



2025 Fire Staffing Study

Albemarle County Fire Rescue, Virginia

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Methodology

Early in 2025, the County of Albemarle, retained Emergency Services Consulting International (ESCI) to conduct a comprehensive staffing study for Albemarle County Fire Rescue (ACFR). The staffing study provides the agency with a detailed understanding of current and future needs and includes a host of findings and recommendations for moving forward regarding their staffing for emergencies and administrative support functions. As such, it is designed to assist the agency with quantifying current service delivery, evaluating service delivery and response performance, identifying forecast growth and emergent conditions, and developing strategies to meet anticipated needs and future service demand.

Project Initiation & Development of the Work Plan

In the initial phase of the staffing study process Emergency Services Consulting International (ESCI) developed a project work plan based on the approved scope of work. ESCI conversed with the ACFR's project team to gain a comprehensive understanding of the organization's background, goals, and expectations for this project. The work plan included identifying the primary tasks to be performed, the method for evaluating the results, and possible obstacles that may arise during the project.

Acquisition & Review of Background Information

ESCI requested pertinent information and data from the ACFR's Project Team. The requested data included information about the fire department service area, National Fire Incident Reporting System (NFIRS) data, automatic and mutual aid agreements, geographic planning zones and station/apparatus locations, staffing plans, relevant comprehensive plans, land use studies, and the hazard mitigation plan. Further consideration was given to ISO reports and previous studies. ESCI used the collected data in the analysis and development of the comprehensive staffing study report.

Key Concepts & National Trends

This report includes best practices based on nationally recognized guidelines and criteria, including concepts from the National Fire Protection Association (NFPA), the Insurance Services Office (ISO), the Center for Public Safety Excellence (CPSE), laws and regulations of the Commonwealth of Virginia, and other generally accepted practices for emergency services. The National Fire Protection Association (NFPA) Standards



Council has approved a plan to consolidate and merge the information currently available in 114 NFPA Emergency Response and Responder Safety (ERRS) standards, guides, and recommended practices into 38 overarching standards. It is called the Emergency Response and Responder Safety Document Consolidation Plan (consolidation plan), as approved by the NFPA Standards Council. The ERRS project is slated to be completed by the end of 2025. Until then, ESCI has listed the standards individually. Where applicable, the report is written and organized in a style that is consistent with:

- Community Risk Assessment: Standards of Cover, 10th Edition, Quality Improvement for Fire and Emergency Services, Center for Public Safety Excellence, Chantilly, VA, 2021.
- Emergency Management Accreditation Program (EMAP) EMS 5-2022
- NFPA 470: Hazardous Materials/Weapons of Mass Destruction (WMD) Standard for Responders
- NFPA 921, Guide for Fire and Explosion Investigations
- NFPA 1006: Standard for Technical Rescuer Professional Qualifications
- NFPA 1021, Standard for Fire Officer Professional Qualifications
- NFPA 1061, Standard for Public Safety Telecommunications Personnel Professional Standards Qualifications
- NFPA 1201, Standard for Providing Fire and Emergency Services to the Public
- NFPA 1225, Standard for Emergency Services Communications
- NFPA 1300, Standard on Community Risk Assessment and Community Risk Reduction Plan Development
- NFPA 1402, Standard on Facilities for Fire Training and Associated Props
- NFPA 1403, Standard on Live Fire Training Evolutions
- NFPA 1500, Standard on Fire Department Occupational Safety, Health, and Wellness Programs
- NFPA 1521, Standard for Fire Department Safety Officer Professional Qualifications
- NFPA 1561, Standard on Emergency Services Incident Management System and Command Safety NFPA 1581, Standard on Fire Department Infection Control Program



- NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments
- NFPA 1583, Standard on Health-Related Fitness Programs for Fire Department Members
- NFPA 1660, Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery
- NFPA 1620, Standard for Pre-Incident Planning
- NFPA 1670: Standard on Operations and Training for Technical Search and Rescue Incidents
- NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.
- NFPA 1720, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments.
- NFPA 1851, Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
- NFPA 1901, Standard for Automotive Apparatus
- NFPA 1911, Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles
- NFPA 1912, Standard for Fire Apparatus Refurbishing

Baseline Assessment & GIS Technology

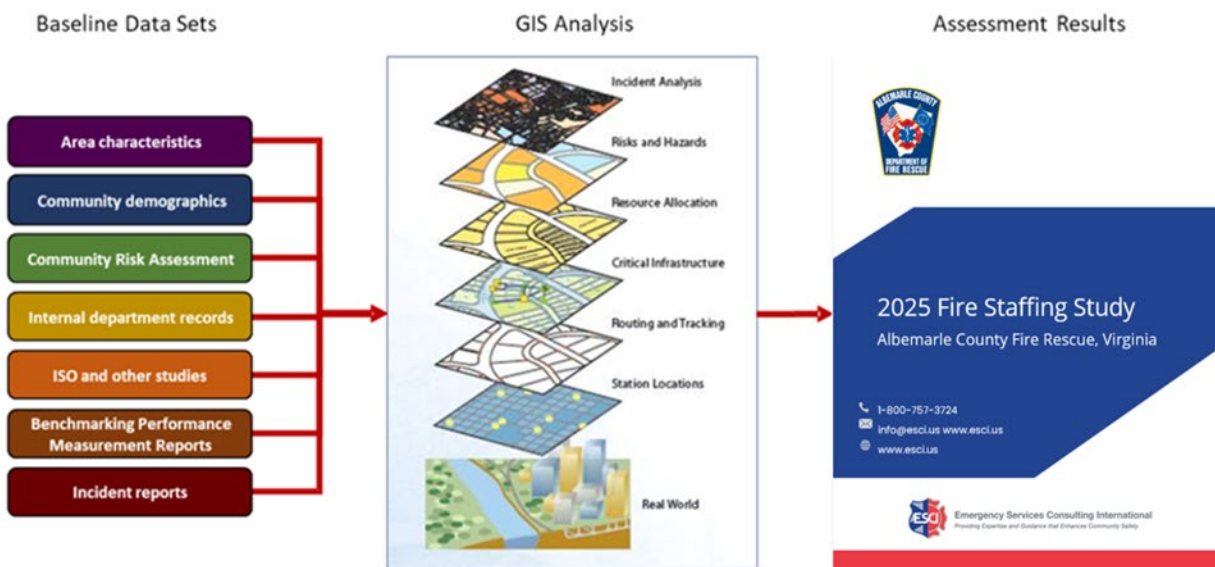
From the information provided by ACFR, ESCI was able to establish a baseline assessment of current community risks and service delivery needs centered around the specialized and technical services provided by ACFR. The purpose of this assessment was to identify risks, hazards, vulnerabilities, and threats in comparison to industry standards and best practices to determine current and future emergency service delivery needs regarding staffing emergency response models.

The ESCI Planning Team also collected information, reviewed population, and other community growth patterns, and then analyzed trends and expectations. This was done to provide a glimpse into future community conditions, land use, and fire

protection risks, interpreting their potential impact on emergency service planning and delivery.

ESCI then used Geographic Information Systems (GIS) technology and analysis tools to visualize the data and provide additional information for ACFR. The following figure illustrates the conceptual GIS methodology as applied to this assessment.

Figure 1. GIS Methodology



Performance Analysis and Development of Recommended Strategies

From the time the first fire station is built, there is an expectation that the facility can and will provide a timely response to calls for service within a given area surrounding that facility. When the original criterion was set for response time from that facility, there was an immediate location-allocation created by that fire station. The fire station provides a response to a given area within a reasonable time, in a pattern that essentially is an overlay on the streets and highways that radiate outward from that location. Even before any incidents occur in a community, the geographic road-network and topographical attributes of a community create a dynamic segmentation that results in the ability of fire professionals to reasonably predict what areas can be, and those that will not be, adequately covered.

Over time the area of coverage changes and evolves based on community growth. The concept of using actual travel time today is based upon a more accurate representation of the level of service for an all-risk approach. It is more performance-based. Today, most fire agencies set a time standard that includes three elements, two of which were



missing from the strict use of mileage from a fire station – specifically, alarm processing time and turnout time. Actual time over road travel has often been used in combination with the other two-time increment components to set the community's expectation of performance.

Using this approach, fire stations are seldom located in a linear fashion. This concept is based on the time intervals identified in the Standards of Response Coverage (SOC) section of the Self-Assessment Manual published by the Commission on Fire Accreditation International. This process leads to the development of a standard of response coverage, or a time and level of staffing decision, designed to control an emergency with a minimum level of loss. The process is, however, a policy choice based on risk and local conditions. ACFR completed their SOC in 2018.

The performance standards for emergency response times are driven by the urgent nature of fire and medical emergencies. Fires can grow exponentially within minutes, and many medical situations become life-threatening in a short time. When response times are delayed, the consequences often include greater property damage, increased risk to occupants and responders, and reduced chances of positive medical outcomes. Rapid intervention is essential to prevent these emergencies from escalating beyond control.

Based on this concept, ACFR performance was evaluated and recommendations for improvement offered. These recommendations will provide additional guidance as ACFR is updating their SOC and working towards accreditation.



Executive Summary

Situation

Albemarle County Fire Rescue (ACFR) serves a geographically diverse and steadily growing community, providing fire suppression, EMS transport, and specialty services across suburban, rural, and urban zones. Population growth, service demand, and declining volunteer participation place increasing strain on the system.

Between fiscal year 2021 and 2026, the County has added 116 positions to public safety; 97 to Fire/Rescue and 19 to Police. Frontline firefighters/EMTs represent 87 of these new positions, strengthening volunteer stations with career staffing, expanding coverage, and reducing response times. The remaining 10 positions included a Battalion Chief, emergency management roles (Emergency Manager and Assistant Emergency Manager), community mental health support (2 HART team members), training (2 Fire-EMS instructors), and operational support (2 mechanics and 1 management analyst).

Albemarle County was fortunate to secure FEMA SAFER grants for 57 of the new firefighter/EMT positions. In FY 2026, the Board of Supervisors raised the real estate tax rate for the first time in six years, dedicating 3.2 of the 4 cents — over \$9.9 million — directly to public safety. This funding sustained SAFER grant positions and supported police expansion. The County continues to prioritize workforce stability by maintaining step increases and cost-of-living adjustments for public safety employees.

Complication

ACFR's growth has not kept pace with demand. Call volume has steadily increased, with EMS transports representing the largest share of workload. Dynamic staffing has become normalized, with ambulances and suppression units reassigned daily to cover vacancies. ALS coverage is inconsistent, especially in rural areas, and volunteer response capacity continues to decline. Battalion Chief coverage requires further depth to ensure safe span of control across the County's geography. Administrative staffing gaps burden operational leaders, pulling them into procurement, HR, and logistics work outside their core role. Without relief, these challenges erode service reliability, impact firefighter wellness, and strain the system's ability to meet national performance benchmarks.



Resolution

ACFR must stabilize frontline staffing, expand supervisory coverage, and institutionalize administrative supports. Implementation of tiered recommendations — ranging from immediate operational stabilization to long-term modernization — provides the County with a phased roadmap. Investments in workforce stability, leadership, and support systems will ensure predictable service, sustainable volunteer integration, and resiliency as Albemarle grows.

Metric	Value
FY2025 Cost per Capita	\$237.26
Primary Workload	EMS transports, fire suppression, special operations
Staffing Profile	Combination system; career + volunteer
Response Performance Focus	Consistent ALS coverage; balanced suppression/EMS availability
Peer Context	Below mid-range among verified Virginia peers; efficient but lean capacity

Headline Findings

- Workload growth: EMS transports dominate workload; fire incidents continue steady demand.
- Dynamic staffing: Normalized practice; daily unit moves reduce predictability and stability.
- ALS coverage gaps: Not all units consistently staffed at ALS level, affecting equity of care.
- Volunteer decline: Reliance on volunteers remains high, but availability continues to erode.
- Supervisory span: One Battalion Chief per shift is insufficient for the County's geography and workload; additional coverage is needed.
- Administrative load: Lack of dedicated HR, logistics, and procurement staff increases strain on operational officers.
- Peer context: ACFR's cost per capita is below many peers, showing efficiency but limited capacity to absorb growth.



Recommendations & Roadmap

Tier 1: Core Stability – Delivering Predictable Countywide Service

- Establish geographic response demand zones to align performance benchmarks with NFPA 1720 classifications.
- Improve alarm handling time to meet NFPA 1225 standards through ECC collaboration and advocacy.
- Improve turnout time to meet NFPA 1710 benchmarks through SOP revision, training, and accountability.
- Normalize and fund 24/7 career staffing at critical stations to ensure consistent coverage.
- Eliminate the day shift staffing model to reduce volatility and inequity in staffing.
- Maintain a minimum of two battalion chiefs per shift to strengthen span of control.
- End dynamic staffing that reduces engine companies to preserve suppression capacity.
- Implement systemwide relief factor funding to stabilize minimum staffing.
- Develop performance-based triggers for adding 24/7 career staffing.

Tier 2: Strategic Leadership, Emergency Management, and Volunteer Integration

- Modernize and elevate the county's emergency management structure, governance, and staffing.
- Establish a volunteer services liaison role to strengthen coordination and support.
- Adapt and align volunteer participation to support systemwide mission objectives.

Tier 3: Workforce Development and Succession Planning

- Enhance and strengthen officer development and succession management programs.
- Optimize Fire Marshal's Office structure and succession to meet national prevention benchmarks.
- Refocus the health and safety officer role to strengthen risk reduction and build on ACFR's mental wellness foundation.

Tier 4: System Efficiency and Public Interface



- Develop a formal community risk reduction (CRR) program.
- Strengthen training delivery, instructor support, and facility capacity.
- Provide administrative support to the deputy chief of operations.
- Expand logistics division staffing.

Tier 5: Policy Modernization and Process Optimization

- Strengthen and institutionalize dedicated public safety HR support.
- Strengthen administrative capacity through structured workload analysis.
- Evaluate payroll coordination and communication with public safety departments.
- Streamline hiring, onboarding, and career pathway development.
- Establish regular interdepartmental HR and legal coordination meetings.
- Implement a float mileage reimbursement policy.
- Formalize procurement and logistics roles.
- Establish a countywide apparatus titling policy.
- Improve IT coordination and support for public safety operations.
- Align finance support with operational planning and budget cycles.

Measures of Success (Quarterly Dashboard)

- 90th-percentile turnout and travel times by zone (urban, suburban, rural).
- % of units consistently staffed at ALS level.
- Dynamic staffing frequency; reduction in daily reassignments.
- Volunteer contribution: calls staffed/response rate.
- Staffing health: vacancies, attrition, mandatory OT, sick leave.
- Training benchmarks: hours per FTE; compliance with ISO/NFPA standards.
- Administrative workload: % of procurement/logistics handled outside operations.

Risks if Deferred

- Continued normalization of dynamic staffing reduces service predictability and firefighter wellness.
- ALS coverage gaps persist, creating inequities in prehospital care.
- Volunteer capacity further declines without structured support, increasing reliance on career staff.



- Supervisory span remains insufficient, raising risk on multi-incident scenes.
- Rising overtime and attrition elevate long-term costs and reduce readiness.

Conclusion

ACFR delivers essential fire, EMS, and rescue services with efficiency, but its workforce and support systems are strained. The tiered roadmap provides Albemarle County with a structured path to stabilize today's operations while planning for tomorrow's growth. By implementing these recommendations, the County can ensure predictable, equitable service delivery, strengthen firefighter wellness, and maintain alignment with community expectations and national best practices.

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Description of Community Served

An assessment of the existing ACFR composition and service delivery was conducted by ESCI. ESCI based this evaluation on data provided by the agency and collected during subsequent fieldwork. Where applicable, the information is compared to a combination of applicable state laws and regulations, National Fire Protection Association (NFPA) standards, Commission on Fire Accreditation International (CFAI) self-assessment criteria, the Center for Public Safety Excellence (CPSE), health and safety requirements, federal and state mandates relative to emergency services, and generally accepted best practices within the emergency services community, as well as the experience of ESCI's consultants.

The following section provides a general overview of Albemarle County and Albemarle County Fire Rescue (ACFR).

Albemarle County, Virginia

Albemarle County, Virginia, established in 1744, is a region rich in history and cultural significance. Named after Willem Anne van Keppel, the 2nd Earl of Albemarle and then-Governor of Virginia, the county was formed from the western portion of Goochland County. Its early economy was predominantly agrarian, with tobacco plantations playing a significant role. Notably, Albemarle is the birthplace and home of Thomas Jefferson, the third President of the United States and principal author of the Declaration of Independence. Jefferson's estate, Monticello, located near Charlottesville, remains a UNESCO World Heritage Site and a testament to the county's historical prominence.¹

Covering 720.5 square miles², Albemarle County boasts a diverse landscape ranging from urban areas to rural countryside. The county's economy has evolved over time, with key industries now including education, healthcare, and professional services. The presence of the University of Virginia significantly contributes to the local economy and cultural vibrancy. Albemarle County is also home to several historic districts and

¹ Cvillepedia. (n.d.). Albemarle County. Retrieved March 30, 2025, from https://www.cvillepedia.org/Albemarle_County

² U.S. Census Bureau. (2025). QuickFacts: Crozet CDP, Virginia; Charlottesville city, Virginia; Albemarle County, Virginia; United States. U.S. Department of Commerce. Retrieved March 30, 2025, from <https://www.census.gov/quickfacts/fact/table/crozetcdpvirginia,charlottesvillecityvirginia,albemarlecountyvirginia,US/PST04522>



individual properties listed in both the Virginia Landmarks Register and the National Register of Historic Places. These sites reflect the county's rich architectural and cultural heritage, attracting scholars and tourists alike. Blending its historical roots with modern development, Albemarle County offers a unique glimpse into America's past while providing contemporary amenities and opportunities.³

County Governance

Albemarle County, Virginia, operates under the County Executive form of government, a structure that delineates clear roles between elected officials and administrative staff. This system is characterized by the following components:

Board of Supervisors

The county's legislative authority resides with a six-member Board of Supervisors, each representing one of the county's magisterial districts. These supervisors are elected to four-year terms and are responsible for setting policies, adopting ordinances, and overseeing the county's budget. The Board of Supervisors is tasked with enacting policies that guide the county's strategic direction and ensure the well-being of its residents.

County Executive

Appointed by the Board of Supervisors, the County Executive serves as the administrative head of the county government. This role involves implementing the board's policies, overseeing daily operations, and managing various county departments. The County Executive ensures that the county's services are delivered efficiently and align with the established policies and goals.

Elected Constitutional Officers

In addition to the Board of Supervisors, Albemarle County's governance includes several independently elected constitutional officers who manage specific functions, the Sheriff, Commonwealth's Attorney, and Circuit Court Clerk. These officials operate autonomously within their respective domains, ensuring the enforcement of laws, legal proceedings, and public safety.

³ Albemarle County. (n.d.). *Historic and Cultural Resources*. Retrieved March 30, 2025, from <https://www.albemarle.org/government/community-development/learn-more-about/historic-and-cultural-resources>



The School Board

The county's educational policies and school system are managed by a seven-member elected School Board. Each member represents a specific district, with one at-large member, collectively ensuring that educational standards and policies meet the community's needs.

This governance framework ensures a balanced distribution of power, with elected officials setting policies and appointed administrators executing them, all aimed at serving the best interests of Albemarle County residents.

Jurisdiction Demographics

Demographics is the statistical study of human populations and characteristics. Demographic data can include information on population size, density, growth, and organizational groupings such as race, gender, or age. Institutions like the U.S. Census Bureau conduct surveys to gather information about the nation's citizens on a regular basis. The population of the United States tends to be ethnically diverse due to the country's history of immigration, which made it a cultural melting pot.

In the 2020 U.S. Census, the permanent population of Albemarle County was 112,395. According to Environmental Systems Research Institute (Esri), the current estimated population of the county has grown to 117,312 residents. This equates to roughly 163 people per square mile.

The Census Bureau's urban-rural classification is a delineation of geographical areas, identifying both individual urban areas and rural areas of the nation. The terms urban and rural categorize different landscapes, with urban referring to densely developed areas and rural areas to small towns, farms, and open spaces. These definitions help standardize data collection for analysis. After each decennial census, the U.S. Census Bureau updates these classifications. In 2010, urban areas were classified into urbanized areas (50,000+ people) and urban clusters (2,500–50,000 people), based on population density thresholds. Around 81% of the U.S. population was considered urban at that time, a figure that remained stable into 2020.

Following the 2020 Census, key updates were made. The minimum threshold for urban classification was raised from 2,500 to 5,000 people, or areas could qualify based on housing unit density. The distinction between urbanized areas and clusters was also removed—now, any area meeting the new thresholds is considered urban. These



changes ensure more accurate classifications of jurisdictions, aiding in better resource planning and policy decisions.

The Census Bureau's urban areas represent densely developed territory, and encompass residential, commercial, and other non-residential urban land uses. The Census Bureau delineates urban areas after each decennial census by applying specified criteria to decennial census and other data. While the city of Charlottesville is considered an urban area by the U.S. Census Bureau, Albemarle contains additional areas in their jurisdiction that do not fall within the urban threshold. The importance of these additional designations is useful when applying specific National Fire Protection Agency (NFPA) consensus standards to ACFR operations for demand zones.

The following figure breaks down the five demand zones depicted by NFPA for population per square mile.

Figure 2. NFPA Population Breakdown

Demand Zone	Demographics/Population
Urban Area	>1000 People/Square Mile
Suburban Area	500–1000 People/Square Mile
Rural Area	<500 People/Square Mile
Remote Area	Travel Distance \geq 8 Miles from a Fire Station
Special Risks	Determined by the Authority Having Jurisdiction

A jurisdiction can have multiple demand zones outlined at one time and each demand zone can have a respective response criterion established. While Albemarle County is classified overall as a rural locality, several areas within its boundaries exhibit population densities more commonly associated with urban environments. For example, although the City of Charlottesville—at approximately 4,544 people per square mile—is not within ACFR's jurisdiction, the surrounding areas just outside the city limits, which are served by ACFR, can exceed 3,000 people per square mile. Similarly, the Crozet area, though geographically distinct from Charlottesville's urban core, has a population density of around 2,000 people per square mile. These population clusters require ACFR to maintain operational capacity, staffing, and deployment strategies that reflect both rural coverage needs and urban response complexities.

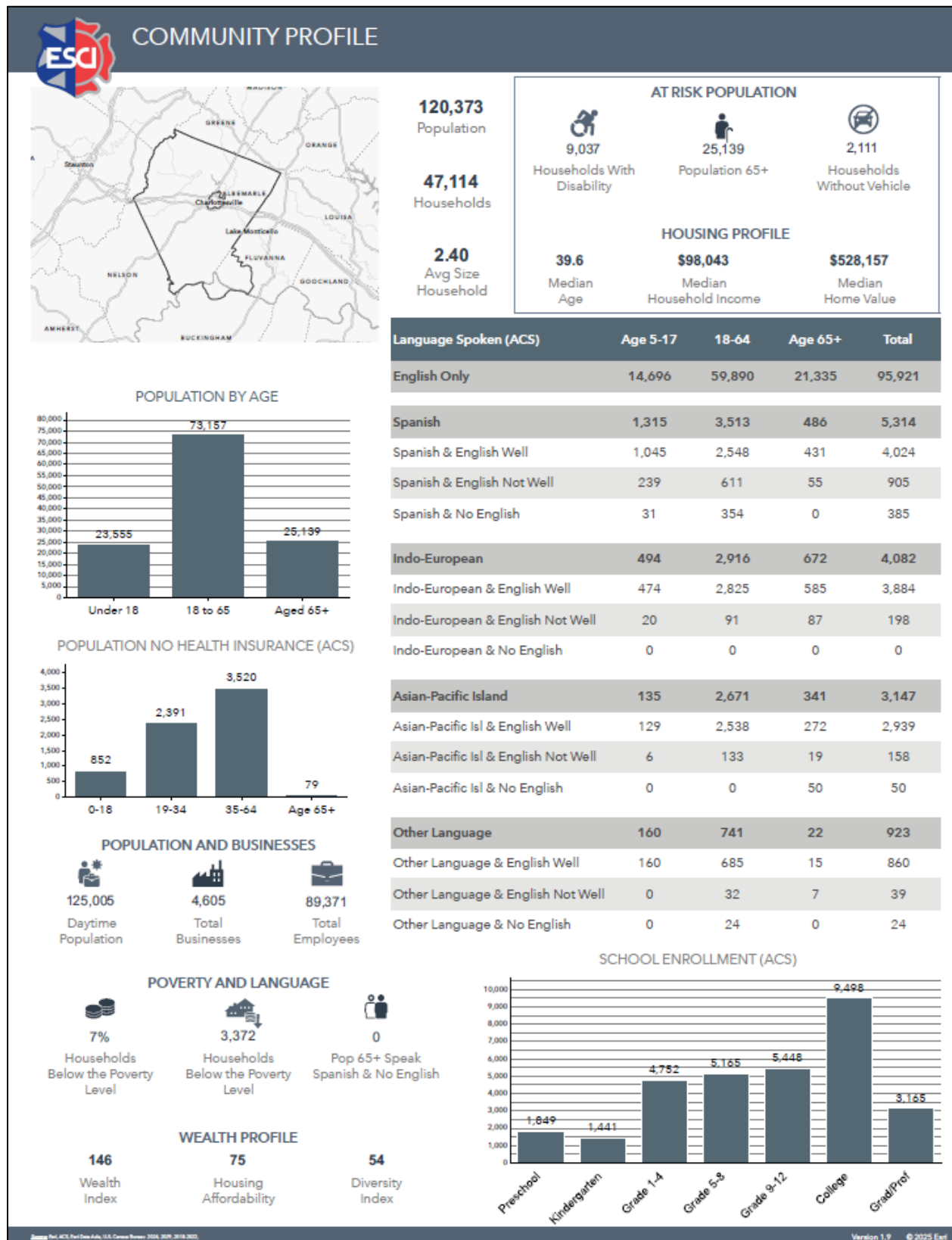


ACFR services portions of two surrounding counties, Fluvanna and Buckingham Counties. These counties are considered rural and are included in the following figure as part of the total jurisdiction demographics.

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Figure 3. Albemarle Fire Rescue Total Response Area Community Profile



Organizational Overview

The Organizational Overview provides a summary of ACFR's composition, discussing its configuration and the services it provides. The purpose of this section is twofold.

First, it verifies the accuracy of baseline information along with ESCI's understanding of ACFR's composition. This provides the foundation from which the Staffing Study is developed.

Second, the overview serves as a reference for the reader who may not be fully familiar with the details of ACFR's operations. Where appropriate, ESCI includes recommended modifications to current conditions based on industry standards and best practices.

The History of Albemarle County Fire Rescue



Albemarle County, Virginia, has a long-standing tradition of community-based emergency services shaped by decades of volunteerism, collaboration, and continuous development. Albemarle County Fire Rescue (ACFR) operates as a combination system that integrates both career and volunteer personnel to provide critical services, including fire suppression, emergency medical treatment and

transport, technical rescue, water rescue, and hazardous materials mitigation.

The foundation of fire and rescue services in the County reflects a collaborative spirit that brought together independently operated volunteer fire departments and rescue squads, many of which were established in the mid-to-late 20th century. These organizations were born from the commitment of local residents to protect their communities and have continued to play a vital role in the County's emergency response system. Over time, the system evolved to include additional career staff and centralized coordination, forming the structure now known as Albemarle County Fire Rescue.

Today, ACFR operates across eleven planning districts with services delivered from fourteen fire stations. Six stations are staffed 24/7 by career personnel, six operate through a combination of career and volunteer staff, and two are staffed solely by

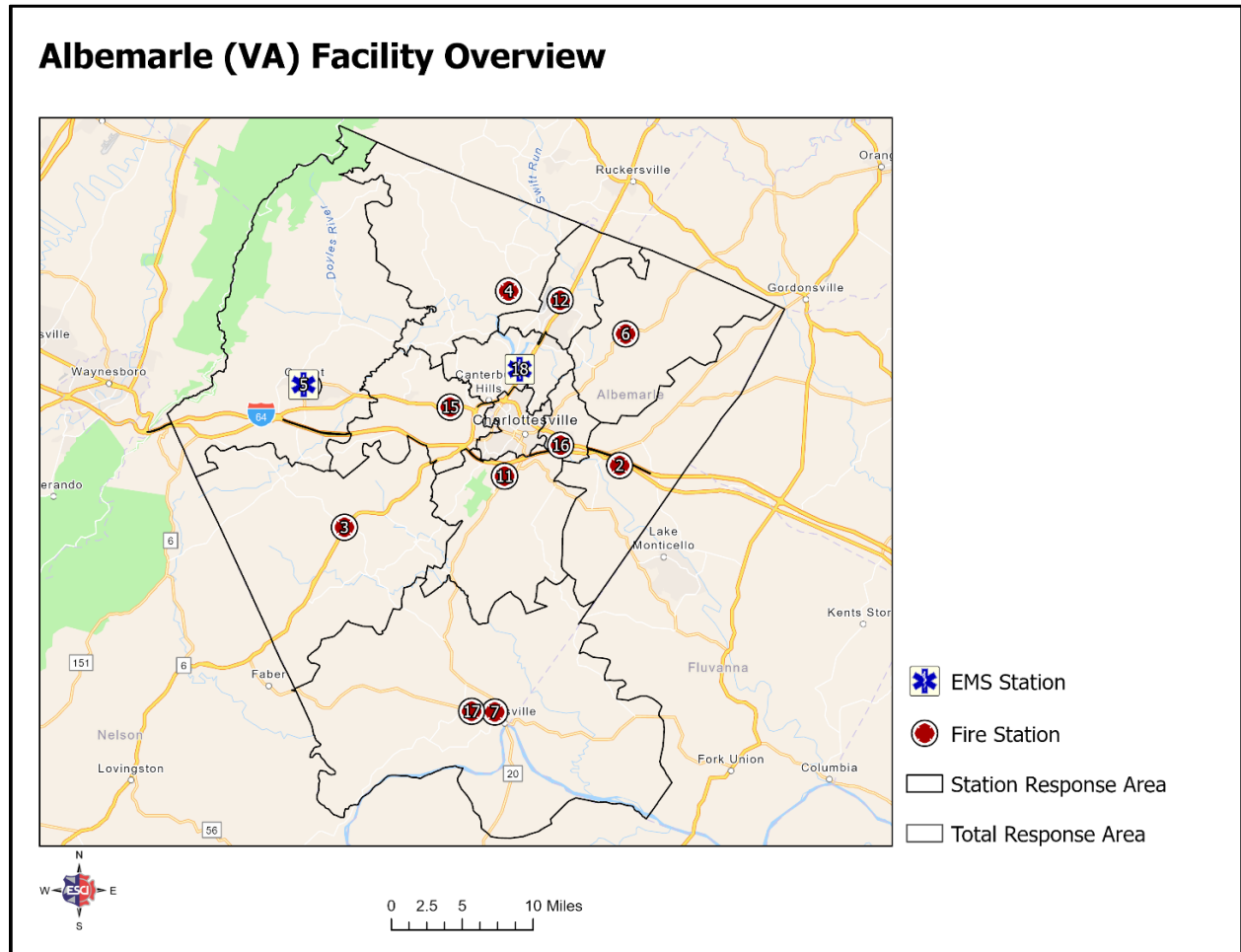


volunteer personnel. The department is comprised of 203 uniformed staff and 14 civilian employees, all working to safeguard life and property across the county.

In recent years, ACFR has reached key milestones, including the onboarding of 36 new firefighters in 2024 through a \$12.7 million FEMA grant and the expansion of the Human Services Alternative Response Team (HART), which integrates mental health support with public safety. These initiatives reflect ACFR's continued commitment to adapting services to meet the needs of a growing and diverse population.

Albemarle County's goal for fire rescue response is to arrive within eight minutes for emergencies in urban areas (90% of the time) and within 21 minutes in rural areas (90% of the time). Public safety represents one of the County's top priorities, with a projected \$78.3 million allocated for this purpose in FY2026—42% supporting the Albemarle County Police Department and 42% directed to Albemarle County Fire Rescue.

Figure 4: ACFR Fire Station Locations



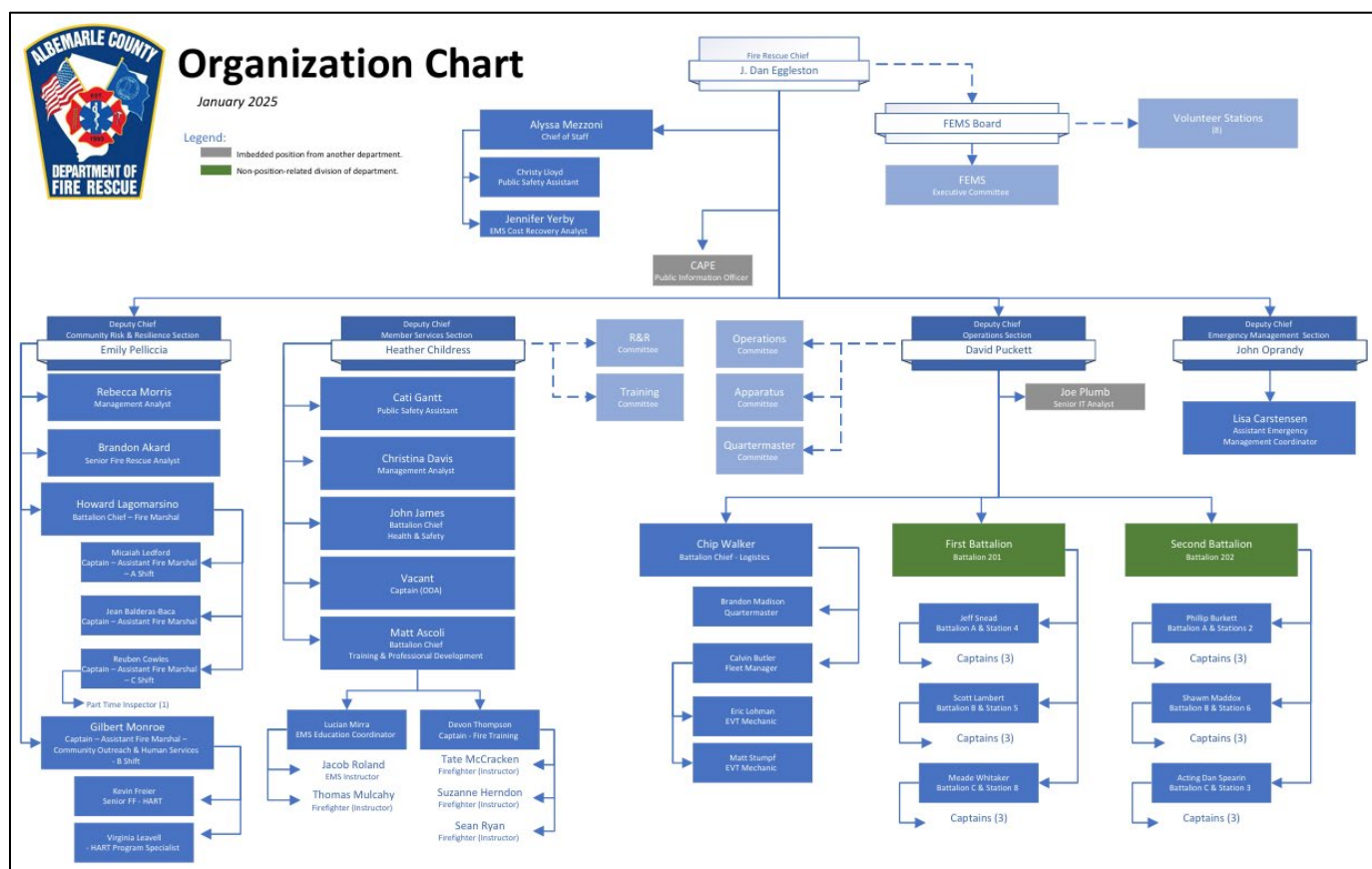
Organizational Structure

The structural design of an organization is important for successful service delivery. ACFR mimics a paramilitary organization. This structure is similar to those found in many fire and EMS agencies across the country. The uniformed professionals filling the various operational positions within the ACFR have the skills and equipment to respond to structure and vehicle fires, medical emergencies involving cardiac arrest, respiratory distress, and trauma, vehicle accidents requiring extrication, hazardous materials incidents, technical rescue, natural disasters, and many other fire or emergency medical calls for service.

When not responding to 9-1-1 calls, ACFR firefighters train for the worst-case scenarios; they perform other duties such as equipment maintenance and conduct pre-incident planning, conduct public education activities, and give back to the community by supporting charitable projects.

The ACFR organization chart is reflected in the following figure.

Figure 5. ACFR Organizational Chart



The chain of command is important as it provides a clear source of direction, lines of communication, and accountability. Albemarle County's fire rescue system is structured to support collaboration between the Fire Rescue Chief and volunteer leadership through a shared governance model. While this inclusive approach fosters input from across the system, it also introduces challenges that can affect cohesion and efficiency. The dual authority structure, particularly between the career chain of command and volunteer leadership can lead to fragmented accountability, delayed policy implementation, and inconsistent enforcement of operational standards. Volunteer officer ranks, while recognized within their respective organizations, may at times conflict with department-wide procedures or expectations for career personnel. Additionally, the Fire and EMS Board (FEMS) serves in an advisory capacity, which can limit its influence when consensus is difficult to achieve. Variability in volunteer staffing levels and persistent cultural differences between career and volunteer personnel further complicate unified system performance. Strengthening clarity in



roles, authority, and accountability across all components of the system will be essential to advancing operational consistency and strategic alignment.

Span of control is a crucial element in the effective and efficient mitigation of emergency incidents, and management of administrative responsibilities. While the effective span of control will vary based on administrative demands and operational complexity, it is widely accepted that a single person's span of control should not be greater than seven subordinates. The maximum administrative span of control in the current organizational structure is 1:7 under the Deputy Chief of Operations.

Management Components

Effective organizational management is a complicated and expanding challenge for police and fire service leaders and planning alone will not suffice. With increasing complexity, comes increased cost. Today's organization must address management complexities that include an effective organizational structure, setting and measuring levels of service, staying abreast of new technologies and methods, evaluation and maintenance of a qualified workforce, staff development for effective succession planning, and financial sustainability for the future. The establishment of department mission statements, vision statements, and guiding principles ensures the employees are aware of the expected behaviors and attitudes required for the success of ACFR. While this section explores key elements of personnel oversight, it should be recognized that effective leadership alone is not sufficient to achieve organizational efficiency and success.

Mission, Vision, Values

To be an efficient and effective organization, management must be based on several components. These include a clearly stated *mission* (the fundamental purpose of an organization), a *vision* for the future (where the organization is going), and the *core values* or *guiding principles* (how will the organization treat its members as it navigates from its current state to its desired future). These fundamental elements allow organizations to evaluate the current environment in which they operate and establish strategic initiatives, goals, and objectives necessary to move forward progressively. ACFR has established and communicated the following fundamental elements by combining them into a document titled, *The ACFR Way*.

The ACFR Way is a philosophy that outlines the expected behaviors and interactions for all members of Albemarle County Fire Rescue (ACFR), regardless of rank or position. It



emphasizes that every member, referred to as part of the ACFR family, plays a crucial role in the success of the department. The ACFR Way requires a continuous, intentional effort from all members, with success relying on leaders and experienced personnel mentoring new members to maintain the department's culture. The standards outlined align with the County of Albemarle's Pillars of High Performance, county policies, ACFR's vision and mission, and departmental guidelines. It serves as a foundation for evaluating day-to-day performance and commitment to both the community and ACFR.

Mission Statement

Through the following mission statement, ACFR works to meet the needs of the community it serves.

We will provide the highest quality services to protect and preserve the lives, property, and environment of our community.

This broad mission statement allows ACFR the flexibility to utilize a wide range of tactics in responding to the needs of the citizens and visitors of Albemarle. Developing a mission statement is only one component of ensuring success. The mission statement must be communicated to internal and external stakeholders, which ACFR accomplishes by placing the statement on their website. It is also posted in fire stations and administration areas in the county.

Vision Statement

Organizations commonly use vision statements to declare objectives to promote a state of continuous improvement. This is an important foundational component because it shows that an organization recognizes that they are not necessarily where they would like to be and are willing to set goals to reach their future objectives. Adopting a vision does not necessarily indicate that an organization is broken, but, rather, a declaration that they could be better and refuse to settle for the status quo.

ACFR has developed and adopted the following vision statement.

We envision a community where well-being is promoted and the quality of life for our citizens is continuously enriched.



Core Values

ACFR believes in achieving excellence in public service through these values.

Integrity – Innovation – Stewardship – Community – Learning

Organizational core values support the vision and shape the culture in a manner that accurately reflects values that align with community expectations. ACFR's core values are simple, easy to understand, and accomplish the overall objectives of the department.

Internal Assessment of Critical Issues and Future Challenges

Similar to the need for guiding documents in the rapidly changing environment of emergency services, analysis and understanding of critical issues and emerging challenges facing the department is critical for organizational leaders and their success. No single leader should address these issues and challenges alone and must engage and involve other talented and capable members of their organization at all levels. ACFR's Fire Chief has identified the five most critical issues that currently face the organization. These issues are illustrated in the following figure.



Figure 6. Identified Critical Issues

Priority	Fire Chief's Perspective
First	Staffing is a critical issue, with the need to ensure adequate personnel to meet the demands of the growing community and enhance operational effectiveness.
Second	Training and development are essential to maintain a highly skilled and adaptable workforce capable of handling diverse emergency scenarios.
Third	Financial health is a top priority, requiring ongoing attention to budget management, resource allocation, and long-term sustainability.
Fourth	Community relations and outreach efforts must be strengthened to foster trust, educate the public, and engage residents in fire prevention and safety initiatives.
Fifth	Technological adaptability is crucial for staying ahead of advancements in equipment, systems, and communication tools to improve service delivery and operational efficiency.

Internal and External Communication Processes

Communication within an organization and the external environment is a critical factor in achieving an effective and efficient organization. Organizations that lack effective communication can have difficulty in reaching their ultimate potential. The following describes both internal and external communications within ACFR.

Internal Communications

ACFR prioritizes internal communication with department staff through a variety of methods to ensure staff are well-informed and engaged. All department members have email addresses and access to a department intranet site, which can be utilized to disseminate information to all personnel in addition to the use of written memos. ACFR holds a monthly conference call for those who want to attend. Those who cannot attend can access the recording. This provides a platform for leadership updates and staff concerns, while nearly daily interactions with the duty crew allow for regular operational check-ins. Executive staff conducts a “Chiefs Tour” every six months, visiting every crew at every station. There is also a quarterly newsletter called *Sirens*. Together, these approaches form a strong internal communications framework that supports ACFR’s operations and organizational health. There is a vertical communications path clearly identified through a chain-of-command.



External Communications

ACFR also communicates externally through multiple avenues. The primary source of external communication is provided by the department's website and social media accounts. The ACFR Facebook® account, X® account, and Instagram® account help to reach its citizens and share information.

While ACFR's internal and external communications demonstrate intentional structure and engagement, its effectiveness is also shaped by how well it collaborates across County departments. Strong interdepartmental relationships are essential to aligning operational needs with administrative processes, yet many of these connections have been strained by shifting priorities and unclear expectations. As noted during stakeholder interviews, issues with coordination—particularly in areas like Human Resources, Information Technology, and Facilities—frequently undermine operational efficiency and delay key initiatives. The following section explores these interdepartmental dynamics in greater detail, highlighting barriers to integration and opportunities for more cohesive support.



Interdepartmental Relationships and Integration

ACFR operates within a complex network of interdepartmental partnerships, many of which are evolving alongside the County's broader modernization and centralization efforts. Efficient fire-rescue operations depend heavily on collaboration across key County departments, including Human Resources, Finance, Information Technology, Legal, and Procurement. ACFR maintains relationships with these departments to support hiring, systems, budgeting, legal compliance, and procurement; however, interviews and workload analysis reveal persistent structural challenges, unclear role delineation, and gaps in trust that constrain effectiveness. This section examines the current state of ACFR's interdepartmental relationships and offers observations based on stakeholder interviews, documents, and organizational insights.

Human Resources

As part of Albemarle County's recent restructuring, Human Resources (HR) was established as a standalone entity, separate from the school system, with a vision to standardize and professionalize services across government agencies. Three HR generalists currently serve the organization, with one assigned to both Fire Rescue and Police. This HR generalist provides support in recruitment, employee relations, policy interpretation, and performance management.

Internally, ACFR's Member Services Section, led by the Deputy Chief, retains responsibility for operational HR functions, including hiring, discipline, pay, and promotions. The HR generalist serves more as an advisor than an embedded manager, resulting in unclear role delineation. Though collaboration between ACFR and HR has improved, both departments acknowledged persistent friction and challenges related to policy interpretation, timelines for personnel actions, and the complexity of supporting a 24/7 operational workforce. Stakeholders noted that similar challenges exist across public safety, though the nature and severity of those challenges may vary by department.

Several challenges were identified:

- Duplicated efforts between ACFR and County HR in onboarding, compensation requests, and promotion processes, leading to inefficiencies and occasional miscommunication.



- Policy and disciplinary misalignment, where HR reported that ACFR occasionally proceeded with grievance resolutions or policy interpretations without legal or HR consultation, resulting in potential legal exposure.
- Gaps in strategic HR planning, where HR lacks insight into succession planning or workforce development because performance data and promotional assessments are managed separately by ACFR.

There is a clear need for a collaborative structure that assigns accountability for each phase of employee management—along with frequent, forward-looking planning sessions between departments—to foster a more integrated approach.

Stakeholder interviews surfaced recurring themes of misalignment, lack of trust, and frustration with inconsistent communication. Despite these challenges, both sides express commitment to collaborative improvement and led to the creation and filling of a Public Safety HR Manager position dedicated to public safety to address whether a centralized model can adequately support departments with specialized operational needs

Information Technology

ACFR maintains a functional, but constrained, relationship with the county's Information Technology (IT) Department. IT support is provided through a hybrid model, including a designated liaison. The ACIT Systems Analyst for ACFR is officed within the ACFR Department at the County Office Building at 5th Street. The recruitment of this position has been collaborative (between ACIT and ACFR). The most recent recruitment resulted in a highly technical former member of ACFR filling this role. Monthly check-ins between this liaison and the Deputy Chief of Operations provide structured updates on open projects and support needs.

While IT provides general support for system repairs and trouble tickets, strategic system management—including software administration, integration, and troubleshooting of key platforms—remains largely the responsibility of ACFR with a collaborative effort of IT. Fire Rescue staff manage the selection, contracting, and day-to-day use of critical systems, such as First Due, and Mobile Data Terminals (MDTs), as well as access coordination for cloud-based tools.

Stakeholders noted that the withdrawal of a fully embedded IT staff member, driven by County centralization, has negatively impacted operational support—particularly during after-hours incidents. ACFR's dependence on a complex array of third-party



platforms for scheduling, training, asset management, and incident reporting further increases the workload and complexity of internal tech oversight.

County IT leadership acknowledges the increasing demand for dedicated 24/7 support in public safety operations, but current staffing levels and system integration challenges limit their ability to fully meet this need. Looking ahead, a more proactive IT support structure—potentially through re-embedding personnel or forming a dedicated public safety tech team—may be necessary to streamline service, reduce system fragmentation, and ensure continuity of operations during critical events.

Finance and Budget

The ACFR Chief of Staff leads internal financial management, including budget development, strategic planning, and grant coordination. Finance and Procurement teams from the county provide support on purchasing, capital project coordination, and compliance with procurement regulations. While day-to-day coordination functions adequately, stakeholders noted that financial systems are not always built to support fire service-specific workflows and timelines, which has led to delays or misunderstandings in project funding and purchases. This collaboration is functional, but marked by several strain points:

- Purchasing and reconciliation tasks are decentralized, with fire personnel managing purchasing cards and inventory tracking, due to a lack of embedded administrative staff. This model creates delays and accountability concerns.
- Grant compliance and tracking remain underdeveloped, despite the availability of substantial federal funding for equipment and hazard mitigation. Workload associated with FEMA and homeland security grants is dispersed across divisions without consistent ownership or visibility.
- Apparatus funding and cost control suffer from a lack of integrated lifecycle planning between Finance, Fleet, and ACFR. Despite a five-year CIP for apparatus, the inability to reassign volunteer apparatus due to co-titling prevents ACFR from optimizing replacement cycles or fleet utilization.

Better alignment between finance and fire leadership is needed through strategic budget summits, shared grant project timelines, and internal tracking mechanisms for purchases, inventory, and capital planning.



Legal

ACFR utilizes the Albemarle County Attorney's Office for legal review of contracts, policy, and liability matters, and subscribes to Lexipol for policy development. Lexipol is a policy management system. While there are no acute legal process concerns, fire personnel expressed a need for more rapid turnaround and subject-matter familiarity in interpreting issues involving collective bargaining, firefighter rights, and enforcement authority (particularly within the Fire Marshal's Office).

Other Departments and Observations

ACFR maintains strong working relationships with several internal County departments, including the County Executive's Office, General Services (Facilities), and the Office of Equity and Inclusion. While broader collaboration with departments such as Social Services and Mental Health has been more limited, there are meaningful opportunities for future integration, particularly in behavioral health and crisis response coordination.

ACFR's internal Human Services division has made progress in this space through the creation of the Human Services Alternative Response Team (HART), a multidisciplinary field response program designed to address mental health and social vulnerability calls. This model presents a promising foundation for further engagement with other County partners to expand wraparound services and integrated care strategies.

Across all functional relationships, two common themes emerged:

- **Role Ambiguity:** In nearly every department, there is confusion over which county department, county administration or ACFR administration—is responsible for specific duties, particularly when processes span both operational and administrative domains. The resulting duplication or inaction contributes to wasted effort and delayed services.
- **Erosion of Trust:** Interviews identified a lingering perception gap between ACFR and other departments. Fire personnel feel their unique operational tempo and needs are not understood or respected, while County leaders express frustration over ACFR's perceived independence and lack of process conformity. This disconnect is most acute in HR and Finance, where system-level planning is essential to workforce and budget outcomes.

Overall, the degree of integration between ACFR and Albemarle County departments varies. Some partnerships are structured and effective, while others suffer from unclear



expectations, role overlaps, or friction stemming from centralized service models not tailored to public safety operations. While the County's shift toward centralized service delivery has merit in many respects, the transition requires deliberate relationship-building, mutual education, and clearer operational agreements to avoid inefficiencies and promote trust.

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Regional Collaboration

Agencies often enter into agreements that benefit their community and surrounding jurisdictions, providing mechanisms for neighboring departments to assist one another during incidents that exceed local capacity. These agreements fall into two primary categories: mutual aid and automatic aid. Mutual aid agreements generally require a formal request from the incident commander before units and resources are dispatched. By contrast, automatic aid agreements dispatch resources from aid agencies concurrently with the initial response from the requesting agency, following a predefined matrix.

Both types of agreements are critical to emergency operations and help agencies achieve compliance with NFPA standards for effective response force assembly, especially in geographically dispersed areas where the closest available unit may reside in an adjoining jurisdiction. These agreements also ensure continuity of service during periods of high call volume and overlapping incidents.

Current Agreements and Practices

ACFR maintains mutual and automatic mutual aid agreements with several regional partners, including the city of Charlottesville (which lies within the county boundaries) and Fluvanna County. Under these agreements, the departments operate according to the policies and operational procedures of the host jurisdiction during a response. Although each locality maintains its own standard operating procedures (SOPs), there is an understanding that responding units adapt to the host agency's protocols. Pre-incident plans and response guidelines are routinely shared among the jurisdictions.

Specialized Team Coordination

ACFR collaborates closely with the Charlottesville Fire Department (CFD) on hazardous materials and technical rescue responses. The hazardous materials response capabilities between the two departments are well developed, with automatic mutual aid protocols in place. Equipment for hazardous materials response is owned and maintained by CFD and is dispatched, as needed, in either jurisdiction. Both agencies jointly contributed to placing a collapse/trench trailer in service—CFD provided the trailer and ACFR supplied the equipment. This shared asset is housed at ACFR Station 11 and is accessible to both departments.



While hazardous materials collaboration is advanced and well-coordinated, the partnership on technical rescue remains under development. Support for these incidents is currently coordinated through mutual aid requests, and joint training continues to evolve.

Ongoing Collaborative Initiatives

Battalion Chiefs from ACFR and CFD have recently initiated regular meetings to discuss operations and develop mutual training opportunities. These multi-company training meetings are still gaining consistency but reflect a strong mutual commitment to greater interoperability. Additionally, ACFR's Emergency Management Section provides a broader coordination platform, maintaining working relationships with the University of Virginia, the city of Charlottesville, and local and state partners.

Peer support initiatives are coordinated jointly with CFD and the University of Virginia, and ACFR's regional training center is made available to partner agencies for training events upon request. The regional 911 center further strengthens interagency collaboration by operating a shared Public Safety Answering Point (PSAP) and managing countywide radio infrastructure.

Opportunities and Gaps

While many regional initiatives are in place, formal alignment of SOPs and incident command integration remains an opportunity for growth. The early success of battalion-level coordination and the ongoing development of technical rescue collaboration suggest a strong foundation for future improvements. Continued investment in shared training, preplanning, and credentialing programs can help close existing gaps in operational consistency and maximize the effectiveness of regional response.



ACFR Staffing Overview

An organization's greatest asset is its people. Special attention must be paid to managing human resources in a manner that achieves maximum productivity while ensuring a high level of job satisfaction for the individual. Consistent management practices combined with a safe working environment, equitable treatment, the opportunity for input, and recognition of the workforce's commitment and sacrifice are key components impacting job satisfaction.

The size and structure of an organization's staffing are dependent upon the specific needs of the organization. These needs must directly correlate to the needs of the community, and a structure that works for one entity may not necessarily work for another agency. This section provides an overview of ACFR's staffing configurations.

ACFR staffing can be divided into two distinct groups. The first group is what the citizens typically recognize, and is commonly known as, the operations unit, which can be generally classified as the emergency response personnel. The second group typically works behind the scenes to provide the support needed by the operation's personnel to deliver an effective emergency response and is commonly known as the administrative section.

In this section, ESCI explores each of the ACFR's current staffing levels and evaluates them against the mission, identifying potential gaps and efficiencies that might be gained with their current operations.

Historical Staffing Perspective

Over the past six years, Albemarle County Fire Rescue (ACFR) has experienced steady growth in its authorized staffing, reflecting both the expanding demands of the community and efforts to modernize operations. Authorized full-time equivalent (FTE) positions increased from 119.5 in 2019 to 198.0 in 2024—a growth of over 65% in authorized positions during this period.

However, this growth has not been linear, and it has been accompanied by significant turnover. The department's annual turnover rate ranged from a low of 3.6% in 2023 to a high of 10.7% in 2022, with notable spikes in both departures and new positions during periods of operational change and organizational expansion. For example:



- 2021–2022: Authorized FTEs jumped from 144.5 to 159.0, but turnover also rose sharply, with 12 and 17 staff departing, respectively.
- 2023: Even as staffing rose to 167.0, turnover briefly dropped to its lowest level but then climbed again in 2024.
- It is important to note that turnover includes planned retirements and new candidates that do not complete their training. In 2024 and 2025 roughly 50% of the turnover each year was attributed to new hires who did not finish or complete their first year.

Figure 7. Historical Staffing Authorized FTEs

Position Title	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25
Fire Chief	1	1	1	1	1	1	1
Deputy Chief	2	3	3	4	4	4	4
Chief of Staff	0	0	1	1	1	1	1
Division Chief	1	0	0	0	0	0	0
Battalion Chief	7	8	10	10	10	10	10
Captain/Captain 2	19	19	19	21	23	25	25
Lieutenant	0	0	0	0	0	0	3
Firefighter/Technician 2	15	19	18	19	19	18	19
Recruit/Firefighter/Firefighter/Technician 1	68	63	86	93	99	128	141
EMS Education Coordinator	0	0	0	1	1	1	1
EMS Instructor	0	0	0	1	1	1	1
Fleet Manager	1	1	1	1	1	1	1
EVT/Mechanic	0	0	0	1	1	1	2
Logistics Specialist/Quartermaster	0	0	0	1	1	1	1
(Assistant) Emergency Management Coordinator	0	0	1	0	0	1	1
Budget/Management Analyst	1	1	0	0	0	0	0
Fire Rescue Senior Analyst	0	0	0	0	0	1	1
Management Analyst	1	1	1	2	2	3	3
Public Safety Assistant	2	2	2	2	2	1	2
Office Assistant	1.5	1.5	1.5	1	1	0	0
Total Employee Count	119.5	119.5	144.5	159	167	198	217

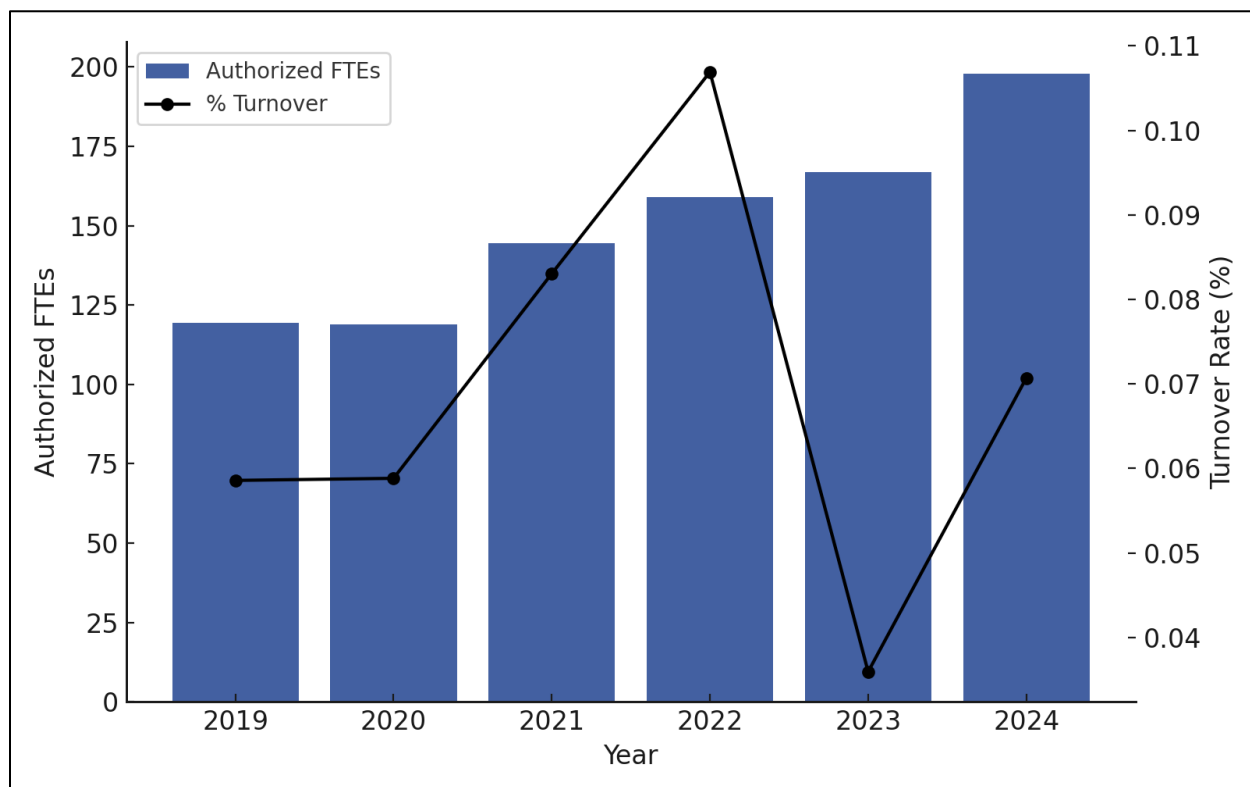
Figure 8. Historical Turnover Percentage

Year	Authorized FTEs	FTEs Leaving Service	% Turnover
2019	119.5	7	5.9%
2020	119	7	5.9%
2021	144.5	12	8.3%
2022	159	17	10.7%
2023	167	6	3.6%
2024	198	14	7.1%
2025	198	11	5.0%



This chart illustrates the growth of authorized full-time equivalent (FTE) positions in ACFR alongside the department's annual turnover rate over the past six years. The bar chart shows the steady increase in staffing, while the line graph highlights variations in turnover. This perspective underscores both organizational growth and ongoing workforce challenges.

Figure 9. ACFR Authorized FTEs and Turnover Rate 2019–2024



This dynamic environment—rapid staffing growth, periodic turnover spikes, and ongoing service demands—has put considerable pressure on the department's administrative and support systems. As the number of operational and support staff has increased, so has the complexity of scheduling, onboarding, records management, and compliance functions. This increase in field staff places additional burden on the ability to fill company officer roles.

Without a proportional increase in administrative and support personnel, ACFR faces ongoing challenges in maintaining efficiency, regulatory compliance, and staff well-being during a period of historic organizational change.



Administrative Staffing Analysis

One of the primary responsibilities of a fire department's administration is to ensure that the operations segment has the means and capacity to respond to and mitigate emergencies in a safe, efficient, and timely manner. An effective system of administration and support services is therefore critical to the success of ACFR.

Like any other division within a fire protection jurisdiction, administration and support require appropriate resources to function at a high level. By analyzing these positions and their functions within the organization, ACFR can achieve a common understanding of the relative resources committed to this function—both in comparison to industry best practices and in similar agencies. Striking the appropriate balance between administration, support, and operational resources is essential for the department to accomplish its mission and meet community needs.

Typical responsibilities of administration and support staff include planning, organizing, directing, coordinating, and evaluating a wide range of departmental programs. This list is not exhaustive; in practice, administrative functions frequently overlap and coincide rather than occur in a linear fashion. For ACFR, this requires the Fire Chief and leadership team to focus on many complex and competing priorities simultaneously.

ACFR's administrative and support staff—approximately 30 FTEs—are distributed across Member Services, Training, Health and Safety, Logistics, Community Risk and Resilience (CR&R), Emergency Management (EM), and Volunteer Services. Key roles include two public safety assistants (administration and member services) and three analysts (EMS Cost recovery, Member Services, and CR&R). They are responsible for HR, payroll, records, logistics, facilities, and volunteer administration. Many support positions are generalists covering multiple functions, resulting in gaps in specialized coverage for Training, Volunteer Administration, Logistics, and Emergency Management.



The following figure reviews the administration and organizational support structure of ACFR.

Figure 10. ACFR Administrative and Support Staff

Position Title	Number of Positions	Hours Worked/Week	Work Schedule
Career Admin/Support (full-time & part-time)	<i>Individuals considered full-time or part-time personnel primarily assigned to manage, plan, or support the activities of the agency and its programs.</i>		
Fire Chief	1	40	M-F
Deputy Chief	4	40	M-F
Chief of Staff	1	40	M-F
Battalion Chief	4	40	M-F
Captain/Captain 2	7	40	M-F
EMS Education Coordinator	1	40	M-F
EMS Instructor	1	40	M-F
Fleet Manager	1	40	M-F
EVT/Mechanic	2	40	M-F
Quartermaster	1	40	M-F
Assistant Emergency Management Coordinator	1	40	M-F
Fire Rescue Senior Analyst	1	40	M-F
Management Analyst	3	40	M-F
Public Safety Analyst	2	40	M-F
Total Administrative and Support Personnel FTE's	30		
Total Department FTE's	198		
Admin/Support Percentage	15.15%		

Work Assignments, Schedules, and Workload

Stakeholder interviews reveal a recurring theme: administrative and support personnel are “stretched thin” and frequently “wearing multiple hats.” Training division staff report that “documentation, scheduling, and compliance are major bottlenecks, and lack of administrative support is a recurring source of stress.” Community Risk & Resilience personnel highlighted the struggle to keep up with outreach, code enforcement, and records, noting that “delays are often due to insufficient administrative staffing.”



Volunteer administration was repeatedly identified as a hidden burden, with both career and volunteer personnel noting the significant coordination required to support, track, and communicate with a large, dynamic volunteer force. In addition, the administrative workload associated with volunteer management and the Emergency Operations Center (EOC) represents a substantial and ongoing demand for department leadership's attention. Addressing these complex responsibilities effectively will require continued support and close collaboration between ACFR and other administrative partners.

Although the County's payroll system implementation occurred more than three years ago and no unresolved payroll issues remain today, some tension persists around the administrative interface between ACFR and Human Resources. These concerns, most notably expressed by the ACFR representative who manages payroll coordination, center on a perception of limited flexibility and a lack of shared understanding of fire rescue's unique scheduling and compensation structures. While the establishment of a centralized government HR department has improved overall capacity and structure, this specific relationship reflects a deeper challenge of trust and communication rather than system failure. Addressing this disconnect may require more deliberate engagement between HR and ACFR leadership to clarify roles, improve mutual understanding, and ensure that operational needs are met through collaborative problem-solving.

Peer Comparison Ratios and Best Practices

Despite meeting or exceeding peer agency ratios, the main challenge for ACFR is the allocation and specialization of administrative and support staff—not just overall headcount. Many positions are generalists who juggle multiple responsibilities, leaving critical areas like Training, CR&R, Volunteer Administration, and Emergency Management without dedicated support. This creates operational inefficiencies, compliance risks, and increased stress on both administrative and operational personnel.

Different peer groups were used in the operational staffing and administrative staffing sections of the report due to the distinct objectives and data availability in each analysis:

- Operational Staffing Peers were selected based on comparable service population, call volume, and staffing models, particularly combination systems serving both



urban and rural geographies. These departments provided meaningful benchmarks for response time performance, suppression and EMS staffing, and shift configuration under similar deployment conditions.

- Administrative Staffing Peers were selected based on agency complexity and support structure, often drawn from similarly sized combination departments with a comparable number of stations, personnel, and system coordination demands. This group focused on administrative support ratios, HR and training structure, and civilian support staffing, rather than field operations.

In some cases, data was more readily available or detailed for one group than the other. As a result, the two peer groups are intentionally distinct to reflect the different functional comparisons being made. This dual-approach ensures that each analysis uses the most relevant and reliable context for interpreting ACFR's current structure and staffing.

The following figure illustrates these peer ratios.

Figure 11. Peer Comparisons

Agency	Admin/Support FTEs	FTEs	Ratio (Admin: Ops)	% Admin/Support of Total Staff
Albemarle County, VA	30	168	1:5.6	15.15%
Loudoun County, VA ⁴	80	790	1:9.8	10.1%
Henrico County, VA ⁵	79	677	1:8.5	11.6%
Frederick County, MD ⁶	60	580	1:9.6	10.3%
Stafford County, VA ⁷	35	235	1:6.7	13.0%
Howard County, MD ⁸	60	641	1:9.3	10.6%
Lynchburg, VA ⁹	23	209	1:9	11%

⁴ Loudoun County, VA, FY2025 Adopted Budget, "Fire and Rescue Staffing Overview."

⁵ Henrico County, VA, FY2025 Budget Document, Division of Fire Rescue

⁶ Frederick County, MD, FY2021 Budget/Staffing Report, Division of Fire and Rescue Services.

⁷ Stafford County, VA, FY2024 Budget Document, Fire and Rescue Staffing Summary.

⁸ Howard County, MD, FY2025 Operating Budget, Department of Fire and Rescue Services.

⁹ Lynchburg, VA, FY2025 Budget Document, Fire Department



Key gaps identified include:

- The lack of a dedicated Training Program Coordinator or administrative assistant for Training.
- Insufficient administrative support for CR&R and Volunteer Services, leading to backlogs and communication breakdowns.
- Emergency Management responsibilities are not separated or adequately supported, resulting in unsustainable workloads for senior chiefs.
- Administrative burden for payroll, scheduling, and HR processes is high.

Stakeholders consistently emphasized that these gaps limit the department's ability to maintain compliance, adapt to growth, and meet the Fire Chief's stated priorities of staffing, training, financial health, community outreach, and technology.

Strategic Findings

ESCI notes that the current level of administrative and support staffing represents roughly 15.15% of the overall department staffing. ACFR's current administrative and support staffing percentage is on par with or higher than peer agencies, but the structure relies too heavily on generalists and lacks specialized, embedded roles for critical functions. To ensure continued success, ACFR should prioritize strategic realignment of support roles—shifting from generalist coverage to specialized administrative support for Training, CR&R, Volunteer Services, and Emergency Management. This realignment will better support operational effectiveness, compliance, and employee well-being, and will position ACFR to meet the demands of a growing and increasingly complex service area.

Fostering Partnerships in Administrative Support Functions

While the administrative and support staffing challenges faced by ACFR are considerable, they are part of broader organizational pressures affecting multiple departments. Interviews with Albemarle County administrative partners, including Human Resources, Finance, Information Technology, and Professional Development, revealed consistent themes of high workload, limited staffing, and growing service demands across the enterprise. Some of the coordination challenges experienced by ACFR, such as navigating the complexities of public safety payroll, securing specialized training support, and maintaining consistent cross-departmental processes, highlight



the increasing difficulty of delivering administrative services to a 24/7 emergency response agency with specialized operational needs.

Although ACFR manages its own recruitment processes and the County has made meaningful progress in consolidating HR, IT, and related functions, opportunities remain to improve alignment and responsiveness between support departments and ACFR leadership. A more collaborative and structured approach to communication, planning, and service delivery will help ensure that administrative systems are flexible and responsive to the evolving needs of public safety operations.

During stakeholder interviews, several participants described a lack of mutual understanding and trust between ACFR and some of the administrative service departments. Concerns were raised about inconsistent communication, misaligned expectations, and differing interpretations of procedures or policies. This disconnect has occasionally contributed to inefficiencies, delays, and a perception of siloed operations rather than collaborative problem-solving. Addressing these concerns will require more than process changes. It will involve deliberate steps to strengthen cross-departmental relationships through joint planning, shared accountability, and ongoing dialogue.



Operational Staffing Analysis

Emergency Response Staffing

Every 23 seconds, a fire department in the United States responds to a fire.¹⁰ It takes an adequate and properly trained staff of emergency responders to put the appropriate emergency apparatus and equipment to its best use in mitigating incidents. Overall, local fire departments across the nation responded to an estimated 1,388,500 fires in 2020, resulting in 3,500 civilian deaths, 15,200 civilian injuries, and \$21.9 billion in direct property damage.¹¹

Insufficient staffing at an emergency scene decreases the effectiveness of the response and increases the risk of injury to all individuals involved. A fire occurs in a structure at the rate of one every 64 seconds, and a home fire occurs every 89 seconds.¹² Tasks that must be performed at a fire can also be broken down into three key components: life safety, incident stabilization, and property conservation. Life safety tasks are based on the number of occupants, their location, condition, and ability to evacuate without assistance. Life safety-related tasks involve search, rescue, and evacuation of victims. The incident stabilization element involves delivering enough water to extinguish the fire and create an environment within the building that allows firefighters entry. Property conservation comes from efficient confinement and extinguishment.

NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program* was developed in 1987 due to the high number of deaths being documented and reported while firefighters were in the line of duty and the growing concern with the number of firefighters who were suffering disabling injuries or developing occupational diseases. Several revisions to this consensus standard ensued over the years that continue to address changes in the fire industry regarding firefighter health and safety. Chapter 8 of this standard specifically addresses emergency operations as it pertains to all hazards that may be faced by firefighters. Section 6 of this chapter provides the following requirements:

¹⁰ 2021 National Fire Protection Agency, *Fire Loss in the United States During 2020*

¹¹ *Ibid.*

¹² *Ibid.*



- 8.6.1 The fire department shall provide an adequate number of personnel to safely conduct emergency scene operations.
- 8.6.1.3 Operations shall be limited to those that can be safely performed by the personnel available at the scene.
- 8.6.3 When inexperienced members are working at an incident, direct supervision shall be provided by more experienced officers or members.
- 8.6.4 Members operating in hazardous areas at emergency incidents shall operate in crews of two or more.

Furthermore, the annex (A.8.6.1.3) states “the limitation of emergency scene operations to those that can be safely conducted by the number of personnel on the scene is intended to reduce the risk of fire fighter death or injury due to understaffing” (NFPA, 2021, p. 48). In this statement, NFPA 1500 strongly recommends that:

“Interior fire-fighting operations are not conducted without an adequate number of qualified fire fighters operating in companies under the supervision of company officers. It is recommended that the minimum acceptable fire company staffing level should be four members responding to or arriving with each engine and each ladder company responding to any type of fire. The minimum acceptable staffing level for companies responding to high-risk areas should be five members responding or arriving with each engine company and six members responding or arriving with each ladder company. These recommendations are based on experience derived from actual fires and in-depth fire simulations and are the result of critical and objective evaluation of fire company effectiveness. These studies indicate significant reductions in performance and safety where crews have fewer members than the above recommendations. Overall, five member crews were found to provide a more coordinated approach for search and rescue and fire-suppression tasks. During actual emergencies, the effectiveness of companies can become critical to the safety and health of fire fighters. Potentially fatal work environments can be created very rapidly in many fire situations. The training and skills of companies can make a difference in the need for additional personnel and in reducing the exposure to safety and health risks”¹³

¹³ NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program, Chapter 8.6.1.3, 2021*



The number and types of tasks needing simultaneous action will dictate the minimum number of firefighters required to combat different types and magnitudes of fire. In the absence of adequate personnel to perform concurrent action, the commanding officer must prioritize the tasks and complete some in sequential order, rather than concurrently. These tasks include:

- Command
- Scene safety
- Search and Rescue
- Fire attack
- Water supply
- Pump operation
- Ventilation
- Backup/rapid intervention

The first 15 minutes are the most crucial period in the suppression of a fire. The timing of these 15 minutes does not start when the firefighters arrive at the scene but begin when the fire initially starts. How effectively and efficiently firefighters perform during this period has a significant impact on the overall outcome of the event. This general concept is applicable to fire, rescue, and medical situations. Responders must perform critical tasks promptly to control a fire or to treat a patient. ACFR is responsible for assuring that responding companies are capable of performing all the tasks described in a prompt, efficient, and safe manner.

Considerable ongoing local, regional, and national discussion and debate draws a strong focus and attention to the matter of firefighter staffing. Frequently, this discussion is set in the context of firefighter safety. The 2020 edition of NFPA 1710: *Standard for Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* has updated the definition of career fire department to include departments that utilize full-time or full-time equivalent station-based personnel immediately available to comprise 50% of an initial full alarm assignment. ACFR falls into this definition and should model their response based on these guidelines regarding response practices when possible.

Because ACFR's jurisdiction sprawls over a large geographic area the jurisdiction may choose to establish response demand zones and use criteria outlined in the National Fire Protection Association (NFPA) standards for measuring performance. NFPA 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments* establishes demand zones for use. A demand zone can be a single



building or group of buildings. It is usually a geographical boundary called fire management area or fire management zone. ACFR has significant geographical setbacks that limit the ability to assemble resources, and the use of NFPA 1720 to establish demand zones allows the ACFR an opportunity to establish performance metrics based on industry's best practices.

The NFPA 1720 demand zone deployment model is listed in the following figure.

Figure 12. NFPA 1720 Deployment Model

Demand Zone	Demographics	Minimum Staff to Respond	Response Time (minutes)	Meets Objective (%)
Urban Area	> 1,000 people/mi ²	15	9	90
Suburban Area	500-1,000 people/mi ²	10	10	80
Rural Area	< 500 people/mi ²	6	14	80
Remote Area	Travel distance ≥ 8 miles	4	Directly dependent on travel distance	90
Special Risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90
* A jurisdiction can have more than one demand zone.				
* Minimum staffing includes members responding from AHJ's department and automatic aid.				
* Response time begins upon completion of the dispatch notification and ends at the time interval shown in the figure.				

ACFR has established a similar demand zone response by using the identifier of “Development” and “Rural.” It could be clarified by using the specific language outlined in NFPA 1720 as “Urban” with the established metric for what constitutes urban or developed.

NFPA 1710, *Standard for Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* specifies the number of firefighters assigned to a particular response apparatus, often characterized as a “minimum of four personnel per engine company.” ESCI notes that the more critical issue is the number of firefighters assembled at the scene of an incident in conjunction with the scope and magnitude of the job tasks expected of them, regardless of the type or number of vehicles upon which they arrive.



The community should set staffing levels based on risk, capability, and citizen expectations. This becomes a policy decision set by the governing body. There is not a mandated requirement that fits all situations, although NFPA 1710 has objectives to meet regarding the number required for some typical scenarios.

Some terms are interchangeable, such as assembly of firefighters on an incident, which may also be referred to as “Initial Full Alarm Assignment,” “Effective Firefighting Force” (EFF), or “Effective Response Force” (ERF). In the figures below, ESCI describes the NFPA 1710 level of staffing comprising this effective response force for three different scenarios¹⁴.

Figure 13. Initial Full Alarm Assignment for Residential Structure Fire

Initial Full Alarm Assignment—2,000 SF Residential Structure Fire	
Incident Commander	1
Water Supply Operator	1
2 Application Hose Lines	4
1 Support Member per line	2
Victim Search and Rescue Team	2
Ground Ladder Deployment	2
Aerial Device Operator	1
Incident Rapid Intervention Crew (4 FF)	4
Total	17

Figure 13 shows the staffing needed to safely and effectively mitigate a single-family, 2,000-square-foot two-story residential structure without a basement and no exposures. The following figure describes an initial full alarm assignment for an open-air strip-type shopping center. Note that as the risk and difficulty become greater, the staffing levels needed for effective mitigation increase.

¹⁴ NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (National Fire Protection Association 2020 ed.) Article 5.2.4 Deployment.



Figure 14. Initial Full Alarm Assignment for Strip Shopping Center

Initial Full Alarm Assignment Open Air Strip Shopping Center (13,000 SF to 196,000 SF)	
Incident Commander	2
Water Supply Operators	2
3 Application Hose Lines	6
1 Support Member per line	3
Victim Search and Rescue team	4
Ground Ladder Deployment	4
Aerial Device Operator	1
Rapid Intervention Crew (4 FF)	4
EMS Care	2
Total	28

The following is an initial full alarm assignment for a three-story apartment building with a single 1,200-square-foot apartment fire.

Figure 15. Initial Full Alarm Assignment in a Three-Story Apartment Building

Initial Full Alarm Assignment 1,200 SF Apartment (3-story garden apartment)	
Incident Commander	2
Water Supply Operators	2
3 Application Hose Lines	6
1 Support Member per line	3
Victim Search and Rescue Team	4
Ground Ladder Deployment	4
Aerial Device Operator	1
Rapid Intervention Crew (4 FF)	4
EMS Care (1 crew)	2
Total	28

These are generalizations representative of different types of structures and their associated risks. Each authority may handle these types of fires with fewer or more personnel; however, this describes the work functions that must take place, generally concurrently and, for safe and effective fire handling, promptly.

Additional crews are necessary when a fire escalates beyond the capability of the initial assignment, or the fire has unusual characteristics such as a wind-driven fire, or when involving an accelerant with a highly flammable compound. There are also types of scenarios that may not be fires, but mass casualty incidents, explosions, tornadoes,



and so forth that may need additional staffing. It is difficult or impossible to staff for these worst-case incidents. These incidents require a strong mutual aid or automatic aid plan for assistance and/or call-back policies.

Emergency Response Staff Allocation

ACFR's staffing model is structured around a combination of 24-hour and day shift personnel, supported by approximately 168 budgeted operational FTEs. The department utilizes both static and dynamic staffing models to maintain system coverage across fourteen career and volunteer stations. A baseline overview of the career staffing model, staffing levels, and relief factors provides an opportunity to review and analyze the current staffing patterns, shifts, and options to increase efficiency, effectiveness, and capabilities.

The following figure depicts the career emergency personnel employed by ACFR.

Figure 16. ACFR Emergency Response Staffing

Position Title	Number of Positions	Hours Worked/Week	Work Schedule
Career Operational (full-time & part-time)	<i>Individuals considered full-time or part-time employees primarily assigned to provide emergency services at the operational level.</i>		
Battalion Chief	6	56	Shift
Captain	18	56/48	Shift and Days
Lieutenant	3	56	Shift
Firefighter	141	56/48	Shift and Days
Total Emergency Operations Staff	168		
Total Emergency Operations Staff per shift (min)	44		
Total Emergency Operations Staff per shift (max)	49		

The Deputy Chief provides direction and support for operations staff as well as command-level assistance, when needed, at incidents with additional alarms, but daily operations for the shift are handled by a Battalion Chief. The current Battalion Chief (6 FTEs), Captain (18 FTEs), and Lieutenant (3 FTEs) to firefighter (141 FTEs) ratio for full-time positions within ACFR operations is 19%. This yields roughly a 1:5.26 ratio of command to line staff, although rank and design structure may not allow for that equally across the organization in some areas. As a rule of thumb, it is within normal



span of control recommendations. As more line staff is added, consideration should be given to ensure appropriate command staff is increased as well to maintain this ratio. Additional span of control issues should be considered for special programs that require detailed management, such as special operations team functions and response capabilities.

ACFR Response Staffing Model

ACFR utilizes multiple staffing methods to support its emergency response operations. The primary model is a three-platoon system, with personnel working 24-hour shifts that result in a 56-hour workweek for operational staff.

Each shift is led by two Battalion Chiefs, for a total of six Battalion Chiefs across the department. These officers serve as the senior operational commanders for their respective shifts and report directly to a Deputy Chief, who works a 40-hour week but assumes an operational role as needed.

The two on-duty Battalion Chiefs divide the county geographically to provide enhanced span of control, maintain daily oversight, and ensure command coverage across all incidents. They are also responsible for representing the Fire Chief during significant emergencies and serve as key decision-makers during routine and complex events.

The second staffing model used by ACFR is a rotating daytime schedule designed to provide coverage at volunteer fire stations. This model consists of four 12-hour shifts, scheduled Monday through Friday, with a rotating day off each week that cycles over a five-week period to equal a 48-hour work week. Personnel assigned to this schedule receive a four-day break every fifth week, which helps mitigate fatigue and provides periodic recovery time. This model supports daytime incident coverage in areas without 24/7 staffing.

The department operates with a Captain assigned to manage each fire station. Lieutenants are new to ACFR and will be assigned to place the aerial ladder in service this year. ACFR does not currently maintain a dedicated, promoted driver/operator rank. Instead, apparatus operation is fulfilled by the most qualified personnel available on shift. ACFR maintains a well-defined driver and aerial operator training and release process. While this position is not considered a promotion, it is part of the department's career development program. Personnel must meet all established requirements before being authorized to operate apparatus, and once released,



operators receive an annual stipend. Career firefighters staff each of the twelve fire stations daily. Six of those stations are 24/7 staffed with career employees. Six are staffed with day shift career personnel. Two additional stations use all volunteer staff to maintain coverage.

The staff for each fire station receives calls for service and respond in the appropriate apparatus. For example, a fire call would require the fire engine whereas a brush fire call for service would require a brush truck. Some of the fire stations are also equipped with a ladder truck, water tender, and brush truck apparatus in addition to an engine (or pumper). If required to respond in either of these apparatuses, staff must move from their current apparatus assignment and relocate to the required or requested apparatus.

Figure 17. Career 24/7 and Day Shift Station Staffing

Station	Minimum Staffing	Hours Worked/Week	Work Schedule
Station 2	3	6am–6am/M–F	Day Shift
Station 3	3	6am–6am/M–F	Day Shift
Station 4	3	6am–6am/M–F	Day Shift
Station 5	3	6am–6am/M–F	Day Shift
Station 6	3	6am–6am/M–F	Day Shift
Station 7	0	Volunteer	Volunteer
Station 8	3	6am–6am/M–F	Day Shift
Station 11*	5	24/7	24 Hour Shift
Station 12	5	24/7	24 Hour Shift
Station 15	5	24/7	24 Hour Shift
Station 16	5	24/7	24 Hour Shift
Station 17*	3	24/7	24 Hour Shift
Station 18*	2	24/7	24 Hour Shift
Rescue 5	0	Volunteer	Volunteer

(*) Additional staff is planned for this station in July of 2025.

While the department budgets for a daily staffing of forty-nine operational staff, dynamic staffing strategies—used during leave, vacancies, or system strain—permit a functional minimum staffing of forty-four personnel to remain in service, not including the Fire Chief and Deputy Chief. Overall, ACFR’s operational staffing is structured around approximately 168 budgeted FTEs distributed across the three shifts. In 2026 the daily budgeted staffing will grow to 51 operational personnel during the daytime and 36 personnel at night as additional staff are added as part of the budget.



When fully staffed, each career fire station within ACFR is assigned one officer and a complement of firefighters, with specific staffing levels determined by the type and number of apparatus assigned to that station. However, full staffing is rarely realized due to routine vacancies caused by leave, training, and attrition. As a result, ACFR typically operates with a mix of acting officers, firefighter/EMTs, firefighter/paramedics, and firefighters assigned to engines, ladders, or rescue units, some of which require cross staffing.

ACFR guidelines direct the following first alarm assignment for structure fires.

Figure 18. ACFR Initial 1st Alarm

Initial Full Alarm Assignment—2,000 ft ² Residential Structure Fire	
Battalion Chief	1
4 Engine	12
1 Ladder	3
1 Ambulance	2
Volunteer Companies	Varies
Total Minimum Personnel	18

The on-duty minimum staffing for a first alarm meets the need for a routine house fire; however, it will not be sufficient for a strip shopping mall or an apartment building, unless there is fire protection built into these structures. This is a type of fire that is likely within the jurisdiction and represents a higher level of risk than the typical medium-size residential dwelling. Because ACFR staffs most response units with a minimum of three firefighters, an initial full alarm force for this level of hazard would commit half of the on-duty staffing to one fire. Furthermore, due to the geographical size of the jurisdiction, it is not reasonable to expect or plan on this as a means of providing coverage for such an event and still provide required services to the jurisdiction as a whole. While this staffing model is the backbone of ACFR operations, real-world constraints frequently require dynamic adjustments, as described in the following section.

Dynamic Staffing Practices

In addition to a structured daily staffing plan, ACFR relies on dynamic staffing practices to manage fluctuations in personnel availability, leave, and operational needs. Battalion Chiefs evaluate shift rosters each morning and make tactical decisions based on real-time conditions, including unplanned absences, training demands, and multiple



concurrent incidents. This may involve reassigning personnel, consolidating apparatus, or placing select units temporarily out of service to maintain countywide coverage.

One common adjustment is the decision not to staff both Battalion Chief positions when doing so would require forced holdovers or overtime beyond sustainable levels. Additionally, Stations 2, 3, 4, and 6 are frequently reduced to two personnel, placing their engines out of service and leaving cross-staffed tankers and ambulances as the primary response units. While not ideal, these decisions are used as mitigation strategies to reduce fatigue and avoid further personnel burnout.

During interviews, the operations staff shared concerns about the increasing frequency of these reductions. One stakeholder commented, “We’ve moved from contingency-based decisions to normalizing gaps. That’s a dangerous place to be.” Another firefighter described the mental toll of frequent reassignments, noting, “We never know what we’re walking into when we show up for a shift—coverage is like a puzzle that keeps changing.” These experiences point to a growing reliance on improvisation, rather than planned resilience.

While dynamic staffing provides short-term flexibility, it is inherently reactive. It should not be viewed as a substitute for robust, sustainable staffing levels. Overreliance on this approach risks compounding operational instability, reducing organizational readiness, and undermining workforce well-being. Interviews highlighted that morale is increasingly affected by this dynamic model, particularly when frequent cross-staffing results in uncertainty about crew continuity, apparatus assignments, and supervisory oversight.

To maintain a reliable and responsive emergency service model, ACFR will need to shift from reactive gap coverage to proactive workforce investment, supported by long-term staffing forecasts, targeted recruitment, and stable relief factors that accommodate routine leave and unexpected absences.

ACFR Scheduling Methodology

ACFR utilizes a traditional three-platoon schedule with personnel assigned to 24-hour shifts, resulting in a 56-hour workweek for operational staff. This is the industry standard among combination and career fire departments across the U.S., offering continuous coverage with limited shift changes. Each of the three shifts rotates evenly through weekdays, weekends, and holidays, which helps balance workload distribution across time periods.



A second, less conventional, model supports daytime coverage at volunteer stations. This schedule consists of four 12-hour shifts, Monday through Friday, with a rotating weekday off and a four-day recovery break every fifth week. The 12-hour career staff schedules at volunteer stations are designed to ensure consistent daytime coverage during hours when most volunteers are unavailable due to work commitments. The intent is to rely on volunteer personnel to provide coverage during evenings and weekends. However, many volunteer stations are unable to consistently staff these time periods, resulting in significant coverage gaps. This places additional strain on the rest of the system to fill those gaps and maintain service levels. This model is primarily staffed by firefighter/EMTs and firefighter/paramedics, many of whom also serve in the 24-hour system. While efficient in theory, the rotating nature and alignment challenges with the 24-hour model have generated fatigue and gaps in command coverage when both systems overlap.

Day Shift Scheduling Considerations

ACFR currently utilizes a 12-hour rotating day shift model to provide weekday coverage at select stations, particularly those that rely on volunteer staffing during evenings and weekends. This model was developed to enhance weekday response capability while avoiding the cost and complexity of adding additional 24-hour units. It includes a rotating weekday schedule that provides personnel with a four-day break every fifth week.

While the schedule has delivered some operational benefits, such as improved weekday station coverage and reduced forced overtime for 24-hour shift personnel, stakeholder interviews revealed significant concerns surrounding its implementation and long-term sustainability.

A recurring theme among operational personnel was the widespread dissatisfaction with the day shift assignment. Employees voiced concern that the rotating day schedule is inconsistently applied across the organization and lacks alignment with actual system demand. In many cases, it was described as creating uneven workloads and inefficiencies in resource placement. Additionally, some felt that the rotating days off resulted in unpredictable station staffing and contributed to friction with volunteer responders at hybrid stations.

Perhaps more concerning were the implications the day shift schedule has for career progression. During interviews, a considerable number of staff expressed reluctance to



pursue promotion due to the likelihood that advancement would result in reassignment to the day shift schedule. The impact on personal routines and family life was seen as too disruptive, leading many qualified personnel to forgo promotional opportunities. This issue, if left unaddressed, has serious implications for the department's future. With a known wave of upcoming retirements, ACFR is at risk of facing a shortfall of qualified company officers and command staff, which will challenge succession planning efforts and threaten organizational continuity.

While the intent of the current day shift model is operationally sound, the friction it causes among staff, coupled with the unintended disincentives to promote, indicate that it may not be sustainable in its current form. ACFR should consider reviewing this model in alignment with system needs, personnel feedback, and succession goals to ensure its workforce remains motivated, effective, and future-ready.

Relief Factor Considerations

To ensure minimum daily staffing, ACFR budgets 168 FTEs across the three shifts, allowing for a baseline daily staffing level of 49 personnel (growing to 51 in FY26). However, the operational "floor" is often 44 personnel due to vacancies, injuries, leave, and training assignments. When interviewed, one line officer noted, "We're managing to the minimum, not the ideal—it makes it hard to plan training, mentoring, or even crew development."

Departments typically use a relief factor to calculate how many personnel are needed to maintain minimum staffing when accounting for time off, leave, and injuries. Historically, ACFR has applied a relief factor of:

- 1.33 FTEs per 24-hour engine position (12 personnel per engine)
- 1.33 FTEs per 24-hour ambulance position (8 personnel per ambulance)
- 1.66 FTEs per daytime engine position (5 personnel per day shift engine)

However, this relief factor has not been consistently funded or applied, particularly during recent budget cycles. As a result, the department has increasingly relied on holdovers and dynamic staffing to fill unavoidable gaps.

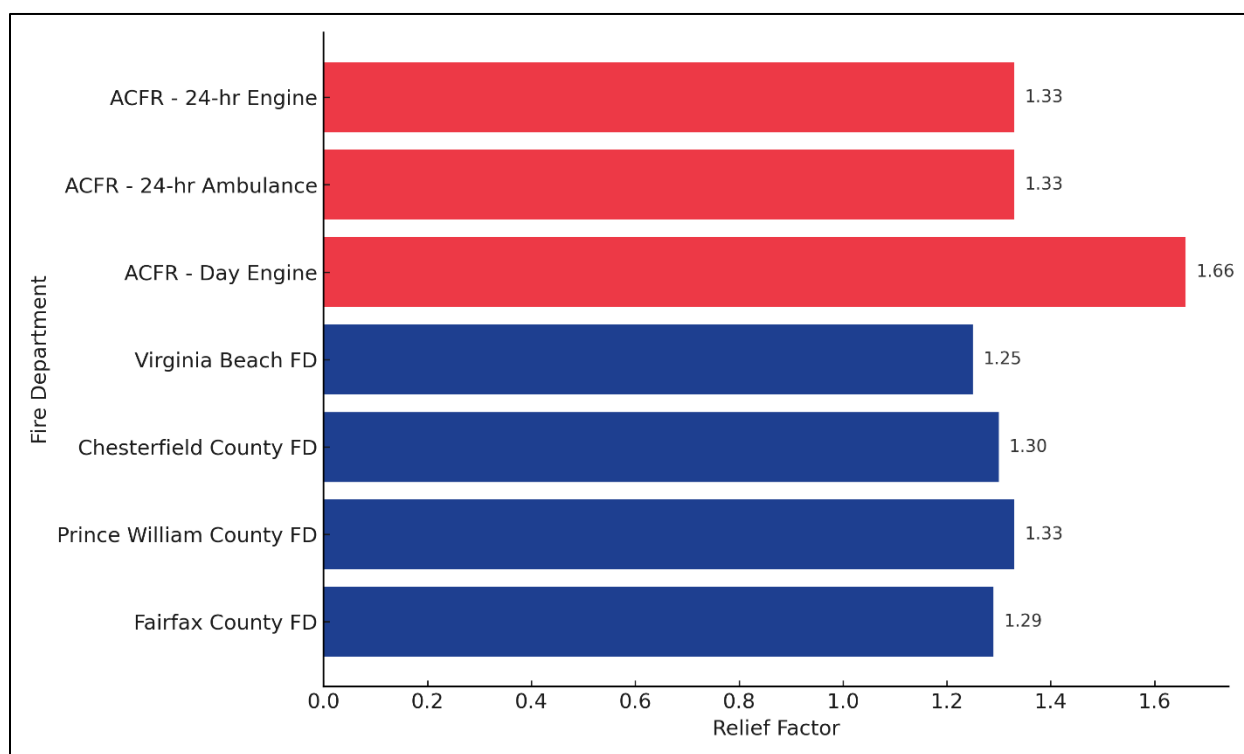
Workforce planning and overtime data suggest that a revised relief factor and updated position planning model are necessary to sustain 24-hour and 12-hour operations. A more consistent relief strategy, aligned with shift leave trends and historical attrition,



would reduce forced overtime, improve training continuity, and ensure safe minimum staffing levels are preserved without reactive adjustments.

The following figure shows some comparable all-hazard fire rescue departments and their relief factor.

Figure 19. Relief Factor Comparison Chart¹⁵



¹⁵ Fairfax County, VA – Relief factor of 1.33 per position. Referenced in Fairfax County Fire and Rescue Department 2022 Annual Report and the Fairfax County FY2023 Advertised Budget Plan.

Henrico County, VA – Uses a staffing factor of 1.33 for 24-hour positions. Cited in internal County budget documents and third-party staffing analyses prepared for Henrico Division of Fire.

Virginia Beach, VA – Staffing factor cited as 1.33 in the Virginia Beach Department of Emergency Medical Services Staffing Plan (2022) and corroborated by budget justifications for career operations.

Chesterfield County, VA – Relief factor noted at 1.33 per firefighter in the Chesterfield Fire and EMS Master Plan (2019).

Stafford County, VA – Staffing factor of 1.33 reported in the FY2024 Proposed Budget and internal operational briefings from the Stafford County Fire and Rescue Department.

Prince William County, VA – Relief factor cited as 1.33 in Prince William County FY2023 Budget and verified in public comments by Fire & Rescue leadership during BOS presentations.

Loudoun County, VA – 1.33 used as the staffing multiplier in Loudoun County Fire and Rescue System Integrated Staffing Plan (2021) and cited in multiple BOS work sessions.



Deployment Methods and Staffing Performance for Incidents

Typical fire department responses across the nation include structure fires, vehicle fires, wildland fires, vehicle accidents, hazardous materials responses, technical rescue responses, general calls for service, and emergency medical calls. The latter is the most frequent reason for activating the 911 system.

Fireground Staffing and OSHA

To comply with federal safety standards, ACFR adheres to the Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1910.134(g)(4)(i), commonly known as the “two-in/two-out” rule. This regulation requires that two firefighters operate inside a hazardous atmosphere while two remain outside, ready for immediate rescue if conditions deteriorate. ACFR uses this rule as a baseline for determining safe minimum staffing at each station. While the department strives to meet this benchmark consistently, it is not always achieved, especially during periods of vacancy or unexpected leave.

The rule emphasizes the need for at least four on-scene personnel to begin safe interior operations at a structure fire. NFPA and OSHA standards both emphasize that without this minimum, firefighters must delay entry, potentially allowing incidents to escalate in severity.

Emergency Fire Incidents

ACFR currently maintains daily budgeted operational staffing of approximately 49 personnel across its system. However, this level is only fully realized when no vacancies exist due to vacation, training, or other leave. Like many departments nationwide, ACFR has defined a “minimum staffing” threshold—set at 44 personnel—below which overtime is authorized to ensure operational readiness.

While the department staffs most engines with three firefighters, this is not always sufficient to initiate interior operations independently, especially when complex tasks must be performed concurrently. Larger or multi-unit responses often strain available resources, particularly during overlapping calls or special incidents. The staffing model of four personnel per company, though ideal, is not currently sustainable within ACFR’s available workforce.



Emergency Medical Incidents

ACFR delivers both Basic Life Support (BLS) and Advanced Life Support (ALS) services across the county using a combination of career and volunteer personnel. Ambulances are housed at multiple stations, including Stations 2, 3, 4, 5, 6, 11, 12, 15, 16, 17, and 18. This blended model includes career-staffed ambulances at stations that operate 24/7, as well as additional EMS units supported by volunteer stations with county staffing during daytime hours.

Albemarle County Fire Rescue works closely with partners such as the Western Albemarle Rescue Squad (WARS), the Charlottesville-Albemarle Rescue Squad (CARS), and others to coordinate coverage. These units respond alongside first-response fire apparatus to deliver pre-hospital care. Although this tiered system effectively distributes workload and ensures rapid ALS care, it can still place significant demands on fire-based EMS providers, particularly during overlapping incidents, transport delays, or when career units must remain on scene to stabilize patients awaiting transport.

Special Operations Incidents

NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* outlines special rescue situations that require additional training and education. These rescues are categorized as special operations and are those emergency incidents to which a fire department responds that require specific and advanced training and specialized tools and equipment. These are often known as hazardous materials and technical rescue incidents. Albemarle County Fire Rescue (ACFR) responds to a variety of technical and low-frequency, high-risk incidents, including water rescue, rope rescue, and hazardous materials responses. While ACFR does not maintain a fully staffed, dedicated Special Operations team, it has strategically developed internal capabilities through cross-trained personnel and regional partnerships.

Technical Rescue:

ACFR has personnel trained in rope rescue, water/ice rescue, and other core technical rescue disciplines. These capabilities are deployed using a cross-staffed model, where trained personnel from the on-duty operational force respond using pre-designated equipment. The department does not maintain a full-time technical rescue team, but it does maintain critical response capabilities and equipment in-house to manage



incidents until additional support arrives. A jointly supported collapse/trench trailer—housed at ACFR Station 11—is available to both departments. The department plans to move to a more dedicated daily staffing plan for trained individuals when Ladder 11 is placed in service full-time. The department's risk profile includes a growing number of mid-rise structures and target hazards where aerial capabilities are necessary, yet current ladder staffing is limited and cross-staffed, delaying effective deployment.

Hazardous Materials:

ACFR participates in a regional hazardous materials team in partnership with the Charlottesville Fire Department (CFD). ACFR personnel are trained to the hazardous materials operations level, and selected members maintain technician-level certification. When required, ACFR provides initial hazard recognition, scene control, and decontamination support, while CFD typically deploys with the primary regional HazMat equipment.

Regional Collaboration:

Hazardous materials and technical rescue capabilities are reinforced through automatic and mutual aid agreements with surrounding jurisdictions. Coordination with CFD includes joint training efforts and equipment sharing. While the hazardous materials collaboration is mature and well-integrated, the technical rescue partnership is still developing.

Special operations incidents in Albemarle County are infrequent but result in high consequences. ACFR's current model provides an efficient balance between local capability and regional support but places increased operational strain on shift personnel who must maintain advanced certifications alongside daily EMS and fire response duties. As demand and risk complexity grow, continued investment in technician-level training, regional interoperability, and long-term planning for specialty incident readiness will be critical.

Responsibilities and Activity Levels of Personnel

In every fire department, there exist a number of activities accomplished that are outside of the “regular” duties of responding to emergency incidents. These typically involve general maintenance of self-contained breathing apparatus (SCBA), hose testing, air monitor calibration, EMS quality assurance, and various committees. ACFR relies upon individuals who have a particular interest in these additional areas to accomplish the tasks along with the use of contractors to perform the specific testing



or services. In addition to the benefit of completing these tasks, the additional responsibilities serve to develop further knowledge, skills, and abilities of participating individuals.

ACFR will continue to face the challenge of making prudent staffing and facility placement decisions based on weighing multiple considerations, including risk exposure, response times, access challenges, deployment, community expectations, and response capacity. Those decisions are difficult with financial constraints and service demand increases.

ACFR's current operational staffing model reflects a highly adaptive workforce managing diverse risks through a combination of shift-based and dynamic staffing coverage. While the structure supports consistent service delivery under routine conditions, it is increasingly strained by simultaneous call volume, vacancies, and regional response demands. Battalion Chiefs and front-line personnel frequently adjust unit coverage mid-shift to account for absences, injuries, or training. These real-time workarounds, while necessary, create operational fatigue and inconsistent command presence, especially during complex or concurrent incidents.

During interviews, multiple operations personnel described "constant shifting to fill the gaps" and noted that "every multi-unit call feels like a gamble" depending on who's available and where units are located. Battalion Chiefs voiced concerns about reduced span of control when both positions are not staffed and acknowledged that dynamic staffing has become more common than exceptional. One shift officer summarized it as "chasing stability rather than planning for it."

These insights underscore the need for more sustainable staffing levels, predictable relief coverage, and deliberate resource planning to reduce burnout and maintain performance across a growing and geographically complex system.



Member Services Section

The Member Services Section of Albemarle County Fire Rescue (ACFR) plays a pivotal role in supporting the well-being, preparedness, and development of the department's personnel. Led by a Deputy Chief, Member Services includes two Battalion Chiefs—one overseeing Health and Safety, and another assigned to Training and Professional Development. A public safety assistant provides administrative support to the division. One of the department's public safety analysts provides embedded HR coordination and support for daily operations. Despite the section's well-defined structure, its personnel and administrative capacity are significantly strained. As the department's operational and organizational complexity increases, Member Services has emerged as one of the most critical areas in need of targeted investment.

The section provides essential services to both career and volunteer members across three primary areas: Training and Professional Development, Health and Safety, and internal Human Resources support. These divisions ensure the department's workforce is well-equipped, healthy, and capable of meeting the increasing service demands of a dynamic and growing community.

Training and Professional Development

A comprehensive training program is one of the most critical factors in ensuring the safe and effective delivery of emergency services. This is especially true for departments with limited staffing, where the complexity and risk of incidents are no different than in larger urban environments. Maintaining a robust program for initial and ongoing fire, rescue, hazardous materials, and emergency medical training is essential to ensure operational readiness, firefighter safety, and public protection.

In combination systems like ACFR, the training workload is further amplified by the need to prepare both career and volunteer personnel. Volunteer training must account for a wide range of prior experience, availability, and turnover, requiring a flexible yet structured approach to onboarding, skills maintenance, and compliance with applicable standards. This dual responsibility places significant demands on the training division's capacity and resources.

Failure to provide effective and continuous training for all personnel, career and volunteer alike, not only increases risk to responders and the community but also exposes the department to potential legal and operational liabilities.



In this section, ESCI reviews the department's training practices and compares them to national standards and best practices. Recommendations for strategic changes or opportunities for improvement are noted where appropriate.

General Training Competencies

Newly hired firefighters must participate in probationary firefighting recruit training. The National Fire Protection Association (NFPA), in its standard NFPA 1001 (Firefighter I and II), identifies the minimum training requirements that can serve as the basis for entry-level firefighters. The NFPA recommends other standards that address initial and ongoing training for firefighters and officers in a variety of specific topics.

In its Fire & Emergency Service Self-Assessment Manual, the Commission on Fire Accreditation International (CFAI) addresses "Training and Competency," and lists performance indicators under the headings of training and education program requirements, performance, and resources. Some of these competencies include the following:

- The organization has a process in place to identify training needs. The process identifies the tasks, activities, knowledge, skills, and abilities required to deal with anticipated emergency conditions.
- The agency's training program is consistent with the mission statement, goals and objectives and meets its needs.
- The training program is consistent with legal requirements for performing mandatory training.
- The agency identifies the minimum levels of training required for all positions in the organization.
- A command and staff development program is in place that encourages pursuit of professional credentialing.
- A process is in place to ensure that personnel are appropriately trained.
- The agency provides a training schedule that meets the organization's needs.
- The agency evaluates individual and crew performance through validated and documented performance-based measurements.
- The agency analyzes student evaluations to determine the reliability of training conducted.



- The agency maintains a training records management system that meets recognized standards.
- Facilities and apparatus are provided to support the agency's all hazards training needs. The agency has plans addressing any facilities and apparatus not available internally to complete training activities.
- The agency has instructional personnel with teaching qualifications and expertise to meet its needs.
- Instructional materials are current, support the training program, and are easily accessible.
- The agency has a process for purchasing, developing, or modifying existing curriculum to meet its needs.
- Equipment utilized for the training is properly maintained in accordance with the agency's operational procedures. The agency makes training equipment readily accessible to instructional personnel.
- The agency maintains a current inventory of all training equipment and resources.
- A selection process is in place for training and educational resource materials.
- Training materials are evaluated at least annually, to reflect current practices and meet the needs of the agency.

Furthermore, the Insurance Service Organization (ISO) requires detailed hours of specific training as part of their fire department ranking. Below is a summary of the ISO required training hours for each firefighter.

Annual:

- Facilities Training: 18 Hours
- Company Training: 192 Hours
- Officer Development Training: 12 Hours
- Driver Continuing Education: 12 Hours
- Hazardous Materials Training: 6 Hours
- Pre-fire Planning: Annual Review

New Employee:

- New Driver Training: 60 Hours
- New Recruit Training: Must meet NFPA requirements



Even though the Insurance Services Office (ISO) requires specific detailed training for department personnel, training programs must go beyond simply fulfilling mandatory hours. Emergency services training administrators and instructors must ensure that firefighters, EMS personnel, and officers are not only competent, but also self-confident in the variety of skills necessary to perform effectively in high-stress situations.

ISO Evaluation Results

In 2023, Albemarle County Fire Rescue underwent a Public Protection Classification (PPC) evaluation by the Insurance Services Office (ISO). While the department maintained a strong overall score, the final rating of 3/3X represented a minor downgrade from its previous 3/3Y classification. This downgrade was directly attributed to incomplete documentation of required minimum training hours for personnel.

Although ACFR conducted a significant amount of training in 2022, ISO determined that it was inconsistently documented, particularly within volunteer stations. Although ISO requires at least 24 hours of documented suppression training annually per firefighter to receive any credit, full credit is based on significantly higher participation levels across several categories. The minimum of 24 hours of annual fire suppression training is required to be considered in the scoring model. Failure to meet this threshold, regardless of actual participation, led to a loss of credit. This highlights a critical vulnerability in the department's training management system, despite the quality and quantity of training provided. The lack of a department wide training program coordinator is a recurring limitation.

Further analysis of the 2023 ISO evaluation revealed that ACFR underperformed compared to peer localities in ISO's "Training" category, earning only 2.5 out of 9 possible points, while peer jurisdictions averaged 6.65 points. This underperformance stands in contrast to ACFR's high marks in apparatus and equipment categories.

The ISO feedback strongly supports several of the department's internal observations:

- There is no dedicated training administrator to oversee documentation, standardization, and audit readiness.
- Company- and station-level training is inconsistently tracked, particularly in volunteer agencies.



- The records management system (RMS) is underutilized for training reporting, and many personnel are not trained in how to properly log activity.
- EMS training hours are not counted toward ISO credit, placing additional pressure on fire-specific training delivery.

The decentralized nature of the volunteer workforce, combined with inconsistent use of the records management system, continues to present a challenge in validating participation and maintaining compliance across all service areas. In response, ACFR has begun piloting enhanced documentation procedures in specific volunteer stations and is planning to expand the use of its records management system (RMS) training module. However, sustainable improvement will require centralized coordination, administrative support, and clear accountability for both career and volunteer personnel.

Addressing these training gaps presents a significant opportunity to improve future ISO evaluations, enhance operational readiness, and better align with NFPA standards for company-level, officer, hazardous materials, and driver training. It also underscores the need for greater integration and oversight across the department's decentralized training delivery model.

Training Administration and Delivery

An effective training program requires strong management, including clear program guidance through structured planning, defined goals, and specific objectives. ACFR has established these foundational elements, and management actively supports training, as seen in the high volume and coordination of training sessions held throughout the year. The extensive service area adds complexity, making it challenging to schedule training outside of primary response territories. Staff interviews highlighted a need for additional support to ensure that operational units can consistently receive necessary training. The lack of administrative support makes it difficult to meet established standards and build future plans for developing goals and objectives of the training division as well as ensure documentation of ISO training hours.

The Training and Professional Development Division for ACFR is responsible for managing all initial and ongoing training for career and volunteer members. Under the supervision of the Battalion Chief of Training, the division delivers the following core programs:

- A six-month Career Recruit Academy, held annually



- Two volunteer Fire Academies (spring and fall)
- A dedicated EMT course for volunteer personnel
- Driver Pump Operator and Aerial Operator certifications
- Technical rescue and special operations training
- Emergency Vehicle Operator Course
- Continuing education for EMTs and Paramedics
- An in-house Paramedic Program, offered in partnership with Virginia Commonwealth University

Training is delivered in accordance with National Fire Protection Association (NFPA) standards and EMS education requirements, including compliance with National Registry of Emergency Medical Technicians (NREMT) expectations. The department utilizes platforms such as Target Solutions and First Due for training delivery, documentation, and credential tracking. The Battalion Chief of training is responsible for training program coordination but experiences difficulty when dealing with the volunteer members and gaining compliance with required expectations.

The Training Division is primarily staffed by uniformed personnel, who bring strong operational experience and instructional credibility. However, the division also includes key non-uniformed roles—such as the EMS Coordinator, EMS Instructor, and a Member Services Public Safety Assistant—who provide important support for EMS education and administrative functions. While this hybrid model offers some continuity, the division's overall capacity remains constrained by the dual operational and instructional roles many uniformed members still carry. As the system grows, expanding civilian instructional and administrative support particularly in curriculum development, logistics, and training coordination would help reduce disruptions caused by emergency reassignments and improve the sustainability of the training program.

In terms of a delivery model, training is primarily centralized, coordinated through the Training Division, and scheduled department wide. Although company officers conduct some localized training, especially in basic skills maintenance or review, there is no formalized station-level curriculum delivery structure. This has resulted in uneven training participation and tracking across shifts and stations, particularly when instructor coverage is limited, or station staffing is reduced.



Beyond curriculum delivery, the division also manages all promotional processes, from Firefighter Technician I through Battalion Chief. This includes the development and implementation of promotional assessments, candidate orientation, and post-assessment feedback processes. These functions are essential to maintaining both operational readiness and professional growth opportunities for ACFR members.

Despite the breadth and quality of the division's offerings, its resources are overextended. The same personnel responsible for long-range curriculum planning are also tasked with facilitating day-to-day training events, coordinating recruit academies, managing certification data, and responding to immediate operational needs. The division has no full-time administrative support or dedicated training program coordinator, resulting in frequent scheduling bottlenecks and delays in content development. The heavy reliance on overtime to deliver training and the recurring reassignment of instructors to recruit schools or modified duties further limits the division's ability to offer consistent, department-wide programming.

While training standards are high, the officer development program still has gaps in supervisory preparation, particularly at the company officer and battalion chief levels. Stakeholders expressed a strong desire for formal leadership training to improve organizational alignment and decision-making consistency. This need is well-aligned with best practices found in NFPA 1021, *Standard for Fire Officer Professional Qualifications* and the IAFC Officer Development Handbook, both of which emphasize structured, progressive training tied to promotional readiness. This lack of access to structured development pathways further compounds the existing gaps in officer readiness and long-term succession planning.

Beyond technical training, the department also engages in broader professional development, often in collaboration with the county's central training office. Although Albemarle County offers a range of professional development opportunities through its central training office, current offerings have limited applicability for public safety personnel. Historically, programs were designed around an 8-to-5 schedule and aimed at general government staff, leaving fire and police employees with minimal access.

In response to broader post-pandemic needs, Albemarle County launched a virtual Management and Leadership Development (MLD) program for new supervisors, as well as periodic supervisor conferences to align leadership expectations across



departments. However, these programs have had limited reach within Fire Rescue due to shift-based staffing and operational demands.

Despite the willingness of county leadership to support Fire's training goals, there is currently no formalized mechanism for aligning strategic training initiatives across departments. This has contributed to inconsistencies in access and planning. The county's lead for professional development, noted that while the county has the capacity and willingness to support Fire's training needs, there is currently no formal structure for collaboration or shared strategic planning. She emphasized the need for better communication, advance planning (ideally 3–6 months lead time), and a countywide learning needs assessment to identify priority areas across all departments. This type of assessment—last conducted in 2015—would provide a foundation for targeted, department-specific leadership development and allow for scalable, integrated solutions that meet both Albemarle County and Fire Rescue objectives.

Health and Safety

ACFR recognizes the importance of health and safety within the department and follows guidelines aligned with several key NFPA standards that serve as industry benchmarks for firefighter wellness, occupational health, and operational safety:

- NFPA 1500: *Standard on Fire Department Occupational Safety, Health, and Wellness Program*
 - Establishes the comprehensive framework for department-wide safety, health, and wellness policies, including training, risk management, PPE, and behavioral health.
- NFPA 1521: *Standard for Fire Department Safety Officer Professional Qualifications*
 - Defines the roles, responsibilities, and qualifications for both Incident Safety Officers and Health and Safety Officers, supporting a dedicated safety management system.
- NFPA 1582: *Standard on Comprehensive Occupational Medical Program for Fire Departments*
 - Sets the medical requirements for fire service personnel and guides annual medical evaluations, fitness-for-duty decisions, and exposure risk tracking.



- NFPA 1583: *Standard on Health-Related Fitness Programs for Fire Department Members*
 - Provides requirements for implementing and managing fire department fitness programs, including physical assessments, exercise protocols, and wellness education.

These standards collectively reinforce the foundation of ACFR's approach to firefighter wellness and risk reduction, while also serving as targets for continuous program improvement.

Health and Safety Administration and Delivery

The Health and Safety Division is led by a Battalion Chief and is responsible for ensuring a safe, healthy, and sustainable work environment for all fire rescue personnel. The division oversees the department's occupational health programs, annual medical evaluations, post-injury return-to-duty processes, behavioral health resources, and operational safety oversight.

Key responsibilities include:

- Coordination of NFPA 1582-compliant medical evaluations and fitness-for-duty screenings
- Oversight of OSHA compliance and workplace safety
- Deployment of incident safety officers at high-risk incidents and training exercises
- Investigation and analysis of injuries, near misses, and exposures
- Management of respiratory protection and PPE compliance
- Cancer prevention efforts, including post-incident decontamination protocols
- Facilitation of mental health support, including peer support, EAP, and licensed counseling access

Mental Health and Wellness

Our nation's firefighters face emotional needs that are very different and unique to the occupation. The percentage of firefighters struggling with career-related stress is very high, with suicide rates climbing each year. These issues manifest themselves through higher divorce rates and addictions such as alcohol, drugs, or gambling. Frequently seen in recent studies, another major concern is Post-Traumatic Stress Disorder (PTSD). As these symptoms occur, employees need support systems that are readily



accessible and provide access to someone who is qualified and genuinely understands the employee's circumstances. ACFR has adopted a proactive mentality for mental health resources and engaging employees in need. ACFR currently offers a Peer Support Group, an embedded clinician, and other resources. There were several examples of the successes achieved through their current processes. A strong desire to enhance and continue the improvement of these resources was expressed not only by the Member Services Section staff but the cross section of interviewed employees as well. Several staff have referenced the work the Peer Support Team is doing and how it helps during the interviews with stakeholders.

Several programs can assist including critical incident stress management, employee assistance programs, Behavioral Health Access Programs, and intervention programs, to name a few. ACFR offers an Employee Assistance Program, and a Critical Incident Stress Management team is requested when needed. Regular information is sent to all members to communicate and make each member aware of the availability of resources.

The development of a Behavioral Health Access Program (BHAP) would be a transformative asset for ACFR, providing a comprehensive, structured approach to support employees facing mental health challenges. A BHAP outlines a robust network of programs and services designed to support the mental and emotional well-being of ACFR employees, offering timely resources to address a range of mental health needs as they arise.

A BHAP recognizes that a single program cannot meet every employee's needs by offering a variety of services, allowing individuals to choose resources best suited to their current situation. Just as physical health can fluctuate, so can mental health. With BHAP, ACFR can create a safe, stigma-free environment, breaking down the silence often surrounding mental health issues and encouraging employees to seek help when needed. Stakeholder interviews highlighted the need for a BHAP as one of the most positively viewed internal support programs.

A BHAP is built on a foundation of established resources, including the Mental Wellness Standard Operating Guideline, developed through Chaplaincy and Peer Support Programs, and is part of a larger initiative led by the Health and Safety Committee (HSC). The HSC, under the guidance of the Health and Safety Officer, oversees all aspects of BHAP and other health initiatives, including cancer prevention, physical



fitness, and overall wellness, with the primary goal of reducing risks for ACFR employees.

The BHAP guide includes Standard Operating Guidelines for the Chaplain Program, Peer Support Team, Clinician Response Team (CRT), and the Health and Safety Committee's purpose and scope. It centralizes resources through a dedicated website, making it easy for employees to access Critical Incident Stress Management, Peer Support, Family Support, recovery centers, Chaplaincy, Behavioral Health Awareness education, and Employee Assistance Programs specifically designed for first responders.

BHAP's multidisciplinary team comprises ACFR and healthcare professionals, trained and credentialed mental health experts, and clergy members trained in crisis interventions. By offering a continuum of care and resources, BHAP helps create a safer, more supportive environment for ACFR employees, empowering them to address mental health challenges proactively and enhance their long-term wellness and resilience.

Safety Culture

The division's scope also includes documentation and trend analysis related to workplace injuries, illness tracking, and exposure incidents. Safety staff collaborate closely with Training and Operations to ensure alignment between best practices and real-world application. ACFR's safety culture is widely viewed as progressive and supportive, particularly in the area of behavioral health. The department's wellness culture, anchored by a peer support team and strong informal leadership—has created meaningful momentum.

To strengthen its safety culture, ACFR is encouraged to align more closely with Chapter 4 of NFPA 1500, which outlines the best practices for effective safety committee operation. This includes a diverse representation from across the department, with a focus on raising awareness and modifying behaviors to promote a safe work environment. The committee is urged to proactively implement safety education programs and foster a climate of safety self-awareness among members rather than relying solely on new rules. Often one of the most frequent challenges with implementation, the department should establish a schedule and allot the time to conduct these important committee meetings. Committee participation requires structure time allocation for success.



The integration of occupational health, fitness, and mental wellness under a single division aligns with NFPA 1500 guidelines and is a strength of the department's organizational model. However, like other areas within Member Services, this section is under-resourced. There is no dedicated analyst managing safety data, tracking regulatory compliance, or supporting policy development. Responsibilities related to modified duty, workers' compensation, and injury documentation often fall on a single point of contact, creating both bottlenecks and burnout risk. Safety Officer deployment is also limited by available personnel, making full compliance with NFPA 1521, *Standard for Fire Department Safety Officer Professional Qualifications* guidelines a challenge.

NFPA 1521 outlines the qualifications, roles, and responsibilities of both Incident Safety Officers (ISO) and Health and Safety Officers (HSO) within a fire department. It includes guidance on:

- Risk management during emergency operations
- Injury/illness investigation
- Hazard recognition and mitigation
- Safety program development and administration
- Compliance with OSHA and other relevant standards

It is closely connected with NFPA 1500, the overarching standard for occupational safety and health in the fire service.

Annual Fitness Evaluations

ACFR has taken meaningful steps toward promoting physical fitness and overall wellness among its career personnel. As of the current evaluation year, the department requires all career firefighters to complete an annual physical abilities test. This evaluation is job-specific, designed in collaboration with a third-party vendor, and structured to minimize risk by substituting full PPE and SCBA with weighted vests and skull caps. The testing is fit-for-duty linked, meaning performance outcomes may affect assignment or trigger conditional status, emphasizing its operational relevance. Additionally, annual NFPA 1582-compliant medical evaluations are conducted through a third-party provider and include cardiovascular screening, ultrasound imaging, and immediate clinician feedback.



While these practices demonstrate strong intent, the department does not currently operate a fully formalized NFPA 1583–compliant fitness program. NFPA 1583 outlines performance benchmarks in areas such as aerobic capacity, flexibility, muscular endurance, and body composition—components not yet uniformly assessed or tracked within the department. Although ACFR employs collateral duty certified peer fitness trainers and provides structured physical training plans for crews, the program is limited by personnel availability and lacks administrative oversight. Volunteers currently receive onboarding physicals, but they are not included in annual fitness testing due to funding and logistical constraints. As such, the department demonstrates partial alignment with NFPA 1583 and would benefit from expanded program development and integration into the broader wellness strategy.

ACFR conducts annual medical evaluations for all career personnel that align closely with NFPA 1582: *Standard on Comprehensive Occupational Medical Program for Fire Departments*. These evaluations are conducted through a contracted third-party provider and include a wide range of diagnostic tools such as bloodwork, stress testing, ultrasound screenings, and immediate clinician consultation. The program is designed to identify occupational risk factors such as cardiovascular disease, cancer, and musculoskeletal issues that can impact firefighter performance and long-term health. Importantly, results are reviewed on-site, allowing for real-time feedback and, if necessary, fitness-for-duty determinations.

However, the medical program is not currently applied uniformly across the entire department. While career personnel receive annual evaluations as part of the formal program, volunteer personnel typically only undergo physical examinations during onboarding, and annual follow-up assessments are not consistently provided. This discrepancy is largely driven by budget constraints and a lack of targeted funding for volunteer health services. In alignment with NFPA 1582 recommendations, expanding the annual medical evaluation program to include volunteers, particularly those who are operationally active would strengthen ACFR's commitment to early risk detection, prevention, and occupational health parity.



Figure 20. NFPA Standards Alignment– ACFR Member Services

Standard	Title	Current Practice at ACFR	Observations / Gaps
NFPA 1500	Standard on Fire Department Occupational Safety, Health, and Wellness Program	Safety and wellness practices are embedded across Training, Health & Safety, and Member Services. Active peer support and incident safety officers deployed.	Strong cultural alignment: administrative support and committee structure could be expanded.
NFPA 1521	Standard for Fire Department Safety Officer Professional Qualifications	Battalion Chief oversees Health and Safety. Safety officers deployed to major incidents. Injury reporting and risk management in place.	The program is understaffed, lacks redundancy. Available personnel limit deployment.
NFPA 1582	Standard on Comprehensive Occupational Medical Program for Fire Departments	Annual medical evaluations provided for all career personnel through a third-party provider. Includes stress tests, bloodwork, ultrasound.	Volunteers receive onboarding physicals only. Annual medicals for volunteers are not currently funded.
NFPA 1583	Standard on Health-Related Fitness Programs for Fire Department Members	Physical fitness testing implemented for all career personnel (job-specific, fit-for-duty linked). Peer fitness trainers and workout plans provided.	No formal fitness program tracking performance benchmarks. Volunteers not included in testing.



Human Resource Services

The Human Resources (HR) function within ACFR plays a pivotal role in recruitment, onboarding, promotions, compensation coordination, and employee support. HR services are embedded within the Member Services Section, supported by Management Analyst who functions as the bridge between ACFR and Albemarle County's centralized HR structure. These staff manage internal administrative functions such as transfer paperwork, promotion adjustments, and coordination of payroll changes, while County HR handles classification, compliance, legal oversight, and formal County policy enforcement.

ACFR conducts their own recruiting and hiring which could benefit from HR involvement. As the department's operational and administrative footprint has expanded, these limitations have become more apparent and are affecting the overall efficiency of HR-related functions.

HR Structure and Staffing

County HR is organized into three generalist positions covering all departments, with one generalist currently assigned to support both Police and Fire, in addition to other agencies like Parks and Recreation. Recognizing the demand, the county has hired a dedicated Public Safety HR Manager for Fire and Police, which represents an important step toward increased focus and specialization.

Internally, ACFR relies heavily on the Deputy Chief and their team to manage nearly all HR workflows, ranging from onboarding and discipline to promotional assessments and employee relations. This internal handling of HR functions, though effective in many cases, raises concerns about duplication of effort, legal liability, and administrative sustainability.

Recruitment and Onboarding

ACFR executes a large portion of its own recruitment process. The department coordinates job announcements, leads physical ability test events, provides hands-on candidate coaching, and tracks applicant performance. HR assists with job posting, background checks, offer letters, and integration into the Albemarle County system, but their involvement is largely back-end.

Staff from both ACFR and HR agree that this division of labor can create gaps in continuity and communication. HR is not consistently looped in early enough to offer



strategic support or ensure consistent onboarding standards. The workload required to execute ACFR's high-touch recruitment strategy, especially the personal outreach, one-on-one coaching, and weekend practice events—is largely absorbed by ACFR personnel. While effective, this model places a considerable strain on operational leadership. Volunteer onboarding and separation processes also remain inconsistent and lack centralized tracking or follow-up.

Classification, Compensation, and Performance Management

ACFR maintains nine operational ranks and works in partnership with county HR to update job descriptions and classification structures annually. While this collaboration is ongoing, concerns persist regarding misalignment between duties performed and those outlined in formal job descriptions. Several stakeholders cited confusion around classification processes, inconsistent turnaround on approvals, and misalignment between job duties and titles.

While compensation administration (step raises, COLAs, market adjustments) is a responsibility of HR, the complexity of dual certification, in-station requirements, and 24-hour shift dynamics make public safety compensation structures difficult to manage under standard policies. ACFR reported often taking the lead in advocating fair compensation structures, but approval processes remain cumbersome and occasionally misaligned with operational timelines.

ACFR manages evaluations and promotion processes, including 360 reviews, but these efforts are often not tracked in ways that support broader workforce development or compensation strategies.

Promotional Processes and Career Development

ACFR manages promotional processes internally, from Firefighter Technician I through Battalion Chief. These include test design, performance evaluations, and post-assessment feedback. While effective, the lack of integration with HR systems limits data tracking, succession planning, and transparency. HR currently has minimal involvement in promotional development or career mapping for fire personnel, which further distances HR policy from operational career realities.

Disciplinary and Grievance Procedures

The complexity of employee relations and discipline within ACFR has grown alongside the department. Grievance handling processes are not always consistently structured, and the respective roles of ACFR and HR in disciplinary reviews are not always clearly



defined. Both ACFR and HR staff described the high volume of disciplinary cases and grievance reviews in public safety as a workload challenge, prompting consideration of additional resources. In some situations, differences in process interpretation or timing have contributed to uncertainty and delays in resolution. These challenges highlight the importance of establishing a clear, mutually understood framework for managing grievances and disciplinary actions. By fostering more consistent communication and shared ownership of these processes, ACFR and HR can reduce potential risks, support fair outcomes, and maintain trust among all involved parties.

Policy Coordination and Collaboration

Perhaps the most consistently cited theme across all interviews was the need for improved coordination between ACFR and HR. County leadership expressed concern about ACFR operating too independently when implementing policies and programs. Conversely, Fire personnel shared that centralized HR does not understand the tempo or operational needs of a 24/7 public safety environment. Stakeholder interviews highlighted that these mutual perceptions may be contributing to operational silos and inefficient collaboration. Individual working relationships are positive, but structural gaps remain.

The newly created Public Safety HR Manager position presents an opportunity to lead improvements in interdepartmental coordination, workload analysis, and support structure development. This position should be formally empowered to guide collaboration and drive administrative efficiency across public safety departments. To ensure success, this role should be empowered, engaged in long-range planning, and supported by mutual performance expectations. Regular strategic planning sessions between HR and ACFR could strengthen the relationship and improve mutual accountability.

Due to what ACFR staff described as gaps in centralized HR support, the department has developed an effective, albeit resource-intensive, internal model. The current division of labor leads to duplication, inconsistent policy implementation, and increased administrative burden on operational leadership. Fire Rescue personnel often carry the full weight of recruitment, onboarding, disciplinary coordination, and promotions, limiting their ability to focus on strategic planning and organizational development.



The County’s decision to hire a dedicated Public Safety HR Manager for Fire and Police is a promising step toward more integrated support. However, meaningful progress will require intentional communication, mutual expectation setting, and shared responsibility for key workforce processes. By embedding HR support more deeply in ACFR operations, and clarifying ownership of policy and compliance functions, Albemarle County can strengthen both efficiency and employee satisfaction across their departments.

DRAFT



Community Risk & Resilience (CR&R) Section

The Community Risk and Resilience (CR&R) Section manages various prevention, preparedness, and education programs designed to reduce the risks and impacts of human-caused and natural disasters. A significant focus of the section is the prevention of fires and hazardous conditions through community education and enforcement of fire and life safety codes.

Fire Prevention and Code Enforcement

The Office of the Fire Marshal, located within ACFR's CR&R Section, oversees fire inspections, construction and site plan reviews, pre-planning and emergency management support, permitting hazardous or high-risk activities, fire and environmental crimes investigations, fire and life safety education, and other related activities. The office is led by a Battalion Chief serving as the Fire Marshal, supported by Assistant Fire Marshals.

Assistant Fire Marshals are assigned to suppression shifts but work approximately 8–10 hours per assigned shift day, supplemented by additional hours during the administrative workweek, maintaining a 40-hour average. They remain on-call during their 24-hour shift periods. When necessary, Assistant Fire Marshals work beyond 40 hours to meet operational demands.

The Office of the Fire Marshal conducts approximately 2,000 inspections annually, following the Virginia Statewide Fire Prevention Code (SFPC). Permitted inspections are fee-based according to an established schedule. Inspections follow an annual schedule focused on targeted occupancies each month. While initial and first follow-up inspections are completed efficiently, additional follow-up inspections (third or fourth visits) are challenging due to workload demands.

Current staffing levels in the Office operate at approximately 60–70% of what has been internally identified as the necessary capacity to meet inspection volume and enforcement requirements. This estimate is based on the office's historical workload trends, current inspection volumes, frequency of re-inspections, and the time required to conduct plan reviews, public education, and code enforcement activities. To manage the shortfall, the Office relies on part-time inspectors and redistributes responsibilities among available personnel.



The CR&R Section also performs construction and site plan reviews, focusing on hydrant placement, fire department connections, and sprinkler system designs. Strong partnerships with the Building Official's Office and developers facilitate proactive compliance. Following the retirement of a long-term liaison, a Battalion Chief currently assumes coordination responsibilities.

Fire and Environmental Crimes Investigations

Investigating the cause and origin of fires and hazardous incidents plays a vital role in reducing future risks and shaping public education strategies. According to NFPA 921: *Guide for Fire and Explosion Investigations*, investigations result in classifications of accidental, natural, incendiary, or undetermined causes.

Assistant Fire Marshals, certified in NFPA 1031, *Standard for Professional Qualifications for Fire Inspector and Plans Examiner* and NFPA 1033, *Standard for Professional Qualifications for Fire Investigators*, as well as through Virginia's Department of Community and Housing Development Core and the Fire Marshal Academy Basic Law Enforcement curriculum, are responsible for fire investigations, hazardous materials incident response, and environmental crimes investigations. Investigation reports support criminal prosecutions, departmental improvements, legal proceedings under FOIA requirements, and are shared with insurance companies in compliance with the Arson Reporting Immunity Act.

Each Assistant Fire Marshal covers a geographic district within Albemarle County and serves as a liaison to assigned fire companies to assist with fire code enforcement, fire prevention outreach, and training support. Additionally, each Assistant Fire Marshal manages specialized programs such as the Unmanned Aircraft System (UAS) Program, Human Services Alternative Response Team (HRSAT) participation, and plan reviews.

Public Education and Outreach:

Fire and life safety education promotes understanding of fire-safe behaviors and technologies that improve personal and community safety. Educating the public in evacuation planning, early detection (smoke alarms), and early suppression systems (sprinklers) can significantly reduce firefighter risk and improve life safety outcomes.

Currently, ACFR does not maintain a dedicated Public Education Office. Stations manage outreach events individually, and one Assistant Fire Marshal oversees countywide event scheduling using a three-tiered event prioritization system.



Personnel on restricted duty and volunteers often support large events when additional staffing is required.

ACFR offers a variety of community outreach programs, including free smoke alarm checks and installations, and targeted post-incident door-to-door smoke alarm campaigns. The 'Safe at Home' initiative, modeled after the national Exit Drills In The Home (EDITH) program, emphasizes family evacuation planning and early warning system maintenance. These initiatives are supported by incident-driven data analysis, identifying specific risks such as fall prevention needs and targeting outreach accordingly.

The absence of a centralized public education division limits the department's ability to deliver consistent educational messaging, particularly to school-age children across the jurisdiction. This staffing gap has been identified as a barrier to expanding comprehensive, countywide fire and life safety education efforts.

Community Risk Reduction and Risk Assessment

Community Risk Reduction (CRR) is not a new concept for the fire service. Fire departments have been actively involved in fire prevention for many years through public education, building inspections, and other activities. Although there is no specific blueprint for developing CRR plans in U.S. fire departments, there are some common and essential steps. The essential steps are as follows: identify risks, prioritize risks, develop strategies and tactics to mitigate risks, prepare the community risk reduction plan, and implement the community risk reduction plan while monitoring, evaluating, and modifying the CRR plan.

Community Risk Reduction (CRR) involves systematic efforts to reduce the likelihood and impact of preventable incidents within the community. While the fire service has historically engaged in fire prevention activities, CRR formalizes a targeted approach to risk mitigation across broader threats, including injuries, severe weather, hazardous materials incidents, and rare catastrophic events.

ACFR is currently working toward a formal CRR program as part of its accreditation efforts through the Center for Public Safety Excellence (CPSE) and the Commission on Fire Accreditation International (CFAI), aligned with Criterion 5F. Key elements include risk identification, prioritization, strategy development, implementation, and continuous monitoring and adjustment.



The department's developing CRR efforts already leverage incident data and community partnerships to design targeted outreach campaigns, enhancing risk awareness and resilience across Albemarle County.

Overall, the Community Risk and Resilience Section fulfills essential functions in prevention, enforcement, investigation, education, and risk reduction. However, staffing limitations, the absence of a dedicated public education division, and the ongoing need for a formalized CRR framework, present challenges that impact the department's ability to fully meet the evolving needs of the community.

ACFR's Community Risk Assessment identified elevated fire and medical risk in suburban demand zones, with contributing factors including aging infrastructure and extended response times. In response, the department will benefit from Community Risk Reduction programming, public education, and home safety visits aligned with NFPA 1300, *Standard on Community Risk Assessment and Community Risk Reduction Plan Development*.



Emergency Management Section

The ACFR Fire Chief currently serves as the County's Emergency Management Coordinator. Historically, emergency management responsibilities were coordinated through a regional model that included the city of Charlottesville, the University of Virginia, and Albemarle County. In recent years, this responsibility has transitioned to Albemarle County Fire Rescue to enhance local focus and control.

ACFR's Emergency Management Section actively engages in all major functions outlined in nationally recognized emergency management frameworks. Traditionally, emergency management has been organized around four primary phases: preparedness, mitigation, response, and recovery. However, both FEMA's National Preparedness Goal and the Emergency Management Accreditation Program (EMAP) adopt a broader structure that includes six mission areas: prevention, protection, mitigation, response, recovery, and preparedness. These six components form the foundation of the National Preparedness System and are embedded within the EMAP Emergency Management Standard (2022), which outlines the capabilities expected of a resilient and well-coordinated emergency management program.

ACFR's Emergency Management Section is progressing toward full alignment with this comprehensive model. In addition to leading the development of the County's first Emergency Operations Plan (EOP), the section has advanced capabilities in continuity of operations planning, response coordination, and incident readiness. Continued emphasis on formalizing prevention and protection strategies, such as interagency intelligence sharing and infrastructure risk assessments, will help ACFR further mature its emergency management program. These efforts will also support the County's long-term readiness to pursue EMAP accreditation, should it choose to do so in the future.

County leadership has shown strong support for the Emergency Management function, setting strategic goals and emphasizing its growing importance. However, current staffing levels are insufficient to fully support emergency preparedness planning, training delivery, and exercise coordination. One position—originally designed to split responsibilities between Emergency Management and grant administration—remains vacant. There is active discussion to shift this role to fully support Emergency Management efforts.



Support staff within ACFR assist the Emergency Management Section with budget and purchasing tasks, logistics coordination, and finance as part of their broader responsibilities. Additionally, a contractor has been engaged to assist with continuity planning. Despite this support, the Deputy Chief of Emergency Management continues to face a high workload balancing countywide coordination with internal fire-rescue responsibilities.

A legacy position within the Emergency Communications Center (ECC) presents an opportunity to be redefined and reallocated in support of the County's Emergency Management functions. Specifically, this position could be realigned to assist with coordination of emergency operations planning, resource tracking, and situational awareness during activations of the Emergency Operations Center (EOC). It could also support ongoing EM program functions such as maintaining the County's Emergency Operations Plan (EOP), contributing to hazard-specific annexes, managing WebEOC or similar platforms, and assisting with training and exercise coordination. By repositioning this role to serve as a bridge between ECC and Emergency Management, Albemarle County can enhance its all-hazards preparedness posture, improve continuity of operations, and build additional capacity without creating a wholly new position.

ACFR's Emergency Management team maintains strong working relationships with internal departments, outside agencies, and private sector partners. Currently, each county department has a designated Continuity Coordinator who maintains continuity plans, assists with internal training, and participates in quarterly planning meetings. The department defines regional participation primarily as collaboration with the city of Charlottesville and the University of Virginia, though broader coordination opportunities exist through the Thomas Jefferson Planning District Commission. Integrating into this larger regional structure could help Albemarle County leverage established relationships and resources.

The Deputy Emergency Manager meets monthly with the Fire Chief (Emergency Manager), Deputy County Executive, and Police Chief. Albemarle County's Chief Operating Officer, who serves as the County's Continuity Coordinator, is expected to begin participating in these meetings as well. Additional coordination occurs monthly with representatives from the City of Charlottesville, the University of Virginia, UVA Health, and the ECC regional liaison. Quarterly meetings are also held with the Local Emergency Planning Committee (LEPC), hosted by the regional emergency liaison.



These recurring coordination efforts reflect the structure and intent of the Emergency Management Accreditation Program (EMAP) standards, which recommend the establishment of a formal advisory committee to guide and support the jurisdiction's emergency management program. While Albemarle County does not currently identify this group as an EMAP advisory committee, its ongoing function closely mirrors EMAP's requirements. Formally recognizing and documenting this body as the designated emergency management advisory committee could help ensure compliance with EMAP criteria and enhance long-term program credibility and effectiveness.

Emergency Management Training, Credentialing, and Preparedness

All Captains and higher-ranking personnel within ACFR have completed the required Incident Command System (ICS) courses. All fire academy recruits complete National Incident Management System (NIMS) courses: ICS-100, ICS-200, ICS-700, and ICS-800. Promotion to Captain II requires additional completion of ICS-300 and ICS-400.

The county recently trained eleven personnel as Section Chiefs and Unit Leaders for the Planning, Finance, and Operations Sections of an Incident Management Team (IMT). ACFR recently signed up as a member organization of the Central Virginia IMT with the goal of credentialing approximately fifteen personnel. These individuals will help train others, expanding the local IMT capability. ACFR has offered an ICS-300 course and two ICS-400 courses over the past 18 months. A second ICS-300 will be offered this fall.

Emergency Operations Center (EOC) Readiness

Currently, Albemarle County does not conduct regular full-scale Emergency Operations Center (EOC) activation exercises. As additional personnel complete credentialing in the Incident Command System (ICS) and participate in the development of the local Incident Management Team (IMT), these individuals will form the core of EOC staffing during major events. This progress enhances the county's overall state of readiness and provides a more resilient structure for managing emergency operations.

To further strengthen EOC readiness, the County should explore opportunities to integrate continuity planning with daily EOC operations. Aligning the EOC framework with continuity of operations (COOP) planning ensures that departmental and countywide functions remain sustainable during disruptions. Embedding continuity considerations into EOC training, exercises, and activation protocols supports a more comprehensive and functional approach to all-hazards planning.



Additionally, emerging best practices in emergency management suggest that EOCs should not only serve during large-scale events but also build daily familiarity with ICS functions. This can be accomplished by creating routine operational liaisons between the EOC and departmental ICS structures, enhancing interoperability, and enabling more agile transitions from routine operations to full activation when needed. While some jurisdictions have begun integrating EOC personnel more consistently into ICS-based planning cycles or operational briefings, Albemarle County has an opportunity to explore these models further as part of its broader emergency management evolution.

Alerting and Public Communication

Albemarle County uses the Motorola Rave alerting platform, managed by the ECC, to issue public notifications. However, only about 5% of residents are currently enrolled. This low enrollment, combined with the decline in landline use, creates a challenge for reaching the public during critical events. Past instances of message confusion have prompted the county to begin standardizing alert terminology in coordination with Charlottesville and UVA.

Community Outreach and Integration

The Emergency Management Section does not yet maintain a formal community engagement plan. To improve outreach and promote preparedness initiatives, Emergency Management should collaborate with the Community Risk and Resilience (CR&R) Section to increase education efforts and community partnerships.



Maintenance and Logistics

The Maintenance and Logistics Division operates within the Operations Section and is led by a Battalion Chief. This division plays a critical support role in enabling ACFR to function efficiently and effectively. Its broad scope of responsibility includes fleet management, equipment and supply oversight, facilities maintenance, procurement and budgeting, logistical support, and compliance with applicable policies, standards, and regulations.

Fleet Management and Ownership Challenges

The division oversees a fleet of more than 175 apparatus and vehicles, managing all aspects of maintenance, repairs, inspections, and replacements. County purchased apparatus are co-titled between the county and the respective volunteer associations, with volunteers maintaining significant input into vehicle specifications and outfitting. While this collaborative approach fosters shared ownership and engagement, it has also introduced challenges that affect maintenance efficiency, standardization, and operational flexibility. Differences in equipment types, parts, and layouts across the fleet create complexity in the supply chain, hinder repair timelines, and limit the ability to rotate apparatus for lifecycle optimization.

Despite the co-ownership arrangement, ACFR bears full responsibility for vehicle repairs, insurance, and fueling. However, the practice of co-titling has at times led to confusion about final authority and ownership, particularly when strategic deployment of apparatus is needed across the county. In some cases, efforts to reposition apparatus during high-risk periods have been delayed or resisted due to conflicting expectations. A clearer delineation of ownership responsibilities—coupled with a more standardized fleet management approach—would improve efficiency, reduce costs, and better align apparatus deployment with operational priorities.

Equipment and Inventory Management

The division is responsible for the procurement, inventory control, distribution, testing, and inspection of mission-critical equipment such as personal protective equipment (PPE), self-contained breathing apparatus (SCBAs), tools, hoses, and communications equipment. Each of these asset classes follows a defined lifecycle for inspection, testing, maintenance, and eventual replacement. The division maintains a comprehensive inventory system to track usage and condition to ensure that resources are available and in compliance with safety standards.



Facilities Maintenance

Facilities maintenance also falls under the Logistics Division's purview. While the county maintains building systems and infrastructure (e.g., HVAC, plumbing, electrical), ACFR is responsible for station-level equipment including appliances, furniture, and fixtures. The division manages upkeep and repair of these assets and coordinates with County Facilities Management on larger-scale maintenance and improvement projects.

Operational Logistics

The division plays an active support role during major incidents, ensuring timely delivery and replenishment of supplies such as food, fuel, communications gear, and scene lighting. It also maintains logistical caches for prolonged incidents and special events, allowing for scalable resource deployment.

Procurement and Budgeting

Logistics staff collaborate with Albemarle County's central procurement office on asset acquisition, contract administration, and budget oversight. Fleet replacement planning, equipment purchasing, and facility outfitting are coordinated through this relationship to ensure compliance with local and state purchasing requirements. The division tracks expenditures related to logistics, maintenance, and capital improvement to support strategic planning and justify future requests.

Compliance and Policy

The division ensures compliance with applicable local, state, and federal requirements, particularly in relation to fleet safety, testing schedules, PPE certifications, and SCBA servicing. Policies and procedures are in place to guide daily operations, and continuous improvement efforts are underway to update outdated documentation and modernize workflows.

The Logistics and Fleet Maintenance Division has grown to a team of five personnel. As part of future planning and organizational development, ACFR has a strategic opportunity to evaluate the leadership structure of this division. Transitioning to civilian leadership could enhance continuity and administrative specialization, while allowing for the reallocation of a sworn position to strengthen operational capacity elsewhere in the department.



Service Delivery & Resource Allocation

Service delivery and performance are the metrics which best illustrate the services provided by the fire department to a community.

Service Demand Analysis

When assistance is requested, a demand for service from the fire department is requested. Analyzed by each calendar year, the primary analyses of service demand include the types of incidents, when they occur, and where they occur.

Incident Type Analysis

Documentation of response to incidents includes recording the type of incident that was found by an arriving unit. The National Fire Incident Reporting System (NFIRS) and its successor, the National Emergency Response Information System (NERIS), are industry standard systems used by the local fire department to record this information. The systems track over one hundred incident types which are grouped into series as illustrated in the following figure.

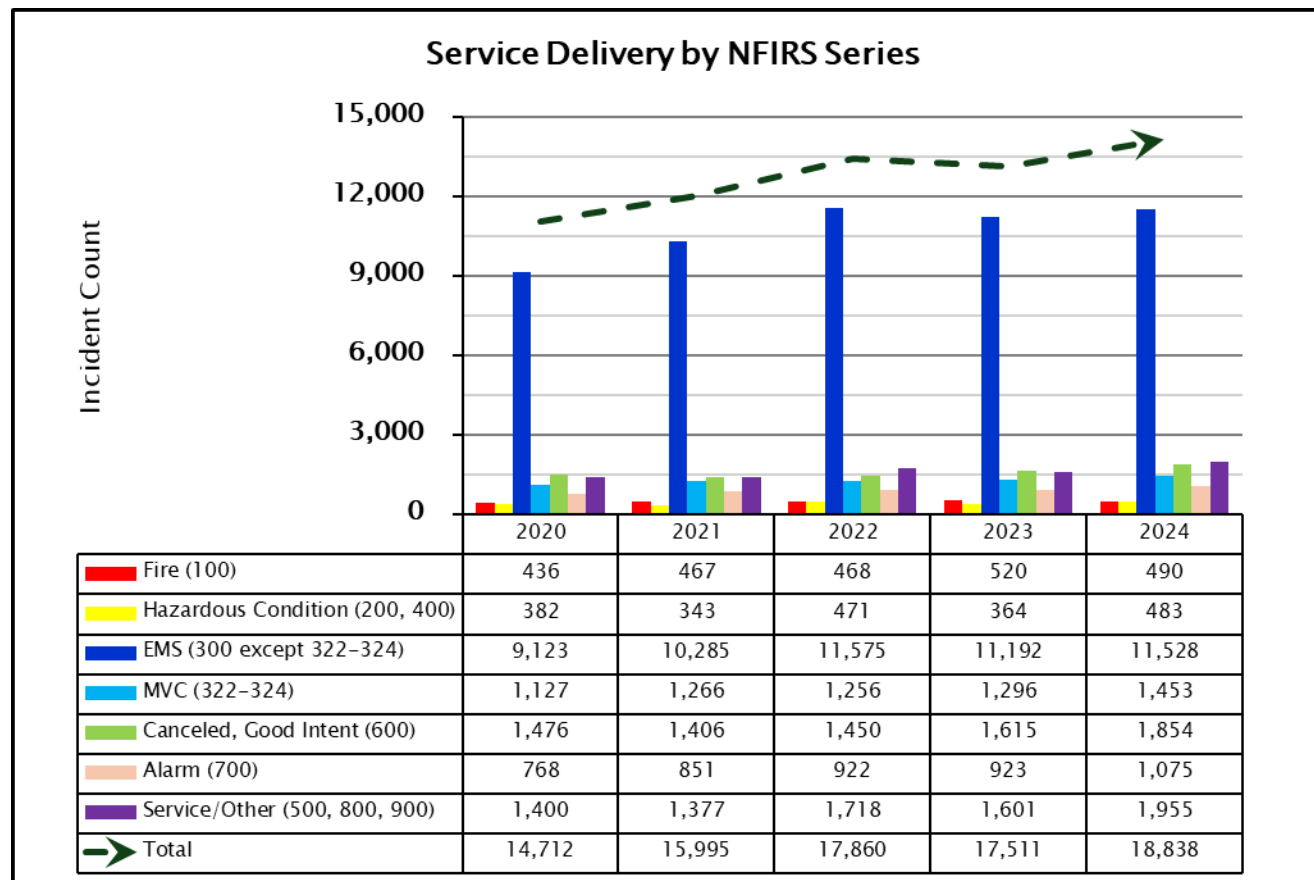
Figure 21. NFIRS Incident Series

Incident Series	Incident Heading
100-Series	Fires
200-Series	Overpressure Rupture, Explosion, Overheat (No Fire)
300-Series	Rescue and Emergency Medical Service (EMS) Incidents
400-Series	Hazardous Condition (No Fire)
500-Series	Service Call
600-Series	Canceled, Good Intent
700-Series	False Alarm, False Call
800-Series	Severe Weather, Natural Disaster
900-Series	Special Incident Type



The following figure illustrates the types of incidents the fire department has responded to over the past five years.

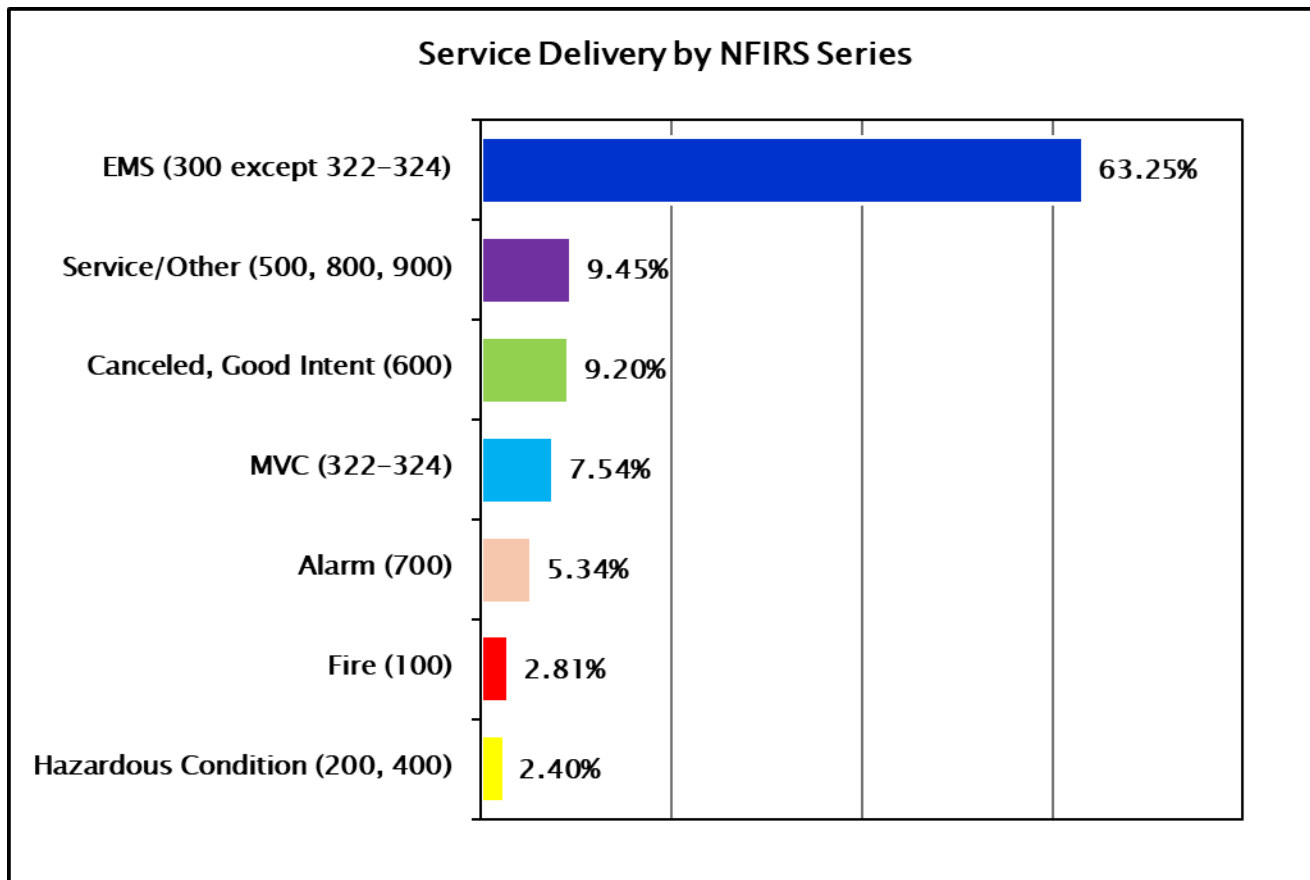
Figure 22. ACFR Service Demand by NFIRS Series, 2020–2024





Another consideration is to determine the percentage represented by each category comprising the entirety of service demand, as illustrated in the following figure.

Figure 23. ACFR Service Demand by NFIRS Series, 2020–2024





Temporal Analysis

Another data point documented for each incident response is the time at which it occurs. This may be analyzed from three different views—months, days, and hours, as illustrated in the following figures.

Figure 24. ACFR Service Demand by Month, 2020–2024

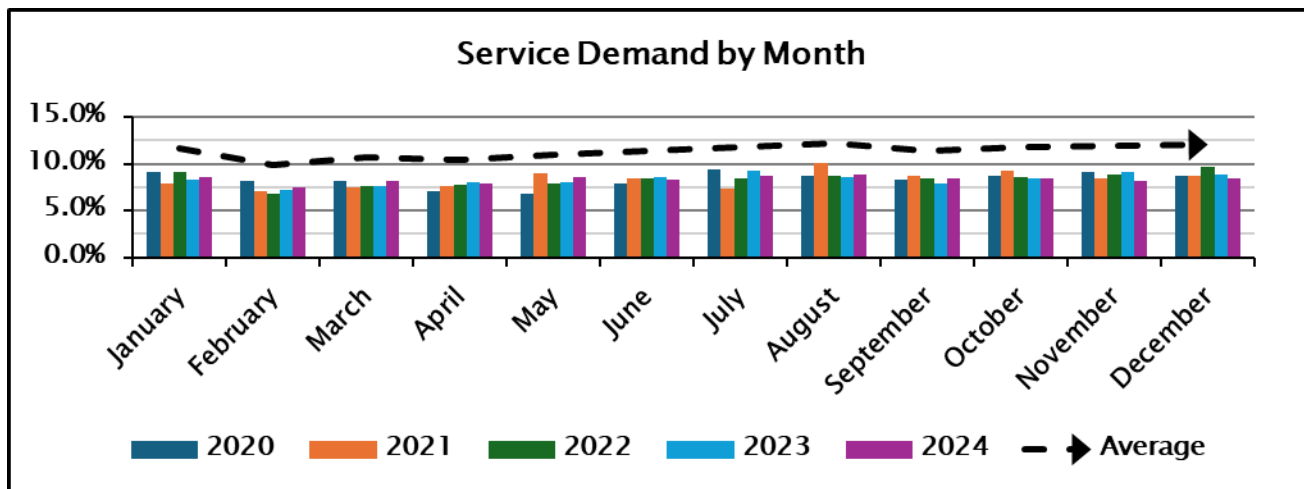


Figure 25. ACFR Service Demand by Day, 2020–2024

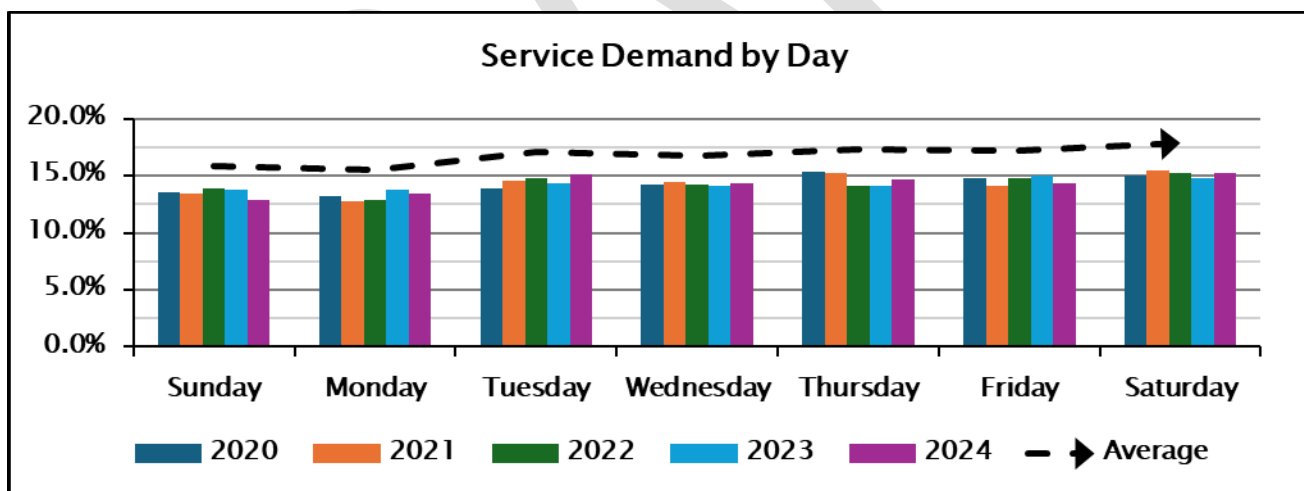
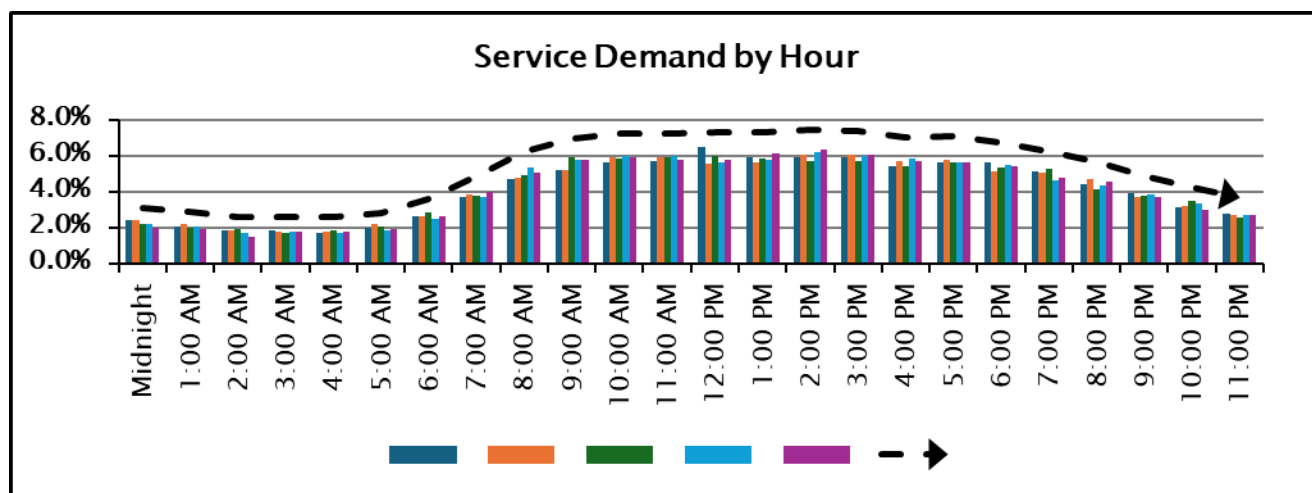




Figure 26. ACFR Service Demand by Hour, 2020–2024



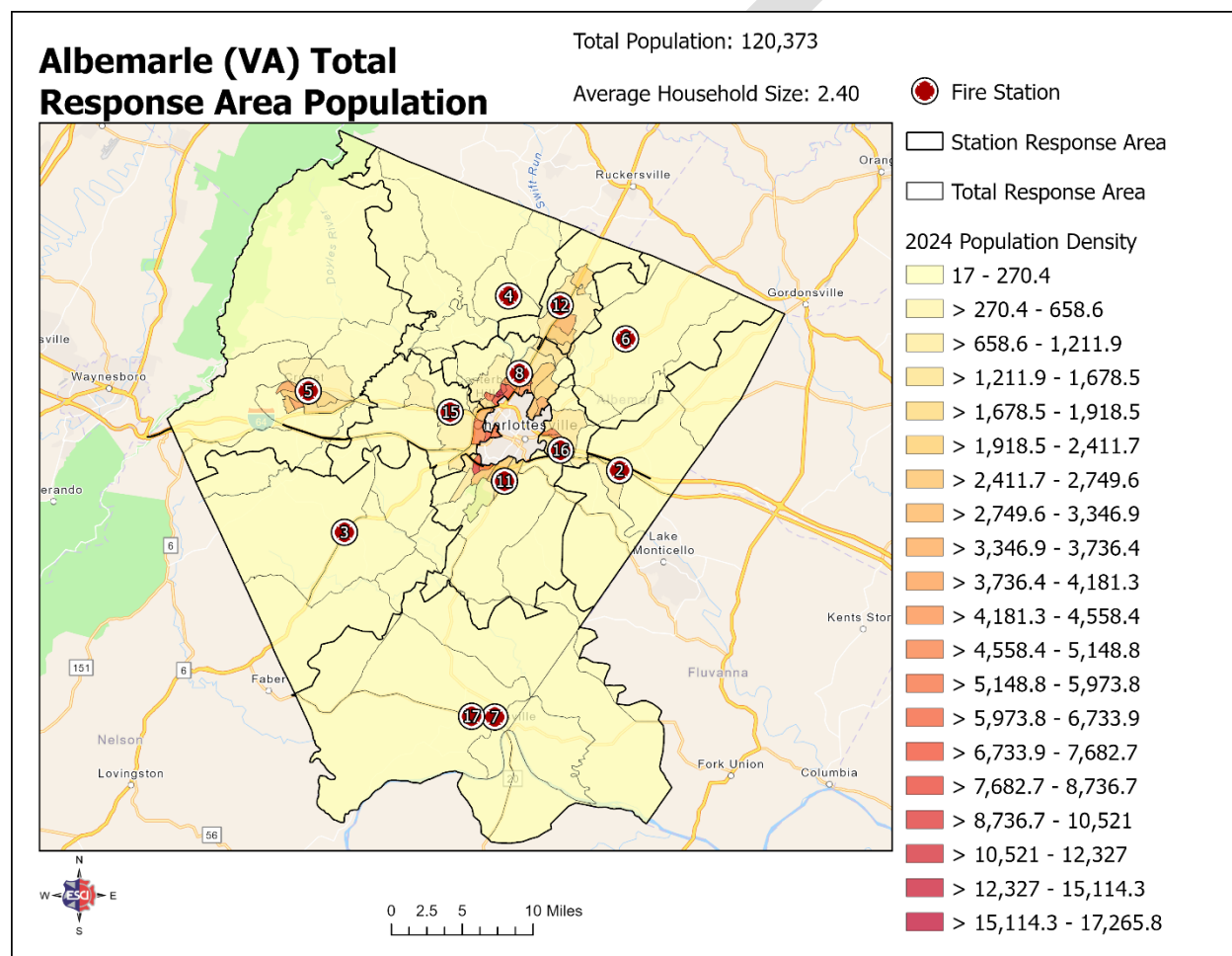
One additional note for time of day; based on a national study recently published, from 2018 to 2020, the occurrence of residential structure fires with fatalities were highest between midnight and 1:00 AM. The 8-hour peak period (11:00 PM to 7:00 AM) accounted for 45% of residential fatal fires¹⁶.

¹⁶ *Fatal Fires in Residential Buildings (2018–2020)*, Topical Fire Report Series Volume 22, Issue 2 /June 2022, U.S. Department of Homeland Security, U.S. Fire Administration, National Fire Data Center.

Geographic Analysis

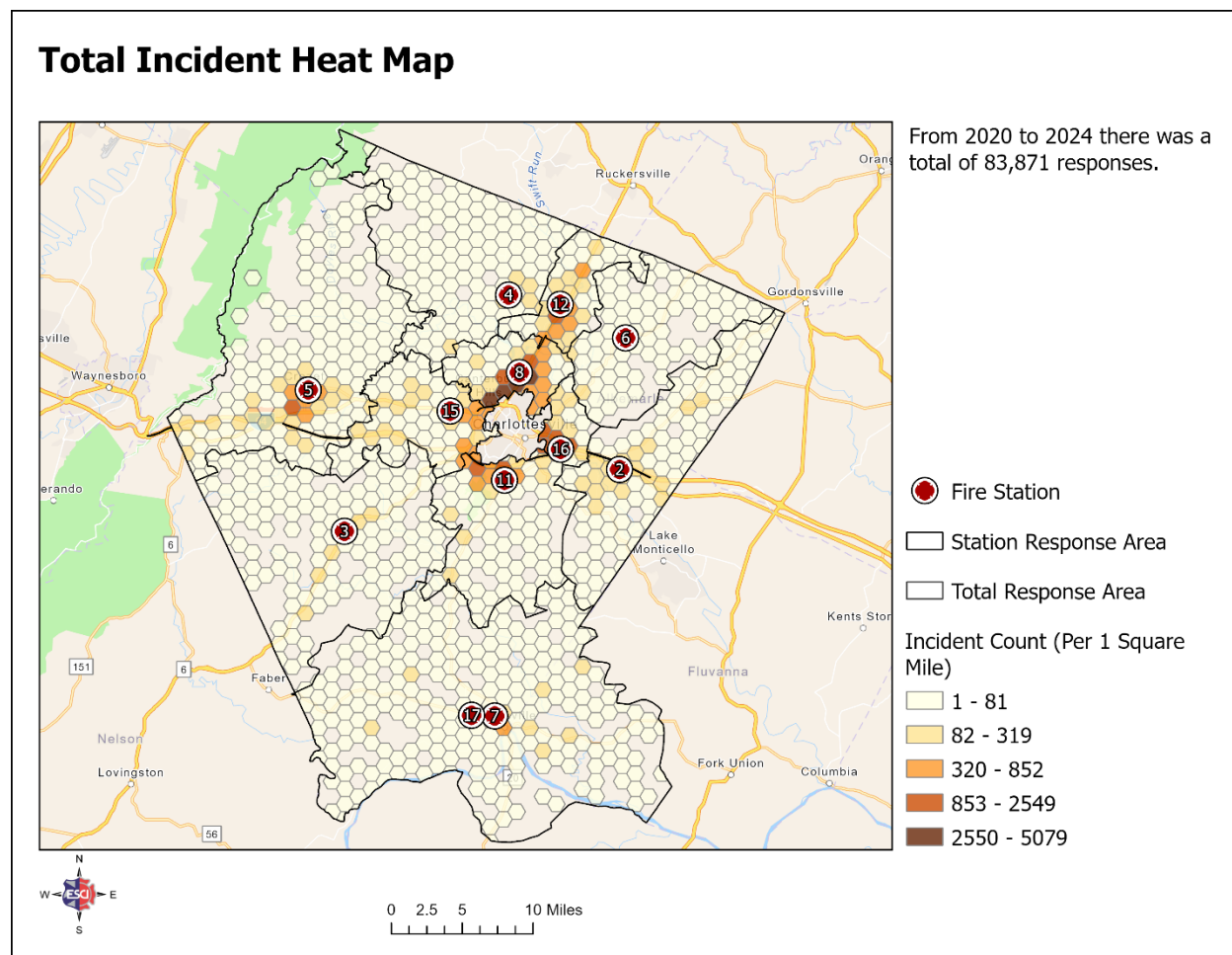
The location of incidents is closely related to the population density within the community. In other words, where there is greater population density (number of people per unit area such as square mile), there tends to be greater incident density. Heat maps are used to display this information. To compare the initial relationship of incidents and population, the first information needed is the population density, as illustrated in the following figure.

Figure 27. ACFR Population Density, 2024



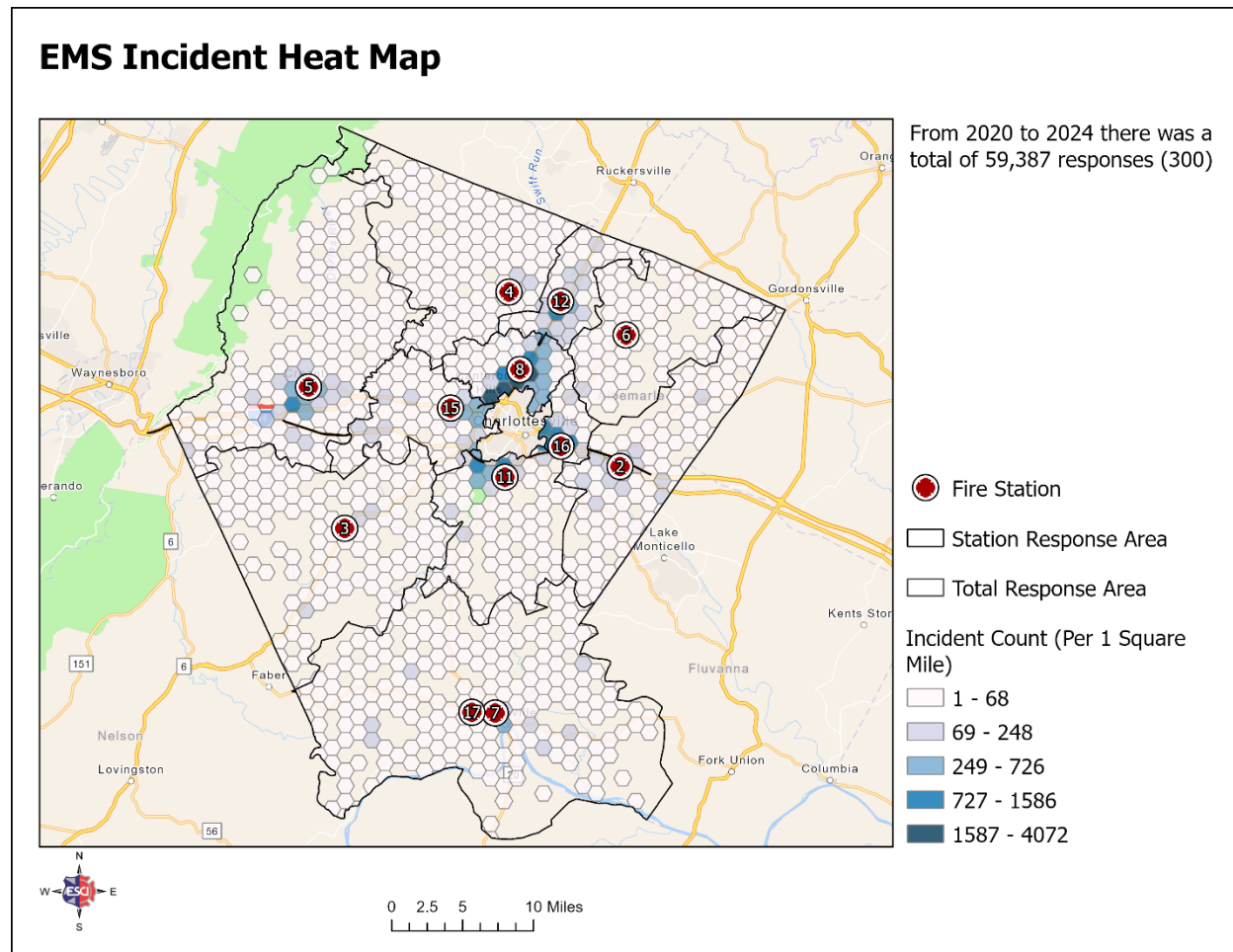
Another datapoint documented for each incident response is the location of the incident, either by address and/or the latitude and longitude of the incident. The first view of incident density includes all responses within the service area, regardless of incident type, as illustrated in the following figure.

Figure 28. ACFR Incident Density (All Incidents), 2020–2024



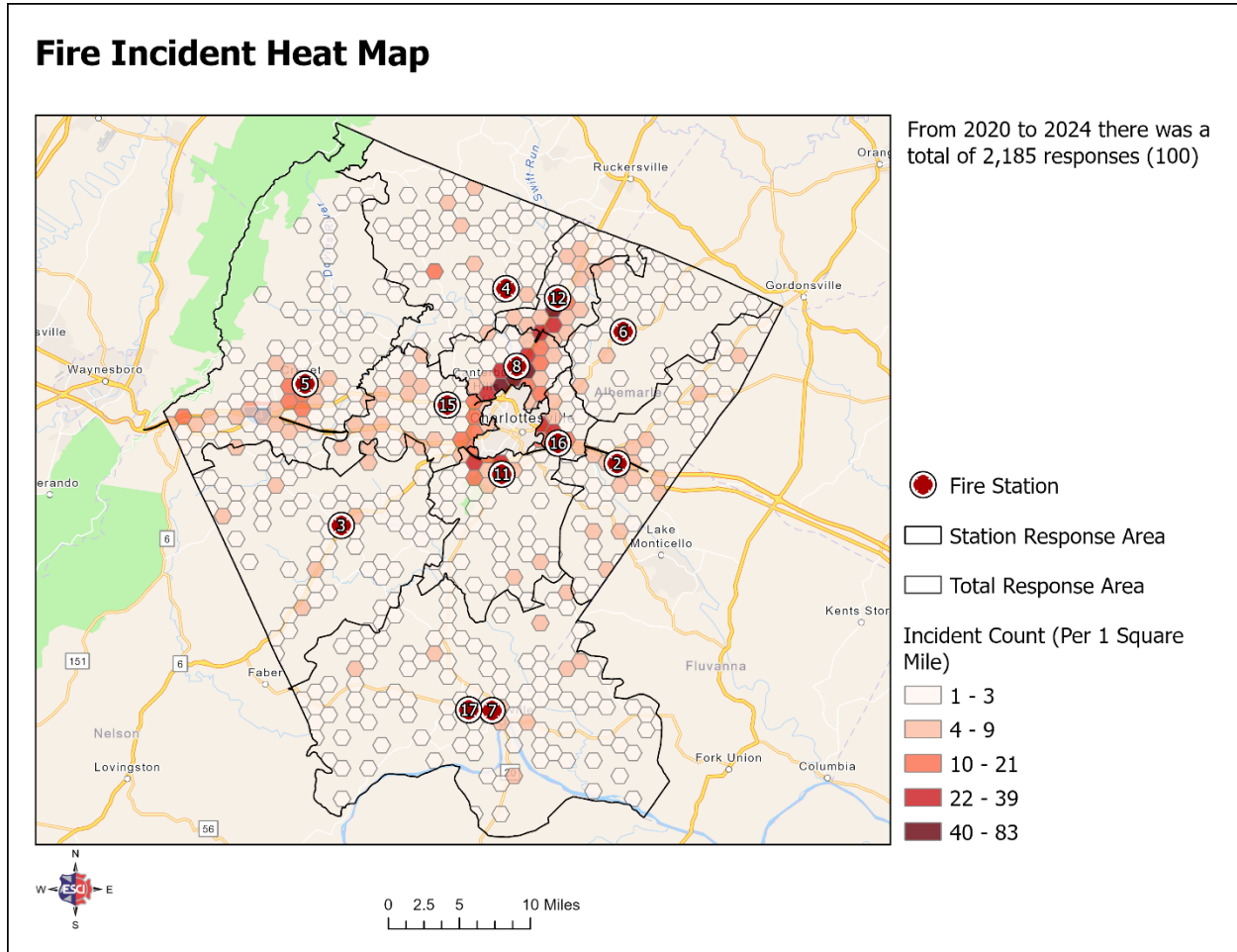
The second view of incident density includes only emergency medical services incidents, as illustrated in the following figure.

Figure 29. ACFR Incident Density (EMS), 2020–2024



The third view of incident density includes only fire incidents, as illustrated in the following figure.

Figure 30. ACFR Incident Density (Fire), 2020–2024





Resource Distribution Analysis

The placement of emergency services resources within the community should be compared to the location of incident density as well as being guided by various industry standards and best practices.

ISO Distribution

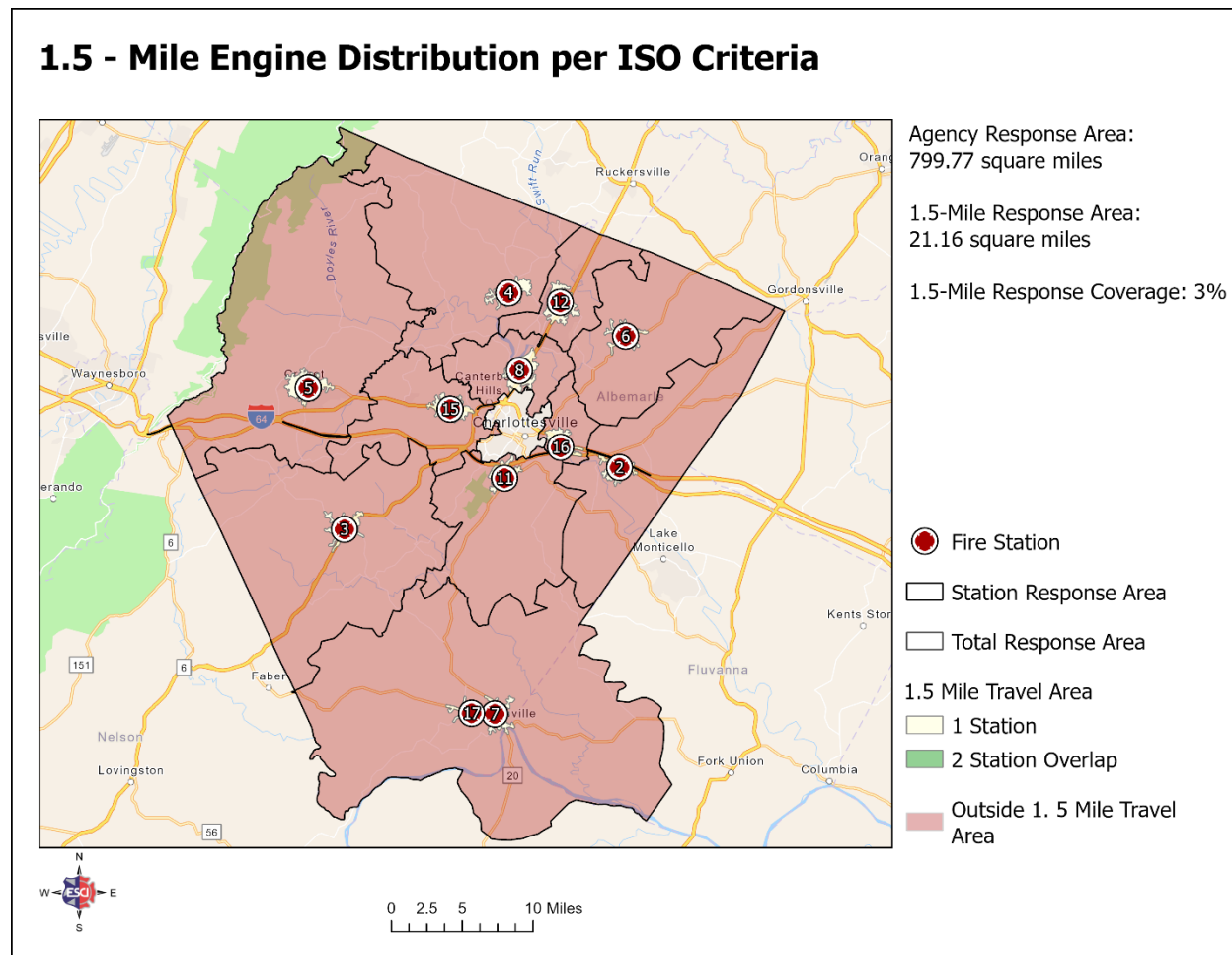
The Insurance Services Office, Inc. (ISO) is a national insurance industry organization that evaluates fire protection for communities across the country. A community's ISO rating is a crucial factor when considering fire station and apparatus concentration, distribution, and deployment, as there is a correlation between a community's ISO rating and the cost of fire (homeowners) insurance for residents and businesses.

To receive maximum credit for station and apparatus distribution, ISO evaluates the percentage of the community (contiguously built upon area) that is within specific distances of fire stations, central water supply access (fire hydrants), engine/pumper companies and aerial/ladder apparatus.

1.5 Mile Engine Distribution

ISO's first measure is the overall percentage of the service area that lies within a 1.5-mile travel distance of the first due fire engine from a fire station, as illustrated in the following figure.

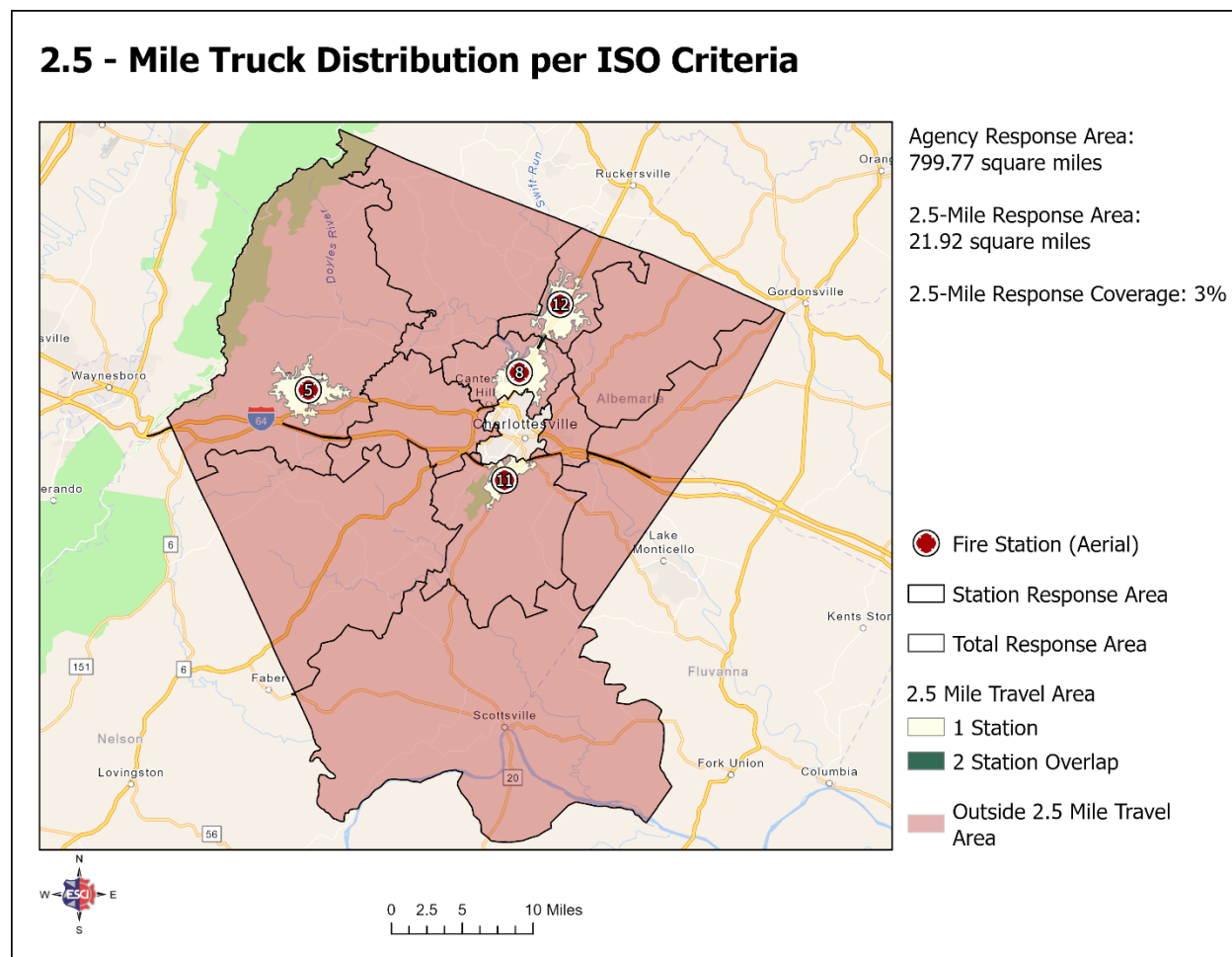
Figure 31. ACFR Engine Distribution



2.5 Mile Aerial Distribution

ISO's second measure is the overall percentage of the service area that lies within a 2.5-mile travel distance of the first due aerial apparatus from a fire station, as illustrated in the following figure.

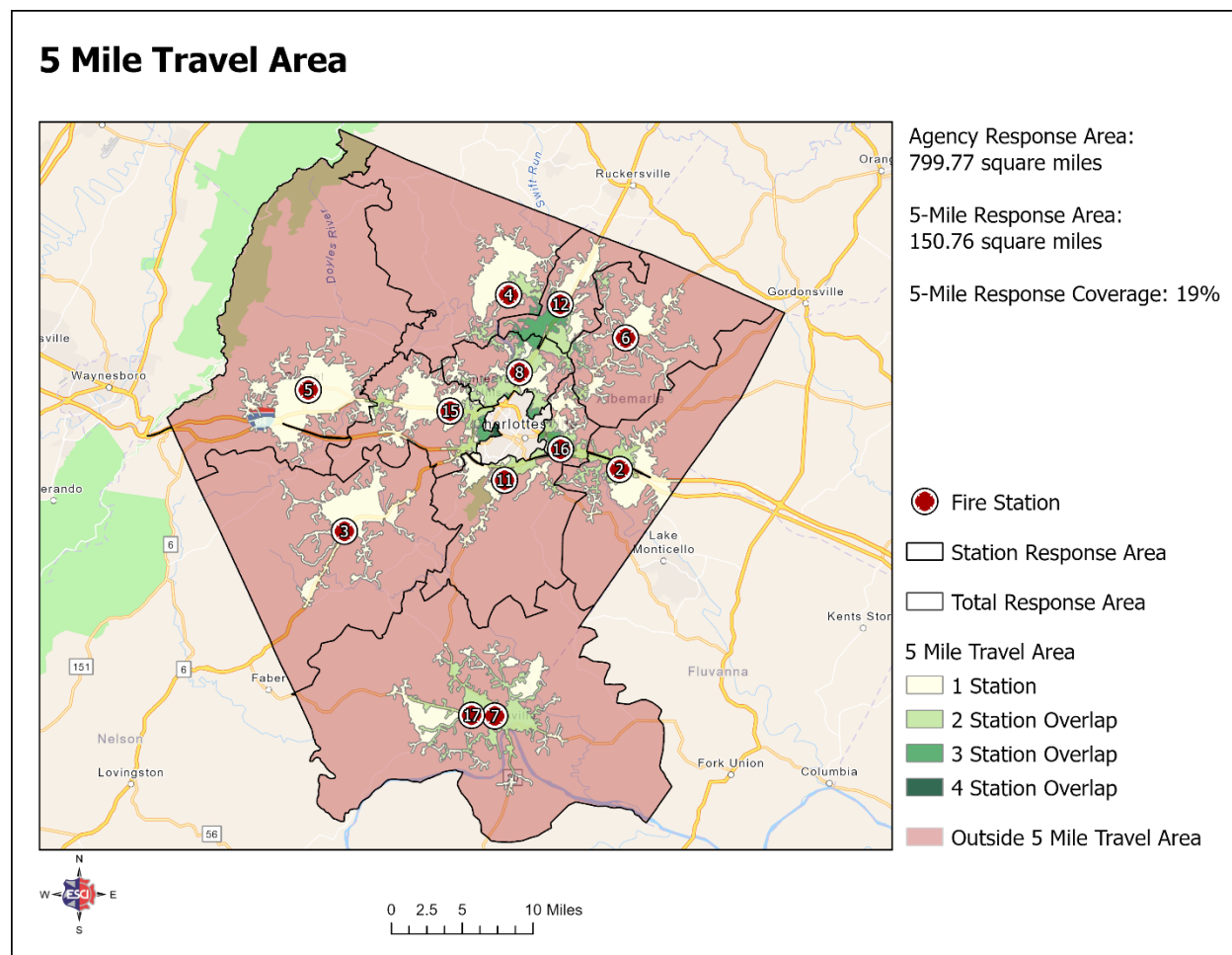
Figure 32. ACFR Aerial Distribution



5 Mile Distribution

ISO's third measure is the overall percentage of the service area that lies within a 5-mile travel distance of a fire station, as illustrated in the following figure. Areas outside of the 5-mile travel distance are subject to a PPC® rating of 10 (no fire department protection available).

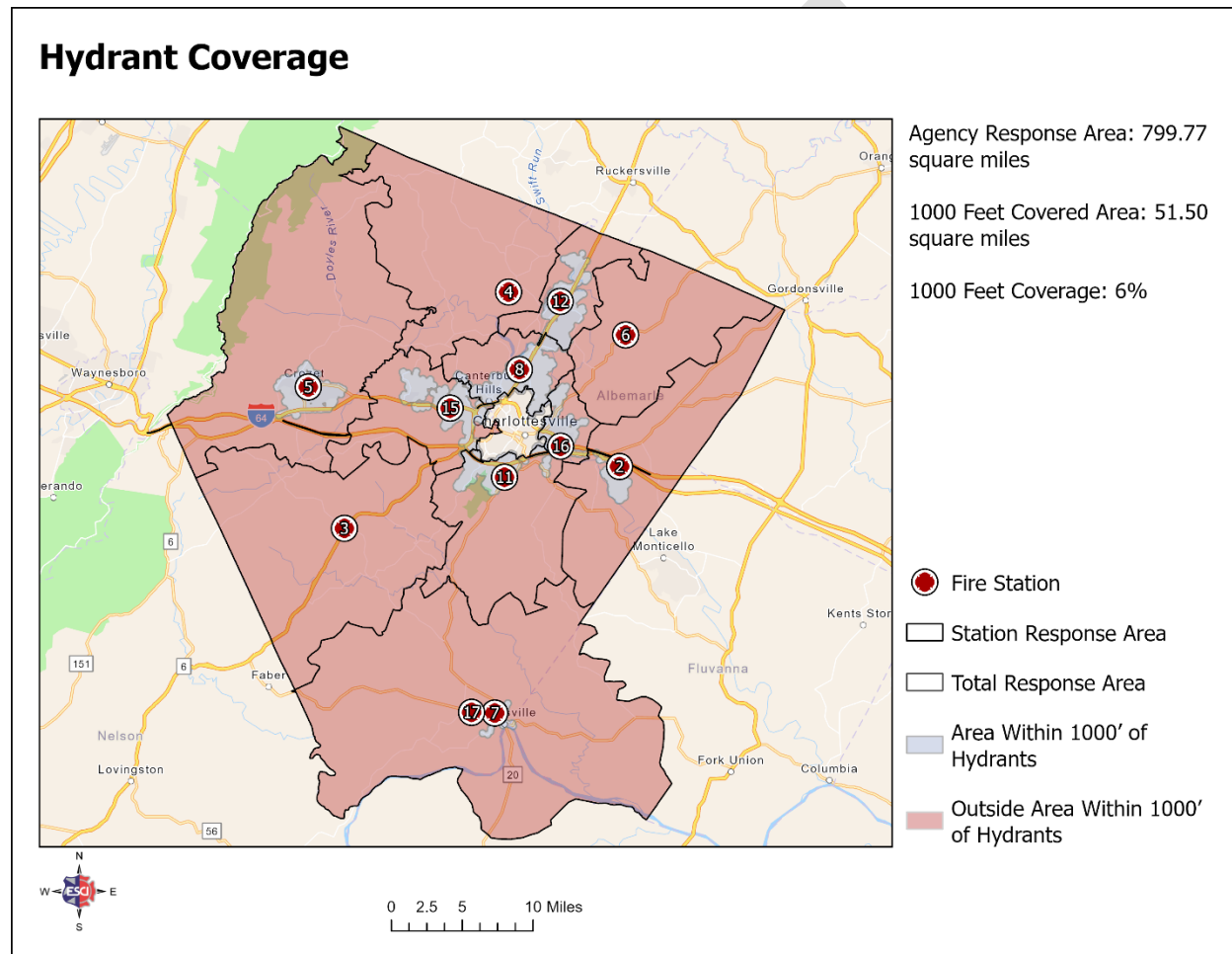
Figure 33. ACFR Station Distribution



Water Supply

ISO's fourth measure is the overall percentage of the service area that lies within a 1,000-foot travel distance of a fire hydrant, as illustrated in the following figure. Exceptions are made when a fire department can show that a dry hydrant or a suitable water tanker operation can provide the needed volume of water for fire suppression activities for a specific period.

Figure 34. ACFR Hydrant Distribution





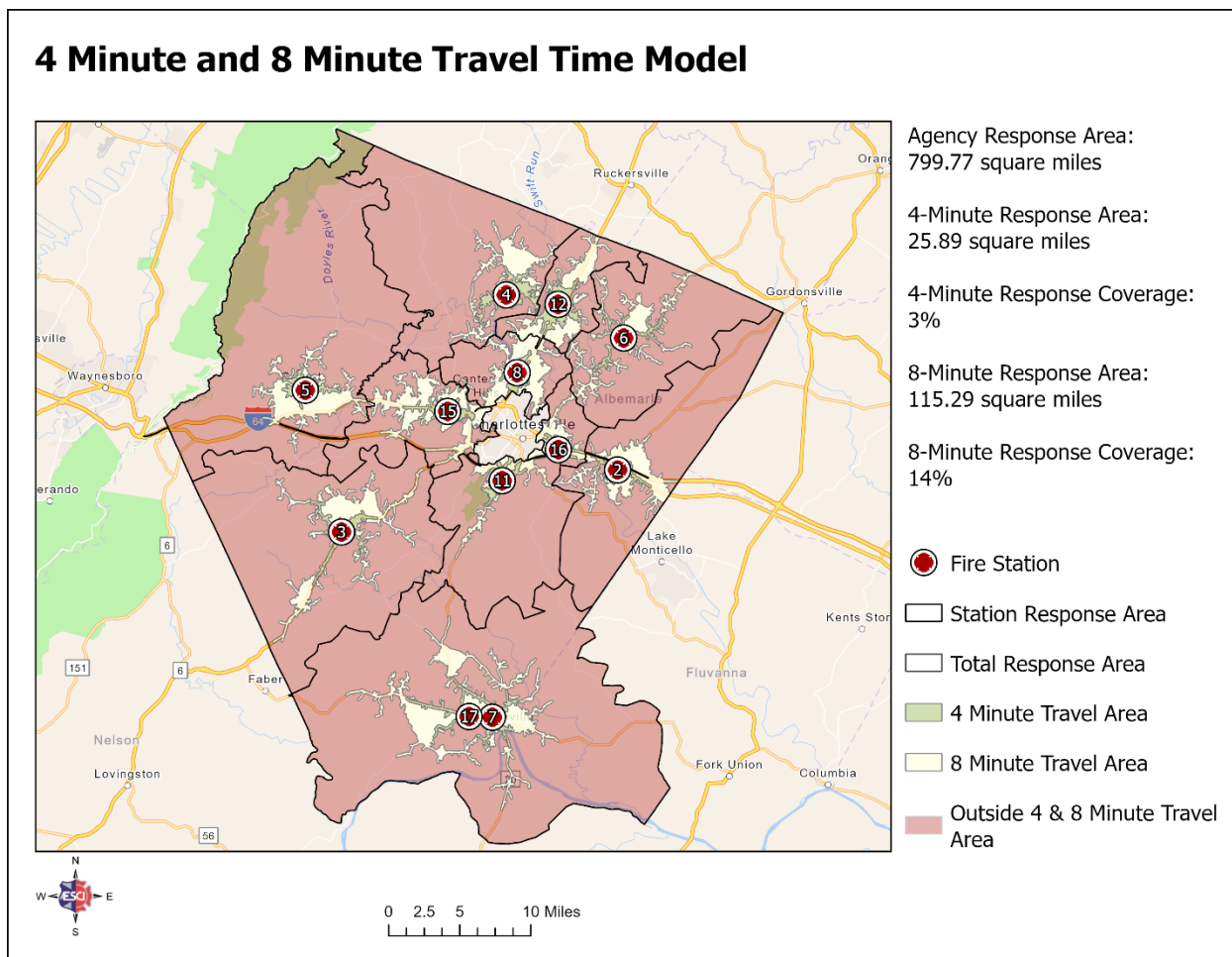
NFPA Distribution

The National Fire Protection Association (NFPA) is an industry trade association that develops and provides standards and codes for fire departments and emergency medical services for use by local governments.

The standard, NFPA 1710: *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*, serves as a national consensus standard for career fire department performance, operations, and safety. Within this standard, a travel time of 4:00 minutes, 90% of the time, is identified as the benchmark for *career* departments to reach emergency incidents within their jurisdiction with the first arriving unit. Additionally, the balance of the response (called the effective response force or ERF) is required to arrive at the incident within 8:00 minutes, 90% of the time.

The following figure illustrates the service area that falls within the 4-minute travel time and 8-minute travel times of a fire station.

Figure 35. ACFR 4/8-Minute Travel Time per NFPA Criteria



The prior graphic provides theoretical travel times based on all units within the station at the time of dispatch. The following figure illustrates actual travel times during calendar year(s) 2020–2024, grouped into 4-minute increments.

Figure 36. ACFR Travel Time Analysis, 2020–2024

Travel Time Category	2020	2021	2022	2023	2024
4 Minutes or Less	32.02%	31.52%	33.89%	34.78%	31.12%
4–8 Minutes	39.79%	39.91%	39.00%	39.12%	38.12%
8–12 Minutes	16.14%	16.87%	16.52%	16.12%	17.48%
Greater than 12 Minutes	12.05%	11.70%	10.58%	9.98%	13.28%



Resource Concentration Analysis

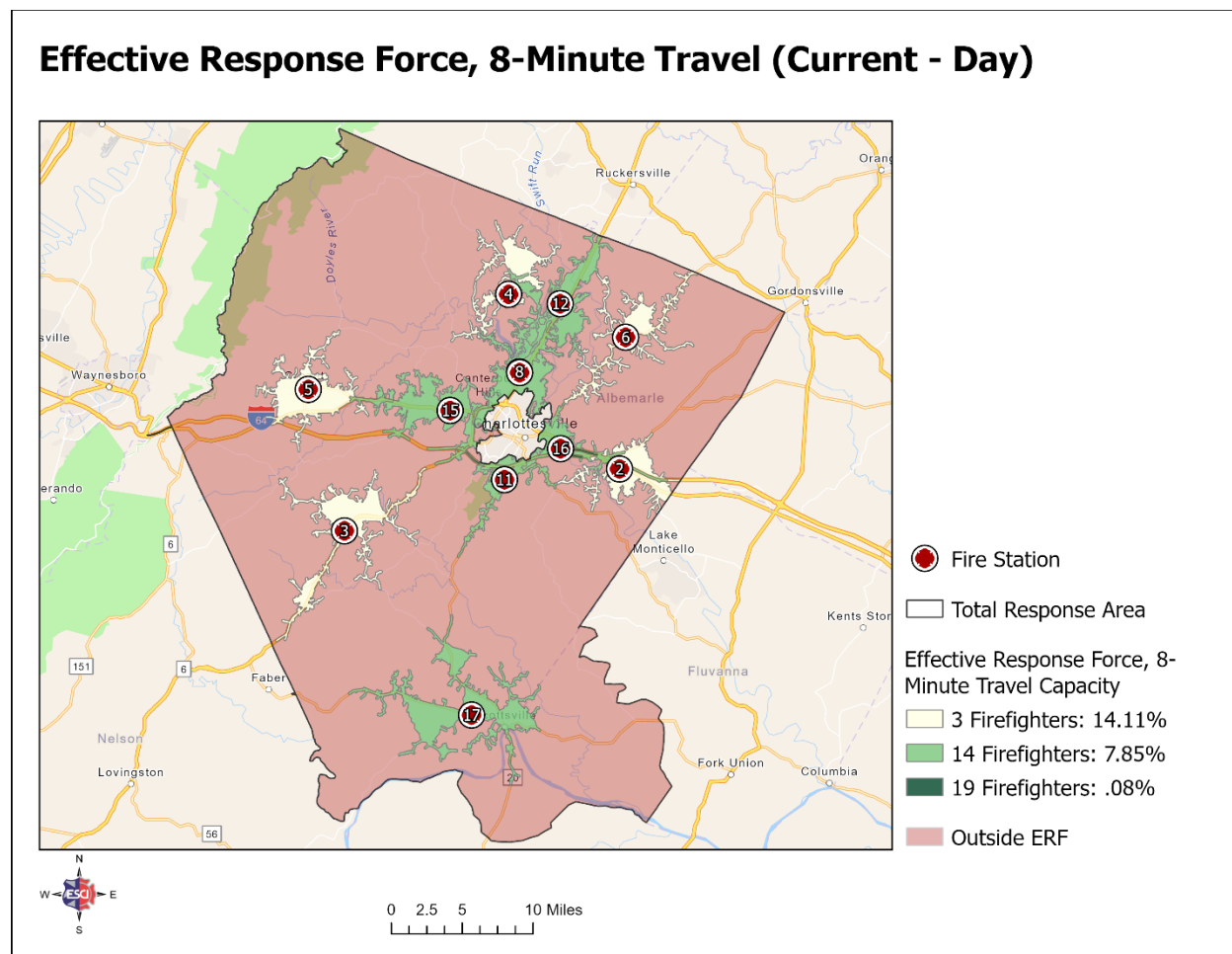
Each of the prior measures provided a view specifically associated with the arrival of the first unit to an incident scene. While arriving at an incident in a quick and safe manner is important, the ability to safely mitigate the incident is also impacted by the arrival of sufficient resources within an appropriate amount of time. The measure of this ability is referred to as ERF (effective response force) and ensures that sufficient personnel and resources arrive on scene early enough to safely control a fire or mitigate other types of emergencies prior to substantial damage, injury, or loss of life. ERF is also commonly referred to as the “full assignment” to the incident. The following graphic illustrates the ERF recommended through standards such as NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* and the Commission on Fire Accreditation (CFAI) Standards of Cover.

Figure 37. NFPA 1710 ERF Recommendations Based on Risk

Function/Task	Single-Family Residence (2,000 ft²)	Open Air Strip Shopping Center (13,000–196,000 ft²)	3-Story Garden Apartment (1,200 ft²)
Command	1	2	2
Apparatus Operator	1	2	2
Handlines (2 members each)	4	6	6
Support Members	2	3	3
Victim Search and Rescue team	2	4	4
Ground Ladders/Ventilation	2	4	4
Aerial Ladder Operator (If ladder used)	(1)	(1)	(1)
Initial Rapid Intervention Team	4	4	4
Initial Medical Care Component	N/A	2	2
Total	16 (17)	27 (28)	27 (28)

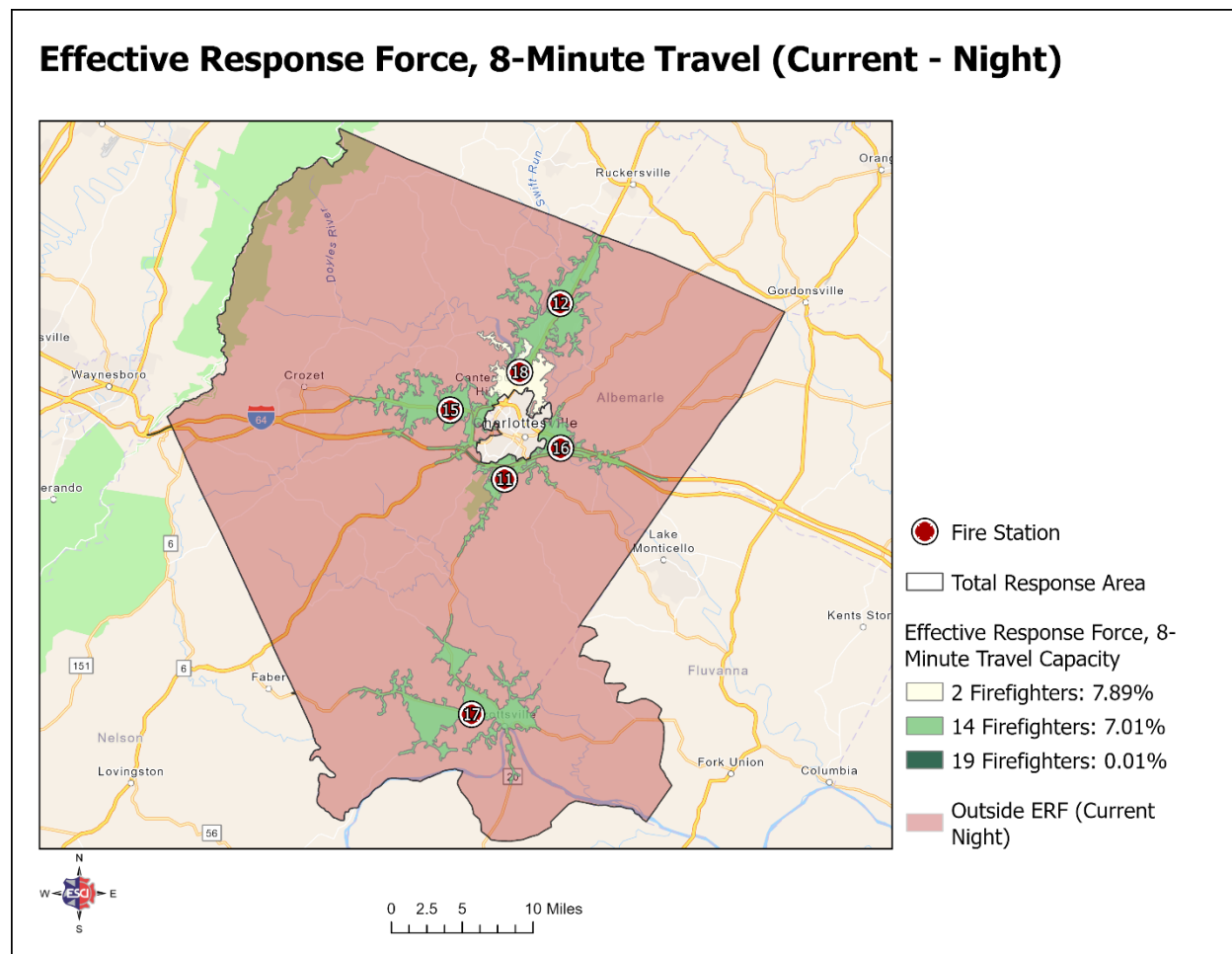
The following figure illustrates the concentration of firefighters that may arrive within the 8-minute travel time. Where responses from more than one station overlap, the number of firefighters arriving increases.

Figure 38. ACFR Effective Response Force per NFPA 1710 (Daytime)



With less career personnel “on duty” during the evening hours, the following figure illustrates the effective response force during nighttime hours.

Figure 39. ACFR Effective Response Force per NFPA 1710 (Nighttime)



Resource Reliability Analysis

To consider the reliability of a unit to respond to incidents within their primary response, workload and zone unit first arrived should be analyzed.

Commitment Time

A fair measure of workload by each unit within the department is to evaluate the amount of time assigned to incidents as compared to the total time the unit is in service, called a commitment factor. While there are limited formal performance measures to use as a target measure, in May 2016, Henrico County (VA) Division of



Fire published an article after studying their department's EMS workload.¹⁷ As a result of the study, Henrico County Division of Fire developed a commitment factor scale for their department.

The next figure is a summary of the findings as it relates to commitment factors and may be utilized by the department's leadership as a base for developing internal workload measures. These workload measures may vary based on the type of apparatus (i.e., fire engine versus transport ambulance).

Figure 40. Commitment Factors Developed by Henrico County (VA) Division, 2016

Factor	Indication	Description
16%–24%	Ideal Commitment Range	Personnel can maintain training requirements and physical fitness and can consistently achieve response time benchmarks. Units are available to the community more than 75% of the time.
25%	System Stress	Community availability and unit sustainability are not questioned. First-due units are responding to their assigned community 75% of the time, and response benchmarks are rarely missed.
26%–29%	Evaluation Range	The community served will experience delayed incident responses. Just under 30% of the day, first-due ambulances are unavailable; thus, neighboring responders will likely exceed goals.
30%	"Line in the Sand"	Not Sustainable: Commitment Threshold—community has less than a 70% chance of timely emergency service and immediate relief is vital. Personnel assigned to units at or exceeding 30% may show signs of fatigue and burnout and may be at an increased risk of errors. The required training and physical fitness sessions are not consistently completed.

The following figures illustrate the commitment factors by unit.

¹⁷ How Busy Is Busy?; Retrieved from <https://www.fireengineering.com/articles/print/volume-169/issue-5/departments/fireems/how-busy-is-busy.html>



Figure 41. ACFR Commitment Time (Battalion Chiefs), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
BC201	0.0%	2.3%	2.9%	2.7%	3.0%	3.0%
BC202	0.0%	3.0%	3.1%	2.6%	3.6%	3.6%

Figure 42. ACFR Commitment Time (Station 2), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B25	0.3%	0.5%	0.3%	0.5%	0.4%	0.1%
E21	5.1%	1.4%	1.5%	1.1%	1.3%	–3.9%
E22	0.7%	5.2%	2.4%	1.5%	1.6%	0.9%
GAT2	0.0%	0.1%	0.1%	0.1%	0.2%	0.2%
RS20	0.0%	1.0%	4.4%	3.3%	3.4%	3.4%
T26	0.1%	0.2%	0.2%	0.2%	0.3%	0.2%
T28	0.4%	0.3%	0.3%	0.1%	0.3%	0.0%

Figure 43. ACFR Commitment Time (Station 3), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B31	0.6%	0.6%	0.6%	0.5%	0.7%	0.0%
B36	0.3%	0.3%	0.1%	0.1%	0.1%	–0.1%
E32	1.8%	1.8%	1.6%	1.5%	2.0%	0.2%
E34	0.2%	0.1%	0.3%	0.2%	0.2%	–0.1%
RS30	0.0%	0.0%	0.4%	2.4%	2.3%	2.3%
T37	0.8%	0.7%	0.5%	0.6%	0.8%	0.0%
T39	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%

Figure 44. ACFR Commitment Time (Station 4), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B43	0.1%	0.1%	0.2%	0.2%	0.1%	0.0%
B46	0.2%	0.2%	0.2%	0.2%	0.1%	–0.1%
E41	1.0%	0.0%	0.4%	0.1%	0.1%	–0.9%
E45	0.3%	0.9%	0.6%	0.7%	0.8%	0.5%
RS40	1.4%	4.0%	5.3%	5.0%	4.7%	3.3%
T49	0.4%	0.2%	0.4%	0.5%	0.3%	–0.1%



Figure 45. ACFR Commitment Time (Station 5), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B53	0.5%	0.3%	0.3%	0.1%	0.2%	–0.3%
B55	0.4%	0.2%	0.3%	0.4%	0.6%	0.3%
E52	0.7%	0.7%	0.5%	0.9%	0.3%	–0.4%
E56	2.1%	3.0%	4.4%	3.2%	3.7%	1.7%
E58	0.2%	0.2%	0.1%	0.2%	0.3%	0.1%
T59	0.7%	0.6%	0.7%	0.7%	0.7%	0.0%
TO54	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%

Figure 46. ACFR Commitment Time (Station 6), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B65	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%
E61	0.8%	0.4%	0.2%	0.4%	0.6%	–0.2%
E62	0.7%	0.4%	0.2%	0.2%	0.3%	–0.3%
GAT6	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
RS60	1.0%	2.1%	1.8%	1.6%	2.3%	1.4%
T69	0.4%	0.3%	0.3%	0.4%	0.4%	0.0%

Figure 47. ACFR Commitment Time (Station 7), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B75	1.3%	1.2%	0.9%	1.2%	1.0%	–0.2%
E72	1.0%	0.9%	0.9%	0.8%	1.2%	0.1%
E73	0.6%	0.7%	0.4%	0.4%	0.3%	–0.3%
T77	0.9%	0.6%	0.6%	0.6%	0.5%	–0.4%
T79	0.4%	0.4%	0.3%	0.2%	0.3%	–0.1%
WR70	0.5%	0.2%	0.3%	0.2%	0.2%	–0.3%

Figure 48. ACFR Commitment Time (Station 8), 2020–2024.

Unit	2020	2021	2022	2023	2024	Change Over Study Period
B85	0.1%	0.0%	0.1%	0.2%	0.2%	0.1%
E81	0.4%	0.4%	0.7%	0.8%	0.4%	–0.1%
E82	1.8%	2.2%	5.5%	2.1%	2.5%	0.7%
E83	6.5%	6.4%	5.9%	7.9%	9.3%	2.8%
TO88	0.6%	0.5%	0.7%	0.7%	0.6%	0.0%



Figure 49. ACFR Commitment Time (Station 11), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
E111	6.1%	5.9%	6.8%	6.6%	6.9%	0.8%
RS11	15.5%	17.4%	16.6%	15.7%	16.1%	0.6%
RS11–2	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%
SQ11	0.6%	0.5%	0.6%	0.3%	0.7%	0.1%
T111	0.9%	0.9%	0.8%	0.7%	1.1%	0.2%
WR11	0.1%	0.1%	0.3%	0.1%	0.3%	0.2%

Figure 50. ACFR Commitment Time (Station 12), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
E121	3.6%	4.0%	5.0%	4.8%	5.6%	2.0%
RS12	13.4%	15.4%	16.7%	14.6%	17.6%	4.1%
RS12–2	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
T121	0.5%	0.3%	0.3%	0.4%	0.3%	–0.2%
TO121	0.6%	0.3%	0.4%	0.3%	0.4%	–0.2%

Figure 51. ACFR Commitment Time (Station 15), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
E151	6.3%	5.7%	5.8%	5.5%	7.0%	0.7%
HM15	0.0%	0.0%	0.3%	0.2%	0.2%	0.2%
RS15	7.2%	9.6%	16.5%	15.5%	16.9%	9.6%
RS15–2	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%

Figure 52. ACFR Commitment Time (Station 16), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
E161	0.0%	0.5%	3.3%	4.7%	6.5%	6.5%
RS16	10.9%	12.8%	18.8%	17.6%	17.5%	6.6%
RS16–2	0.3%	0.0%	0.0%	0.1%	0.4%	0.1%

Figure 53. ACFR Commitment Time (Station 17), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
RS17	12.8%	13.3%	12.8%	12.8%	11.5%	–1.3%
RS17–2	0.1%	0.0%	0.0%	0.0%	2.5%	2.4%
T171	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%



Figure 54. ACFR Commitment Time (Station 18), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
RS18	26.1%	29.1%	30.4%	27.9%	31.1%	5.0%
RS18-2	0.7%	1.2%	0.9%	4.9%	2.3%	1.6%

Figure 55. ACFR Commitment Time (WARS), 2020–2024

Unit	2020	2021	2022	2023	2024	Change Over Study Period
C507	0.6%	0.4%	0.1%	0.7%	0.9%	0.3%
C508	4.6%	3.7%	4.5%	3.9%	3.4%	-1.2%
GAT5	0.2%	0.2%	0.2%	0.3%	0.3%	0.1%
RS501	7.2%	9.5%	11.0%	12.3%	5.3%	-1.9%
RS502	9.7%	8.8%	9.1%	8.3%	4.7%	-5.0%
RS503	2.3%	1.3%	1.2%	1.6%	11.9%	9.6%
RS504	1.1%	0.4%	1.7%	1.8%	2.6%	1.5%
SQ505	0.5%	0.5%	0.5%	0.4%	0.6%	0.1%
WR509	0.2%	0.2%	0.3%	0.5%	0.4%	0.2%

Response Zone Coverage by Response Zone Units

Ideally, incidents within each fire station response zone (or planning zone) would receive initial services from a unit primarily responsible for that zone (usually closest unit). Following the same concept as that of the commitment factor and although no formal standard exists, this should occur for greater than 75% of incidents—allowing for units that may be committed already on other calls, or that the first arriving unit was a unit not normally considered the closest unit. While this is not a specific standard, it is a starting point for the department’s leadership to consider when evaluating the reliability of units and potential need for additional resources.



The following figure illustrates the percentage of times that the primary responsible unit for a zone was the first to arrive on a call in that zone. For purposes of this analysis, Station 17 units were counted as Station 7 units, and Station 18 units were counted as Station 8 units.

Figure 56: ACFR Zone Unit First Arrival, 2020–2024

Zone	2020	2021	2022	2023	2024	Change Over Study Period
Station 2	67.5%	69.6%	65.8%	66.0%	53.3%	–14.2%
Station 3	33.3%	33.3%	40.7%	73.3%	70.3%	37.0%
Station 4	42.3%	59.5%	64.3%	58.7%	66.0%	23.7%
Station 5	89.2%	93.4%	91.2%	90.6%	95.7%	6.5%
Station 6	66.1%	55.2%	60.0%	65.0%	82.8%	16.7%
Station 7	89.7%	89.2%	91.1%	95.0%	96.1%	6.3%
Station 8	88.2%	82.6%	78.9%	83.9%	78.4%	–9.8%
Station 11	91.0%	92.9%	88.7%	89.9%	89.3%	–1.7%
Station 12	91.9%	89.4%	88.6%	87.1%	86.3%	–5.6%
Station 15	80.0%	78.9%	88.3%	87.4%	94.7%	14.7%
Station 16	56.6%	59.7%	78.6%	85.4%	87.8%	31.2%

Response Performance Analysis

How quickly a unit arrives at the scene of the caller's emergency is a key factor in their valuation of the services provided. Industry standards and best practices recommend that departments regularly monitor this performance (total response time), as well as all the following time performance measures that are subsets of total response time:

- Alarm handling time
- Turnout time
- Travel time
- Response time
- Total response time

In analyzing response performance, ESCI, aligned with national standards and best practices, generates percentile measurements of time performance. Percentile measurements are a more accurate measurement of performance standard compliance. A 90th percentile measurement means that 10% of the values are greater than the value stated, and all other data are at or below this level. This can be used as a performance objective to determine the degree of success in achieving the goal.



As this report progresses through response performance analysis, it is important to keep in mind that each component of response performance is not cumulative. Each is analyzed as an individual component, and the point at which the percentile is calculated exists in a set of data unto itself. Each of the following analyses only included those incidents where the response was coded as “emergency” priority.

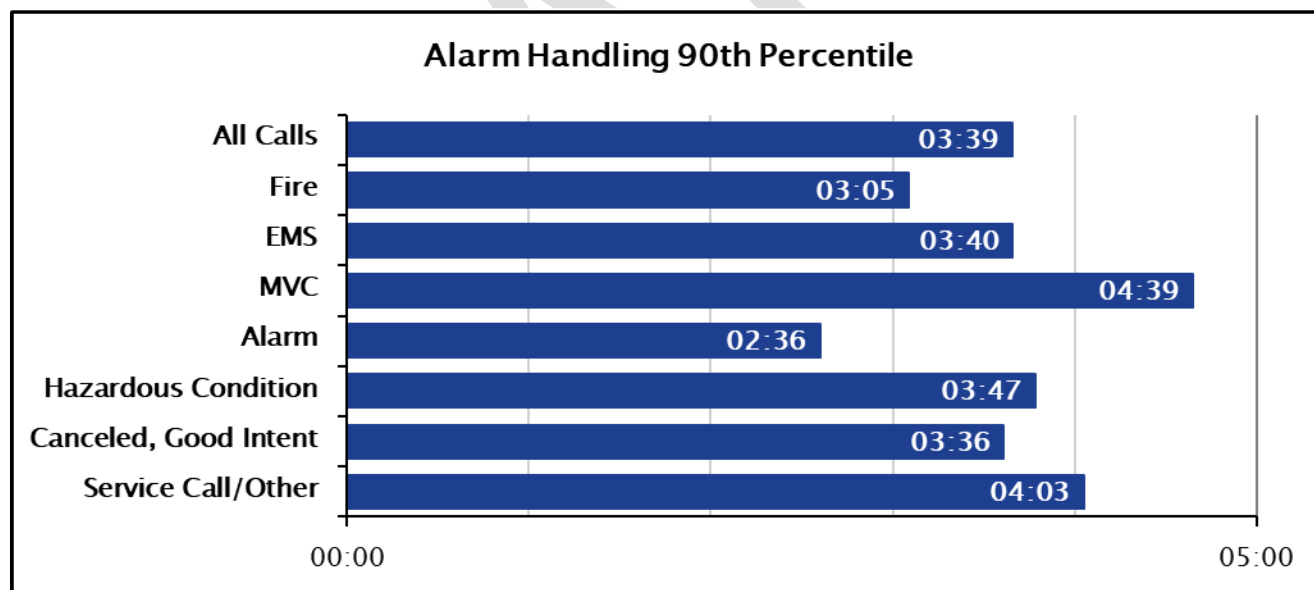
Alarm Handling Time

The measure of time between answering the 911 call and dispatch of resources is known as alarm handling time. For this measure there is one applicable standard as illustrated in the following figure.

Standard	Performance
NFPA 1225: <i>Standard for Emergency Services Communications</i> (2022 Edition)	60 seconds at the 90 th percentile

The following figure illustrates the department’s alarm handling time performance.

Figure 57. ACFR Alarm Handling Time Performance, 2020–2024





Turnout Time

The measure of time between notifying the fire department (dispatching) and the time that the first unit goes enroute is known as the turnout time.

Standard	Performance
NFPA 1710: <i>Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments</i>	<u>Fire and Special Operations Incidents</u> 80 seconds at the 90 th percentile <u>All Other Incidents</u> 60 seconds at the 90 th percentile

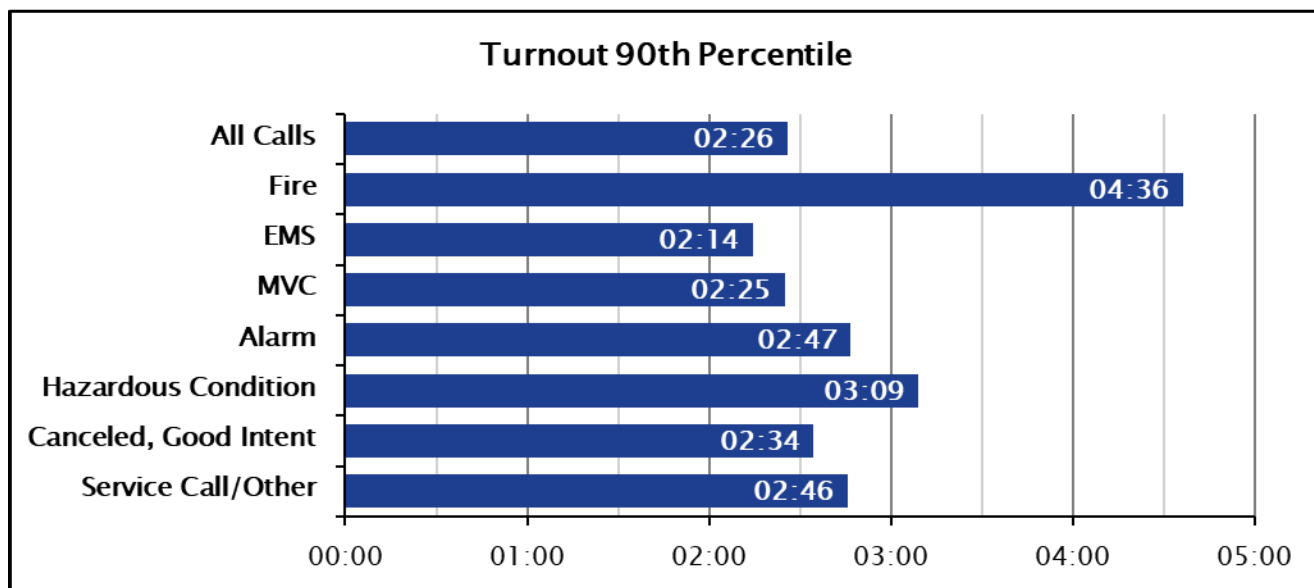
As this is the first measure under direct control of the fire department, the department's leadership may consider the various actions that occur within this measure and determine if there are areas where process changes could improve performance. These factors include:

- Systems used to notify personnel of an incident.
- Station design relates to the movement of personnel from living quarters to the apparatus bay.
- Personnel adherence to department policies and acting with appropriate speed towards the apparatus.
- Time required to don protective equipment prior to responding.
- Moving equipment between apparatus when units are cross staffed.
- Time from starting apparatus until radio system is capable of transmitting.

The following figure illustrates the turnout time for the first responding units.



Figure 58. ACFR Turnout Time Performance, 2020–2024





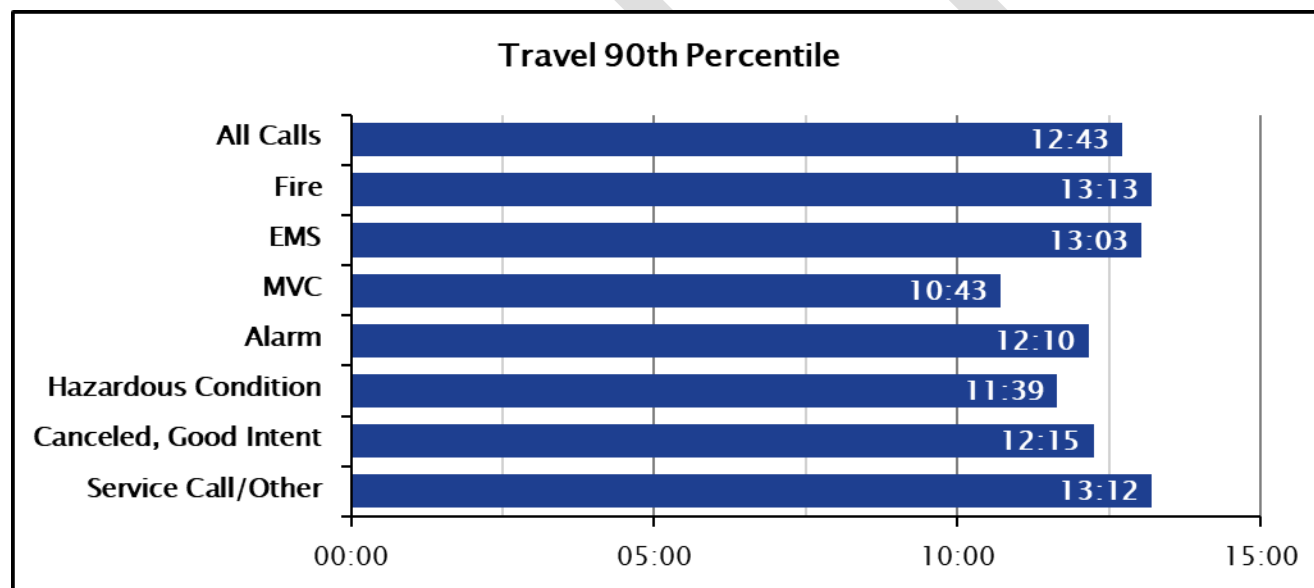
Travel Time

The measure of time between apparatus moving towards the scene of the emergency and arrival at the scene of the emergency is known as travel time. For this measure there is one applicable standard as illustrated below.

Standard	Performance
NFPA 1710: <i>Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments</i>	4 minutes at the 90 th percentile

The following figure illustrates the travel time for the first responding units.

Figure 59. ACFR Travel Time Performance, 2020–2024





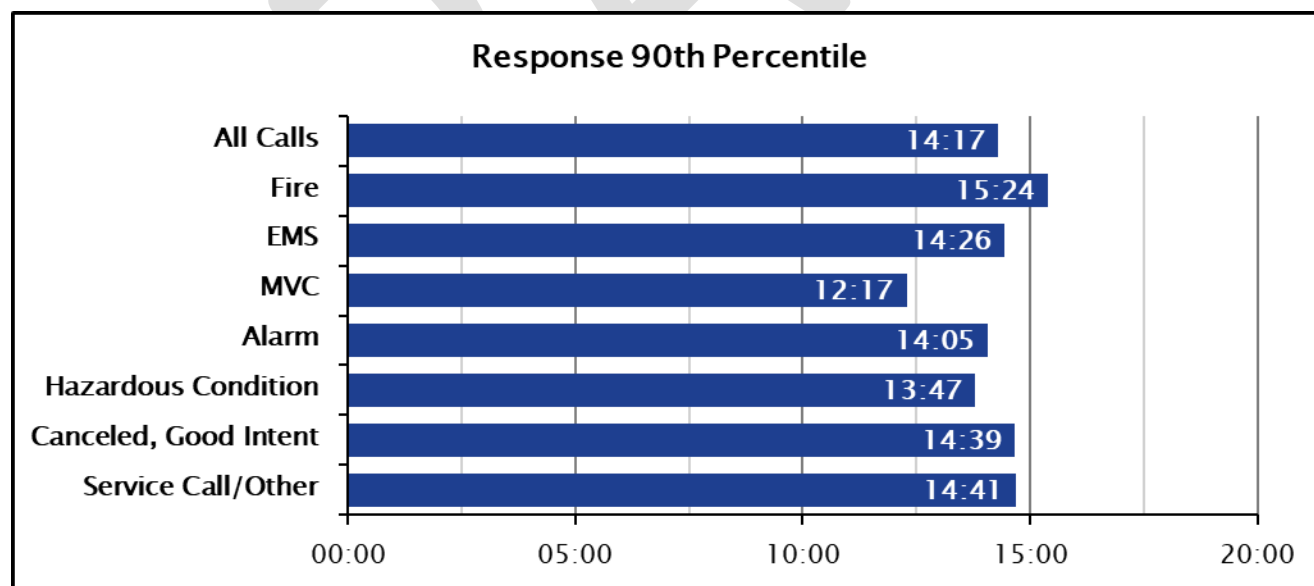
Response Time

The measure of time between dispatch of units and arrival at the scene of the emergency is known as response time. For this measure, there is not a specific applicable standard. However, by combining the individual component standards, the following figure illustrates expected performance.

Standard	Performance
Turnout Time	<u>Fire and Special Operations Incidents</u> 80 seconds at the 90 th percentile
	<u>All Other Incidents</u> 60 seconds at the 90 th percentile
Travel Time	4 minutes at the 90 th percentile
Combined	<u>Fire and Special Operations Incidents</u> 5 minutes, 20 seconds at the 90 th percentile
	<u>All Other Incidents</u> 5 Minutes at the 90 th percentile

The following figure illustrates the response time for the first responding units.

Figure 60. ACFR Response Time Performance, 2020–2024





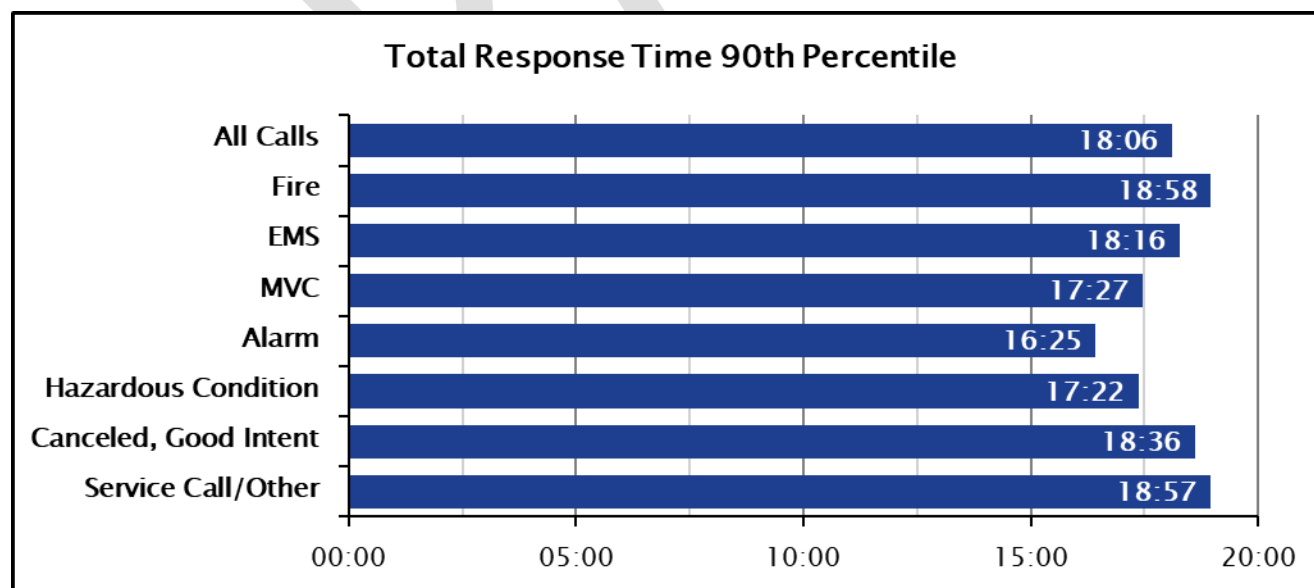
Total Response Time

The measure of time between answering the 911 call and arrival at the scene of the emergency is known as total response time. For this measure, there is not a specific applicable standard. However, by combining the individual component standards, the following figure illustrates expected performance.

Component	Performance
Alarm Handling Time	60 seconds at the 90 th percentile
Turnout Time	<u>Fire and Special Operations Incidents</u> 80 seconds at the 90 th percentile <u>All Other Incidents</u> 60 seconds at the 90 th percentile
Travel Time	4 minutes at the 90 th percentile
Combined	<u>Fire and Special Operations Incidents</u> 6 minutes, 20 seconds at the 90 th percentile <u>All Other Incidents</u> 6 Minutes at the 90 th percentile

The following figure illustrates the total response time for the first responding units.

Figure 61. ACFR Total Response Time Performance, 2020–2024





Mutual and Automatic Aid

Fire departments throughout the nation enter into agreements with neighboring agencies whereby resources are shared. Within an automatic aid agreement, resources from all agencies are included in an initial dispatch of the incident. Within a mutual aid agreement, outside agency resources are only dispatched upon the request of the primary agency.

The following figure illustrates the agreements currently in place for ACFR.

Figure 62. Automatic & Mutual Aid Agencies

Agency	Agreement Type
Augusta County	Mutual
Buckingham County	Mutual
Charlottesville Fire Department	Both
Fluvanna County	Both
Greene County	Mutual
Louisa County	Mutual
Nelson County	Mutual
Orange County	Mutual
Rockingham County	Mutual

It was noted that while the agreement in place with Fluvanna is technically a mutual aid agreement, the normal practice is to dispatch Station 7 as first due to Fluvanna and Buckingham Counties.

As with other information, the use of automatic and mutual aid is documented within the system for each response. The following figure illustrates the use of automatic and mutual aid during the study period.

Figure 63. ACFR Aid Given/Received, 2021–2024

Description	2020	2021	2022	2023	2024
Mutual aid received	0	0	0	0	0
Automatic aid received	1,487	1,271	473	271	166
Mutual aid given	66	79	99	80	97
Automatic aid given	340	427	394	479	478
Other aid given	0	0	0	0	0



High-Level Community Risk Assessment

Albemarle County Fire Rescue (ACFR) provides services across a geographically expansive and demographically diverse county. With a population exceeding 120,000 spread across nearly 726 square miles, the county includes a mix of rural areas, suburban growth corridors, and urbanizing regions near Charlottesville. Albemarle County's community risk landscape is shaped by a growing older adult population, pockets of socioeconomic vulnerability, and a wide range of structural, infrastructure, and environmental hazards.

Understanding these risk factors is essential for making informed decisions about resource allocation, station placement, and staffing. At the same time, evaluating ACFR's cost per capita helps contextualize current service investments, revealing how efficiently resources are deployed relative to both peer jurisdictions and the unique challenges of the service area.

Demographic and Geographic Considerations

Albemarle County's geographic response scale—726 square miles—and its varied terrain present significant challenges for emergency response. With a population density of approximately 156 people per square mile, many residents live in rural or semi-rural areas where distance, topography, and limited infrastructure contribute to longer response times and greater reliance on local stations or volunteer assets. The county experiences notable shifts in daytime population, with over 125,000 individuals present during business hours, reflecting commuting patterns and the concentration of employment, education, and healthcare facilities.

The county's population is aging, with more than 25,000 residents aged 65 or older, while 23,555 are under 18 years of age. Approximately 9,000 households include someone with a disability, and more than 3,300 households fall below the poverty line. These demographics indicate a high level of vulnerability during emergencies and a corresponding need for tailored outreach, community risk reduction programs, and reliable service delivery throughout the county's urban and rural zones.

At-Risk Populations

ACFR serves a community with multiple vulnerable populations requiring specific response considerations. Nearly 20% of households report at least one person with a disability, while over 2,100 households have no access to a vehicle, limiting their



ability to self-evacuate during emergencies. The growing senior population increases demand for both EMS services and fire protection for facilities such as assisted living centers and nursing homes.

Language and cultural barriers further complicate risk mitigation and emergency communication. More than 900 residents report limited or no English proficiency, with a concentration of Spanish and Indo-European language speakers. These factors emphasize the importance of inclusive preparedness efforts, translated public messaging, and culturally competent community outreach to improve situational awareness and equitable service delivery.

Target Hazards and Risk Drivers

Albemarle County contains over 45,000 structures, the vast majority of which are residential. However, the presence of over 1,400 commercial buildings, 169 industrial properties, and many high-risk occupancies such as 10 hospitals, 11 assisted living centers, 40 schools, and 52 fueling centers introduces significant operational complexity. Many of these facilities represent high-consequence risk in the event of a fire or hazardous incident and may require multi-company or multi-agency response capabilities.

The spatial distribution of these hazards varies, with clusters near major corridors and population centers, as well as isolated risks in rural areas. Strategic placement of apparatus and personnel—especially specialized resources like aeriels, tankers, and ALS units—is critical to achieving safe and effective outcomes at these target hazards.

The following figure outlines some of the critical infrastructure and emergency planning information used for the total ACFR response area.

Figure 64. Albemarle County Emergency Planning Information

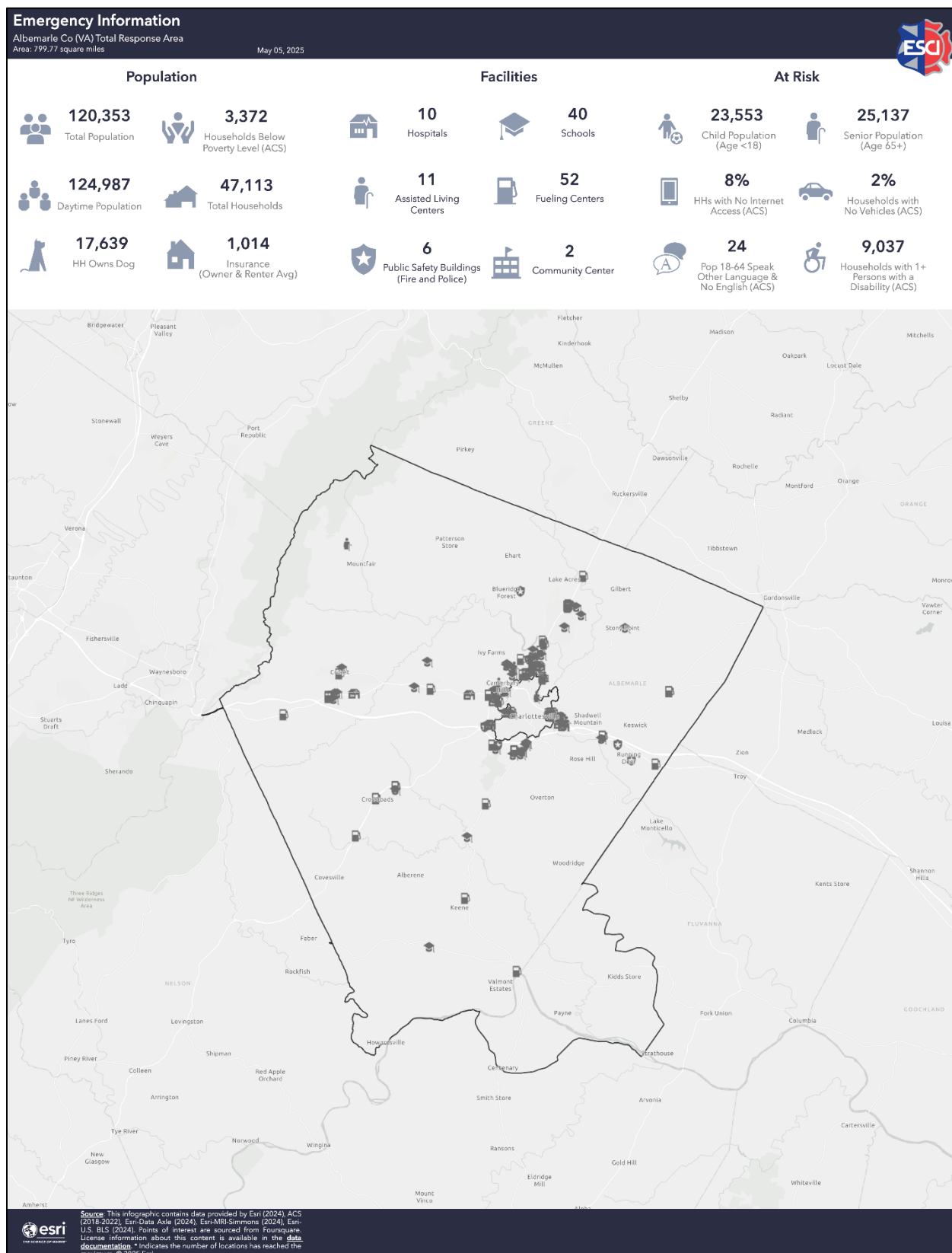
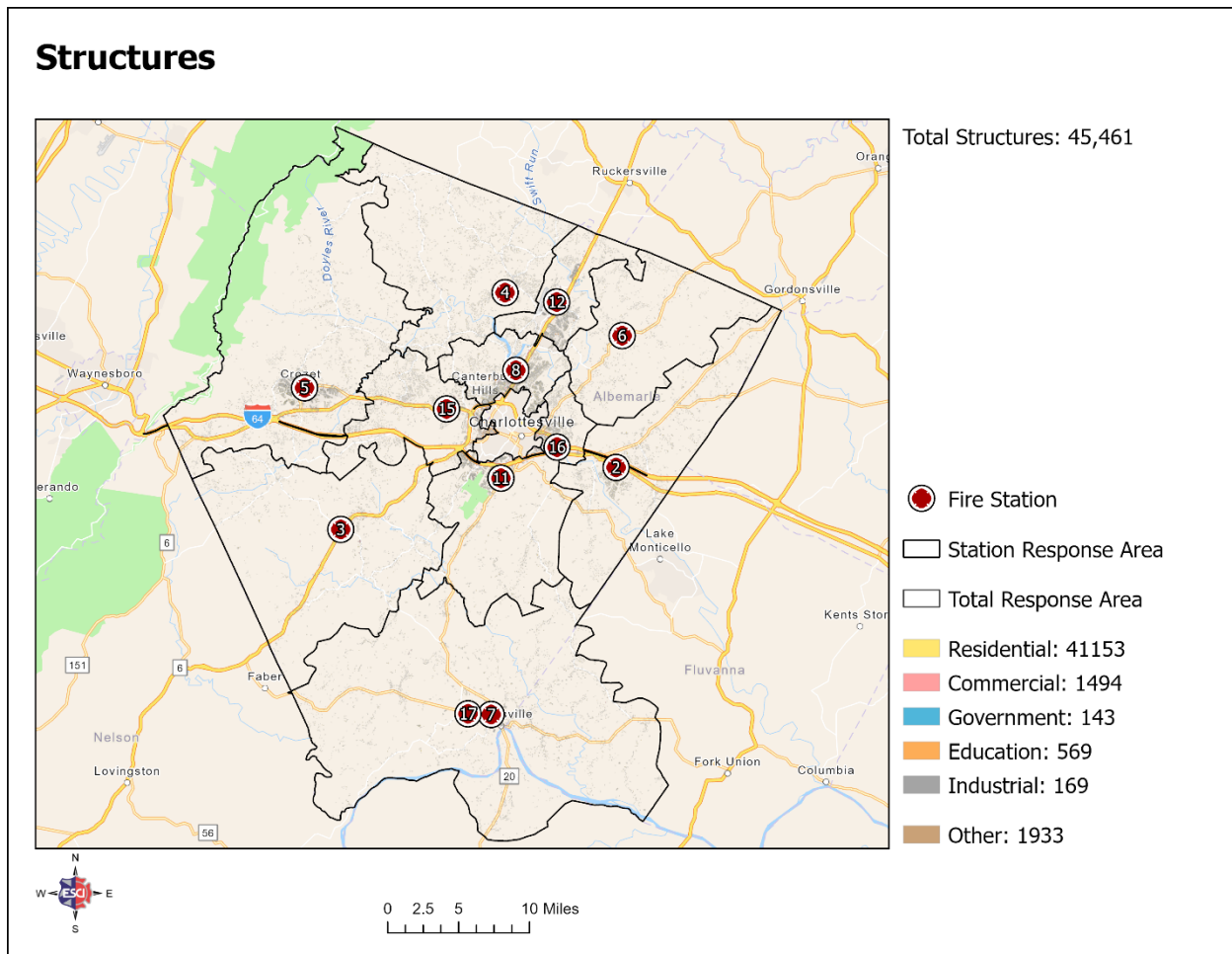


Figure 65. ACFR Structural Risk Environment



The areas around Charlottesville have experienced significant growth and development regarding the types of occupancies. As discussed, these occupancies allow ACFR to predetermine the type of risk associated with each. Many of the recently completed and proposed projects involve moderate and high-risk occupancies with large square footage or multiple levels with large square footage. Firefighting activities significantly get more difficult with every level of height experienced. These types of occupancies require larger ERFs and more specifically the use of aerial ladder trucks.

Essential ladder company operations include search, ventilation, high angle rescue, heavy extrication, aerial and water tower operations. With the large housing stock, freeways, high-speed thoroughfares, multiple story structures, and complex building campuses, a 4-person aerial ladder truck equipped with search, rescue, and aerial ladder capabilities will provide essential critical tasking in a timely manner. This



resource is an essential part of the critical tasking elements and serves an important part of the ERF response within the 8-minute recommended ERF target.

Wildland-Urban Interface and Rural Considerations

A substantial portion of Albemarle County lies within the wildland-urban interface (WUI), particularly in the western and southern regions. These areas feature dense vegetation, limited road networks, steep terrain, and intermittent water supply. Wildfire threats, along with difficulties in deploying resources quickly, require ACFR to maintain capabilities in water shuttling, incident command, and long-duration fire operations.

The rural environment also results in greater reliance on volunteer stations and mutual aid in some districts. As development pressure grows in historically low-density areas, response expectations and risk exposure may outpace current resource deployment, necessitating a dynamic, risk-based approach to staffing and capital investment.

Future System Demand and Growth Pattern Forecasts

Population growth in Albemarle County is concentrated around the city of Charlottesville and along primary corridors such as US 29 and I-64. These areas are seeing an increase in residential development, mixed-use properties, and commercial activity, all of which drive up call volume and complicate traffic conditions. The demand for EMS services continues to rise, particularly in aging communities and in areas with limited healthcare access.

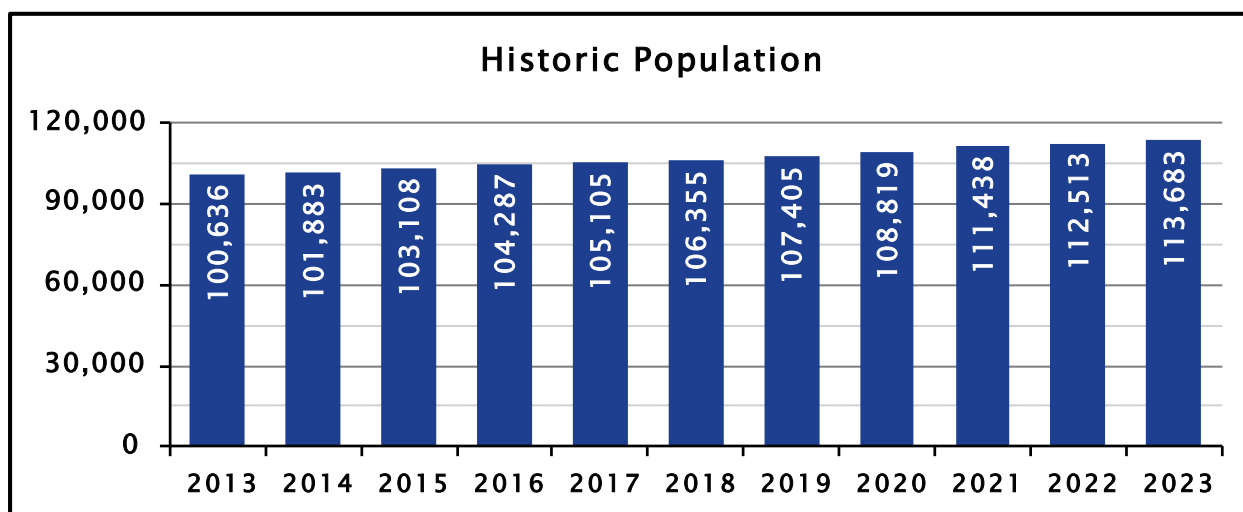
These growth trends strain existing stations, especially those in high-demand zones like Stations 8, 11, 12, and 16. Without corresponding increases in personnel and unit availability, ACFR may experience delayed response times, degraded coverage during peak periods, and reliance on overtime or dynamic unit movement to maintain service levels.

Population Growth Projections

Population History

Based on data from the American Community Survey (U. S. Census Bureau), there was an increase of population within the ACFR service area of 12.96% from 2013 to 2023, as illustrated in the following figure. This equates to a compounded annual growth rate of 1.23%.

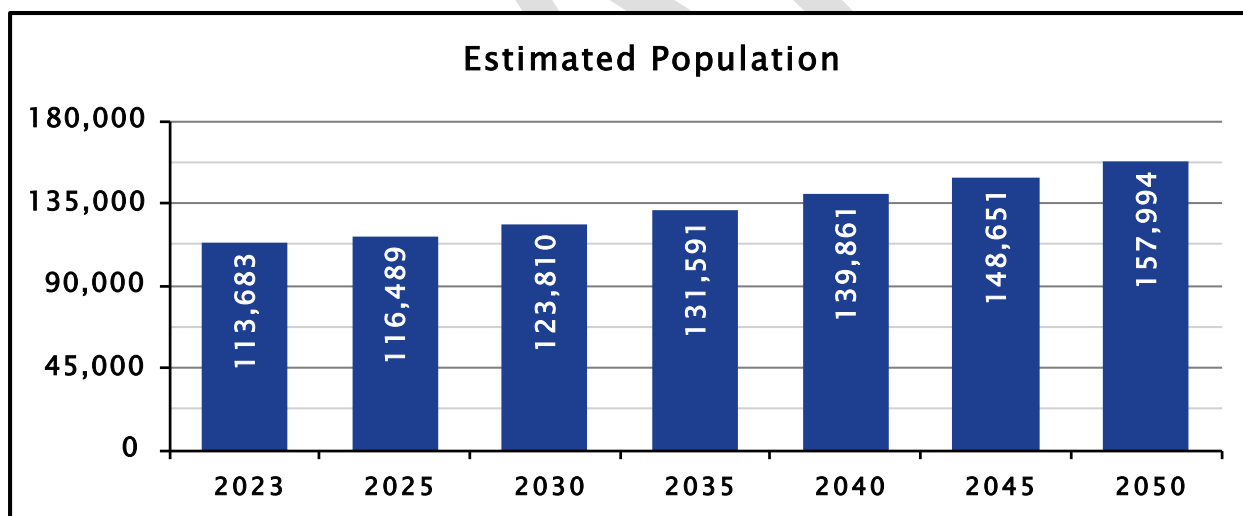
Figure 66. ACFR Historic Population, 2013–2024



Population Projection

Using the compounded annual growth rate of 1.23%, future population growth may be theorized, as illustrated in the following figure.

Figure 67. ACFR Estimated Population Projection, 2023–2050



Service Demand Projections

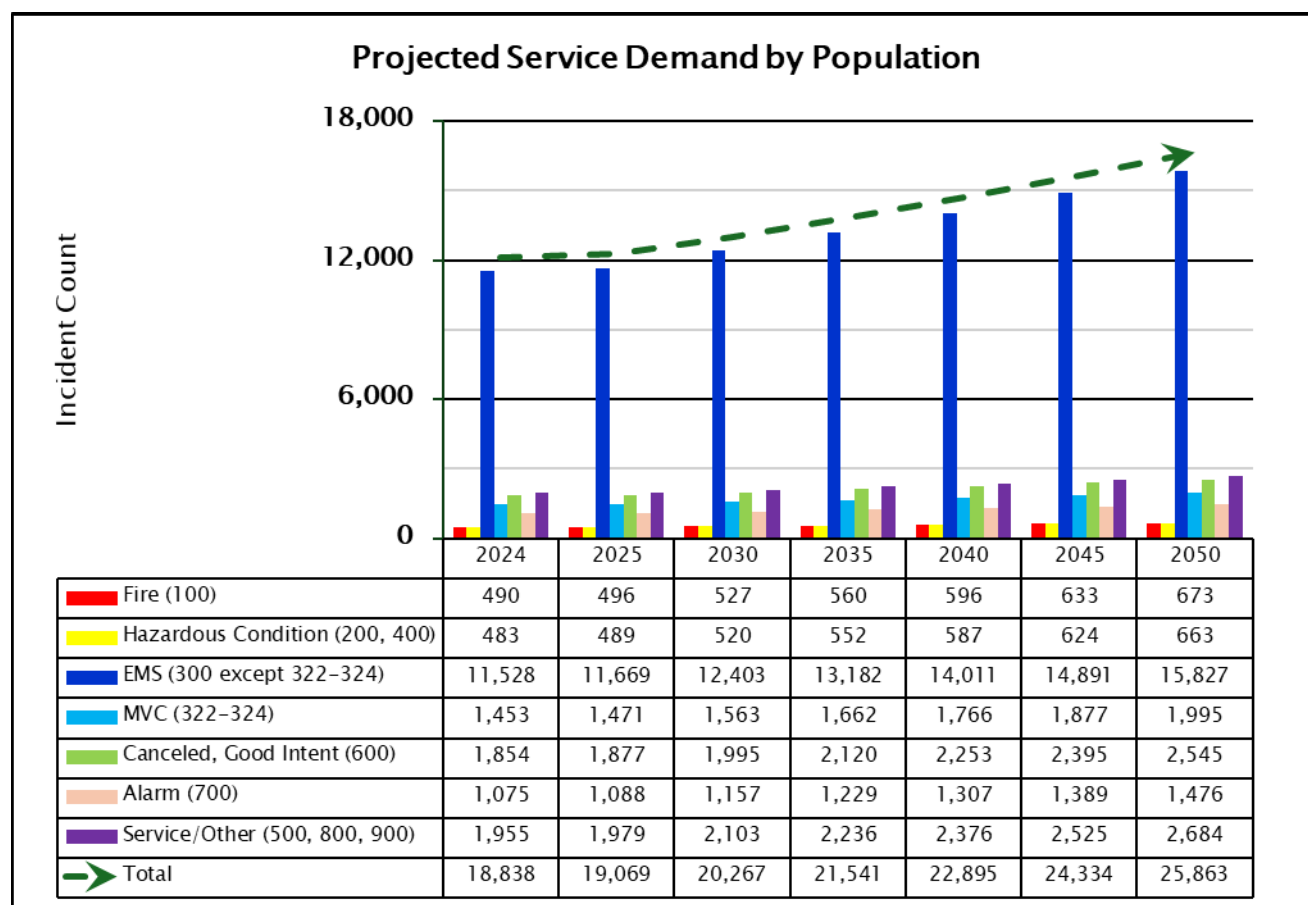
ESCI uses two formulas to compute future service projections, incident history trends and population trends. These two trends provide upper and lower boundaries for forecasting call volumes.



Future Service Demand by Population

By evaluating the current number of incidents per 1,000 in population and applying that to the projected population growth from the preceding figure, it is possible to forecast a lower future service demand boundary within the community, as illustrated in the following figure.

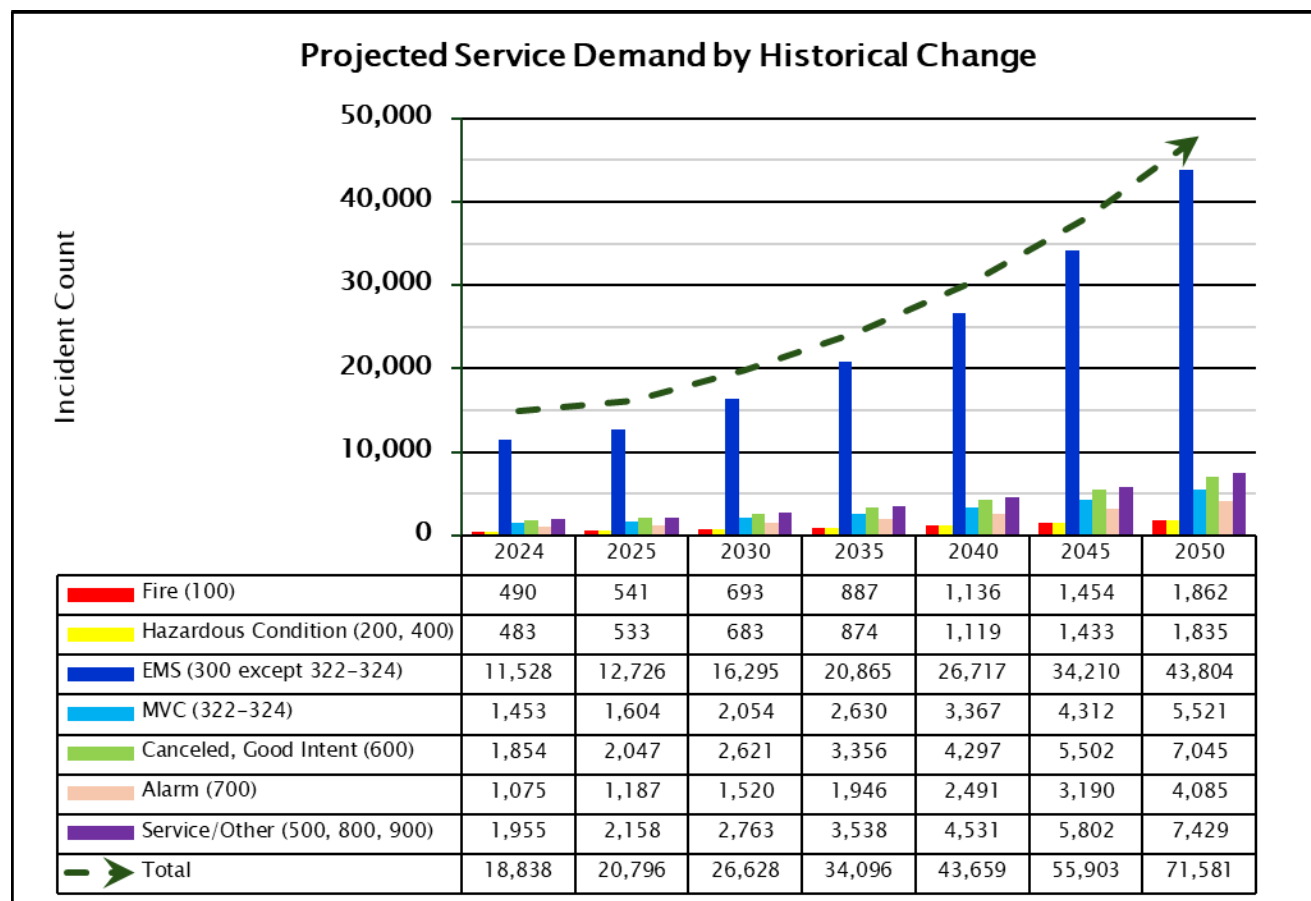
Figure 68. ACFR Projected Service Demand by Population Change, 2025-2050



*Future Service Demand by Historical Change*

By applying the compounded annual growth rate (5.07%) derived from the incident type analysis, it is possible to forecast an upper future service demand boundary within the community, as illustrated in the following figure.

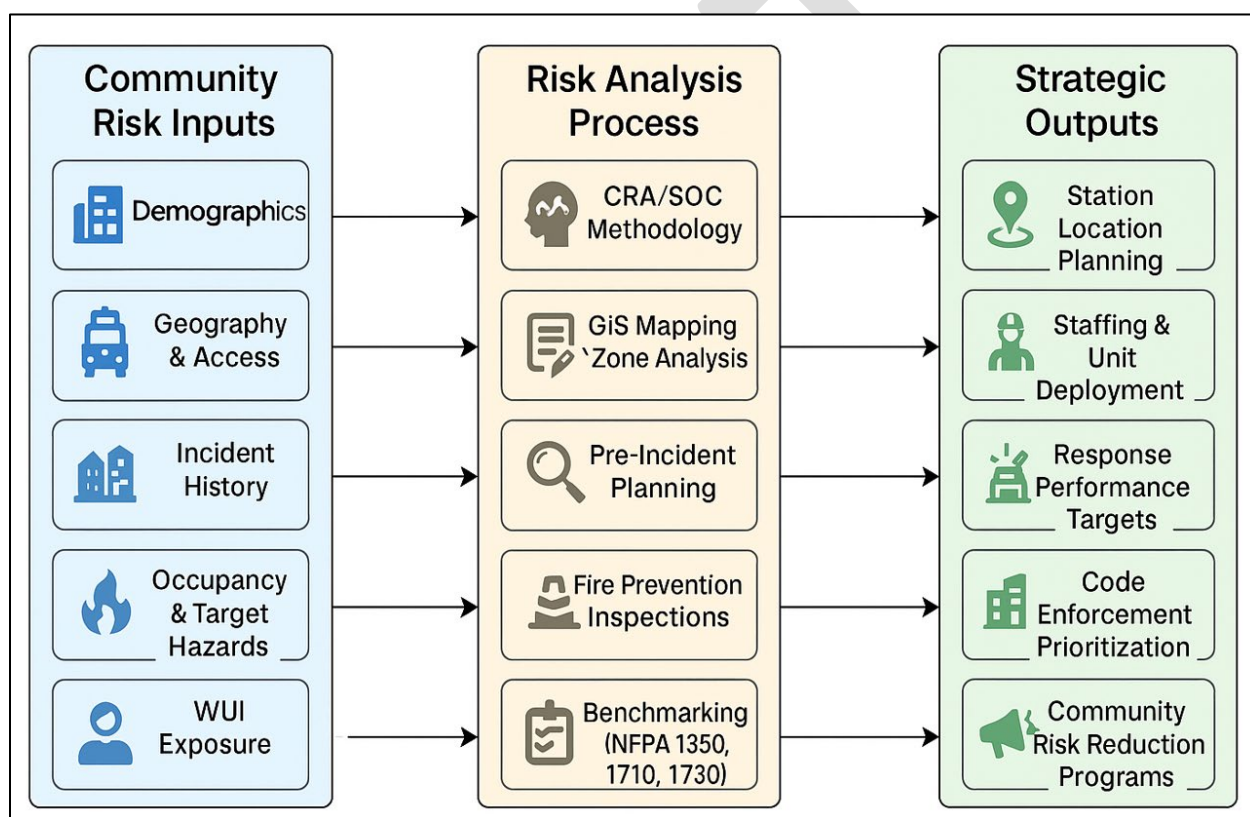
Figure 69. ACFR Projected Service Demand by Historical Change, 2025–2050



Risk Assessment Tools and Methodology

Albemarle County Fire Rescue (ACFR) has taken important steps toward adopting a risk-informed, data-driven approach to resource allocation and deployment through its application of Community Risk Assessment and Standards of Cover (CRA/SOC) principles. These methodologies—outlined by the Center for Public Safety Excellence (CPSE) and aligned with CFAI accreditation standards—form the foundation for evaluating where and how to deploy emergency services most effectively across Albemarle County’s diverse response environment.

Figure 70. ACFR Risk-Inform Planning Framework



ACFR’s risk assessment process is informed by population density, historical incident data, response times, geographic access limitations, and the distribution of critical infrastructure and vulnerable populations. This approach helps define risk zones and determine staffing and apparatus needs relative to actual community conditions rather than relying solely on traditional jurisdiction-wide benchmarks. ACFR uses GIS mapping, performance data, and demographic overlays to visualize and plan for emerging threats and evolving service demand.



The Fire Marshal's Office plays a key role in risk reduction by maintaining a comprehensive pre-incident planning program and conducting inspections of commercial occupancies and target hazards. These proactive efforts ensure that emergency operations personnel have access to critical building and occupancy information, enhancing response safety and operational efficiency. However, continued support for fire prevention staffing and updated inspection frequency standards will be necessary to keep pace with the county's growth and complexity.

ACFR's evolving planning framework also aligns with national fire service standards, including NFPA 1300, NFPA 1710, and NFPA 1730. These standards provide best practice guidance for both the operational and prevention components of a comprehensive risk management strategy.

Moving forward, ACFR should continue to enhance its internal planning capabilities by formalizing CRA/SOC processes, expanding GIS-supported decision-making, and refining performance benchmarks using national standards. Doing so will position the department to deliver efficient, risk-appropriate services and build a framework for long-term sustainability and continuous improvement.

Implications for Staffing and Deployment

ACFR's deployment model must account for both the volume and complexity of incidents across the county. Urban and suburban growth corridors require robust ALS coverage and increased staffing to meet concurrent call demand, while rural regions demand self-sufficient units with longer travel times. The county's demographic vulnerabilities further justify investment in specialized outreach, prevention, and community paramedicine services.

Effective service delivery in Albemarle County will depend on a balanced mix of staffing strategies: enhancing 24/7 coverage in growth zones, supporting volunteer capacity where feasible, and using data-driven triggers to determine when and where to deploy additional units or build new stations. Staffing decisions should also incorporate risk-based models, such as those outlined in NFPA 1710, CFAI's Community Risk Assessment/Standards of Cover, and ISO criteria.



Cost Per Capita Analysis and Comparison

The cost per capita metric provides a high-level snapshot of how much Albemarle County invests annually in fire and EMS services per resident. It is calculated by dividing the fire rescue department's total operating budget by the number of residents serving in this case, 120,373. This metric allows for standardized comparisons with similarly sized or structured jurisdictions and helps assess whether Albemarle is underfunded, appropriately resourced, or overextended, relative to its peers.

For FY 2025, Albemarle County Fire Rescue's operating budget totals \$28,563,649, resulting in a cost per capita of \$237.26.

While this figure provides a useful reference point, it should not be evaluated in isolation. Factors such as geography, service model, EMS transport responsibilities, mutual aid reliance, and call volume also affect the true cost of service delivery. As such, cost per capita should be considered as one of several complementary measures in a broader performance and sustainability framework.

Benchmarking and Interpretation

When compared to peer jurisdictions in Virginia and surrounding areas, Albemarle County falls in the mid-range of per capita spending. Urban jurisdictions with fully career-staffed departments, such as Charlottesville, Lynchburg, and Richmond, show higher costs, while more rural or volunteer-reliant counties, such as Augusta and Rockingham, report lower investments.

Albemarle's mix of rural, suburban, and high-growth areas, along with its combination staffing model and ongoing expansion of 24/7 coverage, contributes to a cost structure that reflects both operational efficiency and growing service demands.

Figure 71. Cost Per Capita Peer Jurisdiction Comparison¹⁸

Jurisdiction	Population	FY25 Fire/EMS Budget	Cost Per Capita	Service Model
Albemarle County, VA	120,373	\$28.6M	\$237.26	Combination
Charlottesville City, VA	44,767	\$18.9M	\$403.21	Career
Augusta County, VA	78,622	\$15.7M	\$202.04	Combination
Spotsylvania County, VA	145,000	\$42.1M	\$290.23	Combination
Frederick County, MD	284,000	\$101.3M	\$356.69	Combination
Stafford County, VA	165,539	\$39.5M	\$234.68	Combination
Rockingham County, VA	87,674	\$16.5M	\$208.79	Combination
Lynchburg City, VA	80,000	\$25.6M	\$320.41	Career
Henrico County, VA	334,760	\$92.5M	\$320.41	Career
Fairfax County, VA	1,152,134	\$267.9M	\$233.83	Career
Loudoun County, VA	443,380	\$157.4M	\$345.41	Combination
Richmond City, VA	229,247	\$78.2M	\$341.26	Career

¹⁸ Albemarle County FY 2025 Budget: <https://www.albemarle.org/government/budget/current-budget>

Charlottesville FY 2025 Budget: <https://www.charlottesville.gov/169/Budget>

Augusta County FY 2025 Budget: <https://www.co.augusta.va.us/government/budget>

Spotsylvania County FY 2025 Budget: <https://www.spotsylvania.va.us/2614/FY-2025-Budget>

Frederick County FY 2025 Budget: <https://www.fcva.us/departments/finance/budget>

Stafford County FY 2025 Budget: <https://stories.opengov.com/staffordcountyva/f9ccec4a-af4c-4e04-83a0-eb135efoc7aa/published/XFJQrGRAt?currentPageId=67cf235c25aeeae491aa3a8>

Rockingham County FY 2025 Budget: <https://www.rockinghamcountyva.gov/>

Lynchburg FY 2025 Budget: <https://www.lyncburgva.gov/337/Budget>

Henrico County FY 2025 Budget: <https://henrico.gov/public-data/approved-budget-2025-2026/>

Fairfax County FY 2025 Budget: <https://www.fairfaxcounty.gov/budget/fy-2025-advertised-budget-plan>

Loudoun County FY 2025 Budget: <https://www.loudoun.gov/budget>

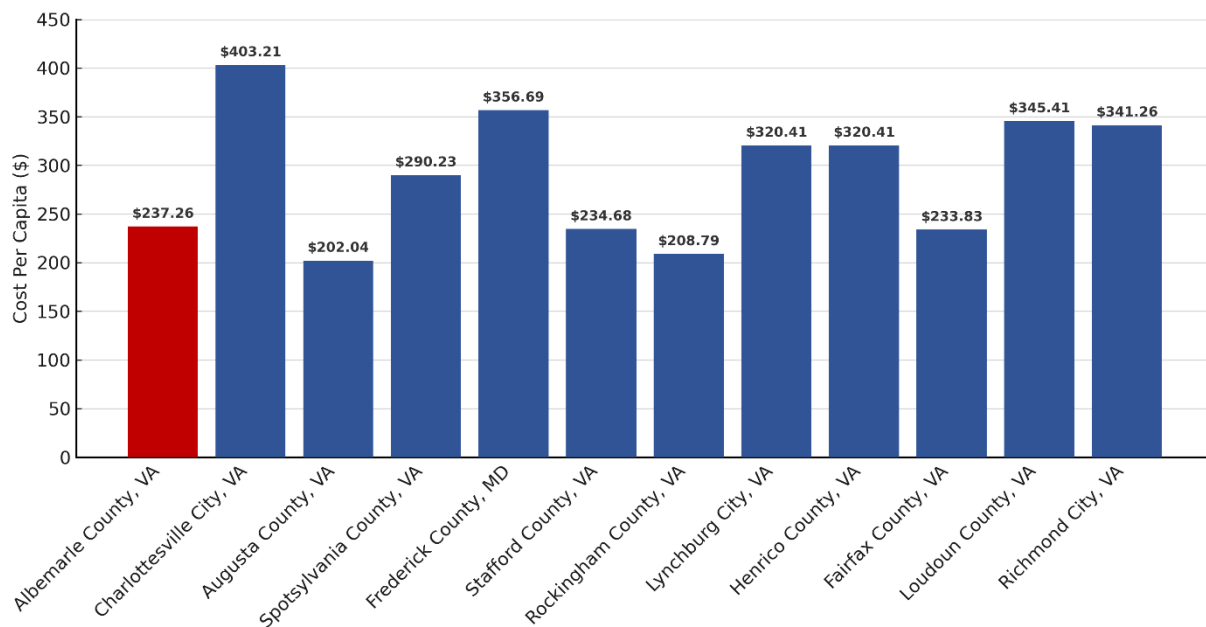
Richmond FY 2025 Budget: <https://www.rva.gov/richmond-city-council/richmond-budget>



Albemarle County's fire and EMS spending is consistent with expectations for a growing, mixed-density jurisdiction using a combination service model. When compared to peer jurisdictions in Virginia, Albemarle County falls below the per capita spending levels of more urban counties such as Henrico, Chesterfield, or Fairfax, which benefit from greater population densities and maintain fully career-staffed fire and EMS systems. However, Albemarle's combination of growing suburban development, high-risk facilities, and expansive rural territory may justify a per capita investment that approaches, or even exceeds, regional averages to sustain equitable service delivery across all areas.

While a lower cost per capita can indicate operational efficiency, it may also point to underlying challenges such as understaffing, aging infrastructure, or an overreliance on overtime and volunteer personnel. Conversely, higher per capita costs are often appropriate in jurisdictions with geographic barriers, increased wildfire risk, or decentralized populations—all conditions present in Albemarle County. As the department continues to evolve, cost per capita should be considered not in isolation, but as one of several interrelated indicators used to evaluate system performance, fiscal sustainability, and community risk alignment.

Figure 72. Cost Per Capita Comparison





Recommendations to Strengthen Service Delivery and System Readiness

Throughout this study, a central objective emerged: to ensure a predictable and reliable level of fire and EMS service for all residents of Albemarle County. This goal—voiced by county leadership and echoed by operational staff—requires not only sufficient staffing but also clarity in how resources are allocated, how coverage is structured, and how performance is measured.

The following recommendations are organized into five tiers based on priority to achieve the objective, operational impact, and time required for implementation. All recommendations in this report are based on stakeholder interviews, operational data, industry best practices, and regional benchmarking. Where recommendations reflect perceptions, they are included not as factual conclusions but as important indicators of trust, communication, or system performance that merit further review. While all are important, they are presented in an order that reflects their impact on ACFR's ability to deliver consistent predictable service across its diverse geography.

Priority is given to those recommendations that affect:

- Staffing availability and daily coverage
- Operational readiness and span of control
- Deployment models and geographic service equity
- Emergency management capacity and coordination
- Volunteer participation and integration
- Training, logistics, and administrative support

This section begins by addressing system-wide resource alignment, starting with the need to define and apply demand zones to guide response expectations and long-range planning.

Tier 1: Core Stability – Delivering Predictable Countywide Service

At the heart of Albemarle County Fire Rescue's mission is the ability to deliver consistent, timely, and effective emergency responses to every resident, regardless of location. Tier 1 addresses the most urgent and foundational elements required to stabilize the system and establish a baseline for predictable service delivery. These recommendations focus on eliminating operational volatility, normalizing staffing



practices, aligning resources with population-based risk, and strengthening system reliability across all demand zones. Together, they lay the groundwork for sustainable growth, equitable service, and public trust in ACFR's emergency response model.

Recommendation #1: Establish Geographic Response Demand Zones

Background¹⁹:

ACFR currently uses two broad service area classifications—Development and Rural—to evaluate performance and allocate resources. While this provides a basic framework, it does not capture the full variation in geography, population density, and service demand across the county. NFPA 1720 offers a more detailed demand zone model, classifying areas as Urban, Suburban, Rural, or Remote based on population density and accessibility. These categories provide a more precise structure for setting response performance benchmarks that reflect actual service conditions.

According to NFPA 1720:

- Urban: >1,000 people per square mile
- Suburban: 500–999 people per square mile
- Rural: <500 people per square mile
- Remote: Very low density, with limited access due to roads, topography, or distance

Within Albemarle County, all four of these risk levels exist. While much of the landmass is classified as rural, the majority of incidents occur in areas with suburban or urban characteristics—particularly in and around the Development Area. Continued growth in these areas will increase demand and elevate expectations for response reliability.

Rationale:

Refining ACFR's demand zone model will allow the department to:

- Set realistic, risk-based response expectations for each geographic type.
- Allocate staffing and resources according to service demand and access challenges.

¹⁹ACFR has already adopted a preliminary response performance framework by classifying Development and Rural Areas. See "Performance Objectives with Definitions," Albemarle County Fire Rescue, 2024.



- Improve transparency and equity in how response performance is measured and reported.
- Strengthen planning for future station locations and capital investment.

This framework also aligns with NFPA 1720, CFAI accreditation standards, and Albemarle County's stated goal of delivering a predictable level of service. By adopting formal response zones tied to population density and geography, ACFR can communicate expectations more clearly to decision-makers and residents alike.

Short-Term Action:

- Conduct a GIS-based demand zone analysis using NFPA 1720 classifications and population density thresholds.
- Review call density, road networks, terrain, and service reliability to validate designations.
- Coordinate with Albemarle County GIS and Planning staff to integrate development trends and growth projections.
- Establish an annual GIS refresh and demand zone validation process in collaboration with county GIS staff to ensure future staffing and station decisions remain data driven.

Mid-Term Action:

- Adopt formal benchmarks for each zone, including turnout time, travel time, staffing minimums, and total response time.
- Integrate demand zones into internal reporting, performance dashboards, and Standards of Cover.
- Educate field personnel, county leadership, and the community on zone definitions and expectations.

Long-Term Action:

- Use zone-specific performance reporting to guide future staffing decisions, capital improvements, and strategic planning.
- Publish zone-based performance quarterly or annually to the County Executive, Board of Supervisors, and the public.
- Reassess demand zone designations every 3–5 years in conjunction with Albemarle County comprehensive plan updates and land use changes.



Recommendation #2: Improve Alarm Handling Time to Meet NFPA 1225 Standards

Background:

Alarm handling time—the interval between answering a 911 call and dispatching emergency units—is the first measurable component of emergency response.

According to NFPA 1225 (2022 Edition), this time should not exceed 60 seconds at the 90th percentile for high-priority incidents.

ACFR does not directly control the dispatch process. All fire, EMS, and law enforcement calls are handled by the Charlottesville–UVA–Albemarle Emergency Communications Center (ECC), a regional entity governed by a management board representing Albemarle County, the city of Charlottesville, and the University of Virginia. The ECC operates as a consolidated communications hub serving multiple jurisdictions.

Between 2020 and 2024, ACFR's alarm handling times at the 90th percentile ranged from 2:36 to 4:39, depending on incident type. These figures fall significantly short of the NFPA 1225 benchmark and represent one of the largest controllable delays in the total response continuum.

Rationale:

Improving alarm handling time is among the most direct ways to reduce total response time. Delays at this phase impact the timeliness of dispatch notifications and slow initial deployment for time-sensitive emergencies, such as structure fires and cardiac arrests.

Although ACFR does not manage the ECC, the department is a primary service recipient and has a vested interest in advocating for improved dispatch performance.

Formalizing shared benchmarks, tracking alarm handling time monthly, and enhancing interagency collaboration will all support a more efficient and reliable response system.

Short-Term Action:

- Track and review ECC alarm handling performance each month using 90th percentile data.
- Collaborate with ECC leadership to identify contributing factors to delay.
- Compare local performance with NFPA 1225 standards and regional benchmarks.

Mid-Term Action:

- Evaluate long-term ECC governance and oversight structures to ensure operational priorities and performance expectations for fire/EMS are equitably represented among all partner agencies.



- Establish a service level agreement (SLA) or memorandum of understanding (MOU) between ACFR and the ECC that includes performance expectations and reporting requirements.
- Work with the ECC to evaluate staffing, technology, and call-processing workflows that impact fire/EMS dispatch.
- Advocate for process adjustments that improve fire-specific dispatch priority and efficiency.

Long-Term Action:

- Support the creation of a dedicated fire/EMS dispatcher role within the ECC to improve prioritization, situational awareness, and coordination.
- Incorporate ECC performance into ACFR's annual performance report and Standards of Cover.
- Reassess progress annually and adjust expectations in collaboration with the ECC management board.

Recommendation #3: Improve Turnout Time to Meet NFPA 1710 Benchmarks

Background:

Turnout time is defined as the time interval between dispatch notification and when a unit goes en route to an incident. Unlike alarm handling or travel time, turnout time is fully within the control of the fire department and reflects internal readiness, station design, staffing practices, and procedural discipline.

According to NFPA 1710, the recommended turnout time benchmarks for career departments are:

- 60 seconds (90th percentile) for EMS and other non-fire incidents
- 80 seconds (90th percentile) for fire and special operations incidents

Between 2020 and 2024, ACFR's turnout time performance significantly exceeded these benchmarks. At the 90th percentile:

- Fire incidents averaged 4 minutes, 36 seconds.
- EMS incidents averaged 2 minutes, 14 seconds.
- The overall turnout time across all incidents was 2 minutes, 26 seconds.

These extended times represent a major opportunity to improve operational effectiveness and total response performance.



Rationale:

Improving turnout time is one of the most direct, internal methods available to ACFR for reducing overall response time. Extended turnout times increase risk to patients and property and erode public confidence in response reliability. Factors that may contribute to delays include:

- Station alerting systems and notification clarity.
- Gear placement and PPE donning procedures.
- Cross-staffing logistics and apparatus assignment confusion.
- Station layout, physical barriers, or insufficient crew coordination.
- Lack of accountability for turnout time tracking and improvement.

By setting clear performance expectations, auditing delays, and addressing internal obstacles, ACFR can move closer to national standards and build system-wide predictability.

Short-Term Action:

- Adopt NFPA 1710 turnout time benchmarks (60s EMS, 80s Fire) as department standards.
- Track turnout time monthly by incident type, unit, and station.
- Identify systemic causes of delay using First Due or comparable data platforms.

Mid-Term Action:

- Provide feedback to crews on turnout time performance and trends.
- Revise internal SOPs and training on turnout best practices.
- Evaluate station layouts, PPE storage, and alerting technology for delay mitigation opportunities.

Long-Term Action:

- Incorporate turnout time improvement into performance evaluations and supervisory responsibilities.
- Factor station design and alerting enhancements into future CIP planning.
- Publish turnout time performance annually as part of department-wide reporting and benchmarking.



Recommendation #4: Normalize and Fund 24/7 Career Staffing at Critical Stations²⁰

Background:

ACFR currently operates under a hybrid staffing model that combines career and volunteer personnel. While this model offers flexibility, it has become increasingly unstable particularly during weekday and overnight hours. This is mostly due to inconsistent volunteer availability and structural flaws in the current staffing approach.

One of the most significant challenges is the use of a rotating day shift model for career staff, which provides weekday coverage but leaves weekends uncovered. This results in critical gaps in service continuity and places additional pressure on volunteer units, which are already experiencing declining availability. When combined with dynamic staffing practices and volunteer reliance, the result is a fragmented staffing structure that cannot consistently meet the needs of a growing community.

Recent analysis conducted as part of this study confirmed that Urban and Suburban demand zones generate the majority of ACFR's incident volume. The Community Risk Assessment further identified areas with elevated risk due to call density, vulnerable populations, and limited redundancy in coverage. These factors strongly support the need to establish reliable, around-the-clock staffing at key stations.

Rationale:

Establishing 24/7 career staffing at critical stations is essential to fulfilling the County Executive's goal of providing a predictable and equitable level of emergency service. This transition will:

- Improve response time consistency across the system.
- Reduce dependency on dynamic reassignments and mutual aid.
- Ensure service delivery aligns with actual risk and population density.
- Support operational readiness in high-growth and high-risk areas.

Rather than adopting a one-size-fits-all approach, ACFR should use demand zone classification, call volume, and station performance to guide where 24/7 staffing is needed first. This risk-based approach is supported by NFPA 1720, NFPA 1710, CFAI

²⁰ This recommendation builds directly on the prior recommendation to establish geographic demand zones and the department's Community Risk Assessment.



best practices, and provides a defensible framework for long-term staffing and investment decisions.

Short-Term Action:

- Conduct a detailed assessment of station-level workload, turnout reliability, and weekend/day shift coverage gaps using demand zone overlays.
- Prioritize stations in Urban and Suburban areas with high incident volume, inconsistent coverage, and proximity to vulnerable populations.
- Collaborate with County Finance and HR to plan phased funding and recruitment of additional FTEs (Full Time Employees).

Mid-Term Action:

- Begin implementation of 24/7 staffing at prioritized stations, focusing on those currently covered by partial day shifts or unsupported weekends.
- Monitor key metrics including turnout time, unit availability, response time by zone, and concurrent incident coverage.
- Define clear expectations and communication strategies with affected volunteer agencies.

Long-Term Action:

- Expand 24/7 staffing to all stations meeting demand thresholds, integrating staffing benchmarks into the department's Standards of Cover.
- Align future expansions with county development plans, community risk assessment findings, and demand zone evolution.
- Use 24/7 staffing as the operational baseline for future CIP, apparatus deployment, and strategic investments.

Recommendation #5: Eliminate the Day Shift Staffing Model

Background:

ACFR currently utilizes a rotating 12-hour weekday day shift staffing model, originally implemented to augment weekday response during peak daytime hours. While the intent was to supplement volunteer or station-based coverage, this approach has proven increasingly incompatible with ACFR's service demands, especially in the context of its growing call volume, risk-based planning model, and hybrid system volatility.

Stakeholder interviews and scheduling analysis identified several critical issues:



- There is no career coverage on nights and weekends, resulting in predictable, recurring gaps in staffing.
- There is a significant administrative burden for command staff, who are required to manually manage vacancies or deploy dynamic reassignment models to maintain coverage.
- There is a perceived inequity among operational staff regarding assignment types. Some personnel view administrative or daylight support positions as more favorable because of their predictable schedules, limited emergency response activity, and perceived autonomy. However, stakeholders noted that these roles often carry significant system-wide responsibilities that are not always visible to field staff. In contrast, daylight response positions, particularly those assigned to supplement under-resourced stations, are frequently seen as less desirable by line personnel. These roles may lack the camaraderie and structure of 24/7 shift work and often involve solo or fragmented deployment to fill staffing gaps. This adds to workload strain and reduces the appeal of these assignments.
- Volunteer participants expressed concern that daytime staffing gaps at several stations are increasingly falling to already stretched volunteer personnel, particularly at rural or under-resourced locations. In interviews, volunteers shared that they often feel obligated to fill coverage voids during weekday shifts. These are times when volunteer availability is naturally limited, which leads to fatigue, declining morale, and operational inconsistencies.
- There is limited team continuity and reduced leadership development, as day shift personnel are not embedded in shift-based crews, impacting training, mentoring, and crew cohesion.

This inconsistency has contributed directly to systemwide staffing reductions. In 2023 alone, ACFR recorded over 500 personnel reductions, the highest annual total in the last five years. Nearly 1,500 reductions were recorded between 2021 and 2024, many of which can be traced to systemic gaps in daily staffing coverage, inefficient resource allocation, and inflexible scheduling caused by the current day shift structure²¹.

²¹ Reduction data is derived from ACFR internal scheduling and operational reporting from 2021–2025, as visualized in department tracking dashboards.

*Rationale:*

As Albemarle County moves toward predictable, risk-informed service delivery anchored in demand zones, a rotating day shift model introduces operational instability, impedes team-based deployment, and creates service equity concerns. Transitioning day shift personnel to either 24/7 shifts or structured, weekday-only support roles is a critical next step toward normalizing the system and maximizing operational value from each FTE.

The additional staff required to achieve this recommendation can be hired over a period of time to lessen the impact of the increased staffing costs associated with the recommendation. The ability to fund FTEs will dictate the speed at which this schedule can be implemented.

These FTEs are displayed in a sample staffing schedule to achieve the transition of current day shift stations to 24/7 over a five-year period.

Figure 73: Sample Staffing Schedule of Additional FTEs

Station	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	7 FTE					7 FTE
		7 FTE				7 FTE
			7 FTE			7 FTE
			7 FTE			7 FTE
				7 FTE		7 FTE
					7 FTE	7 FTE
Total FTEs	7 FTE	7 FTE	14 FTE	7 FTE	7 FTE	42 FTE

Short-Term Action:

- Conduct a full inventory of current day shift assignments, including roles, costs, and hours of coverage provided.
- Quantify the impact of day shift absences on volunteer response and system-wide reductions.
- Survey operational staff, Battalion Chiefs, and volunteers to assess perception, workload distribution, and scheduling friction.
- Determine which day shift stations should transition first based on workload, call concurrency, and volunteer participation.



Mid-Term Action:

- Reassign day shift FTEs to 24-hour shift rotations at stations and create structured, weekday-only administrative or support roles (e.g., training, CR&R, logistics, inspections).
- Update staffing configurations, SOPs, and supervision to reflect new assignments.
- Align role assignments with demand zones, response volume, and operational needs.

Long-Term Action:

- Fully eliminate the rotating day shift model across all operational assignments.
- Monitor reductions, overtime use, and volunteer activation rates to assess long-term impact.
- Reinforce 24/7 staffing as the baseline operational structure for primary response roles.

Recommendation #6: Maintain a Minimum of Two Battalion Chiefs Per Shift

Background:

ACFR is currently budgeted to staff two Battalion Chiefs (BCs) per shift, a necessary enhancement introduced in recent years to improve field supervision and span of control. However, this standard is not consistently achieved due to factors such as leave usage, administrative reassignments, training, or unfilled vacancies. As a result, one BC is often left to oversee the entire shift, including during high-risk, multi-unit incidents.

ACFR operates across a diverse landscape that if adopted as recommended now includes formal demand zones—Urban, Suburban, Rural, and Remote—each with varying levels of incident frequency, population density, and risk. The Development Areas, which contain the majority of the county’s population and call volume, frequently require simultaneous responses, elevated resource coordination, and faster command decisions. In these settings, a single BC cannot effectively maintain system-wide visibility, ensure accountability, or supervise geographically dispersed resources.

Rationale:

Consistently staffing two BCs per shift is critical for:

- Ensuring adequate span of control as recommended by NFPA 1561
- Providing real-time geographic coverage across multiple demand zones and remote service areas



- Supporting safe and effective management of overlapping incidents
- Maintaining direct oversight of growing 24/7 staffing configurations
- Relieving administrative strain caused by unpredictable supervisor availability

This is especially important in higher-risk areas where call volume, density, and resource intensity are increasing, as identified in the Community Risk Assessment. Ensuring command coverage at all times reinforces operational reliability and strengthens system resilience during surges, severe weather events, or simultaneous emergencies.

Short-Term Action:

- Conduct a review of BC shift coverage over the past 12 months to quantify single-BC days and identify systemic gaps.
- Analyze incident frequency and call concurrency by demand zone to understand geographic supervision needs.
- Establish shift-level accountability to maintain dual-BC presence at all times.

Mid-Term Action:

- Implement mandatory backfill protocols using overtime, administrative coverage, or Acting BCs to ensure two BCs per shift.
- Coordinate with HR and Finance to ensure sufficient relief factors for BC scheduling.
- Evaluate potential for regional or zone-based command assignments to improve geographic distribution.

Long-Term Action:

- Institutionalize two-BC coverage as a minimum daily staffing standard, with built-in coverage for planned absences.
- Track command effectiveness metrics such as incident resolution time, safety officer availability, and shift coverage consistency.
- Include BC staffing compliance in annual operational performance reporting.

Recommendation #7: End Dynamic Staffing That Reduces Engine Companies

Background:

ACFR currently employs a dynamic staffing model that, when staffing falls below minimum levels, removes engine companies from service and reassigns the available personnel to cross-staff a brush truck/tanker and an ambulance. This practice,



intended to maintain basic EMS and water supply coverage, results in multiple daily instances—up to four engine companies per day—being unavailable for structure fires or initial suppression efforts. This is often a result of an inadequately staffed relief factor.

As a result, crews often initiate fire responses operating from a brush truck/tanker and a medic unit, with no engine on scene. This places crews in a position where they cannot deploy hose lines, initiate interior attack, or deliver water without waiting for a secondary arriving engine. This practice severely compromises the county's ability to respond effectively to structure fires, protect life and property, and meet national safety standards.

Rationale:

This response model introduces unacceptable risks to responders and the public. It:

- Delays fire attack, search, and rescue operations by several critical minutes.
- Violates the intent of NFPA 1710, which assumes engines are available and properly staffed.
- Undermines OSHA 2-in/2-out rules, as no safe initial fireground operations can occur without an engine.
- Places crews in high-risk situations without tools or water to mitigate the incident.
- Disrupts system balance, as other engines must travel farther to fill the gap—impacting response time, unit availability, and fire growth potential.

What begins as a staffing workaround becomes a structural risk, especially in urban and suburban demand zones where fire load and response expectations are highest. This approach also increases liability exposure and erodes public trust in ACFR's ability to respond effectively to fire emergencies.

Short-Term Action:

- Identify all instances where engines are removed from service and document resulting delays, unit substitutions, and incident outcomes.
- Report dynamic staffing usage, monthly by station, demand zone, and incident type,
- Communicate risks and limitations of this practice to internal stakeholders and county leadership.



Mid-Term Action:

- Establish and fund a staffing reserve pool or float FTEs to provide fill-in coverage and reduce engine downtime.
- Adjust scheduling, overtime policy, or backfill strategy to avoid engine removal as a solution.

Long-Term Action:

- Prohibit the removal of engine companies from service due to staffing.
- Codify three-person minimum staff per engine company as department policy without removing them from service when staffing is low.
- Monitor compliance and continue to use this metric as part of ACFR's annual performance reporting to the Board of Supervisors.

Recommendation #8: Implement Systemwide Relief Factor Funding

Background:

ACFR does not currently maintain a consistently applied, systemwide relief factor that is both funded and protected. While a relief factor has been conceptually adopted in scheduling and budget models, in practice, it has not been implemented effectively.

Operational personnel intended to serve as relief staff are frequently diverted to cover non-operational functions such as:

- Training academy instructors
- Logistics and safety support
- Light duty assignments (Injuries and Medical)
- Special projects, paramedic school, or temporary administrative roles

This ongoing practice erodes the functional relief pool, leaving the department unable to consistently cover daily vacancies due to leave, vacancies, or injury. The result is a continued reliance on:

- Overtime to meet minimum staffing.
- Inconsistent supervisory coverage, as Battalion Chief positions are also impacted (see Recommendation #6).
- Dynamic staffing practices that remove engine companies from service (see Recommendation #7).



Departments of similar size and structure typically require a relief factor between 1.2 and 1.35 for 24 hour units to maintain consistent staffing, while accounting for both planned and unplanned absences. ACFR has adopted a 1.33 relief factor for 24/7 staff and 1.66 for day staff.

Rationale:

A funded and protected relief factor is essential to deliver predictable service, reducing overtime and burnout, and ensuring system stability. Without it, even well-designed staffing models—such as 24/7 coverage and three-person minimum engine companies—become unsustainable in practice.

This recommendation supports and enables:

- Recommendation #6: Ensuring two Battalion Chiefs are staffed per shift.
- Recommendation #7: Ending the removal of engine companies due to staffing shortfalls.
- Recommendation #9 (forthcoming): Creating clear performance triggers for staffing expansion.

A protected relief factor will also reduce the temptation to use core operations personnel as a flexible pool for administrative or training assignments—improving consistency, morale, and efficiency.

Short-Term Action:

- Analyze 3 years of leave data by position type (e.g., Firefighter, Lieutenant, BC) to calculate realistic relief factor needs.
 - The current ACFR 3-year leave analysis yields a 1.19 relief factor and calls for 174 FTEs to fill operational roles to meet the current 49 people per day staffing. Only 168 FTEs are assigned to operations.
 - This does not account for turnover at 5.0%.
 - This does not account for positions reassigned to training or special assignments.
- Document all reassignments and temporary duties that currently reduce relief coverage.
- Model a relief factor implementation plan with built-in backfill and role protection.



Mid-Term Action:

- Fund relief factor positions explicitly in the annual budget, distinct from training or admin FTEs.
- Adjust staffing software and HR coding to prevent unintended relief pool depletion.
- Establish temporary reassignment policies with backfill requirements for all relief-based roles.

Long-Term Action:

- Reassess relief factor needs annually, adjusting based on leave trends, staffing changes, and training demands.
- Monitor daily staffing success rates (e.g., % of shifts filled without OT or downgrade).
- Codify relief factor protections as part of ACFR's operational readiness standard.

Recommendation #9: Develop Performance-Based Triggers for Adding 24/7 Career Staffing

Background:

ACFR currently lacks a formalized process to determine when a station or unit should transition from part-time or volunteer coverage to full 24/7 career staffing. As a result, staffing decisions are often reactive, or based on anecdotal input, rather than consistently applied, data-informed criteria.

This absence of approved and supported structured triggers complicates planning, delays necessary staffing improvements, and leads to uneven service levels—particularly in suburban and rural demand zones where call volume, development, and volunteer availability fluctuate. Without defined benchmarks, career staffing expansion becomes a subjective conversation rather than a policy-driven response to measurable service demand.

Rationale:

Establishing performance-based triggers will give ACFR a defensible, transparent framework for expanding 24/7 staffing based on actual need and risk, not politics or convenience. It enables:

- Equitable service delivery across zones.
- Consistence with ISO, NFPA 1710/1720, and accreditation models.



- Proactive decision-making tied to community growth.
- Clear justification for capital, staffing, and station expansion.

This recommendation is supported by and directly reinforces:

- Recommendation #1: Establishing geographic demand zones.
- Recommendation #7: Ending dynamic staffing by identifying when career staffing must replace unreliable volunteer models.
- Recommendation #8: Implementing a relief factor that provides capacity to expand staffing when justified.

Short-Term Action:

Define and adopt measurable trigger metrics such as:

- Call volume per day or per year (e.g., >750 calls/year)
- Concurrent incident frequency (e.g., >15% of calls occur while another is active)
- Volunteer turnout reliability (e.g., <70% of calls responded to within 5 minutes)
- Response time threshold failures in NFPA 1720/1710 by zone
- Review relevant standards from NFPA, ISO, CFAI, and peer agencies

These metrics are grounded in national models such as NFPA 1710 and 1720, CFAI accreditation criteria, ISO fire suppression rating benchmarks, and planning thresholds used by peer combination departments across the country.

Mid-Term Action:

- Develop formal staffing trigger policy with clear thresholds, data sources, and annual review expectations.
- Validate and pilot the trigger model using at least two stations with different risk profiles.
- Present proposed policy to County leadership and tie to budget request planning cycles.

Long-Term Action:

- Apply the trigger model annually during budget and CIP planning to guide:
 - New FTE requests
 - Station staffing upgrades
 - Volunteer-to-career transitions



- Integrate trigger outcomes into ACFR's Standards of Cover and long-range staffing plan.
- Use trigger outcomes to communicate future resource needs to County leadership and the public with transparency.

Tier 2: Strategic Leadership, Emergency Management, and Volunteer Integration

To ensure Albemarle County Fire Rescue remains adaptive, resilient, and aligned with its evolving service demands, the following recommendations focus on strengthening organizational leadership, emergency coordination, and system-wide support structures. Central to this effort is the modernization of the county's Emergency Management framework, which plays a critical role in maintaining continuity of operations, community preparedness, and multi-agency coordination during complex incidents.

Equally important is the continued integration and support of the county's volunteer fire and EMS agencies, which remain a vital part of the hybrid service model. As career staffing increases and operational standards evolve, the system must also adapt its leadership, communication, and support mechanisms to ensure that volunteer personnel remain engaged, prepared, and positioned to contribute meaningfully to countywide service delivery. These strategies aim to reinforce leadership capacity at all levels while preserving the value of Albemarle's combination system.

Recommendation #10: Modernize and Elevate the County's Emergency Management Structure, Governance, and Staffing

Background:

Emergency Management (EM) in Albemarle County is currently embedded within Fire Rescue and supported by a single dedicated staff member. This model has enabled essential baseline functions such as emergency planning, EOC coordination, and hazard mitigation; however, it has proven insufficient for meeting the growing complexity and expectations associated with modern EM responsibilities.

Recent after-action reviews, exercises, and internal assessments have revealed several systemic issues:

- Unclear command and reporting structure, particularly during activations or declared emergencies.



- Limited depth and redundancy, with EM often reliant on fire leadership already focused on operational response.
- Recruitment and retention challenges, stemming in part from compensation misalignment and overlapping duties.
- Insufficient capacity to coordinate large-scale preparedness efforts or interagency planning across county departments.

As Albemarle County expands, both in population and risk exposure, Emergency Management must evolve to become a clearly defined, well-staffed, and strategically positioned function capable of leading continuity, coordination, and preparedness across the entire government enterprise.

Rationale:

Predictable service delivery during major incidents and disasters depends not only on fire apparatus and EMS crews, but also on the capability of the county's emergency coordination infrastructure. A modernized Emergency Management structure supports:

- Continuity of government and essential services.
- Multi-agency response coordination.
- Compliance with NIMS and ICS standards.
- Hazard mitigation, community outreach, and grant performance.
- Strategic engagement with state and federal partners (e.g., VDEM, FEMA).

This recommendation provides a comprehensive roadmap for strengthening Emergency Management: improving organizational clarity, evaluating the feasibility of a standalone department, and ensuring the county can recruit and retain qualified staff to meet its preparedness mission.

Structure and Governance Modernization

Short-Term Action:

- Review current EM reporting lines, authorities, and activation protocols across all emergency operations plans.
- Develop and publish a formal Emergency Management organizational chart and chain of command, including the authority to activate the EOC and coordinate interdepartmental response.
- Align EM documentation with NIMS/ICS principles and FEMA guidance.



Mid-Term Action:

- Conduct training for county leadership, department heads, and emergency partners to reinforce the revised structure and reporting lines.
- Integrate EM authority language into SOPs, mutual aid agreements, and executive leadership onboarding.

Long-Term Action:

- Reinforce the structure through annual exercises, after-action reviews, and plan updates.
- Establish role clarity across all phases of emergency management: mitigation, preparedness, response, and recovery.

Evaluation as a Standalone Department²²

Short-Term Action:

- Commission a feasibility study to assess the creation of a standalone Department of Emergency Management, including structure, governance, staffing, and fiscal implications.
- Benchmark governance structures, staffing levels, and emergency management models used by similar sized Virginia counties—such as Chesterfield County, which maintains a dedicated Emergency Planning and Management division within Fire and EMS, and Loudoun County, where Emergency Management functions operate under the Department of General Services or independently. These models provide insight into how emergency management can scale alongside population growth, risk exposure, and federal grant eligibility.

Mid-Term Action:

If supported, develop an implementation plan detailing:

- Organizational design.
- Budget and administrative needs.
- Transition milestones and reporting relationships.

²² Peer models reviewed include Chesterfield County's Emergency Planning Division (FY2025 Budget), Fairfax County's pay benchmarking for public safety classes (FY2025 Adopted Budget), and organizational structures from Loudoun and Henrico counties. These examples provide scalable frameworks for dedicated emergency management governance and compensation planning.



Long-Term Action:

- Formally establish the Department of Emergency Management with a dedicated director.
- Integrate the department into the County's executive structure and strategic planning efforts.
- Ensure interdepartmental coordination protocols are codified and exercised annually.

Staffing Capacity and Compensation²³

Short-Term Action:

- Identify current staffing gaps, workload distribution, and advancement limitations.
- Compare current Emergency Management position classifications and compensation to those used in Virginia localities such as Fairfax County, Chesterfield County, and Henrico County, where Emergency Management personnel are placed within defined pay bands and organizational structures that recognize credentialing requirements and after-hours responsibilities. Fairfax County's use of benchmark job classes and Chesterfield's dedicated Emergency Planning personnel offer templates for competitive compensation and clear professional development pathways.

Mid-Term Action:

- Adjust salary bands in collaboration with HR to reflect market competitiveness and support career progression.
- Ensure positions offer professional development, credentialing incentives, and succession pathways.

Long-Term Action:

- Reevaluate EM compensation and staffing structure every 3–5 years.
- Use FEMA's Emergency Management Performance Grant (EMPG) criteria as a framework for performance and resourcing benchmarks.

²³ Peer models reviewed include Chesterfield County's Emergency Planning Division (FY2025 Budget), Fairfax County's pay benchmarking for public safety classes (FY2025 Adopted Budget), and organizational structures from Loudoun and Henrico counties. These examples provide scalable frameworks for dedicated emergency management governance and compensation planning.



Recommendation #11: Establish a Volunteer Services Liaison Role

Background:

ACFR's combination system relies heavily on volunteer personnel for station coverage, response capacity, and community engagement. However, as the department has grown and operational expectations have evolved, no single point of contact or advocate exists to coordinate volunteer engagement, communication, and support.

Volunteer agency leaders and county staff have noted challenges in communication, inconsistent expectations around training and performance, and gaps in administrative support. Without a dedicated liaison, these issues often fall to operational Battalion Chiefs or career officers already tasked with shift supervision and response management, leaving little time for sustained volunteer relationship-building.

Rationale:

Establishing a full-time Volunteer Services Liaison role will help ensure that volunteers are well-integrated into ACFR's overall mission, while providing them with the support, recognition, and advocacy they need to remain engaged. A liaison with combination system experience can bridge the cultural and operational divide between volunteers and career staff, promote consistent standards, and improve system reliability.

This position will support multiple Tier 2 goals, including:

- Facilitating smoother integration of volunteer personnel into a growing demand-based staffing model
- Enhancing communication between the department and volunteer stations
- Supporting credentialing, scheduling, and accountability efforts associated with tiered volunteer participation (see Recommendation #12)

Short-Term Action:

- Create a detailed position description for a Volunteer Services Liaison.
- Conduct workload analysis to determine if current staff have the bandwidth to take on these tasks or if an additional staff member will be needed.
- Prioritize selection of an individual with combination system experience and strong interpersonal and operational credibility.
- Define core responsibilities including support for onboarding, training coordination, policy interpretation, and volunteer communications.



Mid-Term Action:

- Formalize liaison participation in monthly volunteer officer meetings, training coordination, and participation reviews.
- Develop shared communication tools (e.g., digital bulletin board, volunteer newsletter, response dashboards).
- Begin structured outreach and feedback collection with volunteer agencies.

Long-Term Action:

- Evaluate the impact of the liaison role using participation trends and satisfaction surveys.
- Adjust the scope of the role as needed based on system growth.
- Explore expansion into a broader Volunteer Support Unit, if justified by demand.

Recommendation #12: Adapt and Align Volunteer Participation to Support Systemwide Mission Objectives

Background:

Volunteers have long been a foundational component of Albemarle County's fire and EMS system. However, as call volume, development patterns, and service expectations have evolved, and so have the demands on personnel. Stakeholder feedback consistently reflected concerns about declining volunteer turnout, uneven training and readiness levels, and limited integration with the broader operational system.

Currently, the system lacks a clear framework for defining different levels of volunteer engagement, resulting in ambiguity regarding capabilities, responsibilities, and expectations. This gap affects operational consistency, planning, and morale—for both career and volunteer personnel.

Rationale:

Rather than viewing volunteer engagement as a binary (either fully certified firefighters or not operational), ACFR should develop a tiered volunteer role structure that supports a variety of participation levels. This model preserves the tradition and value of volunteerism while aligning it more closely with the department's risk-based, demand-driven deployment system.

Formalizing volunteer roles enhances clarity, accountability, and inclusivity. It also supports predictable service delivery by ensuring that every individual operating within the system is properly trained, credentialed, and equipped for their assigned role.



This recommendation complements:

- Recommendation #4: The expansion of 24/7 career staffing.
- Recommendation #10: Strengthening Emergency Management coordination.
- Recommendation #11: Establishing a Volunteer Services Liaison to oversee engagement and performance.

Short-Term Action:

- Develop a tiered structure for volunteer participation based on required training and operational capacity, such as:
 - Operationally Certified Firefighter (fully certified under NFPA/State standards)
 - Wildland Firefighter (NWCG Type 2 or equivalent)
 - Support Member (non-SCBA roles such as driving, pump ops, rehab)
 - Tender Operator (restricted to water supply apparatus operation)
 - Observer (non-operational, training-phase members)
- Create role-specific task books and training paths for each tier.
- Define operational limits and responsibilities in standard operating procedures.

Mid-Term Action:

- Assign Volunteer Services Liaison to coordinate training, onboarding, and credentialing processes for each role.
- Expand training access for volunteers by formalizing delivery schedules, developing remote-access options, and coordinating with each agency to meet baseline training goals.
- Implement a centralized system for volunteer scheduling, notifications, and recordkeeping.
- Provide regular feedback to volunteer officers on participation and training compliance.

Long-Term Action:

- Track participation trends by role, agency, and station to inform future planning.
- Recognize and incentivize high-participation volunteers with tier-specific benchmarks.



- Reevaluate the role structure every 3–5 years to maintain alignment with department needs and evolving service models.

Tier 3: Workforce Development and Succession Planning

As Albemarle County Fire Rescue prepares for continued system growth and a wave of anticipated retirements, the department must proactively invest in its people. Tier 3 focuses on strengthening the internal pipeline of future leaders, enhancing training and mentorship opportunities, and ensuring that institutional knowledge and operational consistency are preserved across generations. These recommendations aim to build organizational resilience, promote professional advancement, and align ACFR's workforce strategy with its long-term mission of delivering safe, reliable, and effective emergency services.

Recommendation #13: Enhance and Strengthen Officer Development and Succession Management Programs

Background:

ACFR faces significant projected turnover in its leadership ranks over the next five years due to both retirements and organizational growth. With many senior leaders eligible for retirement, and new administrative and supervisory roles being added to meet system demand, the department is at a critical juncture. Without a structured approach to succession planning, the organization risks losing valuable institutional knowledge, decision-making capacity, and operational consistency.

While ACFR has formal leadership development resources in place—including the Officer Development Academy (ODA), Career Development Program (CDP), and succession planning policies—stakeholders described concerns regarding consistency, clarity, and access to these pathways. Several interviewees noted that mentoring relationships and preparation for command roles vary widely, and newer personnel are not always confident in how to navigate leadership progression. Managing a multigenerational workforce, adapting to rising community demands, and supporting personnel through organizational change all reinforce the importance of leadership development as an internal system of support. Strengthening the consistency, communication, and perceived accessibility of these existing programs will ensure the department continues to develop qualified leaders for the future.



Rationale:

Establishing a formal succession management and officer development program is critical for ensuring continuity of leadership and organizational resilience. A well-designed program:

- Prepares internal candidates to step into key roles.
- Preserves institutional knowledge and decision-making experience.
- Supports recruitment and retention by providing clear career pathways.
- Enhances morale and engagement by investing in future leaders.
- Reduces the risk of operational disruption due to planned or unplanned departures.

This recommendation also supports the County Executive's goal of maintaining predictable and reliable service delivery—not just at the line level, but across the command structure. ACFR should use national best practices, such as those outlined by the International Association of Fire Chiefs (IAFC), as a foundation for building a tailored, actionable plan.

Short-Term Action:

- Conduct department-wide retirement eligibility and attrition forecast across all officer and administrative ranks.
- Validate findings using the 2025 internal Projected Officer Needs analysis, which anticipates the need to promote 9–12 officers annually through 2030.
- By 2028, internal candidate supply is projected to fall short of demand unless formal development measures are implemented, reinforcing the urgency of this initiative.
- Identify key positions at risk of turnover and assess internal “bench strength” for each through skills inventories and promotional readiness assessments.
- Gather feedback from current and acting officers on barriers to advancement and development needs.
- Reference succession planning models from peer departments and IAFC/CPSE resources to guide program structure.

Mid-Term Action:

- Develop and launch a department-wide Officer Development Program including:
 - Acting officer assignments



- Structured mentorship
- Promotional preparation support
- Targeted leadership training by rank
- Create a Succession Planning Framework to monitor candidate readiness and long-term needs.
- Align HR and promotional processes to support internal development.

Long-Term Action:

- Review succession readiness annually and incorporate findings into strategic workforce planning.
- Create structured knowledge transfer processes (e.g., retiring officer debriefs, SOP revisions, mentoring plans).
- Evaluate leadership development success using metrics such as internal promotion rates, candidate pool depth, and employee engagement survey results.

Recommendation #14: Optimize Fire Marshal's Office Structure and Succession to Meet National Prevention Benchmarks²⁴

Background:

The Fire Marshal's Office (FMO) plays a critical role in fire prevention, life safety inspections, plan reviews, and code enforcement. While ACFR has designated Assistant Fire Marshals (AFMs) to perform these duties, the current deployment model splits their time between suppression shift coverage and administrative work, limiting inspection consistency, responsiveness, and continuity across the system.

In stakeholder interviews and data analysis, it was evident that follow-up inspections are often delayed, inspection targets are unmet, and prevention capacity is insufficient—particularly in high-risk or rapidly developing areas. These findings align with NFPA 1730 and ISO Fire Suppression Rating Schedule indicators, which suggest that ACFR currently falls short of national expectations for fire prevention effectiveness and staffing.

²⁴ This recommendation is grounded in national guidance including NFPA 1730 (2022 Edition), ISO Fire Suppression Rating Schedule, and leadership practices endorsed by the International Association of Fire Chiefs (IAFC) and Center for Public Safety Excellence (CPSE).



ACFR is also anticipating retirements within the FMO in the coming years. Without dedicated succession planning and knowledge transfer, the department risks operational disruption in this high-compliance, high-liability function.

Rationale:

Restructuring the FMO around a dedicated 40-hour workweek with rotating on-call assignments will ensure consistent weekday coverage, improve inter-team coordination, and significantly enhance inspection performance. This model also creates space for focused succession planning, mentoring, and internal leadership development.

The goal of this recommendation is to align the FMO's performance and staffing with national benchmarks, including:

- NFPA 1730 (2022): Risk-based inspection frequency, with annual inspections for high-risk occupancies
- ISO Rating Schedule: At least one fire prevention FTE per 20,000 population, with evidence of scheduled, risk-prioritized inspections
- IAFC/CPSE Best Practices: Full inspection coverage, timely plan reviews, and structured succession support in prevention divisions
- Achieving these benchmarks not only improves public safety and legal defensibility—it also contributes to favorable ISO ratings and increased community resilience.

Short-Term Action:

- Conduct a gap analysis comparing current inspection output, follow-up delays, and staffing levels against NFPA 1730, ISO, and CPSE benchmarks.
- Establish annual inspection targets aligned with NFPA 1730 for high- and moderate-risk occupancies, and track progress toward full inspection coverage.
- Review upcoming retirements and identify critical institutional knowledge at risk.
- Document current workflows, performance bottlenecks, and training needs within the FMO.

Mid-Term Action:

- Transition all AFMs and FMO leadership to a dedicated 40-hour weekday schedule, ensuring full team availability and coordination during business hours.



- Implement a rotating on-call schedule to maintain fire investigation and urgent inspection coverage after hours.
- Develop structured mentoring and knowledge transfer plans for personnel preparing for leadership roles.

Long-Term Action:

- Track annual performance metrics such as inspection volume, compliance rates, plan review turnaround, and risk-based coverage.
- Adjust staffing based on workload growth, development activity, and performance outcomes.
- Evaluate and update succession planning efforts annually to ensure continuity and leadership readiness.

Recommendation #15: Refocus the Health and Safety Officer Role to Strengthen Risk Reduction and Build on ACFR's Mental Wellness Foundation

Background:

ACFR has demonstrated a strong commitment to mental wellness and personnel resiliency through the implementation of initiatives such as peer support programs, chaplaincy, critical incident stress management (CISM), and partnerships with local behavioral health providers. These programs form a critical foundation for supporting employee well-being and reflect ACFR's recognition of the challenges faced by first responders.

The Health and Safety Officer (HSO) currently plays a central role in overseeing many of these initiatives, in addition to responsibilities such as injury and illness reporting, workers' compensation coordination, return-to-duty tracking, and fitness and wellness program support. However, the scope of this role has expanded significantly as the department has grown, and much of the HSO's workload remains reactive and administrative in nature. This limits the HSO's ability to engage in proactive health and safety interventions, conduct trend analyses, and lead broader risk mitigation strategies.

Rationale:

To build upon its strong foundation in behavioral health, ACFR should refocus the HSO role to more strategically lead proactive health and safety efforts, while implementing the Behavioral Health Access Program (BHAP) as an overarching framework to expand and better integrate its wellness resources.



BHAP is not a replacement for current efforts, but rather a vehicle for scaling, organizing, and sustaining them. The program would serve as a centralized, tiered model supporting the full continuum of mental wellness, benefiting all employees, retirees, and families.

By rebalancing the HSO role to emphasize program leadership and prevention, ACFR can:

- Maximize the value of existing wellness programs through better integration and visibility.
- Reduce stigma and normalize mental health conversations across ranks.
- Improve early intervention and help-seeking behavior.
- Align with NFPA 1500, 1582, and 1583 standards.
- Expand data-driven insights into safety and wellness trends.

This recommendation supports ACFR's broader strategic goal of maintaining a healthy, mission-ready workforce by ensuring that physical, emotional, and behavioral wellness are addressed through coordinated, forward-thinking programming.

Short-Term Actions:

- Conduct a comprehensive inventory of all duties currently assigned to the HSO and identify non-core administrative tasks (e.g., insurance documentation, scheduling) that may be reassigned to support staff.
- Reaffirm the department's commitment to existing wellness programs (Peer Support, Chaplaincy, CISM) and frame BHAP as the centralized structure to coordinate and expand these efforts.
- Launch a BHAP webpage or intranet hub to consolidate access to mental health resources, referral pathways, and family services.
- Finalize BHAP governance under the HSO and Health & Safety Committee, incorporating current team leads and wellness champions.
- Engage internal stakeholders to clarify the future scope of the HSO role with an emphasis on proactive wellness leadership, trend monitoring, and injury prevention.

Mid-Term Actions:

- Capitalize on available administrative support to the HSO for routine documentation, injury tracking, and return-to-duty coordination.



- Update the HSO job description to reflect key responsibilities:
 - Coordinating and evaluating health and wellness programming.
 - Leading injury prevention and wellness outreach.
 - Tracking and reporting on safety and wellness metrics.
 - Supporting department-wide education in mental health literacy.
- Develop formal BHAP Standard Operating Procedures (SOPs) including confidentiality protocols, participation guidelines, and program access criteria.
- Expand training and credentialing opportunities for Peer Support Team members, Chaplains, and Clinician Response Team staff.

Long-Term Actions:

- Institutionalize BHAP as the organizing structure for ACFR's behavioral health and wellness efforts.
- Track and publish annual health and safety performance data, including trends in injury rates, cancer prevention initiatives, fitness participation, and behavioral health utilization.
- Establish a recurring process for evaluating the HSO role, BHAP effectiveness, and opportunities to scale support based on department growth.
- Integrate BHAP metrics and progress into workforce reports and strategic planning updates.
- Build long-term partnerships with external mental health providers, regional responder wellness centers, and public safety health networks to expand access to specialized services.

Tier 4: System Efficiency and Public Interface

With core staffing stabilized and leadership pipelines strengthened, Albemarle County Fire Rescue must now turn its attention to improving the systems, processes, and outward-facing programs that sustain long-term performance and community trust. Tier 4 focuses on optimizing internal efficiency through better coordination, clearer administrative workflows, and modernized support roles—while also enhancing public-facing services like education, outreach, and risk reduction. These recommendations aim to streamline day-to-day operations, reduce unnecessary burdens on field personnel, and ensure ACFR's public service mission is delivered with consistency, transparency, and responsiveness.



Recommendation #16: Develop a Formal Community Risk Reduction (CRR) Program

Background:

ACFR currently engages in several risk reduction activities—such as school fire safety visits, smoke alarm installations, and community outreach—but these efforts are conducted on an ad hoc basis, without dedicated staffing, formal risk prioritization, or centralized program management. As a result, the department's ability to proactively address risk, track impact, and allocate resources is limited.

Community Risk Reduction (CRR) is a growing focus within the fire service, supported by national models such as NFPA 1300 and Vision 20/20, as well as ISO's community risk assessment components. CRR programs aim to identify, prioritize, and mitigate risks before they result in emergency incidents—particularly for vulnerable populations and high-risk occupancy types.

Rationale:

A formal CRR program will position ACFR to proactively reduce preventable incidents, enhance life safety, and deliver more equitable public safety services. A well-structured CRR program:

- Prioritizes outreach and mitigation efforts based on local risk (e.g., fires, falls, EMS demand).
- Enhances ISO scores and compliance with national prevention standards.
- Builds public trust through sustained community engagement and transparency.
- Supports partnerships with schools, senior services, housing agencies, and other community-based organizations.

By aligning CRR efforts with ACFR's newly established demand zone and community risk profiles (see Recommendation #1), the department can deliver targeted, data-informed programming that reflects local needs and improves system performance over time.

Short-Term Action:

- Conduct a CRR gap analysis to identify underserved populations, risk-prone areas, and existing program efforts.
- Review NFPA 1300, Vision 20/20 tools, and ISO community outreach criteria to establish foundational program requirements.



- Engage community partners to map current public safety education and prevention assets.

Mid-Term Action:

- Designate or hire CRR program leadership, either as a dedicated role or through reassignment of qualified personnel.
- Develop a strategic CRR plan identifying:
 - Targeted risk reduction strategies (e.g., fall prevention, cooking fire education, smoke alarm installs).
 - Program goals and evaluation criteria.
 - Key partnerships (e.g., public schools, senior centers, building officials, social services).

Long-Term Action:

- Track and publish CRR performance data annually, including program reach, incident trends, and community engagement metrics.
- Expand CRR offerings to include home visits, safety surveys, and multi-lingual outreach initiatives.
- Integrate CRR outcomes into the department's annual report and strategic performance framework.

Recommendation #17: Strengthen Training Delivery, Instructor Support, and Facility Capacity

Background:

ACFR's ability to deliver high-quality training is critical to maintaining readiness, ensuring certification compliance, and preparing personnel for leadership roles. However, the department's current training system is constrained by three major factors:

- Frequent training cancellations and scheduling conflicts, due to short staffing and unprotected instructional time.
- A limited pool of instructors, many of whom have competing operational responsibilities.
- Aging and heavily shared training facilities, particularly the 38-year-old regional Burn Building used by ACFR and multiple partner agencies.



These challenges collectively delay certification timelines, create inefficiencies, and limit ACFR's ability to conduct realistic, scalable, and timely training across all shifts and disciplines.

Rationale:

To meet growing operational demands and prepare for future leadership transitions, ACFR must enhance its training infrastructure, both in terms of human capital and physical capacity. A modern, reliable training system will:

- Ensure NFPA 1001/1021/1403 compliance for both initial and ongoing certifications.
- Reduce the need for overtime by minimizing training rescheduling and conflicts.
- Support succession planning by providing consistent officer development programming.
- Enable the department to prepare personnel for emerging risks and service expectations.
- Lay the foundation for long-term investment in a modern training facility or training campus.

Short-Term Action:

- Conduct a comprehensive audit of training cancellations, rescheduling frequency, and instructor coverage limitations.
- Assess the scheduling impact of training on shift operations and overtime usage.
- Review facility availability and constraints, including the regional Burn Building and available classroom/drill grounds.
- Engage shift officers, training staff, and field instructors to identify barriers and priorities.

Mid-Term Action:

- Expand the pool of qualified internal instructors and assign protected instructional hours.
- Pilot station-based or shift-compatible training windows to reduce rescheduling needs.
- Implement or upgrade a training management platform to centralize scheduling, attendance tracking, and course forecasting.



- Identify short-term improvements to current training sites, including modular props or mobile simulators.
- Formalize partnerships with regional agencies or county departments to share underutilized facilities.

Long-Term Action:

- Develop a Training Facility Master Plan, aligned with operational growth and future CIP cycles.
- Evaluate the feasibility of a dedicated Albemarle County Fire Rescue Training Center, either standalone or jointly operated.
- Expand training capacity to include:
 - Modern burn props compliant with NFPA 1403
 - EMS simulation labs
 - Dedicated classroom and multi-company coordination space
 - Instructor offices, gear storage, and tech-enabled instruction capabilities
- Monitor and report training system performance annually, including delivery consistency, certification timelines, instructor workload, and training equity across shifts.

Recommendation #18: Provide Administrative Support to the Deputy Chief of Operations

Background:

The Deputy Chief of Operations is responsible for managing the department's most critical and time-intensive functions, including staffing oversight, logistics coordination, scheduling, planning, and operational response. Despite this expansive portfolio, the position currently has no dedicated administrative support, requiring the Deputy Chief to perform day-to-day data entry, meeting coordination, document management, and logistical tracking that could be delegated to a support professional.

This arrangement creates workflow bottlenecks, reduces time available for strategic planning and oversight, and increases the risk of delayed communication, incomplete documentation, and burnout at the executive level.

Rationale:

While ACFR's overall administrative support ratio (1:6.6) is comparable to, or slightly stronger, than peer agencies, internal distribution and role specialization lag behind.



Unlike peer departments that embed administrative coordinators within high-output divisions such as Operations, Training, and Logistics, ACFR's support personnel are largely generalists spread thin across multiple priorities. This gap places an excessive burden on the Deputy Chief of Operations, undermining strategic focus and daily execution capacity. Assigning dedicated administrative support to the Deputy Chief of Operations will:

- Improve efficiency and allow the Deputy Chief to focus on system-level planning and leadership.
- Reduce backlogs related to scheduling, meeting coordination, and project follow-through.
- Improve communication, documentation, and coordination across Operations, Logistics, Training, and field leadership.
- Align with customary practice in similarly sized departments where high-functioning command officers are supported by administrative professionals.

This recommendation complements earlier proposals related to workforce development, logistics, and succession planning, by ensuring that the department's executive operations are properly staffed for growth.

Short-Term Action:

- Conduct a workload analysis to document the volume and type of administrative tasks currently being managed by the Deputy Chief.
- Compare administrative support structures in peer agencies and similar-sized departments:
 - Loudoun County Fire and Rescue (674 operational FTEs) operates with an administrative-to-operations staffing ratio of 1:8.4, with specialized administrative coordinators embedded within functional units such as operations, training, and logistics.
 - Henrico County Division of Fire uses a 1:8.2 ratio and provides executive-level administrative support for deputy chiefs and division heads through administrative specialists.
 - Howard County Department of Fire and Rescue Services (approx. 460 total FTEs) uses a 1:6.7 ratio, similar to ACFR, but supplements each major command function—including Operations—with its own dedicated administrative support professional.



- Use this benchmarking to determine appropriate position classification, workload scope, and expected impact.
- Engage HR and budget analysts to develop a position description that meets the operational tempo and needs of a 24/7 public safety environment.

Mid-Term Action:

- Conduct a workload analysis of current positions assigned to ACFR to determine the need for additional personnel or a redistribution of current personnel.
- Define responsibilities such as calendar coordination, document preparation, communication support, meeting logistics, and data management.
- Create and staff a dedicated Administrative Coordinator or equivalent support role within the Operations Department.

Long-Term Action:

- Evaluate the impact of the support position annually by tracking project throughput, internal communication efficiency, and leadership availability.
- Adjust the role's scope and structure as the Operations Division continues to evolve and expand.

Recommendation #19: Expand Logistics Division Staffing

Background:

ACFR's Logistics Division plays a critical behind-the-scenes role in supporting daily operations, managing equipment and uniforms, coordinating supply distribution, and overseeing fleet-related logistics. As the department has grown—both in career and volunteer personnel, stations, and specialty services—the workload of the Logistics Division has outpaced the current staffing levels.

The division is frequently tasked with procurement, uniform management, EMS supplies, SCBA coordination, asset tracking, and inventory restocking across a growing network of stations. Delays in fulfillment and limited surge capacity have increasingly required line officers and administrative chiefs to fill gaps, drawing them away from their core responsibilities.

Rationale:

Expanding Logistics Division staffing is essential to support the department's current and future operational footprint. A well-staffed logistics function will:

- Improve response efficiency by ensuring equipment, supplies, and apparatus are available and serviceable.



- Reduce the administrative burden on Operations and line officers.
- Enhance asset tracking and inventory accountability.
- Enable greater specialization within logistics roles (e.g., uniform management, fleet readiness, medical supply chain).
- Support future expansion in areas like Community Risk Reduction and dedicated training programming.

This recommendation also reinforces the department's shift toward centralized, scalable support systems that enable field personnel to focus on emergency response and readiness.

Short-Term Action:

- Conduct a workload analysis of current logistics responsibilities, overtime hours, and service request delays.
- Identify the most frequently delayed or disrupted logistics functions (e.g., uniform issuance, equipment repairs, EMS restocking).
- Document the percentage of logistics tasks currently being fulfilled by non-logistics personnel (e.g., lieutenants, captains.)

Mid-Term Action:

- Create and fill one or more Logistics Technician or Coordinator positions, based on priority gaps.
- Evaluate opportunities for role specialization (e.g., quartermaster, fleet/supply liaison, inventory control).
- Establish internal service-level benchmarks for response times to logistics requests.

Long-Term Action:

- Track and publish logistics performance indicators annually, such as fulfillment time, cost per request, and inventory accuracy.
- Evaluate the need for additional FTEs based on department expansion, new station openings, or increased community risk reduction efforts.
- Explore future system improvements including electronic inventory systems, barcoding solutions, or on-demand supply hubs.



Tier 5: Policy Modernization and Process Optimization

As ACFR continues to evolve, the modernization of its internal policies and administrative processes becomes essential to sustaining organizational performance and adaptability. Tier 5 addresses the structural issues that shape day-to-day operations, including hiring systems, HR coordination, procurement practices, and interdepartmental alignment. These recommendations aim to reduce friction, streamline resource allocation, and improve consistency and accountability across the department—ensuring that ACFR remains responsive, compliant, and operationally agile well into the future.

Recommendation #20: Strengthen and Institutionalize Dedicated Public Safety HR Support

Background:

Throughout the staffing study, ACFR leadership and supervisory personnel expressed concerns about challenges related to Human Resources (HR) support for public safety operations. Key issues identified included:

- Delays in hiring approvals, classification reviews, and return-to-duty processes.
- Limited familiarity with the operational needs of the fire service, including FLSA implications, shift-based staffing, certification tracking, and credentialing.
- Inconsistent collaboration or visibility during key personnel decisions, such as discipline, grievance handling, and promotions.
- The perception that HR support is reactive and compliance-oriented rather than solutions-focused or integrated into public safety operations.

Although County HR has taken steps to address many of these items, particularly through the addition of a dedicated Public Safety HR Manager, stakeholders report that a deeper understanding of the 24/7 operational environment and proactive coordination is still needed.

Rationale:

The creation of a dedicated Public Safety HR Manager position marks a significant step forward and reflects an intent to build stronger bridges between HR and the fire and police departments. To ensure the role is successful, however, the County must do more than simply assign responsibility—it must embed HR support in daily workflows, define clear service expectations, and empower the role to address both functional gaps and persistent perceptions.



Embedding this role in a structured, collaborative framework will:

- Improve speed and clarity in complex or time-sensitive personnel matters.
- Reduce administrative burden and duplicate effort between ACFR and HR.
- Support compliance with FLSA, certification standards, and County policy.
- Provide a foundation for resolving stakeholder concerns and building mutual trust.
- Create an avenue for continuous improvement and long-term workforce planning.
- Allow this position to lead structured gap analysis and process mapping across key HR touchpoints.

This recommendation complements other proposals focused on administrative workload analysis (Recommendation #21), streamlined hiring (Recommendation #23), and improved interdepartmental coordination (Recommendation #24).

Short-Term Action:

- Assign the new Public Safety HR Manager as the central liaison for this effort, ensuring consistency across Fire and Police HR support and serving as a conduit between department leadership and HR.
- Collaborate with ACFR, ACPD, and HR to define the scope and deliverables for the new public safety HR role.
- Establish a service-level expectation framework that outlines response timelines, case types, and escalation pathways.
- Ensure onboarding and orientation of the selected candidate includes exposure to fire and police operations, certifications, and organizational structure.

Mid-Term Action:

- Implement a pilot HR support structure—either embedded or assigned—with documented responsibilities.
- Evaluate the effectiveness of the role after six months using feedback from command staff, supervisors, and HR leadership.
- Identify recurring case types (e.g., injuries, promotions, grievances) and establish process maps or SOPs for public safety-specific workflows.
- Consider formalizing the position as either embedded within public safety departments or housed in HR as part of a dedicated shared services unit.



Long-Term Action:

- Evaluate responsiveness, legal compliance, and employee satisfaction annually and adjust the model as needed.
- Use the Public Safety HR Manager role to support continuous improvement in HR coordination, succession planning, and discipline/grievance workflow.
- Institutionalize the role based on performance, workload, and organizational needs.
- Monitor performance metrics such as case resolution times, policy compliance, supervisor satisfaction, and grievance outcomes.
- Adjust structure as needed to accommodate future growth, including additional support roles or expanded cross-training within the HR department.

Recommendation #21: Strengthen Administrative Capacity Through Structured Workload Analysis

Background:

ACFR's operational and administrative footprint has expanded significantly in recent years. As responsibilities in logistics, training, HR coordination, fleet management, planning, and data reporting have grown, the workload on ACFR's limited administrative staff has increased accordingly. While the department has responded by informally redistributing tasks among personnel, the lack of formal workload analysis has made it difficult to determine whether current staffing levels are sufficient or whether process inefficiencies are contributing to the strain.

Stakeholder interviews and internal observations identified several areas where critical support functions—such as scheduling, procurement, documentation, and interdepartmental coordination—are performed inconsistently or by personnel whose primary responsibilities lie elsewhere. However, additional staffing should not be the default solution. Before any administrative expansion is considered, a structured, data-informed approach is needed to assess task volume, specialization opportunities, and process alignment.

Rationale:

Rather than assuming new positions are necessary, ACFR should first conduct a workload and task distribution analysis across all support functions. This approach allows the County to:

- Identify duplication of efforts and inconsistent task assignment.



- Evaluate the impact of decentralization on workflow delays or communication gaps.
- Determine whether automation, process redesign, or role specialization can improve efficiency.
- Justify new roles only where clear workload gaps and strategic benefits are demonstrated.

This recommendation complements other administrative recommendations related to procurement, HR coordination, and logistics support (Recommendations 20–23), and reflects the County’s interest in balancing fiscal stewardship with sustainable support for a growing fire–rescue system.

Short-Term Action:

- Conduct a structured workload and task mapping analysis across all administrative and support functions (e.g., scheduling, payroll coordination, procurement, fleet, logistics).
- Include metrics such as number of tasks performed, time-on-task estimates, delay points, and staff qualifications.
- Leverage the Public Safety HR Manager to lead or facilitate this analysis in collaboration with departmental leadership and County administration.

Mid-Term Action:

- Prioritize process mapping and reallocation of duties before requesting new positions.
- Identify opportunities to centralize recurring administrative tasks (e.g., tracking certifications, equipment ordering) and assign them to the most appropriate roles.
- Develop an administrative support framework aligned with demand zone complexity and system growth projections.

Long-Term Action:

- If workload analysis justifies expansion, develop FTE requests with data-based justifications for each role.
- Evaluate administrative performance annually based on task completion timeliness, error rates, and employee feedback on support effectiveness.
- Adjust administrative support levels as new stations, units, or programs are added.



Recommendation 22: Evaluate Payroll Coordination and Communication with Public Safety Departments

Background:

In 2021, Albemarle County experienced payroll-related issues that significantly affected Fire Rescue personnel. While many of the technical problems have since been resolved, stakeholder interviews revealed a lingering perception within ACFR that Human Resources and payroll staff may still lack a full understanding of the department's complex schedules and pay structures. This perception has contributed to ongoing frustration and has raised questions about communication, process transparency, and training between HR and public safety agencies.

Rationale:

Even if the underlying payroll systems are functioning correctly, perception gaps can erode trust. Clarifying payroll processes, improving interdepartmental training, and reinforcing two-way communication will help restore confidence and ensure that all parties share a consistent understanding of payroll practices, especially given the operational and FLSA complexities that affect public safety pay cycles.

Short-Term Action:

- Facilitate a joint review session between HR/payroll and public safety department representatives to clarify schedule configurations, pay cycle triggers, and overtime rules.
- Survey fire and police department supervisors to gather specific concerns or unresolved questions related to payroll processing.

Mid-Term Action:

- Develop a public safety payroll reference guide and workflow visual that outlines key steps, timelines, and escalation paths for payroll-related concerns.
- Establish quarterly touchpoints between HR/payroll and fire/police administrative officers to proactively identify issues or misunderstandings.

Long-Term Action:

- Evaluate staff training for HR and payroll personnel who support public safety to ensure familiarity with shift schedules, leave types, and special pay rules.
- Include payroll coordination metrics (e.g., correction volume, inquiry turnaround time) in annual performance review of shared services.



Recommendation #23: Streamline Hiring, Onboarding, and Career Pathway Development

Background:

Stakeholders acknowledged that ACFR manages the majority of its own recruitment efforts, including candidate outreach, selection, and coordination with training academies. However, concerns remain regarding the length of time it takes to move candidates from hiring through onboarding and into operational readiness. While some delays are inherent to the training pipeline, particularly the time required for fire academy completion, EMS certification, and operational integration. There is a shared desire to streamline processes wherever possible to ensure staffing gaps are minimized.

Both operational and administrative personnel emphasized that inefficiencies across the end-to-end hiring process, whether in internal approvals, pre-employment testing, background timelines, or inter-departmental communication. This can create frustration and uncertainty. Even when not caused by a single source, cumulative delays result in temporary understaffing, higher overtime usage, and increased workload on existing personnel.

Simultaneously, ACFR recognizes the importance of investing in long-term workforce development. Building a stronger internal pipeline of future firefighters and paramedics, through high school engagement, mentorship programs, and dual enrollment pathways. These efforts can strengthen workforce sustainability, support diversity goals, and promote local interest in fire service careers.

Rationale:

This recommendation encourages a collaborative review of the full hiring-to-readiness process with the goal of accelerating candidate onboarding and increasing operational stability. Key goals include:

- Reducing time from conditional offer to operational readiness through tighter coordination of background, medical, and training steps.
- Enhancing interdepartmental clarity and shared accountability around workflow timelines.
- Maintaining competitiveness in a dynamic labor market by minimizing applicant attrition.
- Developing long-term workforce pipelines.



This recommendation complements the creation of a dedicated Public Safety HR Manager (see Recommendation #20) by addressing both immediate workflow needs and long-term recruitment strategies.

Short-Term Actions:

- Engage the Public Safety HR Manager to convene a joint working group between ACFR, HR, and Budget to map the full hiring and onboarding timeline.
- Identify process bottlenecks, communication gaps, or redundant steps that may extend timelines.
- Establish target benchmarks for each hiring phase to improve transparency and predictability.
- Create interest forms, ride-along options, and informal mentorship pairings between ACFR personnel and local youth.

Mid-Term Actions:

- Refine the coordination between background investigations, pre-employment medicals, and academy planning to reduce idle time for incoming hires.
- Evaluate onboarding scheduling flexibility to allow staggered or accelerated start options as well as more than one new hire class per year.
- Launch a pilot high school mentorship initiative in partnership with local high schools or Charlottesville-Albemarle Technical Education Center (CATEC), offering after-school or weekend fire/EMS career exploration opportunities.
- Launch an annual “Future Firefighter” career academy for high school juniors/seniors to introduce department culture, physical readiness, and certification options.
- Expand community engagement and youth career exploration efforts, including partnerships with schools, EMT programs, and fire science pathways.

Long-Term Actions:

- Formalize a local firefighter and paramedic pipeline through mentorship and dual enrollment programs.
- Develop tracking metrics to monitor hiring cycle time and applicant progression
- Institutionalize a feedback loop with recent hires to identify additional improvement opportunities.



Recommendation #24: Establish Regular Interdepartmental HR and Legal Coordination Meetings

Background:

ACFR personnel processes frequently require coordination with both Human Resources and the County Attorney's Office, particularly in cases involving hiring approvals, disciplinary actions, grievances, medical leave, and return-to-duty decisions. However, stakeholders reported the absence of a formal coordination structure has contributed to:

- Case-by-case decision-making, rather than consistent, proactive planning
- Inconsistent interpretations of policy and labor regulations
- Delayed case resolution and misaligned expectations across departments

These inefficiencies increase risk, erode trust, and often leave supervisors and frontline leaders without timely or clear guidance when dealing with sensitive personnel matters.

Rationale:

Establishing a recurring, structured coordination process between ACFR, HR, and Legal will:

- Promote consistent policy interpretation and case handling.
- Identify systemic process gaps or repeat issues.
- Improve transparency and accountability in personnel actions.
- Support a culture of shared ownership over employee-related processes.

This recommendation complements broader efforts to modernize public safety HR support (see Recommendation #20) and streamline personnel case workflows (see Recommendation #21 and Recommendation #22).

Short-Term Action:

- Establish a standing monthly coordination meeting between ACFR, HR, and the County Attorney's Office.
- Assign consistent representatives from each department with decision-making authority or subject matter expertise.
- Identify and prioritize current or pending cases that require joint input.



Mid-Term Action:

- Begin tracking personnel case metrics, such as response time, number of departments involved, and case resolution timelines.
- Use meeting minutes or shared logs to identify recurring challenges or policy inconsistencies.
- Adjust participation and meeting format as needed based on complexity or caseload volume.

Long-Term Action:

- Formalize the interdepartmental coordination process through shared SOPs, policy references, and accountability mechanisms.
- Integrate coordination meeting outcomes into policy updates and process improvements.
- Evaluate meeting impact annually through feedback from command staff and departmental HR leads.

Recommendation #25: Implement a Float Mileage Reimbursement Policy

Background:

ACFR personnel are frequently reassigned or “floated” to stations across the county to maintain minimum staffing. While necessary to ensure systemwide coverage, this practice often involves significant travel, especially for employees floating repeatedly to distant stations. Currently, ACFR does not reimburse for these travel costs, creating perceived inequity and contributing to frustration and morale issues among operations staff.

Rationale:

Establishing a formal float mileage reimbursement policy demonstrates the department’s responsiveness to employee concerns while promoting fairness and flexibility. It aligns with broader Albemarle County mileage policies and can be implemented with minimal fiscal impact. Providing reimbursement also incentivizes voluntary compliance with float assignments, easing shift coverage during vacancies.

Short-Term Action:

- Draft a float mileage reimbursement policy based on County or IRS mileage rates.
- Define eligibility parameters (e.g., distance thresholds, travel outside the assigned battalion).



Mid-Term Action:

- Launch and communicate the policy to all operations staff.
- Provide simple documentation tools for mileage tracking and reimbursement requests.

Long-Term Action:

- Monitor usage trends, cost impact, and staff feedback annually.
- Adjust policy scope or thresholds as needed to remain equitable and sustainable.

Recommendation #26: Formalize Procurement and Logistics Roles

Background:

Procurement responsibilities within ACFR are currently distributed across various staff, including line officers, administrative personnel, and logistics support members. This decentralized approach leads to inconsistent order tracking, delayed purchases, and difficulty maintaining inventory continuity, particularly as the department grows.

Rationale:

Formalizing procurement and logistics responsibilities will improve efficiency, accountability, and compliance with Albemarle County financial policies. Clear role assignments, written procedures, and basic tracking tools will reduce delays, eliminate redundancy, and strengthen audit readiness.

This recommendation complements prior efforts to expand logistics staffing (see Recommendation #19) by ensuring that growth is accompanied by structured and scalable processes.

Short-Term Action:

- Inventory all staff involved in procurement or purchasing-related duties.
- Identify overlaps, inefficiencies, and process gaps.

Mid-Term Action:

- Assign procurement and inventory responsibilities to designated roles.
- Develop written SOPs for routine purchases, approvals, inventory tracking, and invoice reconciliation.

Long-Term Action:

- Conduct annual procurement audits focused on workflow efficiency, compliance, and fulfillment timelines.



- Update SOPs based on changing department needs, staffing levels, or county policy updates.

Recommendation #27: Establish a Countywide Apparatus Titling Policy

Background:

Several ACFR apparatus remain titled under legacy volunteer departments, despite being used and maintained by Albemarle County or funded through shared investments. This creates ambiguity in ownership, insurance liability, maintenance responsibility, and long-term fleet planning. The lack of a consistent, systemwide approach presents legal and operational risks.

Rationale:

Developing a formal titling policy between the county and its volunteer fire agencies will:

- Ensure clear ownership and responsibility for maintenance, insurance, and incident reporting.
- Simplify capital planning, replacement scheduling, and cost-sharing agreements.
- Reduce risk exposure related to accidents, liability claims, and equipment loss.

This policy would apply to all frontline and reserve apparatus where operational or financial control is shared across Albemarle County and volunteer agency boundaries.

Short-Term Action:

- Conduct a full inventory of titled apparatus and current ownership documentation.
- Identify inconsistencies, potential risk areas, and current insurance arrangements.

Mid-Term Action:

- Draft a standardized titling policy and agreement template in coordination with the county's Legal and Finance departments.
- Engage all volunteer agencies to review, amend, and adopt the policy collaboratively.

Long-Term Action:

- Transition all applicable apparatus to the new title standard.
- Align insurance, maintenance schedules, and replacement planning documents accordingly.
- Reassess policy effectiveness every 3–5 years or when major fleet changes occur.



Recommendation #28: Improve IT Coordination and Support for Public Safety Operations

Background:

ACFR relies heavily on complex systems for training, scheduling, response tracking, preplans, incident reporting, communications, and mobile data. Stakeholder feedback indicated that while Albemarle County IT staff are responsive and well-intentioned, there is no embedded or designated IT support familiar with the fire service's specific operational, compliance, and technical requirements.

This has led to delays in system upgrades, misalignment of priorities, and recurring challenges with CAD integration, First Due deployment, mobile device management, and fire station connectivity.

Rationale:

Fire and EMS operations require dedicated IT collaboration to ensure systems are secure, stable, and optimized for time-critical performance. Improving IT alignment will:

- Reduce disruptions and implementation delays.
- Ensure continuity of operations during system changes or outages.
- Improve data accuracy, compliance, and functionality in daily use.
- Support the integration of GIS, scheduling, CRR, and asset tracking tools.

This mirrors similar structural improvements recommended for HR and legal coordination.

Short-Term Action:

- Identify the primary IT systems and applications critical to ACFR (e.g., First Due, station alerting, MDTs).
- Establish a point of contact or IT liaison role specifically trained on fire/rescue technology systems.
- Begin meeting quarterly with ACFR command staff and IT to align priorities and timelines.

Mid-Term Action:

- Develop shared project timelines and tracking tools for fire system upgrades, integrations, and user testing.



- Implement a ticket triage protocol specific to public safety platforms and emergency system disruptions.
- Include IT representatives in major operational planning discussions involving technology or software.

Long-Term Action:

- Evaluate the effectiveness of the liaison model and determine if a dedicated public safety IT specialist is warranted.
- Track issue resolution times, system uptime, and user satisfaction annually.
- Integrate IT planning into ACFR's strategic and capital improvement plans.

Recommendation #29: Align Finance Support with Operational Planning and Budget Cycles

Background:

Like other public safety departments, ACFR operates with unique budgetary timelines, fleet and capital planning needs, and high-volume purchasing cycles. Stakeholders reported that while the county's Finance team is generally responsive, ACFR has encountered friction around the timing of approvals, reporting delays, and a lack of continuity in support personnel assigned to assist with budget planning and procurement review.

These reported inefficiencies complicate long-range planning and slow down essential operations, such as equipment replacement, supply management, and new position implementation.

Rationale:

Ensuring Finance staff are assigned to and familiar with ACFR's operational model will:

- Improve budget development timelines and alignment with operational priorities.
- Strengthen internal cost tracking and accountability.
- Support capital project forecasting and grant readiness.
- Reduce the need for operational staff to backfill budget management responsibilities.

Short-Term Action:

- Designate a primary Finance Liaison to ACFR, with backup coverage, for budget planning and operational support.



- Establish quarterly meetings between Finance, ACFR leadership, and Logistics to review purchasing patterns, funding gaps, and CIP tracking.

Mid-Term Action:

- Provide cross-training or orientation for Finance personnel on public safety-specific timelines, terminology, and challenges.
- Develop joint budget templates and submission tools aligned to ACFR's operational calendar.

Long-Term Action:

- Integrate finance planning into ACFR's strategic and long-range planning cycles.
- Evaluate liaison effectiveness and adjust support structure as department needs grow.
- Build shared reporting tools or dashboards to improve budget visibility and performance tracking.



Conclusion

Albemarle County Fire Rescue stands at a critical crossroads, facing growing community expectations, evolving risk, and internal organizational transitions. This staffing study provides a strategic roadmap grounded in objective data, stakeholder input, and industry best practices to support sustainable growth and resilient operations. By adopting the recommendations presented, prioritized by operational necessity, implementation feasibility, and impact on service equity, ACFR can build a more predictable, scalable, and accountable emergency response system. These actions will not only enhance current service delivery but also strengthen public trust, improve workforce sustainability, and ensure that Albemarle County remains prepared to meet the demands of tomorrow.

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Appendix B: Cross-Departmental Summary of Common Issues (ACPD and ACFR)

To complement the independent findings of the Fire Rescue and Police Department staffing studies, the project team compiled shared themes that emerged across both agencies. These cross-departmental issues represent structural, administrative, and operational challenges that transcend individual department boundaries and impact Albemarle County's overall public safety system. Identifying these commonalities not only reinforces the validity of individual findings but also highlights opportunities for unified planning, shared resource investment, and more efficient interagency collaboration. The following summary outlines these key issues as a framework for strategic action at the County level.

Uniformed Staffing Needs

- Both departments operate with insufficient numbers of uniformed personnel relative to service demand.
- For ACFR, this includes career suppression staff and officers, especially for 24/7 minimum coverage.
- For ACPD, this includes patrol officers, lieutenants, and detectives, with evidence of CFS backlog and delayed response in rural areas.
- Both agencies noted the need for additional authorized positions, supported by overhire capacity to account for attrition, extended hiring timelines, and training pipelines.

Workforce Stability and Predictable Staffing

- Both departments face persistent vacancies and high attrition, which hinder their ability to deliver predictable, countywide service.
- Neither department had the ability to overhire or maintain hiring levels that account for routine attrition, resulting in extended vacancies and overtime strain.
- Both agencies identified that sworn personnel frequently perform non-core administrative tasks, indicating opportunities for civilianization or support role expansion to stabilize operational coverage.

Perceived Delays and Gaps in HR Support

- Both agencies reported challenges in aligning with centralized HR processes for recruitment, classification reviews, onboarding, and policy application.



- While ACFR conducts most of its own recruitment and ACPD manages its selection process, internal communication with HR has at times been described as misaligned or unclear.
- Both studies recommended a dedicated Public Safety HR Manager or liaison familiar with police and fire operational demands, a position which has now been filled.

Administrative Capacity and Structured Workload Analysis

- Neither department has completed a comprehensive workload analysis of administrative and support functions.
- Support areas such as training administration, internal communications, logistics, scheduling, and data analysis require more formalized structures and process mapping.
- Both agencies recommended conducting a structured workload study to identify functions that could be consolidated, reclassified, civilianized, or streamlined for efficiency.

Leadership Continuity and Succession Planning

- Both departments anticipate significant leadership turnover within the next 3–5 years due to retirements, promotions, and normal attrition.
- While some officer development structures exist, both agencies reported opportunities to expand formal succession planning, mentorship, and career development pathways.
- Recommendations include enhancing promotional systems, developing cross-training programs, and building structured leadership pipelines.

Internal Communication and Coordination

- ACPD and ACFR both experience gaps in internal communication consistency, especially across divisions and ranks.
- Stakeholders expressed concerns about mixed messaging, unclear accountability, and the need for stronger standard operating procedures (SOPs).
- Both departments recommend improvements to SOP development, internal coordination mechanisms, and routine interagency meetings.



Policy Development and Review

- Policy revision processes in both agencies could be more collaborative, inclusive, and clearly structured.
- Both reports recommended formal policy review committees that include diverse internal stakeholders and incorporate operational feedback.
- Opportunities exist to align policy structures across departments where appropriate, particularly in shared operational or administrative areas.

Specialized Training Needs

- Both departments face challenges in providing advanced and specialized training while maintaining operational coverage.
- Limited instructional staffing and competing demands for personnel create training delivery gaps.
- Recommendations include increasing training capacity, enhancing civilian instructional support, and exploring joint training opportunities where appropriate.