

Allegheny County

FIRE & EMS STUDY

In consultation with the Virginia Department of Fire Programs and the Virginia Department of Health's Office of Emergency Medical Services.



Table of Contents

STUDY TEAM.....	2
ACKNOWLEDGMENT	2
EXECUTIVE SUMMARY	3
METHODOLOGY	5
PHASE I: INITIATE PROJECT.....	5
PHASE II: OBTAIN STAKEHOLDER INPUT	5
PHASE III: PREPARE ANALYSES AND DEVELOP CORE STRATEGIES.....	6
PHASE IV: PREPARE FINAL REPORT.....	6
COUNTY INFORMATION	7
I. FIGURE 1: ALLEGHANY COUNTY EXISTING FIRE/EMS FACILITIES	8
FINDINGS AND RECOMMENDATIONS	8
I. PAID EMS SERVICE IN ALLEGHANY COUNTY	9
II. EMERGENCY COMMUNICATIONS AND DISPATCH	10
III. CHANGES TO THE DIRECTOR OF PUBLIC SAFETY	13
IV. COMMUNITY RISK ASSESSMENT	15
V. DEVELOPMENT OF SOP/SOG	16
VI. INCREASE VOLUNTEER INCENTIVES	17
VII. FUNDING FOR FIRE/EMS	19
VIII. STANDARDIZE EQUIPMENT	23
IX. TRAINING	24
X. FIRE AND RESCUE ASSOCIATION	25
XI. FACILITIES	26
XII. OTHER RECOMMENDATIONS.....	27
REFERENCES.....	30
APPENDIXES	33
APPENDIX A: Resolution of the Alleghany County Board of Supervisors	
APPENDIX B: Letter Requesting a Fire and EMS Study from Alleghany County Administration	
APPENDIX C: Other Resources	

STUDY TEAM

Virginia Fire Services Board

John Miller
Ben Reedy

Virginia Department of Forestry
Insurance Industry

Virginia Department of Health – Office of Emergency Medical Services

Chris Vernovai

EMS Systems Planner

Virginia Department of Fire Programs

Dennis Price
Ken Brown
Spencer Willett

Division Chief 6
Coordinator of Community Risk Reduction
Government Affairs Manager

The group above is herein after referred to as “Study Team.”

ACKNOWLEDGMENT

The Virginia Fire Services Board would like to extend thanks to the following organizations and individuals for their contribution to this study:

Alleghany County Board of Supervisors	Clifton Forge Rescue Squad
Reid Walters, County Administrator	Dunlap Fire and Rescue
Jonathan Fitch, Director of Public Safety	Falling Springs Fire and Rescue
Alleghany County Sheriff’s Communications Center	Iron Gate Fire and Rescue
Boiling Springs Fire and Rescue	Selma Volunteer Fire Company
Clifton Forge Fire and EMS	Sharon Fire and Rescue

EXECUTIVE SUMMARY

This report documents the findings and recommendations for the Alleghany County Fire and Emergency Medical Services (EMS) Study. This study and the information contained herein should not be construed as legal advice or as binding recommendations for Alleghany County. This report provides guidance to the Alleghany County Board of Supervisors, the Alleghany County Administrator, its fire and EMS organizations, and other stakeholders in the community regarding public safety. Alleghany County should strive to meet and/or exceed the recommendations contained in this report. These recommendations could enhance the service provided to those dialing 911 in Alleghany County.

This study was requested by a resolution of the Alleghany County Board of Supervisors to analyze the following working areas which include:

- Organization
- Budget and Administration
- Training
- Delivery of Services/staffing
- Fleet Design and Management (Equipment/Apparatus)
- Operations
- Alleghany County Fire and Rescue Association.

The study was conducted by the Virginia Fire Services Board, in partnership with the Virginia Department of Fire Programs and the Virginia Department of Health's Office of Emergency Medical Services. The Virginia Department of Forestry was also represented by a member of the Virginia Fire Services Board as noted above. The above referenced working areas served as a guide for the study team to identify issues, evaluate current fire/EMS operations, and make recommendations to improve Alleghany County fire and rescue services. Of note, the City of Covington was not a formal member of the study requested by the Alleghany County Board of Supervisors.

Alleghany County currently has a Director of Public Safety that coordinates public safety for the county and oversees radio equipment utilized by county fire and rescue personnel, as well as the public safety answering point (PSAP) equipment. Outside of this role, no formal oversight is provided by Alleghany County over fire and EMS entities operating within the county. Of note, the City of Covington operates independently from Alleghany County but provides fire and EMS services through a memorandum of understanding to certain areas of the county outside of the city limits. The study team identified several areas for Alleghany County to examine and improve on related to fire and EMS services.

Alleghany County should consider starting the process to hire or secure career EMS personnel in the jurisdiction. Although some career personnel exist in the City of Covington and the Town of Clifton Forge, the county itself does not have staff to assist with EMS when volunteer providers are not available. As a component of this process, the county should evaluate securing their own EMS license, equipping and requiring current public safety personnel to assist with EMS, and creating an EMS workgroup to help develop the program.

Communications in the region should be consolidated into a regional 911 center that serves multiple jurisdictions. Many areas of the Commonwealth are moving in this direction, with other states seeing notable long-term benefits to regional 911 communications. Additionally, better training should be provided to dispatchers related to fire/EMS responses. The Director of Public Safety's (DPS) role in the county should be codified in county ordinance and should have duties such as assisting volunteer departments with grant writing, reviewing the use of county funds provided to volunteer agencies, and serving in an operational capacity at regional incidents or as requested. The DPS should also serve in a safety officer role in coordination with volunteer departments. If career EMS personnel are hired, the director should oversee the career EMS section and serve as their primary manager until a field supervisor can be hired.

The county should conduct a community risk assessment to review risks within the community, analyze response capabilities, and develop plans for future public safety needs. As a component of this, a fleet risk assessment that refocuses on apparatus needs identified in a prior report should be completed, as well as a risk assessment of target hazards in the community. Standard operating policies and guidelines (SOPs/SOGs) should be developed and enforced by the officers of Alleghany County fire and EMS departments and the Director of Public Safety. These policies and procedures ensure the well-being of the citizens that are served by the departments and the first responders themselves.

Incentivizing volunteers must be addressed if Alleghany County expects to continue to utilize volunteer firefighters and EMS providers as the primary provider of fire/EMS. The creation of a recruitment and retention program/position, creating financial incentives, and formally recognizing the work of volunteers is a recommended course of action.

Funding for fire/EMS should be examined compared to regional partners. Volunteer departments should also submit annual audits to the county. In the future, the county may wish to augment funds based on calls for service rather than an equal amount depending on a department's capabilities. An EMS billing system that directs funds to departments answering calls for service should be developed.

Equipment should be standardized in some critical areas, while leaving room for customization depending on the needs of the response district. County funds should only be used to purchase equipment that meets these requirements. The county should also consider partnering with the City of Covington to create a regional fire training center. Grants are available for a live fire training structure, as well as create additional props for training. Training is a crucial need in the area for volunteer fire/rescue members.

The Alleghany County United Fire and Rescue Association should review and update its current governing documents, include departments operating from the City of Covington, and meet regularly with county leadership, including the Board of Supervisors and County Administrator. The Association should play an active role in the implementation of the recommendations found in this report. Other recommendations, including cancer prevention and incident reporting, are also recommended for Alleghany County.

METHODOLOGY

The following is an overview of the study process:

PHASE I: INITIATE PROJECT

Objectives: Initiation of Study

To initiate the study, the Alleghany County Administrator sent a Resolution, on behalf of the Alleghany County Board of Supervisors, to the Virginia Fire Services Board requesting a review of the fire and EMS system in the county (Reference Appendix A).

The county requested the following areas of concentration:

- Organization
- Budget and Administration
- Training
- Delivery of Services/staffing
- Fleet Design and Management (Equipment/Apparatus)
- Operations
- Alleghany County Fire and Rescue Association.

A study team was convened and the study team began by reviewing county-submitted data including the self-assessment questionnaire completed by the county. The team also began collecting and reviewing existing data, memorandums of understanding and relevant policies and procedures.

As part of Phase I, the study team met with leadership from Alleghany County to establish working relationships, make logistical arrangements, and determine communication lines. During these meetings, the study team discussed the objectives of the project and identified any issues and concerns central to the study.

PHASE II: OBTAIN STAKEHOLDER INPUT

Objectives: Conduct Leadership Interviews & Capture Input from the Departments

The second phase of the study consisted of leadership interviews and department evaluations. The expectations were as follows:

- Identify opinions of department personnel concerning the operations and performance of their department and county coordination;
- Identify issues and concerns of personnel regarding fire and rescue services;
- Identify perceived gaps in existing service levels and new priorities in mission; and,
- Identify strengths and weaknesses as perceived by departmental personnel.

The study team, in coordination with county leadership, developed a schedule of face-to-face interviews with the eight departments, as well as county leadership as outlined below.

The study team met with leadership from Alleghany County to include the Director of Public Safety and the County Administrator. The study team also met with public safety leadership from the City of Covington to better understand emergency response in the region.

All interviews were conducted during an allotted timeframe and a considerable amount of information was collected. A public hearing was advertised by the county and held on October 4, 2023 to give the public an opportunity to share feedback with the study team regarding the Fire & EMS system in Alleghany County.

During the interviews and public hearing, the study team received information regarding volunteer staffing levels, service delivery, budget information, apparatus, relationships between career staff and volunteers, and other information about the operation of each volunteer department. The discussion also provided an opportunity for each organization to share comments regarding service delivery of fire & EMS services in the county and possible areas for improvement.

PHASE III: PREPARE ANALYSES AND DEVELOP CORE STRATEGIES

Objectives: Evaluate Current Trends and Prepare a Report

The third phase of the study involved further investigation and understanding of the organizational structures, operations, limitations, achievements, and opportunities for improvement within the fire and EMS delivery system. The activities that supported this process consisted of additional requests for information not already obtained in Phase I and II of the work plan. Data requests, made in this phase of the study, attempt to address any issues that emerged from the interviews, and further evaluate implications of the operational issues cited. During this phase, the study team worked with public safety staff and other departments to obtain additional information. Data obtained during the study process also assists the study team in identifying issues influencing the current levels of service.

After receiving and critically evaluating information from the interviews and all supporting materials, the study team began identifying the necessary and critical components to achieve effective and uniform service levels throughout the county.

PHASE IV: PREPARE FINAL REPORT

Objectives: Prepare and Present Final Report

The final phase of the study involved documenting the results of all previous tasks into a written report with critical components, such as an executive summary, methodology, background, and findings and recommendations. Once completed, a draft report was shared with the Alleghany County Administrator to ensure the technical content in this report is accurate. Upon receiving corrections, the study team revised the draft report, as needed, to assist in the preparation and issuance of the final report.

COUNTY INFORMATION

Alleghany County is located in the Western half of Virginia and is named for the Allegheny Mountains. Alleghany County is bordered by six other counties (Bath, Rockbridge, Botetourt, Craig, Monroe, and Greenbrier). Of note, Monroe and Greenbrier counties are located in West Virginia. The independent City of Covington is located within the county and serves as the county seat. The county was developed in 1822 from portions of Botetourt, Bath, and Monroe (WV) counties.¹

The county has 449 square miles of land, with two incorporated towns and an independent city. Major transportation in the area is provided by Interstate 64, U.S Highway 60, and U.S Highway 220.

The estimated population in Alleghany County in 2022 was 14,835 people with an average household income of \$49,705 and a total of 7,910 housing units. Most of the county's population is located immediately around the City of Covington.² U.S Census data includes the City of Covington.

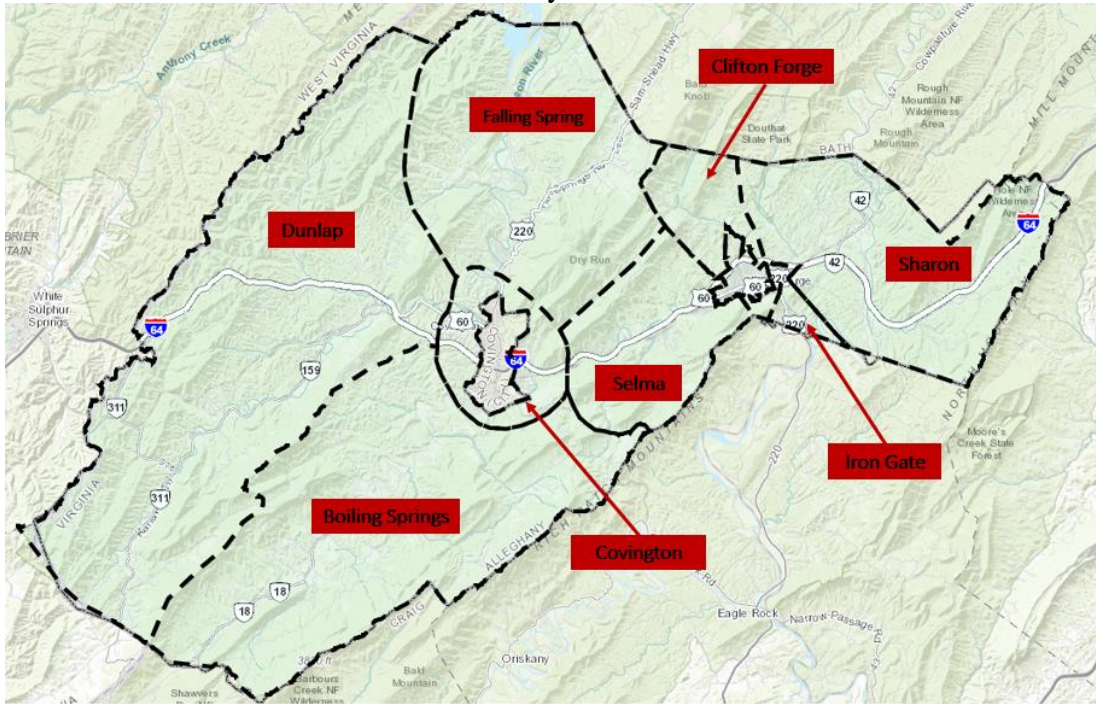
The county operates under the guidance of the Board of Supervisors. Board members represent each of the seven magisterial districts. The County Administrator serves as the Chief Administrative Officer and executive for the county. The Director of Public Safety serves as the Emergency Services Coordinator, 911 Communications Director, and advises the county administrator on public safety in the county. Alleghany County does not have any paid public safety personnel that staff apparatus in the field, while the Town of Clifton Forge does pay personnel to provide EMS.

¹ "Alleghany County...A Concise History" *Alleghany County*

² "Alleghany County, Virginia" *U.S Census Bureau*

FIGURE 1: ALLEGHANY COUNTY EXISTING FIRE/EMS FACILITIES

A map of Alleghany County derived from GIS with fire districts marked by VDFP staff as of January 2024.



FINDINGS AND RECOMMENDATIONS

The recommendations contained in this study are not a requirement for the county to implement. The recommendations are to be used as a guideline of potential solutions that could assist the county as it further develops its capabilities to provide fire and EMS services. The purpose of the study is to review weaknesses and strengths of Alleghany County's current fire and EMS practices, providing recommendations to better serve the citizens and visitors of Alleghany County, as well as the efficiency and effectiveness of the volunteer fire/rescue system.

Recommendations below refer to National Fire Protection Association (NFPA) standards, including NFPA 1720: Standard on Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments. According to chapter 1 of NFPA 1720, the standard defines "levels of service, deployment capabilities, and staffing levels for substantially volunteer fire departments. It contains minimum requirements for deploying fire suppression and EMS for service delivery, response capabilities and resources. It also contains requirements for managing resources and systems such as health and safety, incident management, training, communications, and pre-incident planning. It addresses the strategic and system issues involving the organization, operations, and deployment of a volunteer fire department."³

The National Fire Protection Association provides industry-wide best practices for fire and EMS service. Although the NFPA standards are considered best practices, the study team understands

³ 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.

The foregoing is a recommendation authorized pursuant to Va. Code 9.1-203.A.4 and is not to be construed as legal advice or as a binding recommendation.

that not all NFPA standards are attainable in individual jurisdictions. Alleghany County should strive to meet NFPA standards to provide best-in-class service to its citizens and visitors.

I. PAID EMS SERVICE IN ALLEGHANY COUNTY

As is the case in most of Virginia, there is a growing demand for emergency medical services in Alleghany County. Alleghany County historically relied on all volunteer EMS providers through local rescue squads and joint fire/rescue organizations. In recent years, the Town of Clifton Forge and the City of Covington have hired paid EMS providers that answer calls along with volunteer providers. Some volunteer fire departments have also begun offering emergency medical services in an effort to meet the growing demand. Throughout the study, most participants agreed that additional EMS was required. Participants did not agree on how or where this service should be provided. The recommendations below should serve as a guide related to future decisions related to emergency medical services.

Recommendations:

1. Analyze current emergency medical calls for service as a component of the community risk assessment in Section IV and determine level for care required (basic life support or advanced life support). This data should be utilized to inform recommendations contained below.
 - a. If this data is not available, Alleghany County should work to implement in their reporting software information to ascertain where the EMS call was located and what level of care was required once on scene.
2. The Director of Public Safety (DPS) should establish an EMS Workgroup, composed of leadership from all EMS organizations operating within Alleghany County and the operational medical directors (OMD) of the EMS agencies, to set objectives and goals as the county moves forward. This workgroup should focus on ensuring that citizens and visitors of Alleghany County receive the same level of care countywide. This group may also consider consolidating under a single EMS license operated through Alleghany County, thus protecting providers from other departments operating in Alleghany County if they are operating on an ambulance operated by another fire/EMS entity in the county. The workgroup should review EMS data quarterly to ensure proper placement of future stations, personnel, and apparatus.
3. The Director of Public Safety should procure an EMS license for Alleghany County Public Safety through the Department of Health's Office of Emergency Medical Services. This license would be required if Alleghany County seeks to hire full or part-time staff to provide emergency medical services.
4. Alleghany County should explore hiring part-time staff to staff a daytime transport unit in the west end of the county in a district identified during the community risk assessment or at the discretion of the above-mentioned

workgroup. This unit could be utilized to reduce EMS response times and provide greater coverage in the area.

- a. The county should consider purchasing a quick response vehicle (QRV) to be utilized by paid staff or volunteers when additional providers are available in the system.
 - b. The DPS should work with the EMS workgroup to establish standards on career staff operating volunteer owned apparatus. This agreement should be established in a formal memorandum of understanding and outline funding and maintenance expectations for the unit. In the future, Alleghany County may wish to consider purchasing their own EMS transport vehicles. The Department of Health's Office of Emergency Medical Services can assist with examples of joint career/volunteer EMS agencies.
5. Alleghany County and the Town of Clifton Forge should create, through a memorandum of understanding, expectations for both parties related to the career staffed transport unit operating in this area. The study team endorses a career staffed transport unit in east end of the county, whether it is funded by Alleghany County, the Town of Clifton Forge, or a combination of the two.
 6. The County Administrator should equip and require the Director of Public Safety to respond to EMS calls when EMS resources are responding from an extended distance or units are unavailable.
 - a. For example, if all EMS units are on other calls and the nearest ambulance is responding from an extended distance, the Director of Public Safety or public safety staff should be equipped, trained, and prepared to respond to the incident and render aid until the arrival of the ambulance.
 7. The Department of Public Safety should utilize the Virginia OEMS Standards of Excellence Program. The purpose of the Virginia Standards of Excellence program is to identify and recognize EMS agencies that strive to operate above the standards and requirements of the Virginia EMS Regulations (12VAC5-31). The evaluation addresses several areas that collectively make up the operations of an EMS agency from several perspectives.⁴

II. EMERGENCY COMMUNICATIONS AND DISPATCH

The study team noted during multiple visits with local fire/rescue providers and staff from Alleghany County that issues were present concerning emergency communications. The study team learned that the Alleghany County Sheriff's Office and the City of Covington Police Department both maintain dispatch centers that are located less than 1 mile apart. These dispatch centers handle different calls depending on where the 911 call is made from but utilize the same computer automated dispatch (CAD) and radio system. Delays were reported depending on who received the 911 call and the need to transfer 911 calls to the other dispatch center.

⁴ "Standards of Excellence". Virginia Office of Emergency Medical Services

The foregoing is a recommendation authorized pursuant to Va. Code 9.1-203.A.4 and is not to be construed as legal advice or as a binding recommendation.

Additionally, providers in the field expressed concern over inconsistent service provided by dispatch.

Recommendations:

1. The Alleghany County Board of Supervisors should explore creating a Regional 911 Emergency Call Center in conjunction with the City of Covington and other localities that may be interested in joining that would be feasible. Many areas of the Commonwealth of Virginia are moving from independent communication centers to joint communication centers for a myriad of reasons. Funding, staff availability, rising infrastructure costs, and others are driving multiple localities to combine their communication centers into one.⁵
 - a. Several studies conducted in other states highlight the relative success of regional 911 centers. In Massachusetts, a report found that after initial costs and implementation issues were resolved, that long term costs were lower and better service was provided. The same report highlighted the importance of jurisdictions having clear expectations and equitable oversight and funding of regional 911 centers.⁶
 - b. The study team provides the below information related to grants for PSAPs and 911. The study team recognizes that these grants do not provide adequate funding for a project such as a regional 911 call center but recommend that all funding options be explored.
 - i. *NG9-1-1 Funding and PSAP Grant Program*: This grant program is overseen by the 9-1-1 Services Board located at the Department of Emergency Management. There are several special grant programs that should be explored by Alleghany County and any other entity participating in a regional 911 call center.⁷
 - ii. The Department of Criminal Justice Services, which regulates the certification of dispatchers, has several grants directed to law enforcement. If a regional center is developed, Alleghany County should explore these opportunities in consultation with local law enforcement. Law enforcement, as well as fire and EMS, benefit from improved 911 communications⁸
 - iii. The Department of Health's Office of Emergency Medical Services offers grants through the Rescue Squad Assistance Fund. The office supports the mandated implementation of emergency medical dispatch, which is a special priority for funding.⁹ Although funds may not be available in FY24, this area should be researched if a regional 911 system is created.

⁵ "Planning Considerations" *National Association of State 911 Administrators*

⁶ "Regionalization: Case Studies of Success and Failure in Massachusetts" *Pioneer Institute*

⁷ "PSAP Grant Program" *Virginia Department of Emergency Management*

⁸ "Grants" *Virginia Department of Criminal Justice Services*

⁹ "Virginia Office of Emergency Medical Services Financial Assistance for Emergency Medical Services (FAEMS) General Grant Information" *Virginia Department of Health*

- iv. The Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security offers a list of federal programs that fund emergency communications. The study team highlights grants such as the Rural Emergency Medical Communications Demonstration Project and grants provided by the Federal Emergency Management Agency.

Of note, the study team recognizes that not all grants are applicable to an individual locality. Please consult with your locality leadership and counsel regarding eligibility and use of grants.

- c. Listed below are regional 911 centers that were identified by study team members as examples for Alleghany County to consider:
 - i. New River Valley Emergency Communications Regional Authority¹⁰
 - ii. Charlottesville-UVA-Albemarle Emergency Communications Center¹¹
 - iii. Eastern Shore of Virginia 9-1-1 Communications Center¹²
 - d. The Director of Public Safety (DPS) should be the county official that serves on the governing board of a regional 911 communications center if created.
 - e. Alleghany County should contact the Department of Health's Office of Emergency Medical Services and the Department of Emergency Management for further guidance considering public safety answering points and 911 call centers.
2. If Alleghany County does not develop a regional 911 center, the Director of Public Safety, in consultation with the Alleghany County Sheriff and approved by the Alleghany County United Fire and Rescue Association, should develop consistent initial and annual training for public safety communications operators/dispatchers. It is important that dispatchers are properly trained to understand and serve fire/EMS, especially in the case of a mayday declaration. A mayday declaration often represents the most perilous moment in an emergency response when firefighters or EMS providers require rescue themselves. Communication is vital during these events.¹³

Although this is not a significant component of required training from the state, localities may provide additional training to better serve citizens and providers. The study team was provided with a lesson plan and presentation created by a component of the Alleghany County emergency system. The team suggests using these documents as a framework for the above recommendation.

¹⁰ "Agency" *New River Valley Communications Regional Authority*

¹¹ "About" *Charlottesville-UVA-Albemarle Emergency Communications Center*

¹² "Communications Overview" *Eastern Shore of Virginia 9-1-1 Commission*

¹³ "Handling the Mayday: The Fire Dispatcher's Crucial Role" *Fire Engineering*

III. CHANGES TO THE DIRECTOR OF PUBLIC SAFETY

The Director of Public Safety (DPS) serves as the county level representative of fire and EMS within Alleghany County. One of the primary responsibilities of the Director of Public Safety is to ensure that the organization has the ability and means to respond to and mitigate emergencies safely and efficiently. An effective administrator is critical to the success of any public safety organization. Through interviews with the DPS, as well as fire and EMS agencies within Alleghany County, the study team makes the following recommendations to improve on the services provided within the county.

Recommendations:

1. The Board of Supervisors should codify the role of the DPS within both county government and related to the fire and EMS agencies operating within Alleghany County. Although requested, the study team was not provided a job description for the current DPS. Research by the study team revealed a job description last updated on March 7th, 2022. The study team recommends that the County Administrator work with leadership from the Alleghany County United Fire and Rescue Association to develop the duties and authorities of the Director of Public Safety.
 - a. The job description of the DPS should be readily available on the county website or provided to volunteer organizations. This would increase transparency and give clear guidance to volunteer members of the role.
2. The DPS, in consultation with Alleghany County United Fire and Rescue Association, should develop an organizational chart that is inclusive of the volunteer fire-rescue organizations and all county emergency operations or response assets and/or organizations.
3. The DPS, in consultation with Alleghany County United Fire and Rescue Association, should develop a process by which a mission and vision statement, as well as a public safety vision, would be jointly developed to answer the following questions:
 - a. What is the organization's purpose?
 - b. Why does the organization exist?
 - c. Where is the organization headed?
 - d. What should the organization look like ten years from now?
 - e. What values should guide the organization?
 - f. What conduct should all members of the DPS and the volunteer departments uphold?
4. The DPS should consider hiring a business manager to handle the business functions of the Alleghany County Office of Public Safety. Specific functions of this position include assisting members of the public who come to the administrative office, answering phone calls, processing invoices, assisting with

the onboarding of new members, and coordination for a countywide EMS revenue recovery business for billing purposes.

5. The DPS should be required to assist fire and EMS agencies, as well as the locality, with grant writing. With the increasing cost of fire and EMS equipment, as well as the saturation of applications for available grant programs, the quality of grant applications is vital. As a resource for the fire and EMS agencies, the DPS should be responsible to secure a means to develop and secure grants. This could include hiring or contracting with a grant's writer. A short list of grants provided by the Commonwealth of Virginia related to fire and EMS is found in Section VII. To sustain a volunteer system, the locality must leverage all available funding resources and assist their volunteer agencies with applying for these grants.
6. The DPS should have the authority to review how all county and grant funds received from or in partnership with Alleghany County are spent. When citizen's tax dollars are being utilized a high level of accountability must be maintained. In the event of a financial irregularity, the DPS should notify the County Administrator, law enforcement, and other relevant officials.
7. The County Administrator should equip the DPS with all necessary gear, and require necessary training, for the DPS to serve in an operational capacity. The County Administrator, DPS, and the Alleghany County United Fire and Rescue Association should develop and/or approve guidelines for the DPS to serve in an operational capacity.
 - a. The DPS should serve in a command capacity in the absence of chief officers from fire agencies within the county as needed or requested.
 - b. In a multi-agency incident where resources from outside of Alleghany County are present, the DPS should serve in a command capacity and represent Alleghany County agencies.
 - c. The study team recommends that the DPS be available, during regular hours, to respond as a safety officer to certain incidents as outlined in SOP/SOG. Safety officers are an important part of any incident scene and represent an added level of safety. The responsibilities of a safety officer can be found in National Fire Protection Association (NFPA) 1521.¹⁴
 - d. The DPS should be empowered to enforce SOP/SOG that are adopted by the Alleghany County United Fire and Rescue Association and Alleghany County. It should also be the duty of all chief and line officers of the independent agencies to enforce these SOPs/SOGs. The DPS should oversee this enforcement, as well as confirm that these policies and guidelines are equitable across the county.
 - e. As mentioned in Section I, the DPS should be equipped and trained to respond to emergency medical services calls when other resources are not available or when assistance is requested.

¹⁴ NFPA 1521: Standard for Fire Department Safety Officer Professional Qualifications

The foregoing is a recommendation authorized pursuant to Va. Code 9.1-203.A.4 and is not to be construed as legal advice or as a binding recommendation.

8. The DPS job description should state that the DPS not serve as a member of any volunteer fire or EMS agency within Alleghany County while serving as DPS.

IV. COMMUNITY RISK ASSESSMENT

A community risk assessment is a vital first step in improving fire and EMS services in Alleghany County. The study team recognizes that community risk assessments (CRA) can be wide or narrow in scope. Understanding the risks in the community better allows the system to identify potential risk, and prioritize those risks, to better utilize resources and plan for the future. Although there is no specific blueprint for developing CRR plans, much of the current literature and training materials suggest that community risk reduction programs use a six-step approach towards development outlined below:

- | | |
|-----------------------|-------------------------------------|
| 1) Identify Risks | 4) Prepare Plan |
| 2) Prioritize Risks | 5) Implement Plan |
| 3) Develop Strategies | 6) Monitor, Evaluate, & Modify Plan |

The capability of an organization largely depends on its equipment, funding, and people. Questions related to response times and the training of first responders is an important part of a community risk assessment, as is considering the target hazards, response capabilities, and other areas as identified within the focus area. Additionally, a CRR plan should be reevaluated at regular intervals to make necessary changes to operations as a system develops. Components of an Alleghany community risk assessment should not be limited to recommendations contained below.

Recommendations:

1. The Director of Public Safety should conduct a community risk assessment to identify potential and likely risks within Alleghany County. This process must prioritize risks and target hazards within the locality, followed by a review of the capabilities of fire and EMS agencies.
 - a. It is recommended that a narrow-focused CRA of emergency responses be completed. This process is based on the collection and review of community profile information, event history and response capabilities of the community. By examining the types and frequency of incidents to which community public safety organizations respond, a CRA helps focus and prioritize the fire prevention/loss prevention activities of both the community and department. This is extremely helpful to communities in making long term decisions on funding and initiatives in all areas of service delivery.
 - b. The Director of Public Safety could request the VDFP CRR Coordinator return and assist the county in its Community Risk Assessment (CRA).
 - c. NFPA 1720 indicates that the emergency services engage in the development of a community risk management plan for fire, emergency medical service, and hazardous materials use, storage, and transportation within the county. (NFPA 1720, 4.2;4.2.1;4.2.2; 4.2.3.1)

2. The Director of Public Safety (DPS) should update the fleet risk assessment. The study team was provided an “Emergency Apparatus Fleet Assessment” from 2017, which graded twenty pieces of apparatus from six member agencies of the Alleghany County United Volunteer Fire and Rescue Association. The report notes that “not all agencies and their vehicles belonging to the Alleghany County United Volunteer Fire and Rescue Association were evaluated”.¹⁵ During the site visit, several agencies expressed concern that the program had fallen short of addressing apparatus issues and a replacement cycle. In addition to information already found in the 2017 report, a fleet risk assessment should include:
 - a. A focus on apparatus that meet community specific needs such as population density, zoning, development, previous call data, etc.
 - b. The assessment should examine what the adequate number of each category of response vehicle is for each fire district or EMS district. For example, some departments have multiple pieces of apparatus that are rarely used or able to be staffed. Funds should be placed towards replacing apparatus that is operationally required, with surplus apparatus being removed from service as it ages out. This may reduce the overall number of apparatuses, but also lead to more funds being available to ensure the operation readiness of mission critical apparatus.
 - c. All new apparatus purchased with county funds should be co-titled with the volunteer agency that provides funds. If the county is the sole provider of funds, the vehicle should be titled under the Department of Public Safety.

V. DEVELOPMENT OF SOP AND SOG

The National Fire Protection Association (NFPA) recommends that fire departments have standard operating procedures (SOP) and standard operating guidelines (SOG).¹⁶

Standard Operating Guidelines (SOGs) are written guidelines that explain what is expected of emergency personnel in performing their duties. SOGs are a “how-to” guideline to follow in order to achieve a desired goal. SOGs are not necessarily rules or regulations, but rather a path to achieve specific goals and objectives. Standard Operating Procedures (SOP) are formal policies that specify a course of action, thereby ensuring efficiency, predictability, consistency, and safety.¹⁷

A copy of the By-Laws and Procedures of Operation for The Alleghany County United Volunteer Fire and Rescue Association states in Article XII that the association shall have standard operating procedures. A review by the study team found that the only policy implemented for fire and EMS in the locality is the “Alleghany County Radio Operations and Standard Operating Procedures”.

¹⁵ “Emergency Apparatus Fleet Assessment” *Appraisers of Specialized Vehicles and Losses, LLC*

¹⁶ 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.

¹⁷ “Standard Operating Procedures: The First Step to a Safer Fireground”. Fire Engineering

Recommendations:

1. The Director of Public Safety (DPS), in consultation with the Alleghany County United Volunteer Fire and Rescue Association, should review, develop, publish, implement, and oversee standard operating procedures for use by all fire and EMS agencies in the county. The Director of Public Safety must have the authority and tools to enforce SOPs and SOGs.
2. The Alleghany County Board of Supervisors should codify that the Director of Public Safety has the ultimate authority in enforcing the above mentioned SOPs/SOGs. Officers, firefighters, and EMS providers who fail to meet SOPs/SOGs should be accountable to the Director of Public Safety. The safety of both the public and volunteer providers is dependent on the enforcement of SOPs/SOGs.
3. The study team reviewed the “Alleghany County Radio Operations and Standard Operating Procedures” provided during the site visit. The study team did not find any pertinent issues with the SOP as provided. The study team recommends the following related to this policy:
 - a. The policy be added to the SOP/SOG manual as recommended in this section.
 - b. The policy be enforced by the DPS and the chief officers of each department. If a chief officer fails to enforce the SOP, the DPS should take appropriate action, which could include confiscating the radio.
 - c. The DPS should develop required training for fire and EMS members to ensure they understand and utilize the policy.
 - d. The SOP should be edited to include regular accountability checks of units operating on certain incident scenes, such as working fires. This should be prompted by dispatch every 10 minutes or at an interval determined by Alleghany County. This ensures that personnel are accounted for by command and is an effort to reduce risk in an already dangerous environment.
4. Examples of SOPs/SOGs:
 - a. Amherst County, Virginia Standard Operating Guidelines (2012)¹⁸
 - b. Windsor Volunteer Fire Department Standard Operation Procedures (2011)¹⁹

VI. INCREASE VOLUNTEER INCENTIVES

Alleghany County currently relies on an all-volunteer fire system and a majority volunteer EMS system with some paid staff provided by the Town of Clifton Forge. Like much of the country, the county is experiencing strain with recruitment and retention of volunteers. This, coupled with increasing calls for service, will eventually lead to decreased capabilities to provide fire/EMS protection. Priority should be given to supporting active volunteers and incentivizing new volunteers from around the region to join in Alleghany.

¹⁸ “Standard Operating Guidelines” *Amherst County Public Safety, Fire & Rescue Departments*

¹⁹ “Standard Operating Procedures” *Windsor Volunteer Fire Department*

Recommendations:

1. The Board of Supervisors should consider the creation of a Recruitment and Retention Coordinator under the Director of Public Safety. This position, whether a volunteer or career personnel member (full or part-time) should develop a Recruitment and Retention Plan. This position could also assist the Director of Public Safety with communication between the departments and other duties as needed. The primary task of this position should remain recruitment and retention. As part of this plan, the Director or his designee should:
 - a. Utilize the National Volunteer Fire Council outline for volunteer agencies.²⁰
 - b. Reference the United States Fire Administration's Retention and Recruitment for the Volunteer Emergency Services²¹
 - c. Market volunteer departments through social media and other means to solicit volunteers.
 - i. Highlight noteworthy calls for service, training, or volunteer accomplishments on social media.
2. Each volunteer fire chief and rescue squad captain should assess what the main operational areas are for their organization (fire protection, administration, community events). Leadership should create different classes of membership for department members to handle non-emergent functions such as fundraising, entering fire reports, marketing/social media initiatives, fire & life safety education and community programs, human resource management, station & apparatus maintenance, and in-house training. This lessens the demands on those members that are interested in responding to emergencies and maintaining the necessary training. The most successful teams involve people from different backgrounds with different skillsets.
3. The Director of Public Safety (DPS), in consultation with the County Administrator and Board of Supervisors, should explore matching funding using the Volunteer Firefighters' & Rescue Squad Workers' Service Award Program (VOLSAP). VOLSAP, created by state statute, is a mechanism by which optional retirement savings for volunteer firefighters and rescue squad workers can be invested. Members contributions, coupled with contributions made by the department/locality, are invested by the Virginia Retirement System, and can be withdrawn at a certain age much like a standard employee retirement.²²
4. The Alleghany County Board of Supervisors should consider reducing or eliminating personal property taxes on the primary vehicle for all bona fide volunteer firefighter and EMS provider vehicles in the county. *Code of Virginia* § 58.1-3506 allows localities the discretion to classify these vehicles separately from other tangible property that is taxed if a volunteer can certify that they are members of a recognized volunteer fire or EMS agency. The board should work with the Commissioner of the

²⁰ "Develop a Recruitment and Retention Plan" *National Volunteer Fire Council*

²¹ "Retention and Recruitment for the Volunteer Emergency Services" *U.S Fire Administration*

²² "Virginia Volunteer Firefighters' & Rescue Squad Workers' Service Award Program" *Virginia Retirement System*

Revenue and the DPS to determine who would be eligible for this tax incentive and the relative cost to the county.

5. The DPS, in consultation with the Alleghany County United Volunteer Fire and Rescue Association, should create an incentive program funded through a combination of county funds and fee for service revenues. This incentive fund should be utilized to provide funds to volunteers to purchase individual equipment items not provided by the county or a department. A SOP should be implemented that outlines the program requirements and how funds would be disbursed equitably. Similar programs found in other areas are based on various concepts including:
 - a. A points-based system where a member receives points for components like calls ran, meetings attended, training attended, etc. These points equate to dollars, which eventually cap at a certain amount set to make sure sufficient funds are available.
 - b. A flat rate based on yearly donations to the program or money allocated that is equitable to all members who meet certain requirements stated in the policy.
 - c. A certain item or piece of equipment provided to all members who meet certain requirements stated in the policy.
6. The DPS should host, in consultation with the Alleghany County United Volunteer Fire and Rescue Association, a yearly recognition and awards event for volunteer firefighters and EMS providers. These awards can be funded through community/business partners or fees for service and should highlight the strong work being done by the volunteer agencies. Possible award categories include valor, department of the year, firefighter of the year, officer of the year, top fundraiser, community risk reduction awards, or others as deemed necessary. Award criteria should be clearly spelled out in a SOP/SOG and be chosen through a nomination or application process.

VII. FUNDING FOR FIRE/EMS

The funding of fire and EMS is crucial to providing adequate services. In Virginia, call volume in the last three years has increased by 40%, while state level funding for fire and EMS has increased by only 6.67%. Localities are also seeing a decline in volunteer fire and EMS providers, with 70% of localities stating they could only sometimes, never or rarely meet minimum fire standards developed by the National Fire Protection Association. In addition, costs have risen substantially. For example, in 1992 the cost of an ambulance was just over \$100,000. Today an ambulance costs on average \$325,000.²³

Alleghany County must recognize that volunteer fire and EMS agencies will require greater support from the county with funding as time moves forward. Alleghany already provides funding of varying levels, coupled with state pass through funding, to the agencies serving the county. Budget data provided to the study team shows that

²³ “Service to Others: A Report on the Commonwealth’s Fire and EMS Service” *Department of Fire Programs*

The foregoing is a recommendation authorized pursuant to Va. Code 9.1-203.A.4 and is not to be construed as legal advice or as a binding recommendation.

departments receive between \$65,000 and \$82,000 annually, as well as state aid. The county also provides funding for vehicle insurance, line of duty death benefits, and numerous other support areas. This is a noteworthy investment by Alleghany County in its volunteer fire and EMS system.

Recommendations:

1. To maintain financial stability and promote transparency, each volunteer component should undergo annual audits by an outside entity. Each volunteer component may elect to have their own audit done as long as it is independent of the organization. This information should be submitted to the Director of Public Safety and the Alleghany County Administrator for review.
2. The DPS should leverage all grants offered for fire and EMS. Grant funding is not a consistent means of funding fire and EMS but must be considered as an important augmentation for local funding. Many of the recommendations contained in this report require a significant investment financially, which can be supplemented by grant funding.

Please contact the individual agencies below for additional information. The below list is not exhaustive of all grants available from federal, state, or private entities.

a. Virginia Department of Forestry Grants

Federal Firefighter Property Program: Through an agreement with the Department of Defense (administered by the USDA Forest Service), DOF can obtain surplus military equipment that can be used by emergency service providers. The major difference between this program and the Federal Excess Personal Property Program (FEPP) is that qualifying organizations may be eligible to receive ownership of the equipment with few restrictions on use or disposal and at no cost. Eligible equipment includes:

Vehicles, such as pickup trucks, sport utility vehicles, 2½ ton trucks, 5-ton trucks, utility vans and box trucks
Fire trucks (tankers and pumpers)
Generators
Trailers
Light towers
Light bars and sirens
Hoses, nozzles, and pumps
Fresh air compressors
Breathing apparatus
Turnout gear²⁴

Community Wildfire Defense Grant Program: The Community Wildfire Defense Grant program offers financial assistance to at-risk communities for the

²⁴ “Federal Firefighter Property Program” *Virginia Department of Forestry*

The foregoing is a recommendation authorized pursuant to Va. Code 9.1-203.A.4 and is not to be construed as legal advice or as a binding recommendation.

development of Community Wildfire Protection Plans (CWPP) and associated mitigation projects. This grant funds projects for two primary objectives: the development and revision of Community Wildfire Protection Plans, and the implementation of projects described in a Community Wildfire Protection Plan that is less than 10 years old.²⁵

Dry Hydrant Program: The Virginia Dry Fire Hydrant grant program provides funding to cover the costs of installation and repair of dry hydrants to support firefighting operations. The program is a joint effort between the Virginia Department of Fire Programs and the Virginia Department of Forestry (DOF) that provides state level funding on an annual basis for the installation of dry hydrants across the Commonwealth.²⁶

Volunteer Fire Assistance Grant Program: DOF provides assistance through the Volunteer Fire Assistance (VFA) grant program. The program provides a 50% cost reimbursement for the purchase of personal protective equipment (PPE), tools, and equipment for rural volunteer fire departments. As a key cooperator in the suppression of nearly every Virginia wildfire, this program allows the agency to provide critically-needed federal funding to directly support fire departments in the Commonwealth.

These grants are “50-50” matched grants. This means that grant approvals provide a 50% match of the actual amount expended for the items approved, up to the total approval amount of the grant. For example, to apply for a \$1500 grant under the VFA program, the volunteer fire department must be prepared to spend \$3000 to receive a reimbursement of \$1500 following grant approval. Receipts marked “PAID” will be required prior to any reimbursement of the approved amount. Note that Virginia Department of Forestry is not allowed to provide full or partial grant funding for any one piece of equipment over \$5,000 in cost.

b. Virginia Department of Fire Programs Grants:

Virginia Fire Programs Fund (VFPPF) - Aid to Localities (ATL): Financial assistance is provided to cities, counties and incorporated towns throughout the state by offering a variety of grant opportunities. The Virginia Fire Programs Fund is derived from one percent of fire-related insurance coverage. Approximately 75 percent of the total fund goes directly to counties, cities and incorporated towns within the Commonwealth as Aid to Localities (ATL). ATL provides Virginia cities, towns and counties with funds to pay for training, construction of training centers, firefighting equipment and protective clothing. Allocations are based on population.

Live Fire Training Structure Grant Program: In accordance with §38.2-401-D of the Code of Virginia, the Live Fire Training Structure Grant Program (hereinafter

²⁵ “Community Wildfire Defense Grant Program” *Virginia Department of Forestry*

²⁶ “Dry Hydrant Program” *Virginia Department of Forestry*

referred to as "the Grant") was established to provide defined grants to Virginia localities seeking to construct, renovate (including additions), or repair permanent Live Fire Training Structure in accordance with the most current edition of NFPA 1402. The term Live Fire Training Structure refers to a structure specifically designed for conducting live fire training evolutions on a repetitive basis in accordance with the most current edition of NFPA 1001 and 1403.

VFIRS Hardware Grants: The purpose of this grant program is to provide an incentive to those jurisdictions not currently participating in VFIRS by lessening the economic burden.

Regional Fire Services Training Grant Program: Any training facility owned by a jurisdiction with the exclusive or primary purpose of being used for fire services training delivery for two or more jurisdictions. The funding will be utilized for the acquisition, renovation, repair, service, and management of fire services training props to provide training opportunities to multiple jurisdictions in support of training throughout the Commonwealth of Virginia per the NFPA 1001 and 1403 training standards.

Conference & Education: The purpose of the Conference and Education Assistance program is to provide needed financial support for conferences and seminars sponsored by Virginia-based non-profit organizations that further the education of fire and emergency services personnel throughout the Commonwealth. The Conference and Education Assistance Program shall be administered by the Virginia Department of Fire Programs (VDFP) under the guidance and direction of the Executive Director or the designee.

c. Department of Health's Office of Emergency Medical Services Grants:

Rescue Squad Assistance Fund (RSAF): RSAF is a multi-million-dollar matching grant program for Virginia governmental, volunteer, and non-profit EMS agencies/organizations to provide financial assistance based on demonstrated need. Funding is recommended on the documented need of the specific item being requested. The primary goal of this program is to financially assist governmental, volunteer, and non-profit EMS agencies to purchase EMS equipment, vehicles, and provide needed EMS programs and projects. RSAF is primarily a reimbursement grant that requires the grantee to make the purchase for the awarded item(s) and then submit an invoice for reimbursement.²⁷

3. The Alleghany DPS, working with the County Administrator and President of the Alleghany County United Fire and Rescue Association, should annually reassess fire and EMS expenditures and funding. As a part of this process, call volume should be analyzed, as well as the availability of volunteer first responders.

²⁷ "Virginia Office of Emergency Medical Services Financial Assistance for Emergency Medical Services (FAEMS) General Grant Information" Virginia Department of Health

The foregoing is a recommendation authorized pursuant to Va. Code 9.1-203.A.4 and is not to be construed as legal advice or as a binding recommendation.

4. The DPS and Alleghany County United Fire and Rescue Association should consider augmenting funding for departments based on the number of calls run and the ability of the organization to answer calls for service. This could be done using fee-for-service medical billing.
 - a. The county would employ a part-time or full-time position to handle all medical billing and associated accounting for the EMS service for the county.
 - i. The cost of this part-time position would be covered by the funds generated by the billing process.
 - b. Alleghany EMS organizations would receive 60% of the remaining revenues. These would be considered organizational funds and would be managed by the individual volunteer organizations.
 - c. The remaining 40% would be held in an interest-bearing account and utilized to enhance the EMS delivery system by purchasing equipment and/or ambulances for use within the system. These expenses would be approved by the EMS workgroup mentioned in this report.
 - d. The 60% would be awarded based on the affiliation of the transport unit. Any calls for service which are covered by a career unit would receive the full funding, minus the billing personnel costs, if a county owned ambulance was used for transport. If a career crew transported in a volunteer ambulance, the volunteer organization would receive the 60%.

This would increase funds for departments that are answering calls regularly and meeting response expectations compared to those who do not regularly answer calls. This funding matrix should be developed by the DPS and the association, with final approval resting with the Alleghany County Board of Supervisors.

VIII. STANDARDIZE EQUIPMENT

The study team noted that equipment in the county was not standard from department to department. Although this is common in systems that have independent fire and rescue components, this can sometimes lead to issues on emergency scenes. In addition, increasing costs and lead times for apparatus and equipment are leading to difficulties across the Commonwealth. The study team was also informed that self-contained breathing apparatus (SCBA) varied across the county, with some departments utilizing new SCBA purchased through the county while others were not.

Recommendations:

1. The Director of Public Safety (DPS) and the Alleghany County United Fire and Rescue Association should develop performance-based equipment specifications for each apparatus or equipment type, considering geographic areas that departments serve. Volunteer organizations should be authorized to make customizations at their own cost in some areas not considered critical. Critical areas to maintain continuity amongst departments include pump panels, hose loads, nozzles, and SCBA. This ensures that firefighters from different departments can seamlessly fold into a mutual aid response.

- a. For example, the DPS and the association may wish to create a specification for an engine serving a suburban area versus an engine serving a rural area. As a result of the different first due response area, these engines may need to carry different equipment or amounts of water. However, certain aspects should be the same across the county.
2. Alleghany County should only fund equipment that meets or exceeds the county level specifications. Additional items or items that do not meet county specifications should not be funded with any county dollars. This will ensure uniformity across the system at the most basic level, making training and operations more effective.
3. Apparatus specifications should reference NFPA 1901: Standard for Automotive Fire Apparatus.²⁸
4. The minimum equipment specifications, once approved, should be formalized in an SOP/SOG that all departments agree to and follow.

IX. TRAINING

Alleghany County does not require or mandate training for firefighters, while state regulation mandates training for EMS providers through the Department of Health's Office of EMS. Most departments reported that they conducted regular training, at least monthly, on topics that they determined. This training was sometimes open to other departments. Departments also expressed that they desired to send more of their volunteers to formalized training classes in the region hosted by organizations like the Department of Fire Programs or the Virginia Association of Volunteer Rescue Squads.

The study team was also informed of a training site, including a live fire training structure, located in the City of Covington. This training site previously hosted training events, including live fire training, until it was closed for live fire training due to needed repairs/renovations. This facility is owned by the City of Covington.

Recommendations:

1. The Alleghany County Administrator should consider designating the Director of Public Safety, or their designee, as a training coordinator. This position would be responsible for the coordination of training within Alleghany County related to both fire and EMS. The position, which could be a volunteer or career member, would work with each component to schedule regular training, keep accurate training records, and work with agencies such as the Department of Fire Programs and the Department of Health's Office of Emergency Medical Services. When one department plans to train, this position could make sure that necessary resources are in place and other departments are notified.

²⁸ NFPA 1901, Standard for Automotive Fire Apparatus

2. Alleghany County, through a regional partnership including the City of Covington and others as deemed appropriate, should consider creating a regional fire training center. Hands on training is essential to creating well trained problem solvers in fire and EMS. A regional fire training center could pool resources to provide a site for hands on training.
 - a. Alleghany County and the City of Covington should explore potential costs to repair/renovate the current live fire training structure located in the city. If repairs are possible, the two jurisdictions should enter a formal memorandum of understanding over funding and use of the facility.
 - i. Refer to the Department of Fire Programs' *Live Fire Training Structure Grant Program*
 - b. Alleghany County and regional partners should consider, if the current site is not feasible, securing land elsewhere to develop a training center.
 - c. Alleghany County and regional partners should develop, collaboratively, a site plan that examines future expansion of training opportunities at the current site or a potential new site. These site plans could include classrooms, new fire training props, or other training items that are needed in the area.
 - i. Refer to the Department of Fire Programs' *Regional Fire Services Training Grant Program*
 - d. If the current live fire structure is determined to not be feasible for renovation or repair, Alleghany County and regional partners should consider building a new building. Grant information referenced above regarding renovation and repair is also applicable to new buildings. If approved for a grant, the Virginia Fire Services Board can provide up to \$480,000 towards a new live fire training structure.
3. The Director of Public Safety should implement the EMS Officer Program at all rescue squads with the assistance of rescue squad leadership. The Office of EMS and the State EMS Advisory Board Workforce Development Committee has created an EMS Officer Program that can be implemented in EMS agencies to help boost leadership and help develop and maintain quality leaders in the EMS Community. The program covers topics like human resource management, community and government relations, administration and more, all useful information for the Department of Public Safety and the volunteer organizations contained within it.²⁹

X. FIRE AND RESCUE ASSOCIATION

The request by Alleghany County for the Virginia Fire Services Board to conduct a fire and EMS study specifically referenced the "Alleghany County Fire and Rescue Association". The study team was provided by a participant the "By-Laws and Procedures of Operation for The Alleghany County United Fire and Rescue Association" during the site visit. Handwriting on the document indicates that it was last revised in September 2018.

²⁹ "EMS OFFICER I" Virginia *Department of Health*

Recommendations:

1. The Alleghany County United Fire and Rescue Association should revise and update the “By-Laws and Procedures of Operation for The Alleghany County United Fire and Rescue Association”. As a component of this revision, the association should set a review date where the document is reviewed regularly by the members of the association.
2. The Alleghany County United Fire and Rescue Association should clarify under “Membership” that emergency response agencies of the City of Covington be included if desired. The City of Covington’s fire and EMS entities regularly respond into the county and county resources often respond to assist the city. This alludes that they should be members of the organization.
3. The Board of Governor’s positions should be clarified to list who makes up the 13 members. Currently, the document is ambiguous as to who is a member of the Board of Governors. Each department receives one vote, but only eight departments are listed in the document. Some departments do have both fire and rescue capability, but this should be clarified in the document for the lay person to understand.
4. The Alleghany County United Fire and Rescue Association should meet regularly as outlined in its bylaws, including regular meetings of the committees listed. Some study participants stated that the work of the association ebbed and flowed over the years. The study team recommends that the association prioritize its meetings and work to serve as a unified voice in Alleghany County.
 - a. The association should invite the Alleghany County Administrator to attend meetings biannually. The Alleghany County Administrator should be present at these meetings as the ultimate representative of the county.
5. The Alleghany County United Fire and Rescue Association President, and other officers as deemed necessary, should meet annually with the Alleghany County Board of Supervisors Chair and Vice Chair to review fire and EMS in the county, funding for fire and EMS, and the important relationship between volunteer fire and EMS providers and the county.

XI. FACILITIES

An important aspect of any fire/EMS system are the facilities that house equipment, personnel (both career and volunteer) and the business functions of a department. This study team recognizes that facility needs vary widely depending on a number of factors, including the size and number of apparatuses, training space, ownership of the facility, and many other factors. The study team makes the following recommendations related to fire/EMS facilities in Alleghany County.

Recommendations:

1. The Director of Public Safety (DPS) and each volunteer department should enter into a memorandum of understanding (MOU) which identifies and lists the reoccurring expenses that the county will provide and what the department itself will provide. Alleghany County should assist its departments with some reoccurring expenses related to facilities to maintain that they are operating effectively to assist citizens.
2. The DPS should review facilities for building age, location, ability to house current and future apparatus, and connection to the community. The DPS should plan for the renovation or construction of new facilities that include overnight housing options for potential career staff or volunteers to utilize.
3. The DPS should, in consultation with the volunteer agencies, implement a capital improvement plan that addresses long-term facility projects for fire and EMS.

XII. OTHER RECOMMENDATIONS

The below recommendations are included as a component of the report because study team members felt that the information was both pertinent to Alleghany County, as well as most fire and EMS studies conducted by the Virginia Fire Services Board. The recommendations are broad but encompass best practices to support future growth for Alleghany County and the Commonwealth of Virginia, as well as the safety and well-being of first responders and the citizens they protect.

Recommendations:

1. The Director of Public Safety should ensure that all county fire departments are reporting via VFIRS or NFIRS. Not only does this process provide insight into the county's emergency responses and trends, but it can also provide a means of comparing local trends to regional and national trends. Additionally, the Director of Public Safety should prepare for the transition from NFIRS to NERIS being administered through the U.S Fire Administration. As stated above, this information is critical for the identification and mitigation of any community risks. This is also applicable to EMS call data. The transition to NERIS is expected to provide faster and more effective data for the fire service. Please see the information below concerning NERIS.
2. Cancer prevention is important in the fire service. Cancer is the leading health risk facing firefighters, largely due to the chemicals and carcinogens they are exposed to while engaged in response activities.³⁰ Chemically based plastics are in use in nearly every product in our homes, business and vehicles and when they burn, their chemical composition changes.
 - a. The Director of Public Safety should develop operational SOP's that establish safe cancer prevention practices such as:
 - i. Gross decontamination after fire incidents

³⁰ "Lavender Ribbon Report-Best Practices for Preventing Firefighter Cancer" (2021) *NVFC & IAFC*

The foregoing is a recommendation authorized pursuant to Va. Code 9.1-203.A.4 and is not to be construed as legal advice or as a binding recommendation.

- ii. Washing of firefighter PPE following fire or hazardous materials incidents
 - iii. A fire hood exchange program
 - iv. Shower facilities at fire stations
- a. The Director of Public Safety should encourage /facilitate National Firefighter Registry (NFR) sign up. The Firefighter Cancer Registry Act of 2018 mandated the Centers for Disease Control and Prevention (CDC) create a voluntary registry of firefighters to collect health and occupational information to determine cancer incidence in the U.S. fire service. In response to this mandate, CDC's National Institute of Occupational Safety and Health (NIOSH) established the National Firefighter Registry (NFR).³¹ The NFR will help researchers better understand and reduce cancer in firefighters by matching the information provided by participating NFR firefighters with cancer diagnosis information from state cancer registries. This matching process will allow NIOSH to study the relationship between firefighting and cancer outcomes over time.

Step 1: Firefighters sign up for the NFR.

Step 2: NIOSH researchers match firefighter profiles with potential information in state cancer registries over time. This makes it possible to study the relationship between firefighting and cancer over time, even if cancer diagnoses occur in the future.

Step 3: NIOSH captures work history details. This information can be used to better understand firefighters' exposures and how they may be related to cancer.

Step 4: Stronger evidence can help inform new health and safety measures to protect firefighters from cancer. Combining information from firefighters across the U.S. will help researchers better understand cancer and its risk factors in the fire service, which could ultimately help reduce cancer among firefighters for generations to come.

- 3. The DPS should implement centralized purchasing for fire and EMS supplies. This process should be included in county SOP. The DPS should work with Alleghany County procurement staff to identify areas that the county could assist with purchasing supplies for the volunteer departments.
 - a. Many items, including medical supplies and items used daily, can be centrally stored in accordance with state regulation and distributed. In addition, many equipment purchases could be made county-wide to increase interoperability and reduce costs as mentioned in other areas of this report.

³¹ H.R 931 "Firefighter Cancer Registry Act of 2018". (2018) *115th U.S Congress*

4. It is recommended that the DPS create an equipment maintenance program to increase the life of apparatus and reduce repair costs. This equipment maintenance program should consider variables such as age and mechanical condition, as well as the use level of each apparatus. If volunteer departments are completing their own maintenance, the DPS should maintain records of this maintenance. Where possible, Alleghany County should financially support regular maintenance of apparatus.

REFERENCES

- About.* (2022) Charlottesville-UVA-Albemarle Emergency Communications Center.
<https://cua911.gov/about/>
- Agency.* (2017) New River Valley Emergency Communications Regional Authority.
<https://www.nrv911.org/agency/>
- Alleghany County... A Concise History.* (2023) Alleghany County, Virginia.
<https://www.co.alleghany.va.us/history/>
- Communications Overview.* Eastern Shore of Virginia 9-1-1 Commission. <https://esva911.org/>
- Community Wildfire Defense Grant Program.* (2024) Virginia Department of Forestry.
<https://dof.virginia.gov/community-wildfire-defense-grant-program/>
- Develop a Recruitment and Retention Plan.* National Volunteer Fire Council.
<https://www.nvfc.org/wp-content/uploads/2016/12/RR-Plan.pdf>
- Dry Hydrant Program.* (2024) Virginia Department of Forestry.
<https://dof.virginia.gov/wildland-prescribed-fire/fire-department-resources/dry-hydrants/>
- EMS Officer I.* Office of Emergency Medical Services.
<https://www.vdh.virginia.gov/emergency-medical-services/chatr/leadership-management/ems-officer-i/>
- Emergency Apparatus Fleet Assessment.* (2017) Appraisers of Specialized Vehicles and Losses, LLC.
- Federal Firefighter Property Program.* (2024) Virginia Department of Forestry.
<https://dof.virginia.gov/wildland-prescribed-fire/fire-department-resources/federal-firefighter-property-program/>
- Grants.* (2024) Virginia Department of Criminal Justice Services.
<https://www.dcjs.virginia.gov/law-enforcement/grants>
- H.R 931 “Firefighter Cancer Registry Act of 2018”.* (2018) 115th U.S Congress.
<https://www.congress.gov/115/plaws/publ194/PLAW-115publ194.pdf>
- Lavender Ribbon Report.* (2021) National Volunteer Fire Council. <https://www.nvfc.org/lrr/>
- NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications.* National Fire Protection Association. <https://www.nfpa.org/codes-and-standards/nfpa-1521-standard-development/1521?l=39>

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. National Fire Protection Association. <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=1720>

NFPA 1901: Standard for Automotive Fire Apparatus. National Fire Protection Association. <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=1901>

Norwood, P.J. *Handling the Mayday: The Fire Dispatcher's Crucial Role.* (2015) Fire Engineering. <https://www.fireengineering.com/firefighting/handling-the-mayday-the-fire-dispatchers-crucial-role/>

Planning Considerations. (2023) National Association of State 911 Administrators. <https://www.nasna911.org/911-regionalization/planning-considerations>

PSAP Grant Program. (2024) Virginia Department of Emergency Management. <https://psc.vdem.virginia.gov/pages/9-1-1-psap-grant-program>

Regionalization: Case Studies of Success and Failure in Massachusetts. (2008) Pioneer Institute. <https://www.911.gov/assets/Regionalization-Case-Studies-of-Success-and-Failure-in-Massachusetts-1638566835.pdf>

Retention and Recruitment for the Volunteer Emergency Services. (2023) United States Fire Administration. <https://www.usfa.fema.gov/downloads/pdf/publications/retention-and-recruitment-for-volunteer-emergency-services.pdf>

Service to Others: A Report on the Commonwealth's Fire and EMS Service. (2023) Virginia Department of Fire Programs.

Standard Operating Guidelines. (2012) Amherst County Public Safety, Fire & Rescue Departments.

U.S. Census Bureau QuickFacts: Alleghany County, Virginia. Census Bureau QuickFacts. <https://www.census.gov/quickfacts/sussexcountyvirginia>

Virginia Office of Emergency Medical Services Financial Assistance for Emergency Medical Services (FAEMS) General Grant Information. (2023) Virginia Department of Health's Office of Emergency Medical Services. <https://www.vdh.virginia.gov/content/uploads/sites/23/2023/09/RSAF-Grants-Program-091523.pdf>

Virginia Standards of Excellence Program. Office of Emergency Medical Services. <https://www.vdh.virginia.gov/emergency-medical-services/virginia-standards-of-excellence-program/>

Virginia Volunteer Firefighters' & Rescue Squad Workers' Service Award Program. (2024)
Virginia Retirement System. <https://www.volsap.org/>

Standard Operating Procedures. (2011) Windsor Volunteer Fire Department.
<https://www.windsorfire.org/docs/sog.pdf>

Warren, Thomas. *Standard Operating Procedures: The First Step to a Safer Fireground.* (2016).
Fire Engineering. <https://www.fireengineering.com/leadership/standard-operating-procedures-the-first-step-to-a-safer-fireground/#:~:text=Standard%20Operating%20Procedures%3A%20The%20First%20Step%20to%20a,within%20a%20fire%20department.%20...%204%20Safety%20>

APPENDIX A

Resolution requesting the Virginia Fire Services Board conduct a comprehensive analysis of the Fire and EMS system of Alleghany County, Virginia

R-23-5

**BOARD OF SUPERVISORS
COUNTY OF ALLEGHANY
Covington, Virginia**

At a regular meeting of the Board of Supervisors, Alleghany County, Virginia held on Tuesday, January 3, 2023 at 7:00 P.M., in the Board Room of the County Governmental Complex thereof, the following action was taken:

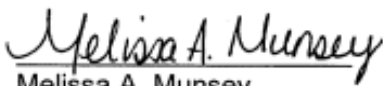
<u>MEMBERS:</u>	<u>VOTE:</u>
G. Matt Garten, Chairman	YES
James M. Griffith, Vice-Chairman	YES
Stephen A. Bennett	YES
Shannon P. Cox	YES
Gregory A. Dodd	YES
Ronald S. Goings	YES
Cletus W. Nicely	YES

On motion of Mrs. Cox, seconded by Mr. Griffith, that the following resolution be adopted:

BE IT RESOLVED that the Alleghany County Board of Supervisors endorses making a request to the Virginia Fire Services Board to conduct a study of the fire and EMS system in Alleghany County at no cost to the County.

Unanimously adopted.

A COPY TESTE:



Melissa A. Munsey
Deputy Clerk to the Board

APPENDIX B

Letter Requesting a Fire and EMS Study from the Alleghany County Administrator



Alleghany County Office of Public Safety **9212 Winterberry Avenue, Covington, VA 24426**

January 4, 2023

Policy Manager
Virginia Department of Fire Programs
1005 Technology Park Drive
Glen Allen, VA 23059

RE: Comprehensive Analysis Study of Fire/EMS System Request — Alleghany County

This is to request the services of the Virginia Fire Services Board (VFSB) in conducting a complete and thorough review of the fire and EMS system in Alleghany County.

This study has the support of the Alleghany County Board of Supervisors and County Administration as shown by the attached resolution adopted at the Board's January 3, 2023 meeting.

The requested areas of concentration of this study include:

- Organization
- Budget and Administration
- Training
- Delivery of Services
- Fleet Design and Management (Equipment/Apparatus)
- Operations
- Alleghany County Fire & Rescue Association

It is the Board's and County Administration's proposal to have a complete and thorough review of the aforementioned areas of concentration and a comprehensive list of recommendations to enhance the delivery of services to the citizens of Alleghany County.

Policy Manger
Comprehensive Analysis Study of Fire/EMS System Request- Alleghany County
January 4, 2023

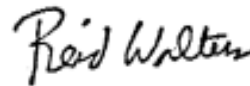
Your consideration of this request at the next available opportunity would be greatly appreciated. I am available to respond to any questions you might have regarding this request. I can be reached by phone at 540.666.8743 or by email at jfitch@co.alleghany.va.us.

Sincerely,



Jonathan Fitch

Public Safety Director



Reid Walters

County Administrator

APPENDIX C

Other resources available to the Director of Public Safety and Alleghany County

1. Community Paramedicine

- a. <https://www.vdh.virginia.gov/emergency-medical-services/community-paramedicine-mobile-integrated-healthcare/>
- b. NFPA 450: Guide for Emergency Medical Services and Systems, 2021 Edition –
 - i. Chapter 14 Operations
 - ii. Annex B Time Intervals and Components.
 1. <https://catalog.nfpa.org/NFPA-450-Guide-for-Emergency-Medical-Services-and-Systems-P1307.aspx#:~:text=The%20comprehensive%202021%20edition%20of%20NFPA%20450%2C%20Guide,well%20as%20during%20the%20evaluation%20of%20measurable%20outcomes.>

2. Manuals

- a. NVFC: Understanding & Implementing Standards: NFPA 1500,1720, and 1851
 - i. https://www.nvfc.org/resource_item/understanding-implementing-nfpa-standards-1500-1720-1851-english/
- b. NVFC: Understanding & Implementing Standards: NFPA 1407 and 1021
 - i. <https://www.nvfc.org/wp-content/uploads/2015/09/Standards-Guide-Vol2-1407-1021.pdf>
- c. NVFC: Psychologically Healthy Fire Departments Implementation Toolkit
 - i. <https://www.nvfc.org/wp-content/uploads/2021/01/PHFD-Implementation-Toolkit.pdf>
- d. NVFC: What to expect: A Guide for Family Members of Volunteer Firefighters
Volunteer Fire Services Culture: Essential Strategies for Success
 - i. <https://www.nvfc.org/guide-for-family-members-of-volunteer-responders-now-available/>

3. Informational Sheets

- a. Training Volunteer Firefighters to be Combat Ready
 - i. Section 9: Developing and Implementing Training Best Practices
 - ii. Appendix B: Sample Knowledge and Skills Based Annual Training Topics Plan
 - iii. Appendix E: How to Use NFPA Standards To your Department's Advantage
 1. <https://www.iafc.org/docs/default-source/1vcos/operational-training-guide.pdf>
- b. The 16 Firefighter Life Safety Initiatives
 - i. <https://www.everyonegoeshome.com/16-initiatives/>
- c. VFIS: NFPA 1500 Fire Department Occupational Safety, Health and Wellness Program Worksheet (2018 Edition)
 - i. <https://education.vfis.com/Portals/0/Documents/wellness/NFPA-1500-Worksheet-2018-Edition.pdf>
- d. NVFC: Conducting a Recruitment and Retention Needs Assessment

- i. <https://www.nvfc.org/wp-content/uploads/2016/12/RR-Needs-Assessment.pdf>