

VIRGINIA FIRE SERVICES BOARD



A Report of Findings
and
Recommendations:

**Grayson County
Fire & EMS Study**



July 2017

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REPORT AUTHORS

Virginia Fire Services Board

Robby Dawson Virginia Fire Prevention Association
Walt Bailey Virginia State Firefighter's Association

Virginia Department of Health – Office of Emergency Medical Services

Michael Berg Regulations and Compliance Manager

Virginia Department of Forestry

Chad Austin Area Forester

Virginia Department of Fire Programs

Dennis Price Division Chief
Mohamed Abbamin Policy Manager

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- Elk Creek Rescue Squad
- Rugby Fire & Rescue Department
- Mt. Rogers Fire and Rescue Department
- Troutdale Fire & Rescue Department
- Independence Rescue Squad
- Independence Fire Department
- Fries Fire and Rescue Department
- Galax Grayson Emergency Medical Services
- Galax Fire Department
- Baywood Rescue Squad

EXECUTIVE SUMMARY

This report documents the findings and recommendations for the Grayson County Fire and Emergency Medical Services (EMS) Study. The information contained is not to be construed as legal advice or as binding recommendations. This report is intended to provide guidance for Grayson County Board of Supervisors and its fire and rescue stakeholders to build on what is working well, while observing opportunities for improvement. Strategic focus in these areas will enhance the overall quality and coordination of fire-rescue service delivery to residents of Grayson County.

The study was requested by the Grayson County Board of Supervisors in order to analyze several areas of responsibility within the County's fire and rescue services. The Study Committee was comprised of representatives from the Virginia Fire Services Board, the Virginia Department of Fire Programs, the Virginia Department of Forestry and the Virginia Office of Emergency Medical Services.

The findings and recommendations are organized into five working themes to include:

- Organizational and Operational Development
- Communication
- Training
- Budget and Administration
- Delivery of Services

These working themes provide a central focus for prioritizing the study's recommendations. They serve as a guide for the Study Committee to identify and evaluate measures that ultimately will improve the quality and coordination of fire and rescue services within Grayson County.

Below is a high-level summary of the findings and recommendations, which will be discussed further in the report.

Theme 1: Organizational and Operational Development (Page 12)

- ***Combination System:*** As demand for service increases along with the limited availability for volunteers during the business day there is a growing need to modify the complexion of Grayson County's Fire and EMS System. To meet these changing needs, the County has to consider utilizing career staffing.
- ***Centralized Authority for Fire and Rescue Services:*** The County Government should embrace and codify a career Director of Fire and Rescue Services as the centralized position responsible for the supervision and authority for all fire and rescue issues throughout the County
 - The Board of Supervisors should restructure and convert the current informal Grayson County Emergency Services Association into one cohesive and effective entity through a countywide ordinance pertaining to Fire and

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.

Rescue. The entity will be referred to as “Fire and Rescue Association” through this report.

- Consolidation of Smaller Departments: The County Government must consider consolidation of smaller departments with little or no calls for service.
- Strategic Planning: The County’s fire and rescue organizations should develop a data-driven Strategic Plan with stakeholder input.
 - Grayson County should develop a mission and vision statement for the system that includes all fire & EMS responders’ participation and input.
- Accountability Practices: Grayson County should establish system wide Standards Operating Guidelines in an effort to establish guidance and accountability during emergency incidents. This guidance is aimed at ensuring that operations are safe and effective.
- Fire Prevention Activities: The County should adopt by ordinance a local fire prevention code and enforce the Statewide Fire Prevention Code; potential methods of enforcement are included herein.

Theme 2: Communications (Page 20)

- Improved Dispatch System: Protocols need to be written to ensure a consistent service delivery across the County. Uniform dispatch protocols will help address the need for standardization, clarification and communication.
 - It is important for Grayson County to incorporate Geographic Information System (GIS) mapping and Automatic Vehicle Locator (AVL) technology for real-time information within its dispatch system so that the closest appropriate unit responds to incidents
- Levels of Interdepartmental Communications: Grayson County must consider hosting a strategic communication session to resolve challenges between the Grayson County Board of Supervisors, the County Administration and members of the volunteer fire and rescue departments.

Theme 3: Training (Page 22)

- Coordinated Training Program: Grayson County government should work with the Fire and Rescue Association/Organizations in improving the current training program to address comprehensive training needs of the entire County.
 - Collaborative training promotes teamwork and can assist with personal communication and interpersonal relations between the career staff and volunteers personnel. To enable ease of access, the County should consider testing to take place at nearby Wytheville Community College in Galax.

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Theme 4: Budget and Administration (Page 25)

- County Funding: Grayson County Government assumes significant costs associated miscellaneous expenses. The County needs to ensure its service providers and citizens acknowledge the value of the insurance and other support it provides.

Financial Accountability: The County should require annual or biannual financial audits or an Agreed Upon Procedures (AUP) to be completed and submitted to the Budget Office or County Administration from the fire and EMS service providers.

- Standardization and Central Purchasing: Working with the Fire and Rescue Association, the County Administration should develop and implement a centralized purchasing option to establish equipment and apparatus standardization and reduce operational expenses.

Theme 5: Delivery of Services (Page 29)

- Response Standards: The County should establish and implement countywide response standards to ensure a high level of accountability. Grayson County can consider the use of Geographic information systems (GIS) technology which will improve planning and response tactics.
- Recruitment and Retention: Grayson County should adopt a countywide recruitment and retention plan in addition to examining the feasibility hiring Recruitment and Retention Position.
- Operations and Staffing: Grayson County should establish minimal staffing standards for apparatus response.

METHODOLOGY

For each task of the work plan, the Study Committee identified objectives, performed specific activities, and delivered project products. The following is an overview of the study process:

PHASE I: INITIATE PROJECT

Objectives: Initiation of Study

To initiate the study, the Study Committee began by gaining a comprehensive understanding of the project's background, goals, and expectations. This was carried out by identifying in detail the specific objectives for the review, and assessing how well the work plan would accomplish the objectives. In addition, the Study Committee set out to establish a mutually agreed project work plan, timeline, deliverables, and monitoring procedures that would support the accomplishment of all project objectives. The final study initiation step consisted of collecting and reviewing existing operational data, information on agreements along with relevant policies and procedures. Many of these review materials are included in the appendix of this study.

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

The meetings also allowed the Study Committee to obtain pertinent reports and background materials relevant to the review, such as current and historical staffing data, as well as a description of the current service delivery system and organization.

Based on this course of action, the Study Committee concluded this section of the study with a revised project work plan/timeline deliverable.

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 expected service levels;
- Identify opinions of department officials concerning the operations and performance of the department;
- Identify issues and concerns of officials 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.

Each goal was realized with the support of Grayson County's study project manager and current County Administrator, Mitch Smith. Mr. Smith assisted in finalizing the interview list and establishing a schedule that was reasonable, but more importantly convenient for the interviewees. All interviews were conducted during an allotted timeframe and a considerable amount of information was collected. Face-to-face interviews were conducted with all Grayson County's Fire and Rescue organizations, County leadership including the aforementioned County Administrator Mitch Smith. Additionally, per the County's request – the study team has also met with Chief of EMS with Galax-Grayson Emergency Medical Services along with David Hankley, Commissioner of Revenue for City of Galax. Disclosure, Mr. Hankley is presently on the Virginia Fire Services Board representing the Virginia Municipal League.

The Study Committee received descriptions of staffing and deployment responses in meeting service demands at targeted service levels. The discussions also provided a snapshot of personnel management contentions as well as concerns regarding service delivery. It is also important to note that the Study Committee visited all fire and rescue stations throughout Grayson County in an effort to supplement their research of the County's organizational functioning.

The deliverable for this section of the study work plan consisted of a thorough evaluation of the site visit data and the development of working themes to capture the team's assessment.

PHASE III: PREPARE ANALYSES AND DEVELOP CORE STRATEGIES

Objectives: Evaluate Current Trends and Prepare a Report

The third phase of the study work plan involved further investigation and understanding of the organizational structures, operations, limitations, achievements, and opportunities for improvement within the volunteer and career 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. Data obtained during the study process also assists the Study Committee in identifying issues influencing the current levels of service.

After receiving and critically evaluating information from the interviews and all supporting materials, the Study Committee began identifying the necessary critical action steps to achieve exceptional organizational functioning and uniform service levels throughout Grayson County.

Each action step was selected to identify the changes in policies, facilities, apparatus, and equipment to ensure that the County would be capable of providing fire-rescue services at the desired level going forward.

The deliverables achieved in Phase III involved drafting a report that evaluated current trends in the services, recommended action steps for improvement, and the assignment of responsibility.

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 designated locality project manager, Gina Franklin to ensure the content is accurate. Upon receiving corrections, the Study Committee revised the draft report, as needed, to assist in the preparation and issuance of the final report.

The deliverables for the final phase of the work plan consisted of 1) a draft report, and 2) the final report.

COUNTY DEMOGRAPHIC INFORMATION

Grayson County is located in the southwestern part of Virginia. According to the 2010 census, the population was 15,533. Grayson is home to Virginia's highest mountain, Mount Rogers which is approximately 5,729 feet above sea level. The mountain is accessible through the Grayson Highlands State Park, a site which hosts various outdoor activities including fishing, boating, hiking, camping, mountain biking, horseback riding, and backpacking.¹

Grayson County has about 446 square miles of which 442 square miles are land.² Major highways include; U.S. Routes, 21, 58 and 221.³ Additionally, the County has access to the following State Routes, 16, 89, 93, 94 and 274.⁴ According to Virginia Economic Development, a high percentage of the workforce is trained in manufacturing, forest products, light trades, and information technology.⁵

Grayson County has a County Administrator and a five-member Board of Supervisors. Independence is the County's seat. Other incorporated towns are Fries, Independence and Troutdale. The population of Grayson County is 17,917, 7,259 households, and 5,088 families residing in the County.⁶ The median income for a household is \$39,477 relative to its neighboring localities of Carroll County (\$45,434) and City of Galax (\$42,616).

The largest employers include, Hansen Turbine, Core Health and Fitness, McAllister Mills, Grayson Mill Works, Tritex, LLC, Stewart Furniture, Darco Southern Inc., Grayson Natural Farms, LLC, Independence Lumber Inc., C & B Lumber Inc. and Fox Creek Leather.⁷ According to the County Profile, two-thirds of the region, including City of Galax and Carroll County has about 24,000 individuals who all work within the region.⁸

Listing of Fire and Rescue Organizations

- Elk Creek Fire Department
- Elk Creek Rescue Squad
- Rugby Fire & Rescue Department
- Mt. Rogers Fire and Rescue Department
- Troutdale Fire & Rescue Department
- Independence Rescue Squad
- Independence Fire Department
- Fries Fire and Rescue Department
- Galax/Grayson Ambulance Service
- Galax Fire Department
- Baywood Rescue Squad

¹ Virginia Department of Conservation and Recreation, General Information on Grayson Highlands State Park

² U.S. Census Bureau, Quick Facts on Grayson County, Virginia

³ Virginia Economic Development Partnership, Grayson County Profile

⁴ Ibid

⁵ Ibid

⁶ U.S. Census Bureau, Quick Facts on Grayson County, Virginia

⁷ Virginia Economic Development Partnership, Grayson County Profile

⁸ Ibid

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The above first responders responsible for fire suppression provide an array of additional emergency services to the residents of Grayson County. The rescue squads within the County provide basic life support (BLS) and advanced life support (ALS) rescue ambulance services to all areas of the County. During 2016, Grayson County responded to approximately 1,050 fire and emergency medical services (EMS).⁹

⁹ For more information refer to Virginia Fire Incident Reporting System (VFIRS) Appendix 2 and Virginia Pre-Hospital Information Bridge Report Appendix 3

FINDINGS AND RECOMMENDATIONS

This section provides a summary of the five working themes for this study report. The summary is based on areas of concern that were repeatedly cited in the face-to-face interviews and observed during the site visit. Following this section is an in-depth examination of each theme, to include findings and recommendations.

Theme 1: Organizational and Operational Development (Page 12)

- Combination System
- Centralized Authority for Fire and Rescue Services
- Consolidation of Smaller Departments
- Strategic Planning
- Accountability Practices
- Fire Prevention Activities

Theme 2: Communications (Page 20)

- Improved Dispatch System
- Levels of Interdepartmental Communications

Theme 3: Training (Page 22)

- Coordinated Training Program

Theme 4: Budget and Administration (Page 25)

- County Funding
- Financial Accountability
- Standardization and Central Purchasing

Theme 5: Delivery of Services (Page 29)

- Response Standards
- Recruitment and Retention
- Operations and Staffing

Grayson County's fire and rescue service providers and administration should continue utilizing the national consensus standards. The standards were developed by the National Fire Protection Association (NFPA) with the input and support of fire and emergency services personnel, businesses, industry and other stakeholders, as guidance documents and resources to address several of the findings identified in this report.¹⁰

¹⁰ Visit the [National Fire Protection Association \(NFPA\)](#) website for a complete listing of the national consensus standards.

THEME 1: ORGANIZATIONAL AND OPERATIONAL DEVELOPMENT

One of the major concerns identified was the level of communication and coordination between the fire and rescue organizations and County leadership. Part of this issue occurs due to the lack of clarity in the organizational structure. Presently, there is no coordinated Grayson County Fire-Rescue System, but rather various independent agencies working alongside one another. This disorganization negatively affects the service delivery to the visitors and residents of Grayson County. Additionally, the confusion over the current organizational structure creates liability issues for the County. In order to improve Grayson's level of service, it is recommended that internal organizational development strategies be considered. This recommendation will serve to stimulate organizational cohesion, innovation, and effectiveness while guiding the inevitable change that will occur as Grayson County strengthens its fire suppression and rescue capabilities.

Combination System

Grayson County appears to successfully utilize its volunteer firefighters and emergency services responders. However, as demand for service increases along with the limited availability for volunteers during the business day there is a growing need to modify the complexion of Grayson County's Fire and EMS System. To meet these changing needs, the County has to consider utilizing career staffing.

Recommendation:

1. The study team recommends for Grayson County to consider model for strong combination system which must enable the County Government hire staff to supplement volunteers.
 - a. Career staff must be strategically placed based on assessment of historical service needs.

Centralized Authority for Fire and Rescue Services

In the current organizational structure, there is no one entity charged with the coordination of Grayson County's fire and rescue administrative and operational responsibilities. Therefore, each entity currently retains final operational authority over its members and operations. Additionally, there appears to be significant lack of understanding among all stakeholders of how the County's Fire and EMS system works.

Career Fire and EMS Management/Leadership: In an effort to keep pace with its evolving community, Grayson County should pursue and embrace a career Director of Fire and Rescue to serve as the centralized position responsible for the supervision and authority of all fire and rescue.

Emergency Services Association: Moreover, the County should consider restructuring the current Grayson County Emergency Services Association; an organization that is not recognized by County Code and is therefore perceived to be unofficial. Such pursuit will

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provide a unified command structure to effectively utilize and coordinate resources of a needs-based allocation structure, which will improve the quality of services rendered.

Ordinance: Grayson County’s current Fire and EMS System has not been established by county ordinance. The study team received an outdated (1973) ordinance page which cites “...County of Grayson, has and does hereby, recognize by this Ordinance that Galax, Independence, Fries, Elk Creek, Mt. Rogers and Troutdale Fire Departments and the Galax and Grayson County Rescue squads have been and are an integral part of the official safety program of the County of Grayson....”¹¹

Grayson County is further encouraged to develop standard operating procedures (SOP), standard operating guidelines (SOGs), or standard operating outlines (SOOs). Although the term is interchangeably used, it nevertheless helps identify clear objectives for the fire and EMS services.¹² Additionally, the plan provides administrative and operational benchmarks in an effort to fairly assess job performance. Lastly, SOGs ensure fire suppression operation is organized in a manner that can deliver sufficient personnel, equipment, and organization of resources during incidents.

Recommendations:

1. Board of Supervisors should embrace and codify a career Director of Fire and Rescue Services as the centralized position responsible for the supervision and management for all fire and rescue issues throughout the County.
 - a. The position should be codified through a local ordinance outlining specific responsibilities and expectations.
2. The newly formed Director of Fire and Rescue Services must ensure that public safety entities with the County are working as one.
 - a. Collaboration will help to develop ownership in a unified system and create transparency.¹³
3. The Board of Supervisors should restructure and convert the current informal Grayson County Emergency Services Association into one cohesive and effective entity.
 - a. It is imperative that this Association ensures all affected stakeholders have the ability to participate. Membership should seek participation from one member from each of the volunteer departments and squads, a representative from the paid service, presumably the paid chief and a provision for one named alternate for each person.
 - b. The name of the association should be decided by the entities involved. Suggested organization names include;

¹¹ See Grayson County Ordinance, Appendix 6

¹² For more information refer to [Developing Effective Standard Operation Procedures; for Fire and EMS Departments, FEMA 1999](#)

¹³ For more information refer to [Leading the Transition in Volunteer and Combination Fire Departments, November 2005](#)

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- i. Fire and Rescue Commission
 - ii. Fire and Rescue Council
 - iii. Fire and Rescue Association
 - *For the remainder of the report this entity will be referred to "Fire and Rescue Association or Association."*
 - iv. This Association should meet regularly to develop policies and procedures for Grayson County's Fire-Rescue System and provide advice and feedback directly to the County Administrator in collaboration with the Director of Fire and Rescue.
4. **Codification of Association:** This Association should be codified through a local ordinance outlining specific responsibilities and expectations to improve the organizational cohesiveness and efficiency.
 5. An organizational chart should be generated and distributed to all affected parties.
 6. Working with its membership, the Association should adopt a single countywide Standard Operating Procedures and Guidelines (SOPs/SOGs) with an accountability system.
 - a. It is critical that each department be consulted in the development and implementation of standardized policies and procedures. All departments have unique and special considerations that must be accounted for when developing these standards.
 - b. Once created, informational and training sessions must be held with all Grayson County fire and rescue members. New members should receive training on these standard operating guidelines during their orientation to ensure integration into the fire and rescue service.
 - c. Grayson County should take advantage of pre-existing resources on the development of Standard Operating Guidelines for Fire and EMS organizations, including,
 - i. [U.S. Fire Administration's Guide to Developing Standard Operating Procedures.](#)
 7. The County should explore assuming the administrative roles for the volunteer agencies. The effort will take a significant workload from the volunteer members allowing them to focus on service delivery and training. These functions could include:
 - a. Training scheduling, coordination, and delivery
 - b. Bulk purchasing and financing of equipment and supplies

- c. Billing of EMS services (a single contract for services will provide economies of scale and reduce cost/improve reimbursement)
- d. Recruiting and processing of volunteer applications to include required background checks by the Office of EMS.

Consolidation of Smaller Departments

Some of the fire departments receive few or no calls for service. It is the duty of local government to efficiently provide services without sacrificing quality. The Virginia Fire Incident Report and Virginia Department of Health's Office of Emergency Medical Service's Pre-Hospital Information Bridge for Grayson County shows at least two fire departments and rescue squads that have extremely low responses. Allocation of funding continues for these entities. This is not the best use of the limited resources.

Recommendations:

1. It is suggested that the Board of Supervisors explore the option of consolidating these individual organizations to maximize its limited resources and personnel.
 - a. Call volume, operational expenses, personnel and geographical location must be taken into consideration when determining if multiple departments could be consolidated.
 - b. The County will notice a benefit to having unique and descriptive names for each station and/or department. Overlapping vocabulary has bred confusion and animosity.
2. Grayson County and its fire and rescue organizations need to identify the unique challenges faced by each department and work to minimize or eliminate them.
3. Combine crews to maintain minimum County staffing (*i.e. three ambulances two fire apparatus, etc.*)
4. Contract for one Operational Medical Director (OMD) for entire system.

Strategic Planning

During the site visit, Grayson County's fire and rescue organizations acknowledged the need for increased coordination. It was often mentioned that Grayson County's parallel fire and rescue organizations work separately. Such process could be catastrophic during a major emergency. Operationally, this presents several concerns and barriers towards accomplishing a consistent, high quality level of service sought by Grayson County and its residents. This organizational challenge can be attributed to the fire and rescue services' lack of unified mission statement and strategic plan.

The first steps to resolving clarity within the fire and rescue services organizational structure is to pursue the establishment of a Strategic Plan. Planning must become institutionalized as an integral part of fire and rescue departments and community

resource allocations.¹⁴ A strategic plan will provide a basis for long-term operational planning and will serve as a framework for services.¹⁵ The strategic plan will further allow the vested parties the opportunity to create effective policies while attuned to its publics' interests, demands, and expectations. It is imperative to keep in mind that decisions only have legitimacy if parties involved work together and are in agreement.¹⁶ The strategic planning process will create public value for Grayson County if the fire and EMS and other stakeholders are fairly represented and there is effective use of relevant expertise along with transparency of the deliberations.¹⁷

Recommendations:

1. Working with an organized Fire and Rescue Association, the Grayson County Board of Supervisors and County Administration should adopt and implement a data-driven strategic plan for its fire and rescue services to increase performance levels and achieve lower cost of service delivery.
 - a. Stakeholders such as fire and rescue personnel along with county government must each play an integral part in the development of this strategic plan in order to meet the county's expectations and foster commitment.
 - b. Parties involved in the strategic planning process should analyze the gap between where the county is and where it wants to be in the future and identify strategies to close such gap.
 - c. The County should seek to reduce residents insurance cost by incorporating methods for improving their Insurance Service Office (ISO) rating into the strategic plan.
 - d. If feasible, it is suggested that a neutral party facilitate this process.
2. In developing its strategic plan, the Fire and Rescue Association should develop a unified vision and mission statement for the Grayson County Fire-Rescue System.
 - a. A unified vision statement will provide the fire and rescue organizations and Grayson County an expansive, aspiring image of the future of fire and rescue services. The vision statement should emphasize purposes, performance criteria, decision rules and standards that serve the public¹⁸.
 - b. A unified mission statement will ensure the fire and rescue organizations are collectively moving forward in one direction to improve service delivery. It will further foster a habit of focusing discussions and meetings on important issues.¹⁹

¹⁴ For more information refer to [Preserving and Improving the Future of the Volunteer Fire Service, March 2004](#)

¹⁵ For more information refer to [Leading the Transition in Volunteer and Combination Fire Departments, November 2005](#)

¹⁶ Mark Moore, *Creating Public Value: Strategic Management in Government*, 1995

¹⁷ Ibid

¹⁸ John Bryson, *Strategic Planning for Public and Nonprofit Organizations*, 2004

¹⁹ Ibid

3. The strategic plan should further create a system of measurable goals and objectives. The performance measurement's factors will strengthen the strategic plan.
 - a. The strategic plan should identify immediate, intermediate and long-term goals with reasonable target deadlines.
 - b. Goals and objectives should be quantifiable, consistent, realistic and achievable.²⁰
4. In developing its strategic plan, Grayson County's fire and rescue organizations should continue their commitment to using incident analysis and reporting, to include the Virginia Fire Incident Reporting System (VFIRS) and the Virginia Pre-Hospital Information Bridge (VPHIB).
 - a. Grayson County's commitment to reporting will ensure that they have reliable data to appropriately develop a plan to address operational and capital funding needs, or equipment, apparatus and facility needs.
 - b. By analyzing fire and rescue incident data and potential community hazards, a plan can be developed to address deployment of resources, placement of sub stations, and the number of personnel needed for response and prevention efforts.
 - c. Access to the data collected should be provided to rescue squads and fire departments so they are able to get a comprehensive understanding of their performance.
 - d. The use of data such as VFIRS and VPHIB can be contributing factors to performance measurement and can further enable stakeholders to assess the effectiveness of the strategic plan.

Performance measurements will enable the Board of Supervisors to evaluate the performance of fire and rescue entities tasked with accomplishing the goals and objectives of the strategic plan.²¹ The performance measurement will exhibit clear association between performing, planning, spending and results.²² Grayson County will have the opportunity to evaluate service delivery through three perspectives: financial accountability, constituent priorities and internal processes.²³

Accountability Practices

According to the National Fire Protection Association (NFPA), a standard operating procedure is "an organizational directive that establishes a standard course of action."²⁴

²⁰ For more information see, [Leading the Transition in Volunteer and Combination Fire Departments, November 2005](#)

²¹ Gerald Gordon, *Strategic Planning for Local Government*, 2005

²² Ibid

²³ Ibid

²⁴ For more information refer to [Developing Effective Standard Operating Procedures for Fire and EMS Departments, December 1999](#)

Thus, Standard Operating Procedures (SOPs) are written guidelines that explain what is expected and required of fire service personnel in performing their jobs.²⁵

During the site visit, the study team discovered the absence of SOPs for fire and rescue entities. Therefore, it is critical for the County to implement and follow a system of countywide SOPs to coordinate service delivery throughout the Grayson County. It is imperative that all members thoroughly understand their responsibilities and expectations. Organizations that lack SOPs are increasingly vulnerable to accidents, lawsuits, preventable costs, personnel problems, and damage to their professional image.

Recommendations:

1. The County should establish system wide Standards Operating Guidelines. Standard Operating Guidelines (SOG's) designed to provide guidance during emergency incidents.²⁶ This guidance is aimed at ensuring that operations are safe and effective. The main purpose of a SOG is to have everyone essentially operating from the same "playbook" at an incident.
 - a. The County should take advantage of pre-existing resources on the development of Standard Operating Guidelines for Fire and EMS organizations such as the [United States Fire Administration's guide on developing Standard Operating Procedures](#), along with other current organizational guidelines.
 - b. Once created, informational and training sessions should be held with all Grayson County fire and rescue members and partners.
 - c. The Table of Contents, or central listing and training, should be included in new members orientation to ensure integration into the organization or fire and rescue service.
2. Utilizing the guidelines outlined in NFPA 1561: Standard on Fire Department Incident Management Systems and Command Safety²⁷ in collaboration with the Association should formally establish, practice and strictly enforce a countywide Incident Management System policy and accountability system.
 - a. Increased structure and coordination to the management of emergency incidents will ensure the safety and health of fire-rescue personnel.
 - b. The County should adopt an incident management system to manage all emergency incidents and training exercises as well as adopt written plans to anticipate incidents that require standardized procedures.
 - c. National and state standards should be used as a guide for the development process, such as the Incident Command System.²⁸
 - d. It is recommended that these management practices and principles be developed, maintained, and reinforced through an on-going (annual) county-

²⁵ For more information refer to [Developing Effective Standard Operating Procedures for Fire and EMS Departments](#), December 1999

²⁶ Ibid

²⁷ For more information see, [NFPA 1561: Standard on Fire Department Incident Management Systems and Command Safety](#).

²⁸ For more information see [FEMA's Incident Command System Resource Center](#)

wide exercise program to include Table-Top Discussions, functional exercises, and full-scale exercises administered to ensure inter-departmental coordination, integration, and cooperation.

3. The County should appoint a Safety Officer with the authority to identify health and safety hazards and ensure that they are corrected.
 - a. Every emergency scene must be properly assessed to identify any potential hazards. This information will provide guidance in strategic and tactical decisions and must be communicated to all emergency responders.
 - b. The County must strive to protect its first responders at all times and should implement a standard personnel accountability system to account for all firefighters on scene.
 - c. The County should utilize NFPA 1521: Standard on Fire Department Safety Officer²⁹ as a guide for the development process.

Fire Prevention Activities

There is no one person or group in Grayson County responsible for all fire prevention activities, and as a result, a lack of focus on actual fire and injury related incidents and risks. The few activities that are accomplished are spread among several individuals with no formal organization or coordinated message. Grayson County has not opted to enact or enforce the Statewide Fire Prevention Code, which are *“statewide standards to safeguard life and property from the hazards of fire or explosion arising from the improper maintenance of life safety and fire prevention and protection materials, devices, systems and structures and the unsafe storage handling, and use of substances, materials and devices, including fireworks, explosives and blasting agents, wherever located.”*³⁰

Recommendations:

1. Grayson County should adopt by ordinance a local fire prevention code and enforce the [Statewide Fire Prevention Code \(SFPC\)](#) in accordance with [§ 27-97 of the Code of Virginia](#). The administrative provisions of the SFPC allows for cost recovery by a locality. Utilization of a fee structure would enable Grayson County to generate revenue to help support these activities.
2. Grayson County should designate someone who will enforce the Statewide Fire Prevention Code by appointing a fire code official in accordance with [§27-30](#) and [§27-34.2](#) of the Code of Virginia, or consider entering into a service agreement with a neighboring jurisdiction to perform inspections and enforcement

In the initiation of this fire prevention activity, Grayson County should utilize the NFPA 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code

²⁹ For more information see [NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications](#)

³⁰ See [Statewide Fire Prevention Code \(SFPC\)](#)

Enforcement, Plan Review, Investigation, and Public Education Operations.³¹ This standard should also be utilized for the development of a more long term and comprehensive fire safety and community risk reduction plan.

THEME 2: COMMUNICATIONS

In order to develop a cohesive Fire-Rescue System in Grayson County, the Board of Supervisors and the County Administration must foster positive internal and external communication among the county's fire and rescue organizations along with members of the general public. Without effective and trusting relationships, the County will have limited success with the recommendations contained in this report and any other attempts at coordinating and improving the fire and rescue services in Grayson County. Before other identified recommendations can be implemented, effective and reliable communication capabilities must be established between the volunteer departments and the county.

Fire and Rescue personnel must have access to reliable and instantaneous communications at all times to effectively coordinate response and recovery operations. Emergency communications is not solely a product of technology, but rather a condition of a locality's governance, standard operating procedures and training. To achieve an effective and efficient emergency response framework, all areas of emergency communications must collectively work effectively.³² Without reliable communications, the safety and security of Grayson County's fire and rescue service providers are jeopardized.

Recommendation:

1. Grayson County must consider hosting a strategic communication session to resolve challenges between the Grayson County Board of Supervisors, the County Administration and members of the volunteer and career fire and rescue departments.

Improved Dispatch System

The current dispatch system is located in the E-911 Dispatch Office in Galax. It utilizes four stations with up-to-date technology and is able to answer all calls-for-service for law enforcement, fire, and emergency medical services throughout the County. The study team was advised that the dispatch procedures utilized are not effective. In certain incidents, BLS responders are activated when the actual need for such situation requires an ALS responder. Over all, all entities interviewed during the site visit were pleased with the communication systems.

Recommendations:

³¹ For more information see, [NFPA 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations.](#)

³² Successful Response Starts with a Map. (2007). National Academies Press

1. Protocols need to be written to ensure a consistent service delivery across the County.
 - a. Uniform dispatch protocols will help address the need for standardization, clarification and communication.
 - b. Updating dispatch procedures without involving the volunteer community will exacerbate the already strained feelings between the County and its Fire and EMS departments. Therefore, it is highly recommended the use of Fire and Rescue Association to its full capacity.
2. It is important for Grayson County to incorporate Geographic Information System (GIS) mapping for real-time information within its dispatch system so that the closest appropriate unit responds to incidents.

Levels of Interdepartmental Communications

During the site visit, the study committee observed and documented inconsistent communication among fire and rescue and the County Government. There are continuous uncertainty and frustration issues related to how information is disseminated countywide. The lack of consistent, personal, and professional communications between service providers and its local government has the potential to affect the application of fire and rescue activities in Grayson County.

The burden lies with the County Administration and the Board of Supervisors to resolve any conflicting perception and ensure an open and honest dialogue is established. The County must identify and resolve the breakdowns in communications and work tirelessly to educate all members.³³ The current obstacles experienced by Grayson County have the potential to divert fire and rescue personnel from their core mission of assisting the residents of Grayson County. The volunteer personnel must understand that communications is a two-way process, therefore, all relevant parties must work together to provide the highest quality level of service for the county.

Recommendations:

1. The County should host a strategic communication session with a professional mediator to resolve existing challenges and barriers amongst the following entities; fire and rescue departments, Fire and Rescue Association along with Grayson County Administration and its Board of Supervisors.
 - a. The objective of this work session should be to develop strategies to overcome identified barriers. It should further create and implement an effective communication system involving fire and rescue departments, County Government and with the general public.

³³ For more information, see [Leading the Transition in Volunteer and Combination Fire Departments, November 2005](#)

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- b. The County must develop an efficient and effective communication model to ensure all stakeholders within the public safety community have input into long-term plans and decisions.
 - c. This communication model must ensure reliable documentation related to public safety strategic planning and development. It must be disseminated and received by all public safety stakeholders.
 - d. The communication session should further serve as an opportunity to clarify and establish countywide division of labor.
2. The County should explore additional ways to communicate with its fire and rescue personnel. Some options include producing an annual report, developing a quarterly newsletter and utilizing social networking avenues.
 3. The County should strengthen its fire and life-safety communication activities with the residents of Grayson County.
 - a. Increased efforts to promote the positives attributes of the fire and rescue services in Grayson County can raise morale and attract more volunteers. Some options include producing an annual report, developing a quarterly newsletter and utilizing social networking avenues.
 4. The County should take advantage of pre-existing fire and life-safety information available through state and federal organizations. Public fire and life-safety education resources are available at the following locations:
 - i. [Virginia Department of Fire Programs](#)
 - ii. [Virginia Fire and Life Safety Coalition](#)
 - iii. [The Home Safety Council](#)
 - iv. [National Fire Protection Association](#)
 - v. [Virginia Department of Forestry \(Grayson County Forestry Office\)](#)
 - vi. [Virginia Department of Emergency Management](#)
 - vii. [Vision 20/20 National Strategies for Fire Loss Prevention](#)

THEME 3: TRAINING

One of the secrets of a successful countywide Fire-Rescue System is the full integration of volunteer personnel, regardless of their affiliation, at the tactical level. Tactical equality recognizes all positions, from firefighter through senior fire officer and requires minimum training standards to ensure performance level.³⁴ Tactical equality is achievable in Grayson County if the departments provide performance-based, certifiable training and the opportunity for all volunteer personnel to train together. The approach will facilitate the development of personal and professional relationships. Training and continuity of

³⁴ For more information, see [Leading the Transition in Volunteer and Combination Fire Departments, November 2005](#)

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leadership are closely joined because solid basic training will foster strong and consistent cooperation among the County's emergency response agencies.

Moreover, similar to many occupations with high physical demand and hazards, injuries in the fire service are a regular concern for departments and the localities it serves.³⁵ Consequently, there has been increased adoption of Risk Management related policies (RM) within the fire services nationwide. Nationally, the fire services industry is pursuing formal proactive approach to improve occupational safety and health.³⁶

Grayson County's independent fire and EMS service providers have exhibited an informal method of utilizing risk management efforts. For example, the study team observed fire departments' individual requirement for new recruits to obtain at minimum of Firefighter I for interior structural firefighting. Additionally, the fire departments must be applauded for their consistent requirement for EVOC certifications in roles requiring driving apparatus although such requirement is not a statewide mandate. It is highly encouraged through the establishment and adoption of the Countywide SOG, both the volunteer entities and the County's Government collaborate in identifying which aspects currently utilized to manage risk within the scope of training is working and which areas could be improved.

Coordinated Training Program

Development of important skills is the basis for safety and improving services received by the citizens. During the site visit, the study committee heard the quantity and diversity of training was not adequately addressing the volunteers' training needs. Coordination to provide additional training opportunities is needed with an emphasis of increasing cohesion between the fire and rescue organizations and ensuring countywide cost-saving. Such effort must be led by the County's Government.

Recommendations:

1. The Association in collaboration with the Board of Supervisors and County Administrator should explore the feasibility of developing a comprehensive training program to be assessed annually and collectively coordinating the application of such countywide training program.
 - a. Ensure that training opportunities are scheduled to meet the needs of volunteer members. The county should consider establishing convenient courses schedules for weekends or nights so that offerings are spread across a longer period of time. The consideration must also be extended to specialty training.
2. Enhance efforts of collaborative multi-company training opportunities.

³⁵ For more information see, [Beyond the fire ground: injuries in the fire service. 2012](#)

³⁶ For more information see, [Establishing a proactive safety and health risk management system in the fire service. 2015](#)

3. To enable ease of access, the County should consider testing to take place at nearby Wytheville Community College in Galax.
4. The County should work collaboratively with the Fire and Rescue Association to ensure all fire and rescue service providers are competent, trained and capable to perform assigned duties.
5. The County must acknowledge the emphasis and importance of specialty training in Grayson County.
6. The Association in collaboration with the Board of Supervisors and County Administration should explore the feasibility of creating a Training Committee to develop and coordinate the application of a countywide training program. This committee should work to increase the number of trainings and collaborative multi-company training opportunities.
 - a. It is important for the Training Committee to ensure that the necessary training is being offered and with appropriate notice to ensure maximum turnout and return on investment.
 - b. Better coordination and increased local training opportunities will also assist with recruitment and retention efforts for Grayson County's fire and rescue organizations.
 - c. The County should explore utilizing both traditional classroom platforms as well as distance learning models. Online training allows greater flexibility in the application of courses to accommodate the schedule of volunteers.
 - d. The Board of Supervisors should appropriate all the necessary resources to fulfill the County's identified training challenges and fully train existing firefighters and rescue personnel.
7. The Fire and Rescue Association should encourage all new firefighters be cross-trained as Emergency Medical First Responders, at minimum, to enhance rescue capacity within Grayson County.
 - a. The Emergency Medical Responder/First Responder (EMR/FR) program offered by the Virginia Department of Health (Office of Emergency Medical Services) provides training in emergency care for those who are likely to be the first personnel responding to the scene of an accident, fire, or medical emergency.³⁷
 - b. The course prepares the responder to address the immediate life threats and injuries until more highly-trained personnel are available.
 - c. Having all firefighters obtain a first responder certification will ensure a rapid response in the event of a major medical emergency or trauma.

³⁷ For more information see, [Virginia Department of Health \(Office of Emergency Medical Services\) Educational Development Page](#)

- d. The Emergency Medical First Responder classes should be offered in conjunction with each Firefighter I program.

THEME 4: BUDGET AND ADMINISTRATION

For FY2017, Grayson County received a total of \$75,185 from the Commonwealth of Virginia’s Fire Programs Fund.³⁸ For FY2017, Grayson County received \$15,000 from the Office of Emergency Medical Services in Four-for-Life funds, which are utilized to fund training, personnel and equipment expenses.³⁹ Additionally, the County received \$11,352 from the Department of Forestry for a Fire Suppression Payment.⁴⁰ To supplement operational cost, some fire departments and rescue squads have a fundraising.

The study team was provided a copy of the County’s Expenditure Transaction Audit Train for FY2016 and FY2017. According to the expenditure report, Grayson County allocates \$2,500 to all fire departments and rescue squads, in addition to the \$1,000 it appropriates to the Grayson County Emergency Services Association. Moreover, the County uses Galax – Grayson Emergency Medical Services for ambulance coverage; it allocates \$80,000 to cover the associated expenses.⁴¹ Lastly, based on the study team’s perspective, Grayson County Government accrues significant costs associated miscellaneous expenses. Below is a brief review of the findings;

Vendor	Insurance FY16	Insurance FY17
Anderson Insurance	\$68,100.00	\$69,000.00
Anderson Insurance	\$93,060.00	\$94,000.00
Total	\$161,160.00	\$163,000.00

Vendor	Ambulance Services FY16	Ambulance Services FY17
Galax/Grayson Emergency Medical Services	\$40,000	\$80,000
Total	\$40,000.00	\$80,000.00

Vendor	Decal/Tag Refunds FY16	Decal/Tag Refunds FY16
Various County Volunteers etc.	\$3,500	\$3,500
Total	\$ 3,500.00	\$ 3,500.00

³⁸ Virginia Department of Fire Programs, *Aid to Localities* Report FY16 & FY17

³⁹ Grayson County Budget Documents, FY16 & FY17

⁴⁰ Ibid

⁴¹ Ibid

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It is evident that the County does not emphasize the support it provides to the various agencies. As cited above, while the locality provides some funding in cash, the County needs to ensure its service providers and citizens acknowledge the value of the insurance and other support it provides. Lastly, the County funds all agencies at the same level which shows its commitment to equity and consistency. However, the reality is that all agencies are not the same. A certain level of base funding should be determined, followed by a performance based payment. The pursuit would be more reflective of the call volume and resource need by each entity. Based on the 2016 Virginia Fire Service Needs Assessment, Grayson County cited it needs at minimum \$893,000 additional funding to enhance its fire and EMS system.⁴²

Financial Accountability

The County and its incorporated towns provide various levels of financial assistance without an accountability system in place. Such blanket funding is inefficient. Grayson County should restructure the funding model to better achieve equality. Budget transparency should not be perceived negatively or as a method for the county to micromanage its fire and rescue departments. The Board of Supervisors has been trusted by the citizens of Grayson County to exercise fiscal responsibility and must therefore ensure taxpayers' dollars are spent efficiently. The burden rests with the Grayson County Board of Supervisors to ensure its limited monies are utilized responsibly and fairly. Strong accounting practices and accountability measures provide fire and rescue leadership the opportunity to demonstrate its financial needs may be greater than the allocated monies. The Board of Supervisors should start requiring each fire department and rescue squad to annually provide yearly financial reports. Greater transparency over the budget will eliminate any distrust between the Board of Supervisors and the Fire-Rescue System's leadership.

Recommendations:

1. A formal accountability plan should be developed for county funds and revenue recovery funds. The plan should be communicated to citizens and members of the fire and rescue organizations.
 - a. The County should require annual or biannual financial audits or an Agreed Upon Procedures (AUP) to be completed and submitted to the Budget Office or County Administration.
 - b. Clarify and document any services provided to the volunteer agencies such as utility bills paid for, County decal reimbursements, hose testing, ladder testing, and pump/pack testing in one document as a "one pager" easy to read tool.
 - c. The County should promote such accountability process to exhibit the value of financial resources, human capital and time.

⁴² For additional detail see, [Virginia Fire Services 2016 Needs Assessment](#)

- d. This accountability plan should be developed with fire and rescue organizations' participation and must ensure it is in accordance to state and national standards.
 - e. By creating an accountability plan and communicating funding usage, confusion should be reduced among fire and rescue organizations on the usage of limited county funds.
2. With input from the Association, the Board of Supervisors should develop a capital improvement plan for upgrading its fire and rescue stations and equipment. At minimum it should include funding for apparatus replacement, turnout gear and air pack replacement.
 - a. Board of Supervisors should establish a countywide equipment replacement policy with an emphasis on rotational equipment replacement based on prioritized needs.
 3. The Grayson County Board of Supervisors should consider using a Grants Writer to assist the fire and rescue organizations with the acquisition and management of grants. This individual should research and consider the availability of all federal, state and private grant programs, including:
 - a. [Virginia Department of Forestry Grants](#)
 - i. Volunteer Fire Assistance (VFA) Grant
 - ii. Firewise Virginia Community Hazard Mitigation Grants:
 - iii. The Department of Forestry's Dry Hydrant grant.
 - b. [Federal Emergency Management Agency Firefighter Grants](#): The page contains links to the Assistance to Firefighters Grants (AFG) programs, Assistance to Firefighters Grants (AFG), Fire Prevention & Safety (FP&S), and Staffing for Adequate Fire and Emergency Response (SAFER).
 - c. [Virginia Department of Health-Office of Emergency Medical Services' Rescue Squad Assistance Fund \(RSAF\) Grants](#).
 - d. [Virginia Department and Virginia Fire Services Board Grants](#).
 - e. Various private grant programs.⁴³

Standardization and Central Purchasing

Grayson County's fire and rescue organizations have several outdated equipment in each stations throughout the county. It is important to ensure all apparatus are NFPA 1901 NFPA 1901 Standard for Automotive Fire Apparatus compliant. Several items were discovered to be more than 20 years old (NFPA 1901 recognizes apparatus to have 20 year life-term).⁴⁴

⁴³ A wide variety of Fire and EMS grants can be found on <http://www.grants.gov/> <http://www.firegrantshelp.com/nvfc/> and <http://www.emsgrantshelp.com/>

⁴⁴ For more information see, [NFPA 1901 Standard for Automotive Fire Apparatus](#)

Moreover, the County can potentially have cost-savings if there is standardization of future equipment and apparatus purchases. Standardization and Central Purchasing will not be without difficulty, but is necessary for delivering cost-effective and efficient fire and rescue services. Group purchasing is highly required in Grayson County. If there is resistance among entities involved, it is advised for the Board of Superiors to consider the renegotiation of any financial support for that particular entity.

Recommendation:

1. The County Administration should develop and implement a centralized purchasing option to leverage county purchasing power and reduce operational expenses.
2. The County Administration after consultation with the Fire and Rescue Association shall develop specifications for central purchase activity areas. Below are suggested areas/activities for central purchasing:
 - a. Personal Protective Equipment⁴⁵ and Self-Contained Breathing Apparatus⁴⁶
Ensure all departments are purchasing compatible equipment that meets National Fire Protection Association standards and are reaping the same cost savings.
 - b. Equipment/Apparatus – The Fire and Rescue Association should survey each department to determine if equipment commonalities exist. As previously mentioned, common apparatus specifications should be created and contracted, allowing volunteer organizations to make customizations without overly altering the specs, and reap the benefits of group purchasing for routine maintenance and replacement of aging ambulance and fire apparatus.
3. Explore the possibility of combining vehicle and personal insurance under one policy. The policy can be that of the County.
4. Establish a basic truck maintenance/service/fueling system within the county’s in house capabilities.
5. The Fire and Rescue Association should survey each department to determine if equipment commonalities exist.
 - a. Explore the opportunity to create an Apparatus Repair and Replacement Subcommittee within the Association order to identify and prioritize needs of apparatus replacement and/or repair.
 - b. This critical priority list of apparatus should utilize the NFPA 1911 – Standard for Inspection, Maintenance, Testing and Retirement of In-Service Automotive Fire Apparatus.⁴⁷

⁴⁵ See NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting

⁴⁶ See NFPA 1981 Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services

⁴⁷ See NFPA 1911 Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles

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- c. An inventory and capabilities of all vehicles should be provided to the Dispatch/Communication Center to improve dispatch development.
 - d. Fire and rescue departments must be strongly encouraged against making significant equipment purchases outside those approved by the Board of Supervisors. It is not fiscally responsible to make equipment purchases that place the County and individual departments in a financially unstable standing.
6. The Fire and Rescue Association should develop specifications for future apparatus purchases (considering the cost-effectiveness of regional contracts), refurbishment and replacement using the following national consensus standards:
- a. [NFPA 1901 - Standard for Automotive Fire Apparatus](#) ⁴⁸
 - b. [NFPA 1911 – Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles.](#)⁴⁹
 - c. [NFPA 1912 – Standard for Fire Apparatus Refurbishing](#) ⁵⁰

THEME 5: DELIVERY OF SERVICES

The County should critically analyze its current fire and rescue station locations and adopt all warranted changes. A thorough review of these response districts is required to ensure call volumes and response times are aligned along with placement of fire and rescue stations are strategic. Development must be a collaborative effort by the Fire and Rescue Association along with County’s Administration and Board of Supervisors. Grayson County must also consider geographical response areas in an effort to modify system status management. The use of Geographic information systems (GIS) technology has allowed first responders for better planning and action in an effort to reduce risk and increase efficiency.

Recommendations:

1. Grayson County must explore the use of GIS with Automatic Vehicle Locator (AVL) technology which can assist the locality with mapping of real-time and reliable information.
2. Grayson County Government should work with the Fire and Rescue Association to identify needs for additional fire and rescue personnel to meet service demands and citizen expectations.
 - a. The County Government should reexamine its current system and must find methods to effectively use the human capital that are in the fire and rescue system presently.

⁴⁸ See [NFPA 1901 - Standard for Automotive Fire Apparatus](#)

⁴⁹ See [NFPA 1911 – Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles](#)

⁵⁰ See [NFPA 1912 – Standard for Fire Apparatus Refurbishing](#)

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3. Fire and Rescue Association should provide scheduled updates to the Board of Supervisors and citizen groups on ongoing activity related to positive and negative areas of service delivery.
 - a. Information associated to call data is an effective tool that can exhibit an entity's ability to meet its community's needs.
4. Utilizing call volume data and geography, the Board of Supervisors should revisit the placement of its fire and rescue stations.
 - a. It is not in the best interests of the citizens to have overlapping service areas and multiple departments competing for emergency calls.
 - b. The Insurance Service Office (ISO) Grading schedule⁵¹ should be used to aid in the placement of fire and rescue stations and the development of the corresponding response districts.

Recruitment and Retention

Managing the recruitment and retention of fire service staff is essential to the operation of a fire department and ensures an effective department response. Volunteerism is strong in the county; the organizations are commended for their proactive efforts of recruiting volunteers. However, Grayson County falls within the current 48% of Commonwealth localities that has felt the impact of declining numbers of men and women volunteering for fire and rescue departments.⁵² According to the 2016 Virginia Fire Service Needs Assessment, Grayson County reported that it presently has zero career firefighters and 68 volunteer firefighters across its stations.⁵³ Moreover, the present call volume warranted 1 career firefighter and 20 additional volunteer firefighters to sufficiently staff the County.⁵⁴

Based on the study team's assessment, the County does not appear to lack incentives to retain current volunteers. As cited above, Grayson County spends about \$3,500 on County Decal Reimbursement annually for volunteers.⁵⁵ In regards to recruitment, the study team discovered the presence of limited action-oriented recruitment assistance from the County. It is highly encouraged for Grayson County Government to increase its efforts of helping stations recruit volunteers. With respect to retention, the study team believes the current incentives in place such as decal reimbursement is commendable. The County must provide increased leadership and participation towards the recruitment of volunteers. County Government and the Fire and Rescue Association should encourage emergency services leaders to contribute to other aspects of the community.

Recommendations:

1. Grayson County should create a countywide recruitment and retention program.

⁵¹ Insurance Services Office, Inc (2012).

⁵² For additional detail see, [Virginia Fire Services 2016 Needs Assessment](#)

⁵³ Ibid

⁵⁴ Ibid

⁵⁵ County Budget (Expenditure Transaction Audit Trail)

- a. The recruitment and retention program should take into consideration the needs of current volunteers and identify motivational factors to keep this population engaged and committed to the fire and rescue service. It is therefore encouraged for the county to improve on its current incentive based recruitment and retention program.
 - b. The county should set annual recruitment and retention goals and concentrate its efforts and resources to achieving these benchmarks. The plan should be included in the strategic plan.
 - c. Opportunities of partnering with high schools to create fire and EMS training should be explored.
2. The Fire and Rescue Association and County Government must identify additional fire and rescue personnel needs continuously.
 - a. Through improvement of fire and rescue incident data analysis and strategic planning, Grayson County will be able to determine fire and rescue personnel needs, equipment needs and deployment.⁵⁶
 3. The County Government and Fire and Rescue Association should collaboratively find low-cost methods to enhance public-education efforts such as open houses and creating Public Service Announcement (PSAs).⁵⁷
 - a. Improve the visibility of the Grayson County fire and rescue services in the community.
 - b. Word-of-mouth recruiting is effective; therefore, each volunteer should be encouraged to inform their respective community network about Grayson fire and rescue services' training and educational opportunities.
 4. According to interviewees, there is one major high school which can be utilized as a source for volunteers. Thus, the Board of Supervisors should adopt a local ordinance outlining the standard policies and identification measures for junior firefighters.
 - a. The occupation of firefighting has been declared hazardous. The *Code of Virginia § 40.1-79.1* outlines specific requirements, including a local ordinance, before a local jurisdiction can utilize junior firefighters.
 - b. Without specifically outlining the response role of these individuals, the County assumes a considerable level of liability should these members become injured.

⁵⁶ For additional detail on use of multiple data, see [International Association of Fire Chiefs \(IAFC\) - "Make Better Decisions: Put Your Data to Work"](#)

⁵⁷ [Fire Service Image Task Force Report: Taking Responsibility for a Positive Public Perception 15](#)

- c. A specific and strictly followed set of procedures allows other departments to know the limited response capabilities of these individuals and will improve overall response.
5. In addition, Grayson County's fire and rescue organizations should take advantage of pre-existing recruitment and retention information. Resources may be downloaded at the following locations:
 - a. Emergency Medical Services (EMS)
 - i. [Recruitment & Retention](#)
 - ii. [Leadership & Management](#)
 - b. [National Volunteer Fire Council](#)
 - c. [2004 Joint Legislative Audit and Review Commission Report on Review of EMS in Virginia.](#)

Operations and Staffing

Special attention should be made to ensure fire and rescue capabilities are adequate for the potential hazards presented by the economic developments in Grayson County and its interstate highway system. The study team was advised that in several stations, there is a lack of sufficient human capital for responses. 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 recommends the following staffing and response times;⁵⁸ Urban area must have at minimum 15 staff members with ability to respond to an incident within 9 minutes, suburban area, minimum of 10 members with a response time of 10 minutes at incident. Grayson County however is considered a rural area which according to NFPA 1720 must have at least 6 volunteer members available to respond to an incident within 14 minutes of dispatch.⁵⁹ Consequently, the volunteer companies interviewed shared a concern on the availability of minimum staff during an incident.

Recommendations:

1. Grayson County must consider establishing minimal staffing standards for apparatus response.
2. Grayson County should explore the possibility of establishing one Countywide EMS/Rescue Agency; individual stations can retain their names.
 - a. One Countywide EMS/Rescue Agency will enable efficient revenue recovery.
3. The County should look into obtaining one Operational Medical Director working under one set of patient care protocols.

⁵⁸ For more information see, [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](#)

⁵⁹ Ibid

4. The County should seek to reduce residents insurance cost by improving Insurance Service Office (ISO) ratings.
 - a. This can be accomplished through improved training records and adding more dry hydrants within the community.
 - b. The county should continue working with the Department of Forestry (DOF) to obtain additional Dry Hydrants.
 - i. Grants can be obtained through [Forestry's Dry Hydrant Grant Program](#).
5. Grayson County fire and rescue services should keep accurate records of incident response times in order to continuously assess response capabilities.
 - a) It is recommended that the county utilize the NFPA guidance documents as resource documents.
 - b) The 2014 edition of *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* addresses the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by all volunteer fire departments.

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APPENDIXES

Appendix 1: Grayson County Letter of Request – October 2016

Appendix 2: Grayson County - Virginia Fire Incident Reporting System Report Summary

APPENDIX 3: Grayson County – Virginia Pre-Hospital Information Bridge Report Summary

Appendix 4: Grayson County 2016 Needs Assessment Summary Statistics

Appendix 5: Grayson County FY2016 Aid-to-Localities Allocation Report

APPENDIX 1: GRAYSON COUNTY LETTER OF REQUEST



Grayson County Administrator
Jonathan D. Sweet, ICMA-CM

129 Davis Street
P.O. Box 217
Independence, Virginia 24348

Phone (276) 773-2471
(276) 236-8149
Fax: (276) 773-3673

October 14, 2016

Mr. Walter Bailey, Chairman
Virginia Department of Fire Programs
1005 Technology Park Drive
Glen Allen, VA 23059

Re: Comprehensive Analysis Study of Fire/EMS System Request – Grayson County

Dear Mr. Bailey,

This letter 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 Grayson County.

This study has the support of the Grayson County Board of Supervisors and County Administration as shown by the attached resolution adopted at the Board's October 13th, 2016 meeting.

The requested area of concentration of this study include:

- Organization
- Budget and Administration
- Training
- Delivery of Services
- Fleet Design and Management (Equipment/Apparatus)
- Emergency Medical Advisory Committee
- Grayson County Fire & Rescue Association

It is the proposal of the Board and County Administration 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 Grayson County.

Your consideration of this request at the next available opportunity would be greatly appreciated. Please do not hesitate to contact me with any questions you may have regarding this request.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jonathan D. Sweet".

Jonathan D. Sweet, ICMA-CM
County Administrator

CC: Mohamed G. Abbamin, MPA Policy Manager

APPENDIX 2: GRAYSON COUNTY – VIRGINIA FIRE INCIDENT REPORTING SYSTEM REPORT

The Virginia Department of Fire Programs manages the Virginia Fire Incident Reporting System (VFIRS). VFIRS is the statewide system for tracking all emergency responses with fire departments in Virginia. By reporting their incidents to VFIRS, fire departments document the details of their incidents for legal purposes and documenting the overall activities of their fire department.

Incident Summary, Grayson County, Virginia, 2012-2016

	2012	2013	2014	2015	2016	Grand Total
Fires	66	57	78	43	54	298
Rescue and EMS	106	65	79	59	118	427
Hazardous Condition	10	11	11	8	21	61
Service	5	6	14	9	5	39
Good Intent	12	4	22	20	67	125
False Alarm	3	7	16	24	27	77
Other Calls	9	1	3	1	5	19
Total Incidents	211	151	223	164	297	1,046
Aid Given	52	14	20	7	22	115
Fire Exposures	0	0	0	1	1	2
Grand Total	263	165	243	172	320	1,163

Fire Dollar Loss Summary, Grayson County, Virginia 2012-2016

Year	2012	2013	2014	2015	2016	Grand Total
Dollar Loss	\$594,155	\$407,250	\$200,700	\$170,600	\$797,550	\$2,170,255

Casualty Loss Summary, Grayson County, Virginia 2012-2016

Incident Type	2012	2013	2014	2015	2016	Grand Total
Civilian Fire Injuries	0	0	0	0	1	1
Civilian Fire Deaths	0	0	0	0	0	0
Fire Service Injuries	0	0	0	0	0	0
Fire Service Deaths	0	0	0	0	0	0

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.

APPENDIX 2: GRAYSON COUNTY – VIRGINIA FIRE INCIDENT REPORTING SYSTEM REPORT

Incident By Fire Department, Grayson County, Virginia 2012-2016

Fire Department	2012	2013	2014	2015	2016
Elk Creek VFD	32	30	27	18	28
Fries VFD	68	49	63	52	108
Independence VFD	10	63	133	93	160
Mount Rogers VFD	90	9	0	0	1
Troutdale Community VFD	0	0	0	0	0
Rugby Fire-Rescue	16	0	0	0	0
Elk Creek VFD	32	30	27	18	28
Fries VFD	68	49	63	52	108
Total Incidents	216	151	223	163	297

VFIRS PARTICIPATION BY FIRE DEPARTMENT, GRAYSON COUNTY, VIRGINIA 2012-2016

Fire Department	2012	2013	2014	2015	2016
Elk Creek VFD	1	1	1	1	1
Fries VFD	1	1	1	1	1
Independence VFD	1	1	1	1	1
Mount Rogers VFD	1	1	0	0	1
Troutdale Community VFD	0	0	0	0	0
Rugby Fire-Rescue	1	0	0	0	0
Fire Departments Participating	5	4	3	3	4
Total Fire Departments	6	6	6	6	6
Percent Reporting	83%	67%	50%	50%	67%

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.

APPENDIX 3: GRAYSON COUNTY – VIRGINIA PRE-HOSPITAL INFORMATION BRIDGE REPORT SUMMARY

The Virginia Department of Health’s Office of Emergency Medical Service manages the Virginia Pre-Hospital Information Bridge (VPHIB). VPHIB is the statewide system for tracking all emergency medical services (EMS) responses with EMS organizations in Virginia. In accordance with the *Code of Virginia*, “Maintaining a comprehensive emergency medical services patient care data collection and performance improvement system. (32.1-111.3)”

Agency ID	Agency Name	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Grand Total
197	Rugby Volunteer Fire Department & Rescue Squad	2012	15	12	12	12	17	9	11	11	8	14	17	17	155
		2013	9	2	10	18	11	17	14	12	10	13	13	5	134
		2014	18	14	19	11	20	3	9	17	12	8	12	16	159
		2015	12	10	14	12	9	9	16	15	8	10	10	14	139
		2016	5	6	15	7	6	12	15	9	11	10	8	14	118
Rugby Volunteer Fire Department & Rescue Squad Total			59	44	70	60	63	50	65	64	49	55	60	66	705
198	Independence Volunteer Rescue Squad	2012	57	42	60	66	74	50	56	58	55	57	77	71	723
		2013	70	54	58	67	69	51	55	69	50	59	58	60	720
		2014	77	70	64	93	69	55	71	69	58	59	68	86	839
		2015	70	68	62	61	65	59	66	56	56	49	65	59	736
		2016	56	36	66	56	92	91	70	82	115	112	125	106	1,007
Independence Volunteer Rescue Squad Total			330	270	310	343	369	306	318	334	334	336	393	382	4,025
387	Mount Rogers Volunteer Fire Department & Rescue Squad	2012	4	10	14	13	14	14	9	6	5	5	12	4	110
		2013	5	11	14	17	18	19	19	13	20	9	11	5	161
		2014	9	14	16	7	4	2	6	9	6	2	3	1	79
		2015	4	4	3	7	1	11	12	10	14	6	10	6	88
		2016	3	12	10	11	17	5	16	8	3	11	3	2	101
Mount Rogers Volunteer Fire Department & Rescue Squad Total			25	51	57	55	54	51	62	46	48	33	39	18	539

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.

388	Troutdale Volunteer Rescue Squad	2012	4	3	0	5	7	1	4	4	3	3	2	4	40
		2013	1	1	3	2	2	3	6	9	2	1	3	2	35
		2014	6	3	2	3	6	4	6	6	1	4	5	2	48
		2015	4	10	4	8	4	2	2	2	10	5	2	3	56
		2016	7	5	6	4	3	5	3	2	2	1	0	1	39
Troutdale Volunteer Rescue Squad Total			22	22	15	22	22	15	21	23	18	14	12	12	218
389	Fries Volunteer Fire Department & Rescue Squad	2012	17	8	18	12	27	23	34	32	27	22	19	40	279
		2013	42	46	36	24	35	23	49	36	28	17	38	25	399
		2014	22	25	26	30	23	42	40	28	36	20	25	20	337
		2015	29	26	24	26	40	22	30	35	27	26	37	34	356
		2016	52	25	28	36	28	46	34	36	35	29	24	38	411
Fries Volunteer Fire Department & Rescue Squad Total			162	130	132	128	153	156	187	167	153	114	143	157	1,782
514	Baywood Search & Rescue	2012	11	6	7	6	10	10	2	5	3	6	5	3	74
		2013	2	5	14	17	12	10	6	10	12	2	2	5	97
		2014	11	6	12	5	1	4	3	5	0	8	7	8	70
		2015	5	7	12	8	1	8	12	2	10	2	0	0	67
		2016	3	2	4	0	1	0	2	1	0	0	0	0	13
Baywood Search & Rescue Total			32	26	49	36	25	32	25	23	25	18	14	16	321
684	Elk Creek Rescue Squad	2012	9	14	3	2	11	16	8	12	3	1	7	6	92
		2013	13	5	8	6	13	8	7	16	3	4	3	1	87
		2014	6	4	5	5	6	4	10	7	8	4	2	4	65
		2015	8	4	2	3	5	8	4	7	4	2	0	5	52
		2016	4	2	0	1	11	3	4	1	8	6	2	3	45
Elk Creek Rescue Squad Total			40	29	18	17	46	39	33	43	26	17	14	19	341
Grand Total			670	572	651	661	732	649	711	700	653	587	675	670	7,931

Note: Data is compiled from patient medical records submitted to the Virginia Pre-Hospital Information Bridge (VPHIB) program (v2, v3) with the Virginia Department of Health, Office of Emergency Medical Services (OEMS), Division of Trauma/Critical Care for 2012-2016 as of 4/3/2017.

APPENDIX 4: GRAYSON COUNTY – 2016 NEEDS ASSESSMENT SUMMARY STATISTICS

The Fire Service Needs Assessment is an annual survey conducted by the Virginia Department of Fire Programs. Fire departments complete a survey questionnaire designed to identify their critical needs. Results are compiled and published in a comprehensive report available each June. The Department of Fire Programs received responses from all six fire departments located in Grayson County.

Fire Department Personnel	Current*	Need Reported**
Career Firefighters	0	0
Volunteer Firefighters	162	55
Paid-Per-Call	0	0
Total Firefighters	162	55
Civilian-Paid	0	0
Civilian-Volunteer	29	0
Total Civilian Personnel	29	0

**Taken from Supplemental Table 1 of the 2016 Virginia Fire Service Needs Assessment.*

***Number from Supplemental Table 7, means needed on top of the total column.*

Apparatus Owned	Current*	Need Reported **
Aerial Apparatus	0	0
Ambulance/Other Patient Transport	0	0
Command Support Unit	1	0
Command Vehicle (SUV)	2	1
Engine/Pumper	13	4
Fire/Rescue Boat	1	0
Hazardous Materials Vehicle	0	0
Heavy Technical Rescue Vehicle	0	0
Logistical Support Apparatus	1	0
Quint Combination Vehicle	0	0

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.

Tanker	4	3
Wildland Brush Truck	6	4
Other Apparatus	1	0

**Taken from Supplemental Table 2*

***Taken from Supplemental Table 5*

APPENDIX 4: GRAYSON COUNTY – 2016 NEEDS ASSESSMENT SUMMARY STATISTICS

Equipment Owned	Current*	Need Reported **
4-Gas Monitors	4	7
Map Coordinate System - GPS	8	12
Mobile Data Terminals	0	5
Personal Alert Safety Systems	72	25
Personal Protective Equipment	166	132
Radios with Emergency Alert Button	14	22
Radios without Emergency Alert Button	74	40
Self-Contained Breathing Apparatus (without integrated PASS)	0	60
Self-Contained Breathing (with integrated PASS)	86	0
Thermal Imaging Cameras	9	9
Other Equipment	0	0

**Taken from Supplemental Table 3*

***Taken from Supplemental Table 6*

APPENDIX 5: GRAYSON COUNTY FY2017 AID-TO-LOCALITIES ALLOCATION REPORT

Description	Population (2010 Census)	FY2017 Allocation
Grayson County	13,924	\$45,185
Troutdale (Town)	178	\$10,000
Fries (Town)	484	\$10,000
Independence (Town)	947	\$10,000
Total	15,533	\$75,185

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.

APPENDIX 6: GRAYSON COUNTY ORDINANCE

An Ordinance recognizing the County Fire Departments and Rescue Squads to be an Integral part of the Safety Program of Grayson County.

THAT WHEREAS, the Galax, Independence, Fries, Elk Creek, and Troutdale Volunteer Fire Departments and the Galax and Grayson County Rescue Squads have been and are an integral part of the official Safety Program of the County of Grayson; and,

WHEREAS, Title 15.1, Article 1.1, Code of Virginia 1950 (Line of Duty Act) for the purpose of said article provides "Deceased shall mean any person whose death occurs as the direct or proximate result of the performance of his duty as a law enforcement officer of this State or any of its political subdivisions, or as Sheriff, Deputy Sheriff, City Sergeant, or Deputy City Sergeant, or as a member of any fire company or department or rescue squad which shall have been recognized by an ordinance of any county, city or town of this State as an integral part of the official safety program of such county, city or town . . . " (15.1-136.2. Definitions), and

WHEREAS, the County of Grayson, Virginia, desires to expressly recognize by an Ordinance that the Galax, Independence, Fries, Elk Creek, and Troutdale Volunteer Fire Department and the Galax and Grayson County Rescue Squads are an integral part of the official safety program of the County of Grayson to comply with the said "Line of Duty Act" in order that any "beneficiary" as defined in said act shall be entitled to receive payment as provided in said act (15.1-136.3. Payments to beneficiaries of certain deceased law-enforcement officers, firemen, etc.).

NOW, THEREFORE, BE IT ORDAINED as follows:

That the County of Grayson has, and does hereby, recognize by this Ordinance that the Galax, Independence, Fries, Elk Creek, and Troutdale Volunteer Fire Departments and the Galax and Grayson County Rescue Squads have been and are an integral part of the official safety program of the County of Grayson, Virginia.

An emergency existing, this Ordinance shall be in effect upon its passage.

Effective date January 8, 1973.

AMENDMENTS:

Amendment Number I. Adopted July 9, 1973, effective immediately..

The Mt. Rogers Volunteer Fire Department shall be added to the list of Fire Departments that are part of the official safety program of Grayson County, Virginia.