

# VIRGINIA FIRE SERVICES BOARD



## A Report of Findings and Recommendations:

### **Nelson County Fire & EMS Study**



**March 2018**

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1. Lovington Fire Department
2. Nelson Rescue
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6. Montebello Fire Department
7. Roseland Rescue
8. Piney River Fire Department
9. Gladstone Fire & Rescue

## **EXECUTIVE SUMMARY**

This report documents the findings and recommendations for the Nelson 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 Nelson 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 Nelson County.

The study was requested by the Nelson 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
- Budget and Administration
- Delivery of Services
- Communication
- Training

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 Nelson 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)**

- **Centralized Authority for Fire and Rescue Services:** Nelson County should consider creating by ordinance, one Fire and Rescue Department headed by a full time Fire and Rescue Chief.
  - **Countywide Fire-Rescue Chief:** Nelson County should consider establishing by ordinance, countywide Fire-Rescue Chief as the central position responsible for the supervision and authority for all fire and rescue issues throughout the County.
  - **Emergency Services Council:** The Nelson County Board of Supervisors should restructure by ordinance the current informal Emergency Services Council into one entity with the purpose of providing administrative and operational oversight in conjunction with the Chief of Fire-Rescue. *The name of the organization will/can be decided upon by the County and its fire and*

*EMS stakeholders - the current Nelson County Emergency Services Council lacks formalized status with legitimate reputation.*

- **Strategic Planning:** The first steps to resolving clarity within the fire and rescue services organizational structure is to pursue the establishment of one Strategic Plan which covers Wintergreen Fire and Rescue along with the remaining Nelson County Fire and Rescue Volunteer entities.
- **Accountability Practices:** The County must adopt a single countywide Standard Operating Procedures and Guidelines (SOPs/SOGs) with an accountability system.
  - Utilizing two separate SOPs exhibits a failure to conduct operations consistent with current fire service practices.
- **Fire Prevention Activities:** Nelson County Board of Supervisors should adopt and enforce the Statewide Fire Prevention Code.

## **Theme 2: Budget and Administration (Page 21)**

- **County Funding and Capital Improvements:** With input from the Council, Nelson County should improve its 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 with consideration of inflation costs.
- **Financial Accountability:** A formal accountability plan should be developed for county and revenue recovery funds. The plan should be communicated to citizens and members of the fire and rescue organizations
- **Standardization and Central Purchasing:** Working with the Council, the County Administration should develop and implement a centralized purchasing option to establish equipment and apparatus standardization and reduce operational expenses.

## **Theme 3: Delivery of Services (Page 25)**

- **Tanker Task Force:** Nelson County should pursue efforts to establish a Tanker Task Force concept to improve water supply capabilities and re-evaluate its Insurance Service Office (ISO)<sup>1</sup> rating throughout county. For example, a task force consists of 3 separate tanker shuttle operations with a capacity to deliver 9,000 gallons of water during an incident.
- **Recruitment and Retention:** Nelson County should adopt a countywide recruitment and retention plan in addition to examining the feasibility hiring Recruitment and Retention Position.

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<sup>1</sup> **ISO - Insurance Service Office** - This is a, for profit, organization that provides statistical information on risk. "ISO Rating" has a large impact on fire departments and their respective localities. The ISO (PPC) rating is from 10 - 1. With "1" being the best.

- **Operations and Staffing:** Nelson County should establish minimal staffing standards for apparatus response.

#### **Theme 4: Communications (Page 29)**

- **Levels of Interdepartmental Communications:** Nelson County Government should consider hosting a strategic communication session with a professional mediator to resolve existing challenges and barriers amongst the following entities; Wintergreen Fire and Rescue, all Nelson County volunteer fire and rescue departments, the Council along with Nelson County Administration and its Board of Supervisors.
- **Infrastructure:** The Nelson County Board of Supervisors should appoint an Emergency Communications Advisory Committee to thoroughly analyze the County's dispatch system.
- **Fire and Life-Safety Communication:** Nelson County is commended for their detailed guidance on "developing your disaster plan." The four steps to safety outline provide the community an opportunity to keep their family and assets safe from various incidents including both manmade and natural disasters.

#### **Theme 5: Training (Page 32)**

- **Minimum Training Standards:** Nelson County needs to establish a countywide minimum training certification/qualification program.
- **Structured and Coordinated Training:** Aligning with the strategic planning efforts, it is recommended that structured and coordinated training program be established to address the comprehensive training needs of the entire county. It is further recommended placing an emphasis on the importance of specialty training and schedules.
- **Training Committee:** The Council/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.

## **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 Nelson 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 Nelson County's study project manager Russell Gibson. Mr. Gibson assisted in finalizing the interview list and establishing a schedule that was reasonable, but more importantly convenient for the interviewees. All interviews

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.

were conducted during an allotted timeframe and a considerable amount of information was collected. Face-to-face interviews were conducted with all Nelson County's Fire and Rescue organizations, County leadership including County Administrator Stephen Carter.

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 Nelson 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 Nelson 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, Russell Gibson 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**

The County of Nelson is located in central Virginia; it is bordered by the counties of Augusta, Rockbridge, Amherst, Appomattox, Buckingham, and Albemarle.<sup>2</sup> The County has a population of 15,161 and land area of 471 square miles.<sup>3</sup> The median household income is \$48,118; amongst the residents 77.8% of them own their homes with a median value of \$174,100.<sup>4</sup>

Nelson County is governed under the County Administrator and Board of Supervisors form of government. There are five-member Board of Supervisors and seven-member Economic Development Authority.<sup>5</sup> Similar to other localities in the Commonwealth, the County provides substantial municipal services, including general government administration; public safety and administration; education; health, planning and community development etc.<sup>6</sup>.

The seven-member Economic Development Authority promotes industrial development revenue bonds for businesses located within the County. The Authority board members are appointed by the County Board of Supervisors. Manufacturers in Nelson County include California Sidecar, which manufacture goods and ship them across the US and abroad.<sup>7</sup> The County has unique economic growth through its breweries and wineries along with the Wintergreen Ski Resort.

According to the County, it is dedicated to the protection of lives and property. Nelson County cites its goal is to “plan for an emergency through preparation and planning, respond to the actual event, initiate the recovery phase post-event, and help mitigate the known problem areas to prevent reoccurrence, if possible.”<sup>8</sup> During 2016, Virginia Fire Incident Reporting System exhibits that Nelson County responded to approximately 1,018 fire and emergency medical services (EMS).<sup>9</sup> The aforementioned amount is based on the locality’s reporting of fire and EMS activities within its jurisdiction. However, per the background information provided - Nelson County’s record keeping system reported over 5,000 fire calls and EMS calls.<sup>10</sup>

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<sup>2</sup> [Central Virginia Partnership for Economic Development, Nelson County](#)

<sup>3</sup> U.S. Census Bureau

<sup>4</sup> Ibid

<sup>5</sup> About Nelson County

<sup>6</sup> Ibid

<sup>7</sup> [Central Virginia Partnership for Economic Development, Nelson County](#)

<sup>8</sup> [Emergency Services, Nelson County](#)

<sup>9</sup> Virginia Fire Incident Reporting System (VFIRS) Appendix 2 and Virginia Pre-Hospital Information Bridge Report Appendix 3

<sup>10</sup> County Records (as submitted by County Administrator)

## **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)**

- Centralized Authority for Fire and Rescue Services:
- Strategic Planning:
- Accountability Practices:
- Fire Prevention Activities:

### **Theme 2: Budget and Administration (Page 21)**

- Financial Accountability
- County Funding and Capital Improvements:
- Standardization and Central Purchasing

### **Theme 3: Delivery of Services (Page 25)**

- Tanker Task Force
- Recruitment and Retention
- Operations and Staffing

### **Theme 4: Communications (Page 29)**

- Levels of Interdepartmental Communications
- Infrastructure
- Fire and Life-Safety Communication

### **Theme 5: Training (Page 32)**

- Minimum Training Standards
- Structured and Coordinated Training
- Training Committee

## **THEME 1: ORGANIZATIONAL AND OPERATIONAL DEVELOPMENT**

Nelson County has a significant lack of coordination of its fire and rescue services. Part of this issue arises due to the lack of clarity in the organizational structure. Presently, there is no coordinated Nelson County Fire-Rescue System. According to one interviewee, “there is very little to no Fire and EMS system or structure for volunteers in the County.”

The County is serviced by all volunteer fire and rescue with assistance from Wintergreen Fire and Rescue, which consists of over 28 full-time career fire services personnel along with 40 active volunteers.<sup>11</sup> There appears to be competing interests between the volunteers and the majority career entity at Wintergreen. Such issue creates a detrimental outcome with no long-term benefits.

There is one organization called Nelson County Emergency Services Council, which acts as an entity responsible for collectively resolving fire and rescue related issues. The organization assists with facilitating training and overall service delivery. It is not recognized by County Ordinance and is therefore perceived to be unofficial.

Additionally, the relationship between County Administration and Emergency Services Council is unclear. The Council does not have by-laws and according to records appears to accept County funding which it then distributes to each fire and rescue department. Lastly, the study team was advised the Council does not have annual audits done.

There is reasonable amount of disorganization that will negatively affect the service delivery to residents of Nelson County and its visitors. In order to improve Nelson County’s level of service, it is recommended that internal organizational development strategies be considered. This recommendation encourages organizational cohesion, innovation, and effectiveness while guiding the inevitable change that will occur as Nelson County strengthens its fire suppression and rescue capabilities.

### ***Centralized Authority for Fire and Rescue Services***

In the current organizational structure, there is no one entity charged with the coordination of Nelson County’s fire and rescue administrative and operational responsibilities. Each department currently retains final operational authority over its members. There is no formal documentation on how the fire and rescue organizations will work together or with the County. This creates confusion among members of the fire and rescue services and reduces accountability.

#### **The study team was advised the following exist in the County;**

- A. Countywide Director of Emergency Services
- B. Nelson County Emergency Services Council
- C. Countywide Emergency Services Coordinator

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<sup>11</sup> Nelson County Fire and Rescue

**Countywide Director of Emergency Services:** The Director of Emergency Services is established in the Nelson County Code of Ordinances, which specifies the Director is the Chairman of the Board of Supervisors (or, at the Board's discretion, a Board member is the Director). The Director does not receive compensation. The Director and Coordinator per the County's Emergency Operation Plan, include the following:

- **Director of Emergency Services and Coordinator of Emergency Services**
  - Continuity of government
  - Direction and control of emergency operations
  - Submission of State-required reports and records
  - Emergency public information
  - Coordinate damage assessment
  - Coordination of disaster assistance and recovery
  - Communications Center

**County Emergency Services Council:** According to interviewees, the Council has at minimum one representative from each volunteer rescue and fire station. The Council meets monthly in an effort to establish a consolidated annual budget request to the County. It further reviews applications of the County's zero interest loan programs for equipment and facilities.

**Countywide Emergency Services Coordinator:** The study team had the opportunity to meet with the newly appointed Countywide Emergency Services Coordinator. The Coordinator reports to the County Administrator. As a result of that, the study team is unclear on the authority of the Countywide Director of Emergency Services.

### **Recommendations:**

1. **Unified Fire and Rescue Department:** Nelson County must consider creating by ordinance, a Fire and Rescue Department headed by a full time Fire and Rescue Chief.
  - a. This will ensure all responders are capable of reporting directly under one Fire Department Identification (FDID). The number is assigned to the department to distinguish it from others throughout the area.
  - b. The newly formed Fire and Rescue Department must ensure that public safety entities within the County are working as one.
  - c. Collaboration will help develop ownership in a unified system and create transparency.<sup>12</sup>
2. **Countywide Fire-Rescue Chief:** Board of Supervisors should establish a Countywide Fire-Rescue Chief as the centralized position responsible for the supervision and authority for all fire and rescue issues throughout the County.

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<sup>12</sup> Leading the Transition in Volunteer and Combination Fire Departments, November 2005

- a. The position should be codified through a local ordinance outlining specific responsibilities and expectations.
  - b. This provides a unified command structure to effectively utilize and coordinate resources on a needs-based allocation structure, which will improve the efficiency of services provided to the citizens of Nelson County.
  - c. Additionally, this position could also perform the duties of a Director of Public Safety.
3. **Emergency Services Council:** The Nelson County Board of Supervisors should restructure the current informal Emergency Services Council into one entity with the purpose of providing administrative and operational oversight in conjunction with the Chief of Fire-Rescue.
- a. Organization should be codified through a local ordinance outlining specific responsibilities and expectations to improve the organizational cohesiveness and efficiency.
  - b. The Board of Supervisors should charge them to serve as a partner with the Fire and Rescue Chief.
  - c. Collaboratively should serve as centralized unit responsible for all fire and rescue issues throughout the County.
  - d. **Name:** The entity's name should be decided by the locality. Suggested organization names include;
    - 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 Council or Council."*
4. **Association Role:** The group should be charged with developing, analyzing, enacting and enforcing system-wide policies, system-wide operational decisions and specifications, and planning and procedures as may be adopted by this group.
- a. The group should meet on a standard date and time without exception; bylaws must be drafted in such a way that any member shall have the ability to place items on the agenda.
  - b. It is imperative that the group ensures that all affected stakeholders have the ability to participate.

- c. An organizational chart should be generated and distributed to all affected parties.
- 5. **System-wide Operational Specifications:** Working with their volunteer membership and County designees, the Fire and Rescue Council 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 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. Nelson 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, <http://www.usfa.dhs.gov/downloads/pdf/publications/fa-197.pdf>; and, International Association of Fire Chief's Volunteer and Combination Officers Section's Sample Administrative Policies, <http://www.iafc.org/micrositeVCOsorg/Resources/SOPlist.cfm?navItemNumber=6891>

### ***Strategic Planning***

During the site visit, Nelson County's fire and rescue organizations acknowledged the need for increased coordination. It was often mentioned that Nelson 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 Nelson 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 study team's research exhibited two separate entities in Nelson County with differing mission;

**Wintergreen Fire and Rescue:** The majority career department cites *"Wintergreen Fire and Rescue's mission is to provide the best possible pre-hospital care and fire suppression for the citizens of Wintergreen and our neighbors in the surrounding Nelson and Augusta Counties."*<sup>13</sup>

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<sup>13</sup> Wintergreen Fire and Rescue

**Nelson County Fire and Rescue:** The County's all volunteer fire and rescue articulates its mission to be *"This Department exists to protect and preserve the lives and property of residents and visitors of Nelson County from damage or loss due to fire, medical emergencies, environmental hazards and traumatic accidents."*<sup>14</sup>

The first steps to resolving clarity within the fire and rescue services organizational structure is to pursue the establishment of a one Strategic Plan which covers Wintergreen Fire and Rescue along with the remaining Nelson County Fire and Rescue Volunteer entities. The Strategic Plan will provide a basis for long-term operational planning and will serve as a framework for services.<sup>15</sup> Due to the current nature of Nelson County's fire and rescue, it is imperative that such planning must become institutionalized as an integral part of fire and rescue departments and community resource allocations.<sup>16</sup>

The strategic plan will further allow the vested parties the opportunity to create effective policies while attuned to its publics' interests, demands, and expectations. In public administration, decisions only have legitimacy if parties involved work together and are in agreement.<sup>17</sup> The strategic planning process will create public value for Nelson 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.<sup>18</sup>

## **Recommendations:**

1. Working with an organized Fire and Rescue Association, the Nelson County Board of Supervisors and County Administration should adopt and implement a strategic plan for its fire and rescue services to increase performance levels and achieve lower cost of service delivery. This must be expanded across the County's service providers including Wintergreen Fire and Rescue.
  - 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 ISO rating into the strategic plan.
  - d. It is suggested that a neutral party facilitate this process.

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<sup>14</sup> [Nelson County Fire and Rescue](#)

<sup>15</sup> Leading the Transition in Volunteer and Combination Fire Departments, November 2005

<sup>16</sup> Preserving and Improving the Future of the Volunteer Fire Service, March 2004

<sup>17</sup> Mark Moore, *Creating Public Value: Strategic Management in Government*, 1995

<sup>18</sup> Ibid

2. In developing its strategic plan, the Fire and Rescue Council should develop a unified vision and mission statement for the Nelson County Fire-Rescue System.
  - a. A unified vision statement will provide the fire and rescue organizations and Nelson 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 public.<sup>19</sup>
  - 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.<sup>20</sup>
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.<sup>21</sup>
4. In developing its strategic plan, Nelson 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. Nelson 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.

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<sup>19</sup> John Bryson, *Strategic Planning for Public and Nonprofit Organizations*, 2004

<sup>20</sup> Ibid

<sup>21</sup> Leading the Transition in Volunteer and Combination Fire Departments, November 2005

**Purpose of Performance Measurement:** 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.<sup>22</sup> The performance measurement will exhibit clear association between performing, planning, spending and results.<sup>23</sup> Nelson County will have the opportunity to evaluate its mission, vision and performance objectives through three perspectives: financial accountability, constituent priorities and internal processes.<sup>24</sup>

### ***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.”<sup>25</sup> Thus, Standard Operating Procedures (SOPs) are written guidelines that explain what is expected and required of fire service personnel in performing their jobs.<sup>26</sup> It is imperative that all members thoroughly understand their responsibilities and expectations.

**Standards Operating Procedures/Standard Operating Guidelines (SOP/SOG):** The document is designed to provide guidance during emergency incidents. People need consistency to achieve their assigned tasks. Providing written guidelines provides consistency in routines and further improves productivity.

**Nelson County’s SOP/SOG:** There are two separate SOPs across Nelson County. The first one established by the Nelson County Emergency Services appears to lack the level of detail an SOP requires. Additionally, there is little evidence all volunteer fire and rescues are practicing it. The study team was also provided a copy of Wintergreen Fire and Rescue’s SOP. As the paid EMS provider for Nelson County – Wintergreen has clearly articulated a standard response plan. It is recommended for the County to work together in establishing one cohesive SOP. Utilizing two separate SOPs exhibits a failure to conduct operations that reflect current fire service practices.

It is critical for the County to implement and follow a system of countywide SOPs to coordinate service delivery throughout the Nelson 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. Improve the current countywide SOP/SOG with an emphasis on producing single document to be used across all entities.

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<sup>22</sup> Gerald Gordon, *Strategic Planning for Local Government*, 2005

<sup>23</sup> Ibid

<sup>24</sup> Ibid

<sup>25</sup> Developing Effective Standard Operating Procedures for Fire and EMS Departments, December 1999

<sup>26</sup> Ibid

- a. The County should establish system wide Standards Operating Guidelines. Standard Operating Guidelines (SOG's) are designed to provide guidance during emergency incidents.<sup>27</sup> 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.
  - 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, <http://www.usfa.dhs.gov/downloads/pdf/publications/fa-197.pdf>, and current organizational guidelines.
  - Once created, informational and training sessions should be held with all Nelson County fire and rescue members and partners.
  - 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, County Government<sup>28</sup> 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.<sup>29</sup>
  - d. It is recommended that these management practices and principles be developed, maintained, and reinforced through an on-going (annual) county-wide exercise program to include Table-Top Discussions, functional exercises, and full-scale exercises administered to ensure inter-departmental coordination, integration, and cooperation.
3. Utilizing the guidelines outlined in NFPA 1561: Standard on Fire Department Incident Management Systems, Nelson County should formally articulate, practice and enforce a countywide Incident Management System policy and accountability system. Nelson County should further implement policy and protocols consistent

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<sup>27</sup> Ibid

<sup>28</sup> County Government refers to both Board of Supervisors and County Administration

<sup>29</sup> Incident Command System, Overview; <http://www.fema.gov/emergency/nims/IncidentCommandSystem.shtm>

with the principles and expectations of the National Incident Management System (NIMS).

- 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 emphasize the importance of incident management system in managing all emergency incidents and training exercises. Nelson County should further emphasize the importance of written plans to anticipate incidents that require standardized procedures.
  - c. The County should explore developing an on-going maintenance of local emergency operations plans for known or potential hazards through the development of the Standard Operations Procedures, Guidelines, or Protocol.
4. The County should consider appointing a Safety Officer with the authority to identify health and safety hazards and ensure that they are corrected.
- a. One individual should be charged to conduct research, recommendations along with the review and processing of injury claims.
  - b. 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.
  - c. 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.
  - d. The county should utilize NFPA 1521: Standard on Fire Department Safety Officer<sup>30</sup> as a guide for the development process.

### ***Fire Prevention Activities***

There is no one person or group in the County responsible for all fire prevention activities. The Nelson County Board of Supervisors has not adopted 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.”*<sup>31</sup>The primary recommendation would be for the County Board of Supervisors to adopt and enforce the Statewide Fire Prevention Code.

### **Recommendations:**

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<sup>30</sup> NFPA 1521, <http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=1521>

<sup>31</sup> 2009 Statewide Fire Prevention Code, Preface, page i.

1. Nelson County Board of Supervisors should adopt and enforce the Statewide Fire Prevention Code.
  - a. The Statewide Fire Prevention Code allows for cost recovery.
  - b. Utilization of a fee structure would enable the County to generate revenue to help support these activities.
  - c. If the Board of Supervisors feels it unattainable to adopt the Statewide Fire Prevention Code (SFPC), the locality should consider entering into a MOU/MOA with a neighboring locality to perform the Code inspection and enforcement.
2. The County Administrator should examine the feasibility of hiring a Fire Marshal to enforce the Fire Prevention Code, conduct fire investigations and coordinate public fire and life safety education. Additionally, this individual should prepare, practice and evaluate detailed emergency response plans for every major business in the County.

## **THEME 2: BUDGET AND ADMINISTRATION**

During the site visit, the study team learned that the County does not have oversight on volunteer agencies' budgets. The Emergency Services Council annually submits a consolidated and categorical budget request on behalf of volunteer agencies. For example, FY18, the county reimburses the agencies for various expenditures incurred in calendar year 2017 and likewise in FY17, the reimbursement is for calendar year 2016.

For FY2017, Nelson County received a total of \$48,742 from the Commonwealth of Virginia's Fire Programs Fund. Additionally, Nelson County received approximately \$17,494 from the Office of Emergency Medical Services in Four-for-Life funds, which are utilized to fund training, personnel and equipment expenses.<sup>32</sup> To supplement operational cost, some fire departments and rescue squads have a fundraising.

### ***County Funding and Capital Improvements***

The County provides various levels of financial assistance without an accountability system in place. The study team observed the following;

- a. **Disability Insurance:** Volunteer Accident and Sickness coverage and the cost of Line of Duty Act coverage
  - i. FY 17 County paid \$40,023 for Volunteer Accident & Sickness coverage
  - ii. FY 17 County paid \$30,510 for LODA coverage
- b. **Direct Payment:** Lovingston Fire and Nelson Rescue: Fuel expense paid directly by the county for Lovingston Fire and Nelson Rescue.
  - i. FY17 County paid \$19,345.

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<sup>32</sup> Office of Emergency Medical Services and Nelson County FY17 and FY18 Budget

- c. **Reimbursement:** The County remits a lump sum payment, based upon approved, funding categories, directly to the Emergency Services Council which then distributes the funding to the various Fire and Rescue agencies.
  - i. FY17 County paid \$ 475,980
- d. **Miscellaneous:** Radios and related equipment and repairs.
  - ii. FY17 County paid \$5,410

According to the County Budget Document, the County allocated \$571,268 to its fire and rescue.

**Contracted EMS Services:** Nelson County has 24/7 coverage throughout the County by Wintergreen Fire and Rescue - annually allocating \$714,507 (FY17) for EMS.

**Capital Improvement Projects:** The County has annually provided funding for purchase of EMS and fire equipment on a rotating basis. As of November 2017, the County's total outlay was \$1,230,541 with an additional \$393,000 budgeted for FY18. According to the Finance Office, Nelson County provides a local match to state grants for ambulances (50/50) while also paying approximately 80% towards purchase of a fire truck. Although the contribution is commended, the County has no ownership on vehicles.

**Revenue Recovery:** Nelson County utilizes soft billing for a revenue recovery program. The annual revenue recovery program produces in the range of \$465,000 - \$495,000 per year.

### ***Financial Accountability***

**Inefficient Allocation of Resources:** Such blanket funding is inefficient. Nelson County should restructure the funding model to better achieve equality. The Board of Supervisors has been trusted by the citizens of Nelson County to exercise fiscal responsibility and must therefore ensure taxpayers' dollars are spent efficiently. The burden rests with the Nelson 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. 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 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 Budget Office or County Administration.

- b. Clarify and document any services provided to the volunteer agencies such as 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.
  - 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 Fire and Rescue Association, the Board of Supervisors should improve its 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 with consideration of inflation costs.
- a. Board of Supervisors should establish a countywide equipment replacement policy with an emphasis on rotational equipment replacement based on prioritized needs.
3. The Nelson County Board of Supervisors should consider the use of Grants Writers 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. The Department of Forestry’s Volunteer Fire Assistance (VFA) grants: <http://www.dof.virginia.gov/fire/index-vfa.htm>
  - b. The Department of Forestry’s Firewise Virginia Community Hazard Mitigation grants: <http://www.dof.virginia.gov/fire/index-mitigation.shtml>
  - c. The Department of Forestry’s Dry Hydrant grants: <http://www.dof.virginia.gov/fire/dryhydrant/dry-hydrant.htm>
  - d. The Federal Emergency Management Agency’s Assistance to Firefighter Grant (AFG): <http://www.firegrantsupport.com/content/html/afg/>
  - e. The Virginia Department of Health-Office of Emergency Medical Services’ Rescue Squad Assistance Fund (RSAF) Grants: <http://www.vdh.state.va.us/OEMS/Grants/index.htm>
  - f. The grant programs offered by the Virginia Fire Services Board (VFSB) through the Virginia Department of Fire Programs (VD FP).<sup>33</sup>
  - g. Various private grant programs.<sup>34</sup>

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<sup>33</sup> A listing of available VFSB is available online, [http://www.vafire.com/grants\\_local\\_aid/index.htm](http://www.vafire.com/grants_local_aid/index.htm)

### ***Standardization and Central Purchasing***

Nelson County's fire and rescue organizations must pursue serious efforts to continue using the central purchasing process. Moreover, the study team discovered that the County can experience additional cost-savings if there were a 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 Nelson County. It is imperative that the County enforce minimum specifications for apparatus and equipment if distributing funding assistance.

#### **Recommendation:**

1. Establish a basic fire apparatus standard for equipment such as Engines and Tankers.
  - a. Standardization of equipment is important as volunteers are dwindling. When there is more mutual aid being utilized, it is important for volunteer personnel to be knowledgeable on how to utilize another fire department's equipment.
2. The County Administration should develop and implement a centralized purchasing option to leverage county purchasing power and reduce operational expenses.
3. The County Administration after consultation with the Fire and Rescue Council shall develop specifications for central purchase activity areas. Below are suggested areas/activities for central purchasing:
  - a. Personal Protective Equipment<sup>35</sup> and Self-Contained Breathing Apparatus<sup>36</sup>  
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 Council 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.
4. The Fire and Rescue Council should survey each department to determine if equipment commonalities exist.

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<sup>34</sup> 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/>

<sup>35</sup> NFPA 1971, <http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1971>

<sup>36</sup> NFPA 1981, <http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1981>

- 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.<sup>37</sup>
  - 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.
5. The Fire and Rescue Council 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 <sup>38</sup>
  - b. NFPA 1911 – Standard for Inspection, Maintenance, Testing and Retirement of In-Service Automotive Fire Apparatus <sup>39</sup>
  - c. NFPA 1912 – Standard for Fire Apparatus Refurbishing <sup>40</sup>

### **THEME 3: DELIVERY OF SERVICES**

Several outside factors are affecting the fire and rescue personnel in Nelson County. Similar to many other jurisdictions, the county lacks adequate personnel to address call volume and growing administrative requirements. According to the 2016 Virginia Fire Service Needs Assessment, Nelson County reported that at the present call volume the locality needs at least 50% more than its current apparatus ownership along with 10 new volunteer personnel and at minimum 3 paid firefighters so it is able to sufficiently service their stations.<sup>41</sup>

**EMS/Rescue:** According to the County Administrator’s Office, the volunteer entities in Nelson County work very hard to maintain their established first due call areas. However, the County’s main concern is the reduced capacity for the volunteer EMS agencies to respond to service calls. The County Government is further concerned about the EMS staff’s ability to maintain required certifications to successfully be active responders.

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<sup>37</sup> NFPA 1911, <http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1911>

<sup>38</sup> NFPA 1901, <http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1901>

<sup>39</sup> NFPA 1911, <http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1911>

<sup>40</sup> NFPA 1912, <http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1912>

<sup>41</sup> See Appendix 4: 2016 Virginia Fire Service Needs Assessment.

**Fire:** Similar to the EMS – the County’s concern relates to the limited number of volunteers. Amongst the fire departments, some have at least 20-30 active volunteers while others have 7-8 volunteers. The inconsistency creates complex response issue as it relates to the availability of personnel capable of covering majority of their respective calls.

**Station Locations:** The County should critically analyze its current fire and rescue station locations. 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 Fire and Rescue Council along with county’s administration and Board of Supervisors.

**Water Supply:** There are areas within the County that has limited water supply or lacks dry hydrants. Lack of water mains and fire hydrants can potentially weaken a fire department's ability to do its job quickly and efficiently.<sup>42</sup> Therefore, the study team would encourage the County to pursue efforts of developing a tanker shuttle task force plan. Additionally, Nelson County should contact their respective liaison from the Department of Forestry (DOF) in an effort to obtain additional dry hydrants.

## **Recommendations:**

1. **Response Criteria:** Nelson County should establish and implement countywide standards to ensure a high level of accountability.
2. **Personnel:** Nelson County Government should work with the Fire and Rescue Council 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.
3. **Service Delivery Status:** Fire and Rescue Council 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. **Tanker Task Force:** Nelson County should pursue efforts to establish a Tanker Task Force concept to improve water supply capabilities and re-evaluate ISO rating throughout county.

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<sup>42</sup> Virginia Department of Forestry

- a. **Example:** Use of 3 separate tanker shuttle operations which has the capacity to dump at 1500 gpm or pumpoff at rates in excess of 1000 gpm through a single 4" discharge. Tank capacity is 3000 gallons. It has a secondary role as a Class A foam supply unit.
- b. This can be accomplished through improved training records and adding more dry hydrants within the community.
- c. The county should continue working with the DOF to obtain additional Dry Hydrants.
  - i. Grants can be obtained through DOF's Dry Hydrant Grant Program: <http://www.dof.virginia.gov/fire/dry-hydrants.shtml>.

- 5. **Station Location:** 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 ISO Grading schedule<sup>43</sup> is used to aid in the placement of fire and rescue stations and the development of the corresponding response districts.

### ***Recruitment and Retention***

Recruiting and retaining quality personnel is an essential component to the overall success of a volunteer fire and rescue departments. Like many areas throughout the nation and the Commonwealth of Virginia, Nelson County has felt the impact of declining numbers of men and women volunteering for fire and rescue departments. Currently, there is absolutely no assistance from the County to help the fire and rescue organizations recruit personnel.

The study team encourages increased efforts on the part of County Government to recruit and retain volunteers. In order to relieve the current burden of limited human capital, the County must provide increased leadership and participation towards the recruitment of volunteers. County Government and the Fire and Rescue Council should encourage emergency services leaders to contribute to other aspects of the community.

### **Recommendations:**

- 1. Nelson County should create a countywide recruitment and retention program.
  - 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.

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<sup>43</sup> Insurance Services Office, Inc (2012).

- 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 County should establish a Recruitment and Retention Officer position to serve all countywide recruitment efforts.
- 3. The Fire and Rescue Council 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, Nelson County will be able to determine fire and rescue personnel needs, equipment needs and deployment.<sup>44</sup>
- 4. In addition, Nelson 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. <http://www.vdh.virginia.gov/emergency-medical-services/>
  - b. How to become an Emergency Medical Services Provider in Virginia
    - i. <http://www.vdh.virginia.gov/emergency-medical-services/education-certification/how-to-become-an-emergency-medical-services-provider-in-virginia/>
  - c. 2004 Joint Legislative Audit and Review Commission Report. "Review of EMS in Virginia" Part III of the report; *Recruitment, Retention and Training of EMS Providers* (Page 55) – <http://jlarc.virginia.gov/pdfs/reports/Rpt312.pdf>

### ***Operations and Staffing***

Several issues are affecting the fire and rescue personnel of Nelson County's fire and rescue service. Currently, there is no position or group charged with the oversight and authority for the County's fire and rescue organizations. As cited in the first theme, all entities operate independently of each other and at times have limited communication and interaction with neighboring organizations. There is no minimum number of responders per response apparatus. NFPA has established a two in and two out rule for structural firefighting. It is imperative for a community to establish their respective standards in

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<sup>44</sup> International Association of Fire Chiefs (IAFC) - "Make Better Decisions: Put Your Data to Work," <http://www.iafc.org/MemberCenter/OnSceneArticle.cfm?ItemNumber=5840>. This article provides an example of how multiple sources of data can be incorporated into fire and rescue department planning.

accordance to budget and human capital consideration. Consequently, Nelson County must pursue efforts to establish minimal staffing standards.

### **Recommendations:**

1. Nelson County must consider establishing minimal staffing standards for apparatus response.
2. The County should look into obtaining one Operational Medical Director working under one set of patient care protocols.
3. Nelson 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 2010 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.

### **THEME 4: COMMUNICATIONS**

In order to develop a cohesive Fire-Rescue System in Nelson 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 Nelson 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.<sup>45</sup> Without reliable communications, the safety and security of Nelson County's fire and rescue service providers are jeopardized.

### ***Levels of Interdepartmental Communications***

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<sup>45</sup> Ten Years After 9/11: Improving Emergency Communications: Hearing before the U.S. Senate Homeland Security and Governmental Affairs Committee (July 2011).

During the site visit, the study committee observed a need for improved communication among county government, Wintergreen Fire and Rescue and all other volunteer entities. Lack of effective personal and professional communications can have the potential to affect the application of fire and rescue activities in Nelson 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.<sup>46</sup> There is

### **Recommendations:**

1. Nelson County Government should consider hosting a strategic communication session with a professional mediator to resolve existing challenges and barriers amongst the following entities; Wintergreen Fire and Rescue, all Nelson County volunteer fire and rescue departments, the Council along with Nelson 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.
  - 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.

### ***Infrastructure***

All of the personnel interviewed during the site visit expressed a high level of concern on the Emergency Communication System. For example, the County did not engage the procurement of the new system to stakeholders. There are numerous dead spots or “ghost calls” throughout the County which makes it difficult for consist service delivery. One interviewee cited that text alerts must be improved to clarify severity of calls and number of personnel responding so volunteers do not leave their job for a minor incident.

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<sup>46</sup> Leading the Transition in Volunteer and Combination Fire Departments, November 2005

1. The Nelson County Board of Supervisors should appoint an Emergency Communications Advisory Committee to thoroughly analyze the County's dispatch system.
  - a. The Committee should meet at least quarterly, and more often if needed.
  - b. Membership shall be compromised of fire, rescue, law enforcement and a citizen representative.
  - c. The Committee shall review dispatch protocols, procedures and equipment upgrades and provide recommendations to the previously mentioned Director of Fire and Rescue Services.
2. Based on guidance from the Emergency Communications Advisory Committee and the Dispatch Center should adopt standard dispatch protocols and procedures.
  - a. The level of response should be consistent across departments and throughout the day.
  - b. The unique and special response circumstances established by several departments need to be eliminated.
  - c. Standardization of dispatch protocols will improve the overall effectiveness and efficiency of Nelson County's fire and rescue response.

### ***Fire and Life-Safety Communication***

Nelson County is commended for their detailed guidance on "developing your disaster plan." The four steps to safety outline provide the community an opportunity to keep their family and assets safe from various incidents including both manmade and natural disasters. Nelson County appears to be far more advanced in fire and life safety communication to stakeholders.

1. The County should strengthen its fire and life-safety communication activities with the residents of Nelson County.
  - a. Increased efforts to promote the positives attributes of the fire and rescue services in Nelson County can raise morale and attract more volunteers. Some options include producing an annual report, developing a quarterly newsletter and utilizing social networking avenues.
2. 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: [http://vafire.com/fire\\_safety\\_education](http://vafire.com/fire_safety_education)
  - ii. Virginia Fire and Life Safety Coalition: <http://www.vflsc.org>
  - iii. The Home Safety Council: <http://www.homesafetycouncil.org>
  - iv. National Fire Protection Association: <http://www.nfpa.org>

- v. Virginia Department of Forestry: <http://www.fireNelsonvirginia.org>
- vi. Virginia Department of Emergency Management: <http://www.vaemergency.gov/social-media/alert-localities>

### **THEME 5: 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.<sup>47</sup> Presently, the County does not have any training requirements or standards for the various positions; i.e. firefighter, driver/operator or officer. Rather, there are training standards at each individual department.

However, tactical equality is achievable in Nelson County if the departments provide performance-based, certifiable training and the opportunity for all volunteer and career personnel to train together. The approach will facilitate the development of personal and professional relationships. Training and continuity of leadership are closely joined because solid basic training will foster strong and consistent cooperation among the County's emergency response agencies.

#### ***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 as well as cost-saving.

#### **Recommendations:**

1. **Countywide Minimum Training Standards:** Nelson County needs to establish a countywide minimum training certification/qualification program.
  - a. Such assessment will enable the adoption of warranted changes.
2. **Structured and Coordinated Training:** Aligning with the strategic planning efforts, it is recommended that structured and coordinated training program be established to address the comprehensive training needs of the entire county. It is further recommended placing an emphasis on the importance of specialty training and schedules.

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<sup>47</sup> Leading the Transition in Volunteer and Combination Fire Departments, November 2005

- a. **Relevant Trainings:** Nelson County must consider the following training enhancement efforts in an effort to ensure a rapid response in the event of a major medical emergency or trauma.
  - i. Establish a Fire Training Officer and EMS Training Officer under the Department of Fire and Rescue to provide adequate training.
  - ii. Encourage new firefighters be cross-trained as Emergency Medical Responders (EMR), at minimum, to enhance rescue capacity within Nelson County.
1. The Emergency Medical First Responder classes should be offered in conjunction with each Firefighter I program.
  - a. **Source:** 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.<sup>48</sup>
  - b. The course prepares the responder to address the immediate life threats and injuries until more highly-trained personnel are available.
3. **Training Committee:** The Council 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.
  - a. **Structure of Committee:** Decision on how to establish this training committee is left to Nelson County.
  - a. **Quantity of Training:** Committee should work to increase the number of trainings and collaborative multi-company training opportunities.
  - b. **Notice of Training:** 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. **Increased Local Training Opportunities:** Better coordination and increased local training opportunities will also assist with recruitment and retention efforts for Nelson County's fire and rescue organizations.
4. **Classroom and Distance Learning:** The County should explore utilizing both traditional classroom platforms as well as distance learning models. Online training

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<sup>48</sup> Virginia Department of Health (Office of Emergency Medical Services) and FY14 Nelson County Budget

allows greater flexibility in the application of courses to accommodate the schedule of volunteers.

- a. **Training Resources:** 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.

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## **APPENDIXES**

**Appendix 1:** Nelson County Letter of Request – September 2016

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

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

**Appendix 4:** Nelson County 2017 Needs Assessment Summary Statistics

**Appendix 5:** Nelson County FY2017 Aid-to-Localities Allocation Report

## APPENDIX 1: NELSON COUNTY LETTER OF REQUEST

BOARD OF  
SUPERVISORS

THOMAS D. HARVEY  
North District

LARRY D. SAUNDERS  
South District

ALLEN M. HALE  
East District

THOMAS H. BRUGUIERE, JR.  
West District

CONSTANCE BRENNAN  
Central District



STEPHEN A. CARTER  
County Administrator

CANDICE W. MCGARRY  
Administrative Assistant/  
Deputy Clerk

DEBRA K. MCANN  
Director of Finance and  
Human Resources

SEP 21 2016  
Department of Fire Programs

September 15, 2016

Mr. Mohamed G. Abbamin, MPA  
Policy Manager  
Virginia Department of Fire Programs  
1005 Technology Park Drive  
Glen Allen, VA 23059

**RE: Comprehensive Analysis Study of Nelson County's Fire/EMS System Request**

Dr. Mr. Abbamin;

This letter is to request the services of the Virginia Fire Services Board (VFSB) to conduct an objective, complete, and thorough review of Nelson County's Fire and EMS system.

As shown in the attached resolution, adopted September 13, 2016, this study has the full support of the Nelson County Board of Supervisors and County Administration.

The requested areas of concentration of this study include:

- Organization and administration
- Budget and central purchasing
- Training
- Operations and delivery of services
- Fleet design and management

It is the Board of Supervisor's proposal to have an objective, complete, and thorough review of the above-mentioned areas of concentration and to receive recommendations for improvements to enhance the County's Fire and EMS service delivery system.

P.O. Box 336 • Lovingson, VA 22949 • 434-263-7000 • Fax 434-263-7004 • [www.nelsoncounty-va.gov](http://www.nelsoncounty-va.gov)

Your consideration of this request is greatly appreciated. If you have any questions concerning this request please contact me at (434) 263-7001 or by email at [scarter@nelsoncounty.org](mailto:scarter@nelsoncounty.org).

Sincerely,

Stephen A. Carter  
County Administrator

Enclosure

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: NELSON 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 Type Summary, Nelson County, Virginia 2012-2016\***

<b>Incident Type</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Fires	173	121	155	104	114	667
EMS/Rescue	314	237	230	185	183	1149
Hazardous Condition	59	27	52	36	44	218
Service Calls	70	57	46	70	96	339
Good Intent	145	97	151	132	164	689
False Alarm	181	151	147	165	182	826
Other	13	9	10	11	9	52
<b>Total Incidents</b>	<b>955</b>	<b>699</b>	<b>791</b>	<b>703</b>	<b>792</b>	<b>3940</b>
Aid Given	254	223	247	243	226	1193
Exposures	1	1	0	3	0	5
<b>Grand Total</b>	<b>1210</b>	<b>923</b>	<b>1038</b>	<b>949</b>	<b>1018</b>	<b>5138</b>

### **Fire Dollar Loss Summary, Nelson County, Virginia 2012-2016\***

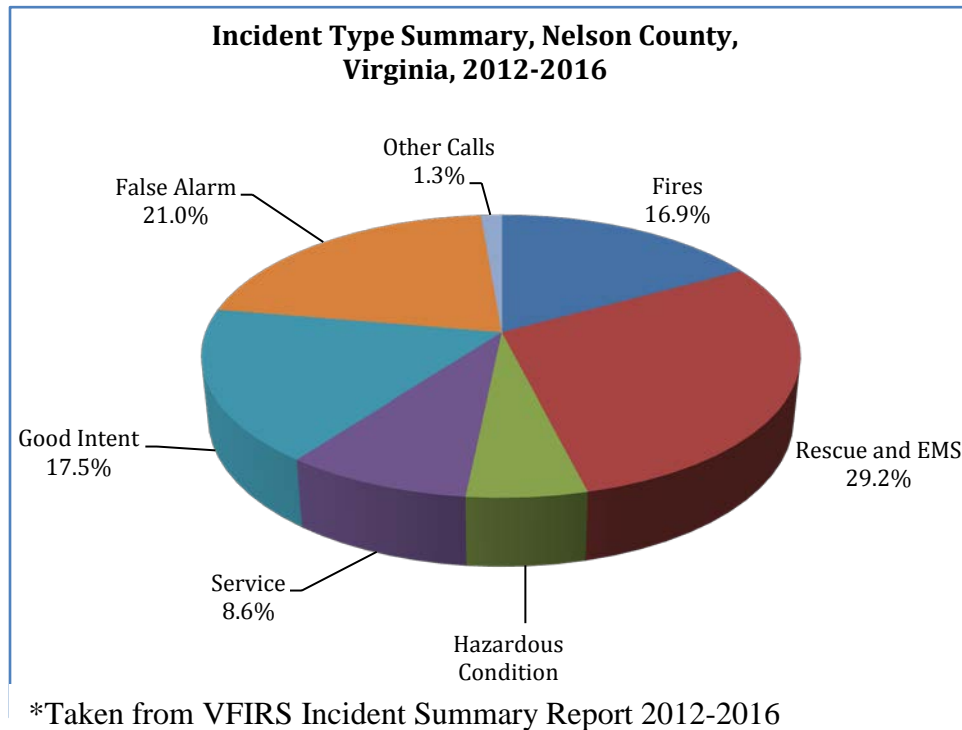
<b>Year</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Dollar Loss	\$1,492,800	\$739,700	\$525,647	\$1,362,500	\$201,002	\$4,321,649

### **Casualty Loss Summary, Nelson County, Virginia 2010-2014\***

<b>Incident Type</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Civilian Fire Injuries	0	0	0	0	0	0
Civilian Fire Deaths	1	0	0	0	0	1
Fire Service Injuries	0	0	1	1	0	2
Fire Service Deaths	0	0	0	0	0	0

\*Taken from VFIRS Incident Summary Report 2012-2016

## **Appendix 2: Nelson County – Virginia Fire Incident Reporting System Report Cont:**



## **\*VFIRS Participation By Fire Department, Nelson County, Virginia 2012-2016**

<b>Fire Department</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Lovingson Vol Fire Dept	Yes	Yes	Yes	Yes	Yes
Piney River Vol Fire Dept	No	Yes	Yes	Yes	Yes
Faber Vol Fire Dept	Yes	Yes	Yes	Yes	No
Gladstone Fire & Rescue Services	Yes	Yes	Yes	Yes	Yes
Rockfish Valley Fire & Rescue	Yes	Yes	Yes	No	Yes
Wintergreen Fire Dept	Yes	Yes	Yes	Yes	Yes
Montebello Fire & Rescue	Yes	Yes	Yes	Yes	Yes
Fire Departments Participating	6	7	7	6	6
Total Fire Departments	7	7	7	7	7
<b>Percent Reporting</b>	<b>86%</b>	<b>100%</b>	<b>100%</b>	<b>86%</b>	<b>86%</b>

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: NELSON 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)”

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Year	Grand
<b>GLADSTONE VOLUNTEER</b>		33	30	31	30	22	16	28	26	13	30	31	32			322
<b>FIRE &amp; RESCUE SERVICES</b>	<b>2013</b>	11	14	11	9	7	3	14	14	6	14	3	3			109
	<b>2014</b>	4	4	13	10	9	2	5	4	1	7	11	9			79
	<b>2015</b>	8	3	2	2		2	3	7	6	9	17	20			79
	<b>2016</b>	7	2	1		2	1									13
	<b>2017</b>	3	7	4	9	4	8	6	1							42

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Year	Grand
<b>Montebello Volunteer FIRE/RESCUE</b>		10	4	6	7	14	17	16	16	12	7	11	5			125
	<b>2013</b>	5	2	5	5	8	9	12	10	7	3	8	5			79
	<b>2014</b>	2		1	2	6	8	4	6	5	4	3				41
	<b>2015</b>	3	2													5

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Year	Grand
<b>Nelson County</b>		16	13	20	16	12	18	8	23	13	12	8	5			164
<b>Rescue Squad</b>	<b>2013</b>	7	4	7	6	2	4	2	7	5	7	7	4			62
	<b>2014</b>	6	3	2	4	3	5	1	5	3	2		1			35
	<b>2015</b>	2	5	5	3	2	7	5	6	4	3					42
	<b>2016</b>	1		4	2	2	2		5	1		1				18
	<b>2017</b>		1	2	1	3										7

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Year	Grand
<b>Rockfish Valley Volunteer</b>		32	19	44	25	32	59	38	16	23	26	21	39			374
<b>Fire &amp; Rescue</b>	<b>2013</b>	5	4	9	6	7	9	4	2	15	11	13	19			104
	<b>2014</b>	21	9	20	9	16	25	15	11	4	6	4	18			158
	<b>2015</b>	4	5	5	8	8	21	16	2	1	6	4	2			82
	<b>2016</b>		1	6	1		3	3	1	3	3					21
	<b>2017</b>	2		4	1	1	1									9

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Year	Grand
<b>Roseland</b>		81	52	85	69	106	79	92	71	41	27	41	38			782
<b>Rescue Squad</b>	<b>2013</b>	20	11	24	13	13	7	22	16	6	6	14	12			164
	<b>2014</b>	17	3	9	16	14	13	19	11	11	7	10	21			151
	<b>2015</b>	10	8	16	17	38	30	21	16	9	3	4				172
	<b>2016</b>	30	20	25	17	21	16	22	24	15	11	13	5			219
	<b>2017</b>	4	10	11	6	20	13	8	4							76

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	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Year	Grand
<b>Wintergreen</b>		8	12	10	2	8	4	3	5	4	8	8	15			87
<b>Fire Dept.</b>	<b>2013</b>	3	1	3	1	4	2	2	3	1	7	1	14			42
	<b>2014</b>	3	6	5												14
	<b>2015</b>		1	1		1	1	1	1	2	1	7	1			17
	<b>2016</b>	2		1		2	1		1	1						8
	<b>2017</b>		4		1	1										6

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Year	Grand
<b>Wintergreen</b>		1142	1037	906	852	867	894	923	928	690	714	595	720			10268
<b>Rescue Squad</b>	<b>2013</b>	226	205	199	169	171	170	186	179	174	165	123	182			2149
	<b>2014</b>	243	199	202	162	183	191	182	206	188	180	145	186			2267
	<b>2015</b>	239	252	174	183	180	186	189	187	160	182	141	146			2219
	<b>2016</b>	226	186	177	153	169	170	193	208	168	187	186	206			2229
	<b>2017</b>	208	195	195	185	164	177	173	148							1404
<b>Grand Total</b>		1322	1167	1102	1001	1061	1087	1108	1085	796	824	715	854			12122

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 4: NELSON COUNTY – 2017 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 January. The Department of Fire Programs received responses from all six fire departments located in Nelson County.

<b>Fire Department Personnel</b>	<b>Current*</b>	<b>Need Reported**</b>
<b>Career Firefighters</b>	19	3
<b>Volunteer Firefighters</b>	35	10
<b>Paid-Per-Call</b>	0	0
<b>Total Firefighters</b>	54	0
<b>Civilian-Paid</b>	0	0
<b>Civilian-Volunteer</b>	15	0
<b>Total Civilian Personnel</b>	15	0

*\*Taken from Supplemental Table 1 of the 2017 Virginia Fire Service Needs Assessment.*

*\*\*Taken from Supplemental Table 7 of the 2017 Virginia Fire Service Needs Assessment*

<b>Apparatus Owned</b>	<b>Current*</b>	<b>Need Reported **</b>
<b>Aerial Apparatus</b>	0	0
<b>Ambulance/Other Patient Transport</b>	0	0
<b>Command Support Unit</b>	0	1
<b>Command Vehicle (SUV)</b>	6	1
<b>Engine/Pumper</b>	6	1
<b>Fire/Rescue Boat</b>	0	0
<b>Hazardous Materials Vehicle</b>	0	0
<b>Heavy Technical Rescue Vehicle</b>	1	0
<b>Logistical Support Apparatus</b>	0	0
<b>Quint Combination Vehicle</b>	1	1
<b>Tanker</b>	2	0
<b>Wildland Brush Truck</b>	4	1

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<b>Other Apparatus</b>	<b>1</b>	<b>0</b>
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*\*Taken from Supplemental Table 2*

*\*\*Taken from Supplemental Table 5*

#### **APPENDIX 4: NELSON COUNTY – 2017 NEEDS ASSESSMENT SUMMARY STATISTICS**

<b>Equipment Owned</b>	<b>Current*</b>	<b>Need Reported **</b>
<b>4-Gas Monitors</b>	4	2
<b>Map Coordinate System – GPS</b>	2	0
<b>Mobile Data Terminals</b>	2	8
<b>Personal Alert Safety Systems</b>	10	0
<b>Personal Protective Equipment</b>	70	5
<b>Radios with Emergency Alert Button</b>	40	10
<b>Radios without Emergency Alert Button</b>	10	0
<b>Self-Contained Breathing Apparatus (without integrated PASS)</b>	56	25
<b>Self-Contained Breathing (with integrated PASS)</b>	10	0
<b>Thermal Imaging Cameras</b>	5	1
<b>Other Equipment</b>	0	0

*\*Taken from Supplemental Table 3*

*\*\*Taken from Supplemental Table 6*

**APPENDIX 5: NELSON COUNTY FY2017 AID-TO-LOCALITIES ALLOCATION REPORT**

<b>Description</b>	<b>Population ( Census)</b>	<b>FY Allocation</b>
Nelson County	15,020	\$ 48,742
<b>Total</b>		

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