Virginia Fire Services Board

A Report of Findings and Recommendations:

Orange County
Fire & EMS Study

February 2014
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.

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Barboursville Volunteer Fire Department
Gordonsville Volunteer Fire Department
Lake of the Woods Fire and Rescue
Mine Run Volunteer Fire Company
Orange Volunteer Fire Company
Orange County Volunteer Rescue Squad
County of Orange, Department of Fire and EMS
EXECUTIVE SUMMARY

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

The study was requested by the Orange 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 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 Orange County.

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

**Theme 1: Organizational Development (Page 11)**

- **Centralized Authority for Fire and Rescue Services:** Orange County Board of Supervisors should modify the title of “Fire Chief” to “Chief of Fire-Rescue” to reflect the span of authority. The Board of Supervisors should further codify the role and identify it as the central position responsible for the supervision of all fire and rescue in the county.
  - The Volunteer Chief’s Association should consider modifying its name to “Fire and Rescue Association.”
  - Orange County Board of Supervisors should consider creating an ordnance to establish and acknowledge the Fire and Rescue Association.
• **Strategic Planning**: Orange County’s fire and rescue organizations should develop a data-driven Strategic Plan with stakeholder input, and should improve its current mission and vision with an emphasis on developing measureable goals.

• **Continuity of Leadership and Succession Planning**: Orange County Department of Fire and EMS should develop a program that illustrates leadership and interpersonal relationship skills within the fire and rescue services and focuses on growing future leadership.

• **Accountability Practices**: Orange County Department of Fire and EMS should formally practice and strictly enforce the current countywide standard operating guidelines. Moreover, it is highly recommended for the County to consolidate its SOGs into one document.

• **Fire Prevention Activities**: Orange County should enact the Statewide Fire Prevention Code through a local ordinance. Additionally, the county should enforce the Statewide Fire Prevention Code; potential methods of enforcement are included herein.

**Theme 2: Communications (Page 18)**

• **Levels of Interdepartmental Communications**: Orange County should host a strategic communication session to resolve challenges and barriers between the Board of Supervisors, the County Administration and members of the volunteer fire and rescue departments.

• **Improved Dispatch System**: The Orange County Board of Supervisors should work with the Fire and Rescue Association along with its current Communications Center’s Manager in developing standard dispatch protocols and procedures.

• **Infrastructure**: The County should update their communication system’s infrastructure to ensure adequate and consistent communications capabilities throughout the County.

**Theme 3: Training (Page 22)**

• **Coordinated Training Program**: Orange County should work with the Fire and Rescue Association in improving the current training program to address the comprehensive training needs of the entire county. Training needs to be better coordinated between different agencies and between the volunteers and career staff.
  - Collaborative training promotes teamwork and can assist with personal communication and interpersonal relations between the career staff and volunteers personnel.

**Theme 4: Budget and Administration (Page 24)**

• **County Funding and Capital Improvements**: Orange County should enhance its use of the current countywide capital improvement plan for upgrading its fire and rescue stations and equipment. The Board of Supervisors should require documentation of expenditures and annually audit funds.
• **Standardization and Central Purchasing:** Working with the Fire and Rescue Association, the County Administration and Board of Supervisors 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)**

• **Recruitment and Retention:** Orange County should adopt a countywide recruitment and retention plan in addition to examining the feasibility of hiring Recruitment and Retention individual.

• **Operations and Staffing:** Orange County should consolidate and enforce existing countywide Standard Operating Procedures and Guidelines (SOPs/SOGs) with an accountability system.

**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 Orange 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 Orange County’s study project manager and Chief John Harkness. Chief Harkness 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 majority of Orange County’s Fire and Rescue organizations as well as County leadership including Interim County Administrator R. Bryan David.

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 Orange 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 Orange 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, John Harkness 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

Orange County is located in the north-central Piedmont region of Virginia near the Blue Ridge Mountains. Orange County is rural, therefore most commercial and industrial activity is concentrated around the Towns of Orange and Gordonsville and along the Route 3 corridor. The County is 72 miles from the state capital of Richmond, 85 miles from the nation’s capital, Washington, DC, 160 miles from the port city of Norfolk, and 25 miles from Charlottesville.

The population of Orange County is 33,481 with a median age of 42.7 years old. The median household income is $59,501 which is $4,135 below the average for Virginia. Orange County is home to diverse economic activities, ranging from agriculture, government, retail trade and manufacturing. According to Virginia Employment Commission data, there was an increase from 12,661 workers in 2000 to 15,322 workers in 2012 within Orange County. Approximately $42 million in local tax revenues are expected to be collected in FY 2013; about 36% is derived from economic activity, paid by businesses or are linked to individual purchase decisions.

The County’s largest employment sector is Government with 24.3%, followed by Retail Trade at 12.3% and manufacturing at 10.5%. Orange County citizens can take advantage of excellent hospital and medical care within the region. The University of Virginia Hospital has 693 beds and is only 32 miles west in Charlottesville. Furthermore, the Orange County Nursing Home is operated as a non-profit by the county. This facility has the capacity for 134 nursing care residents including skilled/rehab services and can accept an additional 34 assisted living residents.

The fire and rescue services of Orange County are provided by a dedicated group of volunteers, with supplemental paid fire and rescue staff. Collectively, these organizations provide firefighting and emergency medical services from stations located throughout the county.

A listing of the fire and rescue services providers can be found below.

- Barboursville Volunteer Fire Department
- Gordonsville Volunteer Fire Department
- Lake of the Woods Fire and Rescue
- Mine Run Volunteer Fire Company
- Orange Volunteer Fire Company

1 Virginia Employment Commission
2 The “County” refers to Orange County
3 Virginia Economic Development Partnership
4 U.S. Census Bureau: State and County QuickFacts.
5 Ibid
6 Virginia Employment Commission
7 Ibid
8 Virginia Employment Commission
9 Ibid
10 Ibid
11 Ibid

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Orange County Volunteer Rescue Squad
County of Orange, Department of Fire and EMS

The goal of the fire and rescue service is to protect life and property by delivering the highest possible level of service consistent with need at the lowest possible cost consistent with safety. First responders responsible for fire suppression provide an array of additional emergency services to the residents of Orange County. They include light and heavy rescue, vehicle extrication, water rescue, hazardous materials, and other non-emergency activities. 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 2012, Orange County responded to approximately 6,447 fire and emergency medical services (EMS).12

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12 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 Development (Page 11)
- Centralized Authority for Fire and Rescue Services
- Strategic Planning
- Continuity of Leadership and Succession Planning
- Accountability Practices
- Fire Prevention Practices

Theme 2: Communications (Page 18)
- Levels of Interdepartmental Communications
- Improved Dispatch System
- Infrastructure

Theme 3: Training (Page 22)
- Coordinated Training Program

Theme 4: Budget and Administration (Page 24)
- County Funding and Capital Improvements
- Standardization and Central Purchasing

Theme 5: Delivery of Services (Page 29)
- Recruitment and Retention
- Operations and Staffing

Orange County’s fire and rescue service providers and administration should utilize 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.13

13 For a complete listing of the national consensus standards developed by the National Fire Prevention Association, visit: http://www.nfpa.org/aboutthecodes/list_of_codes_and_standards.asp

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THEME 1: ORGANIZATIONAL DEVELOPMENT

One of the boundaries faced by Orange County is the lack of coordination of its fire and rescue services. Consequently, the major concern identified was the limitation of Orange County’s communication and coordination among its fire and rescue organizations and County Leadership. With respect to organizational structure, Orange County Department of Fire and EMS has a Fire Chief and two assistant chiefs, one is responsible for emergency management and is the county’s fire marshal with no law enforcement powers while the other is responsible for operations and training.

Centralized Authority for Fire and Rescue Services

Orange County should be applauded for its organizational structure. The Chief is acknowledged as the countywide manager for fire and EMS among the volunteer fire chiefs and rescue captains. However, such acknowledgment is informal. The role and its duties are not identified in Orange County’s Code of Ordinances. Moreover, although it may have been the County Government’s intent to give the Chief the administrative or operational authority, in practice this individual serves more as the liaison between the County Administrator and the fire and rescue organizations.

It is recommended that the Board of Supervisors modify the title from “Fire Chief” to “Chief of Fire-Rescue” to reflect the span of authority. It must also codify the role and identify it as the central position responsible for the supervision and authority for all fire and rescue issues throughout the county. Lastly, Orange County has a Volunteer Chief’s Association which acts an entity responsible for resolving fire related issues. The organization is not recognized by the county code and does not have a formal meeting process.

Orange County Board of Supervisors should consider creating county ordinance to establish a Fire and Rescue Association. The membership of the Association should be 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.

In order to improve Orange County’s level of service, it is recommended that internal organizational development strategies be considered both within the countywide chief’s role and that of the Association. Orange County’s goal should be to support and supplement the volunteer forces as long as possible.

Recommendations:

1. Orange County’s Board of Supervisors should modify the countywide “Fire Chief” to “Chief of Fire-Rescue” and must further adopt a local ordinance recognizing and

14 County Government refers to both Board of Supervisors and County Administration
15 Association refers to the Fire and Rescue Association
16 Chief of Fire-Rescue refers to the Countywide Chief of Fire-Rescue
clearly citing the role as the central position that is the head of combined countywide fire and rescue system.

a. Orange County’s Board of Supervisors should formally consider adopting Title 27 of the Code of Virginia to grant the Chief of Fire-Rescue responsibility of countywide fire and rescue services.

b. Chief of Fire-Rescue should act as the Technical Expert and Subject Matter Expert that will effectively and continuously reports to the Board of Supervisors and County Administrator.

c. The recommendation above will allow the Chief of Fire-Rescue to be an effective manager for the collective Orange County Department of Fire and EMS, career and volunteer equally.

2. Orange County Board of Supervisors should consider creating an ordinance to establish a Fire and Rescue Association.

a. The current Volunteer Chief’s Association, if feasible should reconsider its name. It is recommended the group change the current name to “Fire and Rescue Association.” The group has the flexibility to create its own name.

i. The membership of the Association should be; 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 group should meet monthly 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.

c. The association should be co-chaired by a representative from the volunteer members, chosen by them, and the paid chief, and that co-chairs should alternate serving as presiding officer every other month.

d. 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.

e. The Fire and Rescue Association should be codified through a local ordinance with an emphasis on outlining specific responsibilities and expectations to improve the organizational cohesiveness and efficiency.

3. The Fire and Rescue Association should create a Wildfire Training Committee.
Strategic Planning

During the site visit, Orange County’s fire and rescue organizations acknowledged the need for improved fire and rescue coordination. The current organizational structure does not provide a clear division of labor. This is especially true for the administrative and operational responsibility aspect of the organizations involved, both for career and volunteer members. These factors negatively affect the overall morale of the county’s fire and rescue organizations.

The first steps to resolving ambiguity within the fire and rescue services organizational structure is through the creation of a Strategic Plan. Strategic planning must become institutionalized as an integral part of fire and rescue departments and community resource allocations. 17 A strategic plan will provide a basis for long-term operational planning and will serve as a framework for services. 18 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. 19 The strategic planning process will create public value for Orange 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. 20

Recommendations:

1. Working with the Fire and Rescue Association, the Orange County Board of Supervisors and County Administrator should adopt and implement a strategic plan to increase performance levels and achieve lower cost of service delivery.
   a. Stakeholders such as fire and rescue personnel, communications center, law enforcement and county leadership must each play an integral part in the development of this strategic plan in order to meet stakeholder’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. It is suggested that a neutral party facilitate this process.

17 Preserving and Improving the Future of the Volunteer Fire Service, March 2004
18 Leading the Transition in Volunteer and Combination Fire Departments, November 2005
19 Mark Moore, Creating Public Value: Strategic Management in Government, 1995
20 Ibid
2. Parties involved in the strategic planning should establish a system of measurable goals and objectives. The performance measurement’s factors will strengthen the newly developed 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.\(^{21}\)

   c. The Board of Supervisors should routinely access the achievement of these performance measurements and alleviate any barriers to their completion.

3. In developing its strategic plan, Orange 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. Orange 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.\(^{22}\) The performance measurement will exhibit clear association between performing, planning, spending and results for the county’s fire and rescue services.\(^{23}\) Orange County will have the opportunity to evaluate its mission, vision and performance objectives through three perspectives: financial accountability, constituent priorities and internal processes.\(^{24}\)

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\(^{21}\) Leading the Transition in Volunteer and Combination Fire Departments, November 2005

\(^{22}\) Gerald Gordon, *Strategic Planning for Local Government*, 2005

\(^{23}\) Ibid

\(^{24}\) Gerald Gordon, *Strategic Planning for Local Government*, 2005
**Continuity of Leadership and Succession Planning**

The Fire and Rescue Association should consider developing a continuity of leadership or succession planning program to focus on training and mentoring future leaders within the system. The succession planning program will ensure retention of institutional knowledge, including subsidizing advanced officer training. A succession plan will address the needs of the Orange County fire and rescue services by providing formal program to develop and enhance the future potential of personnel.

**Recommendations:**

1. Orange County should develop a program that demonstrates to all fire and rescue personnel the value of leadership and interpersonal relationship skills. The following elements should be considered for inclusion in the program:

   a. Career and Leadership Development Program for both volunteer and career fire and rescue personnel that focuses on the following subject areas; Management, Prevention, Operations and Safety.  

   b. Incentives for advanced training and higher education.

   c. Leadership training should be offered as an ongoing long-term project.

   d. With the assistance of a trained facilitator, the fire and rescue organizations should hold a focus group consisting of stakeholders to determine how to accomplish and successfully implement the program.

2. The County should consider establishing a mentoring program for company and chief officer levels.

   a. This approach would further assist with the succession planning.

**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.”

Thus, Standard Operating Procedures (SOPs) are written guidelines that explain what is expected and required of fire service personnel in performing their jobs. It is critical for Orange fire and rescue personnel adhere to the established system of SOGs currently in place to better coordinate service delivery throughout the county. It is imperative that all members thoroughly understand their responsibilities and expectations. Organizations that do not adhere to its SOGs

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25 William Shouldis, *Officer Development Programs on a Budget*, 2008
26 Developing Effective Standard Operating Procedures for Fire and EMS Departments, December 1999
27 Ibid

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are increasingly vulnerable to accidents, lawsuits, preventable costs, personnel problems, and damage to their professional image.

1. The Chief of Fire-Rescue should consolidate and enforce existing countywide Standard Operating Procedures and Guidelines (SOPs/SOGs) with an accountability system.
   a. The study committee discovered the county has numerous SOGs. The Chief of Fire-Rescue should create a single set of countywide Standard Operating Procedures and Guidelines (SOPs/SOGs) with an accountability system and publish a Table of Contents or central listing.
   b. It is suggested that Orange County conduct informational and training sessions with all fire and rescue members to ensure all personnel are knowledgeable and adhere to the countywide SOG.
   c. New members should receive training on the SOG during their orientation to ensure adherence. It is imperative that all members thoroughly understand their responsibilities and expectations.
   d. Ensure career and volunteers are operating under the same guidelines.

2. Utilizing the guidelines outlined in NFPA 1561: Standard on Fire Department Incident Management Systems, Orange County should formally establish, articulate, 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 emphasize the importance of incident management system in managing all emergency incidents and training exercises. Orange County should further stress the importance of 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

28 Incident Command System, Overview; http://www.fema.gov/emergency/nims/IncidentCommandSystem.shtm

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d. It is recommended that these management principles be practiced through full-scale exercises. This will help identify response challenges and allow them to be resolved before an incident.

3. Establish a clear response matrix for typical incidents and special incidents.
   a. Allow for Incident Commander to have some flexibility in response decisions based on conditions.
   b. Determine which priority incident categories are needed and work on developing that matrix with a goal over time of one or two per month with the Association.

4. Establish a “Tanker Task Force” in the county allowing for response of companies not initially assigned on the response to provide tanker/tender resources.
   a. The county should preplan in order to avoid the need for the Incident Commander to request specific resources during an evolving incident. Thus such attempt creates a system of accountability which allows immediate resource allocation during a crisis.

5. The Chief of Fire-Rescue 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 Officer29 as a guide for the development process.

Fire Prevention Activities

There is no one person or group in Orange County responsible for all fire prevention activities. The few activities that are accomplished are spread among several individuals with no formal organization or coordinated message. Orange 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


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Recommendations:

1. **Orange County should adopt and enforce the Statewide Fire Prevention Code.** The Statewide Fire Prevention Code allows for cost recovery.
   
a. **Utilization of a fee structure would enable Orange County to generate revenue to help support these activities.**

2. **Orange County should designate someone who will enforce the Statewide Fire Prevention Code.** Presently, the county employs an Assistant Chief of Administration – Deputy Emergency Manager who is also the countywide Fire Marshal. Orange County has further granted the current Fire Marshal police powers under title § 27-34.2:1 of the Code of Virginia. However, below are areas of improvement the county should consider;
   
a. **It is recommended for Orange County to encourage the fire marshal to enforce fire codes and coordinate public fire and life safety education; or,**
   
b. **Consider entering into a service agreement with a neighboring jurisdiction to perform the Code inspection and enforcement.**

**THEME 2: COMMUNICATIONS**

In order to develop a cohesive Fire-Rescue System\(^{31}\) in Orange 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 Orange County. Before other identified recommendations can be implemented, effective and reliable communication capabilities must be established between the volunteer departments and the county.

Public safety 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

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\(^{30}\) 2009 Statewide Fire Prevention Code, Preface, page i.

\(^{31}\) The Orange County Fire-Rescue System (Fire-Rescue System or System) means all those fire and rescue organizations that are recognized by the County as providers of fire, rescue services, and primarily respond to incidents within the County.
framework, all areas of emergency communications must collectively work effectively.\textsuperscript{32} Without reliable communications, the safety and security of Orange County’s fire and rescue service providers are jeopardized.

\textit{Levels of Interdepartmental Communications}

During the site visit, the study committee observed and documented a breakdown of communication among the career and volunteer personnel from the fire departments and rescue squads, current Chief’s Association and the County Government. There are continuous mistrust and frustration issues between career and volunteer staff within the county’s fire and rescue. The lack of personal and professional communications between the volunteers and career staff can negatively affect the application of fire and rescue activities in Orange County.

The study committee detected a high level of anticipation on the part of volunteers as it relates to transitioning the county fire and rescue into career-based system. Consequently, such rumors have negatively affected the relationship between the volunteers and career personnel. Without committed efforts to improve the existing communication challenges, there will be no improvement of Orange County’s overall fire and rescue operations. The obstacle will create resistance towards service delivery enhancement and will continue to alienate each fire department and rescue squad throughout the 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.\textsuperscript{33} The current obstacles experienced by Orange County have the potential to divert fire and rescue personnel from their core mission of assisting the residents of Orange County. All relevant parties must work together to provide the highest quality level of service.

\textbf{Recommendations:}

1. Orange 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, Communications Center along with Orange 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, communications center, County Government and with the general public.

\textsuperscript{32} Ten Years After 9/11: Improving Emergency Communications: Hearing before the U.S. Senate Homeland Security and Governmental Affairs Committee (July 2011).
\textsuperscript{33} Leading the Transition in Volunteer and Combination Fire Departments, November 2005
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 Department of Fire and EMS should strengthen its fire and life-safety communication activities with the residents of Orange County.

   a. Increased efforts to promote the positives attributes of the fire and rescue services in Orange County can raise morale and attract more volunteers. Some options include producing an annual report, developing a quarterly newsletter and utilizing social networking avenues.

3. 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
   v. Virginia Department of Forestry: http://www.fireWISEvirginia.org

**Improved Dispatch System**

The communications system is solely for fire and EMS. Both the sheriff’s office and police departments have their own dispatch system. The current dispatch system in Orange County works poorly and further provides inadequate coverage for mobiles and portables on a countywide basis. The current dispatch center is in the basement of the government building. Consequently, the facility is not acceptable in its current location for many reasons, most important concern being security from both manmade and natural situations. Lastly, the study committee was advised that there are inconsistent dispatch procedures.
Throughout the site visit, the study committee was advised the county’s radio communications consists of outdated technology and inconsistent dispatch procedures that jeopardize not only the service delivery, but the safety and security of Orange County’s first responders. A coordinated and planned response is only as good as the information received from a dispatcher. A critical analysis of the dispatch system and relevant protocols is necessary. The present system has major flaws and a thorough review would improve the response and safety of Orange County’s public safety community.

**Recommendations:**

1. The fire and EMS along with the law enforcement should all have one integrated dispatch system.

2. Orange County needs to upgrade its entire communication system and set it in a secure facility.
   
   a. The current dispatch center’s location does not meet the entities’ needs. Therefore, it is recommended that it be relocated to a secure location.

   b. Orange should incorporate a needs assessment for not only the equipment and the platform, but also personnel to operate the system.

3. Orange County should replace the existing communications equipment to enable coverage of the entire county and the ability to communicate with the adjoining counties for mutual aid.

4. The county should continue its efforts to improve the fire and rescue dispatch protocols to ensure a consistent service delivery across the county.
   
   a. Reviews of the current SOG governing dispatch procedures will help address the need for standardization, clarification and communication.

   b. It is highly recommended that input be solicited from the Fire and Rescue Association along with other stakeholders such as the communications center staff and county’s law enforcement.

5. Accounting for call volume and complexity, the Orange County Board of Supervisors should examine the feasibility of increasing dispatch personnel.
   
   a. Additional staff will likely improve the overall quality of dispatch operations by affording each dispatcher sufficient time to document all pertinent information and efficiently relay it to first responders.

   b. The following resources are provided as a means of analyzing staffing to ensure adequate dispatch coverage:
i. The Association of Public Safety Communication Officials (APCO) – Project RETAINS Toolkit 2.0;

ii. The National Fire Protection Association’s (NFPA) Standard 1221 – Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems; and,


6. Orange County should enhance its use of the Emergency Medical Dispatch Program.

   a. Increase awareness and implementation of accepted Emergency Medical Dispatch system.

7. Orange County should consider exploring accreditation for 911 public safety answering points (PSAP) and emergency dispatch centers through the Virginia Office of Emergency Medical Services.34

   a. This will enable the county to have in place a Quality Assurance and Quality Improvement process ensuring EMD system compliance.

**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.35 Orange County presently has minimum standards of training within the county’s SOG but does not appear to be countywide standards.

Orange County works hard to ensure offerings of mandated and relevant training. However, coordination can be improved to achieve a greater number of training offerings and associated cost savings opportunities. Due to scheduling conflicts, achieving a high level of training is difficult in Orange County. Consequently, there needs to be improved coordination and increased local offerings. This can further assist recruitment and retention efforts of Orange County’s fire and rescue organizations. To get service to an acceptable level, as determined by the jurisdiction, convenient and consistent training schedules should be established.

**Coordinated Training Program**

Tactical equality is achievable in the county if the Orange County Department of Fire and EMS provides 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 leadership are closely joined because solid

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34 Virginia Office of Emergency Medical Services
35 Leading the Transition in Volunteer and Combination Fire Departments, November 2005

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.
basic training will foster strong and consistent cooperation among the county’s emergency response agencies.

Recommendations

1. Aligning with the strategic planning efforts, it is recommended that a structured and coordinated training program be developed to address the comprehensive training needs of the entire county and schedule classes accordingly.
   
   a. The county should develop a comprehensive training program to be assessed annually. Such assessment will enable the adoption of warranted changes.

2. The Fire and Rescue Association in collaboration with the Board of Supervisors and County Administration should explore the feasibility of collectively coordinating the application of a countywide training program.
   
   a. Ensure that training opportunities are scheduled to meet the needs of volunteer members. The county should consider establishing convenient schedules courses for weekends or nights so that offerings are spread across a longer period of time.

   b. Enhance efforts of collaborative multi-company training opportunities.

   c. Necessary training should be offered with appropriate notice to ensure maximum turnout and return on investment.

   d. The Board of Supervisors should continue to appropriate the necessary resources to fulfill the county’s identified training challenges and fully train existing firefighters and rescue personnel.

   e. The county should enforce the training requirements and ensure all fire and rescue service providers are competent and capable to perform assigned duties.

3. The Fire and Rescue Association should implement a countywide officer training program responsible for both fire and EMS training (initial and ongoing).
   
   a. If feasible, the Board of Supervisors and the Chief of Fire-Rescue should create a position within the Orange County’s Department of Fire and EMS.

   b. The position should be a management position that manages and coordinates training in addition to some instruction.

   c. This position should assist in the development of countywide training standards.

4. Orange County should increase the availability of EMT training.
a. Orange County Department of Fire and EMS must consider reaching out to bordering counties to annually plan and provide a staggered schedule of EMS courses.

5. The Fire and Rescue Association must encourage all new firefighters be cross-trained as Emergency Medical First Responders, at minimum, to enhance rescue capacity within Orange 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.\(^\text{36}\)

   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.

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

**THEME 4: BUDGET AND ADMINISTRATION**

For FY2014, Orange County is expected to receive a total of $99,858 from the Commonwealth of Virginia’s Fire Programs Fund. The total aforementioned funding includes allocations to the Towns of Orange and Gordonsville. Orange County also receives approximately $33,000 from the Office of Emergency Medical Services in Four-for-Life funds, which are utilized to fund training, personnel and equipment expenses.\(^\text{37}\) To supplement operational cost, fire departments and rescue squads have several fundraising. The county pays for insurance and EMS supplies. 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.

Orange County’s aerial apparatus appear to be appropriate relative to their locations. Tankers have been strategically placed at all stations throughout the county which exhibits an effective use of them. Lastly, the study team observed all apparatus to be in good/very good conditions.

**County Funding and Capital Improvements**

Currently, Orange County provides funding to the volunteer fire and rescue organizations for operational and capital expenditures. The County allocates $360,000 to the Fire Chief’s Association, the association divides that equally and distributes to all five volunteer fire}

\(^{36}\) Virginia Department of Health (Office of Emergency Medical Services) and FY13 Orange County Budget

\(^{37}\) Office of Emergency Medical Services

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24 of 48
departments – with little or no accountability. The towns also provide some level of financial assistance although it is not consistent. Orange County funds vehicle insurance and liability coverage for fire and rescue departments, purchases EMS equipment as well as the breathing apparatuses.

Orange County has shown that it is forward thinking by integrating the fire and rescue organizations into the Capital Improvement Planning (CIP) process. Considering the challenges posed by the current economic conditions, citizens and elected officials expect fiscal responsibility, cost savings and quality services. Thus, Orange County should improve the current countywide capital improvement plan for upgrading its fire and rescue stations and equipment. Examples of improvement include, setting up equipment purchases on a rotational basis through comprehensive needs assessment.

Furthermore, the Board of Supervisors should reconsider the current funding system which grants $360,000 to the Fire Chief’s Association which then re-allocates it to the relevant entities. The County Government should take the responsibility to allocate funding. This pursuit will ensure greater transparency.

Orange County should restructure the funding model to better achieve equitable and performance based budgeting. Budget transparency should not be perceived negatively or as a method for the county to micromanage its fire and rescue departments. The burden rests with the Orange 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.

**Recommendations:**

1. Orange County should stop using blanket funding the Fire Chief’s Association. It is imperative for the County Government to restructure the current funding model so it is able to achieve an equitable and performance-based model.
   a. Orange County Board of Supervisors should transition the funding allocation responsibility to the County Government rather than the current system.
   b. Orange County currently uses inconsistent funding method that shows allocation of monies to fire and rescue organization regardless of their performance or call volume.

2. With input from the Fire and Rescue Association, the Board of Supervisors should enhance its capital improvement plan for upgrading its fire and rescue stations and equipment.
   a. There should be an emphasis on rotational equipment replacement based on prioritized needs.

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b. The county should develop an apparatus replacement program countywide.

   a. All new apparatus purchases should be funded by the county, with the county retaining ownership and responsibility.

3. County Administration and the Fire and Rescue Association should collaboratively work together in the strategic purchase and placement of fire and EMS vehicles.

4. It is suggested that an individual station should at least have the following;

   a. 1 Brush Unit, 1 Tanker/Tender, 1 Staff Vehicle, 1 Primary Piece of Pumping Apparatus and 1 Secondary Piece of Apparatus of the department’s choosing.

5. Orange County should continue with its countywide needs assessment for the delivery of fire and rescue services. The county must enhance the base funding allocation system in accordance to the priorities set through the needs assessment and quantitative data.

   a. Monies should be allocated based on the most critical needs and the highest call volume data.

   b. It is recommended that the county continuously evaluate whether it is getting the appropriate return on its investments.

   c. The strategic plan adopted by the county should serve as a guide for the funding decisions to account for services rendered and equipment deficiencies.

6. An 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 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.

7. The Orange County Board of Supervisors should consider the feasibility of hiring a Grants Coordinator 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/
   f. The grant programs offered by the Virginia Fire Services Board (VFSB) through the Virginia Department of Fire Programs (VDFP).  
   g. Various private grant programs.

**Standardization and Central Purchasing**

Orange County has a widely diverse fleet of apparatus among the fire and rescue organizations. Orange County’s fire and rescue organizations appear to have sufficient pieces of equipment in each station to support their call volume throughout the county. However, an area of cost-savings would be experienced through the standardization of future equipment and apparatus within the county. The study committee was advised about the county’s initiative with central purchasing. Although the process was utilized one-time, it did leave an impact with the fire and rescue personnel within the county. Therefore, although standardization and Central Purchasing is difficult, it is however, necessary for delivering cost-effective and efficient fire and rescue services.

**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 should consult with the Fire and Rescue Association to develop specifications for central purchase activity areas. Below are suggested areas/activities for central purchasing:

   a. Personal Protective Equipment[^40] and Self-Contained Breathing Apparatus[^41] 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. The Fire and Rescue Association should survey each department to determine if equipment commonalities exist. The equipment commonalities list should be used, along with strategic planning for Orange County’s routine maintenance and replacement of equipment, aging ambulance and fire apparatus.

   a. An Apparatus Repair and Replacement Subcommittee should be established within the Fire and Rescue Association in 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[^42].

   c. An inventory and capabilities of all vehicles should be provided to the Dispatch 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.

4. 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[^43]

b. NFPA 1911 – Standard for Inspection, Maintenance, Testing and Retirement of In-Service Automotive Fire Apparatus

c. NFPA 1912 – Standard for Fire Apparatus Refurbishing

**THEME 5: DELIVERY OF SERVICES**

Several outside factors are affecting the fire and rescue personnel in Orange County. Similar to many other jurisdictions, the county lacks adequate personnel to address call volume and growing administrative requirements. According to the 2013 Virginia Fire Service Needs Assessment, Orange County reported that the present call volume warranted 56 additional personnel to sufficiently staff their stations.

The limited and aging populations along with the lack of incentives make it difficult to recruit volunteers. This shortfall has decreased morale and forced the county to increase the workload on its limited career members with multiple responsibilities. The availability of personnel plays a large role in the quality of service provided to the citizens of Orange County. It is highly recommended for the county to actively participate in recruiting volunteers, specifically pursuing to establish motivational tools to encourage participation. Included in this study are additional resources for recruitment and retention activities.

It was further discovered during the site visit, Wildfires/brushfires incidents have in the past consumed "every piece of apparatus” fire departments may have to offer, preventing them from responding to other incidents. Additionally, there is presently a lack of wildfire training interest within the county although local and statewide opportunities exist. Lastly, it was also expressed that Virginia Department of Forestry grants have not be taken advantage of due to the absence of a grants’ person within the county.

**Recommendations:**

1. Career staff should have minimal wildfire training requirements beyond FF1 structural training.

2. Wildfire SOP should also be developed for the county.

3. The Battlefield Rescue Station should be closed and the personnel relocated immediately.
   a. The facility’s condition is unacceptable.

4. The Gordonsville substation disposal project should be continued.

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46 See Appendix 5: 2012 Virginia Fire Service Needs Assessment.
5. The Chief of Fire-Rescue 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 should reexamine its current system and must find methods to effectively use the human capital that are in the fire and rescue system presently.

6. Orange County Fire and Rescue senior staff 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.

   **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, Orange County has felt the impact of declining numbers of men and women volunteering for fire and rescue departments. Orange County should be acknowledged for their efforts to produce literature advertising the volunteering opportunities available in the county. Moreover, Orange County should also be recognized for their participation in the Volunteer Workforce Solutions’ recruitment and retention study. In its efforts to enhance the county’s recruitment and retention, they have organized over 73 recruitment and retention events in the past six months, distributed recruitment materials countywide and have had staff attend trainings sponsored by Volunteer Workforce Solutions.

It is encouraged that in order to relieve limited human capital, the county must continue with efforts to 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 thus enabling them to become ambassadors of their respective department.47

**Recommendations:**

1. Orange County should enhance its 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 establish an incentive based recruitment and retention program.

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International Association of Fire Chiefs

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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.

2. County Government should consider creating Recruitment and Retention Officer Position.
   a. Appoint a full time Recruitment and Retention Officer who is able to act as Recruitment & Retention staff and can also perform PIO duties.
   b. The Recruitment and Retention Officer should develop a single countywide volunteer orientation process leveraging the best practices of existing orientations in order to provide a consistent foundation for all new volunteers.

3. Working alongside the Fire and Rescue Association, the County Government should identify needs for additional fire and rescue personnel to meet the service demands and citizen expectations.
   a. Volunteers provide a tremendous service to the county and save taxpayers significant amounts of money.
   b. Participation in recruitment and retention activities not only provides welcomed assistance to each department, but it also demonstrates to fire and rescue personnel that the County is a dependable partner in overcoming this obstacle.
   c. The Board of Supervisors should improve volunteer incentives.
   d. Through improvement of fire and rescue incident data analysis and strategic planning, Orange County will be able to determine fire and rescue personnel needs, equipment needs and deployment.  

4. 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 PSAs.
   a. Improve the visibility of the Orange 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 Orange fire and rescue services’ training and educational opportunities.

48 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.
5. The Fire and Rescue Association should encourage career staff to collaboratively work alongside volunteers to enhance the current relationship.

6. Orange County has expressed a desire to participate on the Virginia Standards of Excellence (SoE) program.
   a. The study committee would like to recommend the county to pursue the efforts. SoE is a self-evaluation program designed to help EMS agencies and departments identify critically defined areas that require improvement. The program also provides technical assistance to improve on those defined areas such as Recruitment and Retention.

7. Orange County is encouraged to continue seeking assistance through the Staffing for Adequate Fire and Emergency Response Grants (SAFER).
   a. The grant was created to provide funding directly to fire departments and volunteer firefighter help them increase or maintain the number of trained responders.\(^\text{50}\)

8. In addition, Orange 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)

\(^{50}\) http://www.fema.gov/staffing-adequate-fire-emergency-response-grants.
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 Orange County and its interstate highway system.

Recommendations:

1. Utilizing call volume data and geography, the Board of Supervisors, County Administrator, Fire and Rescue Association and Chief of Fire-Rescue should revisit the placement of its fire and rescue stations.
   a. The Insurance Service Office (ISO) Grading schedule should be used to aid in the placement of fire and rescue stations.

2. Orange 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 continuing to improve its Dry Hydrant availabilities.
   b. The county should continue working with the Department of Forestry (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.

3. Orange County fire and rescue services should keep accurate records of incident response times in order to continuously assess response capabilities.

4. Orange County should continue with its effort to provide 24-hour paid fire and rescue crew to address staffing challenges and ensure adequate resources are deployed for calls during the day.
   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.
REFERENCES


Retrieved on January 4, 2013 from:
%20SFPC.pdf.


For 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.


Virginia Fire Services Board. (2013). Fire and Emergency Medical Services Self-Assessment Questions. Virginia Department of Fire Programs: Glen Allen, VA.

APPENDIXES

Appendix 1: Orange County Letter of Request – November 2013

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

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

Appendix 4: Orange County Training Summary for FY2009 to FY2013

Appendix 5: Orange County 2013 Needs Assessment Summary Statistics

Appendix 6: Orange County FY2014 Aid-to-Localities Allocation Report

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APPENDIX 1: ORANGE COUNTY LETTER OF REQUEST

ORANGE COUNTY, VIRGINIA
BOARD OF SUPERVISORS

November 14, 2013

Ms. Brook Pittenger
Director of Administration
Virginia Department of Fire Programs
Administration Branch
1005 Technology Park Drive
Glen Allen, Virginia 23059-4500

Dear Ms. Pittenger:

Six years ago, the Virginia Fire Services Board, the Virginia Department of Fire Programs, and the Virginia Office of Emergency Medical Services conducted a Fire and EMS Study for Orange County. Many of the recommendations provided in the study have been implemented over the years and have improved the overall effectiveness of the County's Fire and EMS System.

Included in the recommendations implemented over the past six years was the installation of a Computer-Aided Dispatch (CAD) System. The CAD System has been able to provide data that was unobtainable during the last study. Also implemented was an increase in the number of career staff and an expansion of their mission to include assistance to the volunteer fire companies throughout the County. Two 100' ladder trucks were purchased by the County to be added to the emergency vehicle fleet and the County is in the process of purchasing a records management system that will be used collectively by all of the County Fire and EMS agencies. Lastly, the Orange County Department of Fire and EMS hired its first Fire Chief in 2012.

Over the next ten years, Orange County will be faced with many financial challenges as it continues to improve fire and EMS services for its citizens. In the coming years, the County expects to replace or upgrade its E-911 Center and Emergency Operations Center. Other anticipated projects include replacing an outdated radio system, building an additional fire and EMS station, replacing breathing apparatus, and upgrading the emergency vehicle fleet. The County may also have to add additional career staff to continue filling voids related to the decrease of volunteer fire and EMS responders. The total cost of these projects could exceed $15,000,000.

At this time, the Orange County Board of Supervisors is requesting a comprehensive study of its Fire and EMS System to be completed. We hope the study will measure the effectiveness of the improvements that were implemented from the last study. The Board
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APPENDIX 2: ORANGE 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, Orange County, Virginia 2008-2012*

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Fire Dollar Loss Summary, Orange County, Virginia 2008-2012*

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Casualty Loss Summary, Orange County, Virginia 2008-2012*

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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: ORANGE COUNTY – VIRGINIA FIRE INCIDENT REPORTING SYSTEM REPORT

VFIRS Participation By Fire Department, Orange County, Virginia 2008-2013*

<table>
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<tr>
<th>Fire Department</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>Orange Co. Fire &amp; EMS</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Barboursville Vol. Fire Dept.</td>
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<tr>
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<td>6</td>
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<tr>
<td><strong>Percent Reporting</strong></td>
<td>67%</td>
<td>67%</td>
<td>67%</td>
<td>83%</td>
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Incident Type Summary, Orange County, Virginia, 2008-2012

- **Rescue and EMS**: 72.4%
- **Fires**: 4.2%
- **Good Intent**: 10.9%
- **Hazardous Condition**: 3.7%
- **Service**: 4.5%
- **False Alarm**: 0.6%
- **Other Calls**: 3.7%

The data reflects the participation and incident types reported by the Orange County Fire & EMS and various volunteer fire departments from 2008 to 2012.
APPENDIX 3: ORANGE 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)”

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<th>Apr</th>
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<th>Jun</th>
<th>Jul</th>
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**APPENDIX 4: ORANGE COUNTY TRAINING SUMMARY FOR FY2009 - FY2013**

This information is a compilation of training data, for Fiscal Years 2009 through 2013, from the Fire Service Training Record System (FSTRS) maintained by the Virginia Department of Fire Programs. For more information on FSTRS visit, http://www.vafire.com/fire_service_training_record_system/index.htm

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<th>Course</th>
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## APPENDIX 4: ORANGE COUNTY TRAINING SUMMARY FOR FY2009 - FY2013, CONT.

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### APPENDIX ORANGE COUNTY TRAINING SUMMARY FOR FY2009 - FY2013, CONT.

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<tr>
<td>OFFICER DEVELOPMENT SEMINAR</td>
<td>20</td>
</tr>
<tr>
<td>PROTECTIVE BREATHING APPARATUS - SPECIAL OFFERING</td>
<td>0</td>
</tr>
<tr>
<td>PUBLIC FIRE &amp; LIFE SAFETY EDUCATOR I (NFPA 1035)</td>
<td>3</td>
</tr>
<tr>
<td>ROPE RESCUE AWARENESS AND OPERATIONS - PHASE 1</td>
<td>1</td>
</tr>
<tr>
<td>ROPE RESCUE OPERATIONS - PHASE 2</td>
<td>0</td>
</tr>
<tr>
<td>RURAL WATER SUPPLY - 16 HOUR TRAINING PROGRAM</td>
<td>0</td>
</tr>
<tr>
<td>TRAFFIC IMS FOR THE FIRST RESPONDER T-T-T</td>
<td>0</td>
</tr>
<tr>
<td>TRAFFIC INCIDENT MANAGEMENT FOR EMERGENCY RESPONDERS</td>
<td>0</td>
</tr>
<tr>
<td>TRENCH RESCUE OPERATIONS</td>
<td>2</td>
</tr>
<tr>
<td>VEHICLE RESCUE AWARENESS AND OPERATIONS</td>
<td>73</td>
</tr>
<tr>
<td>VEHICLE RESCUE TECHNICIAN - NFPA 1006-03</td>
<td>1</td>
</tr>
<tr>
<td>VFIRS/NFIRS DATA ANALYSIS &amp; PROBLEM SOLVING TECHNIQUES</td>
<td>0</td>
</tr>
<tr>
<td>VIRGINIA FIRE INCIDENT REPORTING SYSTEM - VER. 5 BASIC TRAINING</td>
<td>0</td>
</tr>
<tr>
<td>VIRGINIA FIRE INCIDENT REPORTING SYSTEM - VER. 5 OVERVIEW</td>
<td>24</td>
</tr>
<tr>
<td>WRITTEN TEST &amp; SKILLS TEST EVALUATOR</td>
<td>7</td>
</tr>
</tbody>
</table>
**APPENDIX 5: ORANGE COUNTY – 2013 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 departments located in Orange County.

<table>
<thead>
<tr>
<th>Fire Department Personnel</th>
<th>Current*</th>
<th>Need Reported**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Firefighters</td>
<td>36</td>
<td>6</td>
</tr>
<tr>
<td>Volunteer Firefighters</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>Paid-Per-Call</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Firefighters</td>
<td>186</td>
<td>56</td>
</tr>
<tr>
<td>Civilian-Paid</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Civilian-Volunteer</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Civilian Personnel</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

*Taken from Supplemental Table 1 of the 2013 Virginia Fire Service Needs Assessment.
**Number from Supplemental Table 7, means needed on top of the total column.

<table>
<thead>
<tr>
<th>Apparatus Owned</th>
<th>Current*</th>
<th>Need Reported **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerial Apparatus</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Ambulance/Other Patient Transport</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Command Support Unit</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Command Vehicle (SUV)</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Engine/Pumper</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Fire/Rescue Boat</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Hazardous Materials Vehicle</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Heavy Technical Rescue Vehicle</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Logistical Support Apparatus</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Quint Combination Vehicle</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tanker</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Wildland Brush Truck</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Other Apparatus</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Taken from Supplemental Table 2
**Taken from Supplemental Table 5

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 5: ORANGE COUNTY – 2013 NEEDS ASSESSMENT SUMMARY STATISTICS

<table>
<thead>
<tr>
<th>Equipment Owned</th>
<th>Current*</th>
<th>Need Reported **</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Gas Monitors</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Map Coordinate System – GPS</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>Mobile Data Terminals</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Personal Alert Safety Systems</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protective Equipment</td>
<td>180</td>
<td>0</td>
</tr>
<tr>
<td>Radios with Emergency Alert Button</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Radios without Emergency Alert Button</td>
<td>140</td>
<td>0</td>
</tr>
<tr>
<td>Self-Contained Breathing Apparatus (without integrated PASS)</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>Self-Contained Breathing (with integrated PASS)</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Thermal Imaging Cameras</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Other Equipment</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* Taken from Supplement Table 3  
** Taken from Supplemental Table 5
APPENDIX 6: ORANGE COUNTY FY2014 AID-TO-LOCALITIES ALLOCATION REPORT

<table>
<thead>
<tr>
<th>Description</th>
<th>Population (2010 Census)</th>
<th>FY2014 Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange County</td>
<td>27,264</td>
<td>$76,595</td>
</tr>
<tr>
<td>Gordonsville</td>
<td>1,496</td>
<td>$10,000</td>
</tr>
<tr>
<td>Town of Orange</td>
<td>4,721</td>
<td>$13,263</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33,481</strong></td>
<td><strong>$99,858</strong></td>
</tr>
</tbody>
</table>