**FIRE STATION CAPTAINS: THE KEY TO A COMPREHENSIVE
COMMUNITY RISK REDUCTION EFFORT IN CHESTERFIELD FIRE & EMS**

EXECUTIVE ANALYSIS OF COMMUNITY RISK REDUCTION

By: Melissa P. Ahern
        Chesterfield Fire & EMS
        Chesterfield, VA

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: _____

Abstract

Chesterfield Fire and EMS (CFEMS) was not involved in community risk reduction efforts specific to the risks of the communities served. By modifying the roles and responsibilities of the fire station captains, community-based risk reduction efforts were possible. Personnel were able to better understand the characteristics of the communities and impact the citizens to reduce the occurrence of avoidable incidents, injuries and deaths.

The problem was Chesterfield Fire and EMS did not effectively utilize the fire station captains in community risk reduction efforts.

The purpose of this research was to develop a draft plan that enabled the fire station captains to manage community risk reduction efforts. Action research methodology was used to answer the following research questions:

1. What factors support modifying the role of the fire station captain to enhance community risk reduction efforts?
2. What are the expected challenges?
3. How will effectiveness be measured?

Research was conducted utilizing a literature review and analyzing information specific to CFEMS. This information was job specific duties and responsibilities, performance plans, annual reports, memorandums and other CFEMS department communications.

The results indicated community risk reduction efforts would benefit by utilizing the fire station captains. In addition, the fire station captains would have a direct influence on the occurrence of avoidable incidents in their communities. The firefighters and lieutenants could better understand and prepare for incidents in their communities. Overcoming and managing the reaction to change was the greatest challenge. Change affected both CFEMS personnel as well as the citizens in the communities.

The recommendations suggested working in coordination with other Chesterfield County departments to develop a list of resources and liaisons. Performance measurements were defined based on the occurrence of incidents in respect to risk reduction efforts, not how many times a program was delivered. Coordination of multiple divisions within CFEMS was essential to collecting and analyzing data. Training of personnel at all levels was vital to providing stakeholders with the knowledge, skills, resources, expectations and purpose.

Table of Contents

Appendices

FIRE STATION CAPTAINS: THE KEY TO A COMPREHENSIVE

COMMUNITY RISK REDUCTION EFFORT IN CHESTERFIELD FIRE & EMS

INTRODUCTION

Unintentional occurrences are those acts which are not intended to cause harm. A five year study in Virginia, from 2002 to 2006, indicated that 82.2% of injuries resulting in hospitalization and 66% of deaths were unintentional. The leading cause of death in Virginia for ages one to forty four years is unintentional injuries. There is no cancer, illness, or disease that claims lives or causes harm like unintentional injuries (Virginia Department of Health [VDH], 2008). In each of these unintentional injuries and deaths, people chose to participate in a series of events that led up to the resulting damage. Most, if not all, were avoidable. Understanding the causes of unintentional occurrences can help prevent avoidable damage, injury and death (National Fire Academy [NFA], 2009).

For decades the fire service has been committed to educating the public about fire safety and fire prevention (United States Fire Administration [USFA], 2002). These public education efforts are a result of the 1973 report by The National Commission on Fire Prevention and Control, *America Burning.* This report encouraged the fire service to become proactive in making the public aware that simply changing behaviors could prevent tragedies, such as fires, from ever occurring. The fire service's commitment to educating the public has proven successful in reducing the tragic loss of life and injury from fire (USFA, 1987). The fire service can make the same impact on reducing risks of unintentional occurrences, once those risks are identified (USFA, 2008).

Chesterfield Fire and EMS is very active and involved in the community. According to the CFEMS Annual Report for Fiscal Year 2008, the operational personnel in the fire stations provided public education to 62,774 citizens (Appendix C). The personnel in the Fire and Life Safety Division provided 442 formal programs to 22,710 citizens (Appendixes D & E). Most public safety programs are focused on fire safety (CFEMS, 2008). The occurrence of fire related incidents is low, whereas emergency medical incidents and motor vehicle crashes are very stressful on the system (CFEMS, 2009). By determining the risks that exist within the 25 communities of Chesterfield County, and focusing public fire and life safety education on these hazards, the occurrence of such avoidable incidents could be minimized.

The problem is Chesterfield Fire and EMS does not effectively utilize the fire station captains in community risk reduction efforts.

The purpose of this research is to develop a draft plan that enables the fire station captains to manage community risk reduction efforts.

Action research methodology will be used to answer the following research questions:

1. What factors support modifying the role of the fire station captain to enhance community risk reduction efforts?

2. What are the expected challenges?

3. How will effectiveness be measured?

BACKGROUND AND SIGNIFICANCE

Chesterfield Fire and EMS serves a population of more than 311,000 citizens over an area 446 square miles. The County is a mix of suburban, urban and rural communities. In comparison to other municipalities in Central Virginia, Chesterfield

County is the largest and most populated (Chesterfield County, 2009; Stegmaier, 2008). It borders the City of Richmond to the north, the boundary being the James River. Chesterfield's southern boundary runs along the Appomattox River and Lake Chesdin. Many highly traveled U.S. highways as well as Interstates 95 and 295 traverse through the County. Geographically, Chesterfield County is divided into 25 communities (Chesterfield Fire & EMS (SOC) [CFEMS (SOC)],2009).

The County Government is often noted for prudent business practices and has been the recipient of many awards through the years. Chesterfield County is managed by a County Administrator and a Board of Supervisors. The County provides a full spectrum of municipal services with a Fiscal Year 2010 operating budget of approximately $1.3 billion dollars. Chesterfield County has a mission to be the "First Choice Community" (Stegmaier, 2008). The accessibility, County business practices, municipal services and geographical diversity makes Chesterfield County an attractive area for business, industry, and residents (CFEMS (SOC), 2009).

CFEMS is a combination career and volunteer organization. There is a compliment of 458 career personnel. These personnel staff apparatus and stations 24 hours a day, 365 days a year. The 158 active volunteer fire personnel supplement the operations division of the organization either at an integrated fire station, where the career captain is in charge; or they may be members of one of the few remaining volunteer fire companies (Chesterfield County, 2009). Here the volunteers have a formal charter and chain of command including a Volunteer District Chief. CFEMS personnel staff 21 fire stations and assist with staffing at 9 rescue stations and responded to over 32,700 calls for service in 2008 (CFEMS (SOC), 2009). CFEMS' goal is "to be the safest most secure community of its size compared to similar jurisdictions"

(CFEMS, 2008). CFEMS has a mission to "provide customer valued service in prevention, education, professional service and emergency response. "Great service by great people" (CFEMS, 2008)."

The chain-of-command within Chesterfield Fire and EMS seems clear at first glance. There are firefighter/EMTs as the primary workforce. The first level of promotion to supervisor is lieutenant. Lieutenants manage a company of firefighters assigned to either an engine or truck (Appendix B). These personnel also staff ambulances on a rotating basis. No firefighter is assigned strictly to an ambulance. The next level of supervision is captain. One captain is assigned to manage each fire station. Fire stations may be staffed be personnel assigned to a single engine company without an ambulance. Fire stations may also consist of personnel staffing a single engine company and an ambulance, or an engine and truck company. There may be crews of personnel staffing an engine company, truck company and an ambulance in a fire station. Regardless of the number of companies within a fire station, there is only one station captain.

Station captains also manage a company of firefighters, just like a lieutenant. This is where the chain-of-command becomes foggy. Both lieutenants and captains report directly to battalion chiefs. Lieutenants do not report directly to captains, except when it comes to tasks assigned to them pertaining to the apparatus, equipment, station, pre-plans, or district activity. Any of these assignments can be undermined by the lieutenant's battalion chief having assignments that take precedent over the captain's. There are a lot of additional variables that impact the specific workload of each captain, but these are not applicable to this research.

The expectation of a captain is everything that a lieutenant is responsible for as a first-line supervisor, plus managing a fire station and all the specific duties and responsibilities that come with that fire station (Appendix A). This system of management has been a CFEMS standard for decades. By utilizing the fire station captains to manage companies of firefighters and a fire station, CFEMS has not had the expense of 21 additional lieutenants. On the other hand, the influence of captains within their communities and their stations is restricted. The captains are so overloaded handling basic tasks of lieutenants, that committing time to captain duties means sacrificing valuable time with personnel. The captain is constantly juggling the next deadline and therefore the priorities and focus are constantly changing. These types of situations create an environment where "intuitive decision making" takes place, which is decision-making based on experience (Robbins, 2003). Fulfilling the duties and responsibilities expected of a captain in CFEMS means handling the job of two supervisors within the allotted time that one is given. This creates a culture where acceptable business practices are based on checking a box for completion, rather than performance and effectiveness.

In a CFEMS Captain's Meeting held on September 10, 2008, the CFEMS Deputy Chief of Operations shared his vision of fire captains becoming managers of their fire districts. He suggested the idea of operations personnel in the fire stations becoming more oriented to their communities. He knew that if CFEMS was out in the communities, conducting assessments, gathering demographic information, making contact with citizens, we could be more prepared for incidents in our communities. In addition, CFEMS could prepare our communities for events such as weather related incidents, train or pipeline incidents and even prevent unintentional incidents.

He gathered input from the captains and battalion staff from across the organization on strengths and weaknesses of the traditional CFEMS Fire Captain and the proposed captain's roles and responsibilities. Personnel agreed that the expectation of handling lieutenant and captain tasks was unrealistic if any of them were going to be handled correctly consistently. The idea of having a more flexible schedule was suggested by the Deputy Chief. The intent of this was to allow for the captains to work on the other shifts with the lieutenants. The captains would be using this time to coordinate on-duty with the lieutenants and manage station and district projects. The captains would also be completing a portion of the lieutenants' annual performance reviews. The stumbling block was that the captain would still be responsible for a company of firefighters and spending less time with them. Since no part of the workload was being removed from the captains in order for them to take on the challenge of becoming more community-based, resistance was expressed and the vision of the Deputy Chief did not move forward. A critical factor, "buy-in" (USFA, 2008), was missing to successfully precede with the vision of a station captain as a fire district manager. The captain's roles and responsibilities remain virtually unchanged to this day. As a result, the impact that CFEMS has in the communities also remains unchanged. The fire service has long been known for getting the job done regardless of the limitations set on them. Citizens demand service and there is enough of both care and pride that personnel will get the job done no matter what the circumstances are (Clarke, 1991).

The recent decline in the economy has impacted everyone, resulting in businesses to accomplish more with fewer resources (Bos, 2010). Local governments, including public safety services have also been affected. Although CFEMS has not lost any

personnel in budget cuts, many positions have been reassigned to the Operations Division. The Fire & Life Safety Division, who is responsible for the formal public education programs in Chesterfield County, was the most impacted by these reassignments. In addition, many of the school programs were ceased. These school programs have been a staple of fire and life safety education in Chesterfield County for decades. It will take years to know the full effects of losing these programs and will probably only be determined by CFEMS Planning Division data collected specific to incidents.

Unfortunately, the data that is collected in CFEMS does not measure the effectiveness of any programs. Data collected is solely based on the number of times public education occurs and the number of citizens the program was presented to (Appendix E). Knowing the effectiveness of preventing an occurrence is difficult, because data has to be collected over a period of time and a trend must be identified (VDH, 2008). Once this trend is identified and specific risks and hazards are identified, action can be taken to prevent the occurrence. Over a period of time data must be collected to show whether or not the trend has been impacted. This is how adjustments can be made in a program to increase or maintain effectiveness (USFA, 2008). Continually reassessing risks may reveal that the focus needs to shift (Lewis, 2006; NFA, 2009).

Although the programs and staffing in the Fire & Life Safety Division of CFEMS have been reduced, there are options to improve the effectiveness of risk reduction efforts and improve the level of management for the fire station captain. The captains should be focused on their communities. They should be the lead on preplanning, identifying target hazards, reaching out to the community while performing risk

assessments and locating resources to assist in mitigation efforts. This is the same concept of the Deputy Chief Operations, but with some workload relief for the captains.

The relief comes in the way of having a lieutenant candidate working directly for the captain, managing the personnel, daily routine, daily tasks, and all the lieutenant responsibilities. This provides a real mentoring opportunity for the future lieutenant and enables the captain to focus on improving community risk reduction efforts, the station environment, provide training for the station personnel and complete captain duties to the best of their ability. Firefighters adapt very well to accomplishing more with less (Mills, 2006). This concept allows for progress towards organizational goals, despite the losses impacting the Fire & Life Safety Division.

It only makes sense to keep moving forward with the vision of the Deputy Chief of Operations. The focus of public safety is to prevent the occurrence, not just react to it. If we can not decrease the number and severity of incidents, we must ask ourselves, "who are we keeping safe?" If emphasis can not be placed on reducing the risks of those we serve, it is possible that instead of providing "public safety services" we are encouraging acceptance of providing nothing more than "public disservices".

The National Fire Academy's (NFA) *Executive Analysis of Community Risk Reduction* course focuses on the strategy behind effective risk reduction efforts (NFA, 2009). The course brings forth the concept that "accidents" are both predictable and preventable. Our society has become tolerant of irresponsible behaviors that cause preventable occurrences, or unintentional occurrences. *Executive Analysis of Community Risk Reduction* presents the steps involved in developing strategies to mitigate community risks and provides tools to guide personnel in determining the risks that pose the greatest threat to a community (NFA, 2008).

The National Fire Academy's (NFA) *Executive Development* course involves students becoming more aware of their roles as leaders and managers influencing change within their organizations. According to Cartin (1999)*,* "Organizations have to be living, adapting, resilient organisms – not mere organization charts". As students promote into positions where their decisions have the potential to impact everyone within and served by an organization, success may be determined by their understanding of how change is interpreted by others and the correct way to effect change (NFA, 2006). Leaders of organizations must identify personnel who will assist in a transformation. These are *change agents* and leaders must utilize them skillfully (Cartin, 1999). Both the *Executive Development* and the *Executive Analysis of Community Risk* Reduction courses prepare students for challenges they will face as they seek to implement changes in their organizations (NFA, 2006 & 2008). Specifically in the *Executive Analysis of Community Risk Reduction* course, the ideas are presented that change is necessary to move an organization forward and both the community and the organization will have to change to benefit from the efforts (NFA, 2008). This research project involves changing the traditional roles and responsibilities of the fire station captain in CFEMS. In addition it involves the fire station captain as the driving force in the community risk reduction model. It will take complete buy-in from the captains for both CFEMS and the citizens of Chesterfield County to benefit fully from the concepts presented in this research.

The United States Fire Administration (USFA) has five operational objectives (NFA, 2008). This applied research project is specifically geared toward objective four, "to promote within communities a comprehensive, multi-hazard risk reduction plan led

by the fire service organization"; but may also have a positive impact on objectives one and two which are to:

    1- "reduce the loss of life from fire in the age group 14 years old and below"

    2- "reduce the loss of life from fire in the age group 65 years old and above".

LITERATURE REVIEW

A review of existing literature was conducted to assimilate various ideas, concepts, strategies and recommendations regarding both community risk reduction and effecting change. A number of various keywords were used to search for information such as risk analysis, community programs, community prevention programs, performance measures, managing change, affecting change, leadership, leading change. The author also searched for information pertinent to fire personnel roles and responsibilities in various ranks, but found this to be very broad and unspecific. This search was terminated as it was determined that the rank is not relative to the function as it pertains to community risk reduction. The important concept is developing a plan that positively impacts community risk reduction efforts of CFEMS and supports the mission, vision and values of Chesterfield County and CFEMS (Appendix F).

The idea of affecting change of behaviors within a community by becoming more community-based is a concept that is supported throughout literature (Carr, 2006; Lewis, 2006; NFA, 2009; USFA, 2008; United States Department of Justice [USDJ], 1994; VDH, 2008). The community policing concept proved to be a very effective way of gaining trust and positively influencing the population. In an effort to keep police out of their neighborhoods, citizens would often take matters into their own hands rather than call the police. Community policing allowed the citizens to have a more personal

relationship with the police and assist in crime-fighting efforts. Trust and mutual understanding was developed between both the police and the citizens. The expectations of both parties were understood and the police became more of a resource than a threat. In addition, the police were able to identify potential risks and intervene to decrease the potential effects of those hazards. The police not only had the opportunity to learn the community and plan for specific incidents, but the civilians had a resource to help them. The community policing effort continues to be a highly effective and widely utilized system across the United States (United States Department of Justice [USDJ], 1994).

The process of gathering information to conduct a risk analysis, following a process that focuses efforts on the most threatening and modifiable behaviors, and constantly reassessing was supported by many of the reviewed literature (FEMA, 2004; NCFPC, 1973; NFA, 2009, 2006; USDJ, 1994; USFA, 2008, 2002, 1987; VDH, DIVP, 2008). In addition, the importance of gathering and analyzing data to evaluate the effectiveness of risk reduction efforts was emphasized consistently. An interesting point is the messages here are decades old and continue to the most recent of publishings. The idea is simple but the tendency to create a program or have an idea, then jump in and begin happens all too often (FEMA, 2004; NCFPC, 1973; NFA, 2009, 2006; USDJ, 1994; USFA, 2008, 2002, 1987; VDH, DIVP, 2008). When it does, the effectiveness is difficult to measure. "Many fire departments make the strategic error of gearing for the usual and not the potential" (Clarke, 1991). Another very common and disappointing fact is how often programs are provided when the relevance to any community risk has not been determined (FEMA, 2004; NCFPC, 1973; NFA, 2009, 2006; USDJ, 1994; USFA, 2008, 2002, 1987; VDH, DIVP, 2008). For example, a smoke detector program may involve personnel going through a neighborhood and replacing detectors or

batteries in the homes. The most threatening risks in this community may not be maintaining their smoke detectors but instead injury from falls, motor vehicle crashes and heart attacks. Time may be better spent looking at sources of falls and recommending solutions while in the home (Carr, 2006). According to the International City/ County Management Agency (ICMA) performance objectives are the minimum acceptable performance level (1988).

In order for change to take place effectively, the problem must first be identified, and then objectives clearly communicated (Mills, 2006). The manner in which change is both presented and managed will dictate how well people adjust. Efforts involving change may provide benefits to all involved, however people will hesitate to operate outside of their normal comfort zones if the objectives of the change are not clear and the idea has not been clearly presented. There are several common elements present when an effort involving change is successful: a change agent with a clear vision, a driven purpose and behavior that displays pride and ownership; buy-in and acceptance of others to see the vision and understand the plan; and management that is steadfast and determined to see the effort through to the end. The principles of change were represented consistently throughout the literature (Cartin, 1999; International City/ County Management Agency [ICMA], 1988; Kotter, 2005, 2002; NFA, 2009, 2006; USFA, 2008). The inability of a manager to understand and deal with these principles could pose threats to the success of any change. Change agents who are unprepared for the battles could lose the war.

Literature Review Summary

Risk reduction and risk management strategies have been a focus since the 1970's. Managers need to anticipate issues and constraints (ICMA, 1988). The literature

reviewed reinforced the concept that making changes at any level requires a systematic plan. Unsuccessful attempts at change are generally the result of not following a plan or not planning properly. It takes discipline to subdue the urge that immediate action must be taken when an idea is proposed. By caving to the temptation of urgency, efforts enacting change could take years to overcome. The idea of changing the role of a fire station captain have already been introduced and rejected, so full explanation of the workload reduction and focus will need to me made clear this time.

Balancing the mission, vision, goals and values of an organization can maintain focus during this change project. These concepts are understood by all members and require little explanation. These should also be used for gathering data. Data will be used throughout all stages of the change process, in this case to immediately conduct a community risk analysis.

Throughout the implementation of risk reduction efforts, data should be analyzed to provide direction for continual program success. In the end, a successful program will be one that personnel and the community will be proud of and take ownership. When this occurs, the fire station captains will feel a sense of making a difference and managing at a higher level. In addition, the citizens of the community will be safer and more secure.

PROCEDURES

Action research methodology was used to develop a plan that enables fire station captains to manage community risk reduction efforts. The roles and responsibilities of both the CFEMS Fire Lieutenants (Appendix B) and Fire Station Captains (Appendix A) were reviewed. Information was gathered from previous e-mails, memorandums, meeting notes and various department correspondences pertinent to:

1. the position reassignments in Fire & Life Safety Division

2. September 10, 2008 meeting regarding the vision of a fire station captain as a manager of a fire district and being more involved in the community

3. other duties placed on captains: budget, volunteer personnel, specialty shops

4. any communications regarding the need for mentoring, succession planning and harvesting the knowledge and experience of seasoned personnel, specifically officers, before they retire

5. Chesterfield County and CFEMS Performance Plans, Reports, Strategic View

6. Personal notes of the author's own challenges and limitations as a fire station captain seeking to be more effective in community risk reduction efforts and personnel development.

After information was gathered, a situational analysis was conducted utilizing the following questions from the *Applied Research Self-Study Course Guide* (NFA, 2008):

1. What are the situational forces likely to assist in enabling the fire station captains to become more involved in community risk reduction efforts?

2. What situational forces are likely to impede the efforts of changing the role of the fire station captains?

3. How can factors that contribute to the problem be eliminated?

4. How can I capitalize on factors that may assist in solving the problem?

The following objectives were developed:

1. By October 1, 2010 fire station captains will complete training that will provide them the information needed to understand their new roles and responsibilities as both a manager of community risk reduction and mentor of a lieutenant candidate.

2. By January 1, 2011, the new process will be in place with specific performance benchmarks to be completed by the end of each month.

3. By July 1, 2011, an assessment of the program will be conducted utilizing the data obtained at the beginning of the program and comparing it to the data collected each month for six months.

A decision to modify, continue as is, or discontinue the program will made based on the impact of the changes with respect to making progress in reducing community risks, and decreasing the captain's lieutenant level responsibilities while mentoring a lieutenant candidate.

Action plans were developed:

Objective 1: By October 1, 2010 fire station captains will complete training that will provide them the information needed to understand their new roles and responsibilities as both a manager of community risk reduction and mentor of a lieutenant candidate.

1. A draft of the proposed *Captain - Roles & Responsibilities*, as well as *Lieutenant – Roles & Responsibilities* will be completed and distributed at the July 2010 Company Officer's Meeting. This will be developed by coordination of both the Operations and Fire & Life Safety Divisions.

2. The performance benchmarks will be presented at the July 2010 Company Officer's Meeting.

3. Classes will be scheduled for the Captains to attend on-duty. These classes will provide instruction on conducting a community risk analysis. Each Captain will be assigned a qualified contact person from the Fire & Life Safety Division to provide assistance.

Objective 2: By January 1, 2011, the new process will be in place with specific performance benchmarks to be completed by the end of each month.

1. Forms will be distributed during the training, for personnel to gather information that will be entered into a database. This database will be secured through the Chesterfield County Information Systems Technology Division (IST), and managed by the CFEMS Information Management Technology Division (IMT).

2. Benchmarks will include, but not be limited to:

   a. Identifying the most frequent incident response needs

   b. Obtaining demographics information

   c. Identifying a neighborhood representative/liaison for each area

   d. Securing police officer assistance and information

   e. Completing the community risk analysis

   f. Developing an action plan for mitigating high risk factors

Objective 3: By July 1, 2011, an assessment of the program will be conducted utilizing the data obtained at the beginning of the program and comparing it to the data collected each month for six months.

1. This assessment of data will be conducted by IMT, Emergency Operations and Fire & Life Safety Divisions.

2. The information will be shared at the July 2011 Company Officer's Meeting and feedback from the captains and lieutenants will be encouraged. A decision of how the program will continue or whether it should be terminated will be announced by August 1, 2011.

Limitations and Assumptions

The information gathered pertaining to performance plans, strategic views and annual reports are all long-standing initiatives within CFEMS. We perform business daily with these in mind. It is assumed that information, specifically data, obtained through these sources is factual and presented in the best interest of CFEMS and those populations it serves. It is unknown whether the current community risk reduction efforts of CFEMS are impacting target risks, hazards, or avoidable incidents. There is no specific data relevant to this, making this a limitation of the research.

Another limiting factor is the ability to test the recommendations presented in the project. The idea of modifying the role of the station captain has not been revisited for almost two years. The author believes that if the idea is presented in the context of reducing current workloads on the captains, by assigning a lieutenant candidate to handle first-line supervisor tasks, there may be more support. Regardless, the fact that behavioral change is involved is a limiting factor in itself.

In addition, six months does not provide adequate time to research, formulate a plan of action, implement the plan and study the findings. It would be advantageous to perform the program as developed and compare the results to CFEMS performance objectives.

All reference information is assumed to be produced from experienced and credible resources in their respective field. In no way does the author want to include biased or unfounded reasoning based solely on personal preference. This goes for all information gathered in the literature review, appendixes and cited within the text.

The research was not conducted following any specific scientific process. All recommendations will be based on the author's interpretation of concepts, theories,

information obtained in the literature review, CFEMS internal reports and personal experience of the author with a focus on USFA and CFEMS objectives. The intent of the author is to provide recommendations that will be beneficial to all stakeholders within CFEMS, Chesterfield County Government and most importantly the citizens of Chesterfield County, Virginia.

RESULTS

Action research methodology was utilized to develop a plan that enables fire station captains to be managers of community risk reduction efforts in Chesterfield Fire and EMS. Information was gathered from CFEMS performance plans, strategic plans, annual reports, memorandums, departmental communications and literature was reviewed to answer three research questions.

1. **What factors support modifying the role of the fire station captain to enhance community risk reduction efforts?**

The objectives of the United States Fire Administration, Chesterfield County, Chesterfield Fire and EMS and the Virginia Department of Health all support efforts to reduce community risk reduction. The concept is part of a vision introduced by the CFEMS Deputy Chief of Operations. The recent reallocation of Fire & Life Safety Division (F&LS) personnel to Operations does not leave enough staffing in F&LS to initiate any additional community risk reduction efforts. Fire station captains would benefit from managing at a level that is broader in perspective than a fire station and a crew of personnel. By managing programs that have a direct impact on the community that is served, the results of those efforts will impact the personnel in the station. By making a difference, a sense of ownership can be developed. The ability of the fire station captain to gather demographic, resource, hazard and other

information about the community will aid in preparing public safety personnel for incidents. Conducting a community risk analysis will identify specific focus areas for risk reduction efforts. A risk reduction plan will guide personnel in educating the public on how behavioral changes can impact them. The assignment of a lieutenant candidate to the fire station captain will relieve the captain of managing daily first-line supervisor tasks and allow for real-life employee development.

2. **What are the expected challenges?**

The ultimate challenge is overcoming the reaction to change. It is vital that the plan is introduced and explained clearly. Recipients of the information must see a clear picture of where they are, where they are going and how they will get there. They must know where available resources are to assist, objectives, expectations and limitations.

3. **How will effectiveness be measured?**

The effectiveness of the program will be measured utilizing performance measurements. The performance measurements will be developed by both the F&LS and Operations Divisions of CFEMS. The performance measurements will indicate a relative increase or decrease in the occurrence of targeted risks. They will represent the effectiveness of risk reduction efforts. This information will be used to modify the programs. Data collected will not be exclusively from CFEMS incident history, but all incidents in Chesterfield dispatched from the Emergency Communications Center (ECC). The ECC dispatches calls for fire, EMS and law enforcement. The data will also be obtained from VDH, and Chesterfield County Government Agencies, such as Social Services. Other sources may surface during development of the performance measurements.

<u>Additional findings</u>

The research reinforced the idea of community involvement. This led to the concept of involving outside agencies and businesses such as insurance agencies, or community interest groups. There may be a lot of support and assistance available through involvement of outside agencies. Identifying community resources could provide incentives to citizens and assistance to public safety services in the event of a tragedy, such as a tornado.

The idea of utilizing a lieutenant candidate to handle first-line supervisor tasks under the guidance of a captain is greatly supported in succession planning, mentoring programs and employee development. This idea is a research project in itself.

DISCUSSION

It is incumbent upon fire service personnel to be vigilant in reducing risks to our communities (FEMA, 2004; NCFC, 1973; USFA, 1987). It is not only an objective of the fire service, but also an expectation of the public that public safety organizations lead these efforts (NFA, 2008, 2009). We must perform community risk assessments to identify the specific hazards within our communities (Carr, 2006; Lewis, 2006;NFA, 2009; USFA, 2002, 2008). Focusing efforts allows for efficient use of time and resources and will prove successful by a reduction of occurrences (USDJ, 1994; VDH, 2008). Evaluating the risk reduction efforts through performance measurements will guide mangers to modify programs for continued success (Clarke, 1991; Lewis, 2006; NFA, 2009). These efforts will ultimately lead to a safer community.

By reducing the occurrence of unintentional injuries and deaths, a community can live a higher quality if life (Carr, 2006; NFA, 2009). Citizens can be healthier, more secure, more involved and more aware. Safer communities can have increased property

values and lower insurance rates (VDH, 2008). Emergency response personnel will respond to fewer incidents, specifically avoidable incidents. This keeps emergency response personnel available for true emergencies within the community.

The concept of utilizing fire station captains as managers of community risk reduction efforts involves change. The way a change agent presents a new idea, implements the plan and modifies as needed, can lead to success or failure (Cartin, 1999;Kotter, 1995, 2002; Mills, 2006; NFA, 2006, 2009; Robbins, 2003) . The change agents must be prepared to deal with resistance (ICMA, 1988). The roles and responsibilities of the captains will not be the only change. Everyone within CFEMS will somehow be affected by this change. Firefighters will be managed by lieutenants; in all stations, in all companies and on all shifts. Battalion chiefs will have a slightly different role in supervising the fire stations and personnel. They will be able to guide the captains in mentoring lieutenant candidates. Lieutenant candidates will have the opportunity to be placed in the first-line supervisor role while being mentored by a captain. This helps to prepare the future lieutenants, but also allows for the captains to develop first-line supervisors. The F&LS Division will have the opportunity to use the workforce of station personnel within the communities to make progress in risk reduction efforts. Despite budget constraints, progress can be made through change (Bos, 2010). Passive, reactionary public safety education will be a thing of the past. No longer will personnel see these initiatives as a task that is completed and a box checked. Community risk reduction will be the culture of CFEMS because personnel will see the impact of efforts focused on the true risks. A sense of community pride and ownership will result from people really making a difference in the lives of those they serve (Kotter, 1995; NFA, 2009; USDJ, 1994; USFA, 2008).

The communities will also change. The citizens will be more aware and in time will become more vigilant to correct behaviors (FEMA, 2004; NFA, 2009; VDH, 2008). Pressure between citizens within communities to correct behaviors which threaten the image of that community will change. A level of acceptable risk will be determined by the citizens within the communities (NFA, 2009; USDJ, 1994; USFA, 2002, 2008). The acceptance of certain behaviors will cease.

Utilizing the fire station captains to manage community risk reduction initiatives in CFEMS is supported through evaluation of all cited references. This research is specific to the role of the fire station captain, and does not address a comprehensive risk reduction plan for CFEMS. It is not the intent of the author to specify performance measurements of a comprehensive risk reduction plan.

RECOMMENDATIONS

Utilizing fire station captains as managers of community risk reduction efforts will allow captains to function at a higher level of supervision than before. In addition, the community will benefit from the involvement of public safety personnel guiding them towards a safer lifestyle. Resources will be utilized more efficiently which will allow for progress to me made in risk reduction. Success will be based on performance measurements, not by the number of times a program is given. Performance measurements will be based on the occurrence of incidents within a community.

The CFEMS Planning Division data will be heavily utilized and this division needs to be aware of the changes well in advance. They need to work with IMT in developing databases to capture and retrieve information so efforts are compatible and workloads are not duplicated.

The CFEMS Fire & Life Safety and Operations Divisions should utilize representatives from other Chesterfield County departments when developing a comprehensive community risk reduction strategy. Other departments may include the ECC, Police, Sheriffs, Social Services, Health, Mental Health, Emergency Management and School Board. These departments may have information on trends and baseline data as well as resources or liaisons that are already established. A coordinated effort with a clear purpose will be the most effective.

Training personnel is essential. It is important that personnel are clear on expectations and have a roadmap guiding them. This is necessary for the captains who will be managing the efforts, but also for all personnel because they will be out in the communities. All personnel must understand their roles, responsibilities, limitations and have resources readily available to assist them. Personnel working in the eyes of the public only get one chance to make a first impression. They need to have support and a way to get answers for citizens immediately. This is important to gain community trust.

REFERENCES

Bos, Julie. (2010, May). Today's HR technology at work. *Workforce Management,* Vol. 89, No. 5, 38.

Carr, M. (2006). *Developing a community risk reduction plan.* Unpublished manuscript.

Cartin, T. J. (1999). *Principles and practices of organizational performance excellence.* Milwaukee, WI: American Society for Quality Press.

Chesterfield County, Virginia. (2009). *Chesterfield Fire & EMS home page.* Retrieved June 12, 2009 from http://www.chesterfield.gov/PublicSafety/ Fire/default.asp#Mission.

Chesterfield Fire & EMS. (2008). *Chesterfield Fire & EMS annual report FY08.* Chesterfield, VA: Chesterfield County Government.

Chesterfield Fire & EMS. (2009). [Incidents by fire district, 18-month]. Unpublished raw data.

Chesterfield Fire & EMS (SOC). (2009). *Chesterfield Fire & EMS standards of cover workgroup.* Chesterfield, VA: Chesterfield County Government.

Clarke, W. E. (1991). *Firefighting principles and practices* (2nd ed.). Saddlebrook, NJ: Fire Engineering Books and Video, a Division of PennWell Publishing.

Federal Emergency Management Agency. (2004). *Are you ready? An in-depth guide to citizen preparedness.* Emmitsburg, MD: Author.

International City/ County Management Agency. (1988). *Managing fire services* (2nd ed.). Washington, DC: Author.

Kotter, J. (2002) *The heart of change.* Boston, MA: Harvard Business School Press.

Kotter, J. (1995) *Leading change.* Boston, MA: Harvard Business School Press.

Lewis, S. (2006). *Developing performance measures for the fire and life safety division of Gresham fire and emergency medical services.* Unpublished manuscript.

Mills, Steven (2006, August). Managing change. *Fire Engineering,* Vol. 159 No. 8, 97-102.

National Commission on Fire Prevention and Control. (1973). *America Burning.* Washington, DC: Author.

National Fire Academy. (2008). *Applied research project guidelines.* Emmitsburg, MD: U.S. Fire Administration.

National Fire Academy. (2006). *Executive development.* Emmitsburg, MD: U.S. Fire Administration.

National Fire Academy. (2009). *Executive analysis of community risk reduction.* Emmitsburg, MD: U.S. Fire Administration.

Robbins, S. P. (2003). *Organizational behavior* (10th ed.). Upper Saddle River, NJ: Prentice Hall.

Stegmaier, J. J. (2008). *Chesterfield County proposed biennial financial plan.* Chesterfield, VA: Chesterfield County.

United States Department of Justice/ Bureau of Justice Assistance. (1994). *Community policing; a framework for action.* Washington, DC: Author.

United States Fire Administration. (2002). *America at risk.* Emmitsburg, MD: Author.

United States Fire Administration. (1987). *America burning revisited.* Emmitsburg, MD: Author.

United States Fire Administration. (2008). *Public fire education planning: a five step process.* Emmitsburg, MD: Author.

Virginia Department of Health, Division of Injury and Violence Prevention and Virginia

Injury Community Planning Group. (2008). *Virginia unintentional injury

prevention strategic plan.* Richmond, VA: Author.

APPENDIX A

CHESTERFIELD FIRE AND EMS

STATION CAPTAIN – EMERGENCY OPERATIONS

Duties and Areas of Responsibility

August 24, 2009

I.   **AUTHORITY**

    A.   Station captains, under the general direction of their battalion chief, are responsible for the activities of all personnel assigned to their shift and for the inspection of equipment, in-service and shift training supervision, and requisitions and budgeting for their assigned station.

    B.   Station captains, under the general direction of their battalion chief, are to establish and coordinate station policies and procedures with other company officers and district chiefs/volunteer coordinators.

    C.   During the absence of their supervisors, captains may assume those duties when so delegated.

II.   **OPERATIONAL**

    A.   The station captains will respond to incidents as dispatched; assume command until relieved by a superior officer; determine strategic goals and tactical objectives; and supervise and participate in implementing tactical objectives.

    B.   The station captains will schedule and organize the daily activities for their shift.

    C.   The station captains will ensure citizens are satisfied with our customer service and leave the customers with more than they expected.

    D.   The station captains will supervise employees assigned to their shift; assist in their development and training; maintain discipline; demand safe work habits; and assist with providing for the daily needs of the workers.

    E.   When a subordinate under the station captain's command commits an infraction of department policies, procedures or addendums, they may impose penalties. In case of a minor infraction committed by a subordinate, the battalion chief will be notified in a reasonable amount of time or before the end of the tour of duty. In

case of a flagrant violation, the battalion chief will be notified immediately verbally, followed by a written report containing all the details.

F.   The station captains will train the shift on the special needs of their district, to include: streets, target hazards, water supply and other features affecting response.

G.   The station captains will identify target hazards for pre-plans and complex plans; assign them to each shift; advise their battalion chief of progress relative to completion dates; and review their shift's completed pre-plans with the battalion chief.

H.   The station captains will continuously foster career/volunteer cooperation; participate in and coordinate mutual career/volunteer activities; and keep the district chiefs/volunteer coordinators aware of current events and matters of interest.

I.   The station captains will report to the station operational battalion chief; act as a liaison between the battalion chief and district chief/volunteer coordinator; keep the battalion chief informed as to cooperative effort and progress of other supervisors on station projects; and coordinate/assign special projects as determined by the station operational battalion chief.

J.   The station captains will organize and coordinate daily, weekly and monthly station maintenance; follow-up on routine and emergency repairs; ensure seasonal checks of HVAC equipment; monitor repair costs to project medium and long range repair costs for the budget; and organize and assign station maintenance projects as needed.

K.   The station captains will organize and schedule daily, weekly and monthly apparatus maintenance; coordinate major repairs with the Maintenance and Logistics Division; follow-up as needed on routine work orders; and ensure proper mounting and placement of new equipment.

L.   The station captains will monitor the condition of equipment for safety; ensure equipment maintenance is performed; provide feedback on new equipment placed in service; and follow-up on equipment out for repair.

M.   The station captains will coordinate, conduct and follow-up on group home and daycare inspections; and coordinate special inspections, tours and programs with other supervisors.

N.   The numerical quota of all units will be maintained as far as practicable; deficient manpower will be reported to Emergency Communications and the appropriate battalion chief when the efficient operation of the service is jeopardized.

O. The station captains should coordinate and follow-up on station appearance, shift appearance, shift discipline, and safety in the following areas (but not limited to these areas):

Formal Shift Change	Grass
Proper Care of Property	Carpets
Windows	Maintenance Areas
Gutters	Storage Areas
Floor Waxing	Bay Floors
Station Cleanliness	Unit Cleanliness
Apparatus Areas	Locker Inspection
Needed General Maintenance	Uniform Inspection
Bunk Room Areas	Turnout Gear Inspection
Training and Lounge Areas	Stoves
Safety Hazards	Refrigerators

P. The station captain will keep the battalion chief informed on all matters of interest and important issues.

Q. The station captains will schedule and conduct training each shift.

R. The station captains will not permit intoxicated or undesirable persons to remain in or about quarters at any time. Children will not be permitted in quarters unless accompanied by an adult.

S. The station captains will assemble the shift for shift change and not release members from duty until they are properly relieved.

T. The station captains will maintain themselves in a physical condition to perform their job in accordance with the department health and physical fitness program.

U. In combination career/volunteer stations, the station captains will work closely with the district chiefs/volunteer coordinators on all joint issues and responsibilities such as station policy, budget preparation, station goals and monthly reports.

III. **ADMINISTRATIVE**

A. The station captains will be responsible for coordinating a needs analysis for budget preparation with input from volunteers and other shifts; prioritizing the budget needs; coordinating or obtaining bids for budget items; coordinating the budget with the district chief/volunteer coordinator and battalion chief; requisitioning budget

items; follow-up on back ordered items; and coordinating delivery of purchased items.

B. The station captains will establish station goals and policies which will support and reinforce department goals and policies, procedures and addendums; re-evaluating goals and policies, adding or deleting as necessary; coordinating goals and policies with volunteers and other shifts; and assuring adherence to goals and policies by assigned personnel.

C. The station captains will establish a safety attitude by implementing safety policies.

D. The station captains will ensure all station manuals are kept current.

E. The station captains will assign areas of responsibility among shifts in regards to forms, supplies inventory, map cards, wall map, etc.

F. The station captains will ensure their shift is kept current on department matters, policies, procedures and addendums.

G. The station captains will ensure accuracy and completeness of all station logs, apparatus logs, reports, records, call back cards, etc. relative to county operations.

H. The station captains will ensure that each subordinate possesses a valid operator's license issued by the DMV of the Commonwealth of Virginia. This will be done every April and October. The information will be entered into the station log on the date the license is verified.

I. In combination career/volunteer stations, the station captains will work closely with the district chiefs/volunteer coordinators on all joint issues and responsibilities such as station policy, budget preparation, station goals and monthly reports.

APPENDIX B

CHESTERFIELD FIRE AND EMS
LIEUTENANT – EMERGENCY OPERATIONS
Duties and Areas of Responsibility

July 30, 2009

I. **AUTHORITY**

   A. Lieutenants, under the general direction of their battalion chief, are responsible for the activities of all personnel assigned to their shift, inspection of equipment, in-service and shift training, supervision, requisitions and budgeting for their assigned station.

II. **OPERATIONAL**

   A. The lieutenants will respond to incidents as dispatched; assume command until relieved by another officer; determine strategic goals and tactical objectives; and supervise and participate in implementing tactical objectives.

   B. The lieutenants will schedule and organize the daily activities for their shift.

   C. The lieutenants will develop and maintain cooperation and coordination with the station captain.

   D. The lieutenants will ensure citizens are satisfied with our customer service and leave the customers with more than they expected.

   E. The lieutenants will supervise employees assigned to the shift; guide and assist in their development and training; maintain discipline; demand safe work habits; and assist with providing for the daily needs of the workers.

   F. When a subordinate under the lieutenant's command commits an infraction of department policies, procedures or addendums, they may impose penalties in accordance with Administrative Procedure #07. In case of a minor infraction committed by a subordinate, the battalion chief will be notified in a reasonable amount of time or before the end of the tour of duty. In case of a flagrant violation, the battalion chief will be notified immediately verbally, followed by a written report containing all the details.

G. The lieutenants will train the shift on geographic features such as streets, topography, physical conditions, and other matters affecting response in their first and second due districts.

H. The lieutenants will assist the station captain in identifying target hazards for pre-plans and complex plans; complete pre-plans and complex plans as assigned by the station captain in a timely manner and review their shift's completed pre-plans with the battalion chief.

I. The lieutenants will continuously foster career/volunteer cooperation; participate in mutual career/volunteer activities; and keep the district chief/volunteer coordinator aware of current events and matters of interest.

J. The lieutenants will be a direct report to their battalion chief.

K. The lieutenants will ensure daily, weekly and monthly station maintenance is completed in a prompt and efficient manner on all apparatus assigned to the station, and will follow up on routine and emergency repairs.

L. The lieutenants will monitor the condition of equipment for safety; ensure equipment maintenance is performed; provide feedback on new equipment placed in service; and follow up on equipment out for repair.

M. The lieutenants will conduct and follow up on group home and daycare inspections per Fire and Life Safety Procedure #08; and coordinate and conduct special inspections, tours and programs as needed.

N. The minimum staffing of all units will be maintained as far as practicable; deficient staffing will be reported to Emergency Communications and the appropriate battalion chief when the efficient operation of the service is jeopardized.

O. The lieutenants should continuously monitor station appearance, shift appearance, shift discipline and safety in the following areas (but not limited to these areas):

Grass	Proper Care of Property
Carpets	Windows
Maintenance Areas	Gutters
Storage Areas	Floor Waxing
Bay Floors	Station Cleanliness
Unit Cleanliness	Apparatus Areas
Locker Inspection	Needed General Maintenance
Uniform Inspection	Bunk Room Areas

Turnout Gear Inspection	Training and Lounge Areas
Stoves	Safety Hazards
Refrigerators	

P. The lieutenants will keep the battalion chief informed on all matters of interest and important issues.

Q. The lieutenants will schedule and conduct training each shift. This training will include practical exercises or evolution type classes each month. At least one night drill will be conducted each quarter.

R. The lieutenants will not permit intoxicated or undesirable persons to remain in or about quarters at any time. Children will not be permitted in quarters unless accompanied by an adult.

S. The lieutenants will assemble the shift for shift change and not release members from duty until they are properly relieved.

T. The lieutenants will maintain themselves in a physical condition to perform their job in accordance with the department's health and physical fitness program. They will also ensure that all members of their shift are participating in the approved P.T. program.

U. The lieutenant will ensure that all assigned uniform items for shift personnel are in good condition and worn appropriately.

V. The lieutenant is responsible for diligently working to prevent accidents and injuries. When they occur, the lieutenant is responsible for thorough investigations and making recommendations to prevent future incidents.

III. **ADMINISTRATIVE**

A. The lieutenants will be responsible for participating in a needs analysis for budget preparation and obtaining bids for budget items when requested.

B. The lieutenants will establish shift goals and objectives which will support and reinforce station and department goals and objectives; re-evaluating goals and objectives, adding or deleting as necessary; coordinating goals and objectives with volunteers and other shifts; and assuring adherence to goals and policies by assigned personnel.

C. The lieutenants will establish a safety attitude by implementing and enforcing safety policies.

D. The lieutenants will ensure areas of responsibility assigned by the station captain in regards to forms, supplies inventory, map cards, wall map, etc. are handled in a prompt and efficient manner. The lieutenant is responsible for ensuring that inventories are managed efficiently.

E. The lieutenants will ensure their shift is kept current on department matters and policies.

F. The lieutenants will ensure accuracy and completeness of all station logs, apparatus logs, reports, records, call back cards, etc. relative to county operations.

G. The lieutenants will ensure that each subordinate possesses a valid operator's license issued by the DMV of the Commonwealth of Virginia. This will be done every April and October. The information will be entered into the station log on the date the license is verified.

APPENDIX C

An excerpt from the CFEMS Fire & Life Safety Division Scorecard

FY2005-2009

Section II: Division Level Performance Plan

Fire and Life Safety

A. <u>**Purpose**</u> – The purpose of the Fire and Life Safety Division is to prevent and reduce death, injury, environmental impact and property loss caused by fire and other hazards through engineering design, code enforcement, investigations, and public education.

B. <u>**Core Services**</u> – The Fire and Life Safety Division provides a full range of public education programs, fire code inspections, fire/explosion and environmental investigations, fire protection systems plan review, system acceptance testing, and contributes to safe community design through site plan and subdivision team participation. The division's core services include:

<u>Community Programs</u>
- Public Education Programs
- Work with Juvenile Fire Setters
- Public Information and Media Relations

<u>Inspections</u>
- Fire Code Compliance Inspections and complaint investigations
- Operational Permitting for hazardous processes (fireworks and pyrotechnics, propane storage and exchange, open burning, and blasting operations).

<u>Investigations</u>
- Investigation of fires and explosions
- Investigation of environmental crimes and offences
- Participation in Central Virginia Fire and Arson Task Force
- Participation in the ATF Accelerant Canine Program

<u>Plans Review</u>
- Inspection Services
- Review of Construction Plans
- Acceptance testing of fire protection systems

<u>Community Development</u>
- Site Plan Reviews
- Subdivision Team Reviews
- Water and Utility Reviews
- Inspection and code enforcement for developing projects
- Data collection for Planning Division

Division Critical Services – The Fire and Life Safety Division will be working to address several critical areas over the next few years. These critical issues will be important to the long-term success and operation of the division. Adequate funding for the operations of the division will also impact these issues and the success of services provided by the division. The critical issues include:

- The effective and efficient delivery of construction and development plans review services with adequate resources
- Consistent code compliance and interpretation across the division
- The delivery of targeted community education programs based on historical data with adequate resources
- The consistent, effective and efficient delivery of code compliance inspections with adequate resources.
- The timely, effective and efficient delivery of fire/explosion and environmental investigations with adequate resources.

C. **Division Goals, Objectives and Performance Measures** –

Department's Goals:				
Goal #1: To earn overwhelming citizen satisfaction and community support				
Goal #2: To safely provide public safety services that exceed customer expectations				
Department's Objectives:				
Objective #1.1: To improve our citizen support ratings to a level of 97% based on the next Chesterfield County citizen satisfaction survey				
Objective #2.2: To reduce accidental civilian deaths and injuries each year				
Objective #2.3: To reduce loss from fire within the County				
Fire & Life Safety's Goal:				
Goal #1: To prevent and reduce injury, death, environmental impact and property loss caused by fire and other hazards through public education				
Fire & Life Safety's Objectives:				
Objective #1.1: Develop educational programs that are based upon historical data to educate our citizens in fire and life safety				
Objective #1.2: Deliver educational programs that will positively impact fire related injuries and deaths				
Community Programs Performance Measures	FY05/06 (Actual)	FY06/07 (Actual)	FY07/08 (Actual)	FY08/09 (Actual)
Leading Measures				
• Number of citizens contacted	27337*	16357	22710	29004
• Number of community program deliveries	578*	684	442	381
Lagging Measures				
• Number of residential fires	210	392	322	362
• Number of fire related injuries	19	42	39 (35)	36(52)
• Number of fire related deaths	1	7	3	0

* Inclusive of F&LS Division Programs only. Does not include Operations Division data.
( ) Number of firefighters injured.

APPENDIX D

**Excerpt from the Chesterfield Fire & EMS
FY08 Annual Report- pages 10 & 11**

Emergency Operations

The purpose of the Emergency Operations Division is to prevent and reduce death, injury, environmental impact, and property loss caused by fire, medical emergencies, and other hazards by providing safe, effective, and efficient emergency services.
The Emergency Operations Division provides a full range of emergency and non-emergency services utilizing career and volunteer resources. The division's core services include:
Emergency
• Fire suppression
• Patient care and transportation
• Hazardous materials incident mitigation
• Technical rescue
• Water rescue, search, and recovery
• Countywide emergency management
Non-Emergency
• Public education
• Public relations
• Inspection services
Emergency Operations accomplishments and measurements:
• Conducted a test of the FIREDOC/Major Incident Response Procedure. This included testing the communications procedure, FACE assessments, and windshield assessments. These tests provided feedback on the process and improvements that are currently being drafted.
• Promoted three battalion chiefs, seven captains, and six lieutenants.
• Continued working with the Training and Education Unit to develop in-service sessions that are providing valuable training activities.
• Volunteer Fire Companies report providing 45,969 hours of service to the citizens through training, administrative, and alarm response.

• Volunteer Rescue Squads have begun reporting member hours on a quarterly basis. Through two quarters of FY08, the squads reported 36,811 hours of service.
• We continue to work with the Richmond Metro Operations Chiefs on regional service delivery.
• A regional highway safety SOG has been adopted that includes the components of our highway safety procedure.
• A regional high-rise plan has been developed and a regional in-service delivery is being planned.
• A regional "Big-box" SOG is in draft form and a regional in-service delivery is targeted for 2009.
• Piloted and implemented a resource management procedure including alarm levels, tactical move-ups, and key station coverage for fire apparatus. Have piloted a "posting" concept for transport unit coverage during times of busy EMS activity.
• Implemented a Target Hazard Pre-plan Procedure that allows for both hard copy and electronic archival of pre-plans. Captains are working on development of target hazard lists and assignment of preplans.
• Placed new engines and ambulances in service which helps to update the reserve apparatus fleet.
• Installed or maintained over 1,100 smoke detectors during the year.
• Contacted 62,774 citizens in public displays and community programs.
• Limited fire damage to 8.89% of exposed residential property value.
• Developed a formal process and procedure for releasing captains to work as operational battalion chiefs.

APPENDIX E

**Excerpt from the Chesterfield Fire & EMS
FY08 Annual Report- page 18**

Management Services-
Fire & Life Safety Division

**The division consists of three work units:
Inspectors/Investigations, Plans Review, and
Community Programs.**

Accomplishments for FY08 include:
• Continued our partnership with the Sheriff's
Office and Police Department to conduct the
Summer Cadet Safety Camp for middle school
age children
• Conducted 4,793 fire safety and fire protection
system inspections
• Conducted 232 fire, explosion, or hazardous
material investigations
• Conducted 442 educational programs for 22,710
citizens
• Reviewed 1,663 fire protection system
construction plans in an average of 6.5 days
with 98.9% being reviewed in 15 days or less
(98% last year)

APPENDIX F

Excerpt from Chesterfield Fire & EMS Performance Plan

Vision

Our organization will be the premier provider of public safety services, utilizing our people to accomplish our goals.

CF&EMS will be a leader in providing "Five Star" fire protection, EMS, hazardous mitigation and rescue services. We will be recognized for our ability to prevent accidents, save lives and protect property.

The organization, through its leadership and resources, should support members to be successful and reach their full potential in contributing to the organization through education and professional development. We will communicate system-wide information so members can do their job. Members shall work in an environment that promotes safety and long-term health and well being throughout their career and into retirement. The organization will promote the well being of the member and their family. Membership in the organization should be meaningful and rewarding.

We envision an organization where every member takes pride and ownership in dealing with internal and external customers. They will act as if they are the proprietors of CF&EMS. Members should care about other members because we are family, and we won't tolerate slander of other members. We will encourage each other in attaining career goals. We will work to bring out the best in each other and ourselves while appreciating our differences. Each member will be committed to do his or her very best. In order to be the best, each member must be proficient in their core duties and strive to excel in their areas of expertise. We view education as important to the success of our members and the organization. Each member will take the initiative for their own professional development and seek opportunities both within and outside the organization.

The internal functioning of our organization must be structured to support growth and positive change. In order to accomplish this, members should feel as equals, and people must be prepared to assume higher positions of authority. We strive to have five members prepared for each position as it becomes vacant. The organization should be kept on the cutting edge of our industry through the utilization of technology in association with planning and research. The organization should create a "think-tank" environment that champions ideas for improvement. By measuring our services, we will create a standard business practice of continuously monitoring the effectiveness and efficiency of our efforts.

We envision our organization's success to be dependant on the overwhelming support received from those we serve. We envision our facilities serving as the focal point for our communities. Through our customer-focused attitude of service, we envision our citizens as being our biggest cheerleaders. We envision an organization that is so well respected, that adequate funding is appropriated through County and business sources for us to effectively perform our duties.

Mission

We provide excellent customer valued service in prevention, education, professional service and emergency response.

"Great Service by Great People"

Organizational Values

Our People: Our members are the foundation of our organization. Without dedicated, committed and compassionate members this organization would not exist. We strive to recruit and develop members who are friendly, professional, respectful, trustworthy, enthusiastic, well rounded, responsible and self-disciplined. Without these values instilled in and held by our members, this organization will not continue to grow and prosper.

Accountability: All members are accountable to their customers, the organization and each other to provide quality service. The Mission, Vision and Values of our organization direct our work behavior. Every member is accountable for their actions, conduct and obligations to meet their job responsibilities and perform their assigned duties.

Compassion: Our vocation often allows us to see people at their very worst moments. Loss of life, personal property, and injury can be the most stressful times in ones life. We have the ability to intervene at those times and care for our people, whether it is our citizens or our own members. What may be a significant event for our citizens may be routine to us. We must never become insensitive and lose perspective that we must serve and care for our citizens. Compassion is a virtue that when practiced, can mean so much to so many people. We will treat others as we wish to be treated.

Dedication: Being a member of Chesterfield Fire and EMS service requires a commitment from individuals like no other. Having to place ones life on the line to protect the lives and property of others is a tremendous responsibility. As members of Chesterfield Fire and EMS we must pledge ourselves to the primary cause of protecting lives and property with one hundred percent commitment. Nothing less is acceptable. Our high performing organization demands a high level of engagement from its members to deliver and perform excellence.

Health and Safety: The safety and health of our members should be considered in everything we do. The physical and mental demands of our profession require our members to maintain themselves in the best condition to help others and ourselves. Each member should end their workday in the same or better condition than they began. We owe this to our customers, our organization, our families and ourselves.

Honesty: One of the basic tenants and the cornerstone of the organization is our value of honesty. Honesty is the basis for all relationships and professional interactions, including being candid and forthright in giving views and perspectives. Without it our organization would be severely handicapped and could not operate. Members are often privilege to or responsible for the safe handling of all kinds of valuables and personal possessions. It is critical that citizens be able to completely trust the organization and its members, in any and all situations.

Integrity: The Fire and Emergency Medical Service fields are built upon a code of behaviors, beliefs and values that form the foundation of all that we are and do. The integrity of this organization is built upon honesty, trust, moral soundness and freedom from corruption. Personal, professional and organizational integrity are key components of the culture within our organization. It is expected that our members not only exhibit, but also promote these behaviors, beliefs and values. We must trust each other to uphold the mission and vision of this organization. As public servants, we are held to high moral and ethical standards. It is of great importance that the standards of the organization be maintained without compromise. An outcome of integrity will result in high levels of pride in the organization and all of its members.

Effective Communication: Each member has the responsibility to practice, encourage and take an active role in effective organizational communications. Everyone must follow and use the established procedures and processes for communication within the organization. Senders of information must ensure that messages are appropriately communicated to the right audience and that the message is understood. Receivers of information should actively seek out and participate in the communication process by providing confirmation of the information or feedback as necessary.

Goals and Objectives

Goal #1: To earn overwhelming citizen satisfaction and community support

We will achieve this goal by being actively involved in the community, striving to increase our citizen satisfaction ratings.

- Link to County Goal #2 – To Provide World-Class Customer Service

- Objective 1.1: To improve our citizen support ratings to a level of 97% based on the next Chesterfield County citizen satisfaction survey

- Objective 1.2: To improve our community support ratings to a level of 90% based on an average of all business satisfaction survey instruments

The support and approval that we obtain from the public and from those individuals and groups who have used our services is critical to our long-term success and continued improvement. We must always strive to provide high quality services and work to support the needs of the citizens. Currently, our Chesterfield County Citizens Satisfaction rating is 94.8%. We want to improve this rating.

Goal #2: To safely provide public safety services that exceed customer expectations

To achieve this goal, we will minimize suffering and loss, and ensure a safe community.

- Link to County Goals
  - #4 – To Be the Safest and Most Secure Community
  - #2 – To Provide World-Class Customer Service
  - #6 – To Be the First Choice Business Community
  - #3 – To Be Known for Extraordinary Quality of Life

- Objective 2.1: To reduce our member's work-related injuries each year

The safety of our members as they perform their duties is important to our effectiveness and their wellbeing. We will work to continuously integrate a safety attitude into the entire organization. Members who are injured and away from work impact the entire system and decrease the resources available to provide services to our customers.

- Objective 2.2: To reduce accidental civilian deaths and injuries each year

One of our core functions is to reduce the number of accidental injuries and deaths each year. We will work to identify, correct and prevent these events that impact the citizens of our community. Our community based fire and accident prevention programs will be targeted to those audiences in need resulting in the greatest impact.

- Objective 2.3: To reduce loss from fire within the County

The loss that citizens of our community face from fire impacts their lives in dramatic ways. It also impacts the economic wellbeing of our county. We will work, through the delivery of effective prevention and suppression services, to reduce the impact from fire that our citizens must face. We will work to review and evaluate alternative service delivery options to continue to improve and streamline services provided.

- Objective 2.4: To improve our response time to meet the 6 minute Fire & EMS response goal to Priority 1 calls for service within the urban corridor 90% of the time

Our effectiveness in reducing personal suffering and fire loss is directly related to our response time to incidents. We have an established goal of a 6-minute response time within the urban corridor for all Priority 1 life threatening calls for service. This goal includes the interval from when the call is received by the Emergency Communications Center until the first unit arrives on location. Our members must continuously be prepared to respond in the most efficient means possible.

Goal #3:   To develop a highly effective and efficient public safety organization

By utilizing technology, sound fiscal and process management, our members will continually improve and standardize our business practices.

- Link to County Goals
  - #2 – To Provide World-Class Customer Service

- Objective 3.1: To meet our performance objectives within our allocated budget target

Our organization must work within its allocated budget target from the county as we provide our core services. In order to do so, we must always work to improve how we deliver our services and to operate in the most efficient manner possible. We must continuously look for ways to improve our performance and for alternative delivery methods. Each division within the organization must also meet their individual budget allocations.

- Objective 3.2:   To continually improve our processes to result in increased organizational effectiveness

We must constantly work to improve the operating processes within the organization. Only by identifying, flowcharting and improving on our processes can we truly make a difference in how we deliver our services and conduct business. By standardizing and documenting our processes, we also create the basis by which those members who follow us can effectively operate.

Objective 3.3:   To utilize performance planning throughout the organization

Planning serves as the basis for how we operate as an organization. We must plan in a consistent and orderly fashion in order to be effective and efficient in providing fire and EMS services. The vast amount of programs and projects that are conducted by the organization must be coordinated. This coordination improves the effective use of the financial and human resources that we are allocated. We must consistently use appropriate processes or tools including the PDSA Cycle, SIPOC, and project management.

Goal #4:   To develop a high performance public safety organization consisting of a diverse membership that includes civilian, career and volunteer personnel

By recruitment, development, support and retention of quality members, we will bring to reality the organizational vision.

- Link to County Goals
  - #2 – To Provide World-Class Customer Service
  - #4 – To Be the Safest and Most Secure Community
  - #6 – To Be the Employer of Choice

- Objective 4.1:   To successfully utilize talent management and individual development plans

In order to be a premier public safety organization for the future, we must have members who are well trained and who are ready to fill any appropriate positions within the organization. The organization will identify those expectations and requirements for each position within the organization. Members will be provided training opportunities by the organization. In turn, members must also take the initiative to assist in developing themselves for the future. The vision of the organization is to have five people who are developed and ready to fill any position within the organization.

- Objective 4.2:   To increase utilization of Fire and EMS volunteers within the County

Our volunteers are a critical resource in providing quality fire and EMS services. They enable the county to increase its resources in an efficient manner. We will work to recruit and retain active volunteer members who can provide additional resources in the provision of both traditional emergency response and non-traditional means.

- Objective 4.3:   To maintain an 85% yearly retention rate for volunteer personnel

We will work to improve the retention rate for all volunteers to 85%.

- Objective 4.4:   To recruit, develop and retain Advanced Life Support Providers

The provision of Advanced Life Support EMS services to those in need is a critical core mission that we need to meet. This service requires having an adequate number of trained ALS providers to provide coverage. As the county continues to grow and the external demands for ALS providers increases, the organization will need to concentrate on ensuring that a systematic effort is made to bring in and keep good, qualified providers.