

Running head: FIRE DEPARTMENT USE OF SOCIAL MEDIA

The use of social media as a tool for community based safety education in the Stony Hill Rural

Fire Department response district.

A.C. Rich, Jr.

Stony Hill Rural Fire Department, Inc.

Wake Forest, North Carolina

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 the appropriate credit given where I used the language, ideas, expressions, or writings of another.

Signed: _____

Abstract

This applied research project explores the application of social media methods and platforms to fire service's community risk reduction communications with the public. The problem is the Stony Hill Rural Fire Department is not active in community risk reduction initiatives within its response district. The purpose of this research is to identify social media platforms to use as an outreach tool for community safety education and associated programs. This descriptive research is accomplished through a literature review and analysis of a feedback instrument to answer the following research questions:

1. What is social media?
2. How is social media used in non-public safety organizations?
3. How are other emergency response organizations using social media to improve community outreach activities with their communities?
4. What social media formats may be used to improve Stony Hill Rural Fire Department's community oriented safety initiatives?

The research revealed a direct relationship between the corporate use of social media in marketing and the fire service's goal of public safety education. The commonality identified is customer engagement and maintenance of a relationships. The researcher found that the methodologies used in the corporate world have a direct application in the fire service.

The research recommended that the Stony Hill Rural Fire Department employ the use of social media platforms to enhance its community risk reduction initiatives in its fire protection district.

Table of Contents

Certification Statement2

Abstract3

Table of Contents4

Introduction5

Background and Significance6

Literature Review8

Procedures22

Results26

Discussion34

Recommendations37

References39

Appendix A43

Introduction

The ever present and emerging capability of the Internet coupled with access to instant information is a significant force in the modern American society. Conventional communications media is rapidly replaced by internet based instant access media platforms and the United States population is embracing the technology more daily. The fire service, as a customer service driven organization, is constantly forced to adapt to its external environment and particularly, its customer base. The author, as chief of a rural combination fire department, has determined that this technological media shift has created an opportunity for the improved marketing of fire department public education and service delivery capabilities. As personal electronic communications mediums and technologies are constantly evolving, research is necessary to determine the appropriate media platforms to market the fire department and its initiatives.

The problem is the Stony Hill Rural Fire Department is not active in community risk reduction initiatives within its response district. The purpose of this research is to identify social media platforms to use as an outreach tool for community safety education and associated programs. This descriptive research will be accomplished by answering the following questions:

1. What is social media?
2. How is social media used in non-public safety organizations?
3. How are other emergency response organizations using social media to improve community outreach activities with their communities?
4. What social media formats may be used to improve Stony Hill Rural Fire Department's community oriented safety initiatives?

Background and Significance

The Stony Hill Rural Fire Department was incorporated in 1958 by a dedicated group of concerned citizens from the Stony Hill Community and New Light Township, located in Northern Wake County, North Carolina. As the nearest fire protection was almost 8 miles away in the Town of Wake Forest, serious delays in service were identified by the organizational founders, therefore provided the impetus for department formation. Since those humble beginnings, the department has grown and now operates from two fire stations and has a staff of sixty personnel. The staffing dynamic includes thirty-one volunteers, twelve part-time, and ten full-time personnel. The management team of the organization is comprised of a part-time Fire Chief, three part-time Assistant Chiefs (responsible for Operations, Services, and Training respectively), and one full-time District Chief (responsible for all paid staff coordination).

The organization protects a resident population of 5,426 people, consisting of 2,125 homes (Wake, 2007). Due to watershed limitations and existing zoning regulations, the response district will be remanded to residential development and hence remain a bedroom community. The population growth projection for the response district is estimated to increase to 11,387 in 2015, constituting a 47% increase in five years (Wake, 2007).

Historically, the Stony Hill Rural Fire Department response district has been more centrally oriented as a community and fire department activities and communications were accomplished through family contacts, churches announcements, and simple word of mouth. As the population of the district increased with development, the organization initiated the use of mail outs, sign boards at the stations, and an annual open house activity. These activities have proven very successful, however the ability to reach more citizens is desired by the organization. Personnel

time limitations are also a governing factor as volunteer firefighters are now more involved with work and family.

America Burning, Re-commissioned (2002) indicates the most effective way to minimize and reduce the loss of life due to natural and man-made disasters is to implement a community level multi-hazard mitigation and risk reduction program for communities and their citizens. The United States Fire Administration and FEMA provide informative programs for fire departments to apply. However, if a department serves a community that is primarily residential with no schools or other public venues, the challenge of contact with the public is more problematic.

These local and national factors are indicative of trends where more efficient strategies and approaches are required to provide meaningful fire safety education and general communication to our citizens. The quest for this efficient service delivery is also complimented by the wide spread use of the internet and social networking as a standardized method of communicating with each other in personal interactions. Therefore a communications method is desired that can reach the most people, using a very common user interface (the internet), yet requiring the least amount of personnel resources. The overarching question is how can the Stony Hill Rural Fire Department better reach our customer base with risk reduction information and initiatives when the ability to make contact with citizens and fire department resources are much more time constrained?

This research project will address the U.S. Fire Administration's Operational Objectives of "reduce(ing) risk at the local level through prevention and mitigation" and "improving local preparedness and planning;" and expound on the "community risk reduction" component of the Executive Fire Officer, Executive Analysis of Community Risk Reduction course. The research

will seek to identify suitable social media options for consideration by the Stony Hill Rural Fire Department.

Literature Review

The literature review consisted of a review of web based content, research papers, and books regarding the topic of social media. In the literature review, the researcher found a vast and evolving body of information related to social media and social media marketing. Much of the information was obtained from the internet therefore it is extremely dynamic and timely. The content of this research is relative to the general time period of the research. The researcher anticipates as improved technology emerges the content of this research will be replaced with improved and updated information and applications.

The literature review focuses on gathering and reviewing information relevant to the research questions:

1. What is social media?
2. How is social media used in non-public safety organizations?
3. How are other emergency response organizations using social media to improve community outreach activities with their communities?
4. What social media formats may be used to improve Stony Hill Rural Fire Department's community oriented safety initiatives?

Merriam-Webster (2010) defines social media as forms of electronic communication where users create online communities to share information, ideas, personal messages, and other content such as videos. Social media may also be defined as media that is very accessible and adaptable, using web-based technologies to create communication into interactive dialogue (Wikipedia). Social media is viewed by many as the future of communication where numerous

internet based tools improve the sharing of information and the overall experience of the user.

The innovative base of this media platform will greatly simplify the sharing of information in the form of text and multi-media files. Social media takes on many forms, but it is typically founded in social networking websites, web blogs, and wikis (Social Media, n.d.).

Ron Jones (2009) elaborates social media as a vast array of online and internet based media platforms where people and their individual reactions or impressions are essential for the interaction. Jones defines social media as:

Social media is essentially a category of online media where people are talking, participating, sharing, networking, and bookmarking online. Most social media services encourage discussion, feedback, voting, comments, and sharing of information from all interested parties. It's more of a two-way conversation, rather than a one-way broadcast like traditional media. Another unique aspect of social media is the idea of staying connected or linked to other (web)sites, resources, and people (Jones, 2009).

Jones (2009) continues by categorizing social media into the following types:

1. Social news. Social news sites are websites that allow the user to read news topics and rate their relevance by voting or commenting on the articles. The news articles that are the most prominent are elevated to a higher position in the news feed.
2. Social sharing. Social sharing websites allow the user to upload content such as video or other files for sharing with others subscribers to the site or to the general online public. Examples include You Tube, Flickr, and Snapfish
3. Social networking. Social networking websites provide a means for people to search and connect with people they have otherwise lost contact with. Once

connected or linked, a person may track the status updates of the “friend” by their personal activity posts, photos and videos, and interests. Many people use the social networking capability to market themselves to the job market for potential employers. Facebook, LinkedIn, and My Space are examples of these websites (Jones, 2009).

The essential element to the success of social media applications is the user of the social media content. Sean Silverthorne (2009) of the Harvard Business School describes some the characteristics of social media users. In his article *Understanding Users of Social Networks* he quotes Harvard Business School Associate Professor Mikolaj Jan Piskorski:

Online social networks are most useful when they address real failures in the operation of offline networks. It's hard to know what my friends are up to, but online I can catch up with them quickly. They can also fix bigger search shortcomings, such as those related to establishing new relationships. If I am looking for someone who can help me with my start up, I would ask my friends if they know such a person, and if they don't, I would ask them to inquire with their friends. The problem is that those friends of friends don't always have an incentive to help, so they won't work on my behalf.

Silverthorne adds that the typical user of social media is enticed to socialize virtually without actually experiencing physical or direct contact with another person. This capability allows the user to more openly communicate and convey thoughts and ideas (Silverthorne, 2009). In addition, the user is enabled to freely explore the profile of the other user without conversation. In this artificial environment, Silverthorne hypothesizes that the user must rely heavily on images, videos, or photographs to fulfill the online experience. He adds: “People just love to

look at pictures. That's the killer app of all online social networks. Seventy percent of all actions are related to viewing pictures or viewing other people's profiles” (Silverthorne, 2009).

In the same article, Piskorski concludes that users who post photos or videos of themselves or their activities are able to indirectly advertise their popularity without actually having to boast on their status or activities. He also asserts that the social norm of not prying into the personal lives of individuals is avoided by virtue of the online experience. He states it is “a very delicate way for one to pry into your life without really prying” (Silverthorne, 2009).

Demographically, the users of the internet and social media are diverse. Generational preferences are evident in internet usage and social networking. The Pew Research Center (2010) in a report titled *Generations 2010* states “older generations are making notable gains. Some of the areas that have seen the fastest rate of growth in recent years include older adults’ participation in communication and entertainment activities online, especially in using social network sites such as Facebook” (Pew, 2010). Pew Research (2010) defines the generational age groups and categorizes their internet use as:

1. Millennials (Gen Y) – Born 1977-1992, Ages 18-33, 30% of total adult population, 35% of the internet using population.
2. Generation X – Born 1977-1992, Ages 34-45, 19% of the total adult population, 21% of the internet using population.
3. Younger Boomers – Born 1955-1964, Ages 46-55, 20% of the total adult population, 20% of the internet using population.
4. Older Boomers – Born 1946-1954, Ages 56-64, 14% of the total adult population, 13% of the internet using population.

5. Silent Generation – Born 1937-1945, Ages 65-73, 7% of the total adult population, 5% of the total internet using population.
6. G.I. Generation – Born -1936, Aged 74+, 9% of the total adult population, 3% of the total internet using population.

Bruce Tulgan (2009) describes the Millennial (Generation Y) person as a highly adaptable and accustomed to technology and globalization. He adds they are “comfortable in this highly interconnected rapidly changing web of variables” (Tulgan, 2009). Pew Research (2010) adds that Millennials, those ages 18-33, remain more likely to access the internet wirelessly with a laptop or mobile phone. In addition, they still clearly surpass their elders online when it comes to:

1. Use of social networking sites
2. Use of instant messaging
3. Using online classifieds
4. Listening to music
5. Playing online games
6. Reading blogs
7. Participating in virtual worlds

However, internet users in Generation X and the older generations are now more likely to multiple online activities than the younger Millennial generation. The activities include visiting government websites and using the internet to obtain financial information (Pew, 2010).

Pew Research (2010) also illustrates the overall use of the internet based on preference, regardless of age variation:

1. Email

2. Use of search engines
3. Seeking health information
4. Obtaining news
5. Purchasing products online
6. Making travel reservations or purchases
7. Performing online banking
8. Searching for religious information
9. Rating products, services, or people
10. Making online charitable donations
11. Downloading internet content

Internet use is an indicator of the disposition to utilize social media. In a report from the Neilson Company (2010), the popularity of social media is illustrated by three of the world's top five internet brands being social media related. Facebook, YouTube, and Wikipedia are ranked third, fourth, and fifth respectively. Neilson (2010) adds that the world now spends over 110 billion minutes on social networking and blog sites annually. The activity equals 22% of the total internet activity online or one in every four and half minutes.

For the first time ever, social network or blog sites are visited by three quarters of global consumers who go online, after the numbers of people visiting these sites increased by 24% over last year. The average visitor spends 66% more time on these sites than a year ago, almost 6 hours in April 2010 versus 3 hours, 31 minutes last year (Neilson, 2010).

As the public use of social media increases, private corporations are now aggressively focusing on the benefits of social networking and are developing procedures to participate in and

capture the demographics and preferences of conversations pertaining to their product. A white paper of the SAS Corporation (2010), state that “social media is a force too powerful to ignore” and that visits to the top ten social networking sites increased by 63% from December 2008 until December 2009. They estimate that one of every ten visits to the internet results in a visit to a social networking site and one in every four page views is on a social networking site. In addition, estimates indicate that social networking is 11% of all modern internet use to date. They add that professional marketing managers are now required to rethink their approach to their practices. In the past marketing was a process for “eyeballs only” where the quantity of people that saw your advertisement would naturally equal the success of the advertising. The exponential growth of social media has altered the rules as it is now a process of not only what the customer sees but what they think and feel about the product or service. Even with the transition of business into the internet world, many marketers continue to maintain an “eyeball” ethic. Traditional corporations measure the success of their web based marketing effectiveness by evaluating the number of “hits” or visits on their website. Although this approach will reflect how many persons have visited the website, it is unable to measure the dynamics involved with the potential customer’s feelings and reaction to the advertised product or service. The modern marketing approach is now referred to as “engagement” or interaction, where the metrics of the customer’s experience is measurable in terms of actual feedback related to the product or service (SAS, 2010).

In his column *Social Media Marketing 101*, Rob Jones (2009) provides a general view of the social media world where social media usage trends are illustrated:

1. Five of the top 10 fastest-growing Web brands are user-generated content sites.

2. Sixty-seven percent of businesses state their best source of advice on their products and services comes from their consumers.
3. Forty-five percent of adult Internet users have created personal content online.
4. There are approximately 1.2 million blog posts per day.

Many corporations are striving to find their fit into the social media explosion and promote their products. They are diverting funds to support the development and growth of a new marketing strategy that incorporates social media into their traditional marketing processes. Jones (2009) cites specific examples why social media advertising is beneficial:

1. It assists in the management of your company's or brand's reputation.
2. It builds brand awareness and aids in the improvement of how people view your product or service.
3. Social media will bring you closer to your customers. Determine their needs and respond to them.
4. It will provide creative and effective ways to determine insights not previously available.
5. Social media possesses features that create methods that support your customers and clients that are new and more inexpensive.
6. Social media is very inexpensive when compared to traditional advertising.
7. It provides a capability to measure and track the performance of your product.

Halligan and Shah (2010) describe the use of social media as a process of “getting found” on the internet. They elaborate that the traditional form of marketing used fifty years ago involved an outbound approach where corporations would project their services and products out

to the public. This strategy worked well as the media platforms of radio, television, and printed media evolved, however they conclude this marketing approach “is winding down as people become more efficient at blocking marketing interruptions and turn instead to the Web for their learning and shopping needs” (Halligan & Shah, 2010).

Even as the benefits of social media are positively illustrated, corporations must be judicious and cautious with social media use in marketing. In essence, does a corporation want to succeed at social media use or social media marketing? Augie Ray (2010) argues there is a huge difference, emphasized by the contrast in simply using social media tools or actually adopting social media philosophy in your organization. An organization may feel they are socially networked by their social media presence and the subsequent web postings on their product, however they are doomed to fail if they do not project the old fashioned service when real life or face to face experiences occur. Ray argues that even though social media is a powerful tool for marketing, it is useless if the advertised perception of the corporation is misleading when a real life experience occurs with a customer (Ray, 2010).

Customer relationships are essential to the marketing of a service or a product. Another modernized method employed by businesses is the use of social media to enhance and improve their Customer Relationship Management (CRM) practices. Forrester Research, Inc (2010) explains that traditional customer relationship management has been less transactional or social in nature and customer were not provided a mechanism to offer multi-focused feedback to the manufacturer or the ability to correspond with other customers. Social media is now being used as a medium for improved customer service relationships and it enables an enhanced sharing or transaction of information between the customer, manufacturer and other customers. Forrester Research (2010) states the primary purpose of this swing in communications process is: “to

engage with emerging social consumers, enrich the customer experience through community-based interactions, and architect solutions that are flexible and foster strong intra-organization and customer collaboration.” CDC Software, Inc. in their white paper *5 Principles for CRM Success* (2010) indicate that companies and corporations that are considering becoming more customer centered must develop CRM strategies that establish customers as the focal point of their business. This relationship approach should overshadow their product, processes, and even profits. They stress a focus on building value through stronger customer relationships and improved customer loyalty. The customer experience should be “distinctive, consistent, and positive enough to cement deeper relationships and improved loyalty” (CDC, 2010). It is reinforced that if the customer experience is positive from first contact through post sale, the experience will determine whether the customer buys more, stays longer, or recommends you to others (CDC, 2010).

In conjunction with private sector marketing, the fire service has employed many techniques adapted from the corporate world. Ben May (2007) discusses how proactive and effective fire and safety education programs are largely dependent on the extent a fire department markets its services. He elaborates on prevention marketing as a significant opportunity for fire departments:

The issue of prevention is probably the single most important emerging opportunity for any department to gain visibility among the citizens, institutions, and businesses it protects. The great opportunity prevention provides is that the department can actually achieve one of the primary functions of its mission-stopping fires and accidents before they occur-through the marketing mechanism, and to the most people (May, 2007).

Thomas W. Aurnhammer (2000) poses a question focused on what we are trying to market and why. He indicates that a fire department's marketing efforts should be based upon:

1. The department's viability and survivability.
2. Providing higher visibility in the community.
3. Improved communications with internal and external customers.
4. Creating an understanding as to the department's services, costs and benefits, and culture.

Aurnhammer adds:

All of these items cannot stand alone, and ignore how the department provides services and the underlying theme of meeting the goals of the organization. Recognizing that fact and utilizing a synergistic approach to marketing will assist us in accomplishing our mission. A shift has taken place over the past few years in the use of the media in providing the fire prevention and safety slant in the reporting of fire incidents. Prior to that we stressed the number of alarms, personnel on the scene, amount of water flowed, and the cause of the fire. We are now seeing information on how smoke detectors woke a family and allowed them time to escape, or how fixed fire protection features held losses to a minimum. We must now do the same for all of the services that we as fire departments provide (Aurnhammer, 2000).

In the report *Strategies for Marketing your Fire Department Today and Beyond* (USFA, 1998), fire service marketing is illustrated in three areas of focus: public information, public education, and public relations. Public information includes the community's awareness of the fire department's emergency services and non-emergency organizational activities. Public education is: "the process of changing people's attitudes and behavior related to safety, as most

fires and injuries can be prevented with changed behavior” (USFA, 1998). Public relations is a process of creating and maintaining positive public perceptions of the organization and its services. The USFA describes this activity as an active process where constant work and monitoring is required for success. These three activities are overlaid to form a supportive system for public orientation where the activities complement each other. When one area is performed well, it directly augments the other’s effectiveness (USFA, 1998).

Marketing fire services to the public is not without complications. Alex Ford (2008) describes modern marketing as very complex and more difficult than in recent years. He adds that the explosive use of the internet has actually created more adversity due to the seemingly limitless availability of information. This information overload can actually inhibit the message a department wishes to project (Ford, 2008). May (2008) states that emergency response activities are definitely not the time to have casual conversations with your constituents. He concludes:

“When our citizens do need us, they are usually not in a position to receive a safety message because by the time they call us, it is already too late. At the very least, they are in a state of extreme stress. Not really a conducive atmosphere for learning a safety message” (May, 2008).

As the fire service embraces the technological capabilities of the internet and social media, new reputation related risks emerge. In the white paper *Fire Service Reputation Management* (CVVFA, 2010) activities related to the perception of department membership and their personal activities are brought forward. The paper indicates that there is a tremendous organizational risk when members are participating in social media sharing, especially if the social media use is negative, offensive, or significantly biased. In cases where a fire department

uses Facebook, many of the organization's members are also connected to the department's postings. Depending on the settings of the page, the members posting may be seen by the public via the department's social media page (CVVFA, 2010). The Pew Research Center (2010) indicates that individuals now have larger digital footprints than anticipated and that many are not aware of the openness of their information. This information is available to anyone who may use the social networking site and may include an individual's photo, phone number, email address, employer, and personal preferences. Personal information is viewed as a form of internet commodity:

Personal information has become a form of currency that is shared and exchanged in the social marketplace today. Yet, while the management of users' online identities has arguably become more complex and multi-faceted over time, internet users have become less likely to worry about the amount of information available about them online (Pew, 2010).

Although the use of social media may be risky, Manpower expands and concludes in their report *Social Networks vs. Management? Harness the Power of Social Media* (Manpower, 2010); the risks associated with the use of social media may be considered acceptable given the positive return on its use. Corporations are encouraged to harness the creative energy and imagination of their employees through collaboration with each other and their customers. Manpower (2010) believes if employees can be more intellectually and emotionally engaged with the company's goals, they will be more productive. Manpower also states:

Social media is particularly suited for communications intended to keep employees connected to an organization's mission and vision. For example,

leaders can use social media to establish and enhance a two-way dialogue with employees, and reinforce the perception that “we’re all in this together.”

Similarly, company-sponsored social networks can forge critical connections among teams in far-flung offices, helping ensure that employees feel connected to each other and focused on the task at hand. Moreover, the so-called “millennial” generation, now entering the workforce, will demand that they be able to use the same social media tools that keep them so well connected to their friends (Manpower, 2010).

The literature review may be summarized as an exploration of social media benefits and consequences, coupled with its emerging and loosely understood application in the corporate world. The researcher identified that scholars and professionals alike provided different definitions and applications, however some common themes exist. First, social media is an exponentially expanding technology or capability that reinvents and redirects itself rapidly. It is driven by the web based population serving as contributors and evolves based on user input and their expectations. Next, what began as a way for individuals to share personal information has expanded to a global marketing tool that is more powerful than any other marketing method in history. Finally, social media platforms are now an expectation of society. Although laden with risks to personal and corporate reputation, it remains as a powerful tool for communications to large amounts of people on a local, national, or global scale. The researcher concludes that social media, in its many forms, is a very viable form of mass communication that provides an adaptable fit into the fire service marketing and public communications needs.

Procedures

The desired outcome of this research is to identify information that will contribute to the development and use of social media for the Stony Hill Rural Fire Department's public education initiatives. The technology surrounding social media is adaptive in nature and provides an opportunity for users to contact and interact with mass audiences. As the use of social media for community based risk reduction is new and emerging, the researcher used the descriptive research method to identify existing forms and applications of social media. The procedures used were a review of various literature related to the subject of social media and a feedback instrument to measure the current fire service use of social media within the State of North Carolina. The formation of results in this research project follow formatting prescribed by the *Publication Manual of the American Psychological Association, 5th edition* (APA, 2001).

The literature review began at the National Fire Academy's Learning Resource Center while in attendance of the Executive Analysis of Community Risk Reduction course. Journal articles, white papers, web based content, and existing applied research papers on the subject were accessed and reviewed to identify various methodologies related to the use of social media.

Additional research was conducted via internet access with multiple research periods conducted and Yahoo.com used as the primary search engine. The search terms used included: social media, social media use, social networking, social marketing, fire department use of social media, and fire department marketing. Additional research was conducted at the Wake County Library, Wake Forest Branch located in Wake Forest, North Carolina. The combined information of existing social media use and literature based recommendations provided the basis for the researcher to evaluate the application of social media as a communications tool.

A web based feedback instrument related to fire department use of social media was generated at Zoomerang.com and forwarded to the North Carolina Association of Fire Chiefs email distribution list. The survey was intentionally limited to North Carolina fire service leaders to narrow the focus and reflect a local perspective. The survey consisted of twelve questions:

1. Describe your department's staffing (All Career, All Volunteer, Combination – Majority Volunteer, Combination – Majority Paid).
2. Describe your protection district (Urban, Suburban, or Rural).
3. Describe your protected population (population)
4. Does your organization utilize a website/webpage?
5. If the answer to the previous question #4 is yes, do you provide Fire Prevention and Public Education information on your website
6. Does your organization also use Social Media mediums to promote Fire Prevention/Education information to the public?
7. If the answer to question #6 is yes, which Social Media platforms does your organization use?
8. Does your organization use Social Media mediums for Marketing and Community Stakeholder notices or notification?
9. How successful do you feel your organization's use of Social Media has been (e.g. have you reached your target audience with the intended communication)?
10. Does your organization have a policy or procedure in place that addresses the use of Social Media by members?

11. Regardless of the specific situation, has your organization experienced any personnel related issues related to member use of Social Media (while on or off duty)?
12. Do you feel Social Media platforms (if managed accordingly) are an appropriate medium for Fire Department marketing and communications?

The outcomes of the survey are included in the results section of this research.

Limitations:

Limitations related to the research were noted. The researcher found multiple forms of social media platforms available for users, each different in use and application. The determination of appropriate fit for fire department use in the area of public education was difficult to determine but could coincide with normal business practices. The selected fit will be discussed in the recommendations section of this research.

Definitions:

APA American Psychological Association (APA). This organization publishes the *Publication Manual of the American Psychological Association*. The 5th edition is used for this research project. The APA defines rules to be used in the preparation of manuscripts for clear communication (APA, 2007).

Facebook A social network service where users may create a personal profile, add other users as friends and exchange messages, including automatic notifications when they update their profile. Additionally, users may join common interest user groups, organized by workplace, school, or college, or other characteristics (Wikipedia, 2010).

Social news Social news sites are websites that allow the user to read news topics and rate their relevance by voting or commenting on the articles (Jones, 2009)

Social sharing Social sharing websites allow the user to upload content such as video or other files for sharing with others subscribers to the site or to the general online public. Examples include You Tube, Flickr, and Snapfish (Jones, 2009).

Social networking Social networking websites provide a means for people to search and connect with people they have otherwise lost contact with. Once connected or linked, a person may track the status updates of the “friend” by their personal activity posts, photos and videos, and interests. Many people use the social networking capability to market themselves to the job market for potential employers (Jones, 2009).

Twitter Twitter is a real time network that connects you to information you define as interesting. Using small bursts of information called “tweets” a 140 character maximum message may be sent to “followers” that subscribe to your profile (Twitter, 2010).

Web 2.0 Web 2.0 is a set of technologies and applications that enable efficient interaction among people, content, and data in support of collectively fostering new businesses, technology offerings, and social structures (Forrester, 2007).

Weblogs (Blogs) Harvard Law School define a weblog as “a hierarchy of text, images, media objects and data, arranged chronologically, that can be viewed in an HTML browser. Weblogs allow users to post their ideas in their words

with no editing. Weblogs are a post by post conversation by users.

(Winer, 2003).

You Tube

You Tube is a free service where users may upload and view video content

(Ebsen, 2009).

Results

The results of this applied research project are gathered from the literature review on the subject of social media and survey results. The results are focused to expound on the procedures and information gathered in the literature review, answering the four research questions.

Question #1:

What is social media?

The research has identified social media as: “forms of electronic communication (as Web sites for social networking and micro-blogging) through which users create online communities to share information, ideas, personal messages, and other content (as videos)” (Merriam-Webster, 2010). Social media encompasses many different forms of web-based technologies where users create the content and share with others that are part of the social network. Solis (2009) elaborates that social media is all about dialog where two way discussions bring people together in order to discover and share information. Users of social media are encouraged to provide discussion, feedback, suggestions, voting, and comments on the topic or item being shared (Jones, 2009) This social sharing web basis is known as Web 2.0. Forrester Research, Inc. (2007) defines Web 2.0 as the second generation internet environment where participant interaction is improved and the majority of the web content is user provided. They add that the interactions of Web 2.0 foster not only relationships between people and personal content, but enables improvement and interaction in business, technology, and social structures (Forrester,

2007). Through personal and professional interactions, corporations are harnessing the use of social media to promote their products and receive feedback from customers (Jones, 2009).

Social media is not just for personal information sharing but has found its niche in corporate use for marketing (Business.com, 2009).

Question #2:

How is social media used in non-public safety organizations?

The research has identified a wide use of social media in the corporate world. A report provided by Business.com (2009) describes how not only do people use social media to interact on a personal level but businesses are using the technology to interact with customers and other businesses in their market. Business.com indicates that social media is a powerful tool for the sharing of business information and services (Business.com, 2009).

SAS (2010) discusses how online social conversations about your brand or service can improve your market or damage your reputation if not managed accordingly. They add that friends and followers must be engaged and corporations can no longer push their marketing message and hope that awareness equals advertising; they must be approached interactively sought for feedback to achieve successful sales (SAS, 2010).

Michael Stelzner (2010) reports on the benefits of social media use in marketing. He states: “a significant 85% of all marketers indicated that their social media efforts have generated exposure for their businesses” (Stelzner, 2010). He adds that only 65% of the marketers surveyed have been using social media for a few months, therefore the use of the capability is still in a growth stage. Additionally, 56% of the users of social media for business projection spend six hours or more weekly in the maintenance of the social media status (Stelzner, 2010).

Brent Leary (2010) describes how Customer Relationship Management has also improved with the use of social media. He states that traditional Customer Relationship Management was based upon a more one dimensional perspective of providing access to information and data. The use of social media has added an additional layer of capability where the current and potential customers are now engaged for their input and feedback on services to guide the corporation's focus on improving the overall experience for the customer (Leary, 2010). Forrester Research, Inc. (2010) adds: "CRM is evolving from its traditional focus on optimizing customer-facing transactional processes to include the strategies and technologies to develop collaborative and social connections with customers, suppliers, and even competitors."

Question #3:

How are other emergency response organizations using social media to improve community outreach activities with their communities?

The feedback instrument related to social media use provides the information to address this research question. One hundred fire departments were surveyed twelve questions related to social media use (n=100).

Table 1

Survey Question #1 – Describe your department's staffing.

Respondents (n=100)		
Department Type	Responses	Percentage of Responses
All Career	43	43%
All Volunteer	8	8%
Combination – Majority Volunteer	28	28%

Combination – Majority Paid	21	21%
-----------------------------	----	-----

Table 2

Survey Question #2 – Describe your protection district.

Respondents (n=100)		
District Type	Responses	Percentage of Responses
Urban	29	29%
Suburban	50	50%
Rural	21	21%

Table 3

Survey Question #3 – Describe your protected population.

Respondents (n=100)		
Population Ranges	Responses	Percentage of Responses
0 – 999	-	-
1,000 – 2,499	3	3%
2,500 – 4,999	6	6%
5,000 – 9,999	12	12%
10,000 – 24,999	26	26%
25,000 – 49,999	22	22%
50,000 – 99,999	16	16%
100,000 or more	15	15%

Table 4

Survey Question #4 – Does your organization utilize a website/webpage?

Respondents (n=100)		
	Responses	Percentage of Responses
Yes	96	96%
No	4	4%

Table 5

Survey Question #5 – If the answer to question #4 is yes, do you provide Fire Protection and Public Education information on your website?

Respondents (n=96)		
	Responses	Percentage of Responses
Yes	81	84%
No	15	16%

Table 6

Survey Question #6 – Does your organization also use social media mediums to promote Fire Prevention/Education information to the public?

Respondents (n=100)		
	Responses	Percentage of Responses
Yes	24	24%
No	76	76%

Table 7

Survey Question #7 – If the answer to question #6 was yes, which Social Media platform does your organization use?

Respondents (n=46)		
Social Media Type	Responses	Percentage of Responses
Facebook	18	69%
My Space	3	12%
Twitter	9	35%
You Tube	4	15%
LinkedIn	2	8%
Stumble Upon	-	-
Digg	-	-
Delicious	-	-
Web Blogs	6	23%
Other (specified below)	4	15%

Note. The respondents indicating “Other” did not specify Social Media platform, therefore the data is insignificant.

Table 8

Survey Question #8 – Does your organization use Social Media mediums for Marketing and Community Stakeholder notices or notification?

Respondents (n=98)		
--------------------	--	--

	Responses	Percentage of Responses
Yes	27	28%
No	71	72%

Table 9

Survey Question #9 – How successful do you feel your organization’s use of Social Media has been (e.g. have you reached your target audience)?

Respondents (n=83)		
Criteria	Responses	Percentage of Responses
Very successful	7	8%
Somewhat Successful	22	27%
No effect	12	14%
Unable to measure effect	19	23%
No idea	23	28%

Table 10

Survey Question #10 – Does your organization have a policy or procedure in place that addresses the use of Social Media by members?

Respondents (n=100)		
	Responses	Percentage of Responses
Yes	44	44%
No	56	56%

Table 11

Survey Question #11 – Regardless of the specific situation, has your organization experienced any personnel related issues related to member use of Social Media (while on or off duty)?

Respondents (n=99)		
	Responses	Percentage of Responses
Yes	45	45%
No	54	55%

Table 12

Survey Question #12 – Do you feel Social Media platforms (if managed accordingly) are an appropriate medium for Fire Department marketing and communications?

Respondents (n=100)		
	Responses	Percentage of Responses
Yes	90	90%
No	10	10%

Question #4

What social media formats may be used to improve Stony Hill Rural Fire Department’s community oriented safety initiatives?

The researcher has identified multiple types of social media applications used by public and private corporations. The type of social media used is dependent on the intended audience and preferences for internet use as demonstrated in the literature review. The survey also indicates fire department use of social media that is consistent with the literature based

recommendations. Facebook, Twitter, and weblogs are the top three internet based social media formats indicated in both areas of research, therefore the researcher concludes these formats are the best suited for initial use by the Stony Hill Fire Department. The researcher also identifies research conducted by Ebsen (2009), noting the benefits of You Tube as platform for video based advertising of fire department activities.

Discussion/Implications

Halligan and Shah (2010) describe the expansion of the internet as a revolution in the way we communicate and market. It is a revolution where web presence is power and critical for any business in today's world. Through the literature review, the researcher has identified the application of various media platforms of tremendous benefit to the fire service, not only to promote fire safety and community risk reduction information, but to market our capabilities and services. SAS (2010) states that marketers must continually rethink their marketing strategies and their definition of success; and focus on engaging their customers through the internet. "There's a totally different dynamic going on now. It's not just about pushing your message out there and hoping that awareness leads to preference and then purchase. It is about a far richer and more complex set of interactions" (SAS, 2010).

The societal shift of increased internet use across the generations is another illustration of opportunity. The Pew Research Center (2009) indicates that even though a traditional generational gap may asserted, the use of the internet and social media is diverse across the generations. They explain that the Generation Y users (ages 18-32) are using the internet for entertainment and social media. The younger generations are more likely to seek entertainment in the form of videos and games online. Pew Research (2009) adds that Generation X (ages 33-44) are more inclined to use the internet for banking, research, news, and shopping. The use by

older adults is also indicated by their web based searches related to health care and news (Pew, 2009). The researcher identifies this vast generational internet use activity is an indicator of opportunity for the promotion of community risk reduction initiatives to various age groups.

How are you perceived online? Reputation management is a relatively new term used by both public and private entities to describe the perception broadcast by the social media user. The Pew Research Center (2010) states that reputation management is now a defining feature of internet users. They state that some users are very careful to project themselves in a way that suits a particular audience, while others are well suited to an open approach to sharing information about themselves and their activities (Pew, 2010). The researcher agrees that transparency in operations is important for all public safety organizations, however governance of social media use is imperative to prevent public scrutiny. Manpower (2010) adds that reputation management is a two-fold issue. Projecting a positive reputation is critical for success, however users that provide inappropriate content may be destructive to your organization. Harvard Public Relations, UK (n.d.) discusses how the conversational format of social media poses a threat for companies where the capability for negative and critical feedback may be posted. In the social media environment, negativity can travel more rapidly than in casual conversation (Harvard PR, n.d.). As the fire service is perceived as a public entity, management of its reputation is crucial. The Cumberland Valley Volunteer Firemen's Association (2010) state that the nation's fire service has long been held in a position of high esteem and the current reputation has been hard earned. Destructive online behavior by organizations and their members can rapidly destroy the faith bestowed by the public and the sheer speed and access of the internet allows the public to gain knowledge of transgressions rapidly. They add: "the internet allows and encourages rapid access to stories that would not

have been covered so extensively by the local newspaper or TV station alone. Even the most local story can now be spread far and wide via email, web pages, web blogs, and similar electronic technologies” (CVVFA, 2010). The survey results illustrate a perspective on social media governance. Of the one hundred departments surveyed, only 44% currently have social media use policies in place. 45% of the surveyed departments indicate they have experienced personnel related issues with personnel use of social media. The researcher identifies that the social media use by fire departments should be positive and informative for the public’s access and interactions, but policies should be in place to govern use of the social media platform at the organizational level to guide membership and department use.

Fire departments are currently using social media in varied degrees to promote their activities and initiatives. The survey conducted by the researcher identifies that many departments are using web pages as a form of outward advertising to their constituents. Of the one hundred departments surveyed in North Carolina, 96% are using web pages. However, only 86% of these departments post fire prevention and education information on their web sites. The survey also indicates that only 24% of the departments responding (n=46) currently use social media. The social media platforms in use are (in ranked order):

- | | | |
|----|-----------|-----|
| 1. | Facebook | 69% |
| 2. | Twitter | 35% |
| 3. | Web Blogs | 23% |
| 4. | You Tube | 15% |

The actual or perceived success of the social media use is also measured by the survey. The respondents (n=83) indicate social media success metrics from “very successful” to “no idea.”

These effects are:

1.	Very successful	8%
2.	Somewhat successful	27%
3.	No effect	14%
4.	Unable to measure effect	19%
5.	No idea	28%

Recommendations

The researcher concludes that social media use by the fire service is an integral component of our community risk reduction and organizational marketing efforts. Private corporations have measured successes from its use in the areas of advertising, development of customer trust, and awareness of their products and services. Therefore a direct link exists between the social media methodologies of the corporate world and the fire service's goal of community risk reduction education. The public are our customers and it is by their support the fire service exists; therefore our communications and dialog with them is essential for their awareness of our programs and capabilities. The social media enhanced capability to communicate on a broad perspective creates an ability to reach more people with community risk reduction ideals.

The research suggests that the Stony Hill Rural Fire Department initiate a formal social media web presence on Facebook, Twitter, You Tube, and begin a web blog. The department already employs the use of a web page, but as the research indicates, this form of outward bound marketing only provides the customer a view from the outside. Social media will allow direct engagement of the citizens will develop customer faith and through consistent interaction, loyalty will be inspired. Social media, by design, is an interactive platform that provides dialog and feedback capabilities between users. This technology has the proven ability to enhance the relationships between the users and to improve customer relationships.

Readers of this research should understand that there are various models and formats of media used in public relations and public communications. Social media is but one option that is consistent with modern internet usage and is a constantly evolving technology. The social media format selected should match not only the needs of the corporation but be capable of projecting the desired message. Experimenting with social media is encouraged, but must be managed to insure integrity and accuracy. Although this research will introduce the reader to recommended social media formats, additional research is suggested to determine the appropriate fit for your organization.

References

- America at Risk; America Burning Recommissioned.* (2002). Emmitsburg, MD: United States Fire Administration.
- American Psychological Association. (2001). *Publications manual*. (5th ed.). Washington, DC: American Psychological Association.
- Aurnhammer, T. (2000). *Marketing your fire department*. *New Mexico Fire Chiefs Association*. Retrieved December 17, 2010, from <http://www.nmfirechiefs.com/ee/index.php/articles/fullstory/15/>
- Business.com. (2009, November 2). *2009 Social Benchmarking Study*. Retrieved December 14, 2010, from <http://www.business.com/info/business-social-media-benchmark-study?elq=c5f5d827713746d08ba2b09eb9d8fb7b>
- CDC Software, Inc. (2010). *CRM: The Essential Guide; Five Principles for CRM Success*. Atlanta, GA: Author.
- Cumberland Valley Volunteer Firemen's Association. (2010). *Fire Service Reputation Management*. Retrieved March 10, 2010, from http://www.myfirecompanies.com/download_filelocker.php?file=filelock/12735454240.pdf&org=Reputation%20Management%20White%20Paper.pdf&mode=DownloadFiles
- Ebsen, T. (2009). *Using video clips to market the services of the Oak Park Fire Department*. Executive Fire Officer Applied Research Project, Emmitsburg, MD: National Fire Academy.
- Facebook. (n.d.). In *Wikipedia*. Retrieved December 22, 2010, from <http://en.wikipedia.org/wiki/Facebook>

- Ford, A. (2008, August). The Basics of Online Marketing to the Fire Service. *Fire Rescue 1*. Retrieved December 17, 2010, from <http://www.firerescue1.com/fire-news/425907-the-basics-of-online-marke>
- Forrester Research, Inc. (2010). *Social CRM goes mainstream*. Cambridge, MA: Author.
- Forrester Research, Inc. (2007, April). *Topic overview: Web 2.0*. Cambridge, MA: Author.
- Halligan, B., & Shah, D. (2010). *Inbound marketing, get found using Google, social media, and blogs*. Hoboken, NJ: John Wiley & Sons, Inc.
- Harvard Public Relations. (n.d.). *Harvard Public Relations social media whitepaper*. Retrieved December 22, 2010, from www.harvard.co.uk/news/whitepaper_web.pdf
- Jones, Ron (2009, February, 16). Social Media Marketing 101, Part 1. *Search Engine Watch.com*. Retrieved October 21, 2010, from <http://searchenginewatch.com/3632809>
- Leary, B. (2010). Traditional CRM vs. Social CRM. *Inc. Technology*. Retrieved December 14, 2010, from <http://technology.inc.com/software/articles/200906/leary.html>
- Manpower, Inc. (2010). *Social Networks vs. Management*. Retrieved December 21, 2010, from <http://us.manpower.com/us/en/research/whitepapers/harness-the-power-of-social-media.jsp>
- May, B. (2007, June 14). Comprehensive Fire Service Marketing Opportunities Through Customer-Centered Prevention [Msg 1]. Message posted to <http://www.firehouse.com/topic/fire-prevention-and-investigation/comprehensive-fire-service-marketing-opportunities-through->
- Pew Research Center. (2009, January 28). *Generations online 2009*. Retrieved August 4, 2010, from <http://www.pewinternet.org/Reports/2009/Generations-Online-in-2009.aspx>

- Pew Research Center. (2010, December 16). *Generations 2010*. Retrieved December 18, 2010, from <http://pewinternet.org/Reports/2010/Generations-2010.aspx>
- Pew Research Center. (2010, May 26). *Reputation Management and Social Media*. Retrieved July 25, 2010, <http://pewinternet.org/Reports/2010/Reputation-Management.aspx>
- Ray, Augie. (2010, August 24). Do You Want To Succeed At Social Media Or Social Media Marketing?. *Forrester Blogs*. Retrieved December 16, 2010, from http://blogs.forrester.com/augie_ray/10-08-24-do_you_want_succeed_social_media_or_social_media_marketing
- SAS Institute, Inc. (2010). *Social Media Metrics; Listening, Understanding and Predicting the Impacts of Social Media on Your Business*. Cary, NC: Author.
- Silverthorne, Sean. (2009, September 14). Understanding users of social networks. *Working Knowledge*. Retrieved October 21, 2010, from <http://hbswk.hbs.edu/item/6156.html>
- Social Media. 2010. In *Merriam-Webster Online Dictionary*. Retrieved December 15, 2010, from [http://www.merriam-webster.com/dictionary/social media](http://www.merriam-webster.com/dictionary/social%20media)
- Social Media. (n.d.). In *Social Media Defined*. Retrieved December 12, 2010, from <http://www.socialmediadefined.com/what-is-social-media/>
- Social Media. (n.d.). In *Wikipedia*. Retrieved March 6, 2010, from [http://en.wikipedia.org/wiki/social media](http://en.wikipedia.org/wiki/social_media)
- Solis, B. (2009). The Essential Guide to Social Media. (B. Solis, Ed.) *Brand. PR 2.0*. Retrieved December 14, 2010, from <http://www.briansolis.com>
- Stelzner, M. (2010, April). 2010 Social Media Marketing Industry Report. *Social Media Examiner*. Retrieved August 4, 2010, from <http://www.socialmediaexaminer.com/social-media-marketing-industry-report-2010/>

Strategies for Marketing your Fire Department Today and Beyond. (1998). Emmitsburg, MD:

United States Fire Administration.

The Nielson Company. (2010, June 15). Social Networks/Blogs Now Account for One in Every

Four and a Half Minutes Online. *Nielson Wire*. Retrieved December 14, 2010, from

<http://blog.nielson.com/nielsenwire/global/social-media-accounts-for-22-percent-of-time-online/>

Tulgan, Bruce. (2009). *Not everyone gets a trophy*. San Francisco, CA: Jossey-Bass.

Twitter. (n.d.). In *Twitter*. Retrieved December 22, 2010, from <https://twitter.com/about>

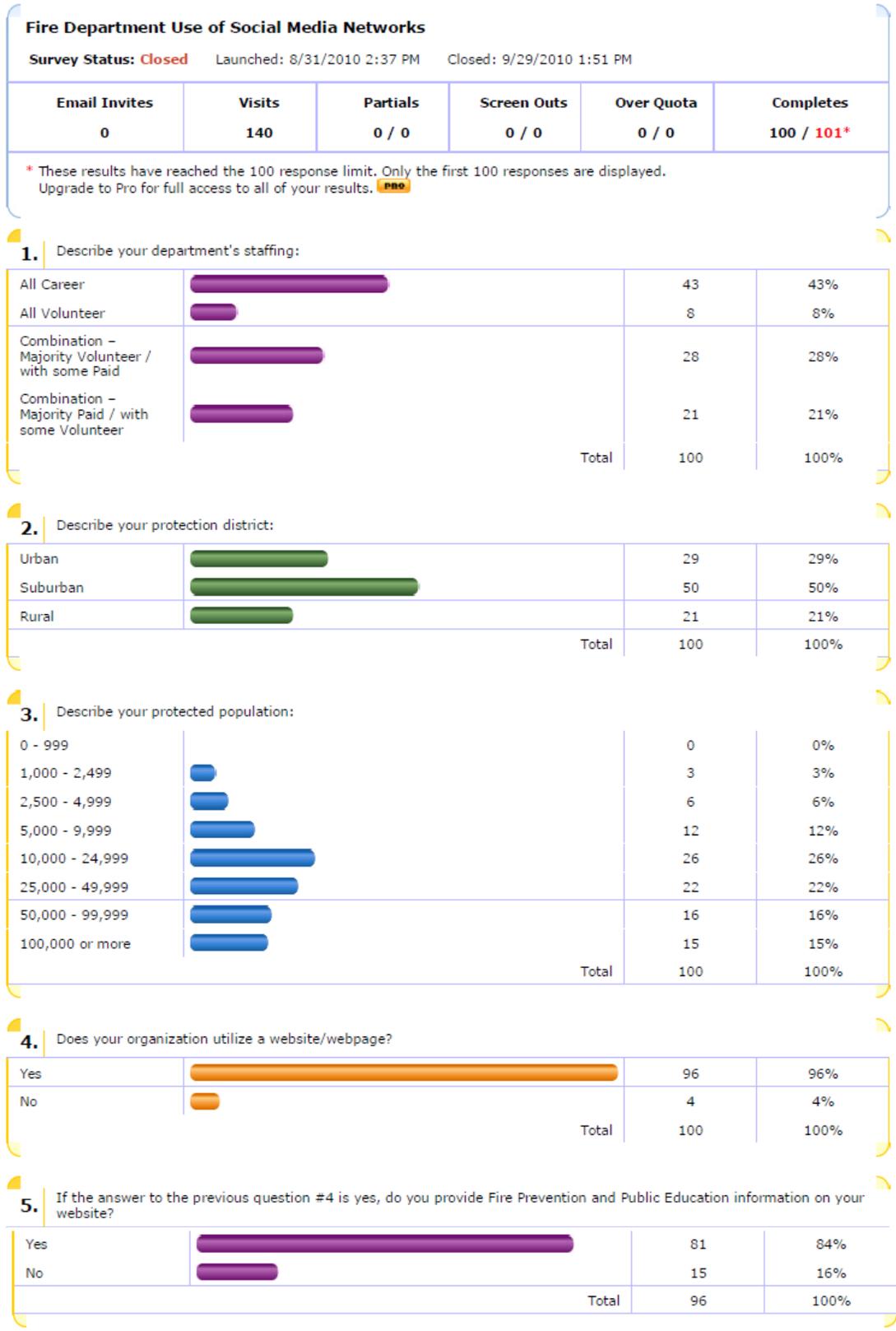
U.S. Fire Administration, (2008). *Applied Research Guidelines II-1- II-16*

Wake County Fire Commission, Long Range Business Plan. (2007). Raleigh, NC: Wake County Fire Commission.

Winer, D. (2003, May 23). What makes a weblog a weblog?. *Weblogs at Harvard Law*.

Retrieved December 22, 2010, from <http://blogs.law.harvard.edu/whatmakesaweblogaweblog.html>

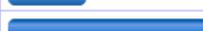
Appendix A



6. Does your organization also use Social Media mediums to promote Fire Prevention/Education information to the public?
 Note - Social Media consists of the following internet based communications platforms: Face Book, My Space, Twitter, YouTube, LinkedIn, Stumble Upon, Digg, Delicious, and Web Blogs, and others.

Yes		24	24%
No		76	76%
Total		100	100%

7. If the answer to question #6 is YES, which Social Media platforms does your organization use?

Face Book		18	69%
My Space		3	12%
Twitter		9	35%
YouTube		4	15%
LinkedIn		2	8%
Stumble Upon		0	0%
Digg		0	0%
Delicious		0	0%
Web Blogs		6	23%
Other, please specify View Responses		4	15%

8. Does your organization use Social Media mediums for Marketing and Community Stakeholder notices or notification?

Yes		27	28%
No		71	72%
Total		98	100%

9. How successful do you feel your organization's use of Social Media has been (e.g. have you reached your target audience with the intended communication)?

Very successful		7	8%
Somewhat successful		22	27%
No effect		12	14%
Unable to measure effect		19	23%
No idea		23	28%
Total		83	100%

10. Does your organization have a policy or procedure in place that addresses the use of Social Media by members (employees/volunteers)?

Yes		44	44%
No		56	56%
Total		100	100%

11. Regardless of the specific situation, has your organization experienced any personnel related issues related to member use of Social Media (while on or off duty)?

Yes		45	45%
No		54	55%
Total		99	100%

[View 40 Responses](#)

