Volunteer Workforce Solutions Final Report

AFG SAFER Grant SAFER - Recruitment Program EMW- 2010-FF-00260

Connecticut Fire Chiefs Association
8/28/2013

Contents

Executive Summary

Connecticut Fire Chiefs Association identified the need to address the difficulties with identifying, recruiting, training, and retaining qualified volunteer firefighters recruits in order to boost the numbers of overall volunteer firefighters. The CFCA partnered with the International Association of Fire Chiefs (IAFC), then applied for and received a Staffing for Adequate Fire and Emergency Response (SAFER) Grant in 2011 from the U.S. Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) for the recruitment and retention of volunteer firefighters.

In order to recruit more volunteer firefighters, it was imperative to analyze current recruitment techniques and find methods that could prove more successful, cost-effective and efficient. The CFCA decided to explore the use of Geographic Information Systems (GIS) technology as one method of enhancing the recruitment of volunteer firefighters, following the model of a similar Virginia Fire Chiefs Association study underway. The CFCA pursued a community-level profile analysis of existing firefighters using GIS technology, anticipating it would provide valuable information for the identification of potential candidates for the volunteer fire service. In addition, the analysis would provide better understanding of the communication and recruitment methodologies needed to reach the target audience.

The CFCA Volunteer Workforce Solutions Program began by selecting 30 fire departments-with 15 departments using traditional recruitment methods and 15 departments utilizing GIS based information to assist in their recruiting efforts. The study occurred over a 12-month period and was designed to assess the effectiveness of traditional and GIS-based recruitment tools on volunteer recruitment and retention in comparably populated service areas. Each department and community profile in one group had similarities with a department in the other, thus resulting in fair and equitable comparisons. The VWS Program provided all recruiting material to the 30 departments, including public service announcements, a central recruiting website, and a statewide billboard campaign. In addition, a series of leadership workshops was conducted across the state to address current recruitment and retention issues identified by the CFCA.

To augment the study and gain a better understanding of issues and perceptions related to the recruitment and retention of firefighters as well as their motivations for joining and leaving the fire service, the CFCA conducted a statewide firefighters survey in 2012-2013. 845 firefighters participated in the survey. The results provided valuable insight about fire department duties, leadership perceptions, motivations for joining and leaving the service, and service longevity among others. The survey, in addition to lessons learned from the VFCA study was instrumental in defining goals and objectives of leadership training that was provided throughout the program.

The CFCA contracted with Environmental Systems Research Institute (Esri) to conduct a GIS based community analysis called Tapestry Segmentation. Tapestry Segmentation is based on the principle that people with similar interests and lifestyles prefer to live in similar neighborhoods (see Appendix C for a sample Tapestry Segmentation Report). This

product is widely used to determine marketing trends across the United States, by identifying specific audiences based on purchase preferences and community demographic variables among others. The CFCA contracted with George Mason University (GMU) to conduct the statistical analysis of the VWS Program activities including the statewide survey and monthly participant reports.

The major findings of the VWS Program are as follows:

- Departments distributed 8, 680 pieces of promotional materials and reported 12, 221 department website requests for information about volunteering. Departments reported approximately 25,000 recruiting activities conducted during the study period.

- During the study, departments reporting * added 150 new members. *(This number is based on reported data only and does not reflect recruitments achieved by departments outside the study. We expect these numbers to be much higher.)

- Seasonally, Fall has the highest recruitment totals for potential recruits (36%) with the highest monthly total in September. Spring is second with 33% of the potential recruits. Winter has the lowest totals for the full season with 19%.

- Service to the Community (14%)) and Personnel Fulfillment (14%), and Fire Response (12%)) are the top three motivators for recruits. The top five motivators account for 55% of the motivating factors for recruits.

- Recruits list Special Events (19%), Friend/Family Referrals (17%), and Webpage/Internet Searches (8%) as their leading mechanisms for learning about opportunities in the profession.

- The top three primary recruit occupations, which account for more than half of the responses, include food service, student, and retired military.

- Overall, the majority of recruits volunteer with the fire service for "passive" reasons (75%) such as referrals, or contact with a previous member compared to "active" reasons (12%) such as events, displays media, and face to face activities

The results of the Firefighter's Survey show four major findings: First, personal interaction with a firefighter is the overwhelming impetus to join. Second, tenured firefighters are more likely to enjoy administrative duties and less likely to enjoy response duties and community outreach. Third, social media questions and perceptions of its benefits enhance recruitment strategies. Fourth, people believe that firefighters leave the service due to a lack of leadership, poor fit with others, and politics within the departments.
Other significant findings that influence recruitment and retention of volunteers are:

- Departments with fulltime Volunteer Recruitment Coordinator, a centralized application process, and standardized policies and procedures were more successful in their recruiting efforts.

- Departments with antiquated by-laws, application processes, and lack of an immediate and coordinated response to potential recruits were less successful in their recruiting efforts.

- Departments with mentorship and leadership programs are more successful in their recruitment and retention efforts.

Introduction

Connecticut fire departments, like much of America, are experiencing a declining volunteer base and membership. Changing demographics, training requirements, and economic conditions all impact the declining number of volunteer firefighters across the nation. Adequate firefighter staffing, regardless of the type of department, is elemental for civilian safety as it directly and indirectly affects human outcomes and economic losses for residents within a community (Curtin & Hill, 2013, p. 11). Because of this significance, the central element with the single highest cost across public services is personnel (Curtin & Hill, 2013, p. 11). In order to maintain adequate staffing levels and a skilled workforce that protects residents' safety, fire departments must recruit and retain qualified volunteer personnel – preferably with cost-effective and efficient methods that meet the community's needs.

Connecticut has been experiencing similar difficulties related to maintaining an adequate volunteer firefighter force. Current research has shown that staffing issues throughout Connecticut's volunteer fire service is still the number-one issue they face today. Because eighty percent of all Connecticut firefighters are volunteers, it's critical to bolster and maintain the volunteer ranks to continue to adequately protect residents and visitors of Connecticut. The Connecticut Fire Chiefs Association identified the need to address the difficulties with finding, recruiting, training, and retaining qualified volunteer firefighters recruits in order to boost the overall numbers of volunteer firefighters. Partnering with the International Association of Fire Chiefs (IAFC), the CFCA applied for and was awarded a Staffing for Adequate Fire and Emergency Response (SAFER) Grant from the U.S Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA) to recruit and retain front line volunteer firefighters.

The SAFER-funded program, named the Volunteer Workforce Solutions (VWS) Program, was created to identify and study new recruitment and retention methods for assisting the volunteer fire service in achieving a viable workforce and to assist elected officials in effectively planning for the future of their emergency response system. The CFCA felt that in order to recruit more volunteer firefighters, it was imperative to analyze current recruitment techniques and find additional techniques that could prove more successful, and be both cost-effective and efficient. Both the CFCA and IAFC felt the use of Geographic Information Systems (GIS) technology was a viable method of enhancing the recruitment of volunteer firefighters. The thought process was to complete a GIS-based community-level profile analysis of existing firefighters in the hopes of providing valuable information for identifying the types of people who would be the best future candidates for the volunteer fire service. The analysis attempts to identify where future volunteers can be located and the most effective methods to communicate with and recruit them. In 2013 the CFCA conducted a Firefighter's Survey of Connecticut firefighters in order to gain a better understanding of the issues and perceptions related to the recruitment and retention of volunteer firefighters.

The CFCA contracted with Environmental Systems Research Institute's (Esri) whose GIS

technology was used to conduct the community analysis called Tapestry Segmentation. Tapestry Segmentation is based on the principle that people with similar interests and lifestyles prefer to live in similar neighborhoods. In addition, the CFCA also contracted with George Mason University (GMU) to conduct the academic comparative analysis of the VWS Program activities.

Leadership was also considered critical to the success of any departments recruiting program, so ongoing support was provided to participating departments as well as leadership training.

In the words of Chief Kenneth W. Richards, Old Mystic Fire Department:

"Retention starts in the Fire Chief's Office. If the leader of the organization fails to recognize the volunteers as equals and vital members of the team they will be drafted by the organization that does. Without those volunteers, our communities are left without critical services, and a departments' survival may be in jeopardy. If volunteers are the lifeblood of your organization, it's your duty and obligation, as the leader, to keep them there." (Richards, 2012)

The Experiment

After receiving the SAFER Grant funding in September 2011, the CFCA began marketing the VWS Program in order to attract fire departments that were interested in participating in the program. The CFCA and IAFC program coordinators conducted informational meetings across the state and invited local fire departments to participate in the VWS program. An official application process and selection criteria was developed in order to represent a cross section of communities and departments using the following characteristics:

- Geographic location
- Population
- Size of department (number of stations and personnel)
- Department need including recent recruiting grant status
- Fiscal/Economic conditions
- Past recruitment activities

Because CFCA wanted to include as many interested departments as possible, some small, similar sized departments agreed to submit joint reports for data collection purposes. Of the 50 applications received all but 3 were selected to participate and they were divided into 30 distinct "departments": 15 GIS and 15 Traditional. New London County departments agreed to participate as two separate "regional" groups and they account for the 9 departments represented by the Mystic Region group, and the Bozrah region group

accounted for 6 departments.

The Traditional participants included:
Avon, Baltic, Cromwell, Essex, Farmington, Manchester, Mystic Region (including Gales Ferry, North Stonington, Quaimbaug, Stonington Borough, City of Groton, Center Groton, Groton Long Point, Pawcatuk, Noank and Old Mystic), Windham/Chaplin, Old Saybrook, Simsbury, Stafford/Ellington, Wallingford, Washington/Woodbury, Weston and Windsor.

The GIS participants included:
North Branford, Harwinton, Coventry, Killingworth, West Haven, Shelton, Bozrah Region (including Montville, Mohegan, Chesterfield, Bozrah, Salem, and Gardner Lake. For the purposes of the study, departments were comparable across the GIS and Traditional groupings.

All departments were required to complete a memorandum of understanding (MOU) and attend the VWS Program kick-off and educational meeting. The meeting focused on program goals and objectives, timelines and schedules, requirements for participation including data gathering and reporting, recruiting material preview, and an overview of the GIS –demographic survey processes.

The TRADITIONAL departments (control group) main focus was to recruit using the most tradition methods of recruiting augmented by new marketing campaigns designed and funded by the VWS Program. The traditional methods of recruiting included:
- Recruitment events
- Fundraising events
- Public safety events
- School visits
- Distributed promotional items
- Banner and sign displays
- Community posters
- Speaking engagements
- Community business contacts
- Media contacts
- Media interviews
- Media ride-alongs
- Media press releases
- Mass mailings
- Public Service Announcements
- Facebook contacts
- Twitter contacts
- Webpage contacts
- Video

- Word of mouth

The CFCA's traditional recruitment method was framed as a grassroots campaign striving to create an emotional connection between potential volunteers and the fire department through the use of a local advocate. This roll of advocate or "poster child" was fulfilled by a current member of the participating department. The campaign also focused on the use of social media to reach its target audience. During the program the Traditional departments received the following print media items (at no cost to them): posters, direct mail postcards, tri-fold brochures, display holders, and large outdoor banners (see Appendix E for examples). Digital media support included: web banner and site design assistance, web advertising, and USB drives. Funding was also allocated to support the creation of print, radio, statewide billboard campaign, and public service announcements. In addition, all participating departments were included on the Connecticut Volunteer Workforce Solutions' website located at **www.everydayheroct.org.**

The GIS departments received a recruitment strategy centered on GIS-based citizen-profile analysis called Tapestry Segmentation developed by Esri. Tapestry Segmentation classifies U.S. residential neighborhoods into 65 distinct market segments. The distinctions between the market segments are based on key determinants of citizen behavior such as income, source of income, employment, home value, housing type, occupation, education, household composition and age. Tapestry Segmentation combines the "who" of lifestyle demography with the "where" of local neighborhood geography to create a model of various lifestyle classifications (segments) of actual neighborhoods, each with distinct behavioral market segments. Identifying these Tapestry Segments was the foundation in the development of the VWS Program's GIS-based marketing campaign –**Everyday Hero CT.** Each of the GIS departments received a customized Tapestry Segmentation Report specific to their community profile. The report graphically mapped and identified the following groups to target their recruitment activities:

> **Core Group**: Segments within the community where a majority of its current firefighters live, and where potential recruits have the opportunity to interact with firefighters on a regular basis.

> **Developmental Group**: Segments within the community where higher proportions of firefighters live and offer good opportunities for recruitment.

> **Niche Group:** Segments within the community that identifies an area where a very small number of firefighters live, and will have little impact on recruitment strategies.

In addition, each GIS department received recommendations for recruitment activities based on the Tapestry profile. Although there were diverse Tapestry Segments identified in CT communities, the recruitments strategies and recommendations did not vary significantly from one to the other. As a result of this, the departments were not confined to selecting recruitment activities based on the Tapestry recommendations alone and they

were used more as a guide and incentive to look beyond traditional recruiting venues.

Both the Traditional and GIS groups were required to document their marketing strategies and recruitment efforts on a monthly basis using two types of tally forms: Recruitment Activity Monthly Tracking Form (Activity Form) and the Recruit Monthly Tracking Form (Recruit Form) (see in Appendix F). The VWS Program defines a recruit as any person taking the initiative to complete the Recruit Form or give additional information to a staff member within a department. Each form (Activity and Recruit) is approximately one page long. Both forms ask a series of questions that generally require a numerical response; however, a few responses are qualitative. Both the GIS and Traditional groups started collecting data in August 2012. All data collection ceased in June 2013. Detailed analysis of the data can be found in the appendix in the Connecticut Fire Chiefs Association Recruitment Activity Analysis Report prepared by GMU (see Appendix A for the full report).

Using GIS Technology for Volunteer Firefighter Recruitment

As the number of prospective volunteer firefighters decreases, the fire service is forced to identify and implement new recruitment and retention tools. The CFCA and IAFC identified that new methods were needed to better recruit and retain volunteer firefighters. They hypothesized that using GIS technology and applications could be a more effective method of identifying potential firefighters and best methods to recruit them. The basic theory was to use intelligent demographic and geographic data to recruit firefighters by:

- Holding recruitment functions in locations where desired candidates congregate
- Highlighting the aspects of service that appeal directly to potential firefighters in a specific area
- Directing advertising with the right message to the right audience at the right location
- Targeting direct mail or door-to-door canvassing in the areas where the most responsive recipients live
- Understanding the characteristics of a community's target (ideal) firefighters
- Analyzing the lifestyle characteristics of firefighters
- Determining where ideal and desired firefighters live
- Discovering the untapped potential recruits in specific areas
- Developing strategies to encourage firefighter candidates to enlist

To determine if GIS would enhance recruitment, an experiment needed to be conducted to compare GIS recruitment activities against more traditional recruitment activities. GIS is defined as a system of hardware, software, and procedures designed to support the capture, management, manipulation, analysis, modeling and display of spatially-referenced data for solving complex planning and management problems. Traditionally, most GIS systems have processed geographic and demographic data. In addition to geographic and

demographic information, Esri's systems utilize business data, consumer expenditure surveys, retail market place data, and consumer survey data.

As part of the VWS Program, Esri geocoded the addresses of all active firefighters for each GIS department into their software programs in order to identify the specific Tapestry segments in which the firefighters reside. Esri's Tapestry Segmentation model provides its users a tool to understand the lifestyles and life stages of consumers within a market or region. Tapestry segmentation classifies U.S. residential neighborhoods into 65 unique market segments based on socioeconomic and demographic characteristics. Tapestry Segmentation uses the notion that most volunteer firefighters have similar backgrounds and that people are attracted by similar tastes, need for security, peer identify, and a sense of place. After researching a volunteer's demographic and personal composition, they are placed within one of the 65 tapestry segments. Once the target audience and tapestry segmentation is understood, recruitment activities can be performed within the identified segments. (Esri, 2011)

A "core segment" consists of a segment that makes up a large percentage of a community's current firefighters. In a core segment, firefighters make up a larger percentage of the workforce than the percentage of firefighters making up the community as a whole. Core segments represent a good opportunity to recruit more of the same types of firefighters that currently make up the workforce. A "developmental segment" not only represents a significant portion of the current workforce, but also represents areas with households that have not yet been reached to volunteer. They represent potential for recruiting new types of firefighters. A "niche segment" represents an area within the community that identifies an area where a very small number of firefighters live, and will have little impact on recruitment strategies. For the purposes of this program, niche segments are not discussed.

To understand segmentation it is necessary to interpret the information and how it can benefit recruitment and retention within a volunteer organization. Segmentation is broken into four components. The target area identifies those groups within a specific area that are likely to be interested in joining the fire department, based on profiles of current firefighters in local departments. Population information identifies and characterizes the workforce. Index numbers describe activities those persons are most likely to participate in; and trade area penetration predicts the likelihood of individuals to become firefighters. For identifying potential recruits, core and developmental groups are evaluated and targeted for recruitment. These groups provide the user with information about the population within the group and why departments need to know them. For this study, the answer to "why a department needs to know them," is clear; they could be the future volunteers needed to maintain its service levels.

Esri Tapestry Segmentation also provides its users with information related to market trends or market potential characteristics. Market potential characteristics help departments create a unique recruitment strategy and gives them the knowledge needed to craft successful marketing messages. The commonalities with the market segments help

to describe the GIS departments as a group.

In the example below are two segments from a CT Tapestry report:

In Style Segment

Demographic: *In Style* residents live in the suburbs but prefer the city lifestyle. Professional couples predominate. Household distributions by type are similar to those of the United States. Married-couple families represent 54 percent of households. Households without children (married couples without children, single-person, shared, and other family types) comprise more than two-thirds of all households. This count is increasing. The population is slightly older, with a median age of 40 years. There is little diversity in these neighborhoods.

Residential: *In Style* residents live in affluent neighborhoods of metropolitan areas across the country. More suburban than urban, they embrace an urbane lifestyle; 14 % prefer townhouses to traditional single-family homes chosen by 56 % of the households. The median home value is $218,289. The 68 % rate of home ownership is just slightly above average. More than three-quarters of the housing was built in the last 30 years.

Socioeconomic: *In Style* residents are prosperous, with a median household income of $70,745 and a median net worth of $182,665. Wages and salaries provide income for 84% of the households; 47 % also receive some form of investment income. *In Style* residents are more educated compared to the US level: 42% of the population aged 25 years and older hold a bachelor's or graduate degree. Labor force participation is 68.5%; unemployment is 8.4%. Forty-six percent of employed residents have professional or management positions, with above average concentrations in the finance, insurance, health care, technical services, and education industry sectors.

Preferences: Computer savvy *In Style* residents go online daily to research real estate information; do their banking; track investments; trade stocks; book travel; and buy computer hardware or software, concert tickets, or tickets to sporting events. They use a financial planner and invest in stocks, bonds, money market funds, money market bank accounts, and securities. Looking toward the future, residents hold life insurance policies and contribute to IRA and 401(k) retirement accounts. To maintain their homes, they hire professional household cleaning services and contractors to remodel their kitchens.

Residents stay fit by exercising, eating a healthy diet to control their weight, buying low-fat foods, and taking vitamins. They attend live musical performances and gamble at casinos. They take domestic vacations to hike, golf, and go backpacking. They read magazines, listen to news-talk radio, and watch professional sports events and golf on TV.

Exurbanites

Demographic: Exurbanites residents prefer an affluent lifestyle in open spaces beyond the urban fringe. Although 40% are empty nesters, another 32% are married couples with children still living at home. Half of the householders are aged between 45 and 64 years. They may be part of the "sandwich generation," because their median age of 45.5 years places them directly between paying for children's college expenses and caring for elderly parents. There is little ethnic diversity; most residents are white.

Residential: Although Exurbanites neighborhoods are growing by 1.61% annually, they are not the newest areas. Recent construction comprises only 22% of the housing. Seventy percent of the housing units were built after 1969. Most are single-family homes. The median home value is $248,490. Nearly 80% of households own at least two vehicles. Their average commute time to work is comparable to the US average.

Socioeconomic: The 65.2% labor force participation rate is slightly higher than the US rate of 62.4%. Approximately half work in substantive professional or management positions. These residents are educated; more than 40% of the population aged 25 years and older holds a bachelor's or graduate degree; approximately three in four have attended college. The median household income is $84,522: the median net worth is $368,532. The median household income is $84,522. More than 20% earn retirement income; another 57% receive additional income from investments.

Preferences: Because of their life stages, Exurbanites residents focus on financial security. They consult with financial planners; have IRA accounts; own shares in money market funds, mutual funds, and tax-exempt funds; own common stock; and track their investments online. Between long-term care insurance and substantial life insurance policies, they are well insured. Many have home equity lines of credit. To improve their properties, Exurbanites residents work on their homes, lawns, and gardens. They buy lawn and garden care products, shrubs, and plants. They will tackle some home improvements, but hire contractors for more complicated projects.

They are very physically active; they lift weights, practice yoga, and jog to stay fit. They also go boating, hiking, and kayaking; play Frisbee; take photos; and go bird watching. When vacationing in the United States, they hike, downhill ski, play golf, attend live theater, and see the sights. This is the top market for watching college basketball and professional football games. They listen to public and news/talk radio and contribute to PBS. They participate in civic activities, serve on committees of local organizations, address public meetings, and help with fundraising. Many are members of charitable organizations. (Esri,2011).

The commonalities with the market segments help to describe the G-15s as a group. The most common segments in the group are Exurbanites that apply to nine departments, Main Street, USA that applies to eight departments – followed by Cozy and Comfortable and Prosperous Empty Nesters that apply to seven departments. These four groups account for 44% of the study segments. Within these four segment types, one department, Mystic Region, is common to all four of them, and five departments, Chaplin/Windham, Manchester, Old Saybrook, and Stafford/Ellington, have three of these segments within their designated recruitment areas. With the addition of three more groups, In Style, Suburban Splendor, and Urban Chic, these groups account for 67% of the market segments in the study. Overall, these common segments help to connect the departments by their similar traits. (Curtin & Hill, 2013, Pg 17)

In addition to grouping the departments, the neighborhood market segments can also differentiate them. The single-entry Tapestry segments with their descriptive titles represent the uniqueness of six departments. Manchester (Aspiring Young Families, Enterprising Professionals, and Old and Newcomers), Washington/ Woodbury (Rural Resort Dwellers), Old Saybrook (Silver and Gold), Chaplin/Windham (Simple Living and Metropolitans), Weston (Top Rung), and Farmington (Wealthy Seaboard Suburbs) have unique market segments. Overall, these individual segments help to separate the departments by their unique traits. (Curtin & Hill, 2013, pg 17)

For each of the GIS- departments, an individualized report was produced identifying the core and developmental segments within their jurisdiction. Data on active firefighters within a department was collected and analyzed so that a detailed picture of a volunteer firefighter could be created. This picture includes: their place of residence, what products and services they purchase and use, how to reach them, and the most effective methods to communicate with them. Then each department was provided series of recruitment strategy recommendations based on its specific core and development segments. An example of recruitment strategies provided for a department include:

1. Select one or more fast food restaurants like Red Robin (or similar) or a family restaurant like Panera Bread or Cracker Barrel, and invite them to be a corporate sponsor of the community fire department. One night each month the restaurant can sponsor a "buy one, get one free" dinner for folks who attend a short recruitment presentation in the parking lot that evening and receive a dinner coupon.
2. Work with your local large combination grocery and drug store and develop a local coupon day where anyone who has a "Volunteer Firefighter Recruit" coupon receives double value. Coupons are given to people who attend the recruitment evening at the station after being invited.
3. Set-up a "power tool safety" demonstration with a local hardware store and have firefighters and store personnel feature a specific tool and its safe use. Have the

engine and recruiters there to invite volunteer interest and follow-up with a "Recruitment Evening" at the station within a month.

4. Using the same hardware store owner, feature a woodworking display at the local fair/crafts show that showcases items made by local volunteer firefighters. Have the hardware store sponsor a "Firefighter Shop Day" at the local high school where recruiters visit the wood shop class and talk about hands on skills for responders.

5. Sponsor an "Ice Cream Social" as the attraction at the fire station during your recruitment meetings. Ask a local community group such as scouts, sports club, or garden club to bring ice cream machines and make the ice cream at the event. Ask the potential recruit to bring their family to the event so that everyone gets "recruited."

6. Work with a local gym and partner with the personal trainers as recruiters. Ask a trainer to write an article for the local newspaper on fitness that focuses on some of your firefighters and their experiences with getting in shape. Have a Fitness Day at the gym where the trainers give free clinics and the firefighters serve as spotters and demonstrators. Hand out your recruitment materials and invite people to your "Recruitment Meeting" at the fire station.

7. Develop an advertising partnership with the local life insurance agents who are doing direct mail marketing in your community. Ask them to support your department overall and to specifically hand out your recruitment information to their clients. Make the agents partners in "Insuring Your Safety – X Fire Department" and recognize their recruitment efforts at an annual event.

8. Partner with a local motorcycle dealership and sponsor a "Ride for Volunteer Firefighters" where the dealership offers a sales event or drawing event at the dealership and the fire department participates with safety information and recruitment materials. Ask the local firefighters who have motorcycles to ride them to the event.

9. Seek out the local garden club and ask them to be a "Community Partner" to assist in recruiting volunteer firefighters. Have them host a "Plant the Seeds of Volunteer Firefighting" event with a local popular nursery/garden store where recruiters can hand out invitations to a "Recruitment Meeting" at the station.

Results and Findings

Firefighter Survey

During the VWS Program, the CFCA felt it was necessary to gauge of the perception and attitude of the Connecticut Fire Service related to recruitment and retention issues. Specific items of interest sought in the survey included: collecting general fire service information, gaining a deeper understanding of motivational factors for becoming a firefighter, gauging the enjoyment levels of various duties, and identifying recruitment, retention and turnover issues.

In 2013, the CFCA distributed a survey through the online tool Survey Monkey, statewide mailings and email through the CT Fire Service and CFCA member lists. 845 individual

firefighters participated in the survey. An analysis of the results by GMU included cross-tabulations of the significant variables, visualizations of the categorical relationships, and Chi-squared tests of the correlation strengths. The results of the initial survey indicate several major findings (see Appendix B for the full survey and analysis):

- Personal interaction with a firefighter is the overwhelming impetus to enlist.
- Tenured firefighters are more likely to enjoy administrative duties and less likely to enjoy response duties and community outreach.
- Social media questions and perceptions of its benefits can enhance recruitment strategies moving forward.
- Perception of why people leave the fire service indicates that a lack of leadership (both on the fireground and in the firehouse), poor fit with others, and political issues within the departments as significant concerns.
- Overall, these results provide a basis for moving forward with an intervention study designed to improve strategies for recruitment and retention of firefighters within Connecticut.

Overall, it was determined that those departments working with a full-time volunteer recruitment coordinator were more successful in their volunteer recruitment programs. Volunteer recruitment coordinators provided a quick and consistent message to interested and potential recruits, which expedited their induction into the department, as well as keeping their interest and motivation high. In addition, volunteer recruitment coordinators serve as consistent media contacts, maintain current advertising and marketing materials and campaigns, and perform valuable and reliable record keeping tasks.

Findings also show that departments operating under a unified and central department with one set of procedures and guidelines had more effective recruitment and retention programs. This directly contrasts to jurisdictions having fragmented fire companies with no standardized recruitment, selection and induction processes. It was also found that departments having strong relationships between the career and volunteer companies were more successful in completing and providing recruiting data back to the CFCA. One major lesson learned throughout the program is to ensure that participating departments have the buy-in and endorsement from all levels of the department and jurisdiction where applicable. Many chiefs and volunteer recruitment coordinators had every intention of fully participating in the program from the onset; however, they ran into challenges and roadblocks performing regular recruitment activities and with the collection and submission of data. This may have been due to staff or leadership changes within the departments, failure to understand the reporting processes or the importance of collecting data. As pointed out in the GMU report, collecting data on events and recruits, is important to identify any shortfalls that exist in the process and those practices that are working best.

Leadership Training Activities

In addition to the GIS Tapestry reports and marketing materials distributed to the

participating departments, the CFCA conducted three leadership workshops during the period of performance. Leadership was identified as a perceived reason why some firefighters have left the departments or the fire service, so the CFCA offered a series of workshops to address current issues facing the CT Fire Service. The new generation of firefighters poses different challenges for the Chief officer, including:

- *The volunteer has different motivations for joining the fire department than in the past where continuing the family legacy, or community service may have been the primary objective. While you will still find these influencing the decision to join, you will also find that building a resume and testing out a potential career move have equal or greater importance to them.*

- *A volunteer will not spend time serving the department if it is not well run, not well respected by the community, doesn't provide some value to them, does not encourage them, or allow them to grow professionally.*

- *Leaders must know what motivates volunteers, what they value, and what is worth spending their time on, and then to encourage them to do so. A volunteer will not spend time serving the department if it is not well run, not well respected by the community, doesn't provide some value to them, does not encourage them, or allow them to grow professionally. Leadership motivation is as important as theirs. (Richards, 2012)*

The training opportunities were open to all fire service personnel in the state free of charge and attendees had a choice of attending a Friday or Saturday program. Participants had the opportunity to network and build their leadership capacity on topics such as mentoring, law and legal issues, public relations, social networking and media. Approximately 300 fire service members participated in the leadership workshops held at the CT Fire Academy in Windsor Locks, and in New Haven. Attendees received certificates of attendance, and professional development credits were offered by the State Fire Marshal's Office for some of the programs.(See Sample Agenda Appendix C)

Special Recruiting Opportunities

During the program several "special events" took place that not only benefited the participating departments but all of the fire service in CT. Although it is difficult to know the full impacts on department membership,, we have some first -hand information based on communications received from department officers. The CFCA VWS project was led by a 5 member steering committee that helped coordinate the project from beginning to end. This group was instrumental to the success of the program. Each a chief, they maintained excellent communications with the departments and kept the importance of the volunteer firefighter and needs of the CT fire service at the forefront. The CFCA participated in 3 radio interviews during the project and discussed the importance of volunteers to the CT Fire Service and provided information on becoming a volunteer. They were also proactive in seeking out activities, venues and opportunities to discuss volunteer needs.

All leadership workshops were available to anyone in the CT Fire Service. All workshop participants received information on the VWS program and had the opportunity to network with other departments and discuss recruitment and retention issues with their peers. Lessons learned and topics were relevant and applicable to their own departments recruitment needs.

Second, a wide variety of recruitment print materials were made available and departments were able to select materials to provide the most impact for the department. Many of the materials were printed with generic contact information so any volunteer department within the state was able to use them to help recruit. The statewide billboard campaign featured the Everyday Hero website link and was distributed in 36 locations across the state having impact beyond the 30 participating departments. This statewide "look" provided a consistent message for the program duration. The CFCA partnered with UConn media department students to develop recruitment PSAs that would be more attractive to a younger audience.

Identified by the Tapestry Report as a recommended recruiting strategy, the CFCA partnered with a local stock car race track and held a Firefighter Appreciation day and recruitment event. This event was attended by over 3500 people from across the state. Local fire departments displayed apparatus and firefighters were on hand to discuss becoming a volunteer. This was a very successful event and departments did receive new recruits as a direct result. As an example, one department had a two people apply that volunteered to provide maintenance service so more firefighter time would be free for emergency response. Several chiefs reported receiving volunteer inquiries after this event. The race track continues to support CFCA recruiting efforts by maintaining an EveryDay Hero billboard at the track through the 2013 season. A local fire chief whose department participated in the VWS project owns a race truck and made it available to volunteer departments to feature in recruiting events throughout the season.

Events With Unknown Impacts on Recruitment and Retention

Two devastating events occurred in CT in late 2012 that may have an impact on current and future recruitment efforts. Because both events occurred so close together and had such a devastating impact on the state, we felt they needed to be mentioned due to potential impacts on the program. Hurricane Sandy hit the New England coast on October 29, 2012. This occurred during the active fall recruiting period for many departments. Some departments may have cancelled scheduled recruiting events and/or suspended reporting during this time to focus on the response and recovery efforts. Although events can be disruptive- they can also have a positive effect for departments as there can be an increase in interested individuals who want to volunteer and help the community. We did see a small increase in the Everyday Hero website inquiries during this period, but it is unknown if any of these resulted in actual new members for the departments.

On December 12, 2012, 26 were killed in the Sandy Hook shooting- including 20 school age children. This occurred near the local fire department whose responders were first on

scene. The department also served as a staging facility for the response and recovery effort, placing them in the national media spotlight. For any community, for any individual, events such as these are traumatic and first responders are not immune to the lasting impacts. Although we will not fully understand the impacts on first responders for years, we do know from similar events that response agencies may see an increase in veterans leaving departments and an initial increase in people wanting to join the department.

VWS Program Comparison Analysis

The CFCA Recruitment Activity Analysis Report, created by George Mason University, discusses analyses based on an intervention studyIn this type of study, an investigator defines the desired characteristics then chooses participants from a larger target population. After choosing the participants, the investigator splits them into two comparable groups, but only one of them receives the intervention. Comparability at the start is imperative because the intent of the intervention study is to improve the conditions of the group (Curtin & Hill, 2013, p. 17).

An intervention study differs from an observational study that is typical in scientific research. The main difference between the two types of studies is that within the intervention study, the investigator may determine specific parameters. The investigator assigns the study structure. In other words, the investigator decides what to study. In this case, the investigator is the CFCA, and the study structure is a comparison between a group using traditional recruitment strategies (TRADITIONAL group) and a second group utilizing recruitment regimes informed by a GIS marketing strategy (GIS-group). The pre-determined structure of this data collection method differs from a typical observational study where there is a treatment group and a control (no treatment) group. Essentially, neither group in an intervention study is technically a control group – since both groups receive some input from the investigator. In addition, contrary to observational analyses where the researcher randomly selects the treatment and control groups to avoid bias from the selection process, the investigator assigns the participant departments into the two specific groups in the intervention-type study. The investigator intentionally assigns bias into the structural framework at this point. The reason for structuring a biased framework for this study type is to ensure that -- at a minimum - the results will produce a small to moderately beneficial outcome, which may be unrealized within a completely randomized study (Curtin & Hill, 2013, p. 13).

To begin the selection process, the investigator first chooses departments with known characteristics that may influence the outcome of the study – in this case, population allocates them to each group in a stratification process. Stratification is a pairing process. For stratification of the groups, the CFCA chose 30 departments, fifteen for the traditional group and fifteen for the GIS group. For each of the fifteen departments within the groups, there is a similarly populated counterpart in the other group with the same ranking. Overall, the populations do not match exactly, but the totals for each group are within 16% of each other. This stratification process ensures that the groups reflect the desired

characteristics equally between them, for a comparative parallel study. (Curtin & Hill, 2013, pg.14)

This parallel study design has four major benefits. First, it allows the investigator to analyze the effects of the changes from a common starting point. Second, either strategy may produce viable results that expand the options for future recruitment successes. Third, by choosing characteristics from the overall population, the investigator ensures that the design is transferable to other departments that are not part of the study. Fourth, the investigator sets guidelines with stratification that bring randomization into the next step of the intervention study process (Curtin & Hill, 2013, p. 13). Overall, the benefits include a strategy that starts at a common point, ensures viable results, transfers to other departments, and limits the randomization process.

To document their marketing strategies and recruitment efforts that either followed traditional methods or GIS targeted-market strategies, the departments submitted two types of forms, the Recruitment Activity Monthly Tracking Form (Activity Form) and the Recruit Monthly Tracking Form (Recruit Form)(see Appendix F for these forms). On the Activity Form, the activities section asked for responses to six types of events, three modes of advertisements, and two opportunities for face-to-face contact. The questions in the media section elicited responses for six activities, and the social media questions tallied responses for two social networking services and web pages. The Recruit Form required background and demographic information from the recruit along with the answers to five main questions. The questions related to recruitment awareness, primary occupation, social circles, volunteer motivations, and social media. Many of the departments recorded this information in a spreadsheet and tracked the potential recruits throughout the application process.

Overall, most of the departments submitted their paperwork on a monthly basis. With the completion of the study, the combined T-15 (67%) and G-15 (80%) groups have 73% of the departments with some type of summary activity Twenty-two departments have recruitment activity, but only three have Recruit Form submissions (14%). As of the final report, eight jurisdictions, Clinton, Coventry, Southington, Terryville, and West Haven in the T-15s and Baltic, Essex, and Manchester in the G-15s do not have any reported recruitment activities or recruits. Three of the four departments with the smallest service area populations, Harwinton, Killingworth (T-15s), and Chapin/Windham (G-15s) departments registered recruitment activity. (Curtin & Hill, 2013, pg 21)

Recommendations and Conclusions

When faced with a challenging and dynamic task, an organization must develop a plan. The key to planning within any organization is to establish responsibility and accountability. Strategic and operational planning is a complicated process and may require technical support for some departments. During this recruitment and retention study it was obvious that requirements to participate were not met by several of the departments. The following

observations and recommendations have been identified as part of the VWS Program.

1. All personnel within an agency, including elected and appointed officials, must take ownership of its recruitment and retention efforts.

2. Policies, procedures and standards must be established by the organization so the membership will know how to perform as agents of the organization. General policies should be developed in key areas including general administration, finance, operations, support services, training, fire prevention, communications and the overall handling of department business.

3. Recruitment application and approval processes must be updated and streamlined to meet today's challenges and provide quicker entry into the departments.

4. Volunteer fire departments will strongly benefit by having a full-time volunteer recruiter coordinator and a centralized application process. This position does not have to be a paid position, but someone must be assigned and held accountable to perform these functions.

5. Departments without solid leadership and/or a volunteer coordinator tended not to follow the recruitment recommendations, showed lack of enthusiasm for the project, and failed to meet the reporting standards set forth to ensure GMU was able to properly analyze the study.

6. Maintaining amicable relationships between independent fire companies and between volunteer and career personnel is necessary to achieve positive recruitments efforts.

7. Personal interaction between current fire service personnel and potential recruits is the overwhelming impetus to effective recruitment. Therefore, personnel should be trained and up-to-date on departmental information and talking points.

8. Social media questions and perceptions of its benefits can enhance recruitment strategies moving forward.

9. Develop and implement a mentorship program for all levels of your department as this positively impacts recruitment and retention.

10. Conduct exit interviews of all firefighters that leave your department in order to identify the reason(s) for leaving. Once reasons are identified, address them if possible.

11. Develop and implement a leadership program to enhance leadership both on the fireground and in the firehouse.

12. Make sure that personnel are treated equally; are not harassed, discriminated against or hazed; eliminate all hostile work environments.

13. Establish and enforce leadership and promotional guidelines, and training requirements, to assure solid leadership and equity within your organization.

14. Focus your recruitment efforts to achieve the highest level of effectiveness and efficiency.

15. Realize that the best recruiters are current satisfied volunteers who relate their positive experiences and encourage others to become involved. Ensure that current volunteers act, speak and appear in positive light at all times as failure to do so could have negative impact on the public perception of the organization and potential recruits.

16. As a leader, ensure that all personnel create an environment that includes a sense of belonging, achievement, increased responsibility, self-respect, challenge, recognition, reward, growth and development.

VWS Programmatic Lessons Learned

As with any new endeavor, lessons are learned along the way. Many elements of the VWS Program went well and will be easily replicated, while some can be enhanced for future recruitment efforts. State level support, as provided by the CFCA Steering proved to be a very positive experience, and helped focus the momentum of the recruiting campaign. They were instrumental in identifying local resources to assist with events, media services, leadership workshops and more. Personal relationships with local and state fire organizations helped increase program awareness and provided additional opportunities for campaign visibility and awareness. They were able to provide immediate support to any department needing assistance and the network of contacts made it easy to reach out to the entire CT fire service. Leadership support was invaluable to the success of the project.

Fire departments appreciated the high quality recruiting materials they received, and a statewide look had benefits for all of CT fire departments. They are not the end-all to recruitment issues, however. Regardless of the quality of campaign materials, the number of campaign materials, and the length of time they are in circulation- it is still ultimately up to departments to maintain a constant proactive recruiting strategy. As with the Tapestry reports, it is only a good recruiting tool if you understand how to use it and are willing to try new strategies.

 The ability to identify with an individual firefighter is seen a positive motivator for joining the department, but it was not always seen as a positive for the departments themselves. By placing photographs of department firefighter/advocates on print materials, it did cause

some issues due to the perception that the individual portrayed had a special standing in the department. In at least one instance, the individual was teased by peers and the materials had to be reprinted without the photograph. In other instances, the individual pictured on recruiting materials left the department mid campaign. Other departments were just reluctant to use any photographs other than department apparatus. What is important is that regular-positive community interaction with the fire department is necessary. Those departments who were engaged throughout the year, and with a variety of events and activities, were the ones most successful in their efforts to recruit additional volunteers.

Best practices and areas for improvement include:

Elements to Replicate:
- Leadership symposium format
- Overall process used to conduct study (use of GIS Tapestry reports, university partner research expertise, etc.)
- Variety and types of departments included in study
- Local Steering committee approach to project oversight and coordination, and department accountability
- Kick-off meeting and other live meetings
- Quality of printed, traditional promotional materials
- Encourage innovation in recruitment events

Areas for Enhancement:
- Adopt a thorough vetting process to assure participating departments will maintain participation level and ensure continuity throughout the project.
- Encourage use of new technologies to manage recruiting processes
- Encourage and support regular communications between departments
- Assure all department leadership and contributors to the process are fully aware of the requirements
- Provide assistance to departments to ensure program continuity
- Increase buy-in throughout the study by providing tools and support that provide tangible, real benefits to departments
- Provide tools to make data collection and reporting easier for departments
- Assist departments with identification and implementation of their own recruitment strategies and ideas based on the unique community characteristics and Tapestry recommendations
- Identify mentoring opportunities throughout the process
- Continual focus on retention and leadership issues
- Focus on the quality of data, not just the quantity
- Conduct follow-up firefighter survey expanding on leadership and mentoring
- Ensure that departments can track recruits throughout the application to membership process.

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Appendix A

Recruitment Activity Analysis Report

Appendix B

CFCA Survey Review and Analysis Report

Appendix C

Leadership Symposium Agenda

Appendix D

Mystic Region Segmentation Study

Appendix E

Recruitment Activity Tracking Form

Appendix F

Recruitment Brochure