Building a Better Community Risk Reduction Program

Jason Schwabe

Oldsmar Fire Rescue, Oldsmar, Florida

Certification Statement

I hereby certify that my responses on this exam constitute my original product, that where the language of others is set forth, quotation marks so indicate, and that appropriate citation is given where I have used the language, ideas, expressions, or writings of another.

_____ Signed:

Date: <u>September 28, 2019</u>

Abstract

The problem was that Oldsmar Fire Rescue has experienced a reduction in community risk reduction efforts and needs re-invigorating. Reorganization in the department created a misalignment of focus with community risk reduction. Fire inspection, plans review, and public education occurred but remained fragmented leading to a lack of consistency with community outreach. Descriptive methodology was used to guide the following research questions: (a) What local, state and federal resources are available for community risk reduction programs? (b) What are the industry standards for components of a community risk reduction program? (c) How do other local fire department organizations manage community risk reduction? The purpose of this project is to identify components that may be used in a more active and productive Community Risk Reduction program. The procedures utilized were personal interviews with local fire service leaders in public education, and a survey constructed and distributed to other local fire organizations protecting communities of Pinellas County, Florida. The results identified consensus standards to guide the completion of a community risk assessment and to guide the development and implementation of a community risk reduction plan.

Table of Contents

Certification Statement	2
Abstract	3
Introduction	6
Background and significance	6
Literature review	9
Procedures	13
Results	15
Discussion	
Recommendations	35
References	37

Appendices

Appendix A: Results from Interview with E. Graham, PEO.	
Appendix B: Results from Interview with C. Faiola, PEO	41
Appendix C: Survey	42
Appendix D: PFCA Email Request	46
Appendix E: FFCA Email Request	47
Appendix F: Fire Department Respondents to Survey	48
Appendix G: East Lake Fire Rescue Calendar of Events	49

Tables

Table 1: NFPA 1730 Minimum Inspection Frequency.	22
Table 2: Department Size Responses	23

Table 3: Personnel Responsible for CRR Efforts Response	.24
Table 4: Public Education Programs Offered responses	.25
Table 5: Public Education Frequency Responses	27
Table 6: Percentage of Businesses Inspected Annually Responses2	28
Table 7: Frequency of Inspections Responses	29
Table 8: Crew Involvement in CRR responses	30
Table 9: Percentage of Budget spent on CRR Efforts Responses3	31
Table 10: Economic Incentives Provided to Businesses Responses3	32

Building a Better Community Risk Reduction Program

In 1973 The National Commission on Fire Prevention and Control recognized and recommended to the President that the Nation's fire service needed to emphasize prevention and public education through local, community level programs (EACRR, 2018). While this recommendation resulted in the framework for fire prevention and public education efforts, many local jurisdictions still struggle with the ability to adequately focus on Community Risk Reduction (CRR) efforts. The United States Fire Administration set strategic goals including the strategic goal to "build a culture of preparedness" and to "ready the nation for catastrophic disasters" (United States Fire Administration, 2019, p. 8). Development of a CRR plan by local fire organizations assist in meeting those goals. A proactive, strategic approach to CRR is best achieved through the use of the Five E's of CRR which consist of: education, engineering, enforcement, economic incentive and emergency response (Sawyer, 2016).

The problem was that Oldsmar Fire Rescue has experienced a reduction in community risk reduction efforts and needs re-invigorating. The purpose of this project is to identify components that may be used in a more active and productive community risk reduction program.

Descriptive methodology was used to guide the following research questions: (a) What local, state and federal resources are available for community risk reduction programs? (b) What are the industry standards for components of a community risk reduction program? (c) How do other local fire department organizations manage community risk reduction?

Background and Significance

Oldsmar Fire Rescue (OFR) functions as part of a city-council government for the City of Oldsmar. The name, Oldsmar, may appear familiar as it was founded by Ransom Eli Olds, the

6

founder of Oldsmobile, in 1913 (*Reflections of Oldsmar*, 1996). The City of Oldsmar borders nine square miles and is geographically located in the Tampa Bay region of Florida and sits as the far most eastern municipality of Pinellas County (*Reflections of Oldsmar*, 1996).

The City of Oldsmar had a mixture of residential, commercial and industrial areas that boast their coexistence with many city established parks, and recreational areas, a sports complex that includes an Olympic style BMX track, wilderness preserve areas and multiple trails for biking and running. This mixture exemplifies the City's one-time motto "A great place to live, work, and play" as the City strived to maintain a small-town atmosphere while providing advancing amenities to its citizens and businesses. The 2018 estimated static population for the City of Oldsmar was 14,841 (U.S. Census, 2018). This population fluctuated throughout the day as a major thoroughfare connecting Hillsborough County and Pinellas County travels through the center of Oldsmar.

Oldsmar Fire Rescue was a one station career fire department that provides advanced life support (ALS) emergency medical services (EMS) and fire suppression with the use of an engine company and rescue unit. Oldsmar Fire Rescue consisted of 15 full-time frontline personnel, two administrative lieutenants, one fire inspector, an executive administrative assistant and the Fire Chief. The frontline personnel were divided into three separate shifts consisting of five personnel each that worked the traditional twenty-four hours on duty and forty-eight hours off duty. Each of the three shifts was led by a lieutenant that is responsible for the day to day operations of the department reporting directly to the Fire Chief. The current practice of staffing the two companies results in three personnel, this included the lieutenant, occupying the engine company and two personnel occupying the rescue unit. In the event that staffing fell below five at any time, the rescue unit was placed out of service due to staffing and all of the remaining personnel staff the engine. Overtime personnel were brought in when staffing falls below three individuals qualified to staff the engine.

As part of Pinellas County, OFR operated under an automatic aid agreement with the Pinellas County Fire and EMS Authority that was guided by a set of tactical guidelines referred to as the 600 series. The Pinellas county Fire and EMS Authority directed the eighteen separate fire departments that provided services to the varying municipalities that comprise Pinellas County. OFR often interacted with many of these departments through training, mutual aid, and various other fire department related activities.

In 2003, OFR created a Fire Codes Administrator position and promoted the fire safety inspector to that position while hiring a replacement fire safety inspector. Both positions worked together to guide the CRR efforts of the department at the direction of the fire chief. The Fire Codes Administrator was responsible for the direction of all fire prevention and fire inspection programs of the department and for planning, assigning, and coordinating all fire and life safety programs (City of Oldsmar, 2003). In 2016, the department's Fire codes Administrator retired, and the position was not filled due to reorganization of the department's structure. A full-time fire safety inspector remained and became primarily responsible for department inspection efforts, while prevention and public education efforts were divided amongst multiple administrative individuals. While inspections overall became a more scheduled effort, company inspections and preplanning declined to a nonexistent state. OFR continued to offer public education in the format of CPR and first aid, fire extinguisher training, station tours and apparatus demonstrations, but these efforts were often organized by various individuals. In this author's opinion, prevention and public education efforts became less organized, and over time, community risk reduction became less of a focus for the department.

Literature Review

A research of literature began with a keyword search of "Community Risk Reduction Programs" through the National Emergency Training Center Library Catalog resulting in over 1900 results. The results were further narrowed to complete this literary review by including trade journals, professional magazines, consensus standards, and other Executive Fire Officer Program (EFOP) Applied Research Papers.

Community risk reduction efforts allow an organization to more readily involve its community in fire safety strategies while ensuring the survival of the organization and preventing line of duty deaths and fire related injuries (Donahue, 2018). While CRR programs are beginning to gain attention in the United States, they have long been a successful approach in other parts of the world such as the United Kingdom, New Zealand, Australia, and Canada (Broman, 2018). The U.S. fire service tends to be more traditional in nature and resistive of transformation making a culture change more difficult. A change in the culture of an entire organization is needed to be effective at CRR (Haight, 2018).

When applied correctly, CRR provides a coordinated effort of emergency operations with fire prevention to mitigate risks in the community (Stouffer, 2016b). The National Fire Academy applied the concept through the Executive Analysis of Community Risk Reduction (EACCR) with the introduction of the five E's of CRR: Education, Engineering, Enforcement, Economic incentives, and Emergency response (EACRR, 2018). Using a combination of the five E's becomes more productive and more effective for the community, rather than applying one tactic (Stouffer, 2016b). CRR becomes a proactive approach to mitigating risk rather than simply being a reactive organization. Balancing limited resources in conjunction with the use of the five E's will provide for a productive CRR plan (Crawford, 2014).

An interview with Palm Harbor Fire Rescue's Public Education Officer, Elizabeth Graham, revealed the *Vision 20/20 Project* (2019). Graham suggested the Vision 20/20 Project as a helpful resource for guidance through the creation and implementation of any aspect of a CRR program. Further research into the project revealed two guides that would prove helpful to any organization beginning a CRR program: *Community Risk Assessment: A Guide for Conducting a Community Risk Assessment* and *Community Risk Reduction Planning: A Guide for Developing a Community Risk Reduction Plan.*

To develop a CRR plan, an organization should begin with the identification of potential and likely risks within its community, and then prioritize those risks. Risk assessment is the critical initial step in preparing for emergency response and the eventual mitigation of those risks (Stouffer, 2016a). A Community Risk Assessment (CRA) does not need to be a complex process and can be simplified to produce basic information to be used in a CRR plan (Stouffer, 2016b). Essentially, the approach needs to involve identifying the problem areas, those who are affected, and how those people can be most effectively reached (Haight, 2018). Although, this is the case, there are essential steps to follow. First and foremost, a CRA should begin with identifying risks of a community by acquiring data, developing a community profile, identifying causal factors and populations at greatest risk, and identifying target hazards. Identifying risks through data collection will provide a minimal perspective of what is occurring in the community (Stouffer, 2016a).

Once the data is collected and analyzed, the next step involves prioritizing the risks. Risks should be prioritized with qualitative measures that describe the vulnerability of the community (Stouffer, 2016a). Prioritizing risks will provide direction towards developing strategies and tactics for mitigation of those that need the most attention. Including community stakeholders to assist with prioritization should be done to involve other member of the community (Stouffer, 2016a).

CRR planning generally consists of an additional four steps outlined in *Community Risk Reduction Planning: A Guide for Developing a Community Risk Reduction Plan* (2016):

- 1. Develop strategies and tactics to mitigate risks
- 2. Prepare the CRR plan
- 3. Implement the CRR plan
- 4. monitor, evaluate, and modify the CRR plan

CRR should be approached by the organization as a whole. Buy in from all aspects of the organization are critical to implementing the plan. CRR is not just the responsibility of the fire prevention division but should include emergency operations throughout the process. Operations personnel are critical for data collection and performing activities vital to implementing the CRR plan (Stouffer, 2016b).

The National Fire Protection Association (NFPA) provided further direction into industry standards for CRR planning. The organization provides consensus standards on many topics, including CRR, by bringing expert individuals together to form a committee that develops and revises industry standards (Farrell, 2015). Three NFPA standards directly related to CRR were reviewed to identify industry standards: NFPA 1300 *Standard on Community Risk Assessment and Community risk Reduction Plan Development*, NFPA 1452 *Guide for Training fire Service Personnel to Conduct Community Risk Reduction*, and NFPA 1730 *Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigations, and Public Education Operations*.

NFPA 1300 Standard on Community Risk Assessment and Community risk Reduction Plan Development was developed secondary to a request made by the Vision 20/20 Project and addressed steps in the completion of a CRA and the development and implementation of a CRR plan (NFPA, 2019b). Minimum requirements for conducting a CRA were identified to include an assessment of the community every five years and an annual review to evaluate the effectiveness of the CRR plan. The Authority Having Jurisdiction (AHJ), or organization or individual responsible for enforcing code and standards requirements, is responsible for coordinating, developing, and updating a CRR plan that is consistent with identified community risks. Community stakeholders should be identified to include in the development of the CRR plan and the ongoing evaluation of the plan (NFPA, 2019b).

A key aspect of implementing a CRR plan is training personnel to carry out all components of the plan. NFPA 1452 *Guide for Training fire Service Personnel to Conduct Community Risk Reduction* was designed to assist with the training of personnel from an allhazards approach (NFPA, 2019a). The AHJ is responsible for public fire safety education that is consistent with risk identified for the community. Fire personnel should be trained to effectively relay basic information related to public behavior during emergency situations, installation and use of early warning devices such as smoke detectors, residential sprinklers, radon detection, and emergency preparedness for all hazards related to the community. Home surveys are a primary source for achieving all-hazards education in the community and provide many benefits to the department and community (NFPA, 2019a). Training should take place to make certain that fire personnel are proficient in recognizing hazards in the home and are knowledgeable in recommending their mitigation. Proper training will assist in the department maintaining an image that leaves a positive and lasting impression on the community (NFPA, 2019a). NFPA 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigations, and Public Education Operations addressed three of the five E's recognized as part of CRR: Enforcement, Engineering, and Education. The standard sets minimum requirements to address the efficiency of fire prevention practices and public education that the Fire Protection Organization (FPO) participates in as part of the CRA (NFPA, 2018). The standard outlined inspection frequency of existing occupancies related to their risk hazard and provided minimum elements associated with plan review of new construction.

Education programs that are delivered by the FPO should be developed to address risks identified in the CRA. Fire personnel should be adequately trained in the delivery of curriculum designed to reach various levels of education. Separate programs should be designed for delivery to daycare, preschool, pre-K through 12 school age, and higher education individuals (NFPA, 2018).

The literature review influenced the direction of this research by providing a framework of expectations through local, state, and national standards. Moreover, it led this author to additional concepts on CRR through review of established authors, consensus standards and interview results of industry experts.

Procedures

The applied research project was conducted with the descriptive methodology. Initial research began during the *Executive Analysis of Community Risk Reduction* (EACRR) course of the Executive Fire Officer Program at the National Fire Academy during March 2019 in discussions with other EFOP students from varying years of completion.

Two neighboring departments, East Lake Fire Rescue and Palm Harbor Fire rescue, were identified to employ full time Public Education Officers. The two departments were identified as programs that provided year-round community outreach and public education curriculum. Public Education Officers for both departments were interviewed with results documented in Appendix A and Appendix B.

A twelve-question survey (Appendix C) was created using "Forms", a free online Google service, and distributed to all Pinellas County fire departments (Appendix D). The online survey method was used in order to reach participants from fire departments that offer services to the eighteen municipalities that comprise Pinellas County.

A review of current CRR practices utilized by Oldsmar Fire Rescue was conducted to provide a basis for this research survey, as well as information gathered during interviews conducted with two neighboring department's Public Education Officers. Additionally, information revealed during literary review and through attendance of the National Fire Academy's *Executive Analysis of Community Risk Reduction* course were also utilized. The survey consisted of twelve questions made up of fill in the blank and multiple-choice type questions. A test draft of the survey was distributed to and completed by past EFOP students known to this author. Changes were recommended by the test group and made prior to distribution.

Fifteen out of the eighteen Pinellas county fire departments responded falling just short of the National Fire Academy desired 85% sample rate (National Fire Academy, 2016, p.35). Although only a 78% sample rate was achieved, this represents a sample size well above the 20% response rate that is considered as an adequate response rate by the online survey group Checkmarket (Van Dessel, 2013). Attempts were made to provide information related to a larger regional sample of the Tampa Bay area through the Florida Fire Chiefs Association (Appendix E). Unfortunately, a poor response was received from that effort, and in the author's view, was not adequate to warrant use in this research. This created a limitation in research of industry standards associated with research question (b) *What are the industry standards for components of a Community Risk Reduction program?* To provide further research into this question, a review of consensus standards related to CRR was conducted through the National Fire Protection Association (NFPA).

Results

Research question one asked: (a) What local, state and federal resources are available for community risk reduction programs? This research question was answered through interviews conducted with two Public Education Officers (PEO) employed with two separate adjacent fire departments. Both PEOs referred to the Florida Suncoast SAFE KIDS Coalition as an extensive local and state resource. The SAFE KIDS coalition is a global organization aimed at reducing injuries to children eighteen years and under (E. Graham, personal communications, May 2019) (Appendix A). The Florida Suncoast is an affiliate that partners with local first responders, educators, local agencies, civic groups, businesses and volunteers within the local community. The coalition provides resources such as education literature and data, as well as opportunities to network with other health and safety experts. The group also aids with grant funding opportunities to purchase safety items such as car seats, life jackets, and helmets for distribution in the local community (E. Graham, personal communications, May 2019).

Claudia Faiola, Public Education Officer with East Lake Fire rescue discussed the importance of creating partnerships with local businesses such as Pinch-A-Penny, Chick-Fil-A,

Publix, Target, etc.. These partnerships have been beneficial for not only tangible resources, but also for creating opportunities to reach the community through events at these locations (C. Faolia, personal communication, May 2019) (Appendix B).

Another local resource mentioned was Pinellas County EMS which provides grant opportunities for items related to specific programs such as CPR instruction, drowning prevention, and fall prevention (E. Graham, personal communication, May 2019).

The American Red Cross has been a long-standing resource for smoke detector installation programs and provides volunteers for canvassing communities for smoke alarm installation. The organization provided free smoke alarms for distribution only requiring information gathering at the time of installation (E. Graham, personal communication, May 2019).

A few local and state organizations to assist with transportation related community outreach are Ped Bike and the Florida Occupant Resource Center. The Florida Occupant Resource Center provides resources such as car seat education materials, grant opportunities, technical information on car seat technology, and a low-income based car seat distribution program (E. Graham, personal communication, May 2019). Ped Bike, also known as Florida's Pedestrian & Bicycling Safety Resource Center, is an organization funded by the Florida Department of Transportation that provided pedestrian and bike safety education materials, bike helmets, bike lights, and other tangible pedestrian and bicycle safety materials (C. Faiola, personal communication, May 2019).

While NFPA provides guidance through consensus standards such as NFPA 1452 *Guide* for Training Fire Service Personnel to Conduct Community Risk Reduction, Faiola also suggested attendance at the annual NFPA Conference and Expo as a great resource for a public education program in its infancy stage (personal communications, 2019). Vision 20/20 was also provided as a national resource found to be beneficial for many aspects of CRR (E. Graham, personal communications, May 2019).

Research question two asked: (b) What are the industry standards for components of a Community Risk Reduction program? This research question was answered through evaluation of NFPA standards related to CRR. In particular, three NFPA standards directly related to CRR were evaluated to identify industry standards: NFPA 1300 *Standard on Community Risk Assessment and Community risk Reduction Plan Development*, NFPA 1452 *Guide for Training fire Service Personnel to Conduct Community Risk Reduction*, and NFPA 1730 *Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement*, Plan *Review, Investigations, and Public Education Operations*.

NFPA 1300 Standard on Community Risk Assessment and Community risk Reduction Plan Development was developed at the request of the Vision 20/20 Project and designed to build on the Community Risk Assessment (CRA) requirements of NFPA 1730. A CRA shall be conducted every five years or more frequently dependent on the needs of the community (NFPA, 2019b). The CRA should include the following:

- 1. Demographic information
- 2. Geographic information
- 3. Building stock profile
- 4. Public safety response agencies
- 5. Community services organizations
- 6. Hazards
- 7. Economic

18

- 8. Past loss/event history
- 9. Critical infrastructure systems

Stakeholders should be identified and included in the assessment process and a CRR committee established to (NFPA, 2019b):

- 1. Prioritize risks identified in the CRA according to probability, impact, resource availability, and legal requirements.
- 2. Address root causes through evaluation of the risks and root cause analysis and determine the most appropriate risk reduction strategy.
- Identify strategic partners with common interests and available resources to address risks identified in the CRA.
- 4. Establish goals and objectives based on the prioritized risks, root causes identified, and available resources.
- 5. Create strategies to meet the established goals and objectives.
- 6. Obtain administrative approval.
- 7. Continuously review, evaluate and update the CRR plan.

NFPA 1452 Guide for Training fire Service Personnel to Conduct Community Risk

Reduction describes fire as the leading cause of injuries and deaths in the home, making the local fire department responsible for public fire and life safety education. The utilization of fire suppression personnel to deliver fire and life safety education allows the organization to achieve the following benefits (NFPA, 2019a):

- 1. Increased productivity
- 2. Increased community contact
- 3. Familiarization with residential properties

- 4. Encourage life safety practices
- 5. Prevent fires
- 6. Prevent injuries
- 7. Decrease crime
- 8. Work with diverse cultures in their place of comfort

NFPA 1452 recommends that fire service personnel are adequately trained on delivery of life safety messages such as emergency behaviors in case of fire, installation and use of smoke alarms, installation and use of carbon monoxide (CO) detectors, installation and use of radon detectors, advantages of residential sprinklers, and a residential all-hazards action planning effort (NFPA, 2019a).

A home survey community risk reduction program was listed as the most effective method for all-hazard risk reduction in the home. Fire service personnel should be able to recognize fire and life safety hazards and have the ability to recommend methods for their mitigation. Training on identification of the following common hazards found in the home should occur (NFPA, 2019a):

- Careless use of candles, smoking materials, matches, and other open flame devices
- 2. Poison potential of home cleaning solutions and other common household items
- 3. Fall and tripping hazards
- 4. Scalding risks associated with cooking and bathing
- 5. Combustible materials within three feet of a heat source
- 6. Radon checks
- 7. Electrical hazards found in the home

- 8. Overcurrent protection
- 9. Grounded receptacles
- 10. Flammable liquid hazards, storage and dispensing practices
- 11. Heating systems and appliances
- 12. Housekeeping, storage, and rubbish hazards
- 13. Flammable gases

As part of the home survey community risk reduction program, fire service personnel

should also possess adequate training on the following life safety considerations (NFPA, 2019a):

- 1. Exit and escape routes in the home
- 2. Home fire exit drill plans
- 3. Occupants with special needs
- 4. Smoke alarms and other warning devices
- 5. Fire extinguishers
- 6. Residential automatic fire sprinkler systems
- 7. Wildland/ Urban interface fire safety

Fire service personnel should be knowledgeable in relevant all-hazards information that may be applicable to their jurisdiction such as (NFPA, 2019a):

- 1. Earthquakes
- 2. Hurricanes
- 3. Tornadoes
- 4. Flood
- 5. Volcanoes
- 6. Hazardous Materials

21

- 7. Pandemic
- 8. Terrorist incidents
- 9. Personal disaster preparedness techniques
- 10. Extreme heat and cold
- 11. Falls
- 12. Choking, suffocation, strangulation
- 13. Poisoning
- 14. Drowning
- 15. Scalds and burns
- 16. Firearms safety

NFPA 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigations, and Public Education Operations stated the use of a CRA to identify needs of a community to establish fire prevention practices of an organization and to identify strategies to include in a CRR plan (NFPA, 2018). As stated in NFPA 1300, the components of a CRA are also identified in NFPA 1730 to include:

- 1. Demographic information
- 2. Geographic information
- 3. Building stock profile
- 4. Public safety response agencies
- 5. Community services organizations
- 6. Hazards
- 7. Economic
- 8. Past loss/event history

9. Critical infrastructure systems

NFPA 1730 identifies fire prevention practices and code enforcement activities by personnel that meet job performance requirements outlined in NFPA 1031 and recommends that existing occupancies maintain an inspection schedule in accordance with frequencies listed on Table 1: NFPA 1730 Minimum Inspection Frequency

Occupancy risk Classification	Frequency
High	Annually
Moderate	Every other year
Low	Every third year
Critical Infrastructure	Per AHJ

Plans review was also noted in NFPA 1730 as a component of fire prevention practices involved with a recommended CRR plan. Minimum plan review elements are listed as (NFPA, 2018):

- 1. Initial fire protection environmental impact
- 2. Water supply and fire flow
- 3. Emergency vehicle access
- 4. Construction building plans related to fire protection features
- 5. Certification of occupancy inspections
- 6. Hazardous materials and processes
- 7. Fire protection system plans
- 8. Fire and life safety systems field acceptance inspections
- 9. Certificate of occupancy issued

The CRR should include a public education program that is developed with defined

course objectives that address fire and injury related items identified in the CRA (NFPA, 2018).

Outcome measures should be evaluated frequently and prior to the next CRA to determine effectiveness of the material. Programs listed in NFPA 1730 include:

- 1. Daycare, preschool, and pre-K through 12 school fire and life safety
- 2. Higher education fire and life safety education
- 3. Independent senior adult life and fire safety education
- 4. Adult and community-wide public education
- 5. Workplace fire and life safety education
- 6. Youth firesetter education
- 7. Home safety education

Research question three asked: (c) How do other local fire department organizations manage community risk reduction? This research question was answered through a twelvequestion survey titled "Pinellas County Community Risk Reduction Programs" (Appendix C) was created using "Forms", a free online Google service, and distributed to all Pinellas County fire departments (Appendix D). Fifteen of the eighteen departments targeted for research responded. Question one of the survey collected the department name to create a list of the survey responses. A list of respondents may be found in Appendix F. Question two of the survey (Appendix C) requested information related to the size of the department for comparison to OFR. Table two reflects the responses received.

	<3 Stations	3-9 stations	10-25 Stations	>25 Stations	No Response
Clearwater Fire Rescue					х
Dunedin Fire Rescue		х			
East Lake Fire		х			
Gulfport Fire Rescue	х				
Largo Fire Rescue		х			

 Table 2: Department Size Responses

Lealman Fire Rescue			X
Madeira Beach Fire Rescue		х	
Oldsmar Fire Rescue	х		
Palm Harbor Fire rescue		х	
Pinellas Park Fire Rescue		х	
Pinellas Suncoast Fire Rescue			x
Safety Harbor Fire Rescue	х		
Seminole Fire Rescue	х		
South Pasadena Fire department	х		
St. Pete Beach Fire Rescue	х		
St. Petersburg Fire Rescue			x
Tarpon Springs Fire Rescue		х	
Treasure island Fire Rescue	х		
Total	7	7	
Percent	50%	50%	

Fifteen of the eighteen targeted departments responded to question three of the survey (Appendix C) regarding the assignment of community risk reduction efforts. 78.6% of the respondents used a shared responsibility approach to CRR efforts of their respective departments, while only 28.4% of the respondents assign CRR efforts to one individual. Table three reflects the responses of the targeted group.

Table 3: Personnel Responsible for CRR Efforts Response

Department Name:	No, it is a shared responsibility	Yes, one position directs CRR efforts	No Response
Clearwater Fire Rescue			х
Dunedin Fire Rescue	X		
East Lake Fire	x		
Gulfport Fire Rescue	X		
Largo Fire Rescue		х	
Lealman Fire Rescue			x

BUILDING A BETTER COMMUNITY RISK REDUCTION PROGRAM

Madeira Beach Fire Rescue	х		
Oldsmar Fire Rescue	х		
Palm Harbor Fire rescue	х		
Pinellas Park Fire Rescue	x		
Pinellas Suncoast Fire Rescue			х
Safety Harbor Fire Rescue		х	
Seminole Fire Rescue	x		
South Pasadena Fire department	x		
St. Pete Beach Fire Rescue	х		
St. Petersburg Fire Rescue			Х
Tarpon Springs Fire Rescue		х	
Treasure island Fire Rescue	х		
Total	11	3	
Percent	78.6%	28.4%	

Question four of the survey (Appendix C) requested information on the type of public education programs that their departments offer their communities. The top three public education programs offered were *CPR/First Aid* at 85.70%, *Apparatus Demonstrations* at 85.70% and *Fire Prevention Week Programs* at 64.30% with multiple single responses at 7.10% indicated as the least provided public education programs. Table four reflects the responses provided by the targeted agencies.

Table 4: Public Education Programs Offered responses

C= Clearwater FR	PS= Pinellas Suncoast FR
D= Dunedin FR	PP= Pinellas Park FR
EL= East Lake FR	SH= Safety Harbor FR
G= Gulfport FR	SEM= Seminole FR
L= Largo FR	SP= South Pasadena FR
LEAL= Lealman FR	STP= St Petersburg FR
MB= Madiera Beach FR	SPB= St Petersburg Beach FR
O= Oldsmar FR	TS= Tarpon Springs FR
PH= Palm Harbor FR	TI= Treasure Island FR

				1	r															
	С	D	EL	G	L	LEAL	MB	0	PH	PS	PP	SH	SEM	SP	STP	SPB	тs	ΤI	Totals	Percent
CPR/ First Aid		х	Х	х	х		Х	Х	х		х		х			Х	х	х	12	85.70%
Fire Prevention Week		х		x	х			Х	х		х		x			х	х		9	64.30%
Station Tours		х	х	х	х		х	Х	Х		Х	х	х	х		х	х	х	14	100%
Apparatus Demos		х	х	х	x		х	х	Х		х		х			х	х	х	12	85.70%
Citizens Academy		х			х			х				х	x				х		6	42.90%
Fire Extinguisher Training		x		x				х	х				х			х	х		7	50%
Car Seat Education/ Installation			x					x	х		x		x					x	6	42.90%
Home Escape Plan		х	х		x				х				х				х	х	7	50%
Disaster Preparedness		х	х		х				х				х			х	х	х	8	57.10%
Other:																				
Multitude of public safety subjects			x																1	7.10%
Fall Prevention Through Thai Chi									x										1	7.10%
Fire Inspections												х							1	7.10%
Plans review												х							1	7.10%
Open House														х					1	7.10%
Great American Teach In																x			1	7.10%
Safe Sleeping Baby																		x	1	7.10%
Smoke Alarm Installation																		х	1	7.10%

Question five of the survey (Appendix C) requested the frequency that public education programs were offered by the targeted respondents. 50% of the respondents indicated that they provide public education programs to their respective communities on a monthly basis and 35.7% of the respondents indicated a weekly delivery of public education programs. Only one agency indicated a delivery of public education programs every other

month resulting in 7.10% of the respondents. Table five reflects the total responses for

question 5.

 Table 5: Public Education Frequency Responses

	Once a Week	Once a Month	Every Other Month	Quarterly	Infrequently	No response
Clearwater Fire Rescue						х
Dunedin Fire Rescue		х				
East Lake Fire		х				
Gulfport Fire Rescue		х				
Largo Fire Rescue	х					
Lealman Fire Rescue						х
Madeira Beach Fire Rescue		х				
Oldsmar Fire Rescue					х	
Palm Harbor Fire rescue	х					
Pinellas Park Fire Rescue	х					
Pinellas Suncoast Fire Rescue						x
Safety Harbor Fire Rescue			х			
Seminole Fire Rescue		х				
South Pasadena Fire department		х				
St. Pete Beach Fire Rescue	х					
St. Petersburg Fire Rescue						x
Tarpon Springs Fire Rescue		х				
Treasure island Fire Rescue	х					
Total	5	7	1	0	1	
Percent	35.7%	50%	7.10%		7.10%	

Question six of the survey (Appendix C) requested information of the frequency that businesses were inspected on an annual basis by the targeted departments. Most of the respondents were split between 26-50% of businesses inspected annually resulting in 35.70% of the responses and 51-75% of businesses inspected annually also resulting in 35.70%. Three respondents indicated that 76-100% of the businesses in their community were inspected annually resulting in 21.40% of the responses while one respondent indicate 0-25% business inspections annually resulting in 7.10% of the responses. Table six reflects the responses received by the targeted agencies.

	0-25%	26-50%	51-75%	76-100%	No Response
Clearwater Fire Rescue					х
Dunedin Fire Rescue	х				
East Lake Fire			х		
Gulfport Fire Rescue				x	
Largo Fire Rescue			х		
Lealman Fire Rescue					х
Madeira Beach Fire Rescue		x			
Oldsmar Fire Rescue		x			
Palm Harbor Fire rescue			х		
Pinellas Park Fire Rescue		x			
Pinellas Suncoast Fire Rescue					х
Safety Harbor Fire Rescue		x			
Seminole Fire Rescue			х		
South Pasadena Fire department		x			
St. Pete Beach Fire Rescue			х		
St. Petersburg Fire Rescue					х
Tarpon Springs Fire Rescue				х	
Treasure island Fire Rescue				х	
Total	1	5	5	3	
Percent	7.10%	35.70%	35.70%	21.40%	

Table 6: Percentage of Businesses Inspected Annually Responses

Question seven of the survey (Appendix C) requested information on the frequency in which businesses were inspected in the targeted agencies jurisdictions. *Annually, every other*

year, and every third year all had four responses each resulting in 28.60% of the responses. One

respondent indicated inspections that were dependent on the type of occupancy and one

respondent indicated inspections taking place on an eighteen-month cycle via a write in option.

Both indicated a 7.10% response value. Table seven reflects the responses.

Table 7: Frequency of Inspections Responses

C= Clearwater FR	PS= Pinellas Suncoast FR
D= Dunedin FR	PP= Pinellas Park FR
EL= East Lake FR	SH= Safety Harbor FR
G= Gulfport FR	SEM= Seminole FR
L= Largo FR	SP= South Pasadena FR
LEAL= Lealman FR	STP= St Petersburg FR
MB= Madiera Beach FR	SPB= St Petersburg Beach FR
O= Oldsmar FR	TS= Tarpon Springs FR
PH= Palm Harbor FR	TI= Treasure Island FR

	С	D	EL	G	L	LEAL	MB	0	PH	PP	SH	SEM	SP	STP	SPB	тs	ΤI	Totals	Percent
Annually				х	х											х	Х	4	28.60%
Every Other Year			х						х		Х	Х						4	28.60%
Every Third Year		х					х	Х		Х								4	28.60%
Dependent on type of Occupancy													х					1	7.10%
Only New Construction																			
No Defined Schedule																			
In an 18 Month period														х				1	7.10%

Question eight of the survey (Appendix C) requested information on the types of CRR components that fire suppression crews actively participated. 71.40% of the respondents indicated that fire suppression crews were involved in *preplanning*, 57.10% indicated that fire suppression crews were involved with *public education*, and 28.60% indicated that fire suppression crews conducted *company inspections*. A write in option was available

and resulted in one respondent indicating smoke alarm installation, car seat installation,

and CPR instruction resulting in a 7.10% value. Table eight reflects the results.

Table 8: Crew Involvement in CRR responses

Department Name:	Public Education	Company Inspections	Home Inspections	Preplanning	Other: Smoke Alarm Install, Car Seat Install, CPR	No response
Clearwater Fire Rescue						x
Dunedin Fire Rescue	x					
East Lake Fire	х			х		
Gulfport Fire Rescue	x					
Largo Fire Rescue				x		
Lealman Fire Rescue						x
Madeira Beach Fire Rescue	x	x		x		
Oldsmar Fire Rescue	x			x		
Palm Harbor Fire rescue	x	x				
Pinellas Park Fire Rescue				x		
Pinellas Suncoast Fire Rescue						x
Safety Harbor Fire Rescue				x		
Seminole Fire Rescue	х	x		х		
South Pasadena Fire department	x	x		x		
St. Pete Beach Fire Rescue				x		
St. Petersburg Fire Rescue						x
Tarpon Springs Fire Rescue				x		
Treasure island Fire Rescue					х	
Total	8	4	0	10	1	
Percent	57.1%	28.6%		71.40%	7.10%	

Question nine of the survey (Appendix C) requested information related to the percentage of the department's budget that was spent on CRR efforts. The top response was 0-5% of the annual budget involving CRR efforts receiving 64.30% of the responses. 28.60% of the respondents indicated 6-10% of their budget was spent annually on CRR efforts, and only one respondent indicated that 11-15% of their budget was spent on CRR efforts reflecting a 7.10% value. Table nine reflects the responses.

	0-5%	6-10%	11-15%	16-20%	21-25%	>26%	No Response
Clearwater Fire Rescue							Х
Dunedin Fire Rescue	х						
East Lake Fire	х						
Gulfport Fire Rescue		х					
Largo Fire Rescue	х						
Lealman Fire Rescue							х
Madeira Beach Fire Rescue			х				
Oldsmar Fire Rescue	х						
Palm Harbor Fire rescue		х					
Pinellas Park Fire Rescue		х					
Pinellas Suncoast Fire Rescue							х
Safety Harbor Fire Rescue	х						
Seminole Fire Rescue		х					
South Pasadena Fire department	х						
St. Pete Beach Fire Rescue	х						
St. Petersburg Fire Rescue							х
Tarpon Springs Fire Rescue	х						
Treasure island Fire Rescue	х						
Total	9	4	1	0	0	0	
Percent	64.30%	28.60%	7.10%				

Table 9: Percentage of Budget spent on CRR Efforts Responses

Question ten of the survey (Appendix C) requested information on whether the targeted agency offered economic incentives to businesses for fire prevention and engineering efforts employed that were above code requirements. 92.90% of the respondents indicated that *No* economic incentives were offered, and only one respondent indicated *Yes*, economic incentives were offered to businesses for fire prevention and engineering efforts employed that were above code requirements and engineering efforts employed that were above for fire prevention and engineering efforts employed that were above code requirements and engineering efforts employed that were above code requirements providing a 7.10% value. Table ten reflects the responses.

Table 10: Economic	Incentives	Provided to	Businesses	Responses

	Yes	No	No Response
Clearwater Fire Rescue			x
Dunedin Fire Rescue	x		
East Lake Fire	x		
Gulfport Fire Rescue	x		
Largo Fire Rescue	x		
Lealman Fire Rescue			х
Madeira Beach Fire Rescue	x		
Oldsmar Fire Rescue	x		
Palm Harbor Fire rescue	x		
Pinellas Park Fire Rescue	x		
Pinellas Suncoast Fire Rescue			х
Safety Harbor Fire Rescue	x		
Seminole Fire Rescue	x		
South Pasadena Fire department	x		
St. Pete Beach Fire Rescue	x		
St. Petersburg Fire Rescue			x
Tarpon Springs Fire Rescue		х	
Treasure island Fire Rescue	x		
Total	13	1	
Percent	92.9%	7.1%	

Question eleven of the survey (Appendix C) was an optional fill in the blank question requesting detailed information related to economic incentives given to businesses for fire prevention and engineering efforts employed that were above code requirements if a respondent answered *Yes* to question ten. One respondent answered Yes to question ten but did not provide a detailed answer to question eleven. Therefore, no results are reported for question eleven.

Question twelve of the survey (Appendix C) offered the respondents the opportunity to provide an email address if they were interested in receiving the results of the survey. Four respondents indicated interest in the results of the survey and were provided such in the form of an email response.

Discussion

The problem was that Oldsmar Fire Rescue (OFR) has experienced a reduction in Community Risk Reduction (CRR) efforts and needs re-invigorating. While OFR's CRR efforts experienced a reduction, the national CRR consensus has grown, even where the concept may not be fully understood. Fire organizations are not only expected to respond to emergencies once they occur, but they also have a duty to mitigate or reduce risks identified in their community, providing a proactive approach (Crawford, 2014). Unfortunately, the fire service is known for being a resistive culture to a new approach and tends to cling to traditional methods for responding to community risk (Stouffer, 2016a). A shift in the culture is needed to create buy in from all areas of the fire service. The most appropriate method to create the needed culture change is to introduce CRR components during the initial training of fire service personnel and continuing that training throughout their careers (Stouffer, 2016b). NFPA 1001, *Standards for Firefighter Professional Qualifications* has been updated in an attempt to precipitate that cultural change by adding public education training requirements to Firefighter I and II qualifications. Although, there is not a standardized curriculum or hourly requirement, making the training wildly diverse (Donahue, 2018).

The survey (Appendix C) supports the notion of a slow cultural shift with the results of question nine: What percentage of the department's budget is spent annually on Community Risk Reduction efforts? 64.30% of the respondents identified 0-5% of their budget spent on CRR efforts, 28.60% of respondents identified that 6-10% of their budget was used for CRR efforts, and 7.10% (only 1 respondent) identified that 11-15% of their budget was spent on CRR efforts. None of the respondents spent more than 15% of their annual budget on CRR efforts. Additionally, all respondents except for one answered "No" to question ten of the survey (Appendix C): Does your department or municipality offer economic incentives to businesses for fire prevention and engineering efforts above code requirements?

Education, one of the five E's of CRR, is the most common method for implementing behavioral change in a community (Farrell, 2015). This statement was reinforced with question eight of the survey (Appendix C) revealing that 57.1% of respondents involve fire suppression crews with public education and question five of the survey (Appendix C) revealing that 85.7% provided public education to their community at least once a month. When applied appropriately, education has the ability to influence behavior by providing information and increasing awareness about an identified risk (Stouffer, 2016b). Fire service personnel delivering public education should comply with NFPA 1035 *Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist, and Youth Firesetter Program Manager Professional Qualifications*, or have approval by the FPO to deliver specific programs after demonstrating proficiency in them (NFPA, 2018).

The Vision 20/20 Project recognized the identification and prioritization of risks through a Community Risk Assessment (CRA) as a primary and essential first steps in the process of developing a CRR program (Stouffer, 2016a). A concept reinforced through review of the NFPA consensus standard 1730 which required completion of a CRA every five years, or in some cases sooner (NFPA, 2018). NFPA 1300 also supported the completion of a CRA by providing details in building a community profile and direction on the development of a CRR plan (NFPA, 2019b). Consensus of the literature research concluded the identification of stakeholders to include in several steps of the CRA and CRR plan implementation process.

According to NFPA 1452, the fire chief has the responsibility of identifying goals and objectives of the CRR plan (2019a). Ultimately, making the goals and objectives of the CRR plan a priority will increase the cultural change needed to support CRR. Shifting from traditional views and embracing the need for cultural change of the organization is the only way to effectively deploy CRR efforts (Haight, 2018). Fire service leaders should understand that CRR programs are the most effective and efficient method to protect their community.

Recommendations

The importance of providing a Community Risk Reduction (CRR) plan to the community was evident after completion of this research. A proactive approach to mitigating identified risks will be more effective than simply reacting to risks as they occur in the community. The first recommendation was to complete a Community Risk Assessment (CRA) with the guidance of *NFPA 1300 Standard on Community Risk Assessment and Community risk Reduction Plan Development* and *NFPA 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigations, and Public Education Operations.* Furthermore, use of the Vision 20/20 Project's guide Community Risk Assessment: A *Guide for Conducting a Community Risk Assessment* would be recommended as more comprehensive direction in the completion of a CRA.

The second recommendation was to follow the completion of the CRA with a detailed CRR plan to address the risks identified and prioritized in the CRA. This recommendation should be completed at the direction of the Vision 20/20 Projects guide *Community Risk Reduction Planning: A Guide for Developing a Community Risk Reduction Plan* and in conjunction with *NFPA 1300 Standard on Community Risk Assessment and Community risk Reduction Plan Development* and *NFPA 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigations, and Public Education Operations.*

The third recommendation was to adequately train and utilize fire suppression crews to deliver the CRR plan with the guidance of NFPA 1452 *Guide for Training fire Service Personnel to Conduct Community Risk Reduction*.

Although descriptive methodology was used in the research of this topic and provided this author with consensus standards and available resources to provide direction for the completion of a CRA and development and implementation of a CRR plan, this author also recommended further action research be completed to assist with the development and implementation of the CRA and CRR plan.
References

Broman, J. (2018). Chief Concerns: Community Risk Reduction. *Fitch & Associates*. Retrieved from https://www.fitchassoc.com/chief-concerns-community-risk-reduction/.

City of Oldsmar. (2003). Job Description: Fire Codes Administrator. Oldsmar, FL, United States.

- Crawford, J. (2014, December). Community Risk Reduction. *Fire Rescue Magazine*.12(9). Retrieved from https://firerescuemagazine.firefighternation.com/2014/12/01/community-risk-reduction/#gref
- Donahue, D. (2018, March 19). Does CRR Really Matter? *Fire Rescue Magazine* 13(2). Retrieved from https://firerescuemagazine.firefighternation.com/2018/03/19/does-crr-really-matter/.

Executive Analysis of Community Risk Reduction (EACRR) [Student Manual]. (2018).

Emmitsburg, MD. National Fire Academy. Retrieved from

https://nfa.usfa.fema.gov/ax/sm/sm r0274.pdf

Faiola, C. (2019, May). Personal interview.

Farrell, R. (2015). Community Risk Reduction: What is Important? (Executive Fire Officer Program, Applied Research Paper). Retrieved from https://nfa.usfa.fema.gov/pdf/efop/efo49117.pdf

Graham, E. (2019, May). Personal interview.

- Haight, D. (2018, January 8). Community Risk Reduction: Part I. *Darkhorse Emergency*. Retrieved from https://darkhorseemergency.com/community-risk-reduction-part-i/
- National Fire Protection Association. (2019b). *Guide for Training fire Service Personnel to Conduct Community Risk Reduction*. [NFPA 1452]. Quincy, MA: NFPA.
- National Fire Protection Association. (2019a). Standard on Community Risk Assessment and Community risk Reduction Plan Development. [NFPA 1300]. Quincy, MA: NFPA.

National Fire Protection Association. (2018). Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigations, and Public Education Operations. [NFPA 1730]. Quincy, MA: NFPA.

Reflections of Oldsmar [Booklet]. (1996). Oldsmar, FL: Friends of the Oldsmar Library.

Sawyer, D., Phillips, D., Catts, D., & Sawyer, D. (2016). Community risk reduction: Doing more with more. Quincy, MA: NFPA. Retrieved from https://www.nfpa.org/-/media/Files/Public-Education/By-topic/Urban/Urban-Task-Force/UrbanPaper2016.ashx?la=en

Stouffer, J.A. (2016a, February). Community Risk Assessment: A Guide for Conducting a Community Risk Assessment. Vision 20/20. Retrieved from http://riskassessment.strategicfire.org/wp-content/uploads/2016/03/Community-Risk-Assessment-Guide-v1.5.pdf

- Stouffer, J.A. (2016b, June). Community Risk Reduction Planning: A Guide for Developing a Community Risk Reduction Plan. Vision 20/20. Retrieved from http://riskreduction.strategicfire.org/wp-content/uploads/2017/10/CRR-Planning-Guidev4.0.pdf
- United States Census. (2018). In U.S. Census Bureau quickFacts: Oldsmar City, Florida. Retrieved from

https://www.census.gov/quickfacts/fact/table/oldsmarcityflorida/RHI225218

United States Fire Administration. (2019). *America's Fire and Emergency Services Leader Strategic Plan Fiscal Years 2019–2023*. Retrieved from https://www.usfa.fema.gov/downloads/pdf/publications/strategic plan 2019-2023.pdf

Van Dessel, G. (2013, February). How to determine population and survey sample size? Retrieved from https://www.checkmarket.com/blog/how-to-estimate-your-population-

and-survey-sample-size/

Appendix A

Results from Interview with Elizabeth Graham, Public Education Officer, Palm Harbor Fire rescue

 What local, state, and federal resources does your department utilize for Community Risk Reduction Programs?

We utilize state resources, like the Florida Occupant Resource Center (OPRC), for free car seat brochures, giveaways, technical information as well as car seats to utilize with a lowincome based distribution program. In addition, we partner with a private local business, Johns Hopkins All Children's Hospital who hosts the Safe Kids Coalition, a global organization aimed at reducing unintentional injuries to children 0-18 years old. They provide a plethora of materials, brochures, data, local, state and national networking opportunities. This group also organizes grant funding to purchase car seats, life jackets and several other tangible resources. We also receive grant funding from Pinellas County EMS grant for the purchase of life jackets to supplement our outreach drowning prevention program. Red Cross is also another local group we partner with for free smoke alarms and volunteers for neighborhood smoke alarm canvassing.

2) What programs do you offer the community on a regular basis?

CPR classes, car seat checks, fire station tours, fire engine demonstrations at schools or in the community, in-school presentations i.e. burn safety with Ruby the Fire House Dog, poison prevention, drowning prevention, business fire extinguisher training, hurricane and disaster preparedness presentations, Tai-Chi Fall Prevention for Seniors, Safety Displays, and In-Home Safety Checks.

3) How do you measure success of programs given? Monthly and annual reports are recorded to show the number of programs delivered and the number of program attendees. We also have pre and post surveys with our Tai-Chi program to self-evaluate balance and motion improvement. On a quarterly basis performance surveys are sent to locations where public education programs were given. The locations are chosen randomly in order to receive accurate feedback from the public. The Safe Kids collation also hosts a yearly overview of injury data to determine success of prevention efforts.

4) How are programs managed in your department? Crew involvement? Who assigns them? We have one full time and one part time public educator who oversee the programs and report to the Support Services Chief. As requests come in for engine demos, displays, station tours the public educator will, with two weeks' notice from the calling party, schedule the program on the department wide calendar and will attend the program with the crews to assist in the educational discussion. As other program requests come in for drowning prevention programs, car seat checks, health and safety fairs, etc. the public educator will self-assign. It's important that the educator position is flexible as many requests are for weekend events, evenings etc.

Appendix B

Results from Interview with Claudia Faiola, Fire and Life Safety Educator, East Lake Fire Rescue

 What local, state, and federal resources does your department utilize for Community Risk Reduction Programs?

Local and State resources we utilize are organizations such as Safe Kids Coalition and Ped Bike. We also try to partner with local businesses such as Pinch-a-Penny, Chick-Fil-A, Publix, and Target. Attending the upcoming NFPA conference would be a great place to start for any program just starting out.

- 2) What programs do you offer the community on a regular basis?*An extensive list was given (Appendix G)*
- 3) How do you measure success of programs given?

Firefighters are provided with forms that list all of the event information. Behind that form we have a section they fill out to report how many people attended the event, what material was distributed and how the event went. We also on occasion will touch base with the person who coordinated the event with us to obtain feedback.

4) How are programs managed in your department? Crew involvement? Who assigns them? Request form is filled out and given to DC for assignment to crews. Event is added to staffing and to station calendar so that everyone can see the event details. LT will let their crews know who is doing what for the event. PEO will either attend the event and provide the materials or give the DC all materials in advance so they can get it to the assigned unit.

Appendix C

Survey

Pinellas County Community Risk Reduction Programs

I am completing an Applied Research Project for Executive analysis of Community Risk Reduction, year two of the Executive Fire Officer Program with the National Fire Academy. I am conducting research to identify components that may be used in a more active and productive Community Risk Reduction program. I would greatly appreciate your help in answering the following questions.

Please answer the questions below with your department's public education, prevention and inspection efforts in mind.

Thank you in advance for your help!

- 1. Department Name:
- 2. Department Size:
 - Less than three stations
 - Three to nine stations
 - Ten to twenty-five stations
 - More than twenty-five stations
- 3. Does your department have a single position assigned to Community Risk Reduction

efforts? Or is it a shared responsibility among multiple positions?

- Yes, one position directs CRR efforts
- No, it is a shared responsibility
- 4. What type of Public Education Programs does your department offer?
 - CPR/ First aid
 - Fire Prevention Week

- Station Tours
- Apparatus Demos
- Citizens Academy
- Fire Extinguisher Training
- Car Seat Education/ Installation
- Home Escape Plans
- Disaster Preparedness
- Other: Write in option
- 5. How often does your department conduct public education programs?
 - Once a week
 - Once a month
 - Every other month
 - Quarterly
 - Infrequently
- 6. What percentage of businesses does your department inspect every year?
 - 0-25%
 - 26-50%
 - 51-75%
 - 76-100%
- 7. How often does your department inspect most businesses in your jurisdiction?
 - Annually
 - Every other year
 - Every third year
 - Dependent on type of occupancy/ hazard
 - Only new construction is inspected

- There is no defined schedule
- Other: Write in option
- 8. Which aspects of Community Risk Reduction are crews in your department involved in?
 - Public Education
 - Company Inspections
 - Home Inspections
 - Preplanning
 - Other: Write in option
- 9. What percentage of the department's budget is spent annually on Community Risk

Reduction efforts?

- 0-5%
- 6-10%
- 11-15%
- 16-20%
- 21-25%
- More than 25%

10. Does your department or municipality offer economic incentives to businesses for fire prevention and engineering efforts above code requirements?

- Yes
- No

11. If you answered 'Yes' to question 10, briefly explain any economic incentives your department or municipality offers to businesses for fire prevention and engineering efforts above code requirements:

• Write in option

- 12. If you are interested in the results of this survey, please provide your email and I will forward them upon completion.
 - Write in option

Appendix D

Pinellas Fire Chiefs Association Survey Request Email

Chiefs,

I am completing an Applied Research Project for Executive analysis of Community Risk Reduction, year two of the Executive Fire Officer Program with the National Fire Academy. I am conducting research to identify components that may be used in a more active and productive Community Risk Reduction program. I would greatly appreciate your help in completing a short survey about your department's public education, prevention and inspection efforts at the following link: <u>https://forms.gle/tNoan8KgFicHhM8f7</u>

Thank you in advance for your help!

Jason Schwabe Fire Chief City of Oldsmar Fire Rescue

Appendix E

Florida Fire Chiefs Association Survey Request Email

Could you please send the following request for information to members of the FFCA?

To whom it may concern,

I am completing an Applied Research Project for Executive analysis of Community Risk Reduction, year two of the Executive Fire Officer Program with the National Fire Academy. I am conducting research to identify components that may be used in a more active and productive Community Risk Reduction program. I would greatly appreciate your help in completing a short survey about your department's public education, prevention and inspection efforts at the following link: <u>https://forms.gle/tNoan8KgFicHhM8f7</u>

Thank you in advance for your help!

Jason Schwabe Fire Chief City of Oldsmar Fire Rescue

Appendix F

Fire Department Respondents to Survey

Dunedin Fire Rescue

East Lake Fire

Gulfport Fire Rescue

Largo Fire Rescue

Madeira Beach Fire Rescue

Oldsmar Fire Rescue

Palm Harbor Fire rescue

Pinellas Park Fire Rescue

Safety Harbor Fire Rescue

Seminole Fire Rescue

South Pasadena Fire department

St. Pete Beach Fire Rescue

Tarpon Springs Fire Rescue

Treasure island Fire Rescue

Appendix G

East Lake Fire Rescue Calendar of Events



East Lake Fire Rescue 2019 Event Calendar



January:

- o National Blood Donor Month
- o January 9th: CPR Class
- o January 9th: Law Enforcement Appreciation Breakfast
- o January 20th: East Lake Community Library "Booked for the Evening" event, scalding
- o January 26: YMCA Open House blood drive
- o January 29th: Blood Drive at North Pinellas YMCA
- o January 31st: Cypress Woods Elementary Firefighters are your friends & escape planning February:
- o February 6th: Calvary Church & ELMS Bike to School
- o February 6th: CPR Class at Allegro
- o February 9th: Car Seat Safety Ferman Chevy
- o February 16th: Alan Everton Scholarship Event: water safety Varsity
- o February 21st: CPR Class at Plato Academy
- o February 22nd: American Heart Month: Hands Only CPR YMCA
- o February 25th: American Heart Month: Hands Only CPR East Lake Library
- o February 26th: American Heart Month: Hands Only CPR YMCA
- o February 27th: Cub Scout Station Tour & Hands only CPR
- o February 27th: American Heart Month: Hands Only CPR YMCA

March:

- o Poison Prevention Awareness Month
- o March 4th: Walker Boot Drive at Varsity
- o March 5th: BSA Cub Scout Pack 475 Station tour & Escape Planning
- o March 6th: Calvary Church & ELMS Bike to S c h o o l
- o March 9th: ELFR Banquet
- o March 11th: Water Safety at YMCA

- o March 12th: Water Safety at YMCA
- o March 13th: Water Safety at YMCA
- o March 13th: CPR Class
- o March 15th: Water Safety at YMCA
- o March 18th_22nd: Poison Prevention Week
- o March 23rd: CPR Class Harbor Side Church
- o March 29th: FF Appreciation Breakfast provided by Allegro

April:

- o April 3rd: Calvary Church & ELMS Bike to School
- o April 5th, 2019: Prom Promise Table at ELHS
- o April 6th: Fight for Air Stair Climb
- o April 10th: CPR Class
- o April 13th: ELFR Open House
- o April 20th: East Lake Community Egg Drop
- o April 24th: Cub Scout Pack 413 Station Tour hands only first aid
- o April 25th: Ignite Academy Fire Safety and Station 57Tour
- o April 27th: 13th Annual Charity Car Show and Community Festival and YMCA Healthy Kids Day
- o April 30th: Bike to School Cypress Elementary
- o Alcohol Awareness Month
- o Child Abuse Prevention Station 56

May:

- o May 3rd: Plato Academy: Water Safety/Firefighters are your Friends
- o May 4th: WildfireCommunity Preparedness Day
- o May 8th: Calvary Church & ELMS Bike to School
- o May 8th: CPR Class
- o May 17: Plato Academy: Water Safety/Firefighters are your Friends
- o May 19-May 25th, 2019 EMS Week
- o May 31 -June 6: Disaster Preparedness Sales Tax Holiday Advertising
- o Share the road: Motorcycle and Bicycle Safety Awareness Month
- o National Water Safety Month: Social Media Campaign
- o BBQ Safety Awareness Social Media Campaign
- o Mental Health Awareness Month
- o National Stroke Awareness Month

June:

- o June 6th: Disaster Preparedness Sales Tax Holiday Last Day Advertising
- o June 12th: Menchies Car Seat Safety
- o June 12th: CPR Class
- o June 13th: Tai Chi FaffPrevention Class
- o June 13th: Meeting with East Lake Library for Tai Chi Fall Prevention Class Scheduling
- o June 20th: Water Safety & Hose down East Lake Woodlands Summer Camp
- o Hurricane Safety: Social Media Campaign
- o Click it or Ticket: Social Media Campaign
- o Lightning Safety: Social Media Campaign

July:

- o July 3rd: Fundraiser Event at Varsity Club
- o July 3rd: Sizzlin' Summer BBQ at East Lake Library 11:30am to 1:30pm
- o July 9th: Water Safety & Hose down at East Lake Woodlands Summer Camp
- o July 1Qth: CPRClass
- o July 12th: Menchies Event 3pm to 5pm
- o July 12th: YMCA MASH Group Hug Our Heroes Event: Fire Safety
- o July 18th: Fire Prevention at Brooker Creek Elementary YMCA Summer Camp
- o July 22nd: Water Safety & Hose down East Lake Woodlands Summer Camp
- o July 23rd: YMCA Summer Camp Fire Safety & Firefighters are your friends
- o Outdoor Safety Tips: Social Media Campaign
- o Hurricane Preparedness: Social Media Campaign
- o Wrong Way Driving Awareness Month: Social Media Campaign
- o Firework Safety: Social Media Campaign
- o Texting and driving: Social Media Campaign

August:

- o ***Firefighters CPR recert***
- o August 1st: East Lake Library Hose Down at 11am
- o August 2nd: East Lake Library Hose Down Rain Day at 11am
- o August 5th: Water Safety & Hose down at East Lake Woodlands Summer Camp
- o August 7th: Matter of Balance Fall Prevention Class
- o August 8th: Back to School Bash Plato Academy: Bike/Walk Safety
- o August 10th: YMCA Pool Party Hands-Only CPR class
- o August 11th: Back to School Safety: Publix Brooker Creek
- o August 12th: Matter of Balance Fall Prevention Class
- o August 14th: Back to School Safety Awareness

- o August 14th: Matter of Balance Fall Prevention Class
- o August 14th: CPR Class
- o August 15th: Back to School Safety Awareness
- o August 16th: Back to School Safety Awareness
- o August 17th: Back to School Safety: Publix Boot Ranch
- o August 17th: Wildfire Home Hazard Assessment
- o August 17th: International Cultural Exchange Services Station 57 Tour
- o August 19th: Matter of Balance Fall Prevention Class
- o August 20th: Department CPR Recertification
- o August 21st: Department CPR Recertification
- o August 21st: Matter of Balance Fall Prevention Class
- o August 22nd: Department CPR Recertification
- o August 26th: Matter of Balance Fall Prevention Class
- o August 29th: East Lake Library CPR First Aid class
- o August 29th: Matter of Balance Fall Prevention Class

September:

- o Hurricane Preparedness at Walmart Neighborhood Market
- o September pt: Fall Prevention: SAGES Theater: Denying Gravity
- o September 5th: Extinguisher Class at Allegro
- o TAI CHI Classes Begin!
- o September 6th: Fire Safety at East Lake Library
- o September 11th: CPR Class
- o September 15th: Cyrus's Birthday Party
- o September 16th: Adam's Birthday Party
- o September 18th[:] Car Seat Check at North Pinellas YMCA 9arn-11Am
- o September 19th: F all Prevention Presentation at the 11VICA
- o September 30 Brooker Creek Publix 5k advertising
- o Fall Prevention Awareness Week
- o National Responsible Dog Ownership Month
- o Brooker Creek Publix 5K advertising

October:

- o October 1st: Bike to School Day East Lake Middle School
- o October 4th: Fire Prevention Month at Brooker Creek Elem.
- o October 6th: Countryside Mall Life & Safety Event
- o October 5th: First Annual Canine Estates H o w l O W e e n
- o October 9th. Fire Prevention Month at Excel Learning Center
- o October 10th: International Bike to School Day: Cypress Woods Elem.
- o October 11th: Fire Prevention Month at Young Days

- o October 3rd: Oktober Fest EL Library
- o October 9th: Walk/Bike to School Calvary Church
- o October 9th: CPR Class
- o October 18th: Fall Festival Brooker Creek Elementary
- o October 11th:, 2019: Fire Prevention Month at Young Days
- o 02tober 12th: Fire Prevention at Cypress \Voods Elementary
- o October 14th: Brooker Creek Publix 5k advertising
- o October 17th: Fire Prevention Month at Leap Forward A c a d e m y
- o October 18th: Fire Prevention Month Brooker Creek Elementary
- October 19th: Fall Festival at Br0oker Creek Elementary Fire Prevention and 5K advertising
- o October 19thth: 6th Annual SK Run/Walk for Charity
- o October 23rd: Fire Prevention Month Oak Crest Preschool
- o October 31 t: Calvary Church: Trunk or Treat
- o Social Media: Halloween Safety
- o Social Media: National Bullying Prevention Month
- o Social Media: Fire Prevention Week

November:

- o Thanksgiving Safety: Social Media Campaign
- o Holiday Travel Safety
- o Great American Teach-in Month
- November 3rd: Toymakers Open HouseNovember 7th: Back to School Day East Lake Middle School
- o November n2 d: Toymakers of East Lake Open House
- o November 3rd: EL Library 20th Anniversary: Clock Change check battery
- o November 6th: Walk/Bike to School Calvary Church
- o November 13th: CPR Class
- o November 14th: Great American Teach In ELMS
- o November 26th: Daisy Girl Scout Troop Station Tour
- o November 23rd: Murder Mystery Show at EL Library 7pm
- o November 24th: Murder Mystery Show at EL Library 2pm
- o Santa Program Sign up
- o Toymakers Open House: Thanksgiving Safety Handout
- o Great American Teach-in at East Lake Middle School
- o Cypress Woods Elementary Fire Prevention Presentation

December:

- o Holiday Safety
- o Santa Program

- o December 4th: Walk/Bike to School Calvary Church
- o Firework Safety: Social Media Campaign
- o December 4th: Bike to School East Lake Library
- o December 5th: Bike to School Day East Lake Middle School
- o December 12: Reindeer Run YMCA Annual 5K: Holiday Safety
- o Wood lands Estates Holiday Block Party
- o December 11th: CPR Class
- o Christmas Socialat Lansbrook Waterfront Park