

**Evaluating the Community Education Programs Provided by
Green Township Fire & EMS**

By: Arlis J. Boggs
Lieutenant
Green Township Fire & EMS
6303 Harrison Avenue
Cincinnati, OH 45247

A proposed research project submitted to the Ohio Fire Executive Program

5 November 2010

CERTIFICATION STATEMENT

I hereby certify that the following statements are true:

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

2. I have affirmed the use of proper spelling and grammar in this document by using the spell and grammar check functions of a word processing software program and correcting the errors as suggested by the program.

Signed: _____

Printed Name: _____

ABSTRACT

Green Township Fire & EMS (GTFE) has been providing community education programs in an effort to reduce the number of injuries and deaths experienced by their community. The problem is GTFE has no way to evaluate if it is providing adequate education through the programs delivered. The department has no way of knowing if it is providing enough opportunities currently to the community.

The purpose of this research, using a descriptive research method, was to evaluate the existing programs and provide recommendations to improve and adjust the community education programs to better serve the community needs.

Three research questions were addressed to find what could be improved or adjusted for the community education programs. The research questions were:

1. What age group does Green Township Fire & EMS focus on for community education programs?
2. How is Green Township Fire & EMS providing an adequate number of educational opportunities for the schools within Green Township?
3. What is the need for additional community educational programs within Green Township?

Data was collected from reviews of literature, interviews with members of GTFE and surveys distributed to teachers at different schools within GTFE. A survey was also sent to community organizations in Green Township and placed on Green Township's website.

The interviews and surveys identified that Green Township Fire & EMS focus on educating children ranging from Kindergarten to the third grade with their community education

classes. Furthermore, the literature review and surveys suggested ways to add additional programs that more fully meet the needs of the entire community.

TABLE OF CONTENTS

CERTIFICATION STATEMENT..... 2

ABSTRACT..... 2

TABLE OF CONTENTS..... 4

INTRODUCTION 6

 Statement of the Problem..... 6

 Purpose of the Study 6

 Research Questions..... 7

BACKGROUND AND SIGNIFICANCE..... 8

LITERATURE REVIEW 8

PROCEDURES..... 18

 Definition of Terms..... 18

 Limitations of the Study..... 19

RESULTS 19

DISCUSSION..... 26

APPENDIX 1 – Green Township Fire & EMS Interview List..... 3130

APPENDIX 2 – Fire Department Personnel Interview Questions 36

APPENDIX 3 – Fire Department Personnel Interview Results..... 38

APPENDIX 4 - High School and Elementary School List35

APPENDIX 5 - School Survey Letter36

APPENDIX 6 - School Survey37

APPENDIX 7 - Green Township Fire & EMS School Survey Results39

APPENDIX 8 - Green Township Fire & EMS School Survey Results.....40

APPENDIX 9 - Green Township Fire & EMS School Survey Results.....41

APPENDIX 10 - Green Township Fire & EMS School Survey Results42

APPENDIX 11 - Green Township Fire & EMS School Survey Results43

APPENDIX 12 - Community Survey Letter44

APPENDIX 13 - Community Survey45

APPENDIX 14 - Community Survey Results46

INTRODUCTION

Statement of the Problem

“The role of the fire service has changed dramatically in the past decade. It has become the “all hazards” response agency for cities and towns across our country and the world” (Robertson, 2002).

The fire service must address many hazards that must be dealt with in today’s communities, and must ensure that it is providing quality education programs for the communities.

It has been reasoned, “Among the many measures that can be taken to reduce fire losses, perhaps none is more important than educating people about fire” (America Burning, 1973, p. 105).

The problem this study addressed was that Green Township Fire & EMS had never evaluated its community education programs to determine if the department was providing adequate education services.

Purpose of the Study

The purpose of this research was to evaluate the existing programs and provide recommendations to improve and adjust the community education programs to better serve the community needs.

Research Questions

The research method for answering the following questions was descriptive. A survey and interview were used to get feedback from past education programs that Green Township Fire & EMS have provided. The survey determined if these programs were adequate or if the programs need improvement. Interviews were conducted with fire prevention educators within G.T.F.E and with the Chief Officers within the department.

1. What age group does Green Township Fire & EMS focus on for community education programs?
2. How is Green Township Fire & EMS providing an adequate number of educational opportunities for the schools with in Green Township?
3. What is the need for additional community educational programs within Green Township?

BACKGROUND AND SIGNIFICANCE

Green Township Fire & EMS has provided education programs from the inception of the Mack Volunteer Fire Department in 1944 and continued into the current Green Township Fire and EMS Department, as it is now. Through the years the programs have evolved from basic informal discussions about “what firefighters do” to more advanced programs involving large training aids. Several of the current programs were designed in response to new ideas from employees that had external influence in their personal life.

Green Township is located in the southwestern portion of Hamilton County, just east of Cincinnati, Ohio. The township is twenty-seven square miles and is called home by an estimated 61,000 residents. Green Township has a diverse make up of residence in the township ranging from school age children to an increasing number of the geriatric population. Currently, there are forty-nine educational occupancies in Green Township. Twenty of these educational occupancies are day cares or preschools. Green Township is also home to the Oak Hills High School which is the largest high school in the state of Ohio, based on number of students in the school.

http://en.wikipedia.org/wiki/Oak_Hills_High_School). Green Township has seen a large development of residential housing over the past ten years. The township has had the most building permits filed for new construction in Hamilton County, Ohio over the last five years. With the increase in population the need for community education continues to grow.

It is believed that the failure to properly educate school-aged children on the hazards they face would jeopardize the health, safety, and welfare of the residents, visitors, and firefighters of Green Township. G.T.F.E must continue to ensure that the proper education is being delivered to school-aged children, but also ensure programs are available for the entire community of Green Township.

With adding new programs and removing existing programs there was no way to measure whether the education programs were providing adequate information to the community. The department never established any customer service questionnaires to evaluate the effectiveness of these changes or new programs being offered.

Currently, GTFE operate four fire stations with a daily staffing level of twenty personnel on duty. The department is a combination department with 42 fulltime and 41 part-time personnel. All personnel are trained as a firefighter and must be at least an EMT-Basic with the exception of the two administration assistants. GTFE has a fire chief, one assistant chief, four district chiefs, and twelve lieutenants. The annual operating budget for GTFE is seven million. In 2009 the department made 6500 fire and EMS details. The department does not have a position dedicated to only community education. A fulltime firefighter has the assignment of fire education along with being assigned to a shift day rotation at a fire station. With the current budget, a position dedicated to community education is not foreseen in the near future.

Throughout the 1990's Green Township Fire and EMS took part in the Tri State Safety Association that provided an annual parade of apparatus and a safety fair. The safety fair was an opportunity for the community to learn new information about making their home safe from fire and other hazards commonly found in their home. Several organizations were involved in this association with Green Township, which allowed additional resources to be used to educate the public. The association has since dissolved leaving each department in the tri state area to provide educational opportunities on its own. There are seven departments in the tri state with limited resources that are providing minimal educational opportunities for the community. The number of programs has increased and decreased over the years. In 1995 GTFE used a FireSafe House to educate school-aged children about the importance of having a fire escape plan for their

home. (approximately 11,000) Over the years the FireSafe House became a maintenance issue for GTFE and the department sold it to another agency.

In 2009 Green Township Fire and EMS provided fourteen different community educational programs. The programs ranged from station tours and talks, to hands on training with the Citizen Emergency Response Team. The specific breakdown is identified in Table 1.

Table 1

GTFE Summary of Community Education Programs 2009

Type of Activity	Adults	Children
AED Training	95	0
First Aid Training	75	10
CPR Training	30	0
Fire Extinguisher Training	95	25
Firefighter Phil	131	2875
Fire Prevention Talks	165	400
School Talks	236	1950
Station Talks & Tours	89	422
Readyman Badge	17	43
Block Parties	352	352
Parades	5291	5510
Misc. Public Education	1272	1490
Car Seat / Injury Prevention	278	
Total	8126	13,076

Note. Source: Green Township Fire Education Report, 2009.

Green Township Fire & EMS has partnered with Creative Safety Products to provide the educational program Firefighter Phil for the last 10 years. The program uses interactive learning for grade school age children. The company provides an annual quality assurance survey to each teacher in the schools where they present the program. The company evaluates every quality assurance survey and continues to make necessary changes to their program to ensure that the children are learning fire safety. The school teachers feel it is enjoyable and keeps the children's attention.

Green Township Fire & EMS has used an evaluation tool when teaching CPR through the American Heart Association, which requires an evaluation to be completed from every student. The evaluations let the instructors know how well they instructed and what the students thought of the information provided. These evaluations are a key for a successful CPR program.

GTFE completes child safety seat inspections for the community on a daily basis. Each seat must be inspected to ensure it has not been recalled or damaged. Once the installer has approved the seat, it is installed according to National Highway Transportation Safety Association. The installer also ensures that the owner can properly install the seat with assistance.

The newest program Green Township Fire & EMS is currently providing is the use of an interactive Hazard House. The Hazard House is a small model home with which the instructor can show different hazards throughout the home. The participants interact by identifying the safety hazards in each room. The program has proven to keep the attention span of the participants in grades kindergarten through fourth grade.

The significance of this research is to gain information from the community of the current community education programs that Green Township Fire & EMS are providing currently. The results of this research will be used to enhance the community education programs delivered by GTFE. *The potential impact this study could have on the Green Township Fire and EMS department is to improve and adjust community programs to better serve the communities needs.*

LITERATURE REVIEW

The literature review focused on evaluating the current community education programs provided by using a survey and interviewing department members during the research process. The Learning Resource Center at the National Fire Academy was accessed to review research projects, which had applicable information. Research and other studies of community education were reviewed and used to help in evaluating the community educational programs delivered by Green Township Fire & EMS.

In Kuroki's article (2007) he states "that we need to address the many ways that we can reduce the fire risks we face in our homes. It seems that fire departments feel they are providing enough community education because they have not had a fire death within their community. For those communities that have had a fire death sadly most of these deaths are preventable."

The National Fire Protection Association (NFPA) 2006 reported that 96 percent of all U.S. homes have smoke alarms, so it's obvious that the majority of the country's fire deaths happen in a small percentage of homes that do not have working smoke alarms. When these fire deaths occur, the question must be asked if fire departments have done all they could have to get the community educated on these dangers. It is vital that departments develop a way to ensure they are connecting with their communities. They must ensure they are providing the educational programs that will help prevent those potential fire deaths.

Robertson (2002) tells of how little communities know about their local fire departments. Citizens in most communities only interact with their firefighters on special occasions such as parades or on the rare occasion where they have to dial 911 to report an emergency. The author of the research works for a fire and EMS department that relies on tax levies to help fund the fire department.

Educators today are not only “fire prevention” educators but must also have basic knowledge and skills in several other life safety and injury-prevention areas, such as burn-injury prevention, electrical safety, baby-sitter training, pedestrian safety, water safety, and CPR. The International Fire Service Training Association has a manual called the Fire and Life Safety Educator. The book describes the important role of today’s educator. The manual was developed for not only uniformed personnel, but those non-uniformed personnel and others from outside the fire service. Throughout the manual, it provides knowledge and skills needed to successfully perform as a fire and life safety educator as addressed in NFPA 1035, *Standard for Professional Qualifications for Public Fire and Life Safety Educator*, (1993 edition). In chapter eleven the book describes and gives information on one of the most important components of any successful public fire and life safety education programs which is evaluating presentations and programs. The manual states that many public educators fear evaluation, viewing it as something that is complicated, detailed and time-consuming. The manual refers to the USFA’s Five Step Process to ensure a successful fire and life safety education program.

Successful programs throughout The United States have used the USFA’s manual (Public Fire Education Planning: A Five Step Process, June 2008) which gives the five-step process for educators to make their community safety programs successful. The first step is to conduct a community risk analysis. During the first step the manual provides the educators with details of how to identify the data to be analyzed and how to develop a community risk profile.

The second step provides information on how to develop community partnerships. These partnerships will assist in the most effective risk reduction efforts a community can provide. Step two says that it is impossible for one person or one organization to reduce a serious community fire or injury risk alone. Fire and EMS organizations rely on mutual aid from other organizations

for fire suppression efforts. The same strategy should be applied to community risk reduction programs.

Step three provides information to help the organization develop an intervention strategy. The intervention strategy is the beginning of the detailed work to develop a successful fire and life safety risk reduction program. An evaluation plan should be developed to assure that the project or program will not fail. Adding an evaluation plan to the intervention strategy will help keep the risk reduction effort on track to reach the intended goal.

In step four it addresses the implementation of the strategy by putting the plan into action to meet set goals. During this step modifications may need to be made to the program to ensure the success. Marketing the program is an important part of the implementation that should not be overlooked. Continuous monitoring and regular progress reports are vital during this step in the process.

Evaluating the results is the fifth and final step in the process. Completing an evaluation will determine if the primary goal of risk reduction efforts are reaching target populations, have the planned impact, and are demonstrably reducing loss. In this final step the manual says that many organizations are simply not sure how to perform evaluations. Step five offers several sources that organizations can seek help with completing evaluations. Organizations must realize that the process will take time and effort to produce tangible results. Evaluations must be done in a valid and objective manner. The evaluator must keep an open mind and be prepared to make adjustments according to the findings of the monitoring and evaluation efforts. (Public Fire Education Planning: A Five Step Process, June 2008)

The author has also looked outside of the fire service industry for information on conducting surveys and evaluations to ensure a successful fire and life safety education program.

Customer surveys are conducted by most organizations (Barlow and Stewart, 2004). Frequently, these surveys do not measure whether your program (brand) is being delivered. The fire service brand would be the educational programs that the departments are providing. It is suggested that the surveys should ask more than “did they like the program”. The book gives advice to ask direct questions to ensure the customer is getting what they expected, and if not the program needs to change something.

Five different survey styles are recommended and include 1) mail surveys, 2) ballot and comment surveys, 3) telephone surveys, 4) online surveys, and 5) in-person surveys. The resource states that you have to develop and conduct a formal survey to get the data you need for important business and marketing decisions. These type of surveys provide feedback to businesses (fire departments) to determine what programs need to be presented to the communities and if the customers are satisfied with the programs. The author of this research project will utilize three different styles of surveys to gather community feedback to help answer the research questions. (Stephenson, 2003)

According to the USFA older adults account for approximately thirty-two percent of all fire deaths. By 2030 the population of Americans aged 65 and older will be nearly 71 million. (Fire in the United States Fifteenth Edition) With the increase in this population it is even more important to have fire prevention and education programs for this at-risk group.

Hall (2010) found that the total cost of fires in the United States in 2007 totaled \$347 billion. This number represented an increase of 86 percent over 1980. This number reflects donated time by volunteer firefighters, building construction for fire prevention, estimated cost of loss of life, cost of career fire departments, economic losses, net insurance cost, and other economic costs. The report concludes that the United States should seek ways to lower the cost

of fire prevention, such as education and product innovation, as opposed to increasing the size of the U.S. fire prevention apparatus. It concluded that these results shows the need for improved methods (e.g., models) for calculating fire performance and costs, so implications of different choices can be considered and judged more comprehensively.

Ray (1998) completed a research project on Fire prevention effectiveness. That revealed that there is a wealth of material on why the fire service should evaluate fire prevention programs. Although, the evidence was inconclusive the methods exist to make such evaluations. His research did show a need for American fire service to improve data collection and use (Ray, 1998).

The author attempted to find documentation from the State of Ohio Fire Marshall's office on successful fire prevention within Ohio. No formal documents exist and the author was referred to the National Fire Administration.

PROCEDURES

A descriptive research methodology was employed to study and understand the current community education programs delivered by Green Township Fire and EMS. Resources from the EFO Applied Research Papers were reviewed as were several articles that had details on community education. The author was able to find resources from the National Fire Protection Association that provided great detail of how community education programs should be established and reviewed.

Two surveys were used to gather information about current and past educational programs in the community. The first survey was used at fifteen different schools within Green Township. Every teacher with an assigned class received a survey. See Appendix 3 for a list of educational facilities that were surveyed. Elementary schools through high schools were surveyed. Five schools were given a paper survey that was delivered and picked up by the author. The remaining schools were sent a survey via an internet link in an email format. The educational facilities were chosen by location within Green Township and type of school.

A second survey was sent to organizations and residents within Green Township (See Appendix 5). Fifty surveys were placed at a public library within Green Township, and could be filled out on site or brought back and placed in a completion binder. Fifty surveys were placed at the Green Township Community Lodge and could be filled out on site or returned at a later date. The community survey was also sent to multiple community organizations, church organizations via an internet link, and placed on the Green Township website. The author received 200 replies to the community survey with more than 60% via the internet survey link.

On February 15, 2010 eleven interviews began with the Green Township Fire and EMS officers, and employees who are involved with community education (See Appendix 1)

The interview provided information of how the members feel community education is being presented and possible changes that may need to be implemented.

Programs across the country were researched for additional community educational opportunities for Green Township Fire & EMS. Three programs designed by NFPA were reviewed to be recommended for GTFE to use as educational tools in the future.

The programs were Risk watch, Learn not to burn, and Remembering when.

Definition of Terms

Emergency medical services, a service providing out-of-hospital acute care and transport. Integrated Emergency Medical Service (IEMS) a derivated acronym of EMS Emergency Medical Service or System. (Wikipedia Encyclopedia. Retrieved July 25, 2010 from the World Wide Web).

Limitations of the Study

Limitations associated with this research project included the accuracy of information obtained during the surveys, knowledge level of each participant, and completeness of information obtained. For example, limitations may include:

1. Incomplete information obtained due to availability and turn-over of teachers,
2. Failure of participants to complete questions on the survey,
3. Lack of cooperation in completing surveys.

It is assumed the participants in the survey process answered the questions completely, honestly, and without prejudice because nothing asked was threatening or of sensitive nature. The author assumed the respondents possessed the appropriate knowledge to accurately answer the questions given their direct experience with Green Township Fire & EMS community

education programs. Despite these limitations, the findings from this study are expected to be useful in evaluating GTFE community education programs, and improve and adjust programs to better serve the community's needs.

RESULTS

Through this research project, the author intended to evaluate the existing programs and provide recommendations to improve and adjust the community education programs to better serve the community needs within Green Township. With this purpose in mind, three questions were asked:

1. What age group does Green Township Fire & EMS focus on for community education programs?

The eleven members from Green Township Fire & EMS that were interviewed provided the result that GTFE focuses on preschool and elementary aged children. Every participant answered that preschool and elementary aged children are the main focus for community education programs within Green Township. See Appendix 3 for interview results. In table two GTFE provided more classes to children than adults which relates back to the population on which the department focuses.

Table 2

GTFE Summary of Community Education Programs 2009

Type of Activity	Adults	Children
AED Training	95	0
First Aid Training	75	10
CPR Training	30	0
Fire Extinguisher Training	95	25
Firefighter Phil	131	2875
Fire Prevention Talks	165	400
School Talks	236	1950
Station Talks & Tours	89	422
Readyman Badge	17	43
Block Parties	352	352
Parades	5291	5510
Misc. Public Education	1272	1490
Car Seat / Injury Prevention	278	
Total	8126	13,076

Note. Source: Green Township Fire Education Report, 2009.

Fire Marshall Rick Bell explained during his interview that GTFE ensures every child from kindergarten through third grade has a fire education program provided to them once a year. The program is called Firefighter Phil and is taught by Creative Safety Products. Fire Marshall Bell stated “as the number of fire and EMS details increased over the years, opportunities for crews to go to the schools and teach the children decreased. Programs in the past have been interrupted due to crews making emergency responses. With Firefighter Phil, the program continues even if the crew must leave. The children are still receiving the education by the instructor provided by Creative Safety Products.” The Firefighter Phil program is provided at no additional cost to GTFE. The businesses within Green Township sponsor the program and provide the funding. In 2009 approximately 2875 children attended the Firefighter Phil program (Green Township Fire Education Report, 2009).

Throughout the interviews all members reported that the focus was on the younger children, but know that GTFE offers additional classes for the entire community. Majority of the members thought that the department is providing enough opportunities for the younger children although felt classes should be added for middle and high school students. Additional classes that participants of the interviews stated are available are firehouse tours and scout merit badge classes.

The school surveys indicated that when a teacher answered yes to receiving a program from GTFE in the past two years, it was the Firefighter Phil program. Other programs that were delivered, the teacher’s request, consisted of basic fire safety for younger children and “what a firefighter looks like in their equipment”.

A majority of the schools below the middle school level had received an educational program from GTFE (Appendix 8). The four schools that were surveyed above the elementary age level had received significantly fewer programs as indicated in Table 3 below.

Table 3.

Did Green Township Fire & EMS present any type of fire education programs for your students in 2008 or 2009?

<u>Educational Facilities</u>	<u>Number of Teachers</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>
White Oak Middle School	12	0%	100%	
Bridgetown Middle School	16	6.3%	93.8%	
LaSalle High School	23	13%	65.2%	26.1%
Oak Hills High School	17	5.9%	88.2%	5.9%

These results indicate that Green Township Fire & EMS focuses primarily on preschool and elementary aged children.

2. How is Green Township Fire & EMS providing an adequate number of educational opportunities for the schools within Green Township?

Green Township Fire & EMS attempts to provide as many educational opportunities for the schools as their staffing and budget allow. Mike Scherer, the current fire educator for GTFE stated “anytime requests from the schools within Green Township are made for an educational opportunity the department tries to fill the request” (personal interview, 2010)

GTFE host several educational opportunities within the schools and at each fire station. In 2009 there were 511 people that received an educational opportunity at one of the fire stations

within Green Township. Additional request were made from schools within Green Township that resulted in programs to 2186 students (Green Township Fire Education Report, 2009).

With the fifteen schools surveyed by the author there was one school that did not receive any type of educational opportunity in 2009 from GTFE as shown in Appendix 8. The surveys also had an area for teachers to leave additional comments or recommendations. The elementary schools felt that kindergarten through third grade received adequate educational opportunities, but would like to see a firefighter in gear for that age group. The teachers recommended adding additional classes for grades four through six to continue educating the students on fire safety, and general safety outside of the school.

Surveys that were completed by middle school and high school teachers found that this age group does not receive as many opportunities as the younger students. There is no clear answer to why this age group does not have the same opportunities. The author found that this is common practice in the United States (through telephone interviews with other departments). The majority of the teachers in this category felt there is time available for additional programs to be presented by GTFE at their schools as seen in Appendix 9.

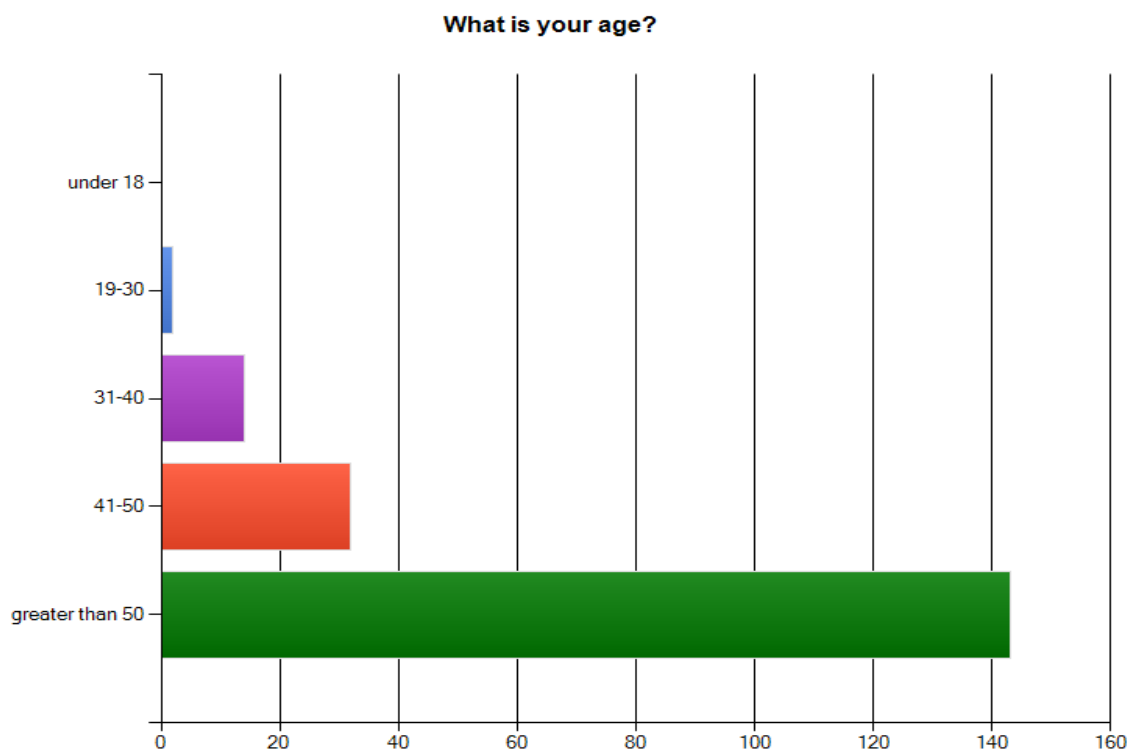
3. What is the need for additional community educational programs within Green Township?

A community survey was distributed throughout out the community and received nearly 200 replies providing information about current programs and adding future programs (appendix 14).

The community survey was used to gather information of how people feel about the current programs offered by GTFE, and what additional programs the community would be interested in attending. The author first wanted to find what age group responded to the survey and found that

74.1% of participants were greater than the age of fifty. Table 4 below gives the break down of age groups that completed the survey.

Figure 4.



After finding what age groups the author tried to obtain how many participants have attended a community education program presented by GTFE. The author found that 40 of the participants had attended a program in the past two years. Of the 20.7%, seventeen participants attended the CPR program presented by GTFE. All participants that attended a program were satisfied with the program they had attended.

For GTFE to add additional community education programs there must be a need and community members must want to attend the programs for them to be successful. In the author's

community survey he found that 86% of participants are interested in attending an educational program presented by GTFE.

Approximately thirty three percent (21,000 residents) of Green Township's population are senior citizens and would be a target audience to provide an educational program to help protect them in the community. Currently, GTFE does not offer a program on a regular basis for the senior citizens in the community. With GTFE EMS details increasing each year from falls, and injuries in the senior citizens, a program such as "Remembering When" could help keep senior citizens safe. The program is designed by the NFPA to help prevent fires and falls in the elderly population. Such a program could be incorporated into the programs that GTFE provide to continue to strive to make the community safe.

DISCUSSION

The information from surveys, plus findings from literature, suggest that Green Township Fire & EMS can improve and adjust the community education programs to better serve the community needs. The research revealed that GTFE provides adequate opportunities for some members of the community, but could improve programs for other members of the community.

The first goal was to find what age group GTFE focuses on for community education programs. Through interviews the author was able to identify the specific age group that GTFE focus. The author used surveys to find the schools that received educational opportunities were satisfied with the programs. Several of the surveys offered suggestions to help improve the current programs offered by GTFE. The surveys also revealed schools that do not receive any program would like a program offered at their school and would assist with the delivery.

The second goal was to find how GTFE is providing an adequate number of educational opportunities for the schools within Green Township. During the interviews with members of GTFE it was asked if they felt GTFE provides enough opportunities for community education. The answers provided by members showed that nine out of the eleven felt that the department is not providing enough. Suggestions made by several participants indicated that the department needs to add additional classes for middle and high school students. The interview and school survey information revealed that kindergartner through third graders receive the most opportunities. Surveys revealed that teachers feel firefighters should be added to the Firefighter Phil program so the student can see a firefighter in turnout gear. Teachers indicated that the younger students may be afraid of firefighters in turnout gear and would help with their fear of a firefighter.

The final goal was to find if there was a need for additional community educational programs within Green Township. Research showed that 86% of those who participated in the community survey would be interested in attending an educational program presented by GTFE.

“Among the many measures that can be taken to reduce fire losses, perhaps none is more important than educating people about fire” (America Burning, 1973, p. 105). With the information provided by the surveys and the findings in the literature it is important for Green Township Fire & EMS to strive to provide community education programs that will help protect and educate the community.

Additional community educational programs are needed within Green Township due to the increase in population resulting in increase of fire and EMS emergencies. Green Township Fire & EMS may not be able to prevent every emergency, although providing community education classes about prevention and what to do in an emergency can assist with decreasing the possibility of an emergency.

RECOMMENDATIONS

Based on the findings from this research, Green Township Fire & EMS should consider implementation of the following actions to improve the community education programs delivered in Green Township. The following recommendations are in no particular order.

1. Green Township Fire & EMS should add a new position as community educator to work a forty hour work week. The community educator should expand the programs offered by GTFE to include subject matter on a variety of safety topics including, but not limited to, burn prevention, bicycle, and motor vehicle safety. Additionally, teachers should be included in the development and implementation of these programs. The educator should also look at developing new programs for the elderly population within Green Township. A position dedicated to community education will allow consistency with the programs offered.
2. With numerous community organizations in Green Township, the department needs to improve on networking with various organizations. This networking system could improve programs and resources for GTFE. Developing a network with the educational facilities could help ensure that not only the school age children receive a program, but continue the education programs throughout high school.
3. Green Township Fire & EMS should implement the use of surveys throughout the community. An annual survey should be used to determine the interests of the community. This survey could help with the development of future programs and also provide information on current programs. A survey should

be provided to every school within Green Township once a year. The information gathered from this survey could help improve and make necessary changes to the programs. Lastly, a survey or evaluation needs to be completed at the end of each program delivered by GTFE. A completed survey or evaluation from participants would provide information whether the participants were satisfied with the program. The surveys could help GTFE to meet the needs of the community through the programs the people want.

4. Green Township Fire & EMS should search for community education grants to help support its educational efforts. Grants could assist with purchasing props, educational handouts, and many other educational resources.

These recommendations will help Green Township Fire & EMS continue to improve and enhance the community education programs offered. The actions identified in this research paper will increase the health, safety, and welfare of the residents, visitors, and firefighters in Green Township.

REFERENCES

- Barlow, J., & Stewart, P. (2004.) *Branded customer service: the new competitive edge*.
San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Creative Safety Products (2009, April). Firefighter Phil quality assurance survey.
Copies received 12 July 2009. 845 Claycraft Rd # O Columbus, OH 43230
- Durjan, J. (2004, June). Teach them and they will survive [Electronic version]. *Fire Engineering*,
Retrieved July 16, 2009 from
<http://www.fireengineering.com/index/articles/display/207261/articles/fire-engineering/operations/2004/06/teach-them-and-they-will-survive.html>
- Fire Engineering (2009, July). High school teachers applaud the chemistry of fire [Electronic
version]. *Fire Engineering*, Retrieved July 28, 2009, from
<http://www.fireengineering.com/index/articles/display/366900/articles/fire-engineering/health-and-safety/2009/07/high-school-teachers-applaud-the-chemistry-of-fire.html>
- Green Township Fire Department. (1992-1995). Bureau of public education report. Printed 8
October 2009. Green Township-Hamilton County, Ohio: Green Township Fire
Department.
- Green Township Fire and EMS. (1999-2008). Public education yearly report. Printed 8 October
2009. Green Township-Hamilton County, Ohio: Green Township Department of Fire and
EMS.
- Green Township Fire and EMS. (2009). Public education yearly report. Printed 30 January 2010.
Green Township-Hamilton County, Ohio: Green Township Department of Fire and EMS.

Kiurski, T. (2007). Connecting with the community: A call to action [Electronic version]. Fire Engineering, Retrieved July 16, 2009, from

<http://www.fireengineering.com/index/articles/display.articles.fire-engineering.prevention-protection.public-education.2007.10.connecting-with-the-community-a-call-to-action.html>

Lee, J.K. (2004). *An evaluation of risk reduction programs for reducing fire injuries and fatalities in Oklahoma City*. (Available from the National Fire Academy Learning Resource Center, 16825 South Seton Avenue, Emmitsburg, MD 21727)

Lesniak, R.M. (2003). Evaluating fire education programs delivered by the fire department of Springfield Township. (Available from the National Fire Academy Learning Resource Center, 16825 South Seton Avenue, Emmitsburg, MD 21727)

Lobeto, A.D. (1999, February). Improving community fire safety and education [Electronic version]. Fire Engineering, Retrieved July 16, 2009, from

<http://www.fireengineering.com/index/articles/display/60817/articles/fire-engineering/volume-152/issue-2/features/improving-community-fire-safety-and-education.html>

Mateo, R. (2001). *Evaluating public service education at Elmendorf fire and emergency services*. (Available from the National Fire Academy Learning Resource Center, 16825 South Seton Avenue, Emmitsburg, MD 21727)

National Fire Protection Association [NFPA]. (2005). NFPA 1035: Standard for professional qualifications for public and life safety educator. Quincy, Massachusetts: NFPA.

National Fire Protection Association. (2010, January). Learn not to burn. Retrieved January 30, 2010 from the World Wide Web:

<http://www.nfpa.org/itemDetail.asp?categoryID=202&itemID=17837&URL=Safety%20Information/For%20public%20educators/Education%20programs/Preschool%20programs>

National Fire Protection Association. (2009, January). Remembering when: A fire and fall prevention program for older adults

National Fire Protection Association. (2010, January). Risk watch. Retrieved January 30, 2010 from the World Wide Web: <http://www.nfpa.org/categoryList.asp?categoryID=1050>

Powell, P. (1997, January). *Fire and life safety educator* (2nd ed.). International Fire Service Training Association

Ray, R. (1998). Fire prevention effectiveness: can we measure what did not happen? (Available from the National Fire Academy Learning Resource Center, 16825 South Seton Avenue, Emmitsburg, MD 21727)

Robertson, M. (2002). Marketing your fire department through public education [Electronic version]. *Fire Engineering*, Retrieved July 16, 2009, from <http://www.fireengineering.com/index/articles/display/146083/articles/fire-engineering/volume-155/issue-5/departments/fire-prevention-bureau/marketing-your-fire-department-through-public-education.html>

Stephenson, J. (2003.). *Ultimate small business marketing guide*: San Francisco, CA: Entrepreneur Magazine Publishers, Inc.

United States Fire Administration. (1991, March). Short guide to evaluating local public fire education programs. Retrieved January 30, 2010 from the World Wide Web: <http://www.usfa.dhs.gov/downloads/pdf/publications/fa-101.pdf>

United States Census Bureau, Census 2000, Retrieved December 15, 2009 from the World Wide Web: <http://www.census.gov/census2000/states/oh.html>

United States Fire Administration. (2008, June). Public fire education planning: A five-step process. 1-51.

United States Fire Administration. (2009, October). Fire in the United States 2003 – 2007.

Retrieved December 15, 2009 from the World Wide Web:

http://www.usfa.dhs.gov/downloads/pdf/publications/fa_325.pdf

APPENDIX 1

Green Township Fire & EMS Interview List

Douglas Witsken, Fire Chief
6303 Harrison Avenue
Cincinnati, OH 45247

Dan Gallagher, Firefighter / Paramedic
5911 Bridgetown Road
Cincinnati, OH 45247

Scott Souders, Assistant Fire Chief
6303 Harrison Avenue
Cincinnati, OH 45247

Mark Wagner, District Chief
6303 Harrison Avenue
Cincinnati, OH 45247

Kevin Hummeldorf, District Chief
6303 Harrison Avenue
Cincinnati, OH 45247

Richard Bell, Fire Marshall
6303 Harrison Avenue
Cincinnati, OH 45247

Tom Dietz, Lieutenant
6303 Harrison Avenue
Cincinnati, OH 45247

Chris Godfrey, Lieutenant
6303 Harrison Avenue
Cincinnati, OH 45247

Russ Ruberg, Lieutenant
5911 Bridgetown Road
Cincinnati, OH 45247

Mike Joseph, Lieutenant
2280 Sylved Lane
Cincinnati, OH 45248

Mike Scherer, Fire Education
5911 Bridgetown Road
Cincinnati, OH 45247

APPENDIX 2

Fire Department Personnel Interview

Name:

Rank with-in Department:

1. Does Green Township Fire & EMS provide enough opportunities for community education?
2. What is your annual budget for community education materials? (Chief only)
3. What age group does GTFE focus on educating?
4. How does the community know when and what classes are offered?
5. Are there any special classes provided by GTFE for the elderly population with in Green Township?
6. Is there a need for a dedicated position of community educator with in GTFE?
7. Are there any problems with presenting community education classes? (Details, personnel)
8. Does GTFE provide enough fire safety information / classes to the schools during Fire Prevention Week?
9. Are there evaluation plans in place to assess what the community education needs?

10. Are there programs GTFE would like to provide but are not able to, due to financial or manpower limitations?

11. Is there an evaluation that is used after each community education program presented.

APPENDIX 3

Fire Department Personnel Interview Results

1. Does Green Township Fire & EMS provide enough opportunities for community education?

No – nine

Yes – Two

Suggestions made to add additional programs for middle and high school and offer more programs for the elderly.

2. What is your annual budget for community education materials? (Chief only)

\$3800.00

3. What age group does GTFE focus on educating?

All participants answered preschool and school age children.

4. How does the community know when and what classes are offered?

Website, Local paper, Township meetings, Phone calls

5. Are there any special classes provided by GTFE for the elderly population with in Green Township?

2 – Upon request, 7 – no, but would be good to do, 1- limited, 1- unsure

6. Is there a need for a dedicated position of community educator with in GTFE?

8 – Yes although other items are more important, 2 – no, 1 - unsure

7. Are there any problems with presenting community education classes? (Details, personnel)

11 – Staffing

8. Does GTFE provide enough fire safety information / classes to the schools during Fire Prevention Week?

9 – No, 2 – classes yes, material no

9. Are there evaluation plans in place to assess what the community education needs?

11 - No

10. Are there programs GTFE would like to provide but are not able to, due to financial or manpower limitations?

8 – Yes, 9 - no

11. Is there an evaluation that is used after each community education program presented.

10 – No, although one is needed, 1 – yes Firefighter Phil program

APPENDIX 4

High School and Elementary School List

LaSalle High School
3091 North Bend Road
Cincinnati, OH 45239

Our Lady of Visitation
3172 South Road
Cincinnati, OH 45248

Oak Hills High School
3200 Ebenezer Road
Cincinnati, OH 45248

St. Antoninus School
5425 Julmar Drive
Cincinnati, OH 45238

Diamond Oaks Joint Vocational School
6375 Harrison Avenue
Cincinnati, OH 45247

St. Ignatius School
5222 North Bend Road
Cincinnati, OH 45239

White Oak Middle School
3130 Jessup Road
Cincinnati, OH 45239

Covedale Elementary
5130 Sidney Road
Cincinnati, OH 45238

Bridgetown Middle School
3900 Race Road
Cincinnati, OH 45247

Oakdale Elementary
3850 Virginia Court
Cincinnati, OH 45247

St. Aloysius Gonzaga School
4390 Bridgetown Road
Cincinnati, OH 45247

St. Jude School
5924 Bridgetown Road
Cincinnati, OH 45247

John Foster Dulles Elementary
6481 Bridgetown Road
Cincinnati, OH 45248

St. James School
6111 Cheviot Road
Cincinnati, OH 45247

Springmeyer Elementary
4179 Ebenezer Road
Cincinnati, OH 45247

APPENDIX 5

School Survey Letter

March 4, 2010

Dear Educator:

Let me introduce myself, my name is Lieutenant Arlis Boggs with the Green Township Fire & EMS Department. I am participating in the Ohio Fire Executive Program, which is a three year Executive Leadership Program. During this program students are given research papers to complete, which are intended to help the individual and organization grow. I have chosen to evaluate our department's community education programs to identify areas that can be improved or if they are effective in there current delivery. My research during this process may develop new classes that we can offer to the community.

I would appreciate if you could complete the attached research survey to help me complete my paper. This survey is vital to my research paper and to Green Township's community education programs. After completion, please leave the survey in the school office with the secretary.

Thank you for your time. If you have any questions please feel free to contact me.

Sincerely,

Arlis J. Boggs, Lieutenant
Green Township Fire & EMS
6303 Harrison Avenue
Cincinnati, OH 45247

APPENDIX 6

School Survey

Teachers Name:

Grade:

School:

of Children in class:

1. Did Green Township Fire & EMS present any type of fire education programs for your students in 2008 or 2009?

YES NO

If so, what was the presentation?

2. Do you feel the program was delivered in a manner in which the children were able to learn?

YES NO

3. Were there any problems while the program was being delivered? If yes, please explain.

YES NO

4. What could Green Township Fire & EMS do to make a better presentation of the programs?

5. Is fire safety education part of you curriculum?

YES NO

If yes, how often?

Monthly Annually Other _____

6. Would you be willing to assist Green Township Fire & EMS in development and delivery of a prevention and injury reduction program?

YES NO

7. Is there available time during the school year for Green Township Fire and EMS to provide additional programs in your class?

YES NO

8. Do you feel Green Township Fire and EMS should provide more educational opportunities through your school?

YES NO

9. Does your school have a career day where members of the community can educate the students about their career?

YES NO

10. Are there programs you would like to see Green Township Fire & EMS present at your school?

YES NO

If yes, what programs?

APPENDIX 7

Green Township Fire & EMS School Survey Results

15 Educational Facilities	Number of Responses
St. Aloysius Gonzaga School	6
St. Jude School	12
St. Ignatius School	6
St. James School	5
Our Lady of Visitation	13
St. Antoninus School	7
Springmeyer School	19
Oakdale School	10
Covedale School	16
John Foster Dulles School	16
White Oak Middle School	12
Bridgetown Middle School	16
LaSalle High School	23
Oak Hills High School	17
Diamond Oaks Joint Vocational School (Daycare only)	1
Total responses	
	179

APPENDIX 8

Green Township Fire & EMS School Survey Results

Did Green Township Fire & EMS present any type of fire education programs for your students in 2008 or 2009?

<u>Educational Facilities</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>
St. Aloysius Gonzaga School	66.7%	33.3%	
St. Jude School	41.7%	58.3%	
St. Ignatius School	100%	0%	
St. James School	60%	20%	20%
Our Lady of Visitation	53.8%	46.2%	
St. Antoninus School	28.6%	57.1%	
Springmeyer School	52.6%	31.6%	6.3%
Oakdale School	70%	30%	
Covedale School	62.5%	31.3%	6.3%
John Foster Dulles School	62.5%	31.3%	6.3%
White Oak Middle School	0%	100%	
Bridgetown Middle School	6.3%	93.8%	
LaSalle High School	13%	65.2%	26.1%
Oak Hills High School	5.9%	88.2%	5.9%
Diamond Oaks Joint Vocational School (Daycare only)	100%	0%	

APPENDIX 9

Green Township Fire & EMS School Survey Results

Is there available time during the school year for Green Township Fire & EMS to provide additional programs in your class?

<u>Educational Facilities</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>
St. Aloysius Gonzaga School	100%	0%	
St. Jude School	91.7%	8.3%	
St. Ignatius School	83.3%	16.7%	
St. James School	100%	0%	
Our Lady of Visitation	61.5%	38.5%	
St. Antoninus School	71.4%	28.6%	
Springmeyer School	68.4%	31.6%	
Oakdale School	90%	10%	
Covedale School	100%	0%	
John Foster Dulles School	81.3%	18.8%	
White Oak Middle School	66.7%	33.3%	
Bridgetown Middle School	87.5%	12.5%	
LaSalle High School	73.9%	26.1%	
Oak Hills High School	76.5%	23.5%	
Diamond Oaks Joint Vocational School (Daycare only)	100%	0%	

APPENDIX 10

Green Township Fire & EMS School Survey Results

Do you feel Green Township Fire and EMS should provide more educational opportunities through your school?

<u>Educational Facilities</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>
St. Aloysius Gonzaga School	100%	0%	
St. Jude School	83.3%	16.7%	
St. Ignatius School	66.7%	33.3%	
St. James School	60%	40%	
Our Lady of Visitation	61.5%	38.5%	
St. Antoninus School	85.7%	14.3%	
Springmeyer School	63.2%	36.8%	
Oakdale School	80%	20%	
Covedale School	87.5%	12.5%	
John Foster Dulles School	62.5%	37.5%	
White Oak Middle School	66.7%	33.3%	
Bridgetown Middle School	93.8%	6.2%	
LaSalle High School	78.3%	21.7%	
Oak Hills High School	64.7%	35.3%	
Diamond Oaks Joint Vocational School (Daycare only)	100%	0%	

APPENDIX 11

Green Township Fire & EMS School Survey Results

Are there any programs that you would like to see Green Township Fire & EMS present at your school?

<u>Educational Facilities</u>	<u>Yes</u>	<u>No</u>	<u>N/A</u>
St. Aloysius Gonzaga School	100%	0%	
St. Jude School	75%	25%	
St. Ignatius School	66.7%	33.3%	
St. James School	40%	60%	
Our Lady of Visitation	15.4%	84.6%	
St. Antoninus School	57.1%	42.9%	
Springmeyer School	26.3%	31.3%	
Oakdale School	60%	40%	
Covedale School	68.8%	31.3%	
John Foster Dulles School	81.3%	18.8%	
White Oak Middle School	68.8%	31.3%	
Bridgetown Middle School	87.5%	12.5%	
LaSalle High School	52.2%	47.8%	
Oak Hills High School	76.5%	23.5%	
Diamond Oaks Joint Vocational School (Daycare only)	100%	0%	

APPENDIX 12

Community Survey Letter

April 27, 2010

Dear Community Member:

Let me introduce myself, my name is Lieutenant Arlis Boggs with the Green Township Fire & EMS Department. I am participating in the Ohio Fire Executive Program, which is a three year Executive Leadership Program. During this program students are given research papers to complete, which are intended to help the individual and organization grow. I have chosen to evaluate our department's community education programs to identify areas that can be improved or if they are effective in their current delivery. My research during this process may develop new classes that we can offer to the community.

I would appreciate if you could complete the attached research survey to help me complete my paper. This survey is vital to my research paper and to Green Township's community education programs. After completion, please leave the survey in the box provided. Thank you for your time. If you have any questions please feel free to contact me.

Sincerely,

Arlis J. Boggs, Lieutenant
Green Township Fire & EMS
6303 Harrison Avenue
Cincinnati, OH 45247

APPENDIX 13**Community Survey****Name:****Gender:****Age:****Area of residence: (circle one)****Bridgetown Covedale Dent Monfort Heights White Oak Mack****1. Have you attended a community education program presented by Green Township Fire and EMS in the last two years?** **YES** **NO****If yes, what program?****2. Did the educational program meet your expectations and needs?** **Very Satisfied** **Satisfied** **Undecided** **Dissatisfied****3. Was the location of the program easy to find?** **YES** **NO** **N/A****4. Was there enough parking available at the program?** **YES** **NO** **N/A****5. Was the facility comfortable for the program?** **Very Satisfied** **Satisfied** **Undecided** **Dissatisfied****6. Have you seen community education programs advertised by Green Township Fire and EMS?** **YES** **NO****If so where?**

7. Would you be interested in attending educational programs presented by Green Township Fire and EMS?

YES NO

8. What educational programs would you like to see Green Township Fire and EMS provide to the community in future?

CPR First aid Injury prevention for the elderly

Fall prevention Home safety inspection

Bicycle safety Car seat safety Other

Appendix 14

Community Survey Results

Total Responses: 193

1. What is your age?

	Percent	Number of Responses
Under 18	0.0%	0
19-30	1.0%	2
31-40	7.8%	15
41-50	17.1%	33
Greater than 50	74.1%	143

2. Have you attended a community education program presented by Green Township Fire & EMS in the last two years?

	Percent	Number of Responses
Yes	20.7%	40
No	79.3%	153

3. Did the educational program meet your expectations and needs?

	Percent	Number of Responses
Very Satisfied	13.5%	26
Satisfied	7.8%	15
Undecided	1.0%	2
Dissatisfied	0.0%	0
N/A	77.7%	150

4. Have you seen community education programs advertised by Green Township Fire & EMS?

	Percent	Number of Responses
Yes	33%	62
No	67%	126

5. Would you be interested in attending educational programs presented by Green Township Fire & EMS?

	Percent	Number of Responses
Yes	86%	166
No	14%	27

6. What educational program would you like to see Green Township Fire & EMS provide to the community in the future?

	Percent	Number of Responses
CPR	64.9%	122
First Aid	48.4%	91
Fall Prevention	26.6%	50
Injury Prevention for the elderly	38.8%	73
Home safety inspections	48.9%	92
Bicycle safety	18.6%	35
Car seat safety	18.6%	35