

DECLINING VOLUNTEER FIREFIGHTER RESPONSE

Executive Development

Declining Volunteer Firefighter Response in the Mt. Lebanon Fire Department

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Certification Statement

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

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Abstract

The problem was that the Mt. Lebanon Fire Department experienced a decline in its volunteer firefighter response to full alarms. The research purpose was to identify the cause of this decline, and to determine how the volunteer call attendance rate could be improved. Through the use of descriptive research, questions regarding contributing factors to the response decline, situations experiencing the lowest volunteer response, and potential department actions for improvement were answered. Research procedures included a literature review, historical analysis of incident data, a survey, and interviews. Results indicated decreased volunteer availability and sleeping through alarms were the predominant contributing factors to the decline. Recommendations were for strategic planning of staffing needs, targeted volunteer recruitment, officer training, and volunteer program enhancements.

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Declining Volunteer Firefighter Response in the Mt. Lebanon Fire Department

Managers of volunteers must accept a certain lack of control over the time in which a volunteer is available and willing to commit to an organization (Lee, 1999). Such lack of control is particularly troublesome for the fire service since being a volunteer firefighter is considered one of the most demanding volunteer activities (National Volunteer Fire Council, 2005). Unavailable or uncommitted volunteer firefighters can lead to sporadic or complacent volunteer response to emergencies, ultimately resulting in inadequate fireground staffing for those departments that rely heavily on a volunteer response component. Not being able to assemble sufficient staff in a timely manner adversely affects a fire department's ability to meet national response standards and community expectations. In addition, it poses a serious safety concern for both the public and responding firefighters (Scott et al., 2005).

The Mt. Lebanon Fire Department has long functioned under a combination delivery system heavily reliant upon volunteer firefighter response from home for full alarm dispatches. The problem is that the Mt. Lebanon Fire Department has experienced a decline in the rate of volunteer firefighter attendance at full alarms during the past several years. The purpose of this study is to identify the reasons for the declining rate of volunteer firefighter full alarm attendance in Mt. Lebanon, and to determine what measures the Mt. Lebanon Fire Department can take to improve it. Through the use of descriptive research, the following questions are addressed. First, what are the contributing factors to the decline in Mt. Lebanon Fire Department's volunteer firefighter response to full alarms? Second, what types of full alarm situations show the lowest volunteer firefighter attendance in Mt. Lebanon? Lastly, what actions can the Mt. Lebanon Fire Department take to improve its volunteer firefighter response to full alarms?

Background and Significance

The Mt. Lebanon Fire Department is a combination department consisting of 17 career and 43 volunteer firefighters operating from a single station. The department provides fire and rescue services to the Municipality of Mt. Lebanon, a mature, fully developed community of 33,000 bordering the southern portion of the city of Pittsburgh, Pennsylvania. The area served covers six square miles, and is comprised primarily of residential and commercial properties. The department responds to approximately 1,800 calls annually. A regional non-profit ambulance authority handles emergency medical services for the community.

Career personnel provide the Mt. Lebanon Fire Department operational leadership at the company officer and chief officer ranks. Volunteer personnel function as firefighters and apparatus operators. Volunteer recruitment and retention responsibility is currently assigned to the Operations Platoon Chief.

In January 2005, the department initiated a shift alignment program where volunteer firefighters are assigned to platoons in an effort to better manage the volunteer staff, facilitate team building and utilize volunteers more in department non-emergency functions. Also in January 2005, the department began a volunteer duty shift program where volunteer firefighters can earn call credits and incentives by working scheduled shifts as part of the on-duty crew. Participation in the volunteer duty shift program is not mandatory, and, to date has been low. Success of the shift alignment program has also been limited due to several reorganizations of the career staff over the past six months following a retirement, promotion and resignation.

Authorized on-duty staffing levels in the Mt. Lebanon Fire Department are three to eight career personnel Monday through Friday 0800 to 1800 hours, and two to three career personnel at all other times. An adaptive response protocol is utilized for the deployment of resources to

emergency calls. The protocol establishes the level of fire department response based on the type of emergency and number of career and volunteer personnel in station. On-duty career personnel, with limited volunteer participation, handle nearly 90% of the department's emergency calls as still alarms. The remaining calls are dispatched as either special still or full alarms. Special stills authorize the callback of off-duty career personnel. Full alarms require the response of all available volunteer and off-duty career personnel. The department averages approximately 120 full alarms annually.

The Mt. Lebanon Fire Department relies heavily upon volunteer firefighter response from home to provide sufficient staffing at full alarms. During the past several years, the department has experienced a significant increase in its number of volunteer firefighters. This is contrary to national and state trends, which show dwindling numbers. The National Volunteer Fire Council (2005) reports more than a ten percent decline in the number of volunteer firefighters in the United States since 1983. The situation in Pennsylvania is even direr. Between 1985 and 2004, the number of volunteer firefighters in Pennsylvania dropped from 152,000 to 72,000, a greater than 50% decrease (Pennsylvania Legislative Budget and Finance Committee, 2005). Mt. Lebanon, on the other hand, has experienced a greater than 30% increase in its number of volunteer firefighters since January 1998 (Figure 1).

Despite having significantly more volunteers, however, the number of volunteer firefighters responding to full alarms has not shown a corresponding increase. Current volunteer turnout to full alarms remains below 1998 levels (Figure 2). This indicates a serious decline in the volunteer attendance rate for these incidents. As depicted in Figures 3 and 4, both the percentage of volunteers responding to full alarms and the average percentage of full alarms attended per volunteer have decreased by approximately 30% since 1998.

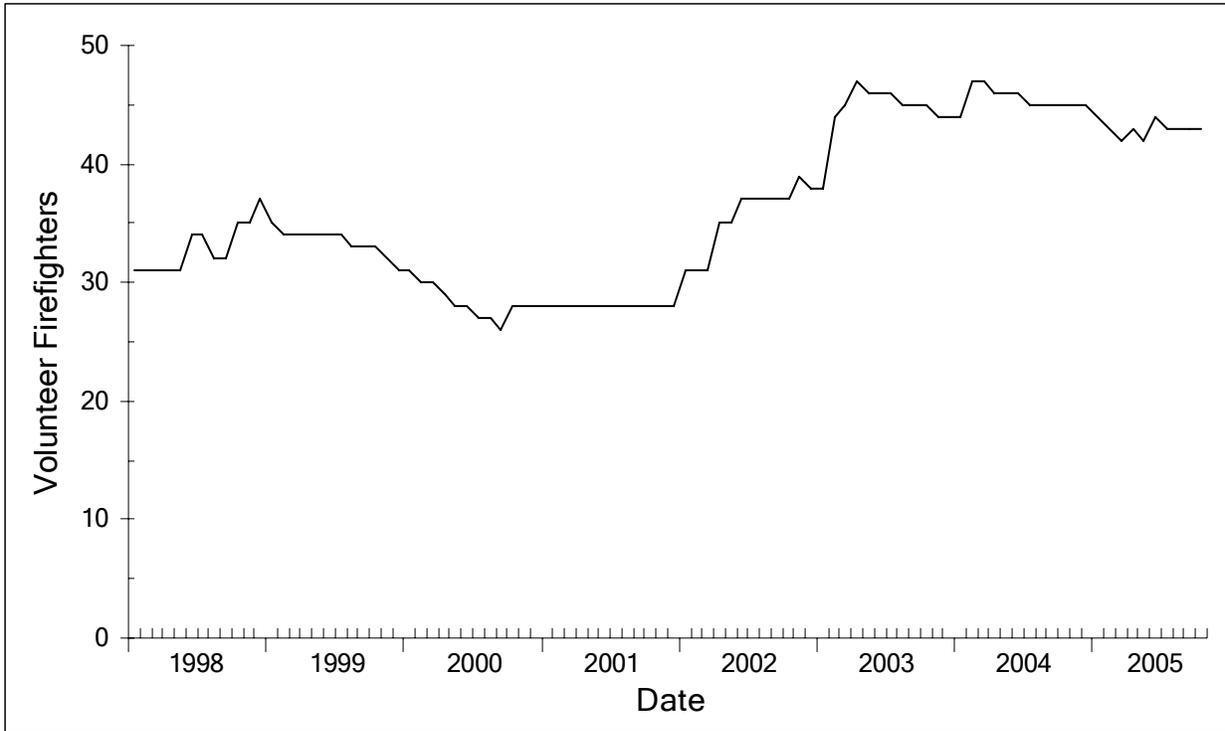


Figure 1. Number of volunteer firefighters in the Mt. Lebanon Fire Department.

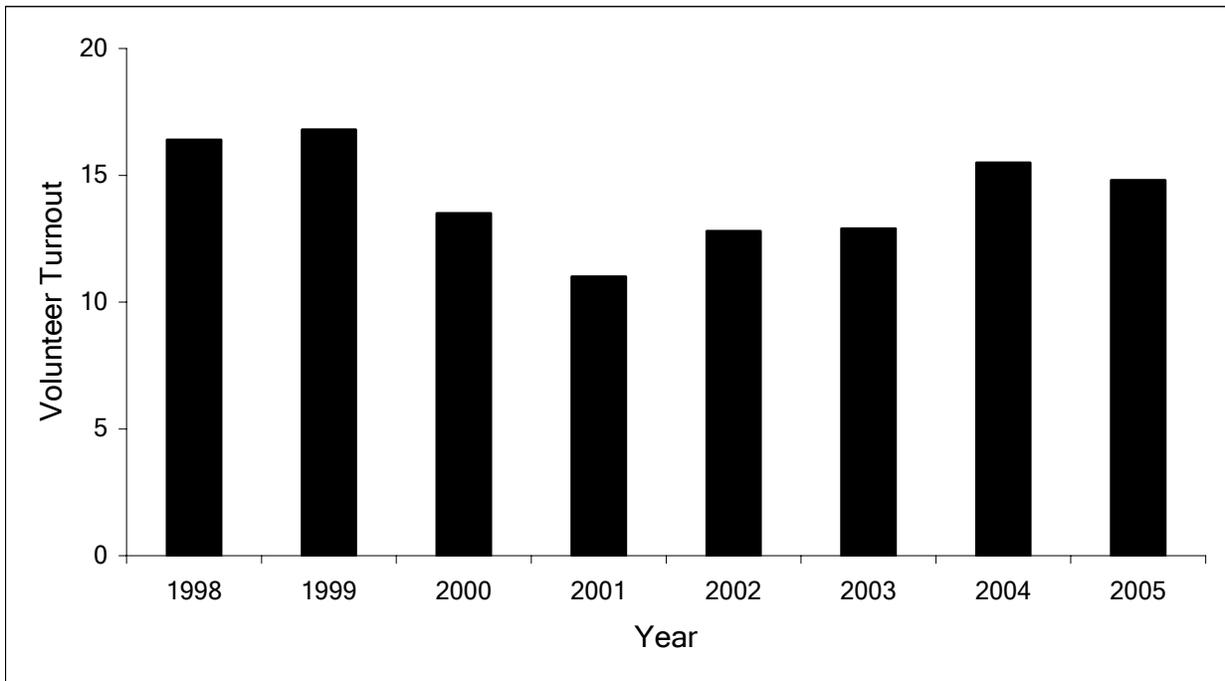


Figure 2. Mt. Lebanon Fire Department's average volunteer turnout to full alarms. Note that 2005 results are based on 10-month data from January 1, 2005 to October 31, 2005.

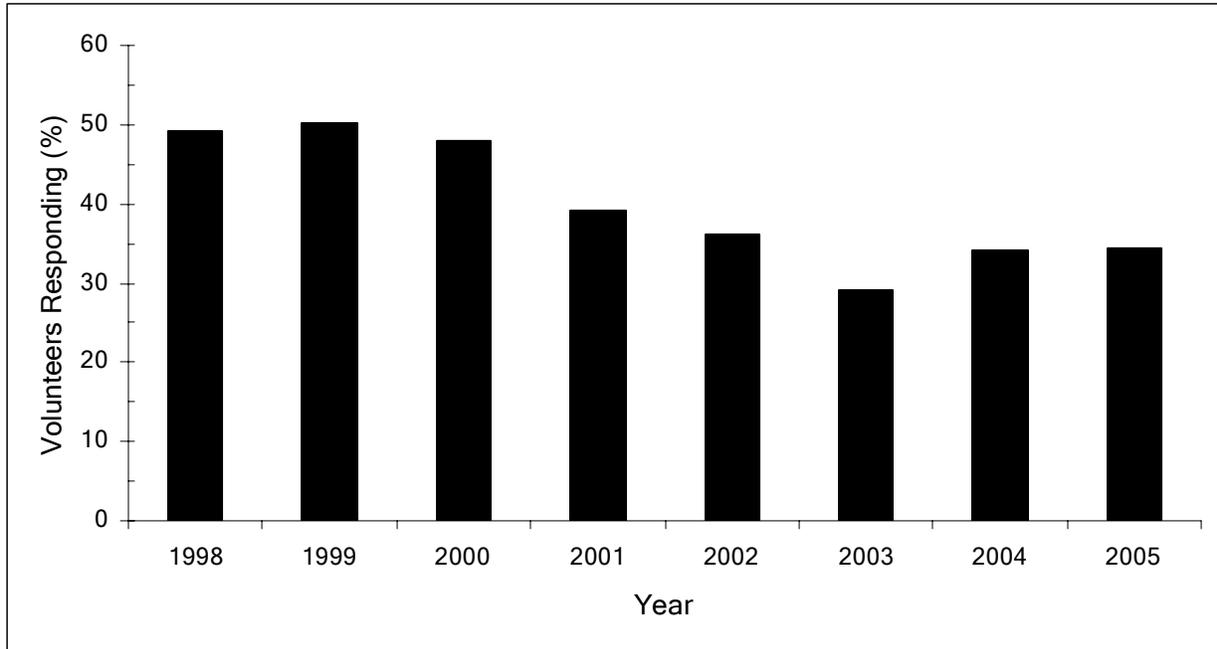


Figure 3. Mt. Lebanon Fire Department's percentage of volunteers responding to full alarms. Note that 2005 results are based on 10-month data from January 1, 2005 to October 31, 2005.

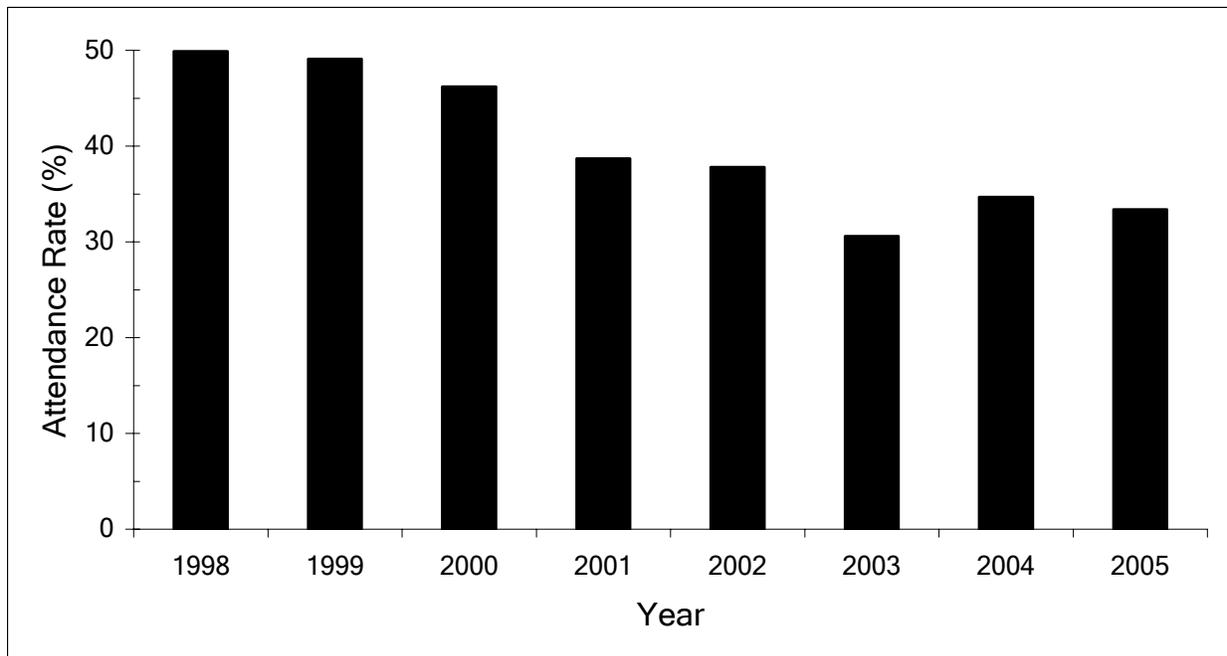


Figure 4. Mt. Lebanon Fire Department's average percentage of full alarms attended per volunteer (volunteer full alarm attendance rate). Note that 2005 results are based on 10-month data from January 1, 2005 to October 31, 2005.

The department does not have a minimum full alarm attendance requirement for volunteer firefighters. Active status as a volunteer firefighter is determined by attendance at a minimum of 12 drills annually and 5% of all emergency calls: still, special still or full alarms. Active volunteers are provided an extensive list of incentives by the department (Table 1).

Table 1

Benefits Provided to Mt. Lebanon Volunteer Firefighters

Stipend reimbursement for call responses

Life insurance

Death, Disability and Dismemberment Fund

Annual uniform allowance

Post drill meals

Banquets

Several annual social events

Family Christmas party with Santa

Length of Service Awards

Meritorious Service Awards

Clothing incentives (jackets)

Fitness center

Comprehensive annual medical exam

Computer facilities with internet access

No fundraising requirements

Opportunities to attend national fire service conferences

In November 2003, a change in the department's response protocols was instituted to decrease the number of full alarms between 2300 and 0800 hours. No significant increase in the volunteer full alarm attendance rate was observed following the change. During the past year, extremely low volunteer firefighter attendance at several serious incidents occurring during times of historically peak volunteer firefighter availability brought the issue to the forefront of the department's priorities.

Mt. Lebanon Fire Department's declining volunteer firefighter response to full alarms has profound consequences on the department's ability to fulfill its mission of effectively delivering fire and emergency services to the community. It further impacts neighboring fire departments through the potential for delayed or reduced staff responses to mutual aid requests. Not addressing this problem can lead to a continued decline in the department's emergency response capability, eventually forcing dramatic changes to department operations or significant public expenditures for the hiring of additional career personnel.

The study of the department's declining volunteer firefighter response helps achieve the United States Fire Administration's operational objectives of reducing the loss of life from fire and appropriately responding in a timely manner to emergent issues. The reduction in the loss of life from fire applies to all targeted age groups, as well as firefighters. As Snook, Johnson, and Olsen (1998, p. 10) state, "the number of trained personnel that arrive initially, or shortly thereafter, are going to play an important role in the end result." Fewer firefighters on scene equates to diminished capability and places personnel at greater risk. The research problem also relates to Executive Development course topics of leadership through adaptive challenges, team and change management, organizational culture and service quality.

To identify the contributing factors of the observed decrease in Mt. Lebanon Fire Department's volunteer firefighter response, descriptive research methodology is utilized. Solutions for improved volunteer firefighter response are derived from appropriately addressing the identified contributing factors. The practicality and likelihood of success for potential solutions are assessed through the experiences of other volunteer and combination department leaders who faced similar situations.

Literature Review

Relevant literature suggests six contributing factors to observed declines in volunteer firefighter response to emergency calls. First and foremost, due to its unavoidable nature, is volunteer availability (Snook et al., 1998; Lee, 1999). Second, are leadership problems. Declining incident attendance is a common response to declining department morale (Cowardin, 2000). Others agree that often, in the face of ineffectual leadership, volunteers will simply stop contributing to a department without formally quitting (Perkins & Benoit, 1996).

Just as in recruitment and retention, the third factor, motivation, also plays a critical role in establishing a volunteer's level of participation. The most basic motivation of any volunteer is the desire to satisfy a personal need (Snook et al., 1998). Marinucci (2003, p. 929) stresses "no competent individual will remain in a voluntary situation if their needs are not met," indicating that lack of attendance, and eventually resignation, can occur when the volunteer's personal needs go unsatisfied. Desired needs vary by individual. As such, Ward (1999) divides volunteer firefighters into three groups based on their underlying motivation. Those he classifies as "good neighbors" (p. 37) may not respond to minor emergencies where they are less likely to be utilized, because their satisfaction is drawn from actively helping their neighbor. Generational differences in motivation and commitment to civic duty have also led to lower call attendance

rates among younger volunteer firefighters (Clay, 1998). Lastly, friendships between members are considered a strong motivation for sustaining a high level of commitment to a volunteer organization (Wilson, 2002).

Distinct from personal friendships, but similar in effect are positive working relationships, the fourth significant factor in determining the degree of volunteer participation. According to Buckman (2005, p. 24), “relationships lead to retention” and “retention improves results.” Therefore, to improve volunteer commitment, one must first improve working relationships within the organization. In this regard, organizational leadership has a tremendous influence. For combination departments, Lee (1999) stresses that leaders must foster positive career and volunteer relations for the volunteers to be most effective.

Natural decline in performance over time is the fifth contributing factor. According to Snook et al. (1998), volunteer firefighter participation normally plateaus at a level that fulfills the desired activity need of the volunteer while maintaining balance with the volunteer’s other personal commitments. Typically then, after approximately one year, noticeable declines in incident attendance naturally occur.

Finally, for fire departments having a busy call volume, the sixth factor, volunteer burnout, can contribute to declines in volunteer firefighter response (Snook et al., 1998). Volunteer burnout is a condition where a volunteer is so active, or their personal life is interrupted so often by the volunteer activity, that their enjoyment derived from volunteering becomes significantly lessened. The potential for a volunteer firefighter not responding when needed is greatly increased when this condition occurs (Scott & Buckman, 2004).

The situations experiencing the lowest volunteer firefighter call attendance are primarily a function of volunteer availability and type of emergency incident. Volunteer firefighter

staffing shortages are most common during weekday daytime due to a majority of volunteers working a traditional schedule as part of their full-time employment (Clay, 1998), and the predominance of workplace restrictions that prohibit volunteers from temporarily leaving work to attend an emergency call (Scott et al., 2005). The types of calls having the lowest volunteer firefighter attendance are most influenced by underlying volunteer motivations and volunteer burnout. Ward (1999, p. 37) suggests that “good neighbors” may elect not to respond on calls of a minor nature when they feel others can adequately handle the situation without them. Colella (1992) cites automatic fire alarm responses as a prime contributor of volunteer burnout.

For the most part, increasing volunteer attendance at emergency calls is achieved by addressing the applicable contributing factors of decline. The literature further suggests that a high level of volunteer response is most dependent on volunteer availability and commitment. Volunteer availability is one of the most difficult factors to improve upon since departments have no control over the times when volunteers are available. To assure reliable staffing levels, fire departments must simply plan accordingly for periods of low volunteer availability, and strongly consider availability during volunteer recruitment and selection (Snook et al., 1998).

Effective selection processes will also help find the most committed volunteers. According to Olsen (1996, p.46), “Most departments don’t create unhappy, divisive or unmotivated members within their organizations. They select unhappy, divisive and unmotivated persons to be members within their departments.” Lee (1999) goes on to suggest that if departments fail to screen out uncommitted volunteers, even the best supervision will not resolve the problem.

Critical to sustaining high levels of volunteer commitment are leadership, management and supervision. Department leaders must be primarily focused on meeting their volunteers’

needs (Snook et al., 1998). Officers must also manage with the intent of creating successful volunteer experiences in order to maximally capitalize upon a volunteer's motivation (Wilson, 2002). For combination departments, managers and supervisors need to ensure volunteers are not made to feel like irrelevant extras. Lee (1999) further emphasizes the importance of providing adequate leadership, management and supervisory training to those who direct volunteers.

Snook et al. (1998) suggest supervisors can manage natural performance declines by injecting new challenges for volunteers when declines begin to occur. To avoid burnout, the number of intrusions on a volunteer's life must be minimized (Scott & Buckman, 2004). This can be achieved, while maintaining needed deployment, through dispatch protocol modifications or the assignment of volunteer firefighter on call times (Colella, 1992; Scott et al., 2005).

Lastly, incentives provide an effective tool for improving levels of volunteer participation. Scott et al. (2005) stress their particular importance to the incoming generation of volunteer firefighters, which is heavily dependent on immediate feedback. Not all incentives, however, need be financially based or require significant department expenditure. Marinucci (2003, p. 933) contends, "The most effective incentive is to treat people fairly and with respect."

In summary, much of the literature pertaining to decreased volunteer firefighter attendance at emergency calls is principally related to volunteer recruitment and retention. Essentially, declining volunteer participation is a temporary resting point on the path to poor retention. As such, the way to improve volunteer firefighter call attendance is to continually improve upon the department's recruitment and retention efforts. This is best achieved through sound personnel planning and having strong, effective leadership that is focused on meeting the volunteers' needs.

Procedures

Literature Review

A review of literature applicable to the research questions was initiated in August 2005 at the National Fire Academy's Learning Resource Center located in Emmitsburg, Maryland. Further literature was obtained in September 2005 from the Mt. Lebanon Public Library in Mt. Lebanon, Pennsylvania. Throughout the course of the project, supplemental information was retrieved from the internet.

Historical Analysis of Incident Report Data

Mt. Lebanon Fire Department incident report data from January 1, 1998 to October 31, 2005 was used to identify trends in the department's volunteer turnout to full alarms, percentage of volunteers responding to full alarms and volunteer full alarm attendance rate. In partial response to the first research question concerning contributing factors to the decline in volunteer firefighter full alarm response, Mt. Lebanon Fire Department incident report data from November 1, 2004 to October 31, 2005, the most recent 12 month period available, was used to compare volunteer full alarm attendance rates by years of service. In response to the second research question concerning the types of full alarm situations that show the lowest volunteer firefighter attendance, Mt. Lebanon Fire Department incident report data from November 1, 2004 to October 31, 2005, the most recent 12 month period available, was used to compare the percentage of volunteers responding to full alarms by incident type and the percentage of volunteers responding to full alarms by time and day. All incident data was queried using Firehouse Software's Fire and EMS Records Management Software version 6.3.

Survey

In response to the first research question regarding contributing factors to the decline in Mt. Lebanon Fire Department's volunteer firefighter response to full alarms, and third research question concerning actions the Mt. Lebanon Fire Department can take to improve its volunteer firefighter response to full alarms, a survey (Appendix A) of Mt. Lebanon Fire Department volunteer firefighters was conducted. The purpose of the survey was to assess the level of influence various factors related to availability, motivation, volunteer burnout and organizational culture have on Mt. Lebanon Fire Department's volunteer firefighter response to full alarms, as well as to identify those factors having the greatest potential for improving it. An intuitive approach to the applicable factors, supplemented by the literature review findings (Snook et al., 1998), was utilized in the development of the survey. The survey was tested on several of the department's volunteer firefighters for clarity and understanding prior to distribution.

All Mt. Lebanon volunteer firefighters were chosen for the survey sample based on the small total population size. The survey and survey cover letter (Appendix B) were distributed to volunteer firefighters at the department's weekly drill beginning October 10, 2005. The survey was concluded on November 10, 2005. Of the 43 surveys distributed, 40 were returned assuring a 95% confidence level.

Interviews

To address the third research question regarding actions the Mt. Lebanon Fire Department can take to improve its volunteer firefighter response to full alarms, interviews were conducted with five chief officers whose departments were the subjects of Executive Fire Officer Program applied research projects on similar declines in volunteer firefighter response to emergency calls (Alderman, 2003; Carrizzo, 1998; Shiley, 1999; Sweeney, 2003; Yamane,

1999). All of the interviews were conducted via telephone. The purpose of the interviews was to discuss each department's experience with potential solutions for improved volunteer firefighter response since completion of the applied research project. No specific list of interview questions was used. Each interview lasted approximately thirty minutes.

George Shiley, Fire Chief of the Plant City Fire Department, Plant City, Florida, was interviewed on November 9, 2005. Mark Sweeney, Deputy Fire Chief of the Brookline Volunteer Fire Company, Havertown, Pennsylvania, was interviewed on November 9, 2005. Scott Alderman, Fire Chief of the Lewisville Fire Department, Lewisville, North Carolina, was interviewed on November 15, 2005. Richard Carrizzo, Fire Chief of the Southern Platte Fire Protection District, Parkville, Missouri, was interviewed on November 15, 2005. Donald Perry, Fire Chief of Walla Walla County Fire District # 5, Burbank, Washington, was interviewed on November 15, 2005.

Limitations

The research was subject to the following limitations. First, incident response data of sufficient detail, and in a form capable of software retrieval using the required queries, was only available beginning in January 1998. Second, the software used to query the incident response data could provide no further statistical information beyond the mean in most instances. Third, the author grouped and summarized responses to the survey's few open-ended questions. Lastly, the chief officers interviewed as part of this research were all affiliated with Executive Fire Officer Program applied research projects. The basis for selection of this convenience sample was the need to find sufficiently well studied similar situations of declining volunteer firefighter response, not related to mere decreased numbers of volunteers, so an adequate assessment of post project experiences with potential solutions could occur.

Definition of Terms

Duty Shifts – scheduled time periods where volunteer firefighters work in the fire station with the on duty crew, participating in platoon activities, shift training and emergency responses.

Full Alarm – an emergency call where, in addition to the on-duty crew, all department volunteer and off-duty career firefighters are paged to respond.

Full Alarm Attendance Rate – the percentage of full alarms attended in a given time period per volunteer

Shift Alignment Program – a program where volunteer firefighters are assigned to a specific functional platoon within the department and report to that platoon’s career Lieutenants and Platoon Chief.

Still Alarm – an emergency call handled by the on-duty crew.

Volunteer Turnout – the number of volunteer firefighters responding to an emergency call.

Results

Contributing factors to the declining volunteer firefighter full alarm response

The survey revealed the following demographic profile of Mt. Lebanon volunteer firefighters. In terms of the number of years with the Mt. Lebanon Fire Department, 5 respondents (12.5%) had less than 1 year, 14 respondents (35.0%) had 1-5 years, 5 respondents (12.5%) had 5-10 years, 6 respondents (15.0%) had 10-15 years, 2 respondents (5.0%) had 15-20 years, and 8 respondents (20.0%) had greater than 20 years. In terms of total number of years in the fire service, 3 respondents (7.5%) had less than 1 year, 12 respondents (30.0%) had 1-5 years, 5 respondents (12.5%) had 5-10 years, 7 respondents (17.5%) had 10-15 years, 3

respondents (7.5%) had 15-20 years, and 10 respondents (25.0%) had greater than 20 years. Regarding age, 7 respondents (17.5%) were 20 to 29 years old, 9 respondents (22.5%) were 30 to 39 years old, 10 respondents (25.0%) were 40 to 49 years old, 11 respondents (27.5 %) were 50 to 59 years old, and 3 respondents (7.5%) were 60 years old or greater. No respondent was under 20 years old. Of the 40 survey respondents, 28 (70.0%) were married and 14 (35.0%) reported having children currently under the age of 18.

Concerning employment, 31 survey respondents (77.5%) were employed full time, 6 respondents (15.0%) were employed part-time, 2 respondents (5.0%) were retired, and 1 respondent (2.5%) was not employed. Of those employed full or part time, 26 respondents (70.3%) indicated that they work a typical Monday through Friday daylight schedule, 6 respondents (16.2%) indicated that their job requires frequent overnight travel, 12 respondents (32.4%) indicated that they work in Mt. Lebanon, and 11 respondents (29.7%) indicated that their employers allow them to leave work for full alarms.

In terms of the number of hours spent on fire department activities, 15 survey respondents (37.5%) averaged 5 hours or less per week, 15 respondents (37.5%) averaged between 6 and 10 hours per week, and 10 respondents (25.0%) averaged greater than 10 hours per week. Of the 40 survey respondents, 23 (57.5%) indicated that their time spent volunteering for the fire department was about what they expected, 8 (20.0%) reported spending more time than expected, 3 (7.5%) reported spending much more time than expected, 5 (12.5%) reported spending less time than expected, and 1 (2.5%) reported spending much less time than expected. Regarding how their time spent on fire department activities has changed since joining, 13 respondents (32.5%) spent more hours, 11 respondents (27.5%) spent less hours, and 16 respondents (40.0%) spent about the same number of hours. The reasons given for spending

more hours included involvement in additional department activities (11 respondents), attending additional training (3 respondents), performing duty shifts (2 respondents), friendships with other members (1 respondent), and use of the fitness center (1 respondent). The reasons given for spending less hours included less availability (14 respondents), being dissatisfied with the department (1 respondent), and being underutilized (1 respondent).

Regarding the number of years expected to remain an active firefighter, 12 survey respondents (30.0%) indicated 1 to 5 years, 8 respondents (20.0%) indicated 6 to 10 years, 8 respondents (20.0%) indicated 11 to 15 years, 4 respondents (10.0%) indicated 16 to 20 years, and 8 respondents (20.0%) indicated greater than 20 years. Of those members with over 20 years of service to the department, 75% plan to retire from active status within 5 years.

Of the 40 survey respondents, 15 (38.5%) volunteered with other organizations and 16 (41.0%) indicated significant involvement in other activities. The other organizations members reported volunteering for included local churches (7 respondents), other public safety organizations (6 respondents), charitable organizations (3 respondents), and the parent-teacher association (1 respondent). The significant activities members reported involvement with included church groups (4 respondents), sports teams (3 respondents), coaching (2 respondents), scouts (2 respondents), an entertainment group (1 respondent), the parent-teacher association (1 respondent), and being a condo association board of director (1 respondent).

The primary motivations reported for becoming a volunteer with the fire department are summarized in Table 2. The top five motivations for joining included a desire to help the community (33 respondents, 82.5%), the mental and physical challenge of being a firefighter (17 respondents, 42.5%), feeling of achievement (15 respondents, 37.5%), always wanting to be a firefighter (12 respondents, 30.0%), and educational opportunities and opportunities to learn new

skills (8 respondents, 20.0%). The primary motivations reported for remaining an active volunteer with the fire department are summarized in Table 3. The top five motivations for remaining active included a desire to help the community (22 respondents, 55.0%), the mental

Table 2

Survey results on motivations for becoming a volunteer with the Mt. Lebanon Fire Department

Percentage of Respondents (%)	Motivational Factor
82.5	Desire to help the community
42.5	Mental and physical challenge of being a firefighter
37.5	Feeling of achievement
30.0	Always wanted to be a firefighter
20.0	Educational opportunities / Learn new skills
15.0	Excitement of responding to emergencies
15.0	Develop new friendships
12.5	Recognition by others / Pride in membership
12.5	Family tradition
10.0	Friends active in the fire department encouraged me to join
7.5	Good experience to put on my resume
5.0	Interested in attaining a full-time fire or EMS position
2.5	Social activities
2.5	Use of the fitness center and other department equipment / facilities
2.5	Additional income and other financial incentives
2.5	Civic duty following September 11 th

and physical challenge of being a firefighter (16 respondents, 40.0%), feeling of achievement (16 respondents, 40.0%), friendships with other members (15 respondents, 37.5%), and the excitement of responding to emergencies (9 respondents, 22.5%).

Table 3

Survey results on motivations for remaining a volunteer in the Mt. Lebanon Fire Department

Percentage of Respondents (%)	Motivational Factor
55.0	Desire to help the community
40.0	Feeling of achievement
40.0	Mental and physical challenge of being a firefighter
37.5	Friendships I have with other department members
22.5	Excitement of responding to emergencies
20.0	Recognition by others / Pride in membership
17.5	Educational opportunities / Learn new skills
15.0	Always wanted to be a firefighter
10.0	Family tradition
10.0	Good experience to have on my resume
7.5	Interested in attaining a full-time fire or EMS position
5.0	Use of the fitness center and other department equipment / facilities
5.0	Additional income and other financial benefits offered by the department
5.0	Civic duty following September 11 th
2.5	Became interested in non-emergency department functions

Of the 40 survey respondents, 17 (42.5%) indicated that they seriously considered quitting the Mt. Lebanon Fire Department. From those 17 respondents, the reasons given are summarized in Table 4. The top five reasons cited included lack of available time due to work or family obligations (8 respondents, 47.1%), not being adequately recognized or appreciated for their contributions to the department (5 respondents, 29.4%), poor relations between career and volunteer personnel (5 respondents, 29.4%), not being utilized or being underutilized on emergency calls (5 respondents, 29.4%), and disagreement with management decisions or department direction (5 respondents, 29.4%).

Concerning the frequency with which members do not respond to full alarms when available, 26 survey respondents (65.0%) indicated that they sometimes do not respond to full alarms, and 1 respondent (2.5%) reported frequently not responding to full alarms. The reasons cited for not responding to full alarms when available are summarized in Table 5. The top five reasons included sleeping through the pager sounding (55.6%), having to leave soon for work (55.6%), being asleep or too tired (29.6%), the call being reported false right after dispatch (29.6%), and watching young children who cannot be left alone (25.9%). All of the survey respondents reported that the department's expectation and policy on volunteer firefighter response to full alarms was made clear to them when they joined.

All of the interviewees reported volunteer availability as the most significant factor in their department's observed decline in volunteer firefighter participation.

Mt. Lebanon Fire Department incident response data for the most recent 12-month period shows the highest volunteer full alarm attendance rates are among those having 10-15 and more than 20 years of service in the Mt. Lebanon Fire Department (Figure 5).

Table 4

Survey results on reasons volunteers considered quitting the Mt. Lebanon Fire Department

Percentage of Respondents (%)	Reason Cited for Considering Quitting
47.1	Lack of available time due to work or family obligations
29.4	Not adequately recognized or appreciated
29.4	Poor career / volunteer relations
29.4	Not utilized or underutilized on calls
29.4	Disagreement with management decisions or department direction
23.5	Lack of trust in the organization, management, or other members
17.6	Personality conflicts with other members
17.6	Changes were being forced upon the membership
11.8	Lack of feedback regarding my performance
11.8	Too difficult to meet the training requirements
11.8	Did not feel welcomed by the group
11.8	Increased number of responses to automatic fire alarms
5.9	Lost interest in firefighting
5.9	Call attendance requirements are too difficult to maintain
5.9	Poor leadership
5.9	Not enough “working” fires or rescues
5.9	Age
5.9	Medical condition
5.9	Potential relocation
5.9	Frustration with lack of commitment from other members

Table 5

Survey results on reasons cited for not responding to full alarms when available

Percentage of Respondents (%)	Reason For Not Responding
55.6	I sometimes, or often, sleep through the pager sounding
55.6	I have to leave soon for work
29.6	I'm too tired, or sleeping
29.6	The call was reported false right after dispatch
25.9	I am watching young children who cannot be left alone
22.2	The location of the call
22.2	I have to get up early for work and don't want my sleep interrupted
18.5	I have an upcoming family commitment
18.5	The call will most likely turn out to be a false alarm
14.8	I am rarely assigned to responding apparatus
14.8	I don't want to be stuck covering the station
11.1	I am typically not utilized, or am under-utilized, on calls
11.1	The on-duty crew should be able to handle the call
7.4	I am in the middle of running an errand or doing work around the house
7.4	Too many automatic fire alarm activations
7.4	I live too far away from the station to make the responding apparatus
3.7	I am at dinner or out with friends
3.7	The type of call does not interest me
3.7	I don't respond to certain types of calls

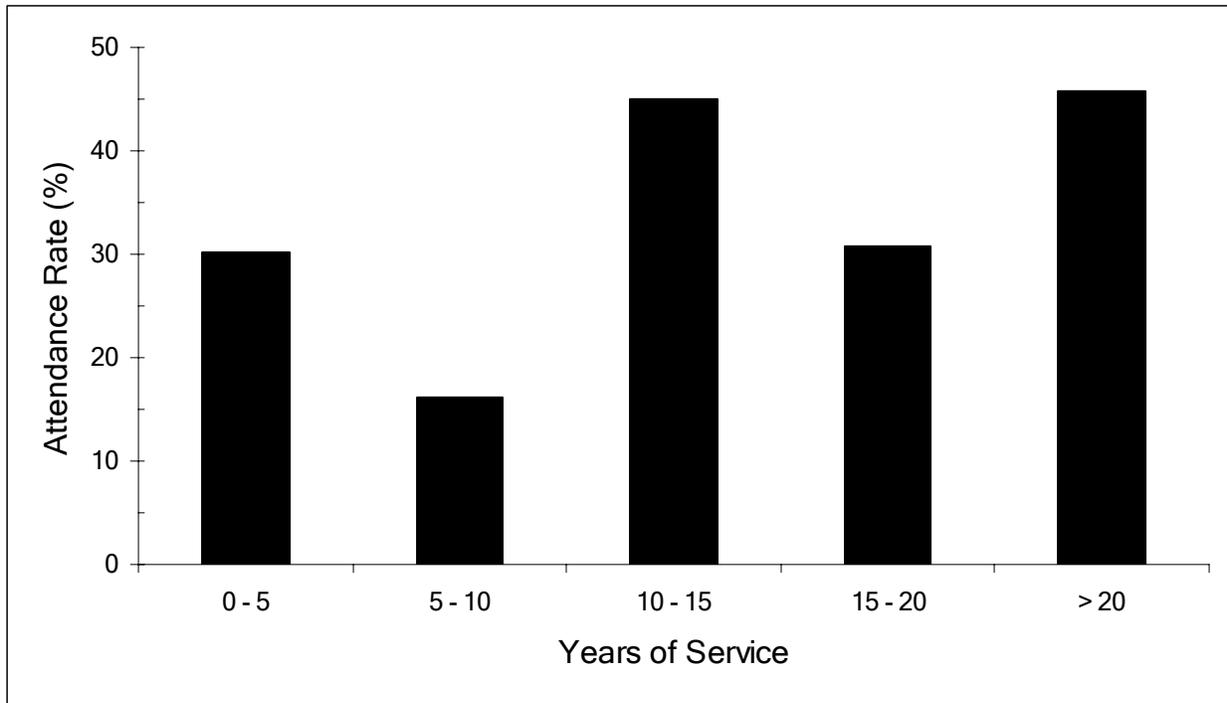


Figure 5. Mt. Lebanon Fire Department’s average volunteer full alarm attendance rate by years of service with the department, from 11/1/04 to 10/31/05.

Types of full alarm situations showing the lowest volunteer firefighter attendance

Mt. Lebanon Fire Department incident response data shows false automatic fire alarm activations as the type of incident with the lowest volunteer firefighter full alarm attendance in Mt. Lebanon (Figure 6). The times and days having the lowest volunteer firefighter full alarm attendance in Mt. Lebanon are Monday through Friday between 0600 and 1800 hours, and everyday between 0000-0600 hours (Figure 7).

Department actions to improve volunteer firefighter response to full alarms

Of the 40 survey respondents, 30 (75%) reported that they currently respond at the maximum level their availability allows. The remaining 10 respondents cited the following would entice them to respond to more full alarms: being utilized more on emergency scenes (5 respondents), more “working” fires or rescues (3 respondents), greater camaraderie (3 respondents), being assigned to responding apparatus more often (2 respondents), improved

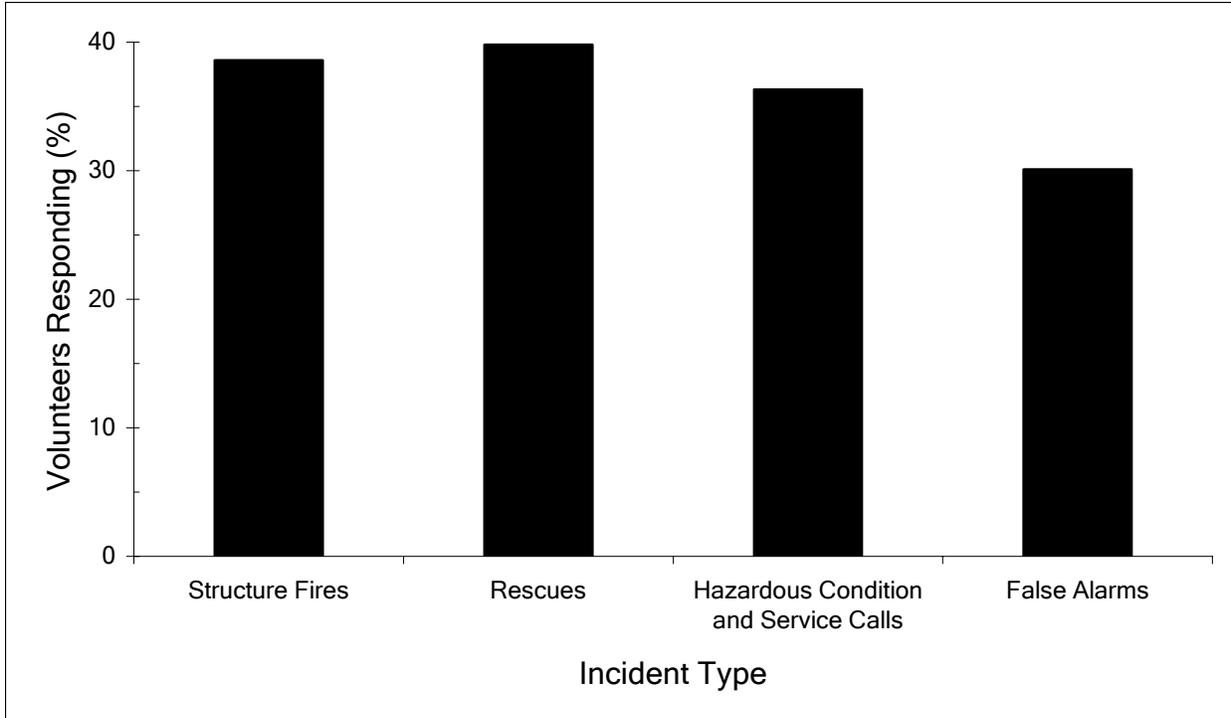


Figure 6. Mt. Lebanon Fire Department’s percentage of volunteers responding to full alarms by incident type, from 11/1/04 to 10/31/05.

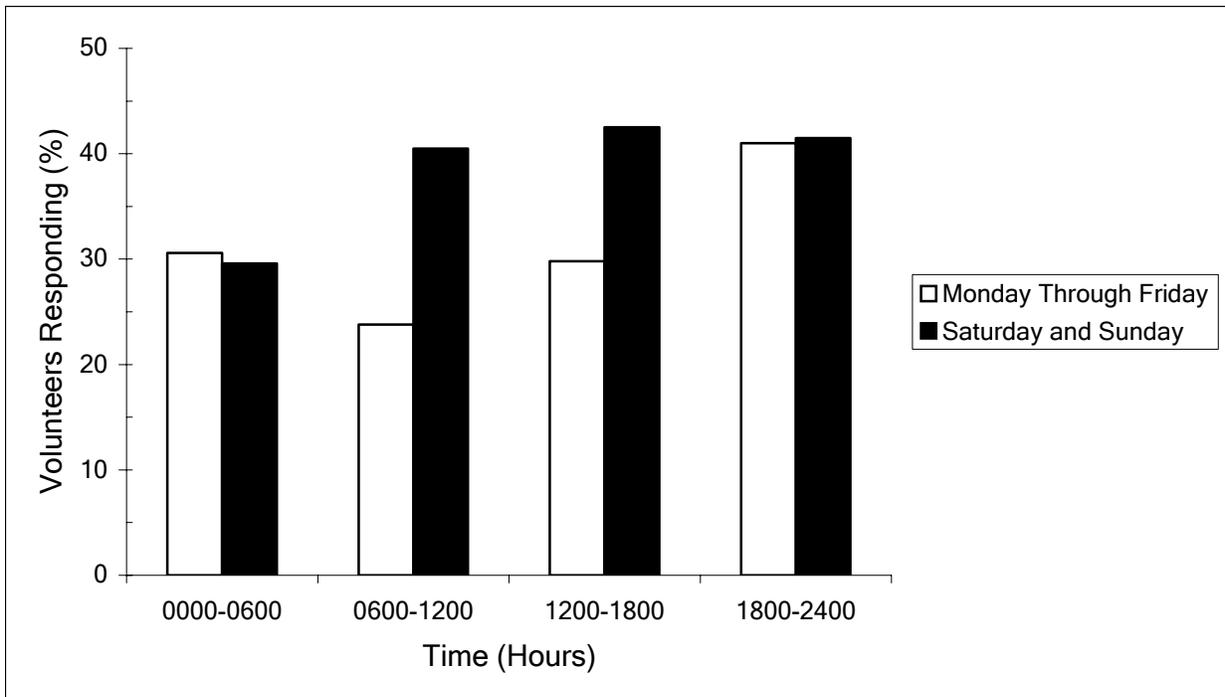


Figure 7. Mt. Lebanon Fire Department’s percentage of volunteers responding to full alarms by time and day, from 11/1/04 to 10/31/05.

relations between career and volunteer personnel (2 respondents), not being called out so often for false alarms or minor incidents (2 respondents), greater recognition (1 respondent), mandated minimum attendance at full alarms (1 respondent), and changes in response protocols (1 respondent). Of the 40 survey respondents, 28 (70.0%) oppose adding a full alarm attendance requirement to maintain active status as a volunteer firefighter.

The interviews revealed that the Lewisville Fire Department initiated a duty shift program similar to Mt. Lebanon Fire Department's, with the exception that duty shifts are mandated for new volunteers. The Plant City Fire Department modified their existing duty shift program by assigning volunteers to specific platoons similar to Mt. Lebanon Fire Department's shift alignment program. The fire chief's from both Plant City Fire Department and Lewisville Fire Department report that their department's duty shift programs have noticeably improved camaraderie and volunteer sense of belonging, resulted in greater volunteer utilization from added career staff confidence in the skills of the volunteers, and provided more rewarding volunteer experiences since the volunteers are now present from call onset as part of the first due crew. Plant City Fire Department's shift alignment program is also attributed with improving on-scene crew performance through the greater number of opportunities for volunteer and career personnel to more closely train and work together. No increase in volunteer firefighter call attendance from home is observed as a result of Lewisville Fire Department's duty shift program. The only improvement to on-scene staffing reported is that provided by the duty shift volunteer. The Plant City Fire Department no longer utilizes volunteer response from home.

The Brookline Volunteer Fire Company has improved its volunteer turnout to single unit responses between 2300 and 0500 hours by assigning on-call crews during these hours on a rotating basis. Despite recent losses in its number of volunteers, Walla Walla County Fire

District # 5 reports improved call attendance rates among those members that remain. The Fire Chief of Walla Walla County Fire District # 5 attributes the greater commitment to better screening of volunteer applicants, and a more rigorous and time demanding training academy that typically forces out those volunteer recruits with only marginal commitment.

The Fire Chief of the Southern Platte Fire Protection District reported that despite an aggressive recruitment campaign, lowering requirements, providing more flexible training options, and offering additional incentives, the department's volunteer program could not be improved and has since severely declined. Additional career personnel were hired to compensate for the loss of volunteers, and more career staff additions are planned.

Discussion

Decreased volunteer availability appears to be the most significant contributing factor to Mt. Lebanon Fire Department's observed decline in volunteer firefighter full alarm response. This is based on several survey findings and the historical analysis of incident response data. The survey reveals that the most cited reason for members decreasing their time commitment to the department was less availability, and the top reason for volunteers considering quitting the department was lack of availability due to family and work commitments. In addition, a top reason for not responding to full alarms when available was the need to leave soon for work, indicating that many consider the hours preceding their leaving for work as unavailable. Finally, 75% of the department's volunteer firefighters report currently participating at the maximum level their availability allows.

Historical analysis of incident response data shows that the periods of lowest volunteer full alarm response experienced by the Mt. Lebanon Fire Department are consistent with survey findings that approximately 70% of department volunteers work a traditional weekday daylight

schedule with less than one third being allowed to leave work for full alarms. Other significant restrictive influences on volunteer availability revealed through the survey include family commitments and involvement with other organizations.

All of these findings replicate both the interview and literature review results. Volunteer availability was reported by every interviewee as the most significant factor in their department's observed decline in volunteer firefighter participation. The literature also indicated decreasing volunteer availability (Scott and Buckman, 2004), and stressed its unavoidable impact (Lee, 1999), particularly during weekday daytime (Clay, 1998). Snook et al. (1998) suggest developing a strategic staffing plan and increasing department recruitment efforts with a focus on selecting those volunteers with the most availability as the best course of action for the Mt. Lebanon Fire Department to take in regards to improving its level of volunteer firefighter full alarm response. These actions are obviously long term solutions rather than quick fixes.

Survey findings show being too tired and sleeping through the pager sounding as other significant reasons for Mt. Lebanon volunteer firefighters not responding to full alarms when available. This is consistent with the historical analysis of incident response data for full alarms, which shows a low period of volunteer attendance between 0000 to 0600 hours. Of note is that the volunteer firefighter full alarm response for this time period is beginning to approach weekday daytime lows. Since an overwhelming majority of members do not frequently travel overnight as part of their employment, availability should not be a limiting factor during this time period. The problem of sleeping through calls is correctable, indicating the potential for some improvement to volunteer full alarm response during this time period. Being too tired to respond should be a manageable commitment factor, while sleeping through the pager sounding may be more of a physical concern that potentially requires a technological solution.

Although of minor consequence when compared to availability and sleeping through calls, survey results also suggest that volunteer motivation, relationships, and departmental leadership are partial contributors to the department's decline in volunteer firefighter full alarm response. The motivations for joining the fire department and remaining an active member indicate that Mt. Lebanon volunteer firefighters are predominantly community minded individuals, having a strong need to be utilized and challenged. Such underlying motivations are consistent with Ward's (1999, p. 37) classification of "good neighbors," and show the potential for decreased attendance at minor calls due to low volunteer utilization. Survey results show that being utilized more is the most sought after enticement to increasing the full alarm attendance rate for those volunteers who are available to respond more often. The benefits of more fully utilizing volunteer firefighters are also confirmed through interview results regarding volunteer duty shift programs.

After joining the fire department, motivational priorities of volunteer firefighters exhibit a distinct shift towards friendships with other department members. Such a shift is consistent with literature review findings (Wilson, 2002), and indicates the importance of relationships to the volunteers. Survey results also show greater camaraderie as a desired incentive to improve full alarm attendance rates. Interview results suggest that the duty shift and shift alignment programs provide the best opportunities to foster the needed positive relationships between career and volunteer personnel. Next to lack of availability, shortcomings of department leadership are cited most often as reasons volunteers considered quitting the department. More effective leadership, and better management of volunteer motivations and relationships, however, can only be expected to yield minor improvements to the department's volunteer firefighter response. Availability remains the obvious overshadowing and limiting factor.

Volunteer burnout appears to have only very limited applicability to Mt. Lebanon Fire Department's decline in volunteer firefighter full alarm response, if any. This is based on the fact that the response protocol change instituted by the department in November 2003 to decrease full alarms between 2300 and 0800 hours resulted in no significant improvement to volunteer firefighter full alarm attendance. In addition, only a relatively few survey respondents indicated problems with too many automatic fire alarms or responses for minor calls. The department's lower volunteer firefighter response to false alarms is inconsistent with these survey findings, indicating that it may be more related to volunteer underutilization at these incidents and many calls being reported false right after dispatch rather than an effect of volunteer burnout.

Based on the fact that the incentives offered to Mt. Lebanon volunteer firefighters are already fairly extensive and no interest in additional incentives was indicated by the survey, modifications or additions to Mt. Lebanon volunteer firefighter incentives will most likely not have any effect on volunteer firefighter response. The only volunteer incentive the Mt. Lebanon Fire Department should pursue is that of respecting people and treating them fairly as set forth by Marinucci (2003).

An unexpected finding revealed by this study is a looming situation of even greater volunteer firefighter full alarm response declines for the Mt. Lebanon Fire Department possible over the next several years. As depicted in Figure 5, volunteer firefighters having over 20 years of service to the Mt. Lebanon Fire Department are the department's most active responders to full alarms. The problem is that the survey indicated 75% of these members expect to retire from active status within five years. Replacement with new volunteers is simply not enough to

prevent further decline, since the historical analysis of incident data shows newer volunteers respond 30% less often to full alarms than members having over 20 years of service.

Recommendations

Based on the results of this study, it is recommended that the Mt. Lebanon Fire Department undertake the following actions. First, the department needs to develop a strategic staffing plan. The plan should identify required career and volunteer turnout for full alarms based on community expectations of department response capability, as well as outline how the required volunteer turnout will be reliably achieved considering time and day variances. Inclusive within the plan should be special consideration of the volunteer retirements anticipated over the next several years, and contingency plans for additional paid staffing in the event volunteer firefighter participation does not improve or declines even further. Benefits of the strategic staffing plan include alerting commissioners of potential funding needs, and ensuring adequate staffing levels for enhanced public and firefighter safety. The strategic staffing plan can be developed as a stand-alone document or as a component of the departmental strategic plan slated for development in 2006.

Second, the department's recruitment and retention program needs to be revitalized with a greater focus on screening volunteer applicants for availability and commitment. During the past several years, the Mt. Lebanon Fire Department has been successful in generating greater numbers of volunteer firefighters. However, volunteer turnout is the statistic that matters more to the department's response capability. More rigorous volunteer selection, coupled with department strategic planning, offers the best chance for dealing with the department's identified volunteer availability issue. Upcoming retirements of some of the department's most active

volunteers highlight the need to begin a targeted recruiting campaign now. Prior to implementation, additional research will be required to develop a target volunteer recruit profile.

Third, participation in the duty shift program should be made mandatory for all new volunteer firefighters. Mandatory duty shifts load the department's response upfront relieving some of the dependence on personnel response from home. Additionally, it forces greater opportunities for enhanced volunteer experiences. This should in turn help maximize volunteer commitment since a top reason cited for volunteering more hours to the department was becoming involved with more departmental activities. By making the duty shift program mandatory for new volunteers only, potential resistance from existing volunteer firefighters is minimized.

Fourth, the shift alignment program must become a department priority. The recent career reorganizations stalled the program, and subsequently, hurt membership acceptance. This must be overcome since fostering positive relationships and effectively managing volunteer motivations are crucial to retention and commitment. Similar to the duty shift program, the shift alignment program offers another excellent forum for creating a more meaningful volunteer experience. Prioritization is the only need with regard to implementation as the program was just recently reintroduced under the direction of the Operations Platoon Chief.

Fifth, all career staff should receive training in volunteer leadership, management, and supervision on a regular basis as part of the career training schedule. Currently, such training is only provided as outside training to limited numbers of career staff. Implementing this training is necessary to effectively administer the duty shift and shift alignment programs.

Other researchers wishing to conduct a similar study should consider polling volunteer firefighters on their estimated availability and comparing this to observed call attendance. A

direct correlation should result if volunteer availability is the limiting factor to response. Absent a direct relationship, lack of commitment is indicated. This approach will help better assess and quantify the number of volunteer firefighters who are just unavailable and the number who are not committed.

In summary, to achieve reliable fireground staffing, volunteer and combination fire departments must plan around the availability of their volunteers and manage for maximum volunteer commitment and performance.

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Appendix A – Volunteer Firefighter Response Survey

Mt. Lebanon Fire Department Volunteer Firefighter Survey

Please answer the following by placing a check mark by your response. Write in additional information where indicated.

1. Number of years with the Mt. Lebanon Fire Department:

- Less than 1 year
- 1-5 years
- 5-10 years
- 10-15 years
- 15-20 years
- Greater than 20 years

2. Number of years total in the fire service:

- Less than 1 year
- 1-5 years
- 5-10 years
- 10-15 years
- 15-20 years
- Greater than 20 years

3. Age:

- Under 20 years old
- 20 to 29 years old
- 30 to 39 years old
- 40 to 49 years old
- 50 to 59 years old
- 60 years old or greater

4. Are you married?

- Yes
- No

5. Do you have any children currently under the age of 18?

- Yes
- No

6. Employment status:

- Employed full-time
- Employed part-time
- Retired
- Not employed

(If retired or not employed, skip questions 7 through 10.)

7. Do you work a typical Monday through Friday daylight schedule?

- Yes
 No

8. Does your job require frequent overnight travel?

- Yes
 No

9. Do you work in Mt. Lebanon?

- Yes
 No

10. Does your employer allow you to leave work to answer full alarms?

- Yes
 No

11. On average, how many hours per week do you spend on fire department activities (calls, training, meetings, duty shifts, volunteer officer duties, community outreach events, block parties, etc.)?

- 5 or less
 6 to 10
 Greater than 10

12. How does your actual time spent on fire department activities compare with what you expected to spend at the time you joined?

- Much more than I expected
 More than I expected
 About what I expected
 Less than I expected
 Much less than I expected

13. How has the number of hours per week that you spend on fire department activities changed since the time you originally joined the fire department?

- I spend more hours per week now than when I joined.
 I spend less hours per week now than when I joined.
 I spend about the same number of hours per week now as when I joined.

If your hours spent on fire department activities has increased or decreased since when you first joined, please give the reason: _____

14. How many years do you expect to continue being an active firefighter with the Mt. Lebanon Fire Department?

- 1 to 5 years
 6 to 10 years
 11 to 15 years
 16 to 20 years
 Greater than 20 years

15. Do you volunteer with any other organizations?

- Yes
 No

If yes, please list what organizations:

16. Are you involved in any activities (sports teams, professional associations, church groups, scout leader, coaching, etc.) that significantly impact your time available for response to emergency calls?

- Yes
 No

If yes, please describe:

17. What were the primary reasons why you joined the fire department? (check up to three choices)

- Excitement of responding to emergencies
 Feeling of achievement
 Mental and physical challenge of being a firefighter
 Recognition by others / Pride in membership
 Develop new friendships
 Desire to help the community
 Social activities (banquets, parties, sporting events)
 Interested in attaining a full-time fire or EMS position
 Use of the fitness center and other department equipment / facilities
 Family tradition
 Educational opportunities / Learn new skills
 Friends active in the fire department encouraged me to join
 Additional income and other financial incentives offered by the department
 Civic duty following September 11th
 Always wanted to be a firefighter
 Good experience to put on my resume
 Other (please describe) _____

18. What are the primary reasons why you remain an active member of the fire department?
(check up to three choices)

- Excitement of responding to emergencies
- Feeling of achievement
- Mental and physical challenge of being a firefighter
- Recognition by others / Pride in membership
- Friendships I have with other department members
- Desire to help the community
- Social activities (banquets, parties, sporting events)
- Interested in attaining a full-time fire or EMS position
- Family tradition
- Educational opportunities / Learn new skills
- Use of the fitness center and other department equipment / facilities
- Additional income and other financial benefits offered by the department
- Civic duty following September 11th
- Always wanted to be a firefighter
- Good experience to have on my resume
- Other (please describe) _____

19. Have you ever seriously considered quitting the Mt. Lebanon Fire Department?

- Yes
- No

If yes, please give reason: (check all that apply)

- Lost interest in firefighting
- Personal injury risk
- Poor communications – not kept informed of what is happening in the department
- Not adequately recognized or appreciated for my contributions to the department
- Not adequately compensated for my contributions to the department
- Lack of trust in the organization, management, or other members
- Call attendance requirements are too difficult to maintain
- Lack of available time due to work or family obligations
- Poor career / volunteer relations
- Not utilized or underutilized on calls
- No opportunities for advancement
- Poor leadership
- Personality conflicts with other members
- Not enough “working” fires or rescues
- Lack of feedback regarding my performance
- Too difficult to meet the training requirements
- Disagreement with management decisions or department direction
- Did not feel welcomed by the group
- Not treated fairly
- Changes were being forced upon the membership
- Increased number of responses to automatic fire alarms
- Other (please describe) _____

20. When available to do so, how often do you **not** respond to full alarms?

- Frequently
 Sometimes
 Never

If you answered frequently or sometimes, what are the reasons for you not responding? (check all that apply)

- The location of the call
 I sometimes, or often, sleep through the pager sounding
 I am typically not utilized, or am underutilized, on calls
 The type of call does not interest me
 I am rarely assigned to responding apparatus
 The on-duty crew should be able to handle the call
 I have an upcoming family commitment
 The call will most likely turn out to be a false alarm
 I don't want to be stuck covering the station
 I only respond to calls that sound like they'll be "working" incidents
 The weather is too bad
 I have to leave soon for work
 I don't respond to certain types of calls (like flooding or fire alarm activations)
 I have to get up early for work and don't want my sleep interrupted
 I am watching young children who cannot be left alone
 I am in the middle of running an errand or doing work around the house
 Most calls turn out to be minor, so I don't get to do anything worthwhile
 I already made the minimum call requirements for the month
 I'm too tired, or sleeping
 I am at dinner or out with friends
 Too many automatic fire alarm activations
 I live too far away from the station to make the responding apparatus
 The call was reported false right after dispatch
 Other (please describe) _____

21. Was the department's expectation and policy that you respond to all full alarms when available clearly explained to you when you joined?

- Yes
 No

22. Do you favor implementing a full alarm attendance requirement, as a replacement or addition to our current 5 % call attendance rule, as a means to increase volunteer firefighter turnout on full alarms?

- Yes
 No

23. What would make you to respond to more full alarms? (check all that apply.)
- Nothing, I currently respond at the maximum level my availability allows
 - Greater recognition
 - Being utilized more on emergency scenes
 - Increased financial incentives
 - More “working” fires or rescues
 - Greater camaraderie among members
 - Rule changes mandating minimum attendance requirements for full alarms
 - Changes in the response protocols
 - More social activities
 - Bonus gifts (such as uniform items, dinner gift certificates, etc.)
 - Being assigned to responding apparatus more often
 - Improved career / volunteer relationships
 - Not being called out so often for false alarms or minor incidents
 - Other (please describe) _____

Feel free to add any additional comments concerning volunteer firefighter response below.

Appendix B – Volunteer Firefighter Response Survey Cover Letter



Mt. Lebanon Fire Department
555 Washington Road
Pittsburgh, PA 15228
412-531-5366
412-343-1697 (FAX)

October 10, 2005

Dear Volunteer Firefighter:

Please complete the following survey and return it to me via interoffice mail by November 10, 2005. The survey is part of a research project on volunteer response that I'm conducting as part of the National Fire Academy's Executive Fire Officer Program. The purpose of the survey is to assess the level of influence various factors have on Mt. Lebanon Fire Department's volunteer response to full alarms, as well as to identify those factors having the greatest potential for improving it.

Do not include your name on the survey. The survey is intended to be anonymous, and all responses will be kept confidential. At the conclusion of the project, a summary of survey results and a final report of my research findings will be shared with all members of the department.

Please contact me if you have any questions. Thank you for your time.

Sincerely,

Christopher K. Switala
Lieutenant

Appendix C – Volunteer Firefighter Response Survey Detailed Results

Mt. Lebanon Fire Department Volunteer Firefighter Survey

Please answer the following by placing a check mark by your response. Write in additional information where indicated.

1. Number of years with the Mt. Lebanon Fire Department:

5	(12.5%)	Less than 1 year
14	(35.0%)	1-5 years
5	(12.5%)	5-10 years
6	(15.0%)	10-15 years
2	(5.0%)	15-20 years
8	(20.0%)	Greater than 20 years

2. Number of years total in the fire service:

3	(7.5%)	Less than 1 year
12	(30.0%)	1-5 years
5	(12.5%)	5-10 years
7	(17.5%)	10-15 years
3	(7.5%)	15-20 years
10	(25.0%)	Greater than 20 years

3. Age:

0	(0 %)	Under 20 years old
7	(17.5%)	20 to 29 years old
9	(22.5%)	30 to 39 years old
10	(25.0%)	40 to 49 years old
11	(27.5 %)	50 to 59 years old
3	(7.5%)	60 years old or greater

4. Are you married?

28	(70.0 %)	Yes
12	(30.0%)	No

5. Do you have any children currently under the age of 18?

14	(35.0%)	Yes
26	(65.0%)	No

6. Employment status:

31	(77.5 %)	Employed full-time
6	(15.0%)	Employed part-time
2	(5.0%)	Retired
1	(2.5%)	Not employed

(If retired or not employed, skip questions 7 through 10.)

7. Do you work a typical Monday through Friday daylight schedule?

26 (70.3%) Yes
11 (29.7 %) No

8. Does your job require frequent overnight travel?

6 (16.2 %) Yes
31 (83.8%) No

9. Do you work in Mt. Lebanon?

12 (32.4%) Yes
25 (67.6%) No

10. Does your employer allow you to leave work to answer full alarms?

11 (29.7%) Yes
26 (70.3%) No

11. On average, how many hours per week do you spend on fire department activities (calls, training, meetings, duty shifts, volunteer officer duties, community outreach events, block parties, etc.)?

15 (37.5%) 5 or less
15 (37.5%) 6 to 10
10 (25.0%) Greater than 10

12. How does your actual time spent on fire department activities compare with what you expected to spend at the time you joined?

3 (7.5%) Much more than I expected
8 (20.0 %) More than I expected
23 (57.5 %) About what I expected
5 (12.5 %) Less than I expected
1 (2.5%) Much less than I expected

13. How has the number of hours per week that you spend on fire department activities changed since the time you originally joined the fire department?

13 (32.5 %) I spend more hours per week now than when I joined.
16 (40.0%) I spend less hours per week now than when I joined.
11 (27.5 %) I spend about the same number of hours per week now as when I joined.

If your hours spent on fire department activities has increased or decreased since when you first joined, please give the reason:

Reasons for increases:

11 Involvement with additional activities
3 Additional training

- 2 Duty shifts
- 1 Friendships with other members
- 1 Fitness center

Reasons for decreases:

- 14 Less availability
- 1 Dissatisfied with department
- 1 Underutilized

14. How many years do you expect to continue being an active firefighter with the Mt. Lebanon Fire Department?

- 12 (30.0%) 1 to 5 years
- 8 (20.0%) 6 to 10 years
- 8 (20.0%) 11 to 15 years
- 4 (10.0%) 16 to 20 years
- 8 (20.0%) Greater than 20 years

15. Do you volunteer with any other organizations?

- 15 (38.5%) Yes
- 24 (61.5%) No

If yes, please list what organizations:

- 7 Local church
- 6 Other public safety organizations
- 3 Charitable organizations
- 1 Parent Teacher Association

16. Are you involved in any activities (sports teams, professional associations, church groups, scout leader, coaching, etc.) that significantly impact your time available to respond?

- 16 (41.0%) Yes
- 23 (59.0%) No

If yes, please describe:

- 4 Church groups
- 3 Sports teams
- 2 Coaching
- 2 Scouts
- 1 Entertainment group
- 1 Parent Teacher Association
- 1 Condo association board of director

17. What were the primary reasons why you joined the fire department? (check up to three choices)

- 6 (15.0%) Excitement of responding to emergencies
- 15 (37.5%) Feeling of achievement
- 17 (42.5%) Mental and physical challenge of being a firefighter
- 5 (12.5%) Recognition by others / Pride in membership
- 6 (15.0%) Develop new friendships
- 33 (82.5%) Desire to help the community
- 1 (2.5%) Social activities (banquets, parties, sporting events)
- 2 (5.0%) Interested in attaining a full-time fire or EMS position
- 1 (2.5%) Use of the fitness center and other department equipment / facilities
- 5 (12.5%) Family tradition
- 8 (20.0%) Educational opportunities / Learn new skills
- 4 (10.0%) Friends active in the fire department encouraged me to join
- 1 (2.5%) Additional income and other financial incentives offered by the department
- 1 (2.5%) Civic duty following September 11th
- 12 (30.0%) Always wanted to be a firefighter
- 3 (7.5%) Good experience to put on my resume
- Other (please describe)

18. What are the primary reasons why you remain an active member of the fire department? (check up to three choices)

- 9 (22.5%) Excitement of responding to emergencies
- 16 (40.0%) Feeling of achievement
- 16 (40.0%) Mental and physical challenge of being a firefighter
- 8 (20.0%) Recognition by others / Pride in membership
- 15 (37.5%) Friendships I have with other department members
- 22 (55.0%) Desire to help the community
- 0 (0%) Social activities (banquets, parties, sporting events)
- 3 (7.5%) Interested in attaining a full-time fire or EMS position
- 4 (10.0%) Family tradition
- 7 (17.5%) Educational opportunities / Learn new skills
- 2 (5.0%) Use of the fitness center and other department equipment / facilities
- 2 (5.0%) Additional income and other financial benefits offered by the department
- 2 (5.0%) Civic duty following September 11th
- 6 (15.0%) Always wanted to be a firefighter
- 4 (10.0%) Good experience to have on my resume
- 1 (2.5%) Other: Became interested in non-emergency department functions

19. Have you ever seriously considered quitting the Mt. Lebanon Fire Department?

- 17 (42.5 %) Yes
- 23 (57.5%) No

If yes, please give reason: (check all that apply)

- 1 (5.9%) Lost interest in firefighting
- 0 (0%) Personal injury risk
- 0 (0%) Poor communications – not kept informed of what is happening in the department
- 5 (29.4%) Not adequately recognized or appreciated for my contributions to the department
- 0 (0%) Not adequately compensated for my contributions to the department
- 4 (23.5%) Lack of trust in the organization, management, or other members
- 1 (5.9%) Call attendance requirements are too difficult to maintain
- 8 (47.1%) Lack of available time due to work or family obligations
- 5 (29.4%) Poor career / volunteer relations
- 5 (29.4%) Not utilized or underutilized on calls
- 0 (0%) No opportunities for advancement
- 1 (5.9%) Poor leadership
- 3 (17.6%) Personality conflicts with other members
- 1 (5.9%) Not enough “working” fires or rescues
- 2 (11.8%) Lack of feedback regarding my performance
- 2 (11.8%) Too difficult to meet the training requirements
- 5 (29.4%) Disagreement with management decisions or department direction
- 2 (11.8%) Did not feel welcomed by the group
- 0 (0%) Not treated fairly
- 3 (17.6%) Changes were being forced upon the membership
- 2 (11.8%) Increased number of responses to automatic fire alarms
- 4 (23.5 %) Other:
 - 1 Age
 - 1 Medical condition
 - 1 Potential relocation
 - 1 Lack of commitment from other members

20. When available to do so, how often do you **not** respond to full alarms?

- 1 (2.5%) Frequently
- 26 (65.0%) Sometimes
- 13 (32.5%) Never

If you answered frequently or sometimes, what are the reasons for you not responding? (check all that apply)

- 6 (22.2%) The location of the call
- 15 (55.6%) I sometimes, or often, sleep through the pager sounding
- 3 (11.1%) I am typically not utilized, or am underutilized, on calls
- 1 (3.7%) The type of call does not interest me
- 4 (14.8%) I am rarely assigned to responding apparatus
- 3 (11.1%) The on-duty crew should be able to handle the call
- 5 (18.5%) I have an upcoming family commitment
- 5 (18.5%) The call will most likely turn out to be a false alarm
- 4 (14.8%) I don't want to be stuck covering the station
- 0 (0%) I only respond to calls that sound like they'll be “working” incidents

0 (0%)	The weather is too bad
15 (55.6%)	I have to leave soon for work
1 (3.7%)	I don't respond to certain types of calls (like flooding or fire alarm activations)
6 (22.2%)	I have to get up early for work and don't want my sleep interrupted
7 (25.9%)	I am watching young children who cannot be left alone
2 (7.4%)	I am in the middle of running an errand or doing work around the house
0 (0%)	Most calls turn out to be minor, so I don't get to do anything worthwhile
0 (0%)	I already made the minimum call requirements for the month
8 (29.6%)	I'm too tired, or sleeping
1 (3.7%)	I am at dinner or out with friends
2 (7.4%)	Too many automatic fire alarm activations
2 (7.4%)	I live too far away from the station to make the responding apparatus
8 (29.6%)	The call was reported false right after dispatch
0 (0%)	Other (please describe)

21. Was the department's expectation and policy that you respond to all full alarms when available clearly explained to you when you joined?

40 (100.0%)	Yes
0 (0%)	No

22. Do you favor implementing a full alarm attendance requirement, as a replacement or addition to our current 5 % call attendance rule, as a means to increase volunteer firefighter turnout on full alarms?

12 (30.0%)	Yes
28 (70.0%)	No

23. What would make you to respond to more full alarms? (check all that apply.)

30 (75.0%)	Nothing, I currently respond at the maximum level my availability allows
1	Greater recognition
5	Being utilized more on emergency scenes
0	Increased financial incentives
3	More "working" fires or rescues
3	Greater camaraderie among members
1	Rule changes mandating minimum attendance requirements for full alarms
1	Changes in the response protocols
0	More social activities
0	Bonus gifts (such as uniform items, dinner gift certificates, etc.)
2	Being assigned to responding apparatus more often
2	Improved career / volunteer relationships
2	Not being called out so often for false alarms or minor incidents
0	Other (please describe)

Feel free to add any additional comments concerning volunteer firefighter response below.

I would love to give more time if I had it available.

Establish “platoon nights or shifts” where you sign up to respond to special still and full alarms, with each volunteer being required to sign up for several shifts per week.

If the volunteers felt more utilized or needed, they would respond more. Most volunteers joined to help people. The more a volunteer gets to do that, the more they will respond.

Encourage those unable or unwilling to make the commitment to quit, and replace them with newer more active members.

Utilize people more. Nobody likes standing around doing nothing.

There is noticeable tension in the organization.

Offer home monitors to those experiencing difficulty waking up for middle of the night alarms. They are louder, and can turn on a light.

You can't legislate a desire to commit to an organization.

The department already offers too many incentives to volunteers.

Officers need to hold volunteers more accountable by directly questioning them on their poor response.

Find better members.

Screen applicants better during recruitment.

Appendix D – Mt. Lebanon Fire Department Rules and Regulations on Level of Response

6 DEPARTMENT RESPONSE TO EMERGENCIES

6.1 STILL ALARMS

- 6.1.1 Calls of a minor nature
- 6.1.2 Response by on-duty career personnel with one or more apparatus.
- 6.1.3 May be a Code 2 or Code 3 response.
- 6.1.4 Off-duty career personnel are not permitted to attend.
- 6.1.5 Volunteer personnel are encouraged to respond.

6.2 SPECIAL STILL ALARMS

- 6.2.1 Calls requiring additional personnel resources but not necessarily the entire organization.
- 6.2.2 May be a specialized emergency requiring special skills:
 - 6.2.2.1 vehicle extrication
 - 6.2.2.2 hazardous materials
 - 6.2.2.3 technical rescues
 - 6.2.2.4 elevator rescues
- 6.2.3 Response by on-duty career personnel with one or more apparatus.
- 6.2.4 Off-duty career personnel are authorized to respond.
- 6.2.5 Volunteer personnel are encouraged to respond.

6.3 FULL ALARMS

- 6.3.1 Calls that are potentially or known to be of a serious nature.
- 6.3.2 Calls that require significant personnel resources.
- 6.3.3 Response by on-duty career personnel with one or more apparatus.

- 6.3.4 Off-duty career personnel required to respond by district response protocol.
- 6.3.5 Duty officer responds to the scene.
- 6.3.6 Volunteer personnel required to respond by district response protocol.