Town of Amherst



STRATIGIC PLAN
Department: Fire
August 2013

Introduction

During the summer of 2013 under the direction of the Amherst Board of Selectmen each department within the Town Government engaged in a strategic planning process. Over the course of several months each department evaluated their operation, examined future needs of the community and identified three to five year goals. This process and plan takes into consideration strategic goals and initiatives of other departments and how things like community development impact the services other departments provide.

Respectfully

Mark R. Boynton

Fire Chief / Emergency Management Director

September 5, 2013

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Definitions

Volunteer – receives no compensation for any time dedicated to a towns fire department

Paid-On-Call/Volunteer – Receives hourly wages for time spent responding to calls only. Attendance at all functions and emergencies is voluntary.

Paid-On-Call – Receives compensation for all time dedicated to a town's fire department.

Part-Time (PTE) – Part-time employee works less than 30 hours per week and is compensated for all time dedicated to the town. Receives no health, dental, retirement benefits. Part-time Firefighters work out of the fire station when on-duty and provide immediate response.

Full-Time (FTE) – Works over 30 hours per week, receives hourly compensation for all time dedicated to the town, and receives benefits as outlined by the town. Full-time Firefighters work out of the fire station when on-duty and provide immediate response.

24/7 Immediate Response – Sufficient part-time, full-time or a combination of both on duty 24/7 working out of the fire station and available to respond immediately without delay.

Planning & Organizing the Project –

Three years ago, the planning and organizing process for Amherst fire started with a new Fire Chief and three new Fire Officers. As you will see in the following pages, a number of steps have been taken to gather the information needed to develop a comprehensive strategic plan.

As this document was finalized, the leadership and management of the department were afforded the opportunity to review the information, make suggestions, and comment on its content. Because the department is deeply rooted in pride, spirit and tradition, some members are afraid any forward progress will change the department as we know it today. However, at the same time, all members understand times have changed and our fire protection model needs to be evaluated.

During the process, the common goal was to continue to provide high quality emergency services to the Town of Amherst, preserve the paid-on-call / volunteer membership, while addressing the current and future needs of the community. We closely looked at enhancing services to meet national standards, address weaknesses and meet the expectations of the citizens.

As the Town's Fire Chief, it is my job to possess the knowledge of a paid-on-call / volunteer Fire Department with management techniques and ability to effectively recruit, manage, motivate and evaluate members of the department. To be an effective Fire Chief, it's imperative to understand the nature of a call fire department and support the volunteer efforts of the members of the Fire Department. It is also the responsibility to keep the department abreast with current practices of modern fire suppression and training to provide consistent public safety services to the Town of Amherst.

Understanding the past and present –

Amherst Fire Department is a combination department comprised of two full-time salaried personnel who average 50+ hours per week; one permanent part-time employee who works 20 hours per week; and 37 members who serve the community as paid-on-call / volunteers. These paid-on-call volunteers devote thousands of unpaid hours to the town each year to train, get certified, attend organizational meetings, conduct fire prevention education, and attend community events. Firefighters are compensated \$11.75 per hour, officers and drivers are compensated \$12.58 per hour only when they respond to emergencies putting themselves in harm's way to save lives, property and the environment. Each member also receives an annual stipend based on rank ranging from of \$126.36 to \$462.36. The stipend was the original form of compensation established many years ago and was intended to offset incidental cost such as damaged personal clothing, lost time at work and travel cost to attend meetings and training.

AFD provides fire, rescue, hazardous material and secondary emergency medical response to the Town of Amherst consisting of 11,201 resident population (2010 Census) and \$1.6 billion in assessed property value (2012 Town Report).

Amherst continues to subscribe to a primarily volunteer fire protection model, which has evolved very little over its 200+ year history. The roster of personnel has fluctuated from a high of 52 in the mid 1970's to a low of 30 in 2010. The first permanent paid position was funded in the mid 1980's to address department code enforcement requirements during the housing boom. Later, the Fire Chief position was funded part-time, and hourly wages were added to transition from a fully volunteer department to what is now considered a paid-on-call volunteer department. To address management and leadership needs the first full-time Fire Chief was hired in 2003 followed by a full-time Deputy Fire Chief in 2005. The part-time fire prevention position transitioned to an administrative support role and continues to provide these services at the present time.

One hundred years ago, the population of Amherst was very small, and the volunteer fire protection model was very effective. The Figure below shows the population growth of Amherst. As you can see, the population doubled between 1950 and 1970 and doubled again between 1970 and 1990.

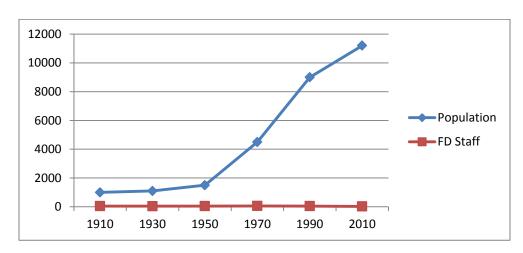


Figure 1 Population / Fire Department Staffing

As you can also see the fire department staffing and model did not grow; indeed staffing has actually dropped.

Since the mid 90's, the number of volunteer and paid-on-call volunteer firefighters has steadily decreased across the country, and Amherst is no exception. A May 22, 2011 article written by Michael Shepard indicated the number of firefighters in Maine has dropped by 20% since 1990. "There were approximately 10,000 firefighters in Maine – paid and volunteer – around 1990, now there are 8,000 and its isn't the career men that are going away said State Fire Marshal John Dean (Shepard 2011). Many believe this is largely attributed to the transient nature of today's society, lack of work in the community, and the inability to leave work to serve the community. In the 70's, the majority of the Fire Department members worked in town and occasionally left work to answer emergency calls. This was an accepted practice and frequently compensated by employers. Today, the majority of Amherst firefighters work out of town; the number of emergencies calls has quadrupled; leaving work is frowned upon, not allowed or results in lost wages; and training requirements have doubled. Life as we know it is moving at

light speed with multiple priorities competing for our time. Families are running from one commitment to the next, and our lives are jam-packed trying to fit it all in. Fewer and fewer people have time to volunteer and commit the large amount of time required to be a firefighter today. An August 12, 2013 article written by Kathleen Ronayne indicates the Towns of Webster, Dunbarton and Canterbury New Hampshire are struggling. "We of course are struggling to get some new people to join, being a small town. And it's a very big time commitment," Webster Deputy Chief Rob Wolinski said (Ronayne 2013). Fewer people are willing to take time away from other obligations and family. The few that continue to uphold the tradition of serving as an Amherst Firefighter do it for the satisfaction and sense of pride, but it comes with tremendous sacrifice.

Thirty years ago the number of Amherst firefighters was at its peak, the departments had a waiting list to join, and the call volume was less than 100 calls per year. On average, emergency calls increase by 7% each year. Figure 2 below shows that, as the population of Amherst grew, the number of calls increased by nearly 15% each year. Demands on volunteer firefighters increased from responding to one call a week to more than 10 calls per week or 1.5 per day.

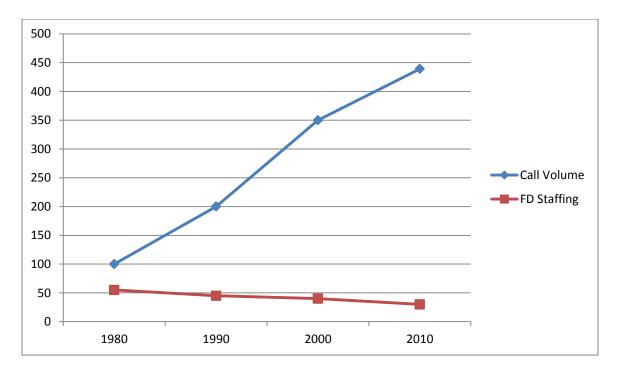


Figure 2 - Fire Department Staffing / Call Volume

The situation in Amherst is that the town is outgrowing the volunteer fire protection model. Many years ago as the housing boom was in full swing and the Route 101 and 101A corridors were being developed departments like Amherst Police, Bedford Fire and Police, Merrimack Fire and Police added employees and changed models to address the needs. Amherst fire continued with a primarily volunteer model, to some extent resisted change, and only hired full time staff when absolutely necessary to address management and code enforcement

requirements. The two full-time staff cannot address the emergency response needs of the community.

Due to the decline in Fire Department members in the 1990's, the leadership of the department instituted voluntary on call shifts for the fire officers to cover nights, weekends and holidays. This was an effort to make sure that, at the very least, one member of the department would respond to any emergencies during these periods and call for help from surrounding towns if Amherst was unable to muster enough personnel to answer the call. These on-call shifts consisted of one fire officer who assumes the responsibility of being in charge, responding to any and all calls and staying in town. This responsibility rotates to each officer and consists of one week night a week and one weekend a month. Realizing the value and sacrifices being made in 2006, the town changed to compensation of \$50 per 24 hour period on weekends and holidays, while week nights continued to be voluntary with no compensation. In 2010, this was modified to include two officers: one to answer routine service calls, and one to assume to responsibilities of the Fire Chief, meet the state statues of a senior fire official, and protect the best interests of the town. The compensation remains the same of \$50 on weekends and holidays and no compensation week nights.

Figure 3 provides a view of the call volume and major call types from 2011 – 2013. As previously stated we are seeing an average increase of 7% each year. As call volumes increase, so does the frequency and severity. Amherst and Bedford have experienced a significantly higher volume of building fires over the past ten years. Neighboring communities such as Merrimack, Milford, and New Boston experience one structure fire a year or one every other year. Amherst and Bedford have averaged five multiple alarm building fires each year over the past seven years. These are primarily residential home fires typically, due to the lack of building and life safety codes and/or enforcement in the 1930's to 1960's.

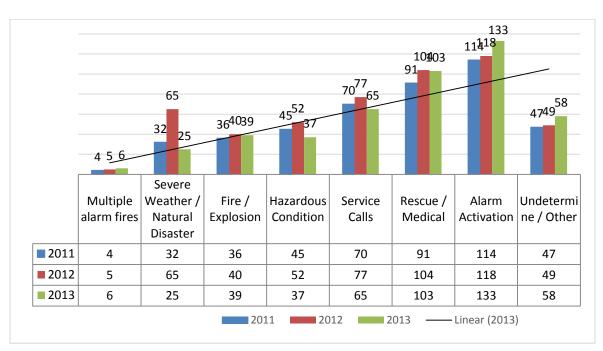


Figure 3 – Fire Department Emergency Call Types and Frequency

AFD responds to a variety of calls requiring a number of skills sets and varying levels of staffing. The frequency, complexity and severity continue to increase.

Figure 4 breaks emergency call percentages into three time frames today's society is accustomed to. *Weekdays* on the chart represent the percentage of calls AFD receives from 6 a.m. to 6 p.m. Monday through Friday. *Weekend* represents the number of calls from 12 a.m. Saturday until 12 p.m. on Sunday *Weeknights* represents 6 p.m. to 6 a.m. Monday through Friday.

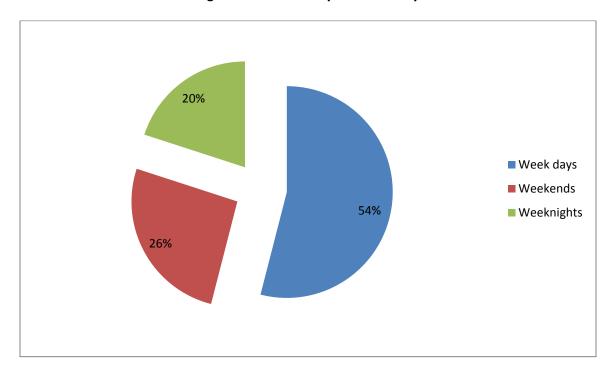


Figure 4 – Incidents by Time and Day

The majority of Amherst Fire Department calls occur during the week days when the majority of volunteers are not available.

Figure 5 – shows the most recent fire-loss history. As indicated earlier, with increased frequency comes increased severity. 2013 was a busy year for Amherst Firefighters with six multiple alarm fires, over a five month period during the winter month. Every three weeks from late November to early April, Amherst Firefighters were called upon to fight multiple alarm fires for multiple hours at a time.

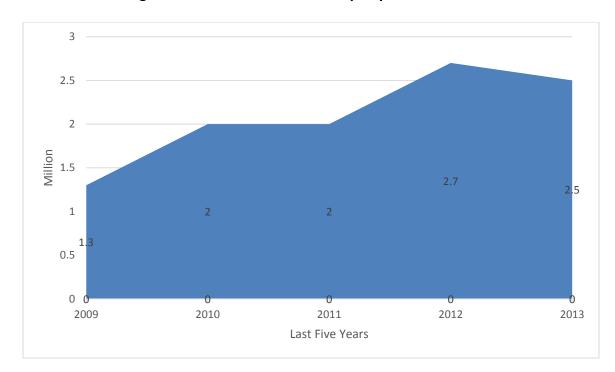


Figure 5 – Amherst Estimated Property Loss Due to Fire

As shown, property loss is significant, at an average of \$2.1 million per year. We are thankful that it has been many years since an Amherst resident has lost his/her life due to fire, and firefighter injuries have been relatively minor and infrequent. On average, five families in Amherst are displaced each year for 6-12 months while their homes are being rebuilt. A portion of the property lost is taxable property such as buildings. Most are repaired or rebuilt within one year but some are never rebuilt and most result in lost tax revenue. Over the past five years Amherst has lost an estimated \$120,000 dollar in tax revenue as a result of fire loss.

Figure 6 below compares all the similarly sized communities in New Hampshire to Amherst. The communities are listed based on population. It is important to note the square miles of land and populations are very similar with the average being the same as Amherst's. ISO stands for Insurance Service Office, which sets fire protection ratings for each community in the United States. A rating of 1 is the best fire protection available, 10 is no fire protection. At the time of this writing, Amherst is being evaluated by ISO, we expect a new rating to be assigned in the next few months. Prior ratings were based on fire station locations in the community and available water supply, with little consideration to staffing and the time it takes fire apparatus to respond and arrive at the scene of an emergency. This rating method has recently changed, and ISO is rating Amherst on national standards for response and staffing levels. ISO ratings are used to calculate and determine commercial and residential property insurance rates. The lower the ISO rating the lower the insurance premium is; likewise, the higher the rating the higher the premium.

Personnel analysis FTE stands for full time employees. Figure 6 does not take into consideration part-time or volunteer paid-on-call personnel.

Figure 6 - Similar Size Communities Comparison of Full Time FD Employees

	Dem	ographic Infe	ormation	Personnel Analysis
Fire Department	Population	Land	ISO	FTE
		Sq Miles	Rating	
Seabrook	8,363	9	5	22
Tilton-Northfield	8,688	40	5	14
Franklin	8,608	27.7	4	16
Berlin	10,170	61.5	5	20
Raymond	10,825	28.8	4	2
Hanover	10,894	49.1	4	23
Amherst	<mark>11,928</mark>	<mark>33.9</mark>	<mark>4</mark>	2
Somersworth	11,989	9.8	4	17
Pelham	12,454	26.3	4	19
Windham	12,823	26.7	6	22
Claremont	12,837	43.1	4	18
Hooksett	13,483	36.2	4	32
Milford	13,606	35.4	4	4
Lebanon	13,638	40.3	4	29
Average	11,414	33.3	4.7	18.3

Of the 14 departments listed above, 11 staff the fire station 24/7 and provide the community with immediate response. These communities have seen the value in minimizing losses by providing immediate 24/7 response with an average of 18 full time employees. To accomplish this, the departments listed have three or four personnel on duty around the clock. Each department also has paid-on-call members that are not represented in the Figure. These members respond from home to supplement the response. Amherst relies solely on paid-on-call volunteers to respond to the station then to the emergency scene.

Figure 7 looks at the three remaining departments with a population over 10,000 that do not provide 24/7 staffing for immediate fire response. Amherst is frequently compared to Milford, and our fire departments work very closely together. Although similar, Milford is fortunate to have a very different set of demographics and a full roster of 52 paid-on-call members. This is due in large part to the availability of housing and dense population. Because Milford population is so concentrated in one area, they have one fire station.

Amherst currently has no apartment complexes and all Amherst Firefighters that reside in town are home owners spread out across the community. Because Amherst is so spread out, it requires two fire stations to provide adequate coverage: one in the middle of town and one on the south end of town near the industrial corridor. Several of Amherst paid-on-call volunteer firefighters live in Milford near the Amherst line in apartment complexes.

Figure 7 - Week day Coverage Only

Towns over 10,000 Population without immediate coverage

	Population	Land	ISO	Empl	Budget	t
Amherst	11,928	<mark>33.9</mark>	<mark>4</mark>	<mark>2.5</mark>		\$504,80 <mark>7</mark>
Milford	13,606	35.4	4	4		\$545,161
Raymond	10,825	28.8	4	2		\$480,525
					Ave	\$510,164

Figure 8 takes a closer look at the fiscal comparison break down. We look at the same similarly sized communities starting with the highest budget and break the budgets down into cost per citizen, cost per call, and cost per full-time employees. Amherst, Milford and Raymond do not provide 24/7 immediate response, therefore cost per full-time employee has not been included.

Figure 8 – Fiscal Comparison

Similar Size Communities Comparison Fire Department Budget.

Fiscal Analysis **Cost Per Fire Department** FY2010 Cost Per **Cost Per** Full time Budget Resident Call **Employee** Hanover \$2,034 \$3,387,185 \$301 \$147,269 Lebanon \$3,195,270 \$230 \$1,007 \$110,182 Seabrook \$2,981,978 \$357 \$814 \$135,544 Windham \$2,650,915 \$207 \$1,866 \$120,496 Hooksett \$2,846,099 \$211 \$1,355 \$88,941 Berlin \$2,018,117 \$198 \$4,426 \$100,906 \$1,750,500 \$136 \$2,059 \$97,250 Claremont Somersworth \$1,660,382 \$138 \$1,436 \$97,670 Franklin \$1,646,151 \$191 \$1,089 \$102,884 Tilton-Northfield \$115,494 \$1,616,914 \$1,108 \$186 Pelham \$1,601,712 \$129 \$1,228 \$84,301 Milford Not Applicable \$545,161 \$40 \$944 **Amherst** \$504,807 \$42 <mark>\$987</mark> Not Applicable Raymond \$480,525 \$44 \$645 Not Applicable

Average \$2,023,771 \$182 \$1,497 \$100,835.25

Figure 8 demonstrates Amherst, Milford and Raymond provide extremely affordable fire protection compared to similar size communities. However, this also could be viewed as being on the bottom of the scale when it comes to investing in fire protection. The budget and cost per call are extraordinarily low due to the lack of full time staffing. For this extremely low cost fire protection we have sacrificed immediate emergency response.

Figure 9 depicts the fiscal comparisons and examines the amount of taxable property protected by the same departments. The figures are based on taxable property evaluations of all property in each jurisdiction.

Figure 9 – Taxable Property Comparison

Town		2011 Gross		% of taxable
	Tax	able Property	FD Budget	property
Seabrook	\$	3,410,399,100	\$2,981,978	.0874
Windham	\$	2,259,434,100	\$2,650,915	.1173
Hanover	\$	1,900,268,200	\$3,387,185	.1782
Amherst	\$	1,855,640,200	\$504,807	<mark>.0272</mark>
Lebanon	\$	1,752,403,911	\$3,195,270	.1823
Hooksett	\$	1,651,798,834	\$2,846,099	.1723
Milford	\$	1,584,799,583	\$545,161	.0343
Pelham	\$	1,557,821,853	\$1,601,712	.1028
Raymond	\$	1,002,557,905	\$480,252	.0479
Tilton-Northfield	\$	907,544,300	\$1,616,914	.1781
Somersworth	\$	888,371,007	\$1,660,914	.1869
Claremont	\$	735,510,978	\$1,750,500	.2379
Franklin	\$	628,840,275	\$1,646,151	.2617
Berlin	\$	475,964,178	\$2,018,177	.4240
Average	;	\$ 1,442,747,248	\$2,013,498	.1598

Note the taxable property of Amherst is over \$400 million above the average of these 14 communities. Amherst ranks fourth in this list in taxable property value with a fire department budget that is one quarter of the average. When we apply the average % of taxable property and multiply this with the gross taxable property for Amherst we see what the average FD budget is for a community the size of Amherst. The amount of taxable property is typically the driving factor for full-time fire protection. For example the Towns of Gilford, Hollis, Rye and Wolfeboro have similar taxable property values with less than half the population. All four of these towns have full-time fire departments due to the property values they protect.

The information in Figure 9 is an indication we are outgrowing our current fire protection model. The primary difference is reliance on volunteer keeping the budget extraordinarily low.

For years, we have been proud of this low cost model; however, the use of volunteers and unstaffed station inherently comes with some risk. Citizens, new residents and new businesses considering moving to Amherst could view this as a concern or even a risk of loss from fire or increased insurance rates. Many times we find these folks are under the false impression that Amherst Fire provides 24/7 immediate response.

The natural progression of Fire Departments across the country is to transition from volunteers with no pay to paid-on-call members who receive pay to increase retention and recruitment and show appreciation for the services they provide. Amherst has taken some steps towards this by paying personnel for calls and providing a small stipend for some expenses.

As demands increase for fire prevention, inspections, and emergency calls, departments will add full-time day staff to address deficiencies during the day and will rely more heavily on paid-on-call / volunteer members at nights and on weekends. Amherst took part of these steps in 2003 by hiring a full-time Fire Chief and in 2006 by hiring a full-time Deputy Fire Chief of Fire Prevention. We addressed the management and code enforcement needs but have not address the emergency response needs.

The Town of Peterborough address emergency response needs in 2009 adding part-time staff to handle emergencies during week days and weekends. The neighboring Town of Hollis with a population just over 7,000 has recently transitioned from part-time to full time 24/7 coverage. Hollis is utilizing 6 full-time Firefighter to provide 24/7 coverage supplemented by a combination of part-time and full-time personnel that fill vacant shifts and work week days when call volumes are highest. In Amherst we have tried to stretch out the paid-on-call / volunteer model as long as possible. Another common model is to merge fire and EMS departments to provide 24/7 immediate response and more efficient services utilizing cross-trained staff. Seventy five percent of the departments represented in the Figures and sixty seven percent in the State of NH provide fire, rescue and EMS transport service. This was discussed in Amherst several times in the past starting as early as 2006.

To provide quality and consistent services, the last progression of a fire department is to transition to full-time staffing. This eliminates juggling a high number of part-time employees increases quality by having employees dedicated to the community rather than picking up a few part-time hours from a second employer. In a career as dangerous as being a firefighters, teamwork and cohesiveness is essential, firefighters typically spend more time with co-workers then they do with family members.

As call volume and fire loss increase in Amherst with a decreasing number of volunteers the progression to ensure a timely and adequate response to the citizens of Amherst is to systematically address deficiencies.

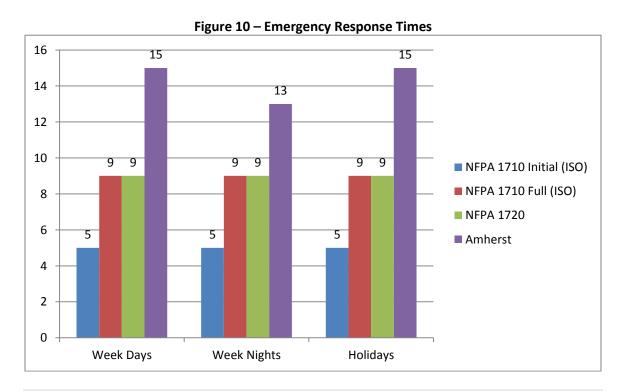
The second indication we are outgrowing our fire protection model is response times. This is the time between the initial 911 call made by an Amherst citizen and the time a fire apparatus arrives at the emergency. The response for Amherst citizens is not immediate, due to the volunteer model. Response times are unpredictable and dependent on firefighter locations at the time of the call. Firefighters must first respond by arriving at the fire station put on protective clothing, assemble a crew, get on fire apparatus before heading to the location of the fire. Response is delayed even further during inclement weather when personal vehicles have

frost or snow on the windshield and road conditions are unfavorable. Figure 10 compares Amherst response times on week days, week nights and holidays from 2008 - 20012 to national standards measured in minutes from the time of the call to arrival at the emergency location.

The National Fire Protection Association has two standards that pertain to adequate staffing and response times. NFPA 1710 "Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments" is the standard for departments that provide 24/7 immediate response with Parttime or full time staff. The standard indicates an appropriate response is five minutes from the time of the alarm until a fire engine arrives on scene 90% of the time. (90% because we know there are places in our communities that we will never reach in 5 minutes.) This is represented below as "NFPA 1710 Initial (ISO)". If fire stations are properly placed in the densely populated areas, which they are in Amherst, the 90% can be achieved. ISO also uses this standard to evaluate and rate the community's fire protection.

NFPA 1710 also includes a standard for full response of 15 firefighters assembled at the scene of the emergency within 9 minutes of the initial call. This is represented below at "NFPA 1710 Full (ISO)".

The second standard is NFPA 1720 "Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments." This standard is for small towns with volunteer fire departments where the call volume and tax base is so low that funding a full-time department is not feasible. The standard calls for a 9-minute response time for urban areas with a population greater than 1000, 10 minutes for suburban with a population between 500-1000, and 14 for rural areas with a population less than 500. The 9-minute response time is represented below in Figure 10.



What we see here is that Amherst's firefighters are unable to meet the demands of today's call volume and today's standards. This is another indication we are outgrowing our fire protection model. Lengthy response times are a result of insufficient staffing and no immediate response. The reason this is important and a national standard is that on average fire doubles in size every thirty seconds. The longer a fire burns, the greater the damage and likelihood of a total loss, personal injury and greater risk to firefighters.

The next Figure examines the number of firefighters responding over the same time period. Currently, there are times when Amherst only gets one or two firefighters that respond to a call, and this typically happens during the week days. A recent call for a propane leak is a prime example. Friday August 2, 2013 at 1:36 p.m. Amherst Fire was dispatched to 104 Amherst Street for a propane tank that had been struck by a piece of construction equipment. One of the valves on the 1000 gallon tank had been broken off and leaking propane. A total of four paid-on-call volunteers responded and none were qualified to drive a fire truck. Help was requested from Milford Fire department and the propane continued to leak at a high rate until Milford arrived 22 minutes into the call. A total of 400 gallons of propane leaked out of the tank before it was plugged and the situation was brought under control. Other times like week nights, when everyone is home, we get sufficient personnel to handle something major like a building fire.

The third indicator that needs to be taken into consideration is adequate firefighting personnel to safely control the situation. Utilizing a volunteer or paid-on-call fire protection model is unpredictable in both staffing and response times. Staffing depends on who is available at any given time, and, since the staff are volunteers, we have no control over their availability.

The National Fire Protection standards also take into consideration adequate staffing. NFPA 1710 (Initial) calls for assemble of four adequately trained firefighters during the initial response (5 minutes). NFPA and the Occupation Safety and Health Administration (OSHA) identify four as the minimum to facilitate what is called the two-in-two-out rule. If two firefighters are to enter a building to engage in firefighting, two firefighters must be outside and available to rescue them, if needed. The only exception is when immediate rescue of a citizen is needed.

NFPA 1710 (full) calls for assembling 15 adequately trained firefighters during the full response period (9 minutes). Firefighting is complex and dynamic; to safely carry out the tasks needed to suppress a building fire several tasks need to be completed simultaneously. To accomplish this at a single family residence with one average size room on fire, 15 firefighters are needed.

Lastly, represented in Figure 11 is NFPA 1720 (volunteer), which also calls for 15 adequately trained firefighters to arrive at the scene of the emergency within 9 minutes. This standard is for a volunteer department with a population less than five thousand people.

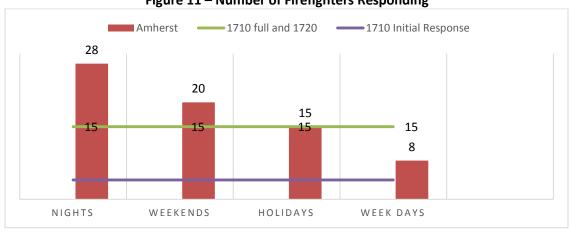


Figure 11 – Number of Firefighters Responding

Sometime in the 1800's, the Amherst Firefighters created the motto "Be Swift to Do Good". Today's standard of being swift to do good for a community the size of Amherst with the tax base of Amherst is the assembly of 15 properly equipped and adequately trained firefighters in 9 minutes or less. Figure 10 showed we do not meet the response time standards, so we are not being as "Swift" as we should be. Figure 11 indicates that we do not meet the staffing standard during the week days. We have sufficient staffing 50% of the time on holidays, and we consistently have sufficient staffing most weekends and week nights based on the averages.

The final indicator that should be taken into consideration is the competency levels of the firefighters. The two main factors when examining competency are levels of training and years of experience. With a high turnover rate and dependence on firefighters to voluntarily attend 240 hours of certification training, Amherst struggles with this. At any given time, the department has 6-8 firefighters that are not certified at any level. This represents 15-20% of the department personnel who are considered probationary, have limited abilities, and require direct supervision. National standards and federal grants require all firefighters to be certified at Level two, which is an additional 140 hours of training. Again, due to the turnover rate and level of commitment required of a volunteer, Amherst does not meet this standard. On average, 25% of the department is not certified to firefighter Level two.

The last factor to consider is level of experience. The department as a whole is very young, with an average of 7.5 years of experience. This is largely due to three Chief Officers and two Captains with 20+ years of experience. When we look at the level of experience of just our firefighters, the average is less than five years. A study conducted by lowa State University in 2011 discovered "experienced firefighters are more likely to make good decisions when faced with crisis". This contributed to "experienced firefighters put a heavier emphasis on enhancing their situation awareness and creating a mental map for themselves" and "having a better understanding of the consequences of a bad decision". Inexperienced firefighters were more likely to take cognitive shortcuts and make bad decisions.

When we put this all together and look at response times, staffing, and competency, we get a different picture. New personnel are typically excited to be a part of the fire department, meet

expectations, and are eager to respond to emergency calls. Weekdays, when the department struggles to provide adequate staffing, it is common to have these eager new members responding. Although the staffing is needed and appreciated, there are times when as much as 50% of the weekday staffing are not certified at any level, have less than a year of experience on the department, and do not have direct supervision.

Envisioning the future -

In 2010, Amherst Fire Department began the strategic planning and master planning processes. This began with brainstorming sessions to identify areas that needed improvement and goals for the future. Immediately following the brain storming process, the leadership of the department began developing the department's first mission, vision, and values statements. This began with an evaluation of our core values and Dominance, Inducement, Submission and Compliance (DISC) behavior profiling. We identified the department's primary functions and responsibilities under the current laws, taking into consideration the expectations of the citizens and the governing body.

Amherst Fire Department Mission Statement

Amherst Fire Department is a community-based, all hazard emergency services organization comprised of loyal members dedicated to the health and well-being of its citizens by providing high-quality emergency response, fire prevention education, life safety code enforcement, and community support services.

We accomplish this through a balance of mutual aid between neighboring departments, accountability to the local community and support from Amherst Fire Department Association.

AFD VALUES

- **A** Accountability
- M Managed Risk
- H Honorable Service
- E Effective and Efficient Response
- R Respect of Community
- **S** Strive for Excellence
- T Teamwork
- S Spirit
- P Pride
- I Integrity
- ${\bf R}$ Responsibility
- I Innovation
- **T** Tradition

The next step in the department's planning process began in the spring of 2012 with the officers identifying the department's strengths, weaknesses, opportunities and threats as seen in the SWOT analysis below. Annual surveys of the department were completed over the past three years to analyze our progress and identify any deficiencies. The brain storming process completed in 2010 was repeated and updated in January of 2013.

Figure 12 – SWOT

SWOT	ANALYSIS
Strengths What we do well? What unique resources can we draw? What do others see as our strengths?	Weaknesses What could we improve? Where do we have fewer resources that others? What are others likely to see as weakness?
Amherst FD effectively fights fires.	Slow response times that do not meet national standards.
Respected by the citizens of Amherst	High frequency of fires and high property loss.
We treat citizens with respect and compassion during a time of need.	Staffing levels below national standards and below averages of similar size communities.
Adapt and overcome difficult situations.	High turn-over rate with a high percentage of firefighters without minimum levels of training.
Provide and extremely low-cost service. Very diverse work force with well-rounded backgrounds and skills.	Incomplete second floor inability to staff the station 24/7 during major storms, natural disasters or progress to 24/7 staffing.
Excellent working relationships with neighboring fire departments and other town departments.	
Opportunities What opportunities are open to us? What trends could you take advantage of? How can you turn your strengths into opportunities?	Threats What treats could harm us or the town? What are similar size departments doing? What threats do your weaknesses expose you to?
Grant opportunities to fund replacement apparatus and second floor.	Losing public trust and respect by failing to meet expectations.
Fund raising opportunities to complete second floor.	Failing to provide adequate response to a major event emergency.
Engage in Capital Improvement Planning and Strategic Planning processes.	Injury or loss of a firefighter due to inadequate staffing advanced fire conditions or equipment failure.
	Injury or loss of a civilian life due to substandard response times, short staffing or equipment failure.

On many levels, the weaknesses and threats Amherst Fire Department faces are no different than every other fire department in the state and across the country. Over the past 30 years, the fire service has become the lead agency and primary work force to respond to hazardous materials incidents, terrorist events, and major disasters such as flooding, hurricanes, tornadoes, ice and snow storms. We are expected to handle an increasing number of incidents that are increasing in complexity. Motor vehicles have evolved from simple combustion engines that pose a fire hazard to complex electric and hybrid vehicles with deadly high voltage. Firefighting has evolved from wood and paper to hydrocarbon plastics generating enormous heat and emitting deadly toxic gasses. Firefighter protective clothing and techniques have evolved from a wet rag over a firefighter's mouth and a rubber coat to highly complex breathing apparatus, complete thermal and vapor protection, thermal imaging cameras and specialized foam.

The time and commitment required of today's firefighters to meet minimum standards to conduct safe firefighting operations have increased. In the 1960's, training was on the job and minimal, with no formal training. Today, firefighters are required to attend more than 240 hours of formal training to meeting national standard. For Amherst Firefighters, this is time volunteered away from family, nights, and weekend after working a full time job.

These are just a few of the reasons fire departments across the country, including Amherst, are seeing a decline in volunteers. Over the past three years, Amherst Fire Department has battled this national trend and increased the number of firefighters by 25%. Although the numbers have increased, our current levels are far from the 52 firefighters the department had in the 1970's. Despite our best efforts, we have reached a plateau of 40 personnel, with a high turnover rate and a number of members that rarely respond to calls due to other commitments.

We have defied the odds thus far due to extraordinary efforts recruiting personnel. But each year, the number of calls increase, and it gets harder and harder to engage the appropriate number of volunteers. Our recruiting efforts include being at the voting polls each year asking anyone and everyone between the ages of 18-55 if they have ever considered joining the fire department. A Fire Department Explorer post gives us the opportunity to get high school kids between the ages of 14-18 interested and engaged in the fire department at an early age. Unfortunately, most leave town for college after high school and over the past three years none have joined the department after turning eighteen. We have a presence at nearly every community event in town with a recruiting and information booth. On a regular basis, signs are put out in front of the fire stations and posters are placed in local businesses.

We have been very successful and recruited 23 new members over the past three years. Unfortunately about half of these new members have left in less than two years. The number one reason for leaving is to relocate for full-time employment opportunities, nine members left for this reason. Three members have resigned over the past three years because they could no longer commit the time needed to meet the minimum requirements. We are not alone, an April 28, 2012 article written by Andrea J. Cook indicates only one in five prospective firefighters who walk into the Rapid Valley Volunteer Fire Department in South Dakota stays for more than a year, according to Lieutenant Mark Enright (Cook 2012).

The process of recruiting and training new firefighters has become a burden on the senior members and officer of the department. These personnel volunteer their time to recruit new members, spend hundreds of hours each year training them only to see half leave. These personnel have indicated they are "tired and can't keep up this vicious cycle much longer". At any given time we have three to four new members attending probationary fire training on Wednesday nights.

The Fire Department members envision a future where the fire department's response is immediate and adequately staffed to reduce the property loss the citizens in Amherst are experiencing; a future that preserves the pride, spirit and tradition of Amherst Fire Department, where paid-on-call firefighters continue to play a major role but are not relied upon for immediate and timely response; where fire officers no longer have to volunteer their time to be on call, training new firefighters; and firefighters no longer volunteer to get trained; a future that provides an appropriate level of fire protection for the taxpayers of Amherst; a level of service that reduces insurance premiums, reduces property damage and losses from fire; rescue services that are timely, giving our citizens and those traveling through Amherst the best chance for survival.

Strategic Goal -

Amherst Fire Department has one strategic goal that will have a major and lasting impact on the citizens of Amherst, with several strategic initiatives that are vital to the success of the goal.

"Increase the level of fire protection to the Town of Amherst to meet the needs of the community, stabilize or lower insurance rates, protect the tax base, and reduce property loss from fire"

This goal is important to the Town of Amherst, because we are outgrowing the traditional fire protection model we have used for over 200 years. As the number of natural disasters continues to increase and calls continue to increase by an average of 7% each year, our call volume will increase by an estimated 175 calls over the next five The fire protection model of relying on volunteers is starting to fail, response times are below national standards. The number of firefighters on the department continues to fluctuate, turnover is high due to job and family commitments and staffing levels are below national standards contributing to the inadequate response times. Although we will continue to retain and extend the life of our paid-on-call volunteer model, it's time to seriously look at changing. It's time to examine our options, address the immediate needs, and strategically plan for the future. This means phasing into 24/7 staffed fire department using part-time and/or full-time staff that will respond immediately with the minimum number of personnel. Paid-on-call personnel will continue to provide the staffing needed for major emergencies in the foreseeable future and minimize the cost impact to the town. The pride, spirit and tradition of Amherst Fire Department will live on and continue to reduce the cost of fire protection in the community.

Strategic Initiatives -

- <u>1)</u> <u>Change the Fire Protection Model</u>: There are a number of ways to change the fire protection model for Amherst and phase things in over a number of years to minimize the impact to the taxpayers. As shown there are three objectives that we need to meet.
 - a. **Increase Staffing Levels:** This can be accomplished a number of ways utilizing full-time, part-time or a hybrid combination of both.
 - b. **Reduce Response Times:** The primary way and possibly the only way to reduce response times is to provide adequate staffing to facilitate an immediate response.
 - c. Increase the Level of Competency: To increase competency we need to reduce turnover rates. We have no control over turnover rates of volunteer members; the primary reason firefighter leave it to relocate for their fulltime job. To stabilize competency levels, the best option is fulltime personnel committed to the Town of Amherst as their primary employer. This will provide competency and consistency for the citizens of Amherst.
- **2)** Invest in Protecting the Community; What we know is Amherst has higher than average tax base with a population that continues to increase. To facilitate a change in the fire protection model we need to invest in protecting the community.
 - a. **Preserve the Paid-On-Call Volunteer Force:** As previously stated, our paid-on-call force will continue to be a critical element of the department for the foreseeable future. To preserve and maintain this work force, we need to accomplish three things: 1.) Reduce the call volume volunteers are expected to respond to; 2.) compensate these personnel for time they invest in training, meetings and community events to show they are valued; 3.) adjust the hourly wages to appropriate levels that reflect level of responsibility, training and experience. These personnel need to be transitioned from being looked at and treated like volunteers to part-time employees of the town. After all, the Fire Department is the largest work force in the town government.
 - b. *Invest in Capital Improvements*: In order to change the fire protection model facilities and equipment must exist to accommodate the change.
 - i. **Second Floor:** When the Central Fire Station was constructed in 1988 the town's leadership had a vision of the future. The second floor to accommodate 24/7 staffing was framed but left unfinished. Now, 25 years later, it is time to complete this project.
 - ii. Fire Apparatus: Without fire trucks, the fire department cannot respond. With an aging fleet with an average age of 19 years old, Amherst has recently embraced the Capital Improvement Planning process. To ensure our fire protection model remains consistent and effective apparatus needs to be on a 20-year replacement plan with an average age of 10 years old.

Fire Protection Options-

To accomplish the strategic goals, strategic initiatives and objectives, a number of efforts should be considered. To provide the citizens of Amherst with adequate and timely fire protection and increase in staffing has been identified as the primary objective. This can be accomplished a number of ways. Several options are listed below.

<u>Option One:</u> Continue with the current fire protection model, increase compensation and provide wages for training, meetings and on-call shifts.

Pro's - The intent of this option is to prolong the current model as long as possible and minimize the financial impact to the taxpayers.

Con's – We are ignoring the inadequacies and risks previously identified. We continue to put property and lives at risk.

<u>Option Two:</u> Add part-time employees phased in over five years to address each of the objectives.

Pro's – Addresses the immediate deficiency in incremental steps, avoids the cost of employee benefits, and minimizes cost.

Con's – Juggling as many as 30 part-time staff in addition to 40 paid on call volunteer members, high turn-over, loss of continuity and consistency, significant investment in protective clothing for employees.

<u>Option Three</u>: Add full-time employees phased in over five years to address each of the objectives. <u>Recommended Option</u>

Pro's – No juggling of part-time employees, provides consistency with a work force committed to the town of Amherst, little or no turnover, in-house development of future leaders.

Con's - Considerable cost in benefits

<u>Option Four:</u> Part-time/Full-time hybrid phased in over five years to address each of the objectives.

Pro's – Delays to financial impact of all full-time option. Minimizes the cost over the first four years.

Con's – Juggling 20-30 part time personnel, high turn-over, loss of continuity and quality of service, cost of providing protective clothing, equally as expensive as hiring full-time personnel.

Vision Dashboard-

The options above would impact the vision of the future incrementally based on which was chosen and the year of implementation. The vision dashboards below in Figures 13 and 14 give a snapshot of what response times and staffing levels would look like five years from now.

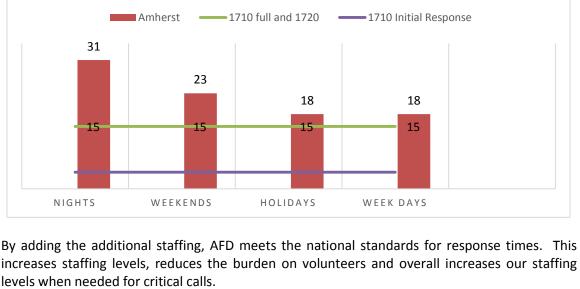


Figure 13 - Number of Firefighters Responding

increases staffing levels, reduces the burden on volunteers and overall increases our staffing levels when needed for critical calls.

When we look at response times, we see a significant change due to the immediate response. This also has an impact on our ISO rating and amount of property losses.

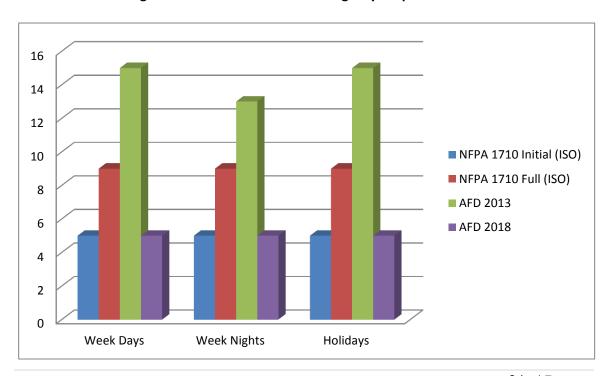


Figure 14 – Vision Dashboard Emergency Response Times

Response times drop dramatically and align with national standards.

The following Figures represent what staffing totals would look like for each of the options for each of the five year periods.

Figure 15 Option one, Current Staffing

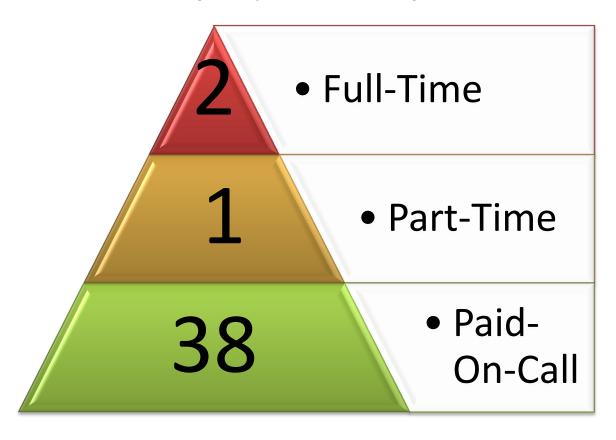


Figure 16 Option Two, Increase Part-Time Staffing

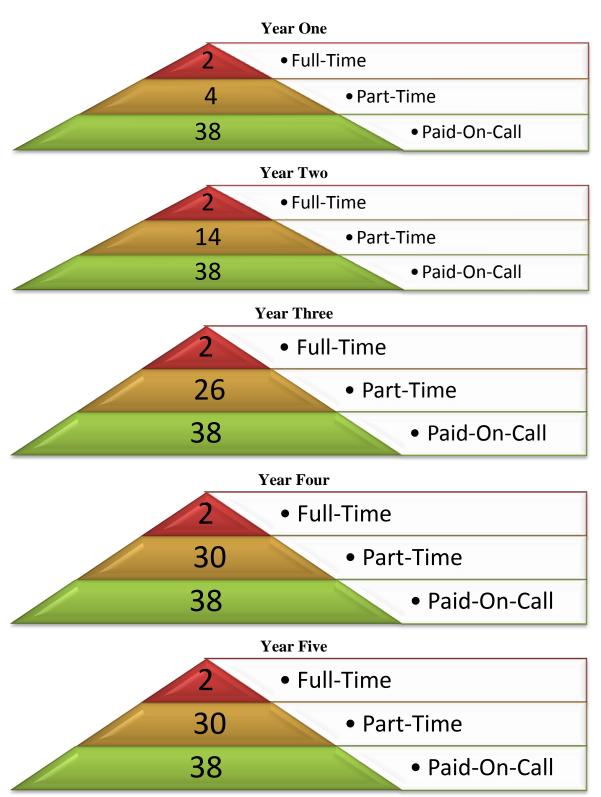


Figure 17 – Option Three Full-Time Staffing Year One

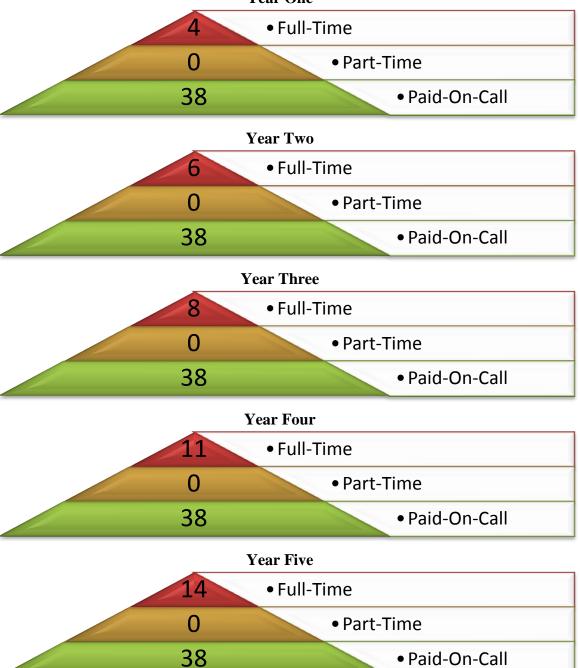
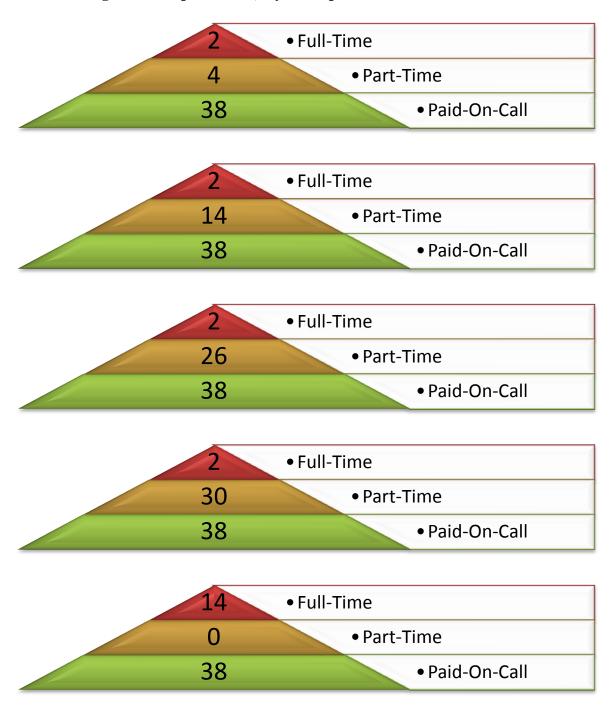


Figure 18 – Option Four, Hybrid Option Full-Time/Part-Time



Annual Operating Plans & Budgets -

Based on the suggested strategic plan, the fire department budget would increase incrementally over a five year period. These plans address the immediate and future needs of shorter response times and guaranteed staffing at different increments.

The following dashboard represents the fire protection model options previously mentioned. The dashboards allow us to evaluate the effectiveness of each option and the associated cost.

Figure 19 represents *Option One* the current fire protection model and applies the same efforts to maintain this model that was represented in the 2014 proposed budget. This option does not advance the department or improve the level of service provided to the citizens. It is an attempt to prolong the current model with the associated risks.

Figure 19 – Continue with Current Fire Protection Model

Amherst Fire Dept.	Proposed	Year 1	Year 2	Year 3	Year 4	Year 5
Operating Budget		Increase Call Pay	N/A	N/A	N/A	N/A
Fire Chief	\$ 85,565.00					
Deputy Fire Chief	\$ 68,657.00					
Part-Time Lieut.	\$ 18,366.00					
Part-Time Salaries	\$ 18,366.00					
Call Pay	\$ 58,304.00	\$ 75,000.00	\$ 75,000.00			
Operational Costs	\$ 255,850.00					
Budget Adjustments	\$ 16,998.00					
One-Time Gear Expens	-					
Pre-Employment	\$ 2,200.00					
Total	\$ 524,306.00	\$ 599,306.00	\$ 674,306.00			

Option One does not address the current deficiencies or risk to the community.

Figure 20 represents Option Two: utilization of part-time staffing to provide immediate response to the community phasing in 24/7 immediate response and coverage over a five year period.

Figure 20 –Part-Time Staffing

Amherst Fire Dept.		Proposed		Year 1		Year 2		Year 3		Year 4	Year 5		
Operating Budget			Incre	ease Call Pay	Add 10 PTE			Add 12 PTE	-	Add 4 PTE	N/A		
			Add 3 PTE			Weekend		Week Night	F	ill the Gap			
			Wee	kday Response		Response		Response	24,	/7 Coverage			
Fire Chief	\$	85,565.00											
Deputy Fire Chief	\$	68,657.00											
Part-Time Lieut.	\$	18,366.00											
Part-Time Salaries	\$	18,366.00	\$	65,000.00	\$	150,000.00	\$	195,000.00	\$	65,000.00			
Call Pay	\$	58,304.00	\$	75,000.00	\$	75,000.00							
Operational Costs	\$	255,850.00											
Budget Adjustments	\$	16,998.00											
One-Time Gear Expens		-	\$	9,000.00	\$	30,000.00	\$	36,000.00	\$	12,000.00			
Pre-Employment	\$	2,200.00	\$	1,050.00	\$	3,500.00	\$	4,200.00	\$	1,400.00			
Total	\$	524,306.00	\$	674,356.00	\$	922,806.00	\$	1,124,506.00	\$ 1	,162,706.00			

This part-time option minimizes the cost while creating concerns with juggling as many as 30 part-time employees to avoid paying benefits. A high turn-over rate is likely creating issues with teamwork and continuity.

Figure 21 represents *Option Three* adding full-time personnel phased in over a five year period. This is the recommended option as it addresses the needs of the community, providing 24/7 immediate response. Full-time personnel will provide the continuity, team work and commitment needed to provide the high level of service that will be expected from a minimum size work force.

Figure 21 – Full-Time Staffing Recommended Option

Amherst Fire Dept.	P	roposed		Year 1		Year 2		Year 3		Year 4		Year 5	
Operating Budget			Increase Call Pay Add 2 FTE			Add 2 FTE	Add 2 FTE Week Night			Add 3 FTE	Add 3 FTE Transition to		
						Weekend				Week Night			
				Weekday Response		Response		Response		Response	4 shifts of 3		
Fire Chief	\$	85,565.00									24	1/7 Coverage	
Deputy Fire Chief	\$	68,657.00											
Part-Time Lieut.	\$	18,366.00											
Full-Time Salaries	\$	18,366.00	\$	150,000.00	\$	150,000.00	\$	150,000.00	\$	225,000.00	\$	225,000.00	
Call Pay	\$	58,304.00	\$	75,000.00	\$	75,000.00							
Operational Costs	\$:	255,850.00											
Budget Adjustments	\$	16,998.00											
One-Time Gear Expens		-	\$	6,000.00	\$	6,000.00	\$	6,000.00	\$	9,000.00	\$	9,000.00	
Pre-Employment	\$	2,200.00	\$	2,000.00	\$	2,000.00	\$	2,000.00	\$	3,000.00	\$	3,000.00	
Total	Ś.	524,306.00	Ś	757,306.00	Ś	982,306.00	Ś	1,132,306.00	Ś	1,361,306.00	Ś	1,586,306.0	

Full-time staffing is the recommended option and a higher cost option due to the benefits cost of full-time employees. Federal grants "Staffing for Adequate Fire and Emergency Response" (SAFER) are available to assist with cost associated with increasing to a full-time 24/7 service and compliance with NFPA staffing and response time standards. These highly competitive grants provide funding over a five year period covering 90% of the cost the first year diminishing to 10% on the fifth year. The application period for these grants typically open August 1st of each year and require approval from the governing body.

The final option presented in this plan is *Option Four*, a hybrid option utilizing part-time staff the first four years and transitioning to full-time staff and picking up the cost of benefits on the fifth year. The option minimizes the tax impact over the first four years, includes one-time cost to purchase protective clothing, recruit personnel and conduct pre-employment requirements such as pre-employment physicals, background checks and drug screening.

Figure 22 – Hybrid Option Part-time/Full-time

Amherst Fire Dept.		Proposed		Year 1	Year 2		Year 3			Year 4	Year 5		
Operating Budget			Incre	ease Call Pay		Add 10 PTE		Add 12 PTE		Add 4 PTE	Transition to		
			Add 3 PTE		Weekend			Week Night	F	ill the Gap	Full-Time		
				Weekday Response		Response		Response	24,	/7 Coverage	4 shifts of 3		
Fire Chief	\$	85,565.00											
Deputy Fire Chief	\$	68,657.00											
Part-Time Lieut.	\$	18,366.00											
PT/FT Salaries	\$	18,366.00	\$	65,000.00	\$	150,000.00	\$	195,000.00	\$	65,000.00	\$	425,000.00	
Call Pay	\$	58,304.00	\$	75,000.00	\$	75,000.00							
Operational Costs	\$	255,850.00											
Budget Adjustments	\$	16,998.00											
One-Time Gear Expens		-	\$	9,000.00	\$	30,000.00	\$	36,000.00	\$	12,000.00			
Pre-Employment	\$	2,200.00	\$	1,050.00	\$	3,500.00	\$	4,200.00	\$	1,400.00	\$	12,000.00	
Total	Ś	524,306.00	\$	674,356.00	\$	922,806.00	Ś	1,124,506.00	Š 1	,162,706.00	Ś	1,586,306.°	

The part-time to full-time option has the highest cost due to gear and pre-employment expenses of hiring three to four times the number of personnel. This option also comes with the hardships of juggling thirty part-time employees in addition to forty paid-on-call members.

Supporting Initiatives –

As previously stated, finishing the second floor and timely replacement of fire apparatus are critical to the department success regardless of the fire protection model. Simple stated if firefighters have no place to sleep we cannot provide 24/7 immediate response. If fire apparatus is out of service or breaks down on the way to a call the firefighters cannot do their job.

1. Fire Apparatus Replacement – AFD has actively engaged in the CIP committee process and recommends a plan be put in place to replace aging apparatus and transition from a 25 year replacement plan to a 20 year plan. NFPA 1901 "Standard for Automotive Fire Apparatus" recommends apparatus greater than 15 years old be put in reserve status. Apparatus greater than 20 years old be replaced due to rust, metal fatigue and lack of significant safety enhancements. Amherst 1988 Engine is a prime example, as it lacks seat-belts that go over the shoulder,

air bags, anti-lock brakes and traction control. The estimated average cost of this plan is \$280,000 per year over the next five years.

- 2. Central Station Second Floor Completion of the second floor will immediately have an impact on emergency response during major storms. Paid-on-call personnel are willing and have stayed at the station in the past. Recruit firefighters attending college are willing to cover the station on a voluntary basis to gain experience and gain college credits. This will also facilitate the future growth of the department if the decision is made to transition to 24/7 immediate coverage or accommodate another department such as EMS. Cost to complete this project is estimated to be \$190,000. This was included in materials provided to the Capital Improvement Committee. It is our belief this project can be completed for less money utilizing grant funds, community outreach fundraising, and volunteer firefighters for labor.
- 3. Increase Firefighter Wages and Compensate for Training The Fire Department supported the efforts of the Board of Selectmen in the 2013-2014 budget process. The proposed budget included the first year of a two-year program to compensate firefighters for time spent training, adjust wages to appropriate levels, and changes in compensation depending on rank and level of responsibility. We strongly recommend these funds be put on a warrant article this year. The additional funds of \$75,000 in FY15 and \$75,000 in FY16 will allow us to compensate firefighters for the thousands of hours they spend each year volunteering their time. This will increase our retention of firefighters and help us to recruit new firefighters by compensating them for their time.

Similar to what was presented to the Capital Improvement Committee, Figure 23 is a combination of the five year fire apparatus replacement plan and a five year second floor / station renovations plan. This Figure represents the intent of this short term strategic plan rather than a 20 year replacement plan.

Figure 23 – 5 Year Capital Improvement plan.

Amherst Fire Dept.	Current		Year 1	Year 2		Year 3		Year 4		Ye	ar 5
Capital Improvement Budget					Se	Second floor					
							complete				
Apparatus Replacem	\$	200,000.00	\$ 250,000.00	\$	250,000.00	\$	300,000.00	\$	300,000.00	\$	300,000.00
Second Floor	\$	-	\$ 60,000.00	\$	60,000.00	\$	60,000.00	\$	75,000.00	\$	100,000.00
Total	\$	200,000.00	\$ 310,000.00	\$	310,000.00	\$	360,000.00	\$	375,000.00	\$	400,000.00

Conclusion -

This plan provides a tremendous amount of material that has been gathered over the past three years. The concept of planning for the future is relatively new to Amherst, but the fact we have a very dedicated and knowledgeable staff is to our benefit. Each and every employee is always looking out for the best interest of the community and to providing the most efficient and effective services possible.

Ultimately the level of fire protection provided to the community is the choice of the governing body and the community. This strategic plan is a recommendation based on historical data, comparison data, best practices, and national standards. I commend the Board of Selectmen for challenging the department heads think strategically and present these plans to help shape the future of Amherst. All too often, the level of fire protection is ignored until something tragic happens. During our interaction with the citizens of Amherst, most are shocked to find out the department is primarily volunteer. A high percentage of our citizens moved here from other places and have assumed the fire protection model is full time with immediate response. The citizens of Amherst deserve to know the level of service they are funding, how the protection compares to similarly sized communities, and whether we meet national standards. They also deserve the opportunity to decide what level of protection is acceptable or the level of risk they are willing to take.

Thank you for your time and consideration. I hope you found the information in this plan informative. If there are any question feel free to contact me.

References

- Cook, Andrea (2008 April 28) Fire Departments struggle to maintain volunteer force.

 Rapid City Journal, Retrieved August 21, 2013 from

 http://rapidcityjournal.com/news/local/top-stories/fire-departments-struggle-tomaintain-volunteer-force/image_3b812432-7db1-5220-bf82-8aacd6937150.html
- National Fire Protection Association. (2004). Standard for the organization and deployment of fire suppression, emergency medical operations and special operations to the public by career departments (NFPA 1710). Quincy, MA: Author.
- National Fire Protection Association. (2005). *Emergency services incident management* system (NFPA 1561). Quincy, MA: Author.
- National Fire Protection Association. (2007). Fire department occupational safety and health program (NFPA 1500). Quincy, MA: Author.
- Ronayne, Kathleen (2013 August 21) Small town fire departments struggle to find volunteers. *Concord Monitor*, Retrieved August 21, 2013

 http://www.concordmonitor.com/home/8024486-95/small-town-fire-departments-struggling-to-find-volunteers
- Shepherd, Michael (2011 May 11) Area volunteer fire department now older and smaller.

 The Morning Sentinel, Retrieved August 21, 2013 from

http://www.onlinesentinel.com/news/area-volunteer-fire-departments-nowolder-and-smaller_2011-05-21.html?pagenum=full