

FINAL REPORT

**FIRE AND EMERGENCY
MEDICAL SERVICES**

ORGANIZATIONAL ANALYSIS

AMHERST, NH

DECEMBER 2014

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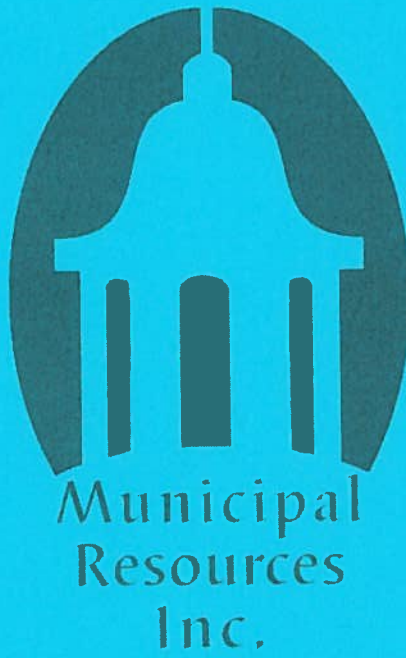
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REPORT





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EXECUTIVE SUMMARY

The Town of Amherst, New Hampshire, covers 34.2 square miles (.5 square miles consists of inland waterways) and has a base, year round population of 11, 201 (2010 census). Amherst is a growing, affluent residential community that also boasts a strong retail presence. The Town commissioned this study after a weekday, daytime, propane leak at an apartment complex which resulted in the initial response of a Milford Fire Department Engine as on-call staff was not available. This concern was advanced by public statements by the former Fire Chief noting a lack of coverage and a need for a career firefighting force.

The Town is served by a combination fire service organization, composed of two full-time personnel, including the Chief of the Department, a Deputy Fire Chief and a part-time Fire Lieutenant. The on-call component of the organization consists of a healthy compliment of approximately 40 trained firefighters and fire officers. Based on our collective experience, the on-call aspect of the Amherst Fire Department provides an exceptional level of service and value to the community. The study team does not feel that a 24/7 initial response career force is required based on the vibrant nature of the existing on-call department. Preserving this service delivery methodology should be a primary goal of the community.

As is common across the United States, the availability of on-call personnel for weekday, daytime response is often limited. This scarcity of human resources is driven by the following economic and generational factors:

- A reduction in leisure time
- The need to maintain multiple jobs
- The change in values relative to the value of public service
- Increasing training requirements
- The cost of housing in many affluent communities

Although effort should be placed upon the recruitment and retention of on-call personnel, it is not realistic to add dozens of on-call personnel based upon the affluent nature of the community. It would be nearly impossible to find a large number of individuals with weekday, daytime availability, who wish to pursue this type of part-time employment.

The current fire service staffing pattern consists of the Fire Chief and Deputy Fire Chief working an administrative five day schedule. A Fire Lieutenant working part-time and on-call personnel regularly train and provide emergency response on an as needed basis. Prior to the start of this study, the Fire Chief resigned and that position has been left vacant pending the findings of this study. In the interim, Deputy Fire Chief Matt Conley has served in the position of Acting Fire Chief.

Emergency Medical Services (EMS) are provided to the community by a combination EMS organization which is separate from the Amherst Fire Department. This service is a third Public Safety Department (Police, EMS, Fire) and operates independently from both the Amherst Fire and Police Departments. Amherst EMS also provides coverage to Mont Vernon, a practice which the study team believes should continue.

As this study commenced, the EMS organization was composed of a full-time EMS Director, several per diem personnel and a decreasing number of volunteers. Based on a limited community outreach program, increasing training requirements and limited on-call availability, this agency has evolved into a hybrid career organization staffed by per diem personnel from outside the area. This model creates several challenges which are explored in the body of this report. Subsequent to our first field visit, the EMS Director resigned and that position has been left vacant pending the findings of this study.

The budgeted staffing pattern for the Amherst EMS consists of an EMS Director working an administrative five day schedule. Additionally, three per diem personnel per shift. These personnel are certified as Emergency Medical Technicians (EMTs), Intermediate EMTs, Advanced EMTs, or Paramedics, and provide coverage twenty-four hours per day, seven days per week. These three personnel staff one ambulance and an emergency first response unit as primary coverage to the Town of Amherst. In addition, one of the three on-duty staff members can assist in staffing a second ambulance or providing additional patient care in critical situations.

Although several fire and EMS members provide a dual role in Amherst or other communities, a distinct cultural separation and rivalry can exist between the two organizations. Although this rivalry primarily exists between department leaders, an us vs. them orientation has been adopted by some employees. Interviews revealed that although cooperation has varied based on the relationships between the leaders of these organizations, an operational separation in terms of mission and values remains strong. Despite this separation, emergency operations are well regarded by the public, who feel both Departments provide a high quality public safety service. In fact, based on the public meeting that we conducted, six clear themes emerged:

- The community as a whole supports both agencies
- The public does not want to see the level of service diminished
- An apprehension exists relative to the immediate daytime response of fire resources
- A concern exists relative to full integration of these services
- The community is conservative and frugal, and seeks to enhance value through efficiency
- An unique opportunity has developed to realign fire and EMS services given that the top leadership position in both agencies has been held vacant awaiting the findings of this report

As the study progressed, five concerns emerged:

- The reduction in daytime on-call availability reduces the ability to provide adequate emergency response
- Based on limited volunteer staff it is often difficult to staff a second ambulance, resulting in requests for mutual aid
- EMS staff have varying levels of interest in providing fire staffing
- Culturally the organizations have distinct and separate identities
- Many per diem personnel view shifts in Amherst as a job and lack a sense of ownership in the community

This report will concentrate on the following six focus areas. These areas can serve as a foundation for action and are discussed more fully later in the body of this report:

- I. Current Structure and Operations
- II. Alternative Service Delivery Methods
- III. Comparative Analysis
- IV. Focus Groups
- V. Grants
- VI. Recommended Strategy

The real issue facing Amherst is to determine an acceptable level of risk and then define an appropriate level of service for the community. Planned growth of the public safety capability is essential to provide a consistent service level to the community.

TOP EIGHT CHALLENGES FOR THE TOWN OF AMHERST

- 1. *Deciding upon an acceptable level of risk for the community as it pertains to fire, rescue and emergency medical services***
- 2. *Recruiting a well experienced transitional leader capable of integrating and leading both fire and EMS services***
- 3. *Developing a collaborative approach to the delivery of life safety services***
- 4. *Recognizing the Police Department as a partner in the response to emergency medical incidents***
- 5. *Developing a shared sense of vision between agencies***
- 6. *Offering, but not forcing, the cross-training of fire and EMS personnel***
- 7. *Breaking down cultural barriers and roadblocks***
- 8. *Developing interest and recruiting EMS on-call staff within the Town of Amherst***

RECOMMENDED STRATEGY

The study team identified six alternative delivery options. These alternatives ranged from the status quo, to the privatization of EMS services. After careful consideration of these alternatives, the study team unanimously recommends that Fire and EMS services be combined, co-located, and structured as a separate division of the fire/rescue department. Developing a separate EMS operational division within the Amherst Fire Department allows the Fire Chief to provide oversight and supervision. Based on the presence of a single leader, the organizations will grow closer over time; this will allow employees to develop of a sense of common vision and mission. A leader well experienced in both fire and EMS operations and supervision should be recruited to manage this operational transition.

In addition, many first responders join to provide a singular type of emergency response service. Not all firefighters want to provide EMS and not all EMS providers want to enter a burning building. Often these unique resources are wasted, as communities require cross training and full integration. The development of an EMS division will

allow up to two providers to function as EMS personnel. Although the Town should encourage and support cross training of all personnel, this should not be a requirement.

Currently, three EMS staff members are on duty at all times and the EMS Director's position remains vacant. The on duty EMS staffing pattern should be restructured to two personnel at all times. At least one of the two EMS providers should be a paramedic. The EMS Director's salary and the reduction in per diem staffing should be redeployed. First, the on-call members of the Fire Department should be offered the opportunity to fill two weekday, daytime per diem fire shifts. Preference should be given to members that are EMTs, and these personnel should have the shared responsibility of supporting EMS personnel at critical calls, providing lift assists and staffing the second ambulance.

The purpose of these two weekday per diem fire shifts is to provide a rapid initial response and support the existing on-call Department when resources are least available. The personnel that fill these shifts would be on-duty at the station and ready to respond to either fire or EMS incidents. In the event that Amherst Fire Department members cannot fill these per diem shifts, these shifts should be offered on a per diem basis to qualified firefighter/EMTs from other communities. In the event that these shifts cannot be filled using per diem personnel in either the Fire or EMS Division, the community should hire a firefighter/paramedic to ensure that all four positions are staffed during weekday/daytime hours.

This combination of options has the potential to accomplish the following:

- Integrate the fire and EMS Departments into a single agency
- Preserve the viability of the on-call nature of the Amherst Fire Department
- Strengthen the ability to provide daytime fire response
- Provide daytime staffing for the second ambulance
- Provide the opportunity to work shifts
- Preserve the value of singularly focused EMS providers
- Enhance the level of service offered to the community

GLOSSARY OF TERMS

Accountability System: A system used on the fireground or incident scene to methodically track the location of personnel operating at that location.

ALS (Advanced Life Support): Refers to pre-hospital interventions that can be brought into the field by paramedics. Typically, this service level includes the ability to bring much of the emergency room capability to the patient. Paramedics can administer intravenous fluids, manage a patient's airway, provide drug therapy, utilize the full capabilities of a 12 lead cardiac monitor, and provide a vital communication link to the medical control physician, who can provide specific medical direction based on the situation.

BLS (Basic Life Support): Refers to pre-hospital interventions that can be brought into the field by basic level emergency medical technicians (EMTs). This would include semi-automatic cardiac defibrillation, oxygen administration, patient assessment, and stabilization.

CAAS: Commission on the Accreditation of Ambulance Services.

Calendar Year: The twelve-month period from January to December within a given year.

Capital Project: A project with a cost that exceeds \$10,000 and the asset being procured has a life span of at least five years.

Cross Staffing: A fire service practice of assigning personnel to multiple emergency response vehicles. As an example, these personnel may staff both an ambulance and an engine. They would respond to whichever call comes in first; if it was a fire call, the engine would respond and the ambulance would then be placed out of service until the fire call was concluded, although a common practice service is provided on a first come first serve basis as a risk management strategy.

EMD (Emergency Medical Dispatch): A systematic program of classify emergency medical calls by severity and providing callers with pre arrival instruction.

EMS (Emergency Medical Services): Transport based emergency medical services that often include the ability to deliver advanced life support.

EMS Revenue: The income generated primarily from insurance companies for providing transport based emergency medical services to the community.

FireAct Grant: The annual competitive grant program administered by the Federal Emergency Management Agency. This program provides funding for emergency response vehicles, safety equipment, training, minor fire station renovations, and the development of regional activities.

Fiscal Year (FY): The 12-month period from July to June within a given year. Most municipal budgets are based upon a fiscal year rather than a calendar year.

ICMA: The International City/County Management Association.

Incident: An event requiring the response of fire service resources.

Incident Volume: The total of fire suppression and emergency medical response demand for a given period of time.

Industrial/residential mix: The percentage of industrial or commercial property compared to the number of residential dwellings in a community.

IOD (Injured on Duty): This is a status provided to firefighters injured in the line of duty.

ISO (Insurance Services Office): This is a fire protection rating number ranging from one to ten that provides a perspective on the fire protection capabilities of an organization. One is the best possible score while ten indicates no substantive protection exists.

Inspection: A non-emergency code compliance service. An example of this activity would be conducting fire drills, securing keys in a key box, or issuing permits for hazardous operations.

Long-term Absence: An absence from a scheduled shift for a period of more than two weeks.

Medicare Rate: The rate that Medicare will pay for emergency medical interventions and transportation. This is typically well below the market rate and has become a standard foundation to base ambulance service rates upon.

NFPA (National Fire Protection Association): An international organization that develops professional consensus based standards for the fire service. This organization is based in Quincy, Massachusetts.

NFPA 1500: NFPA Standard on Fire Department Occupational Safety and Health Programs.

NFPA 1710: NFPA Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

NFIRS: National Fire Incident Reporting System.

Officer: First line supervisor (Lieutenant) or shift Commander (Captain).

OSHA: Occupational Safety and Health Administration.

Quint: A piece of fire apparatus that is outfitted was a pumper but also has a junior aerial ladder, typically 75-85 feet. This concept allows the rapid deployment of a unit that can quickly effect rescue and produce the best possible firefighter safety.

Response Time: The time elapsed from when an emergency call is received until fire emergency responders arrive on the scene of an event. Typically, this includes both dispatch process and turnout time.

SAFER: The Federal Staffing for Adequate Fire and Emergency Response grant program.

Shift Float: The difference between the number of personnel assigned to a work group, less the number of personnel required to maintain the minimum operational shift strength selected.

Target Hazard: A structure that based on occupancy, construction, or location creates a higher than average fire protection risk to the community. Examples of target hazards are nursing homes, hospitals, corrections facilities, large commercial complexes, industrial facilities, and facilities that utilize hazardous materials.

Technical Rescue: Special rescue operations requiring unique training and equipment. Examples of technical rescue operations are trench and building collapse.

Turnout Time: The time from when the fire department is alerted to respond to an incident until the responding unit leaves the fire facility. Typically, this is approximately 90 seconds after personnel arrive at the station.

Two In/Two Out: The OSHA rule (1910.134) relative to appropriate respiratory protection and commencing safe operations on the fireground.

PURPOSE, SCOPE, AND METHODOLOGY

MRI (Municipal Resources, Inc.) was engaged by the Town of Amherst to review the operation of the Fire Department and the EMS Department, to determine how they compare to contemporary public safety practices, and to assess the need for both staff and organization redesign. We have attempted to produce a report containing recommendations that will assist the Departments and the Town to set a clear course of action for future improvement.

OUR OBJECTIVES

- To help municipalities and agencies obtain maximum value for limited tax dollars;
- To raise public awareness of the value and professionalism of their municipal resources; and
- To help local leaders develop and execute plans that best meet their community's needs, given available resources.

SCOPE OF WORK

The work contemplated herein is designed to assist the Fire Department and EMS Department in their desire to provide the highest level of service, according to National Standards, to all its residents, balanced with reasonable, effective costs for personnel, equipment, and related benefits. Accordingly, this study has reviewed and addressed the following organizational issues:

MRI will review, document, and evaluate the manner in which Fire/Rescue and EMS services are currently provided within the Town, and assess and evaluate the adequacy of current organizational structures and operational approaches to meet current service levels. We will make recommendations for near term improvements that may improve service levels or enhance efficiency, but our primary focus will be developing an understanding of and exploring models and alternative structures that are appropriately suited to the long- term needs and financial capacity of the community for these basic and critical services.

We will address the current Fire/Rescue and EMS departments independently, as well as in the context of an integrated system, and explore and evaluate potential modifications to the delivery systems to optimize response times and services to the Town. We will consider whether the current staffing approaches are appropriate for either the current or projected future demands, including whether or not the departments might be consolidated or more effectively integrated, and whether they should continue as mixed staffing organizations, switch to career operations, or be pursued on a contract or shared service basis.

All recommendations for improvements will be based on ISO (Insurance Service Office), NFPA (National Fire Protection Association), CFAI (Commission on Fire Accreditation International), CAAS (Commission on Accreditation of Ambulance Services), national accepted standards, and administrative regulations as they may apply.

During the course of our work, emphasis will be placed on the following:

1. Identification and evaluation of options for Fire/Rescue and EMS services within the Town, considering call volume, coverage area, response time, outcomes, staffing levels and skills, and compare options to alternative existing models and appropriate industry benchmarks.
2. Review mutual aid agreements, if any.
3. Identification and listing of any current organizational or operational deficiencies within the departments, as well as opportunities to improve efficiency or enhance service levels.
4. Provide a detailed cost analysis for the Town to:
 - a. Remain as is
 - b. Consolidate Fire/Rescue and EMS, maintaining a mix of career, part-time, and volunteer staffing
 - c. Consolidate EMS and Fire into one career department
 - d. Work with other neighboring towns as a regional department or through inter-municipal agreements
 - e. Other possible scenarios
5. Outline of the procedures required to pursue the various alternative approaches including legal requirements, division of assets, debt service, equipment, personnel, timeline, and any other pertinent factors to be considered.
6. Define the staffing, equipment, building needs, communications, and associated costs for each alternative model.
7. Identify any grants that would be available for facilities, equipment, apparatus, and/or personnel.
8. MRI will conduct a full day of focus groups that will consist of one session for EMS workers (that sign-up); one for firefighters; and one for citizens.

In order to conduct the study, MRI will interview the following officials, employees, and individuals of the Town to gain an understanding of the issues facing the departments and the municipality, and to better understand the practices and procedures of the departments used to provide services to the community:

- ✓ Board of Selectmen
- ✓ Town Administrator
- ✓ Fire Chief
- ✓ Director of EMS
- ✓ Police Chief
- ✓ Emergency Management Director
- ✓ Other local officials, employees, representatives of the business community, and members of the public, as necessary.

MRI will review the following documents and data:

- ✓ Municipal budget, audit, and financial reports and documents.
- ✓ Fire Department policies, plans, response strategies, training programs and requirements, call volume analysis, and standard operating guidelines.
- ✓ Emergency medical policies, plans, response strategies, training programs and requirements, call volume analysis, and standard operating guidelines.
- ✓ Information from the Communications Center(s) for both departments.

As part of our effort to assess the demands on the service delivery system and evaluate effective utilization of departmental resources, we will work with each department to identify the level and typical magnitude of risk managed by the departments and assess levels of services required to effectively respond. We will prepare an area impact assessment map using GIS to help the community understand and consider the spatial relationships between existing assets, current and future demands, response times and capabilities, all in the context of local and regional resources.

METHODOLOGY

There were fifteen major work elements involved in this review. These are:

1. A review of compiled data regarding key administrative and operational aspects of the Fire and EMS Departments.

2. A review of standard operational procedures (SOPs) of the Fire and EMS Departments.
3. An analysis of current budgets and the overall Fire and EMS fiscal footprint.
4. A review of emergency response workload, time distribution, and response times.
5. A thorough tour of the community to gain a sense of the physical environment, the primary fire and life safety risk exposures, and the location of population and commercial centers in relation to existing facilities.
6. A target hazard analysis based on the unique tourist and seasonal aspects present within the Town of Amherst.
7. Developed and delivered three focus groups including staff members of both Fire and EMS Departments and members of the public.
8. Identified mutual aid partners and reviewed operational practices relative to the use of mutual aid.
9. Conducted interviews and or discussions with key individuals including the Board of Selectmen, Town Administrator, Police Chief, Acting Fire Chief, EMS Director, and previous Fire Chiefs.
10. Discussed service delivery options with EMS providers and fire personnel from surrounding communities.
11. Conducted a literature review and Internet based research.
12. Identification of service gaps and response patterns within both departments.
13. A review of e-mail feedback from public safety responders and members of the community.
14. A review of Fire and EMS facilities and equipment.
15. Development of a summary benchmarking analysis using national norms and practices of four other New Hampshire communities. This analysis compared thirty-six data points.

To address the scope of this project, members of the study team held an initial orientation meeting with Town officials. In partnership with these officials, we gathered a variety of statistical information and data on the Department. In addition, MRI consultants performed several days of on-site work, interviews, and observations in Amherst.

We investigated areas such as the command structure, organizational collaboration, chain of command, span of control, recruitment, selection and training, budgeting, staff recall, service demand, the deployment of personnel, the communications and data processing functions, internal discipline, working relationships with other persons and agencies, responsiveness, internal regulations, facilities and equipment, and compliance with various state and federal regulations.

Following the on-site visits, the data collected and observations made were subjected to analysis by the project team, both individually and collectively. The information was then compared with contemporary fire service and EMS practices, in order to formulate the recommendations contained in this report.

We would be remiss in not thanking the people of the Town of Amherst who demonstrated their concern in person, by telephone, and e-mail. In addition, this process revealed the genuine desire to provide an exceptional service to the community. Specifically, we would like to acknowledge and thank the following individuals who assisted us by gathering data and participating in various aspects of the study:

- James O'Mara, Town Administrator
- Police Chief Mark Reams
- Acting Fire Chief Matt Conley

THE STUDY TEAM

The following MRI personnel participated in the study:

Project Manager

Brian P. Duggan now commands the Fire Department in the City of Northampton, Massachusetts, where he has instituted substantial changes to modernize the entire department including equipment, facilities, personnel, training and organizational structure. He formerly commanded the Northborough, Massachusetts Fire Department, and has significant experience with the Massachusetts Department of Fire Services where he held several key positions. He also developed and directed the Graduate and Undergraduate Fire Science Programs at Anna Maria College in Paxton, Massachusetts, from 1995 - 2003. Chief Duggan has a Business Management/Fire Science degree from Providence College, and a Masters Degree of Business Administration (MBA) from Nichols College in Dudley, Massachusetts. He is also a graduate of the National Fire Academy's Executive Fire Officer Program, and is one of only a few fire service professionals to be designated as a Chief Fire Officer by the Commission on Fire Accreditation International. Chief Duggan also leads the Massachusetts fire service through his affiliation as Chairman of the Fire Chief Association of Massachusetts Technology Committee and as a Regional Director on the Massachusetts State Fire Mobilization Committee. In addition, he has authored several publications inclusive of writing Section 7, Chapter 3, "*Fire Department Information Systems*" in the Nineteenth Edition of the National Fire Protection Association's Fire Protection Handbook.

MRI Associates

Sue Prentiss is the Manager of Emergency Medical Services (EMS) at Concord Hospital. A nationally registered Paramedic since 1995, Sue has held leadership positions in public safety and healthcare at the national, state, regional, and local levels. Sue first came to NH in 1992 as the Project Director for Dartmouth Medical Schools' federally funded rural health outreach initiative focusing on EMS. Since that time, Sue has served as the Administrator of the Woodsville Rescue Ambulance, the State of NH's Trauma System Coordinator, and Chief of EMS at NH's Department of Safety. Sue has received the 2010 North Country Public Safety Foundation's President's Award, a Meritorious Service Medal from NH's Fire and EMS Committee of Merit in 2010, in 2012 the NH Fire Standards and Training Commission's Academy Award and a Meritorious Service Award from the Concord Fire Department. A resident of West Lebanon, NH since 2004, Sue has been elected to the Lebanon City Council for three consecutive terms representing her neighborhood of Ward One and currently serves in the leadership elected Assistant Mayor in 2014. Her current term expires in 2015. Sue graduated from Saint Michael's College in 1986 with a Bachelor's Degree in Sociology and completed her Master's in Public Administration in September 2013 at the

University of Phoenix. Sue attended the July 2014 Senior Executives in State and Local Government program at Harvard University's Kennedy School of Government as well as graduated from the Leadership NH program in 2014. Sue has served on the Executive Committee of the National Association of State EMS Officials (NASEMSO) and is currently an alternate on the National Fire Protection Association's 1719 Technical Committee. As part of her duties at Concord Hospital's Emergency Department, Sue manages the contract for the Infield Care Center and Grandstand Aid at the NH Motor Speedway.

Robert C. Craig most recently served as Interim Director of Fire and Emergency Medical Services for the Town of Acton, Massachusetts. Immediately prior to this, he had served the Town of Acton during his entire career of almost 44 years of service as a member of the Acton Fire Department, which included his last 22 years as Fire Chief. The Town of Acton Fire Department is staffed by 42 career personnel, housed in three Fire/EMS stations and provides full fire, rescue and emergency services including EMS for approximately 23,000 residents. During his career, Bob administered an annual fire department budget of approximately 3 million dollars. Together with the Acton Police Chief, he also managed a joint Public Safety Dispatch Center. Bob holds an Associate Degree in Fire Science and Technology as well as a Bachelor of Arts Degree and is a graduate of the Executive Fire Officer Program of the National Fire Academy. He is a member of the International Association of Fire Chiefs; the New England Association of Fire Chiefs; the Fire Chief's Association of Massachusetts and the National Fire Protection Association. Bob has served for over twenty (20) years as a member of the Massachusetts Fire Training Council as one of the representatives of the Fire Chiefs Association of Massachusetts and now continues to serve as appointed by the Governor to represent the Citizens of the Commonwealth. He has attained professional status and recognition as a credentialed Fire Chief in Massachusetts. Bob has a diverse background and expertise in Firefighting, EMS, Dispatch, Fire Prevention and Investigation, Emergency Planning and Operations, Municipal Finance and Government and Labor/Management relations. During his career, he has also participated in the study of and /or implementation of a number of regional programs including Fire Investigation, Dispatch, and EMS to include ALS services. In addition, he has been instrumental with the planning and construction of a public safety facility which included a joint dispatch center and Fire/EMS station construction and renovations. He has also participated in a number of Fire/EMS management studies.

Lee Douchkoff offers more than 30 years of volunteer fire and EMS experience. He currently serves as a Deputy Fire Chief and EMT in the Town of Westhampton, Massachusetts, where he initiated and developed a volunteer rescue squad that has expanded to encompass transport EMS. In addition, Mr. Douchkoff owns his own business that develops and delivers fire, life safety, and emergency skills programs to the disabled. These programs are widely respected and have served as an example of exceptional program design and development for others within Massachusetts. As a

strong advocate for training, Lee has developed the curriculum for several emergency skills training programs. Over the past fourteen years that Lee has served as Deputy Fire Chief, he has developed several programs that have modernized the fire department and improved life safety within the community. Lee has attended the Massachusetts Fire Academy, the National Fire Academy, and is associated with the American Heart Association. Mr. Douchkoff holds certifications as both a nationally registered and Massachusetts Licensed Emergency Medical Technician. He has been recognized for his contribution to the development of emergency medical services and received several save awards from Hampshire County Emergency Medical services. Mr. Douchkoff obtained a Bachelor's degree in Psychology and a Masters of Education in Guidance and Psychological Services from Springfield College in Springfield, Massachusetts.

I. CURRENT ORGANIZATIONAL STRUCTURE AND OPERATIONS

Six factors have propelled the concern relative to adequate and timely fire and emergency medical response forward to form the motivation for this study:

- The Amherst Fire Department was unable to immediately respond to a reported propane leak while an EMS unit was available.
- Former Fire Chief Boynton publically warned the community about this growing response issue and the need for additional resources.
- The separation between fire and EMS personnel can result in a lack of operational efficiency as per diem EMS staff that may be available, are not trained as firefighters and do not staff fire apparatus.
- The Town is concerned that with three paid positions being filled on a 24/7 basis that a needed public safety resource could sit idle.
- The positions of EMS Director and Fire Chief are both currently vacant, providing a unique opportunity to restructure the leadership of fire and EMS services.
- In the past cooperation and relationships between the Fire and EMS Departments have ebbed and flowed based on the personalities and competitive nature of previous leaders. This often resulted in a competition for dominance and power that is truly a leadership issue.

Fire Services

The Town is served by a combination fire service organization, composed of two full-time personnel, including the Chief of the Department, a Deputy Fire Chief, and a part-time Fire Lieutenant. The on-call component of the organization consists of approximately 40 trained firefighters and fire officers working out of two stations. Based on our collective experience, the on-call aspect of the Amherst Fire Department provides an exceptional level of service and value to the community. Preserving this service delivery methodology should be a primary goal of the community.



Figure 1 - Amherst Fire Headquarters (Central Station)



Figure 2 - Amherst Substation (South Station)

The availability of on-call personnel for weekday, daytime response has become increasingly limited. This limited availability has caused concern in the community when mutual aid was requested after several tones resulted in the inability to provide an initial response unit.

The lack of on-call and volunteer personnel is an issue faced by communities across the country. This scarcity of human resources is driven by the following factors:

- A reduction in leisure time
- The need to maintain multiple jobs
- Changing values related to the importance of community service
- Increasing training requirements
- The cost of housing in many affluent communities

Although effort should be placed upon the recruitment and retention of on-call personnel, it is not realistic to add dozens of on-call personnel based upon the affluent nature of the community. It would be nearly impossible to bridge this operational gap solely through a recruitment initiative.

Despite these concerns and the limited daytime availability of on-call personnel for both fire and EMS services, it should be recognized that the Amherst Fire Department is an

exceptional organization that provides a tremendous service to the community. In fact, when compared to other similar agencies, the vitality of the on-call response model is apparent as Amherst has close to double the on call responders when compared to the number of members in peer departments.

The current fire service staffing pattern consists of the Fire Chief and Deputy Fire Chief working an administrative five day schedule, a Fire Lieutenant working part-time, and on-call personnel regularly train and provide emergency response on an as needed basis. This staffing pattern is depicted in the following organizational chart:

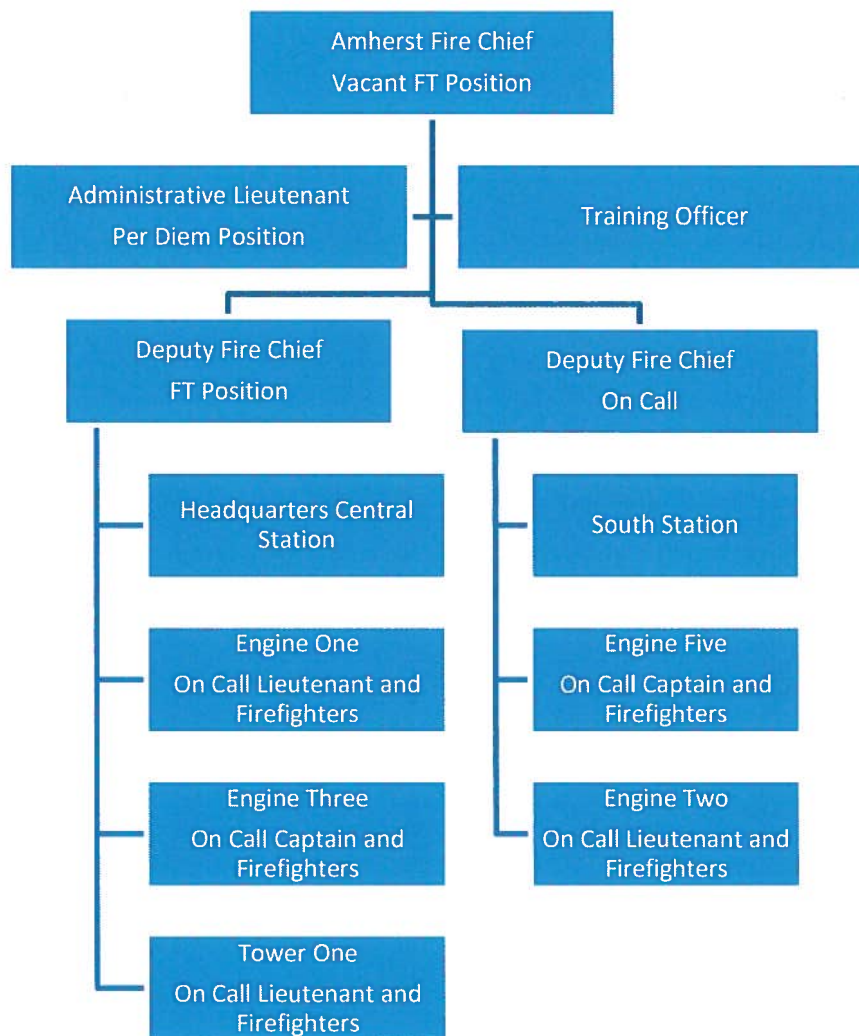


Figure 3 – Amherst Fire Department Current Organizational Chart

Based on the organizational chart above, the Amherst Fire Department has a small full-time and per diem staff that provides fire prevention and administrative services to a healthy and enthusiastic on-call organization.

EMS Services



Figure 3 - Amherst EMS is Co-located with the Amherst Police Department

Emergency Medical Services (EMS) are provided to the community by a hybrid combination EMS organization, which is separate from the fire service. As this study commenced, the EMS organization was composed of a full-time EMS Director, several per diem personnel, and a dwindling number of volunteers.

The budgeted staffing pattern for the Amherst EMS consists of an EMS Director working an administrative five day schedule. Three per diem personnel certified as Emergency Medical Technicians or Paramedics per shift provided coverage 24 hours per day, seven days per week. These three personnel staff one ambulance and an emergency first response unit on an as needed basis. In addition, one of the three on-duty staff members can assist in staffing a second ambulance or providing additional patient care in critical situations.

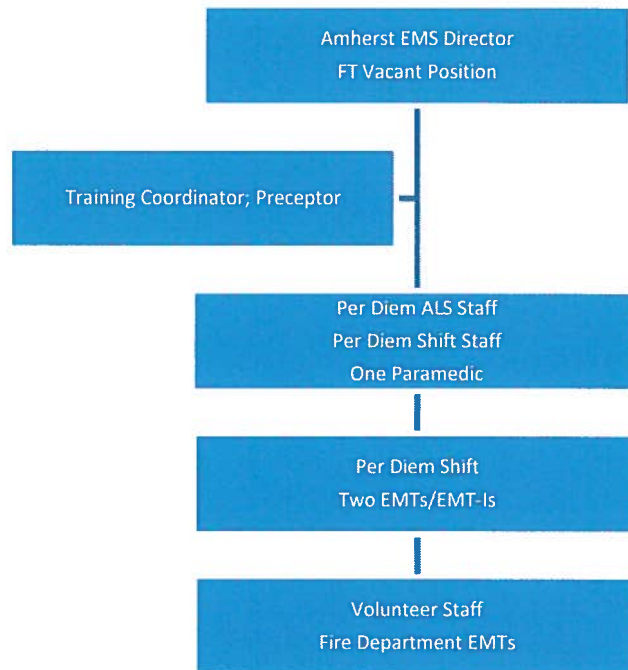


Figure 4 - Amherst EMS Current Organizational Chart

Based on the organizational chart in Figure 3, the Amherst EMS Department operates with a full-time Director and several per diem personnel (three per shift). As many per diem personnel are approaching full-time hours, Amherst EMS has evolved into a paid organization staffed by a majority of health care providers living outside of the community. One theme evident in both interviews and focus groups is that Amherst EMS has become a job rather than a community service. The fact that most EMS staff come from outside of the community partially speaks to the limited pool of qualified personnel, but also highlights a lackluster recruitment and training effort within the community.

The current lack of resident participation contributes to the inability to staff the second ambulance with on-call personnel. The Amherst EMS Academy which currently offers EMS training to generate revenue should refocus its efforts toward the development of a recruitment and training program for Amherst residents. Obviously the goal of this realignment would be to develop a cadre of Amherst residents that could provide on-call EMS response and staff a second ambulance. During our interviews, we were told that this could not be accomplished based on a lack of time, insufficient resources, and residents that are not interested in becoming EMS first responders. The challenge to Amherst EMS is to make this concept work. Secondary to developing a pool of residents as first responders and EMTs, an on-call system should be devised to provide the on duty crew with assistance in lifting patients when required and providing a team approach to critical care situations.

Emergency Medical Dispatch (EMD) is a system that allows a dispatcher to classify the nature of an emergency and provide the caller with pre arrival instruction. EMD utilizes the letters A,B,C,D and E to classify emergency from the least serious (level A) to life threatening (level E). These classifications should be utilized by Amherst to filter the nature of calls and dispatch the correct resource set. As an example a level A call would have only an ambulance respond while level E calls would have the closest first responders, an ambulance, additional crew member and an engine company respond.

RECOMMENDATIONS

- 1.1 The Amherst EMS Academy should be refocused on the recruitment and training of Amherst residents.***
- 1.2 Overtime is currently prohibited in most circumstances for Amherst EMS employees. Although every effort should be made to expand the pool of providers and provide the opportunity for staff to cross train, overtime should be allowed to ensure that all shifts are appropriately covered.***
- 1.3 An on-call EMS system should be developed to provide a third on-call responder to C, and D level emergency medical calls.***
- 1.4 The Amherst Fire Department should be toned and respond a single engine to E level medical emergencies and situations involving significant trauma.***

Although many Fire and EMS members provide a dual role in Amherst or other communities, a distinct cultural separation and rivalry exists between the two organizations. Interviews revealed that although cooperation has varied based on the relationships between the leaders of these organizations, an operational separation in terms of mission and values remains strong. Much of this separation has evolved through the relationships and personalities of previous leaders. In many instances, cooperation has increased while interviews revealed that competition for resources and the desire to create a more powerful organization often stifled the collaboration of these two public safety functions.

As the Fire Chief has transitioned to another agency and the EMS Director has resigned, Amherst has a unique opportunity to evaluate the effectiveness and efficiency of leadership within both agencies. In addition to evaluating the effectiveness of the current approach, having two senior positions vacant provides a natural opportunity for operational consolidation and a potential for cost reallocation.

If a consolidated leadership structure is selected, the study team feels strongly that an experienced leader with significant fire and EMS supervisory experience should be selected. This recruitment should provide the community with an

assessment of internal and external candidates' ability to provide the appropriate leadership considering the amount of change and organizational transition facing these two Departments.

- 1.5 *A single Fire/EMS leader should be selected for the position of Fire Chief. It is essential that this person be a transitional leader and well versed in both Fire and EMS operations.***

ORGANIZATIONAL CHALLENGES

The organizational challenges experienced by Amherst Fire and Amherst EMS are not unique, and in many ways, these organizations have evolved separately based on the emerging needs of the Town of Amherst. However, as a community grows, we often find that organizational separation, rivalry, and competitive cultures cloud the ability to provide effective and efficient service to the community. Many of the operational challenges outlined in this report are symptomatic of operational capability issues confronting growing communities across the nation. It is not uncommon for fire and EMS to develop as separate agencies. In many cases, a rescue squad is formed by personnel who do not want to fight fires. This strategy often preserves the ability for a community to provide fire services utilizing primarily on-call staff.

Amherst has grown to the point that a strategy that balances the value of on-call fire services and high quality rapid response is essential.

Fire Service Challenges

- A reduction in volunteerism
- Elongated response times based on on-call structure
- Many new members have a low base of experience
- Retention of on-call personnel
- A shift in generational values relating to community service
- Increased training requirements
- Higher career expectations in terms of the number of hours dedicated to a job
- Changing family needs
- The changing demographics of the community
- Limited recruitment and retention support
- Sluggish replacement of capital assets
- A culture that has supported the us (fire) vs. them (EMS) mentality

EMS Challenges

- A lack of local personnel certified to provide patient care

- A poor recruitment effort
- A lack of community outreach
- Escalating training requirements
- Employee retention issues and changing values relating to community service
- Unfunded mandates
- Changing health care environment – decreasing reimbursement for services
- Threatened by private EMS
- The inability to field multiple crews
- The orientation toward employment
- A lack of community ownership by health care providers
- A culture that has supported the us (EMS) vs. them (fire) mentality

ORGANIZATIONAL WORKLOAD

The following charts provide an analysis of the emergency response workload experienced within the Town of Amherst. These figures provide a perspective relative to the organizational ability to provide emergency response services to the community considering the current deployment patterns.

Emergency Response Volume Analysis (Monday to Friday)

<i>Year</i>	<i>Monday – Friday Fire Responses</i>	<i>Monday – Friday EMS Responses</i>	<i>Total Monday – Friday Emergency Response Volume</i>	<i>Average Calls per day</i>
2012	216	508	724	1.98
2013	214	521	735	2.01

<i>Year</i>	<i>Monday – Friday Fire Responses</i>	<i>7AM- 6PM Monday - Friday</i>	<i>6PM – 7AM Monday - Friday</i>	<i>Day/Night Percentage</i>
2012	216	137	79	64/36
2013	214	149	65	70/30

<i>Year</i>	<i>Monday – Friday EMS Responses</i>	<i>7AM- 6PM Monday - Friday</i>	<i>6PM – 7AM Monday - Friday</i>	<i>Day/Night Percentage</i>
2012	508	318	190	63/37
2013	521	342	179	66/34

<i>Year</i>	<i>Monday – Friday Daytime Fire Responses</i>	<i>Monday – Friday Daytime EMS Responses</i>	<i>Total Daytime Emergency Response Volume</i>	<i>Average Calls per day Daytime Only</i>
2012	137	318	455	1.25
2013	149	342	491	1.35

<i>Year</i>	<i>Monday – Friday Night Fire Responses</i>	<i>Monday – Friday Night EMS Responses</i>	<i>Total Night Emergency Response Volume</i>	<i>Average Calls per day Nighttime Only</i>
2012	79	190	269	.74
2013	65	179	244	.69

Emergency Response Volume Analysis (Weekends)

<i>Year</i>	<i>Weekend Fire Responses</i>	<i>Weekend EMS Responses</i>	<i>Total Weekend Emergency Response Volume</i>	<i>Average Calls per Weekend Day 24 Hour Day</i>
2012	254	200	454	4.37
2013	275	207	482	4.63

Emergency Response Volume Analysis (24/7/365)

<i>Year</i>	<i>Fire Responses</i>	<i>EMS Responses</i>	<i>Emergency Response Volume</i>	<i>Average Calls per Day</i>
2012	470	708	1,178	3.22
2013	489	728	1,217	3.3

Note: On average, most calls consume 2.5 hours of time. Therefore, during the 24 hour period crews are assigned to emergency response, approximately 8.5 hours per day. This includes approximately 4.8 hours of EMS response. During an EMS shift, there are other duties such as checking equipment, stocking supplies, completing reports, cleaning facilities, and maintaining vehicles. However, a crew of two personnel assigned to EMS can easily complete these assigned tasks and significant down time should be expected.

Cumulative Fiscal 2013 Finances

<i>Year</i>	<i>Fire Budget</i>	<i>EMS Budget</i>	<i>Total Fire/EMS Budget</i>
Fiscal 2013	529,906	521,506	1,051,412

Wage Analysis

<i>Fire service position</i>	<i>Fire Wages per hour</i>	<i>EMS Position</i>	<i>EMS Wages per hour</i>
Probationary Firefighter	\$10.00	EMT	\$12.10
Probationary Firefighter/EMT	\$11.00	EMT - Intermediate	\$12.85
Certified Firefighter	\$13.00	EMT - Advanced	\$13.00
Certified Firefighter	\$14.00	EMT - Paramedic	\$16.85
Fire Lieutenant	\$16.00		

II. ALTERNATIVE SERVICE DELIVERY METHODS

The study team developed six potential service delivery methodologies. These alternatives ranged from the status quo, to the privatization of EMS services. Pursuant to the scope of work, we have provided a consistent analysis of these options. The purpose of this chapter is to detail the options. A recommendation relative to the best course of action will be made later in this report. These six alternatives include:

- Maintaining the Status Quo
- Integration limited to supervisory oversight
- Integration with separate divisions
- Full integration with a career initial response force
- Privatizing EMS
- Regional partnerships

Status Quo: Departments Remain Separate Operating Units

Overview

The Town is served by three separate and distinct Public Safety Departments (Police, Fire and EMS). In terms of fire services, the Town is served by a combination fire service organization, composed of two full-time personnel, including the Chief of the Department, a Deputy Fire Chief, and a part-time Fire Lieutenant. The on-call component of the organization consists of approximately 40 trained firefighters and fire officers. Based on our collective experience, the on-call aspect of the Amherst Fire Department provides an exceptional level of service and value to the community. Preserving this service delivery methodology should be a primary goal of the community. The current fire service staffing pattern consists of the Fire Chief and Deputy Fire Chief working an administrative five day schedule. A Fire Lieutenant working part-time and on-call personnel regularly train and provide emergency response on an as needed basis.

Emergency Medical Services (EMS) are provided to the community by a combination EMS organization which is separate from the fire service. As this study commenced, the EMS organization was composed of a full-time EMS Director, several per diem personnel, and a dwindling number of volunteers. The budgeted staffing pattern for the Amherst EMS consists of an EMS Director working an administrative five day schedule. Three per diem personnel certified as Emergency Medical Technicians or Paramedics provided coverage 24 hours per day, seven days per week. These three personnel staff one ambulance and an emergency first response unit on an as needed basis. In addition, one of the

three on-duty staff members can assist in staffing a second ambulance or providing additional patient care in critical situations.

Benefits and Challenges

Retaining the status quo is by far the easiest course of action as change can be a difficult and nerve racking experience. Internally members of both the Amherst Fire Department and Amherst EMS are concerned about a potential forced integration and how that integration would impact their role in providing these essential services to the community. The issues of staffing a second ambulance and the immediacy of daytime fire response were reviewed. Information provided was scare and many felt the issue had been inflated to build a case for a career department.

Utilization of this model does not decrease the service gaps that have become evident with daytime fire response and staffing a second ambulance. Currently most calls occur during daytime hours. As the community continues to grow, increasing service demand will add to the current staffing and deployment pressure experienced within the community. The challenge of maintaining the status quo translates into a community wide acceptance of the risk associated with occasional service gaps that are filled through mutual aid. A second challenge of this model is that two distinct and often competitive public safety leaders manage fire and EMS services. Beyond the issues of cooperation and collaboration, the efficiency and need for this model in a community the size of Amherst is questionable.

Communications

Communications would remain unchanged and dispatch services would continue to be provided by the Amherst Police Department's Public Safety Communications team.

Debt Service

Based upon maintaining the status quo, no additional debt would be incurred.

Division of Assets

Based upon maintaining the status quo, no equipment would be removed from service.

Facility Needs

Continuing to utilize this model, facility needs remain unchanged. However, it should be recognized that fire headquarters has sufficient space to reorganize

apparatus and to complete the second floor living space for crew quarters. One factor that should be considered is the cramped quarters that the Police Department continues to utilize. Presently the Amherst Police Department operates with eighteen sworn officers. As the community grows, this number can be expected to increase. Currently, the Police Department operates in a 4,852 square foot station that is augmented by 1,008 square feet of unfinished attic space. **Frankly, this is insufficient space to accommodate the needs of a modern police department.** As part of the planning process, the study team believes the space needs of the police department should be considered.

Fiscal Impact

There is no fiscal impact as this is the baseline of the current service that is provided to the community.

Leadership

A Fire Chief and an EMS Director would be retained to manage their respective Departments. As noted previously, the efficiency and need for two positions should be carefully evaluated.

Legal Requirements

No change in legal requirements

Personnel, Staffing, and Deployment

No change in personnel, staffing, or deployment

Timeline

This model is currently being utilized to provide fire and EMS services to the Town of Amherst.

Supervisory Oversight Only

Overview

This model would consolidate the leadership associated with the positions of Fire Chief and EMS Director. Presently, the Town pays the salary and benefits associated with these two full-time, career positions. If each position is equally compensated, which seems to be the case, the Town pays approximately \$172,000, plus benefits, for both of these positions.

As both positions are currently vacant, this presents a tremendous opportunity for the community to reevaluate these leadership positions. Implementing this alternative would result in a consolidation of leadership through the Fire Chief's position assuming an expanded scope of responsibility. In this case, the Fire Chief would assume the responsibility for Amherst EMS, the EMS Director's position would be abolished, and all other aspects of service delivery would remain unchanged.

Benefits and Challenges

Combining leadership would eliminate some of the previous issues related to personalities and the competition for power. In itself, this strategy would improve communication and coordination between the agencies. Under a single leader, organizations tend to become more collaborative and may integrate service delivery and personnel over time.

We understand that in the absence of leadership associated with these two positions, neither service would not have developed the quality or configuration they currently enjoy. It appears that although this model provided value to the community during the previous decade, the time has come to provide singular leadership and increase the efficiency of the leadership of these critical services.

A challenge associated with this model is the need to provide supervision to personnel in separate facilities, along with the need to delegate scheduling, billing and many of the other administrative aspects of the former EMS Director's position to per diem personnel. During our site visits, and in the presence of the EMS Director, we found that per diem personnel assumed limited responsibility and that there was a significant amount of unstructured down time. The assignment, distribution, and accountability related to these tasks should be pursued.

Utilization of this model does not decrease the service gaps that have become evident with daytime fire response and staffing a second ambulance. Currently, most calls occur during daytime hours. As the community continues to grow, increasing service demand will add to the current staffing and deployment pressure experienced within the community. The challenge of maintaining the status quo translates into a community wide acceptance of the risk associated with occasional service gaps that are filled through mutual aid.

Communications

Communications would remain unchanged and dispatch services would continue to be provided by the Amherst Police Department's Public Safety Communications team.

Debt Service

No additional debt would be incurred.

Division of Assets

Changing the supervisory structure would result in the EMS Director's vehicle being assigned to the Fire Chief, and the Fire Chief's vehicle utilized for other fire and EMS assignments, such as the transportation of personnel to training, inspections, etc.

Facility Needs

Continuing to utilize this model, facility needs remain unchanged.

Fiscal Impact

Consolidation of supervisory structures would require that the Fire Chief's position be expanded and that the salary be appropriately adjusted. As the EMS Director's position would be abolished, the Town could anticipate the following fiscal impact that has been developed based on the Fiscal 2013 budget figures provided to the study team.

The EMS Director's line item lists a total compensation of \$92,340. Although it is unclear if this includes a portion of benefit costs, MRI has found that benefits in New Hampshire add approximately 40% of an individual's base salary. In this case, the EMS Director's current salary was represented at approximately \$86,000. Utilizing the 40% benefit figure, this produces an additional cost to the Town of Amherst of \$34,400. The total estimated cost to the Town of Amherst associated with this portion is \$120,400.

The elimination of the EMS Director's position would produce a savings of \$120,400 that would be offset by the need to adjust the Fire Chief's salary. Based on the experience of the study team, an appropriate salary would be needed to recruit and retain a transitional leader. This represents an increase in the salary of the Fire Chief of \$39,000.

This model produces an overall savings to the community of \$81,000 per year.

Legal Requirements

No change in legal requirements.

Personnel, Staffing, and Deployment

The only changes associated with this model are the consolidation of the supervisory structure as detailed above.

Timeline

As both positions are vacant, and this model has been informally adopted with the oversight of Amherst EMS being placed under Acting Chief Conley, this alternative is substantively in place and would be strengthened over the next six months with the selection of a permanent Fire Chief.

Integration with Separate Divisions

Overview

This alternative would build on the consolidated leadership model previously presented. In addition to consolidating leadership at a savings of approximately \$81,000 per year, this model would produce a single organization, but operate EMS under a separate division. Over the next 24 months, the study team recommends that should this model be selected, Fire and EMS be relocated at fire headquarters, once a renovation of the second floor is completed.

Developing a separate operational division allows fire services to provide oversight and supervision, and over time will allow cross training of personnel and a shared vision to develop. A single leader well experienced in both fire and EMS should be recruited to manage this operational transition.

In addition, many first responders join to provide a singular type of emergency response service. Not all firefighters want to provide EMS and not all EMS providers want to enter a burning building. Often these unique resources are wasted, as communities require cross training and full integration. The development of an EMS division will allow up to two providers per shift to function as EMS personnel. Although the Town should encourage and support cross training of all personnel, this should not be a requirement.

Currently, three EMS staff members are on duty at all times and the EMS Director's position remains vacant. The on duty EMS staffing pattern should be restructured to two personnel at all times. At least one of the two EMS providers should be a paramedic. The EMS Director's salary and the reduction in per diem staffing should be redeployed. First, the on-call members of the Department should be offered the opportunity to fill two weekday, daytime, per diem fire shifts. Preference should be given to members that are EMTs and these

personnel should have the shared responsibility of supporting EMS personnel at critical calls, providing lift assists, and staffing the second ambulance.

The purpose of these two weekday per diem fire shifts is to provide a rapid initial response and support the existing on-call Department when resources are least available. In the event that Amherst Fire Department members cannot fill these per diem shifts, these shifts should be offered on a per diem basis to qualified firefighter/EMTs from other communities. In the event that these shifts cannot be filled using per diem personnel in either the Fire or EMS Division, the community should hire a firefighter/paramedic to ensure that all four positions are staffed during weekday/daytime hours.

This combination of options has the potential to accomplish the following:

- Integrate the fire and EMS Departments into a single agency
- Preserve the viability of the on-call nature of the Amherst Fire Department
- Strengthen the ability to provide daytime fire response
- Provide daytime staffing for the second ambulance
- Provide Amherst personnel with the opportunity to work shifts
- Preserve the value of singularly focus EMS providers
- Enhance the level of service offered to the community

Utilizing this model, EMS staffing would be reduced from three crew members to two crew members on a 24/7 basis. The third EMS position would fund two separate initiatives:

1. Redeployment of EMS staffing to create two Monday to Friday, 7AM to 5PM day shift, per diem, fire shifts. Priority selection for these shifts should be given to Amherst Fire Department Members, with preference to paramedics and EMTs. If these positions are difficult to fill with internal staff, shifts should be offered to qualified external personnel who are firefighters in other communities. If these shifts cannot be filled on a per diem basis, a single career firefighter/Paramedic should be hired. These two fire staff members should respond to medical calls to compliment patient care and provide assistance lifting patients, thus preventing injuries and provide the flexibility to utilize a third crew member in critical situations.

If these two personnel are available, they should be assigned to staff whichever call comes in first. This includes staffing a second ambulance or providing personnel to respond to a fire incident.

2. The funding remaining from the reduced EMS staff should be utilized to incent the response of a third on call EMS responder at night and on weekends.

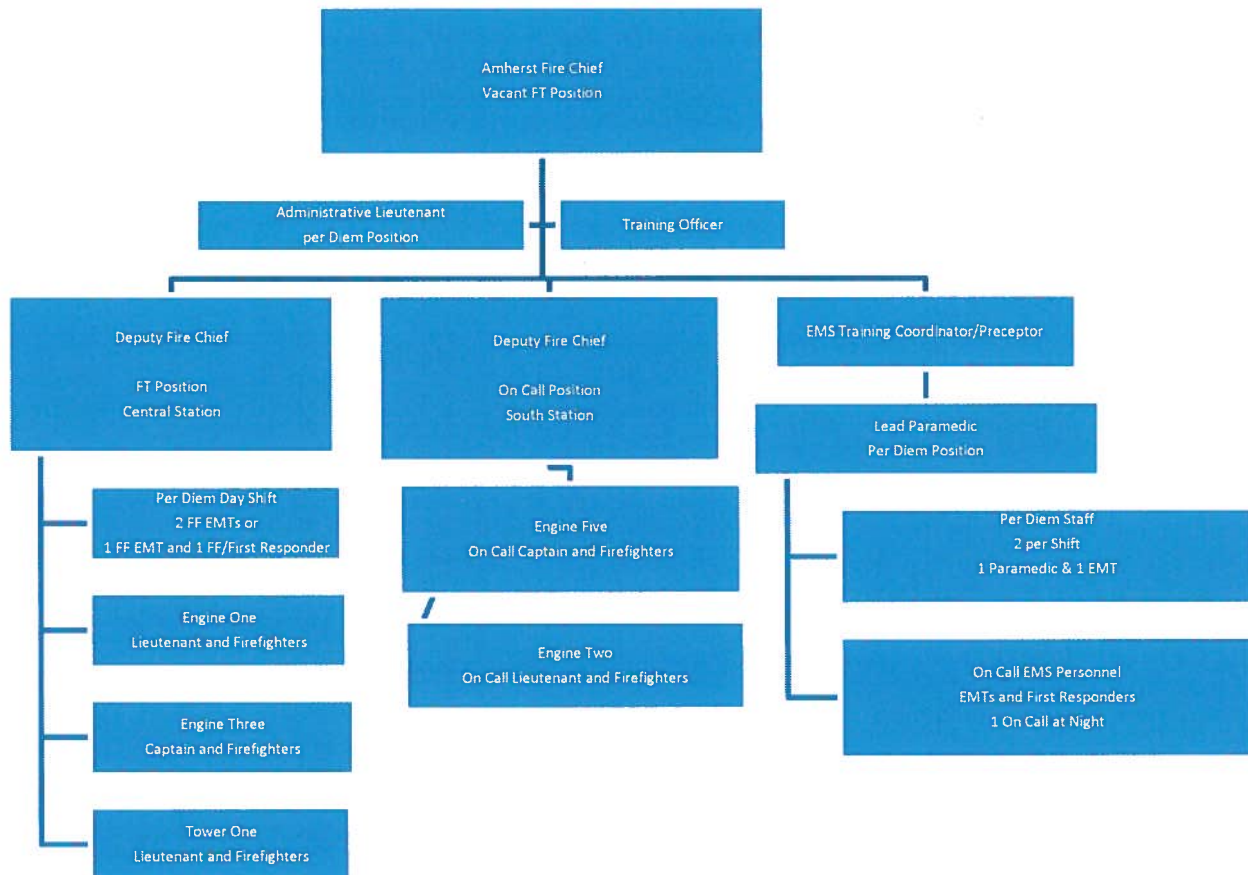


Figure 5 - Integration of Functions Retaining Separate Divisions

Benefits and Challenges

This model forms a single organization with singular leadership. In addition, while staffing at night will be reduced from three crewmembers to two, an on call EMS system is created. It will be a challenge to create this on-call system; however, we expect moderate success as the current per diem model seems to provide limited incentive for the development of this system. As an example, in a Massachusetts Town of 1,400, a volunteer rescue squad was formed and has

developed a membership of fifteen personnel. A recent call at 03:50 resulted in the immediate response of five responders.

Daytime, weekday fire staffing will be increased and a total crew of four personnel will be available to serve the Town. Utilizing this model, cross training will be encouraged, but not required. This avoids the concern repeatedly voiced during the focus group session that presented a concern over forced integration.

These daytime fire shifts will be filled with per diem personnel. Although this will be a challenge, we have found two other New England communities that report great success with this concept. Operationally, fire response will need to be adjusted to allow a unit to leave with less than four personnel. Although four personnel produce a far more functional crew, Amherst will need to strike a balance between holding resources and immediate response. We would recommend that a unit be allowed to roll to an emergency with three personnel. If four tones are sounded, the unit should proceed with two personnel.

OSHA Two In/Two Out is a national standard that requires four personnel on the fireground prior to initiating an offensive interior fire attack or entering a hazardous materials situation. An exception to this rule exists if there is the need for an immediate and visible rescue. Arriving with less than four personnel, firefighters could perform exterior operations to control the situation and setup for interior operations. Once a second unit arrives, an interior operation could be pursued. It is our experience that a second unit will arrive before the first unit has setup for interior attack.

Communications

Communications would remain unchanged and dispatch services would continue to be provided by the Amherst police Department's Public Safety Communications team.

Debt Service

No additional debt would be incurred unless the proposed station renovation is bonded.

Division of Assets

Changing the supervisory structure would result in the EMS Director's vehicle being assigned to the Fire Chief and the Fire Chief's vehicle utilized for other fire and EMS assignments, such as the transportation of personnel to training, inspections, etc.

Equipment

No additional equipment would be required, as existing assets would be utilized. As this model gains traction, there would be the need to outfit cross-trained fire/EMS responders and provide EMS gear for those recruited for the on-call system.

Facility Needs

As noted previously in this report, the most effective way to supervise and integrate the Fire and EMS Departments is co-location of resources. The second floor of fire headquarters would need to be finished to accomplish that goal.

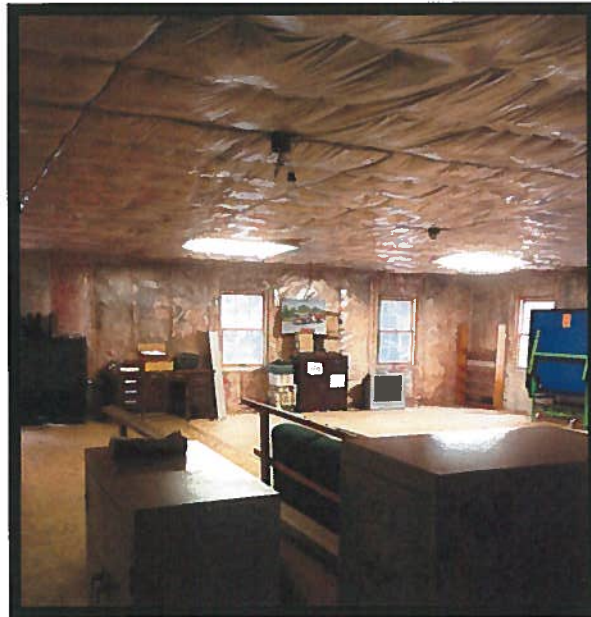


Figure 6 - Fire headquarters unfinished second floor



Figure 7 - Fire headquarters unfinished stairway

The current unfinished portion of fire headquarters should be completed. Acting Chief Conley informed us that this has been brought forward to the Amherst Capital Planning Committee for a three-year appropriation of \$180,000. The study team understands the discussion over ADA and the need for sprinklers. However, we feel that this area could be converted into a non-public second floor living space that would house the EMS crew and provide firefighters a facility for storm coverage for a fraction of the proposed price.

Once this renovation has been completed, Fire and EMS would be co-located and the Police Department would obtain the use of much needed space. In addition, this would maximize the ability to supervise EMS activities and produce the greatest value to the Town for the utilization of this unfinished building.

Fiscal Impact

Approximately \$81,000 would be saved by the elimination of the EMS Director's position. The staffing redeployment would be expense neutral, as the third EMS crew member's wages would be redeployed as:

1. Fire daytime per diem staff – two positions
2. On-call EMS system

<i>Fire service position</i>	<i>Fire Wages per hour</i>	<i>EMS Position</i>	<i>EMS Wages per hour</i>
Probationary Firefighter	\$10.00	EMT	\$12.10
Probationary Firefighter/EMT	\$11.00	EMT - Intermediate	\$12.85
Certified Firefighter	\$13.00	EMT - Advanced	\$13.00
Certified Firefighter	\$14.00	EMT - Paramedic	\$16.85
Fire Lieutenant	\$16.00		

Leadership

Leadership would be consolidated under a revised Fire Chiefs position. A singular leader would lead both Fire and EMS services. The study team strongly believes that this person should be selected after an assessment open to internal and external personnel. This person will need to be a transitional and visionary leader capable of bringing people together. It is essential that the new Fire Chief is experienced and well versed in the supervision and operation of Fire and EMS resources.

Legal Requirements

There would be no change in legal requirements other than transferring the name on the ambulance license.

Personnel, Staffing, and Deployment

That information has been detailed in the narrative above.

Timeline

- Singular supervision – currently in place
- Reduction of EMS staffing, development of daytime fire staffing – 60 days
- Selection of a permanent Fire Chief – 6 months
- Co-location of resources – 24 months

- Cross training of interested personnel – 6-9 months
- Development of on-call EMS structure – 6-12 months

FULL INTEGRATION WITH CAREER INITIAL RESPONSE FORCE

Overview

This model would absorb EMS under the fire Department. Ten firefighter paramedics would be hired providing a staffing model of four fire/EMS providers during weekdays and two Fire/EMS providers at night and on weekends. Under this scenario, Amherst EMS is abolished, per diem EMS shifts would be abolished and the primary role of on-call firefighters would be diminished.

Benefits and Challenges

This would be a very expensive proposition that would change the fabric of the Amherst Fire Department. Although response times for the initial unit would be reduced, there are other long-term staffing implications that outweigh this benefit. As noted previously, the Amherst Fire Department should be supported and the on-call service model should be preserved and expanded. Under this model, on-call members that thrive on serving the community would become a secondary response force.

If this alternative was selected, a lower level of participation and motivation of Amherst on-call personnel should be expected. This model immediately forces a full integration in the absence of other organizational considerations. As a career force takes hold, tension between the on-call members and the new career staff should be expected. This model would provide the flexibility to staff two ambulances during the daytime and would reduce the idle time observed of per diem personnel.

The study team believes this model should not be considered further.

Communications

Communications would be unchanged.

Debt Service

No additional debt would be incurred unless the proposed station renovation is bonded.

Division of Assets

Changing the supervisory structure would result in the EMS Director's vehicle being assigned to the Fire Chief and the Fire Chief's vehicle utilized for other fire and EMS assignments, such as the transportation of personnel to training, inspections, etc.

Equipment

No additional equipment would be required, as existing assets would be anticipated.

Facility Needs

As noted previously in this report, the most effective way to supervise and integrate the Fire and EMS Departments is co-location of resources. The second floor of fire headquarters would need to be finished to accomplish that goal.



Figure 8 - Fire headquarters unfinished second floor



Figure 9 - Fire headquarters unfinished stairway

The current unfinished portion of fire headquarters should be completed. Acting Chief Conley informed us that this has been brought forward to the Amherst Capital Planning Committee for a three-year appropriation of \$180,000. The study team understands the discussion over ADA and the need for sprinklers. However, we feel that this area could be converted into a non-public second floor living space that would house the EMS crew and provide firefighters a facility for storm coverage for a fraction of the proposed price.

Once this renovation has been completed, Fire and EMS would be co-located and the Police Department would obtain the use of much needed space. In addition, this would maximize the ability to supervise EMS activities and produce the greatest value to the Town for the utilization of this unfinished building.

Fiscal Impact

A firefighter's base salary in New Hampshire averages \$50,000 per position. When we consider the cost of benefits and overtime a total cost associated with this model would approach \$950,000 per year. When the EMS Director's salary is reduced (\$81,000), and ambulance revenue is considered (\$236,000), a new investment of \$633,000 per year should be expected. Obviously in terms of initial response, some risk would be reduced in consideration of this investment.

Leadership

A single career Fire Chief would be the leader.

Legal Requirements

There would be no change in legal requirements other than transferring the name on the ambulance license.

Personnel, Staffing, and Deployment

Ten full-time personnel would be hired by the Town. Amherst EMS would cease to exist and on-call membership should be expected to decline. If we consider the current Deputy Chief's position as a shift member, this number could be reduced to nine new hires.

Timeline

Implementation could occur six months after Town meeting funding and approval.

Privatize EMS

Overview

Utilizing this model would abolish Amherst EMS and provide one dedicated unit with an area backup unit. Fire and EMS remain separate and distinct, and personnel staffing these units would be selected by the private vendor.

Benefits and Challenges

This model further separates these essential functions.

Amherst would lose control over personnel selection and supervision.

A significant stipend should be anticipated, as the ambulance revenue is insufficient to support a dedicated unit with an appropriate profit margin and return on investment. In the long-term, the community may lose control of the finances associated with this structure.

EMS becomes a private business.

The initial stipend may be attractive based on the concept of a loss leader.

Assets would be transferred to the private provider for little value.

Communications would utilize two networks (Fire/EMS and the communications infrastructure of the private firm).

There is no community role in this model.

This does not address the fire staffing issue that created the need for this study.

Communications

Communications would utilize two networks (Fire/EMS and the communications infrastructure of the private firm)

Debt Service

This would no longer be the responsibility of the Town of Amherst.

Division of Assets

All Amherst EMS assets would be transferred to the private vendor or sold privately. A limited value should be expected.

Equipment

This would no longer the responsibility of the Town of Amherst.

Facility Needs

Either the current facility could be utilized, or the Town could require the vendor to provide a separate space.

Fiscal Impact

The community may lose control over ambulance rates and we would expect a cost of \$250,000 to \$500,000. Initially, this may approximate the amount of the current EMS budget, less revenue. However, this cost should be expected to grow. If the unit provided was not dedicated, risk would increase and response times would become periodically longer when the primary unit is on another call for the private vendor. This could result in a no cost contract, but the cost to the community would be an altered level of risk.

Leadership

This would no longer the responsibility of the Town of Amherst.

Legal Requirements

This would no longer the responsibility of the Town of Amherst.

Personnel, Staffing, and Deployment

This would no longer the responsibility of the Town of Amherst.

Timeline

This could be implemented within six months.

Regional Partnership

Overview

The study team considered this concept and identified Milford EMS and Bedford Fire as two likely partners. Informal discussions revealed a low level of interest or commitment based on current needs servicing their response area.

III. Comparative Analysis

As the study progressed, the team worked with Acting Chief Conley to develop appropriate points of comparison. We asked that three benchmark communities be selected by the Selectmen, Town Administrator, and the Fire Chief. This collaboration was done purposefully to avoid any contention that members of the Amherst Fire Department selected favorable comparables. The four New Hampshire communities of Hanover, Milford, Pelham, and Windham were selected.

In an effort to extract the maximum amount of data, Acting Chief Conley was asked to contact the Chiefs and or EMS Directors in each community and request cooperation and response. All four of the communities actively responded and provided the necessary data to be included in this study. The communities of Fitchburg, Leominster, and Natick, Massachusetts, and Salem Hanover, Milford, Pelham, and Windham, New Hampshire, responded to this request and provided the data displayed in the tables below. The data provided by these communities provides information that can benefit the Town of Amherst.

Community	Community Base Population	Square Miles
Hanover	10,850	50.27
Milford	15,115	25.3
Pelham	13,000	27
Windham	13,592	27.9
Average	13,139	32.62
Amherst	11,258	34.8
Deviation	0.86	1.07

Community	Fiscal 2014 Total Community Budget	Fire Budget for Fiscal Year 2014
Hanover	\$23,859,114	\$3,111,441
Milford	\$12,848,633	\$549,161
Pelham	\$12,848,999	\$949,965
Windham	\$12,507,560	\$2,105,275
Average	\$15,516,077	\$1,678,961
Amherst	\$11,269,800	\$526,760
Deviation	0.73	0.31

Community	EMS Budget for Fiscal Year 2014	NFIRS, Building Fires in 2013
Hanover	\$793,719	18
Milford	\$671,628	17
Pelham	\$949,965	4
Windham	\$1,025,000	17
Average	\$860,078	14
Amherst	540,561	14
Deviation	0.63	1.00

Community	Total Fire Calls in 2013	Fire Dollar Loss in 2013
Hanover	666	\$204,860
Milford	1,023	\$613,400
Pelham	484	\$20,518
Windham	587	\$708,000
Average	690	\$386,695
Amherst	449	\$1,470,110
Deviation	0.65	3.80

Community	EMS Calls in 2013	Total Combined Fire/EMS Incident Volume 2013
Hanover	1,116	1,782
Milford	1,893	2,916
Pelham	873	1,348
Windham	873	1,460
Average	1,189	1,877
Amherst	699	1,148
Deviation	0.59	0.61

Community	EMS Level ALS/BLS	Number of Fire/EMS Full-time Staff (Combined)
Hanover	ALS	22
Milford	ALS	9
Pelham	ALS	18
Windham	ALS	23
Average	ALS	18
Amherst	ALS	3.0
Deviation		0.17

Community	Number of Fire personnel On Duty Day/Night	Number of EMS personnel On Duty Day/Night
Hanover	8 Day/5 Night	8 Day/5 Night
Milford	3 Day/0 Night	5 Day/2 Night
Pelham	7 Day/4 Night	7 Day/4 Night
Windham	8 Day/5 Night	8 Day/5 Night
Average	7 Day/4 Night	7 Day/ 4 Night
Amherst	2 Day/0 Night	3 Day/3 Night
Deviation		

Community	Number of Active On-call/ Volunteer Personnel	Number of Active Part-time Personnel
Hanover	12	1
Milford	78	4
Pelham	16	0
Windham	4	0
Average	28	1
Amherst	47	12
Deviation	1.71	9.60

Community	Number of Personnel Assigned to Each Ambulance	Are EMS Personnel Cross-trained as Firefighters?
Hanover	2	Yes
Milford	2	No
Pelham	2	Yes
Windham	2	Yes
Average	2	Yes
Amherst	2 or 3	No
Deviation		

Community	Are Personnel Recalled immediately when a Crew Responds to an Emergency Call?	Average Response Time to Emergency Calls
Hanover	Yes	5-6 min.
Milford	No	5-6 min.
Pelham	Yes	5-6 min.
Windham	Yes	5-6 min.
Average	Yes	5-6 minutes
Amherst	No	7 - 10 minutes
Deviation		

Community	Are Fire and EMS Resources Co-located in One Facility?	Built out Square Footage Size of Fire Headquarters
Hanover	Yes	12,524
Milford	No	7,800
Pelham	Yes	17,280
Windham	Yes	27,000
Average	Yes	16,151
Amherst	No	12,530
Deviation		0.78

Community	Time of Day with Limited On-call/Volunteer Availability	How is Dispatched Staffed (fire, civilian, police, regional)
Hanover	Varies	Civilian
Milford	None	Civilian
Pelham	Varies	Civilian
Windham	7 to 5	Civilian
Average	Varies	Civilian
Amherst	7 to 5	Civilian
Deviation		

Community	Fiscal EMS Revenue 2013	EMS Billing Rate (Medicare plus?)
Hanover	392,755	Base Als-550.00/BIs-450.00
Milford	696,872	Base Als-638.55/BIs-488.58
Pelham	194,996	Base Als-513.72/BIs-432.61
Windham	258,600	Medicare + 30
Average	385,806	varies
Amherst	272,445	Medicare Plus
Deviation	0.71	

Community	Revenue per EMS Call	Number of Pumpers
Hanover	351	4
Milford	752	4
Pelham	428	2
Windham	420	3
Average	488	3.25
Amherst	407	4
Deviation	0.83	

Community	Number of Aerial Ladders	Number of Tankers
Hanover	1	0
Milford	1	0
Pelham	0	1
Windham	1	1
Average	1	0.50
Amherst	1	1
Deviation		2.00

Community	Number of Brush Units	Number of Ambulances
Hanover	1	2
Milford	2	2
Pelham	2	2
Windham	1	2
Average	1.5	2.00
Amherst	2	2
Deviation	1.33	1.00

Community	Number of Unanswered Fire Calls Deferred to Mutual Aid in 2013	Number of unanswered EMS calls (Second Ambulance) Deferred to Mutual Aid in 2013
Hanover	0	39
Milford	0	68
Pelham	0	8
Windham	0	50
Average	0.00	41.25
Amherst	0	31
Deviation		0.75

Community	Number of overlapping Calls (Fire and EMS calls at the Same Time) in 2013	Number of Calls Requiring Both a Fire and EMS Response in 2013
Hanover	588	145
Milford	316	177
Pelham	395	78
Windham	496	890
Average	448.75	322.50
Amherst	Unknown	Unknown
Deviation		

Based upon the information contained above, we have developed the following observations and recommendations:

OBSERVATIONS

- The population in Amherst is slightly smaller than the average of the peer communities. The total land area of Amherst is larger than the average of the peer communities. These factors indicate that the peer communities selected are appropriate.
- The community budget in Amherst is 27% less than the average. Fire and EMS budgets are 36% below the average.
- The fire and EMS emergency response workload is 39% below average.
- All of the peer communities and the Town of Amherst offer Advanced Life Support Services. This level of care has become the industry standard in the area.
- The number of full-time employees in Amherst Fire and EMS is 17% of the average, while the number of part-time employees is several times the average of the peer communities.
- Amherst enjoys a stronger on-call fire service than the peer communities as Amherst has almost double the number of on-call fire personnel.
- Amherst is unique in that it is the only service that staffs two or three personnel on an ambulance. All of the other respondents staff an ambulance with two members.
- Most of the EMS staff in other communities are cross trained as firefighters. This is not the case in Amherst as these organizations are separate and distinct with minimal overlap.
- Emergency response times in Amherst are slightly higher based upon the heavier reliance on on-call response and the larger land area of the community.
- Three of four peer communities co-locate fire and EMS resources.
- The headquarters facility in Amherst is 18% smaller than the average.
- All of the peer communities struggle with limited on-call availability. The most common times of concern are Monday to Friday, 7AM to 5PM.
- All of the respondents operate or utilize civilian dispatch centers.

- EMS revenue in Amherst is below the average and rates do not appear to be optimized as revenue per call is 17% below average.
- The fire and EMS apparatus set appears to be appropriate and in line with the equipment utilized in peer communities.
- Fire calls that were assigned to mutual aid units based on a lack of initial response were listed as zero in 2013. This statistic may not consider initial response and is inconsistent with the primary impetus of this study. Interviews with previous Chiefs universally cite an increase in staffing issues during daytime hours.
- Based upon the separation of agencies, data that compared overlapping and joint responses was not provided. Overall the workload in Amherst consists of 3.1 emergency calls per day. Although some complex responses may take several operational periods, the average response time associated with an emergency call is 2.5 hours. This results in crews being assigned to either fire or EMS calls 8 hours per day. As EMS calls approach 2 service requests per day, EMS crews can be expected to be assigned to incidents for 5.0 hours per day. Crews are assigned to fire incidents approximately 3 hours per day.

RECOMMENDATIONS AND DISCUSSION

Requests for EMS are the most common emergency that occurs in Amherst. Once screened, the calls are assigned a level; A (minor) to E (most severe). Industry best practice indicates that to provide the highest quality patient care, preserve resources, and prevent injuries, an escalating matrix of resource assignment should be utilized. In many communities an engine company only responds to medical calls where the severity indicates a larger team would benefit that patient and reduce first responder injuries.

Subject to the direction and approval of the medical director, an engine should only respond to serious medical calls classified as E level calls. An on-call EMT or first responder should respond to calls that are screened at the C or D level. The purpose of this response is to assist with patient care, lifting, and to provide the ability for a second crew member to treat the patient. In total, these more serious situations translate into a response to 25% to 35% of the most serious calls. In Amherst, this means that additional resources would be assigned to approximately 200 calls per year, the majority of these call occur during the daytime.

RECOMMENDATIONS

- III.1 Emergency Medical dispatch should be utilized as a tool to screen medical calls based on severity. Once severity has been established, a response of the appropriate resources should be initiated.***
- III.2 The Medical Director should approve the response matrix.***
- III.3 Every effort should be made to recruit and train additional on-call personnel. Preserving the vitality of the on-call structure of the Amherst Fire Department should be a goal of the community.***
- III.4 The EMS staffing pattern should be reduced from three personnel to two personnel. One member of this per diem crew should be a paramedic.***
- III.5 The Amherst EMS Academy should be refocused to recruit and train local first responders and EMTs. The development of on call EMS personnel that live in Amherst should become a priority.***
- III.6 A system should be developed where an EMT should be on-call during nighttime and weekend hours. This person should respond to calls to provide initial patient care, lift assistance, and provide the option of adding a crew member to the ambulance.***
- III.7 The Town should offer and encourage EMS and fire personnel to become cross trained.***
- III.8 The second floor of fire headquarters should be completed, and over a period of 24 months fire and EMS resources should be co-located within that facility.***
- III.9 A daytime Monday to Friday per diem staff of two firefighter/paramedics, firefighter/EMTs or firefighters should be developed. One member should be at least an EMT and preference should be given to Amherst Fire Department staff members.***
- III.10 Ambulance rates should be revisited annually. The current rate should be increase to optimize the revenue stream.***
- III.11 The Department should begin to track overlapping and joint response call statistics. This information should be presented to the Board of Selectmen in a monthly report.***

IV. FOCUS GROUPS

MRI was contracted to develop and deliver a series of three focus groups that would explore issues relating to the delivery and future structure of fire and EMS services within the Town of Amherst. A **focus group** is a form of qualitative research in which a group of people are asked about their perceptions, opinions, beliefs, and attitudes towards a product, service, concept, advertisement, idea, or packaging. Questions are asked in an interactive group setting where participants are free to talk with other group members.

There were a total of three focus groups that were conducted during a single day visit to the Town of Amherst. Each focus group session was scheduled to last for an hour. Following is a synopsis of the input that was gained from the three representative groups that had been invited to participate.

FOCUS GROUPS CONDUCTED

EMS Focus Group

EMS Staff- 5 members present (4 initially with one on-duty member arriving later).

Questions utilized to stimulate discussion with feedback and themes of input:

Question1: Tell us about the Town of Amherst?

The Town of Amherst was described as a great family based community, “you want to raise your family here”. It was also described as a wealthy community, a balanced community, “essentially a rich community that won't vote for things”. More specifically, it was stated that EMS is never turned down for equipment, but the town probably would not vote for full-time personnel as the “Board of Selectmen hate EMS”.

Following a general description of the Town that was supplied, the discussion focused more on the nature of EMS within the Town. It was noted that in general, EMS is changing, it is its own service, and the concept of merging is bad. The Town has changed in that originally, EMS was all volunteer and BLS (Basic Life Support) was acceptable up until about 1980. The volunteer fire demand on training was small and responses were small. As the town grew, the growth brought with it a number of iterations. This included a transition from an all-volunteer model of services to the present stipend model as training and service expectations increased on volunteers. It was also stated that this change or transition came about with the advent of full-time administrators, although change might have happened anyway. In addition, generational changes

resulted in less volunteerism; it was felt that the younger generation may be less willing to volunteer. This is similar to what has been experienced with leaders in scout groups. The Town used to recruit volunteers on July 4, and as indicated, there are no longer any viable recruiting efforts. A volunteer responding from home has become more difficult, due to people commuting to jobs out of town.

One member stated that the staff do not feel invested. There is a very large contingent of EMTs and Paramedics from outside of the town. Pay is very inadequate and EMS staff are working 40 hours on a Per-Diem basis, and have no benefits, including no sick time. They do not feel valued by the Board of Selectmen. It was suggested that EMS needs at least a couple of full-time funded positions. The member that expressed this viewpoint was not interested in being cross trained as a firefighter.

It was stated that there are a handful of EMTs that clean the ambulances and facility; however, this could be fixed and more personnel would participate if full-time jobs were created. It was mentioned relative to out of town personnel who hold similar full-time positions elsewhere, "Where can you work like this, get paid well, and sleep". Local knowledge has also been lost.

Question 2: What is your role in Amherst EMS?

The members that were present for the focus group consisted of three EMTs and two Paramedics.

Question 3: Are you cross trained as a firefighter? Would that be a positive or negative?

One person had some firefighter training, but stated that firefighting was not for her and was not sure if cross training as a firefighter would be of interest. It was stated that cross training might be mutually beneficial for firefighters learning how to use a stretcher and perhaps EMTs could be utilized to dress a hydrant. It might be helpful to have knowledge of terminology and some cross training relative to extrication might be helpful.

Question 4: Should Amherst EMS be integrated with Amherst Fire (advantages, disadvantages, problems, obstacles)?

One participant stated that "It would be a slap in face to put EMS under fire."

Question 5: What would you propose as the best path to provide the best service to Amherst?

One comment was that if integration were to take place, it should consist of a merger to provide a single director with a single salary, but still retain separate

departments. It was also hoped that this merger would result in better pay and benefits.

Question 6: What should be the timeline associated with your proposed changes?

No responses noted.

Question 7: How would you implement those changes?

It was mentioned that with the number of Fire Chiefs over the years there were different personalities involved. Chiefs DeSilva and Todd had a good relationship with EMS. It was stated that Chief Boynton wanted to forcibly take over. This resulted in a comment that "If fire is taking over EMS, it needs to be more of a marriage than an abduction".

Question 8. Should all personnel be cross trained?

One of the five present does have cross training and is still a member of the Fire Department. A number of firefighters took an EMT class, but did not test for EMT. In addition, firefighters respond to station, officers to scene; some FF/EMTs have their EMT training, but there are no practical applications for their EMS skills.

Question 9: What are the pros and cons of fully integrating these agencies?

Regarding the question of integration, it seemed that two members were in favor of integration and one member was opposed. It was stated that they do not want two chiefs. However, they would want separate budgets. From comments received, it also seemed that some form of joint training might be supported.

If integration takes place, one member also suggested that it might become a penalty to be assigned to an ambulance for discipline in the Fire Department. Also, you would have personnel whose heart is in one or the other. They are separate functions. It was expressed that there may be a fiscal advantage, but a cultural disadvantage.

Training together might be beneficial, but maybe not full integration. There could be a possible loss of good people if told to do both functions. It was also expressed that an integration might result in less people as job shifting might occur to achieve better pay when evaluating the differences between EMS pay and Fire Department pay.

Relative to specific pros and cons, it was suggested that a pro might be that with one agency there might be better communications and positioning within

community. It was also mentioned that another pro item might be realized in obtaining drivers from the Fire Department who might have a CDL (Commercial Driver's License). Relative to con items it was expressed that patient care may decline and EMS focus may be lost. There may also be a draw down of total resources with the advent of a dual focus. In addition, there may also be a possibility of losing staff who only have an interest in one skill set as opposed to the other. Finally, a potential con item might be that mutual aid problems might occur.

Question 10: How often do you work or respond on calls?

Members stated that currently their shifts have been restricted. Now A-2 calls are often not covered due to 40 hour restrictions as a result of cost containment. There was also a comment that off duty personnel are not always ready for call back, they may be dirty or have paint covered clothes. If they were to respond on a call back situation, that would not be acceptable or professional if they were to do so.

Question 11: What could enhance staffing of the second on-call ambulance?

It was suggested that staffing might be enhanced by having one director, and that any daytime fire personnel should be EMT to help out EMS. It was noted as being advantageous to continue three EMS personnel on a crew although it may be possible to go to two. There are fifty plus members to the fire department right now.

Question 12: Is the Town of Amherst a good employer?

Comments were made that the town is good to other departments, but not to EMS. They are paid less than part-time high school pages that work in the library, they have no health benefits, and personnel have to come to work sick. As an example of their perceptions, the order of the department's names as listed on the sign in the front of the public safety complex was cited. It was mentioned that they do not feel valued.

Question 13: Anything else that you would like to add to the conversation?

It was noted that prior to his departure, the previous EMS Director had conducted his own Independent survey of the EMS members.

It was also mentioned that funds utilized for the Dispatch center are a waste of money and that the center should be returned to the MACBase system.

Fire Focus Group

Fire Service Staff: 3 members present.

Questions utilized to stimulate discussion with feedback and themes of input:

Question 1: Tell us about the Town of Amherst?

Amherst was described as a small tight knit nice community, a nice place to live.

Question 2: What is your role in the Amherst Fire Department?

All members present were FF/EMTs.

Question 3: Are you cross trained as an EMT? Would that be a positive or negative opportunity?

Many members of the fire department were noted to be cross trained as EMTs. It was indicated that many others would not object to becoming EMTs; however, there are time constraints with work and families that would possibly prohibit that.

Question 4: Should Amherst Fire be integrated with Amherst EMS (advantages, disadvantages, problems, obstacles)?

It was noted that the advantage of integrating the two services would be the ability to train together, while the biggest disadvantage might be a change of the "status quo".

Question 5: What would you propose as the best path to provide the best service to Amherst?

No comments noted.

Question 6: What should be the timeline associated with your proposed changes?

It was suggested that any proposed changes should take place "sooner rather than later".

Question 7: How would you implement these changes?

No comments noted.

Question 8: Should all personnel be cross trained?

It was stated that probably not every member would need to be cross trained as long as the system is functional.

Question 9: What are the pros and cons of fully integrating these agencies?

The pro's that were suggested included: More efficient use of available resources, cohesion, reduction of conflicting policies, the ability to train together, and an increase in face to face time between the agencies. The major con that was suggested was a change in the "status quo".

Question 10: How often do you work or respond on calls?

No comments noted.

Question 11: What could enhance the staffing to provide an initial daytime fire response?

One suggestion that might enhance the staffing would be to utilize personnel from the road department, cross trained as firefighters. They already possess CDLs, have a knowledge of the town, and such staffing could be implemented at almost no cost.

It was suggested that if a merger happened and there was a daytime crew, perhaps there could be two personnel on the ambulance and two personnel on the engine, supplemented with call personnel. It was felt that some people may be interested in that concept and that daytime coverage is a challenge. This is especially true as employers are not as willing to release workers to respond to fires and emergencies; the number of volunteers is down as many residents commute.

Currently the engine responds with a minimum of three firefighters. The issue of paid personnel versus volunteer issue was also mentioned.

Question 12: Is the Town of Amherst a good employer?

The town was described as a good employer and very responsive. An example cited was a pay discrepancy that was handled right away.

At this point in the focus group, additional department members arrived.

A follow-up question was asked pertaining to an assessment of the fire department at the present time. It was noted that morale is high although things are in a current "limbo" with an Acting Chief. It was indicated that personnel feel

that “we are one department”, there have been good leaders on the department, especially in the last four or five years, and there are good social activities where personnel are able to interact in a social setting.

It was noted that some chiefs became power hungry and resignations resulted. Training decreased and was not as rigorous as in the past.

Officer coverage is good with on-call officers that have an additional meeting.

Many personnel have full-time jobs that makes working EMT shifts difficult.

A number of younger members feel that this is an entry path to a full-time career.

The current relationship between Fire and EMS are that they are separate organizations that work together on scenes.

This group also noted an independent survey by former EMS Director to CERT Members.

Citizen Focus Group

Members of the public, twenty-five residents, including several firefighters, former Fire Chiefs, and interested parties attended this session. Although this session was the most well attended, it was also the most controversial.

Questions utilized to stimulate discussion with feedback and themes of input:

Question 1: Tell us about the Town of Amherst?

A number of residents described Amherst as being a great location with the "best looking common". The town also has a rural environment and is a great place to raise a family according to many. The town was also described as having a real community spirit with many long time residents. It was expressed that there is a sense of openness, trust, and a connected core. However, it was noted that many residents are never seen due to their commuting to and from work locations outside of the Town. Amherst was also noted to have a good school system.

Question 2: Are you pleased with the level of public safety that Amherst Fire and Amherst EMS provide?

Two residents indicated that they felt that Fire response is excellent. Three residents felt that EMS responses are efficient, very professional, and personnel do a great job.

It was mentioned that residents appreciate the separate departments, they are treated equally, and all services do a good job. It was also mentioned that there is a higher level of respect with the separate services.

Question 3: Have you utilized these services and how would you characterize response times?

A number of residents described how they had utilized public safety services and noted positive experiences and excellent response times. Specifically cited was a timely response for a tree worker with a back injury. Also mentioned was a three minute response to smoke in a building. Responses were described as professional and competent. It was noted that medical calls result in a prompt and efficient 911 response. EMS personnel are well trained for cardiac response, as well as other types of responses.

Question 4: What do you think of when public safety in Amherst is discussed?

People view the Fire Department and EMS as separate, but equal entities.

One word used to describe Public Safety in the Town of Amherst was “dedication”. It was noted that the services are “about as volunteer as you can get”, EMTs serve for the love of doing it. One resident said that Amherst should be looking at response times of the Fire Department and EMS to calls.

Question 5: Amherst Fire and EMS are separate organizations considering a merger. What do you see as pros and cons?

There seemed to be a great deal of confusion about the benefit of merging the two departments. Two people felt a merger would create compromise of EMS. There was also concern expressed relative to trying to merge; blending and mixing resources, multiple tasks, and hats. However, it was expressed that the ambulance should be primary. It was stated that there is an issue of response time, it had been stated in the past by the Fire Chief that a fire doubles every minute.

Although the quality of response is good, response time is of concern. It was noted that there is a difference in response time for EMS versus response times for Fire. It comes down to lives being saved versus property saved. However, overall, response time/staffing is a concern if you cannot roll the apparatus.

Relative to pros and cons, there was some discussion to let separate departments do the jobs they do best. A con to a merger might be the loss of volunteers.

One resident expressed that it used to be that there was a triage car. EMS worked mandatory shifts and A-1 and A-2 were covered.

There was discussion relative to a greater likelihood for a need for EMS. The question being asked is are we taking EMS folks to staff fire, likewise are we effectively staffing for fire response?

Question 6: Can you tell us how these two organizations are staffed?

No discussion.

Question 7: Should Amherst have an on-duty Initial Response Force (FT/PT)?

Although there was no clear response to the question of an on-duty, Initial Response Force, there was some discussion about a possible EMS Director/medic to provide coverage. There was also discussion about a command vehicle versus engine. It was felt to be more essential to have on-duty personnel to respond with an engine rather than with a command vehicle.

Question 8: Would you pay more in taxes to support a higher level of Fire and EMS service?

Some residents felt that there may be support for additional taxes for this purpose if it is explained correctly. It was stated further that with consideration for the use of an existing salary and if all options are explored, this would lead to a “qualified yes” in this regard. Also added was the statement that “it is clear that the public does not understand how the present system works”.

Question 9: Are there problems in these organizations? If so, what are they?

It was stated that there are problems in these organizations. There may be a rift due to the concept of pay versus volunteerism. Also, there has been a turnover of fire chiefs and power struggles between the two public safety organizations. Most recently, there was also the loss of a well-regarded EMS Director. This change occurred suddenly, and without explanation. It was also noted that as a result of power struggles, fire is not responding on A-2 calls.

Question 10: Is there anything else that you would like to add to the conversation?

The additional remarks included mention of Fire Chief not responding in a command vehicle only which was described as a “little red truck”.

Observations

As noted at the beginning of this chapter, it was determined to utilize a focus group methodology to gain greater insight into the thoughts, feelings, perceptions, and suggestions of representative EMS and Fire personnel, as well as residents of the Town of Amherst. Questions were structured to first of all put the respondents at ease with the focus group moderators, then to gain insight relative to attitudes, beliefs, and or any suggestions, and finally to determine if there was any helpful additional information to be gained from the conversations. As such, and after conducting the focus groups,

there were a number of common themes that seemed to emerge, albeit from different perspectives. These included the following:

- Amherst is a great place to live.
- Some confusion exists relative to the current needs of EMS and Fire.
- Employees appear to have a lack of knowledge and direction.
- As expected, there is apprehension regarding change.
- Some feel that the benefit of cross training between Fire and EMS skillsets is minimal.
- Many participants had questions and concerns about the integration of EMS and Fire.
- Desire to do the best job possible for the residents of the community.
- The need for a separate EMS Director and salary was questioned.
- Employees appear to have uncertainty about leadership or vision.
- Possible pay/benefit disparity between Fire and EMS, although Town generally is a good employer.
- The possible use of existing town personnel, such as the road crew, for possible additional fire staffing was discussed.
- Response time and staffing expectations were discussed.
- Many are uncertain of the best method to affect change and a timeline to follow.

As a result of the focus groups, we are left with a number of pertinent observations. Once again, these observations might be characterized from the responses of Fire and EMS personnel, and also those of the residents that rely on those personnel and the services that they provide. Within the Fire and EMS departments, there seems to be a lack of knowledge and direction; a concern relative to forced change driven by the uncertainty of leadership and direction.

Likewise, many of the same observations are apparent from the focus group comprised of members of the public. However, in addition, there seems to be the observation that adequate EMS services provided to the Town are more prevalent than the need to provide additional fire staffing. Also, in general, it seemed that there is a great deal of confusion and/or lack of substantive information relative to the situation at hand or the most cost effective and efficient solutions to best resolve the situation.

V. GRANTS

The federal FIRE Act grant program provides \$350 million annually in funds for fire apparatus; safety equipment for firefighters; training and physical fitness programs for firefighters; rescue equipment and fire station safety systems such as emergency generators, diesel exhaust removal systems and building fire alarm systems. Also, a Department can apply for a Regional grant that encompasses several Departments in a regional approach for equipment or a program. A Department can apply for up to three FIRE Act grants in a single year. Depending upon the population base of the community, there is a co-pay arrangement of 0, 5, 10 or 25 percent of the total project cost by the municipality.

The federal SAFER Act program makes available approximately \$300 million annually to add career firefighters for two years free of charge and also to bolster the number of volunteer and on-call firefighters for those Departments who rely upon this type of staffing. One cannot apply for both types of SAFER grants in one year: only one is allowed.

The full-time employment type SAFER Act grant adds a number of career positions over two years: the first two years are free from the federal government; the municipality pays for the last year. This must be guaranteed and is monitored by the federal government. If there are lay-offs prior to year six of these positions, the entire grant must be re-paid to the federal government.

The on-call or volunteer recruitment and retention type SAFER Act grant utilizes various strategies to recruit numbers of on-call or volunteer firefighters and seeks to retain them once they join up. The funds can be used for college fire safety degrees; EMT or paramedic training; health insurance; new uniforms; other tax incentives; and a host of other methodologies to get people to join their local fire departments.

The federal grants employ a four-step system for review. First, each application is subjected to a computer review whereby certain statistical elements of the application are reviewed to determine if the applicant meets the criteria as established by the federal government. Approximately 50 percent of all applicants fail to move on past the computer review.

The second element of the system is peer review. This entails a hands-on review of the application and narrative portion by a panel of three "peer reviewers", firefighters or an allied profession. They grade each application in four content areas and the application then receives an overall grade. Usually those with an 80 or above move on to the next phase of the program.

That is the review by professionals from FEMA. The applications are checked again for relevancy to the areas applied to and the costs of each element are

scrutinized against accepted industry standards and pricing. Once this is completed, there usually is a negotiation session with the municipality over the cost of the grant. This usually is a downward negotiation for the receiving department.

The last element is monitoring by FEMA. Once a department receives an award, it is subject to continual review by FEMA, including telephone contact and actual on-site visits by a FEMA representative to insure that the grant is being administered as it was approved.

Typically, in any year, only 8 percent of all grants are approved. There is such a limited amount of money available, it is impossible to satisfy even a tenth of the grant pool. The applications for new fire apparatus alone total over \$1 billion annually.

Despite these stringent guidelines and procedures, we believe that Amherst should seek both types of federal grants in 2015. A SAFER Act grant of \$120,000 for the recruitment and retention of on-call fire and EMS personnel. This grant would include providing EMT training to on-call staff members. In addition, a grant of this type would typically pay for tuition for a fire science course; an EMT course or paramedic program certification; health insurance; and various other tax incentives that could be offered locally (free trash pick-up; reduction in property tax; etc.) can be utilized to recruit and retain new members.

The Fire Chief may want to apply for multiple FIRE Act grants. One application could seek the replacement of a piece of apparatus, the priorities put forth within the grant instructions should be considered. Another FireAct grant could pursue equipment such as tracking units installed on self-contained breathing apparatus (SCBA). This equipment would fall under in the Training or Safety category.

The keys to obtaining these grants is to meet the initial parameters as explained in the grant application and then build a convincing case that Amherst needs the grant. Firefighter safety; meeting national standards; efficiencies and effectiveness in operations; and the ability to share the resource with neighboring communities are big selling points and receive favorable marks from peer reviewers.

RECOMMENDATIONS

- V.1 In 2015, apply for a Federal SAFER Grant for on-call fire and EMS recruitment and retention. This grant should be utilized to develop a marketing program, provide EMT training to Amherst residents, and provide incentives to on-call personnel, such as tuition reimbursement.***

- V.2 *Seek external assistance in the development of Federal FireAct and SAFER Grant Applications.***
- V.3 *Consider applying for a health and safety Federal FireAct Grant. The selected program should enhance operational safety and be tied to meeting or moving toward national standards.***

VI. RECOMMENDED STRATEGY

The study team identified six alternative delivery options. These alternatives ranged from the status quo to the privatization of EMS services. After careful consideration of these alternatives, the study team unanimously recommends that Fire and EMS services be combined, co-located, and structured as a separate division of the fire/rescue department. Developing a separate operational division allows fire services to provide oversight, supervision, and over time will allow cross training of personnel and a shared vision to develop. A single leader well experienced in both fire and EMS should be recruited to manage this operational transition.

In addition, many first responders join to provide a singular type of emergency response service. Not all firefighters want to provide EMS and not all EMS providers want to enter a burning building. Often these unique resources are wasted, as communities require cross training and full integration. The development of an EMS division will allow up to two providers to function as EMS personnel. Although the Town should encourage and support cross training of all personnel, this should not be a requirement.

Currently three EMS staff members are on duty at all times and the EMS Director's position remains vacant. The on duty EMS staffing pattern should be restructured to two personnel at all times. At least one of the two EMS providers should be a paramedic. The EMS Director's salary and the reduction in per diem staffing should be redeployed. First, the on-call members of the Department should be offered the opportunity to fill two weekday, daytime, per diem fire shifts. Preference should be given to members that are EMTs and these personnel should have the shared responsibility of supporting EMS personnel at critical calls, providing lift assists, and staffing the second ambulance.

The purpose of these two weekday per diem fire shifts is to provide a rapid initial response and support the existing on-call department when resources are least available. In the event that Amherst Fire Department members cannot fill these per diem shifts, these shifts should be offered on a per diem basis to qualified firefighter/EMTs from other communities. In the event that these shifts cannot be filled using per diem personnel in either the Fire or EMS Division, the community should hire a firefighter/paramedic to ensure that all four positions are staffed during weekday/daytime hours.

This combination of options has the potential to accomplish the following:

- Integrate the fire and EMS Departments into a single agency
- Preserve the viability of the on-call nature of the Amherst Fire Department
- Strengthen the ability to provide daytime fire response

- Provide daytime staffing for the second ambulance
- Provide Amherst personnel with the opportunity to work shifts
- Preserve the value of singularly focus EMS providers
- Enhance the level of service offered to the community