HANCOCK, NEW HAMPSHIRE
FIRE SERVICES
STUDY

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TABLE OF CONTENTS

Table of Contents

I. PROJECT OVERVIEW, PURPOSE, SCOPE, AND METHODOLGY 4

PROJECT OVERVIEW 4

SCOPE OF WORK 5

METHODOLOGY 7

II: TOWN OF HANCOCK OVERVIEW 10

III: FIRE DEPARTMENT OVERVIEW 13

IV: COMMUNITY RISK ASSESMENT 18

INSURANCE SERVICES ORGANIZATION (ISO) RATING 22

WATER SUPPLY 29

V: FACILITIES, APPARATUS AND EQUIPMENT 312

VI: INCIDENT RESPONSE TYPES AND TIMES 42

VII: STAFFING 46

VIII: AUTOMATIC AND MUTUAL AID PRACTICES …. 58

IX: GRANTS AND REVENUE 61

X: LOOKING FORWARD 64

XI: MAPPING OUT THE FUTURE 66

IMPLICATIONS OF NOT TAKING ACTION 688

XII: CONCLUSIONS AND IMPLEMENTING CHANGE 70

XIII: TEAM PROFILES 722

XVI: COMBINED RECOMMENDATIONS 744

HANCOCK NEW HAMPSHIRE
FIRE AND EMERGENCY MEDICAL SERVICES STUDY
AUGUST 2025

I. PROJECT OVERVIEW, PURPOSE, SCOPE, AND METHODOLOGY

PROJECT OVERVIEW

The Town of Hancock contracted with Municipal Resources, Inc. (MRI) to provide an organizational assessment and review of the manner in which the fire Department and Emergency Medical services are provided within the community. Using this as a basis, the MRI team reviewed the organization and delivery of fire and EMS services within the community, including conducting a target hazard analysis, review of response metrics, and a review of the current facility and apparatus set. Our project team has developed recommendations for improvements that take into consideration the current and future needs of the Town of Hancock, and recommendations for appropriate modifications to the delivery systems to provide the desired level of services to the Town.

MRI has developed this document containing recommendations for improvements to organizational practices, recruitment and retention efforts, infrastructure, quick reaction, and on-call staffing. The project team has developed this document, which outlines appropriate modifications to the Fire Department, Emergency Dispatch Center, and Emergency Medical Services systems to provide optimum service to the entire community. It has also evaluated the efficient use of resources and whether the current organizational structure is appropriate or should be modified.

A key component of the basis of this report is that the Town of Hancock is seeking to evaluate the current operations of the current Fire and EMS delivery system, to identify the present and future service needs of the community, and to provide recommendations that will assist the community with decision making for resource allocation and operational planning.

The goal of the project is to review and analyze the current resources and staffing, forecast future demands for service, and make recommendations regarding the future need of current resources, staffing, and rank structure to fulfill the mission. Part of the objective is to conduct an analysis of the operation of the current Fire and EMS with an emphasis on defining the expected service level of the community and identifying the impact of current response participation

levels, demographics, and projected growth within the response area. The results of this study will be to inform the Town of Hancock of realistic recommendations for providing an efficient and effective Fire and EMS system for today and the future.

The task of the project was to conduct a study to determine the potential to achieve the following benefits:

- Increased efficiency
- Improved effectiveness
- Preservation of a level of service
- Enhanced or expanded services
- Reduced costs
- Cost avoidance
- Coordination of Regional planning
- Elimination of artificial boundaries
- Standardization of services and program
- Potential reduced ISO ratings
- Fire service accreditation
- Impact on future state and federal grant funding

SCOPE OF WORK

The goal of this study is to review and analyze the current resources and staffing, forecast future demands for service, and make recommendations regarding the future need of current resources (including facilities), staffing, and rank structure to fulfill the Department's mission. MRI will conduct a comprehensive analysis of the operation of the Hancock Fire Department with emphasis on the impact of current on-call response participation levels, demographics, and projected growth within the response area. This study shall include a review of all services provided, resources allocated to each service area, organizational structure, communications, and proper staffing level. The comprehensive study will be utilized to inform the Town of Hancock of realistic recommendations for managing and operating the Hancock Fire Department efficiently and effectively. The following five staffing and operational aspects will be addressed within this project:

Review Apparatus Set

1. Evaluate the apparatus set, make recommendations relative to an appropriate apparatus set required to meet the needs of the Town of Hancock.

2. Review and or develop a capital plan for the replacement of apparatus, considering escalating cost and delivery timelines.

3. Consider asset depreciation and recommend a capital reserve appropriation level consistent with the Town's fiscal goals and ability.

Evaluate Facilities & Organizational Needs

4. Evaluate the space and function of fire service facilities and identify if this service platform will support the service level expected in the community.

5. Identify and document existing facility conditions as well as health and safety related concerns.

6. Identify options for a facility renovation and detail the steps necessary to approach a project of this type.

Evaluate Fire Service Operations

7. Review of Fire & Rescue service data and operations, including but not limited to response times, on call participation levels, and organizational capabilities.

8. Review of Southwestern District Fire Mutual Aid Dispatch metrics.

9. Review of Southwestern District Fire Mutual Aid practices and compliance with NFPA 1720. Identify dispatch operational concerns relating to firefighter health and safety.

10. Identification of the current service level offered to the Town of Hancock.

11. Review of incident volumes & trends, community demographics & target hazards.

12. Review of Fire & Rescue best practices and how Hancock meets professional standards.

Review Recruitment and Retention Efforts

13. Review overall trends relative to on-call personnel availability in New Hampshire and the nation, and their impact on the Hancock Fire Department.

14. Identification of recommended wage rates for on-call responders.

15. Develop a future staffing and transition plan necessary to support on-call forces. Said plan shall include using a hybrid staffing pattern, improving on-call recruitment & retention efforts, and suggesting strategies for successful integration of on-call & paid forces.

Provide Advice on Revenue & Grants

16. Identify potential grant opportunities and revenue sources. It should be clearly communicated and understood within the Hancock Fire Department that the purpose of this study is to identify strategies to preserve a predominantly on-call organization and not to supplant the current role of on-call members.

Most importantly, the study shall be an objective, unbiased assessment that is driven by data, national industry standards (e.g., NFPA, ISO, NIST, etc.), and best practices of the organization as it is currently, coupled with a future vision.

METHODOLOGY

To provide an appropriate evaluation of these issues, we employed seventeen methods, which are listed below:

- Conducted Industry based research on the issues presented;
- Review data and performance metrics provided by the Hancock Fire Department and the Town;
- Met with the Town Administrator;
- Met with Selectboard;
- Toured the Town of Hancock;
- Reviewed target hazards;
- Review the current staffing and organizational design;
- Toured the Fire Station;
- Evaluated information relative to service demand and response times;
- Reviewed current operational policies;
- Reviewed quality of service issues and interagency communication;
- Reviewed fire and EMS equipment;
- Interviewed Fire Chief;
- Interviewed Fire Department Officers;
-

In addition, the project team also considered how current and future service demand will impact the location and/or expansion of physical facilities and impact the need for equipment. This report also identifies whether the current fire and rescue staffing is appropriate or should be modified.

Specific items addressed, included but not limited to the following:

A. Identified service needs, based on the characteristics of the community, statutory and regulatory requirements for response and delivery, and comparison with current ability to fulfill the needs and expectations.

B. Identified the public safety risks and prioritized the level of risk that must be covered based on the data and operations of the fire and first response EMS operations. The type, frequency, distribution, response times, mutual aid and/or contractor provided services, staffing policies, and reporting of emergency and routine responses to all services were included.

C. Assessed the current staffing plan for deploying the required number of staff, officers, and supervisors, along with vehicles and apparatus used, and recommended cost-effective alternatives based on the type of incident. Evaluated whether there were recommended changes to improve efficiency and delivery of service.

D. Evaluated the response of personnel, including appropriate operational staffing, supervisors, management, and support staff, starting with the initial call for routine calls or emergency services.

E. Identified the required staffing levels that meet the needs of the community in the most cost-effective and complete manner, including operating costs, personnel impact, and impact on the delivery of service and workload.

During the development of this document, the focus was placed on enhancing current fire and EMS service operations by augmenting and supporting the existing Department. The recommendations contained within this document should be utilized to promote local and regional discussion and collaboration. The proposed plan and timetable have been developed to allow for flexibility while still moving forward.

To accomplish the goals and objectives, this document has been divided into the following sixteen sections:

I: Project Overview, Purpose, Scope and Methodology
II: Town of Hancock Overview
III: Fire Department Overview
IV: Community Risk Assessment
V: Facilities, Apparatus and Equipment
VI: Incident Response Types and Times
VII: Staffing
VIII: Automatic and Mutual Aid practices
IX: Grants and Revenue
X: Looking Forward
XI: Mapping out the Future
XII: Conclusions and Implementing Change
XIII: Project Team Profiles
XIV: Combined Recommendations

II: TOWN OF HANCOCK OVERVIEW



Hancock is in Hillsborough County and borders the Towns of Antrim to the North, Bennington to the Northeast, Greenfield to the East, Peterborough to the South, Harrisville to the South West, and Nelson to the West. The Town is made up of 31.2 square miles, including 30.0 square miles of land and 1.3 square miles of water. The main village in the Town is defined as the Hancock-designated place (CDP) with almost every building on Main Street listed on the National Village Historic District. Hancock's meeting house is the home to Paul Revere's #236 Bell, which chimes on the hour, day, and night. The village does not have typical paved sidewalks; however, there are gravel paths between the houses. The Hancock Inn and Fox Tavern is a major landmark in the Village. There are several things people who visit the area can do, such as visit the Harris Center for Conservation Education, visit the crystal clear Nubanusit Lake, hike many conservation trails, visit antique shops, and visit Sarah's Hat Boxes or Main Street Cheese. U.S. and State Routes 202, 123, and 137 traverse the community.

The population of the Town is 1,731 (2020) with a density of approximately 58 people per square mile. The population was spread out, with 17.9% under the age of 18, 6% from 18 to 24, 15.9% from 25 to 44, 37.9% 45-64, and 22.2% who are 65 of age or older.

There are 867 total housing units in the community, with 787 being single-family units. There are 61 housing units consisting of two to four units, an additional 11 structures with five or more units, and 8 mobile homes or other units.

The largest businesses in the community include The Inn at Hancock, Hancock Market, Fiddleheads Café, Mathewson Co., Inc., and Our Town Landscaping Inc.

Hancock, like many other communities, has a wide range of public safety challenges that they need to be mitigated. With the increasing volume and changing types of incidents that occur, the Fire Department needs to be able to adapt and to respond to these challenges properly and safely.

The population chart below indicates the increasing population of year-round residents and is not reflective of the seasonal influx the Town sees every year with vacationers and people attending scheduled events in and around the Lakes Region area.

Year	Population	% increase
1960	722	18%
1970	909	25.9%
1980	1193	31.2%
1990	1623	34.5%
2000	1742	8.4%
2010	1648	-4.9%
2020	1731	4.7%

Figure 1
Town of Hancock, NH Population Chart

According to the US Census Bureau, 17.9% were under the age of 18 and 22.2% over the age of 65.

2023 Snapshot of population by age

Age		% of population
Under 18		17.9%
18 to 24		6.0%
25 to 44		15.9%
45 to 64		37.9%
65 and over		22.2%

Median age 55.3 years

Figure 2
Hancock, NH Age Distribution Chart

	2023	2024
Municipal	$7.95	$8.21
County	$1.20	$1.15
School	$13.48	$14.07
State Ed.	$1.52	$1.68
TOTAL	$24.15	$25.11
Difference From Prior Yr.	0	$2.40 (3.9%)

Figure 3
Hancock, NH Tax Rate Chart

According to the Department of Revenue, in 2024, the total taxable valuation is $295,152,789.00, and with utilities (Electric, etc.) is $301,874,989.00. There is a minimal residential and commercial growth happening in the Town, and the taxable valuation will no doubt go up in the next year as well as the tax rate.

III: FIRE DEPARTMENT OVERVIEW

The Hancock Fire Department is a vibrant volunteer/on-call fire service organization that is well respected within the area. The Department operates under the following mission statement, which serves as a foundation for organizational culture and a guide to operations.

Hancock Fire Department Mission Statement

The mission of the Hancock Fire Department is to provide protection of life, property, and the environment from fires, medical emergencies, and other hazards through ready response and community education. We are guided by our core values of integrity, professionalism, respect, accountability, teamwork, dedication, and courage.

The Hancock Fire Department (HFD) operates out of a single station and maintains an appropriate fleet of apparatus that is well matched to the community's needs. The Department is overseen by a Fire Chief, who administers a Fire budget for FY 25 totaling $152,081.00. The Department is made up of approximately 27 on-call members who are listed on the roster. Of these 27 members, 15 hold firefighter certifications and 15 EMS certifications.

The Department operates as an on-call fire department. The chief has overall management and authority to run the Department under the direction of the Selectboard. The staff respond to a variety of incident types, including fire rescue and emergency medical calls. Overall, the Town has provided tremendous support to the Department in terms of both facilities and equipment. The Town is considering planned improvements to both facilities and apparatus, which will be discussed in greater detail in this document.

The on-call staff consists of a very dedicated group of people who come from all generational groups. The mix of these groups is what makes a department stable and creates a culture that positively interacts with residents in the community. Compared to several other departments that we have worked with, the HFD appears to be a well-organized, proud, and focused organization. This is not always the case as internal turmoil often exists.

Group	DOB Range	# of Staff
Gen Z	1997-2012	2
Millennials	1981-1996	8
Gen X	1965-1980	4
Boomers	1946-1964	11
Silent Generation	1928-1945	2

Figure 4 - Staff Generation group breakdown

The Department relies heavily on the commitment of its members to respond to emergency calls at all hours of the day, every day. It has been reported that the HFD has been very fortunate throughout the life of the organization and has always had proper staffing for the incidents they respond to and have not had to retone or repage staff to respond except to request additional apparatus and or resources. This is a tribute to the members of the Department and should be recognized by the community. In contrast, many of the departments that we work with have to retone responses multiple times, and some fail to respond to more than 10% of emergencies requiring the response of mutual aid units from adjacent communities.

Almost all the staff have full-time employment elsewhere, and some of these people work for organizations that allow them to leave should the need arise. There are other members who are retired and are more available during the typical work hours to respond. In general, about half of the Department is available most of the time. The HFD needs to continue to monitor not only the participation levels of the individual staff but also the health and wellness of the members to ensure a proper response that can handle the physical work that may need to be done. The officers can always request mutual aid resources on an as needed basis to provide resources and assistance.

Institutional knowledge is an important factor to be considered when looking at the staffing of a fire department. In Hancock, the average years of service to the Department is just under 15 years, including 12 people with less than 10 years, 5 with 10 to 20 years, and 9 with 20 plus years. Considering everyone's overall experience in the fire service, which may include participation in another department, brings the average up to 18.5 years of knowledge and experience. The overall average age of the members is 54.7 years. It is good to see that there are more younger people working in the Department and there is a good balance with senior, more experienced people. It is the hope that the new younger people take the knowledge, skills, experience, and institutional knowledge seriously. The one piece of knowledge a younger person may learn from a more experienced person may save their life.



Figure 5
Hancock Fire Station

Emergency Medical Services



Figure 6 - Hancock First Response EMS Unit

The HFD provides a first response level of service to all areas of the Town for all requests for EMS services. The Department is equipped and provides EMS skills up to the Advanced EMT level. The Town has contracted Peterborough Fire for Paramedic level transport services at an FY 2025 cost of $123,637.57. This model currently provides a high level of service for a reasonable cost to the taxpayer. Peterborough Fire bills and receives all funding from insurance companies in addition to the fee charged to the town. Peterborough's transport unit response times are well within an acceptable time frame, and at times (depending on location), both Hancock and Peterborough arrive simultaneously.



Figure 7
Peterborough Ambulance

Dispatch Services

Dispatching is a contract service that is provided by Southwestern New Hampshire District Fire Mutual Aid (SWNHDFMA) located in Keene, New Hampshire. The SWNHDFMA Center provides dispatching service to many fire and EMS departments in New Hampshire and Vermont and operates under a clearly defined governance framework designed to ensure equitable representation, operational continuity, and strategic oversight across its service area. This structure is codified in the organization's bylaws. Initial dispatch is done on a primary channel, and incidents are assigned an operational channel (aka Fireground channel) once on scene. There seems to be some difficulty in both transmitting and receiving signals to and from the dispatch center on both the dispatch and fireground channels. This is of concern for responder safety and must be addressed.

RECOMMENDATIONS:

III-1 ***The Department should continue a working group to review, update, add, and publish all Standard Operating Procedures (SOPS) to its employees. A process for acknowledging these SOP's should be developed for each employee to sign or initial. This document should be considered a living document and reviewed and changed as needed on a regular basis.***

III-2 ***The Department should review and update Rules and Regulations and should publish these for the employees to have.***

III-3 ***The Department should develop a set of goals and objectives for the next year, as well as long-term goals looking five years out, and be reviewed annually.***

III-4 The HFD should review and or develop a mission, values, and slogan that reflects the Department and should use these as a basis to educate the community.

III-5 Create a work group to develop preplans for structures within the community. As part of this group's mission, they should be collecting information for structure fires that are shared with the CAD and RMS systems.

III-6 The Department should continue to produce and distribute the "Fire Lines" Newsletter as a way of informing the public on the activities of the Department.

III-7 SWNHDFMA Dispatch Center should be consulted and required to do testing of both mobile and portable radio coverage in all areas of the Town. Responder safety during an actual responder emergency is a real concern.

IV: COMMUNITY RISK ASSESSMENT

Fire, Rescue and EMS services generally have a common overall mission; the protection of life and property, but different community profiles in which they operate. These dissimilarities create very different fire and rescue services operational needs based on a unique community risk profile, service demands, and stakeholder expectations.

A community risk assessment is a comprehensive process to identify the hazards, risks, fire, and life safety problems, and the demographic characteristics of those at risk in a community. In each community, there are numerous hazards and risks to be considered. For each hazard, there are many possible scenarios and potential incidents that could be encountered depending on timing, magnitude, and location of the hazard or incident. A thorough risk analysis provides insight into the worst fire and life safety problems and the people who are affected. The analysis results create the foundation for developing risk-reduction and community education programs.

Conducting a community risk analysis is the first step toward deciding which fire or injury problem needs to be addressed. Risk analysis is a planned process that must be ongoing, as communities and people are constantly changing. Too often, an objective and systematic community risk analysis is a step that is overlooked in the community education process. Many emergency service organizations address risks based on a perceived need for service that isn't really there. This approach can be costly (i.e., misdirected resources, continued property loss, injuries, or deaths). In short, a good community risk assessment will produce a picture of what the hazards and potential for incidents are, identify who is at risk, and attempt to quantify the expected impacts.

Understanding the definition of hazards and risks is critical to the risk assessment process. Hazards are physical sources of danger that can create emergency events. Hazards can be items such as buildings, roadways, weather events, fires, etc. Risk relates to the probability of a loss due to exposure to a hazard. People and property can be at risk. Consequences for the community are also factors to consider. Each of these factors is assessed during the community risk process (Figure 8).

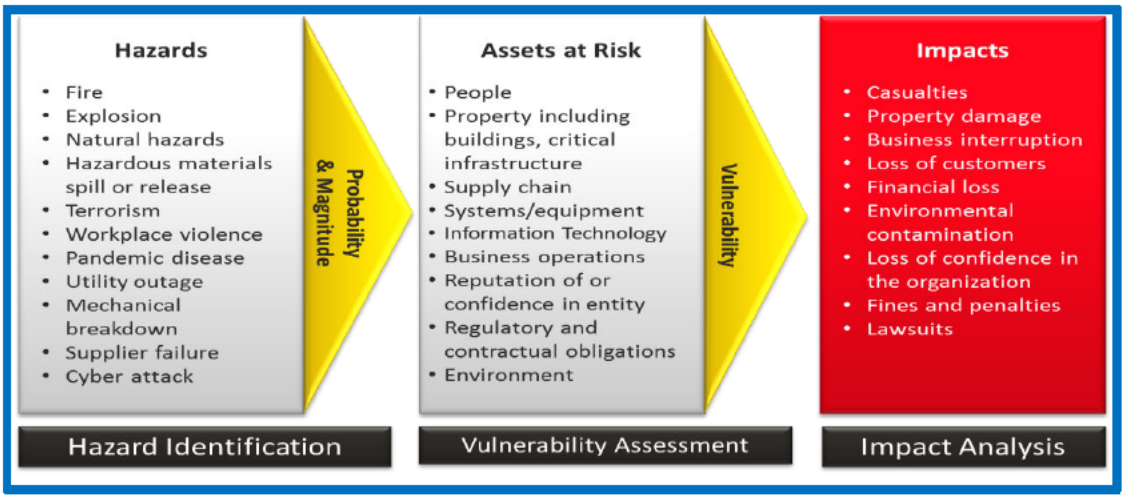
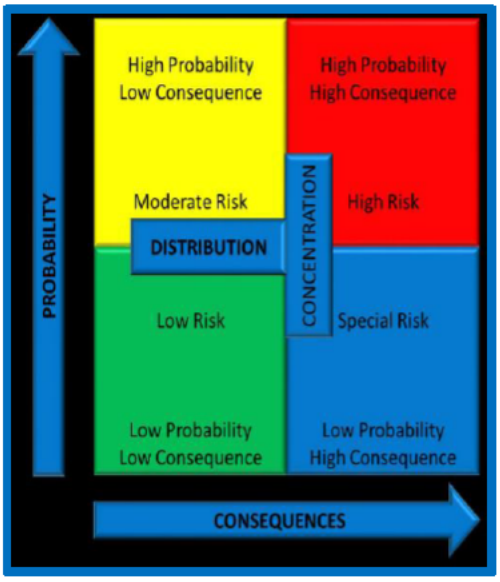


Figure 8
Risk Assessment Process
Image Credit: www.ready.gov/risk-assessment

A more focused fire risk assessment is performed by assessing such factors as the needed fire flow, probability of an incident, consequences of an incident, and occupancy risk. The "score" established is then utilized to categorize the area, or even individual properties, as one of low, moderate, or high/maximum risk. This categorization can assist the fire department in establishing fire risk/demand areas or zones.



Having this information readily available provides the community and the fire department with a better understanding of how fire stations, response run cards, and staffing patterns can be used to provide a higher concentration of resources for higher risk scenarios or, conversely, fewer resources for lower levels of risk.[1]

Figure 9
Fire Probability and Consequences Matrix
Credit: Commission on Fire Accreditation

[1] Fire and Emergency Service Self-Assessment Manual, Eighth Edition, (Commission on Fire Accreditation International, 2009), p. 49.

The community fire risk assessment may also include determining and defining the differences in fire risk between a detached single-family dwelling, a multi-family dwelling, an industrial building, and a high-rise building by placing each in a separate category.

According to the NFPA *Fire Protection Handbook*, these hazards are defined as:

> **High-hazard occupancies:** Schools, hospitals, nursing homes, high-rise buildings, and other high life-hazard or large fire-potential occupancies.
>
> **Medium-hazard occupancies:** Apartments, offices, mercantile, and industrial occupancies not normally requiring extensive rescue by firefighting forces.
>
> **Low-hazard occupancies:** One-, two-, or three-family dwellings and scattered small business and industrial occupancies[2].

The NFPA also identifies a key element of assessing community vulnerability as fire department operational performance, which is a comprised of three elements: resource availability/ reliability, department capability, and operational effectiveness[3].

> **Resource availability/reliability:** The degree to which the resources are ready and available to respond.
>
> **Department capability:** The ability of the resources deployed to manage an incident.
>
> **Operational effectiveness:** The product of availability and capability. It is the outcome achieved by the deployed resources or a measure of the ability to match resources deployed to the risk level to which they are responding.[4]
>
> The implementation of successful community risk reduction strategies after completion of a community risk assessment are linked directly to prevention of civilian and firefighter line of duty deaths and injuries. In fact, they directly address goals found in firefighter Life Safety Initiatives 14 and 15.

[2] Cote, Grant, Hall & Solomon, eds., Fire Protection Handbook (Quincy, MA: National Fire Protection Association, 2008), p. 12.
[3] http://www.nfpa.org/assets/files/pdf/urbanfirevulnerability.pdf.
[4] National Fire Service Data Summit Proceedings, U.S. Department of Commerce, NIST Tech Note 1698, May 2011.

Virtually every risk reduction program in the fire and emergency services will have elements of what are called **"The 5 Es of Prevention".** These include:

Education ▪ Enforcement ▪ Engineering
Economic Incentives ▪ Emergency Response

Understanding and addressing only one element will not lead to a successful program. All five "Es" must be integrated into every program for it to be effective[5] (Figure 10). Strong fire prevention codes have been shown to be an extremely effective means to reduce risk in a community. Fire alarm and sprinkler systems mandates, for not only commercial buildings but all occupancies, including single-family dwellings, dramatically reduces fire risk and increases life safety. Code implementation that doesn't require these creates an increased risk. A weak code enforcement causes an increase in fires and emergency response. Strong code provisions and enforcement have demonstrated a greater ability to decrease fire problems than continuing to acquire more traditional fire department resources.



Figure 10
Five Es of prevention in a community risk reduction program.
Image credit: www.beaherosaveahero.org

[5] http://www.beaherosaveahero.org/2013/10/community-risk-reduction-crr-overview/ February 5, 2016

INSURANCE SERVICES ORGANIZATION (ISO) RATING

ISO is an independent risk company that services insurance companies, communities, fire departments, insurance regulators, and others by providing information about risk. ISO's expert staff collects information about municipal fire suppression efforts in communities throughout the United States. In each of those communities, ISO analyzes the relevant data and assigns a Public Protection Classification – a number from 1 to 10. This Class rating places the community in the middle of having a commendable fire suppression program for its size. A Class 1 community represents an exemplary fire suppression program, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria.

The Public Protection Classification (PPC) program provides objective countrywide criteria that may prove helpful in connection with fire departments and communities planning and budgeting for facilities, equipment, and training. When companies have fewer or lower claims to pay, the premiums they collect can be lower. Therefore, by recognizing the potential effect of improved fire suppression on fire insurance losses, in that respect, the PPC program can often serve as an objective mechanism that can help recognize communities that choose to maintain and improve their firefighting services.

PPC can also be an important factor in overall community resilience and provides a consistent measurement tool that can help in these efforts, from the structural fire response perspective. Given the potential effect on fire insurance rates, the PPC could also be a factor considered by some businesses and developers to determine where to make investments.

While ISO's primary focus is to measure the effectiveness of a community's ability to respond to structure fires for insurance purposes, there are many derivative benefits. These include providing a statistically proven method of measuring performance; a methodology that can help as part of planning, budgeting for, and making improvements; a tool that can be used to further the concept of community resilience; and a metric that can help encourage investment in a community.

The ISO rating for Hancock currently is a **6/6Y**, which is a really good rating for a department with the current makeup, response capabilities, and local water supply. However, some minimal changes could result in returning to the favorable 5/5Y rating. In reviewing the ISO evaluation, there are some very notable deficits that can be corrected and allow the community to obtain a better rating. Most notable are the Credit for Company Personnel, Credit for Training, and Credit for Inspection and Flow testing of Hydrants. The areas of Deployment Analysis and Company

Personnel all deal with the number of trained staff you have available 24/7. With the number of call staff, the training component can be more challenging to obtain, but it can be done. One of the key factors is proper training in various disciplines, as outlined in the full report as well as proper documentation to demonstrate the components and attendance of the training conducted.



Figure 11
ISO Grading Chart USA
2019

One of the action items developed through the adoption of this study should be to move the Departments from the current class to a lower class over five years. Our team believes that this grade reduction could be accomplished through at least focusing on staffing, training, and water supply inspection, and flow testing. The greatest fire safety concern throughout the area is the potential life loss in fires that occur in non-sprinklered, single and multi-family residential dwellings during sleeping hours, which is consistent with national trends. These fires are fueled by new "lightweight" construction and more flammable home contents. The time to escape a house fire has dwindled from about 17 minutes, 20 years ago, to three to five minutes today. This poses a severe risk not only to occupants but also to firefighters, as they now have less time to do their job and save residents' lives and property.

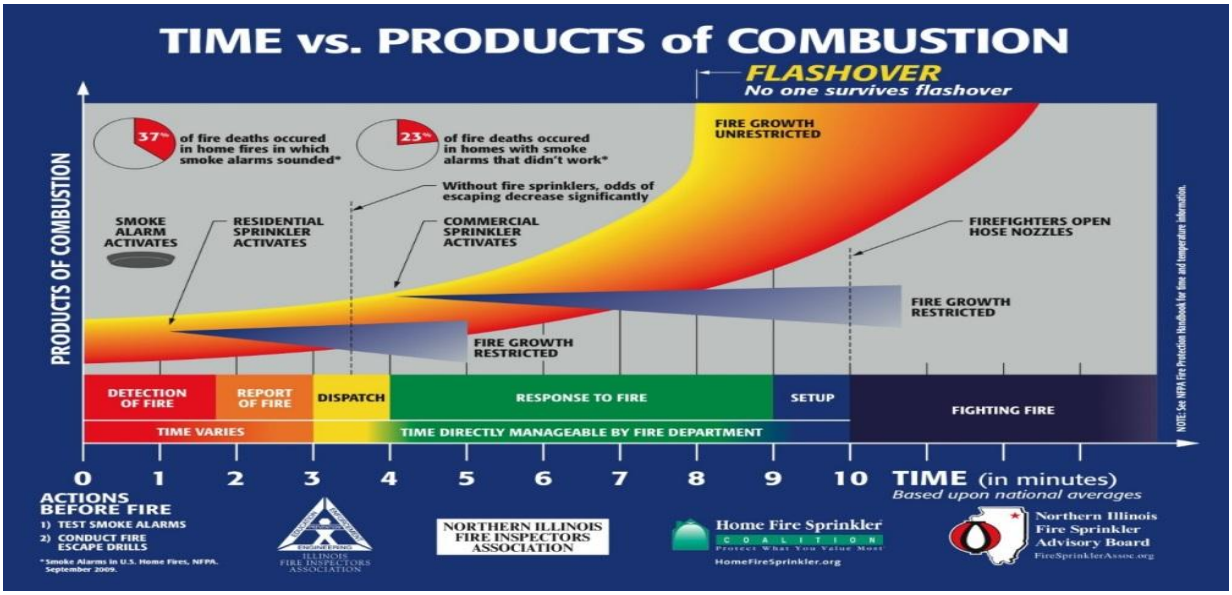


Figure 12 – Fire Development Timeline

Time versus products of combustion curve showing activation times and effectiveness of residential sprinklers (approximately 1 minute), commercial sprinklers (4 minutes), flashover (8 to 10 minutes) and firefighters applying first water to the fire after notification, dispatch, response and set up (10 minutes)
http://firesprinklerassoc.org/images/newflashoverchart.jpg

Hancock has five buildings that are fully sprinkler protected: Town Hall, Meeting House, Vestry, the Inn, and the Elementary School. Fire sprinklers save lives and property, producing large reductions in the number of deaths per thousand fires, and average direct property damage per fire, especially in the likelihood of a fire with large loss of life or large property loss. They do so much quicker and often more effectively and with less damage than firefighting operations. No fire safety improvement strategy has as much documented life safety effectiveness as fire sprinklers because they extinguish the fire, or, at a minimum, hold it in check and prevent flashover, until the arrival of the Fire Department.

Studies from 2007 to 2011 of fires in all types of structures show that when sprinklers were present in the fire area of a fire that was large enough to activate the sprinklers in a building not under construction, sprinklers operated 91% of the time[6]. When they operated, they were effective 96% of the time, resulting in a combined performance of operating effectively in 87% of reported fires where sprinklers were present in the fire area and the fire was large enough to

[6] U. S. Experience with Sprinklers. John R. Hall, Jr. National Fire Protection Association, June 2013.

activate sprinklers[7]. **In homes (including apartments), wet-pipe sprinklers operated effectively 92% of the time. When wet-pipe sprinklers were present in the fire area in homes that were not under construction, the fire death rate of 1,000 reported structure fires was lower by 83%, and the rate of property damage per reported home structure fire was lower by 68%.**

Like most communities, Hancock has various types of housing that are older, although still well-maintained. Most of these older residential occupancies are wood frame houses. The fire service further assesses the relative risk of properties based on several factors. Properties with high fire and life risk often require greater numbers of personnel and apparatus to effectively mitigate a fire emergency. Staffing and deployment decisions should be made with consideration of the level of risk within each area of a community.

Low Risk: Minor incidents involving small fires (fire flow less than 250 gallons per minute), single patient non-life-threatening medical incidents, minor rescues, small fuel spills, and small brush or outside fires.

Moderate Risk: Moderate risk incidents involving fires in single-family dwellings and equivalently sized commercial office properties (needed fire flow generally between 250 gallons per minute to 1,000 gallons per minute, life threatening medical emergencies, hazardous materials emergencies requiring specialized skills and equipment, technical rescues involving specialized skills and equipment, and larger brush and outside fires particularly if structures are exposed.

High Risk: High-risk incidents involving fires in larger commercial properties with sustained attack (fire flows more than 1,000 gallons per minute), multiple patient medical incidents, major releases of hazardous materials, and high-risk technical rescues.

The potential emergency risks present in towns are not limited to just residential or commercial structural fire incidents. Weather, Transportation, Hazardous Materials, and man-made disasters all add to the overall risk in the community.

It is the project team's assessment that the level of risk differs based on the specific infrastructure and demographics of each community. The level of risk faced by each community and the region overall can be established based on the information presented within Figure 13.

[7] U. S. Experience with Sprinklers. John R. Hall, Jr. National Fire Protection Association, June 2013.

OCCUPANCY DESCRIPTION	RISK
Single Family Residential (unsprinkled)	*Moderate*
Multi-Family Residential (sprinkled)	*Moderate*
Multi-Family Residential (unsprinkled)	*High*
Institutional-Educational	*Low*
Commercial (Retail and Office) (sprinkled)	*Moderate*
Commercial (Retail and Office) (unsprinkled)	*High*
Industrial	*Moderate/High*
Open Space	*Low*
Transportation Incident	*High*

Figure 13
Community Risk Assessment Hazard Index

The weather a community experiences can impact the Fire and EMS ability to respond. Snow, ice, and other conditions can slow response. Major storms can create emergency situations that can overwhelm local emergency response forces. The regional area enjoys a moderate climate typical of the New England region. Thunderstorms, strong windstorms, and significant rain events happen several times in an average year, and tropical storms and hurricanes occasionally impact the area. Snowfall is experienced annually, and occasionally in amounts that paralyze the region.

The above information is intended to provide a "snapshot" of the area. It is not intended to be all-inclusive or comprehensive. For the fire Department and first responders, it serves to put the Town and its associated hazards and risks into some context as the fire Department works to carry out the recommendations of this study. A moderate to high-risk designation should not infer that the risks are imminent safety concerns. The risk designations present themselves based on several factors, including what is the potential risk to people, based on the factors specific to the target hazard in question.

Ultimately, a comprehensive risk assessment should:

- Clearly identify and classify the Town's current risks;
- Place the risks in context with the Fire Department's current operational capabilities and procedures;
- Reflect what the Budget Committee and Selectboard feels is an acceptable level of risk for the Town.

Looking ahead, the region will continue to experience a slow growth increase in development and population, although probably not high levels. While any development will have a definitive impact on the Town's emergency services, the exact amount is difficult to quantitatively and accurately predict. Increased development of any type will mean an increase in the number of people living, working, and traveling within the area. Each of these will reasonably be expected to result in an increased number of requests for services from the fire services in the region. They can also impact response times through increased traffic and congestion.

It is likely, the most significant increase in requests for emergency services will be EMS related. More people simply increase the number of medical emergencies that occur. It would not be unreasonable to expect that the increase in EMS incidents would be proportional to the increase in population; however, that is not always the case. Although several factors can ultimately impact the requests for service, such as ages or socio-economic status of new residents, or an aging population, it could reasonably be anticipated that an increase in population, along with potential increases in employment from any significant commercial development, would translate into an increase in emergency medical incidents.

The fire service further assesses the relative risk of properties based on a few factors. Properties with high fire and life risk often require greater numbers of personnel and apparatus to effectively mitigate a fire emergency. Staffing and deployment decisions should be made with consideration of the level of risk within each area of the community. The assessment of each factor and hazard as listed below took into consideration the likelihood of the event, the impact on the Community itself, and the impact on the community's fire and first response EMS providers' ability to deliver emergency services, which includes automatic aid capabilities as well. The list is not all inclusive but includes categories most common or that may be present in the community as a whole.

Low Risk:

- ***Automatic Fire/False Alarms***
- ***Single patient/non-life threatening BLS EMS Incidents***
- ***Minor Flooding with thunderstorms***
- ***Good Intent/Hazard/Public Service***
- ***Minor fire incidents (fire flow less than 250 gallons per minute) with no life safety exposure***
- ***Minor rescues***
- ***Outside fires such as grass, rubbish, dumpster, vehicle with no structural/life safety exposure***

- ***Small fuel spill***

<u>Moderate Risk</u>:

- ***Fires in single-family dwellings and equivalently sized commercial office properties (needed fire flow generally between 250 gallons per minute to 1,000 gallons per minute) where fire and/or smoke is visible, indicating a working fire.***
- ***Life threatening ALS medical emergencies***
- ***Motor Vehicle Accident (MVA)***
- ***MVA with entrapment of passengers***
- ***Hazardous materials emergencies requiring specialized skills and equipment, but not involving a life hazard***
- ***Technical rescues involving specialized skills and equipment (such as low angle rescue involving ropes and rope rescue equipment and resources***
- ***Larger brush and outside fires, particularly if structures are exposed***
- ***Suspicious Substance Investigation involving multiple fire companies and law enforcement agencies***
- ***Surface Water Rescue***
- ***Good Intent/Hazard/Public Service fire incidents with life safety exposure***

<u>High Risk</u>:

- ***Fires in larger commercial properties and target hazards with a sustained attack (fire flows more than 1,000 gallons per minute)***
- ***Cardiac/respiratory arrest***
- ***Multiple patient medical/mass casualty incidents with more than 10 but less than 25 patients***
- ***Major releases of hazardous materials that causes exposure to persons or threatens life safety***
    - ***Confined Space Rescue***
    - ***Structural Collapse involving life safety exposure***
    - ***High Angle Rescue involving ropes and rope rescue equipment***
    - ***Trench Rescue***
    - ***Explosion in a building that causes exposure to persons or Threatens life safety or is outside of a building***
- ***Suspicious Substance incident with injuries***
- ***Weather event that creates widespread flooding, building damage, and/or life safety exposure***

Special Risk:

- ***Working Fire in a structure greater than three (3) floors***
- ***Fire at an industrial building or complex with hazardous materials***
- ***Mass Casualty Incident over 25 patients***
- ***Rail or transportation incident that causes life safety exposure or threatens life safety through the release of hazardous smoke or material***

WATER SUPPLY

The community has a municipal water supply for primarily domestic use. The system has approximately 30 fire hydrants and some commercial fire suppression systems tied in. This system is annually tested by the DPW. Data provided indicated flows and pressures that should be considered at the very low end of the water supply needed for an average structure fire. Currently, the flows range from 225 to 1000 GPM. Along with the flow (gallons per minute) is the pressure needed to get water into the fire truck, so it can increase the pressure to give the firefighters the proper nozzle pressure to put out a fire and to protect them at the same time. It is important to note that using a fire hydrant for fire extinguishment influences the quality and quantity of water available for domestic use. If the water supply for drinking water and for fire attack is drained, it will create a health and safety issue that will need to be addressed. The chart below indicates the data provided.

Gallons per minute flow range	# of Hydrants
Zero or no data provided	5
1 to 299 Gallons per minute	12
300 to 500 Gallons per minute	15
500 to 999 Gallons per minute	2
1000 or greater	1

Figure 14
Hydrant Flow Test Data

KV Partners LLC of Gilford, New Hampshire, did an evaluation of the system and the use of UV disinfection in 2011. In the letter, it stated the Department uses approximately 10,000 gallons of water for training (assuming it is per year) and that the flow must be less than 350 GPM or less to not trip the flow alarm. The construction and BTUS's rate of home furnishings require a great deal of water to overcome the high temperatures and put a fire out. With the inability to have

proper flow and pressure, the Department needs to continue to plan and train to have an adequate water supply to mitigate an incident and to operate in a safe manner without the use of the hydrants. The suppression systems (fire sprinklers) that are tied in and automatically go off in a fire condition will reduce the needed flows as the fire is either extinguished or held small by the spray from the sprinkler heads. The use of tankers and or relay pumping will need to be established early on in a fire to minimize the use of hydrants.

Based on the limitations of the hydrant system, it should not be relied upon for fire suppression. Instead, this system should be viewed as an aid to assist the Department in determining where to slowly and consistently fill tankers.

RECOMMENDATIONS:

IV-1 The HFD should conduct a thorough Community Risk Assessment and use the assessment as a tool to move the Department into the future. Over the next year, a plan should be developed to utilize strengths to pursue opportunities and address weaknesses while mitigating threats. This should be an ongoing process that has member involvement and is moved forward by the officer core.

IV-2 The Department should create an inventory of water supply sites, both with and without a dry hydrant. Each of these devices should have a unique ID number and should be flushed and or tested annually. All work done at the sites should be kept in a log. Each time a device or site is tested, the flow should be documented in a log.

IV-3 The Department should continue to request and receive flow data from the water division to ensure the pre-plan model created can be supported by the pressurized hydrant system, and if not, that a plan is in place, and if practical trained on.

IV-4 Based on the limitations and concerns of the hydrant system, it should be only utilized as an aid (harnessing a low and consistent flow) to fill tankers during fire suppression operations.

IV -5 The Department should continue to monitor and encourage improvements to the municipal water supply. Improving fire flow would, decrease concerns relative to use, and create a more sustainable source for fire suppression.

IV-6 The Department should continue to develop and train on establishing a sufficient water supply both in and out of the hydrant district for an average structure that is 50% involved with no exposures. This should be the baseline and built upon as the involvement and exposures increase.

IV-7 The Community and the Department should continue to invest and expand the training site behind the station and offer training to its members and the surrounding communities to train with them at a preferred local safe training ground.

IV-8 All inspections need to be formally tracked and documented for Day Care Centers, Schools, Annual occupancy inspections, and all Special events.

IV-9 The Department should consider having two tankers to move water. (See Apparatus Section.

V: FACILITIES, APPARATUS AND EQUIPMENT

Fire stations are a critical component of effective fire and EMS service delivery. In addition to housing apparatus, a modern fire station will provide safe housing of staff, proper storage and maintenance of equipment, including personal protective equipment. Modern fire stations should also add safety and efficiency to the fire department's operations.

The Hancock Fire Department operates out of a single station that was originally built in 1980, with an addition added in 1992.



Figure 15
Hancock Fire Station

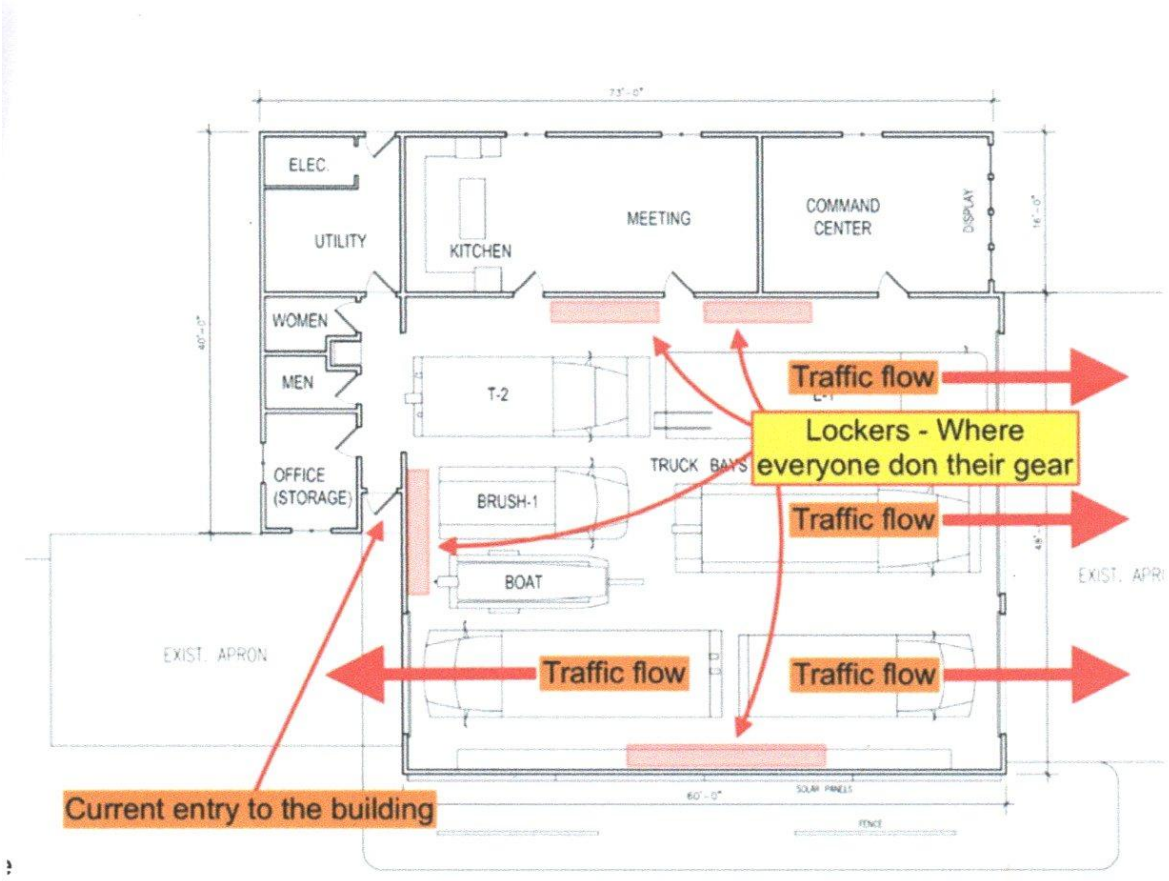


Figure 16
Current floor plan

The plans reviewed by the MRI team to add to the current station have many safety considerations that are in line with a modern fire station, without the need to tear down and start all over at a much higher cost. The need to ensure firefighter health and safety, including environmental hazards "clean versus dirty areas", cancer prevention, proper decontamination of people, equipment, and gear, the flow of incoming staff, and the movement of responding apparatus are all key features. The apparatus floor area (fire truck garage) is very tight today, and any future apparatus built to a proper standard will make it even tighter if it is to be able to fit in the floor plan as it is today. The need to properly provide basic functions of staff is key to recruitment and retention. The rooms and training areas are appropriate, flow in a safe manner, and have operational needs taken into consideration. As an example, the training area is accessed from the outside by the apparatus floor, is separated from the Command Center, and allows for meetings and training to take place without interruption.

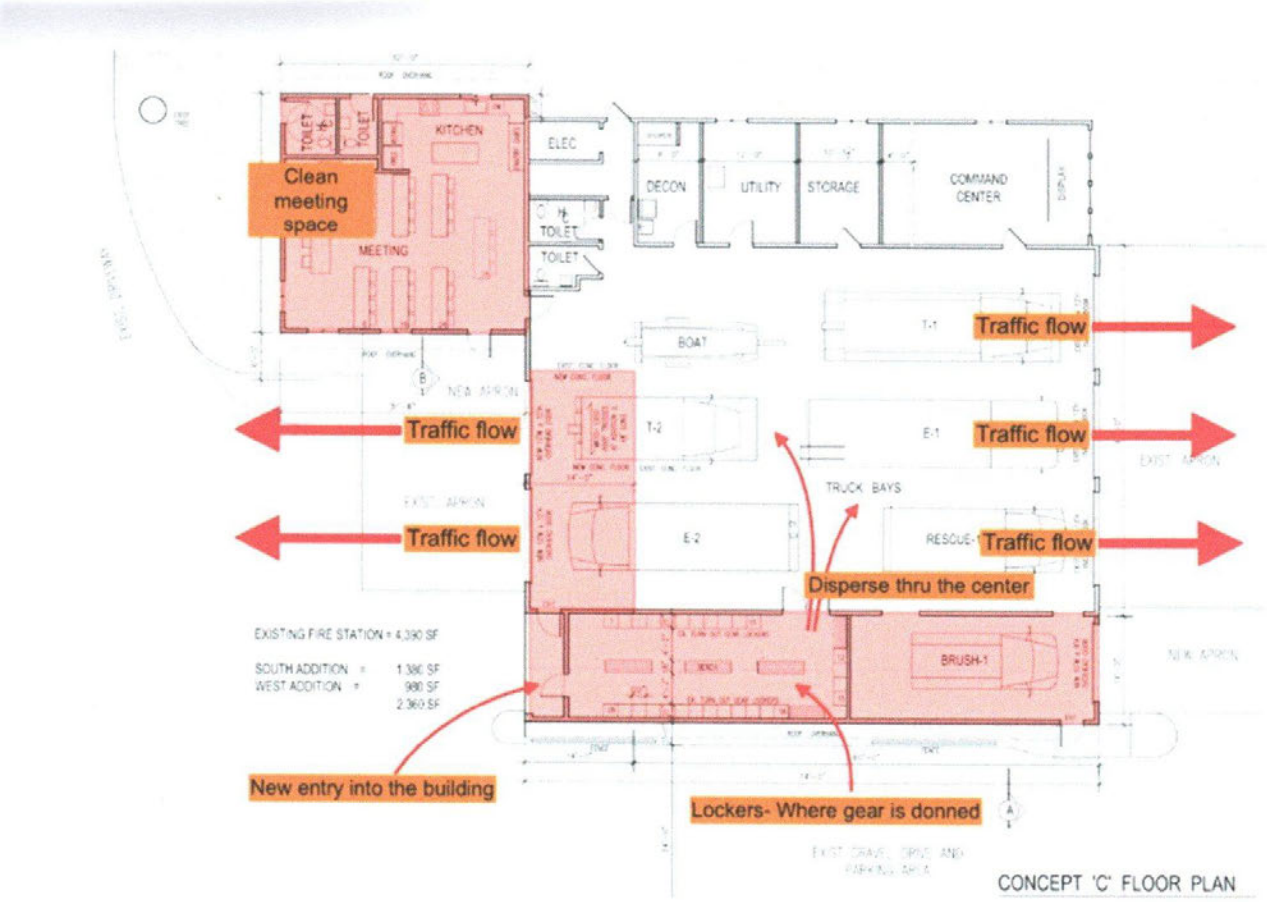


Figure 17
Proposed Fire Station Renovation Floor Plan

The MRI team recommends the Town continue with the proposed plan, to invest in the proper housing of high value apparatus and to give a safe environment for staff to work, train, and respond from to meet the needs of the community. Clearly, this is a conservative request to meet the immediate fire protection needs of the community.

There are many options the community should explore to fund this project. The overall cost provided to the MRI team indicates a cost of $1,080,000

The Town's Taxable value is derived from the State of New Hampshire 2024 and does not include utility or railroad portions. The costs are calculated based on a one-year project with no bonds being taken on. To further assist in understanding the cost impact, the charts indicate total tax added per thousand of valuation and broken down by four valuation points.

Town Taxable value	**295,152,789**			
	$ 295,152.79			
Total Cost	$ 1,080,000.00			
Annual Cost per 1000	**$ 3.66**			
			Wk	**Day**
Cost on $250,000. Taxable value	$ 914.78		$ 17.59	$ 2.51
BI annual Tax bill	$ 457.39			
Cost on $500,000. Taxable value	$ 1,829.56		$ 35.18	$ 5.01
BI annual Tax bill	$ 914.78			
Cost on $850,000 Taxable value	$ 3,110.25		$ 59.81	$ 8.52
BI annual Tax bill	$ 1,555.13			
Cost per million Taxable value	$ 3,659.12		$ 70.37	$ 10.02
BI annual Tax bill	$ 1,829.56			

Figure 18
Approximate tax increase based on full cost absorption

There are many variables in calculating bonds and the cost of a bond for a project like this. For example, the interest rate at the time, the bond rating of the community, conditions the bonding agency may have on the project, and if there is a partial or full release of the money at the time the bond is issued. To assist with looking at the bond for the potential cost, the MRI team has provided the chart below. The chart is assuming a project cost of $1,080,000.00, an interest rate of 6% calculating for interest only with no other potential charges. To further assist with comparisons, each payment type has been calculated for a five and a ten-year payback.

Years	Rate	Payment	# Payments	Amount	Total Payments	Interest	Principal	Interest
10	6%	Quarterly	40	$ 36,150.80	$ 1,446,031.82	$366,031.82	75%	25%
5	6%	Quarterly	20	$ 62,951.99	$ 1,259,039.81	$179,039.81	86%	14%
10	6%	Bi Annual	20	$ 72,846.57	$ 1,456,931.38	$376,931.38	74%	26%
5	6%	Bi Annual	10	$ 126,852.99	$ 1,268,529.00	$188,529.90	85%	15%
10	6%	Annual	10	$ 147,906.04	$ 1,479,060.35	$399,060.35	73%	27%
5	6%	Annual	5	$ 257,559.46	$ 1,287,797.29	$207,797.29	84%	16%

Figure 19
Approximate tax increase based on bonds

APPARATUS AND EQUIPMENT

The Hancock Fire Department maintains a modern and appropriate apparatus set consisting of two structural engines, one rescue truck, one forestry truck, two tankers, and one boat. A replacement plan for the apparatus fleet is in place and has been successful.

Engine 1	**2019**	**Smeal 1250 GPM, 1000 Gallon Tank**
Engine 2	**2007**	**Smeal/International 1250 GPM, 1000 Gallon Tank**
Tanker 1	**2001**	**KME/International 2500 Gallon Tank, 1250 GPM pump**
Tanker 2	**1988**	**White/GMC Front mount pump, 1000 GPM single stage, 1980 tank**
Rescue 1	**2006**	**Valley/Ford F550 cab 12-foot Rescue poly body**
Brush 1	**1993**	**Ford F250 4WD**
Boat 1		**16-foot Aluminum Hull w/ 25HP Yamaha motor**

Figure 20
Apparatus Inventory

One of the key factors in the fleet maintenance of apparatus and equipment is a strong repair and maintenance program. The Department has been following both the manufacturers' recommendations and the appropriate National Fire Protection Association standards for testing on pump hoses, Self Contained Breathing Apparatus, and EMS equipment.

With the water supply challenges in the community, the ability to bring water to the scene is crucial for containing and extinguishing fires. The ability to have larger water tanks on trucks as well as having tankers is something the Department needs to continue to monitor, as well as the condition of the current fleet, and ensure that future apparatus have sufficient on-board water to bring to incidents. With the community water supply need coupled with a municipal water supply that is not sufficient, there should be two tankers or one tanker and one tanker/pump combination in the Department's inventory.

Another notable piece of equipment that should be considered is a side by side or other off-road means to reach sick, injured, or lost people on the vast trails within the community. An appropriate enclosed trailer will allow for the storage of equipment to be used on the off-road vehicle, such as a stokes basket, possible portable water tank, a pump, and hose, backpack with EMS gear, maps, etc.

Review of the Capital Improvement plan indicates that the equipment on the list is appropriate. The Department should review the list and update it on an annual basis for order of items to meet current and projected needs as well as cost. The estimated replacement cost on many of

the items appears to be very low. The cost of apparatus over the past several years has increased by an average of 16% each year.

A recent purchase of a fire truck with 1300 gallons of water priced out at just over 1 million dollars. Along with the cost, the time from bid award to delivery is currently averaging 2.75 years. The delivery time must now be considered in the purchasing time frame to ensure delivery prior to a piece of equipment being taken offline due to repair costs or safety concerns. Proper planning for purchasing needs to start two to three years before the actual need exists.



Figure 21 – Engine 1



Figure 22 - Engine 2



Figure 23 – Tanker 1



Figure 24 – Tanker 2



Figure 25 – Brush 1



Figure 26 – Rescue 1



Figure 27 – Boat

RECOMMENDATIONS:

Station:

V-1 ***The current plan for adding space is a benefit and is an indirect result of the primary goal of safety and efficiency. This project needs to be funded and completed as the need has been outlined, and the costs will only increase each year it is not done.***

V-2 ***Cancer in the fire service is on the rise. All reasonable and proper methods to reduce the risk of cancer should be implemented as soon as practical. (Majority of these are included in the expansion plan proposed).***

V-3 ***The Town should consider making accommodations at this station for future use and needs. Items such as dormitories, kitchen, office, and dayroom areas that could be used during long-term emergencies, and or for housing student interns in the future.***

Apparatus and equipment:

V-4 ***The Auto extrication tools are 20 years old, and the airbags are out of date. It is recommended that these items be placed on the Hancock Capital Plan for future replacement.***

V-5 ***A 20-year capital plan should be reviewed on an annual basis.***

V-6 ***Purchase, train, and equip a side by side ATV or other off-road trail vehicle and trailer to store and move the equipment in.***

V-7 ***Based on the current cost of large capital items for the Fire Department, the Town should consider increasing and or creating a reserve fund of $250,000.00 a year.***

V-8 ***A second set of PPE should be purchased for each interior firefighter. The gear should be within date and will allow for proper decontamination of gear as needed, and allow the firefighter to respond to other incidents while the cleaning process is taking place.***

VI: INCIDENT RESPONSE TYPES AND TIMES

From the perspective of effective emergency response, there are three main factors that are used to help determine the deployment of resources: response time, travel distance, and call volume. For most evaluations, response time is the most critical factor; an important measuring instrument to determine how well a fire department or first response EMS provider is currently performing, to help identify response trends, and to predict future operational needs. Getting emergency assistance to the scene of a 9-1-1 caller in the quickest time possible may be critical to the survival of the patient and/or successful mitigation of the incident. Achieving the quickest and safest response times possible should be a fundamental goal of every fire department and first response EMS provider. It is not just a cliché that during critical life-threatening situations, minutes and even seconds truly do count.

An analysis of the type of incidents Hancock responded to in 2022, 2023, and 2024 was completed with data provided. The table below shows a broad classification of the types of incidents as reported to the National Fire Incident Reporting System (NFIRS) and an average of the three years indicating the number of responses to each type. Regardless of the actual incident address (in town or mutual aid) all responses were calculated as it was a service that was provided by the Fire Department.

NFIRS Reporting System	2022		2023		2024		3 Year Average	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
100 Series- Fires	8	4.88%	15	6.88%	15	7.89%	13	6.55%
200 Series - Ruptures / Explosions	1	0.61%	2	0.92%	1	0.53%	1	0.68%
300 Series - Rescue / EMS	99	60.37%	118	54.13%	111	58.42%	109	57.64%
400 Series - Hazardous Condition	17	10.37%	27	12.39%	18	9.47%	21	10.74%
500 Series - Service Call	12	7.32%	11	5.05%	6	3.16%	10	5.17%
600 Series - Good Intent	18	10.98%	27	12.39%	24	12.63%	23	12.00%
700 Series - False Alarm	9	5.49%	16	7.34%	12	6.32%	12	6.38%
800 Series - Severe Weather	0	0.00%	2	0.92%	3	1.58%	2	0.83%
900 Series - Special Incident	0	0.00%	0	0.00%	0	0.00%	0	0.00%
TOTAL	**164**	**100%**	**218**	**100%**	**190**	**100%**	**191**	**100%**

Figure 28
2021 Fire Department by Incident type

The highest demand for service is for Rescue and EMS calls, with an average of 57.64%, followed secondly by Good intent calls at 12%. Hazardous conditions reflect calls like power lines and or trees down, flooding, or any other condition that does not necessarily fit into any of the other types. Hazardous condition calls average 10.74% over the three study years. Fires themselves consistently reflect 6.55% on average of the response volume during the three years of the study.

Incidents by day of the week and time of day were also analyzed. The outcome of the data looked at is very comparable to other departments that have been looked at over the past few years. The statistics indicate there is minimal difference in the day of the week, showing the need is every day.

Incidents by Day of the week	2022		2023		2024		3 Year Average	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
Monday	29	18%	21	10%	28	15%	26	14%
Tuesday	17	10%	37	17%	32	17%	29	15%
Wednesday	20	12%	46	21%	28	15%	31	16%
Thursday	22	13%	32	15%	13	7%	22	12%
Friday	23	14%	33	15%	28	15%	28	15%
Saturday	31	19%	29	13%	32	17%	31	16%
Sunday	22	13%	20	9%	29	15%	24	12%
	164	**100%**	**218**	**100%**	**190**	**100%**	**191**	100%

Figure 29
Analysis by Day of the Week

The time of the day was reviewed, and once again indicated what we typically see with every study we have recently done. The "awake hours" are the busiest time of the day.

Incidents by Time of Day	2022		2023		2024		3 Year Average	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
0000-0559	24	15%	29	13%	20	11%	24	13%
0600-1159	50	30%	69	32%	53	28%	57	30%
1200-1759	59	36%	75	34%	63	33%	66	34%
1800-2359	31	19%	45	21%	54	28%	43	23%
	164	100%	**218**	100%	**190**	100%	**191**	100%

Figure 30
Analysis by Time of Day

What is truly clear is that the public needs are twenty-four-hour needs all year long. It is important to be able to respond efficiently and effectively to incidents all day, every day.

Structural firefighting has become far more challenging and dangerous in the last thirty years. A fire can easily at least double in size and intensity every 30 seconds. If firefighters cannot arrive in a timely manner and attack the fire quickly, a strong possibility exists that a dangerous flashover (simultaneous ignition of all combustible materials in a room) will occur. Flashover can occur within five to seven minutes of fire ignition and is one of the most dangerous events that a firefighter or trapped civilians can face. When a flashover occurs, initial firefighting forces are

generally overwhelmed and will require significantly more resources to affect fire control and extinguishment.

Heart attack and stroke victims require rapid intervention and care, and transport to a medical facility. The longer the time duration without care, the less likely the patient is to fully recover. Numerous studies have shown that irreversible brain damage can occur if the brain is deprived of oxygen for more than four minutes. In addition, the potential for successful resuscitation during cardiac arrest decreases exponentially with each passing minute that cardio-pulmonary resuscitation (CPR) or cardiac defibrillation is delayed. The true key to success in the chain of survival is the education and early access to the 911 system by civilians. The early notification, coupled with the added skills of properly trained EMS staff who arrive quickly and transport at the appropriate level of care, are all key factors in a positive outcome for patients.

For EMS incidents, nationally, the standard of care based on stroke and cardiac arrest protocols is to have a unit on scene at a medical emergency within six minutes from receipt of the 9-1-1 call. Considering the future potential of this regional approach, Paragraph 4.1.2.1(4) of NFPA 1710[8], which would be applicable to departments that provide first response EMS operations since they are primarily provided by in station, per diem staff, recommends that for EMS incidents, a unit with first responder or higher level trained personnel and equipped with an AED, should arrive within four minutes of response (five minutes of dispatch of the call), and an Advanced Life Support (ALS) unit should arrive on scene within eight minutes (ten minutes of call receipt. Paragraph 4.1.2.2 recommends the establishment of a 90% performance objective for these response times. CAAS[9] recommends that an ambulance arrive on scene within eight minutes, fifty-nine seconds (00:08:59) of dispatch.

Although NFPA 1720 provides essential benchmarks, fire departments often measure baseline performance in terms of *total response time*, which is the time it takes from the call to be received at the Public Safety Answering Point (PSAP) until the first unit arrives on the scene of the emergency incident. Total response time should be measured and reported for all first-due units *and* the effective response force (ERF) assembly. Total response time is composed of call-processing time, turnout time, and travel time:

[8] NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments, 2001 edition (National Fire Protection Association, Quincy, MA), outlines organization and deployment of operations by career and primarily career fire departments.
[9] *The Commission on Accreditation of Ambulance Services (CAAS) is an independent commission that established a comprehensive series of standards for the ambulance service industry.*

- *Call processing time* – the elapsed time from the call being received at the PSAP to the dispatching of the first unit.
- *Turnout time* – the elapsed time from when a unit is dispatched until that unit changes its status to "responding."
- *Travel time* – the elapsed time from when a unit begins to respond until its arrival on the scene.

The response travel time is calculated from the time of dispatch to the time of arrival of the first piece of fire/EMS apparatus. It is also important to keep in mind that there are many possible variables to actual response travel times, such as weather, physical location of the incident compared to the location of the station (travel distance), especially during mutual aid responses, as well as other simultaneous calls that may be happening. It is also important to note that the response time for fire staff for non-EMS incidents is typically higher. Before staff leave the station, they should be wearing all of their personal protective equipment (boots, pants, hoods, and coats).

Response times

	2022		2023		2024		3 Year Average	
	# incidents	Time	# incidents	Time	# incidents	Time	# Incidents	Time
Sunday	22	7.60	21	7.50	29	8.80	24.00	7.97
Monday	29	7.80	21	10.50	28	8.90	26.00	9.07
Tuesday	17	10.80	37	6.50	32	11.90	28.67	9.73
Wednesday	20	7.70	46	8.90	28	6.50	31.33	7.70
Thursday	22	11.00	32	11.40	13	10.30	22.33	10.90
Friday	23	9.00	33	7.10	28	8.10	28.00	8.07
Saturday	31	12.80	29	10.30	32	6.50	30.67	9.87
TOTAL	**164**	**9.53**	**219**	**8.89**	**190**	**8.71**		**9.04**

Figure 31
Analysis by day of the week

VII: STAFFING

The key to any successful organization is the appropriately trained staff that are available to respond when needed. In today's fire service, the number of call volunteer firefighters is dropping, and a marked drop has been noticed since the COVID-19 pandemic.

In Hancock, there are two groups of firefighters. The first group generally has full-time jobs out of town, are not available during normal business hours, and are not able to leave their jobs to respond. The second group is people who either work from home or are retired from a full-time job and are generally available during the day to respond. During predicted large scale weather events, the department could have staffing in the station for a faster response; however, this would also require some modifications in space to allow for proper accommodation during these events.

As shown in Figure 32, the department has done very well in training and certifying the staff at both fire and EMS certifications.

Certifications (Fire and EMS)		
Firefighter 1		10
Firefighter 2		5
EMT		9
AEMT		4
EMR		2

Figure 32
Staff Certifications

It has often been said that the fire service can have all the best equipment, but that equipment is useless without a good and efficient crew to operate it. In today's world, call and volunteer firefighters are getting harder and harder to not only recruit but also to retain. This is a nationwide issue that in many communities is now becoming a crisis.

Having several people listed on a roster may give a false sense of security and be misleading. Their participation in training, working shifts, and actual response to incidents shows the real numbers and the level of service the department can deliver.

Hancock Fire Department Member Years of Service				
	Years of service in Hancock	Combined Years of service all agencies	Age / 2025	
Staff 1	2	3	51	12 People with 10 or less years
Staff 2	2	6	35	
Staff 3	3	26	71	
Staff 4	4	4	24	
Staff 5	4	4	41	
Staff 6	4	8	51	
Staff 7	4	4	50	
Staff 8	4	4	23	
Staff 9	6	12	80	
Staff 10	8	12	30	
Staff 11	8	15	33	
Staff 12	10	10	37	
Staff 13	12	12	61	5 People with 10 to 20 years
Staff 14	15	15	63	
Staff 15	15	15	44	
Staff 16	15	15	58	
Staff 17	19	19	37	
Staff 18	22	22	68	9 People with 20 plus years
Staff 19	23	29	66	
Staff 20	23	48	73	
Staff 21	23	23	64	
Staff 22	25	25	66	
Staff 23	28	38	85	
Staff 24	34	34	68	
Staff 25	35	38	65	
Staff 26	41	41	78	
Average	**14.96153846**	**18.53846154**	**54.6923077**	

Figure 33
Hancock Staff - Years of Service

Most firefighters and EMTs are not providing the service to the community for money. As an example, MRI has studied a department where 14% of emergency calls received no response from the local community. To address the situation, the Selectboard doubled wages but received no associated increase in participation and response. Although this is an extreme case, other

retention strategies may be more effective. It is the hope of most departments to get people interested in performing the services and to keep them as long as they can.

The amount of time that is required to complete training programs should be rewarded. Hancock Fire should consider a one-time stipend for making certain benchmarks as a way of compensating staff. The department should consider giving one-time stipends for completing firefighter 1, firefighter 2, different fire officer levels, and EMS certifications as a way of rewarding people for taking the time to complete programs. Most communities are now offering an hourly wage for training and bumping the wage up as training and certification levels are completed.

Training				
	2022	2023	2024	3 Year Average
Number of staff in training	29	30	26	28
Average # of Hours per person	20.16	34.74	34.66	30
Total number of hours of training	504	903.25	866.5	758

Figure 34
Training comparison

There has been much research done by several fire departments on the effects of various staffing levels. One constant that has emerged is that company efficiency and effectiveness decrease substantially, while injuries increase when company/unit staffing falls below four personnel. A recent comprehensive yet scientifically conducted, verified, and validated study titled *Multi-Phase Study on Firefighter Safety and the Deployment of Resources* was performed by the National Institute of Standards and Technology (NIST) and Worcester Polytechnic Institute (WPI), in conjunction with the International Association of Fire Chiefs, the International Association of Fire Fighters, and the Center for Public Safety Excellence. This landmark study researched residential fires, where most of the fire, injuries, and fatalities occur. ***The study concluded that the size of firefighter crews has a substantial effect on the fire department's ability to protect lives and property in residential fires and occupancies.*** Several key findings of the study include:

- *Four-person firefighting crews were able to complete 22 essential firefighting and rescue tasks in a typical residential structure 30% faster than two-person crews and 25% faster than three-person crews.*

- *The four-person crews were able to deliver water to a similarly sized fire 15% faster than the two-person crews and 6% faster than three-person crews, steps that help to reduce property damage and reduce danger/risks to firefighters.*

- *Four-person crews were able to complete critical search and rescue operations 30% faster than two-person crews and 5% faster than three-person crews.*

The United States Fire Administration, part of the Federal Emergency Management Agency in the Department of Homeland Security, recommends that a minimum of four firefighters respond on or with each apparatus. In its respected textbook *Managing Fire Services,* the International City/County Management Association (ICMA) states, *"that at least 4 and often 8 or more firefighters under the supervision of an officer should respond to fire suppression operations"*. They further state, *"If about 16 firefighters are not operating at the scene of a working fire within the critical time period, then dollar loss and injuries are significantly increased, as is fire spread"*.

Note: The State of New Hampshire is not an OSHA state; however, the New Hampshire Department of Labor 281-A:64, safety program legislation, PPE rules, adopted NFPA codes, and mandated training standards keep New Hampshire fully compliant with OSHA 1910.134(g)(4). The MRI team feels compelled to educate the reader that first responder safety should be a priority to all communities, and by following recognized safety standards and New Hampshire Department of Labor safety provisions, we can keep responders operating in a safe environment.

Beyond the NFPA standard(s), which as standards, do not carry the weight of regulation or law, is the Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard, CFR 1910.134, which carries the weight and force of regulation, thus making compliance mandatory. One key provision of the Respiratory Protection Standard that is directly applicable to fire department staffing is known as the "Two-In/Two-Out" rule. In brief, this regulation specifies that anytime firefighters operate in an environment/atmosphere that is "immediately dangerous to life and health" (IDLH), whenever two members enter the IDLH area together/as a team, they must maintain visual or voice communication with two additional firefighters who must remain outside of the IDLH atmosphere, prepared to render immediate emergency assistance to those inside (Figure 35). The OSHA rule does provide an exception, however, which states that the rule does not apply in emergency rescue situations where a person is visible and in need of immediate rescue, or there is credible and reasonable information that potentially viable victims are still in need of rescue.

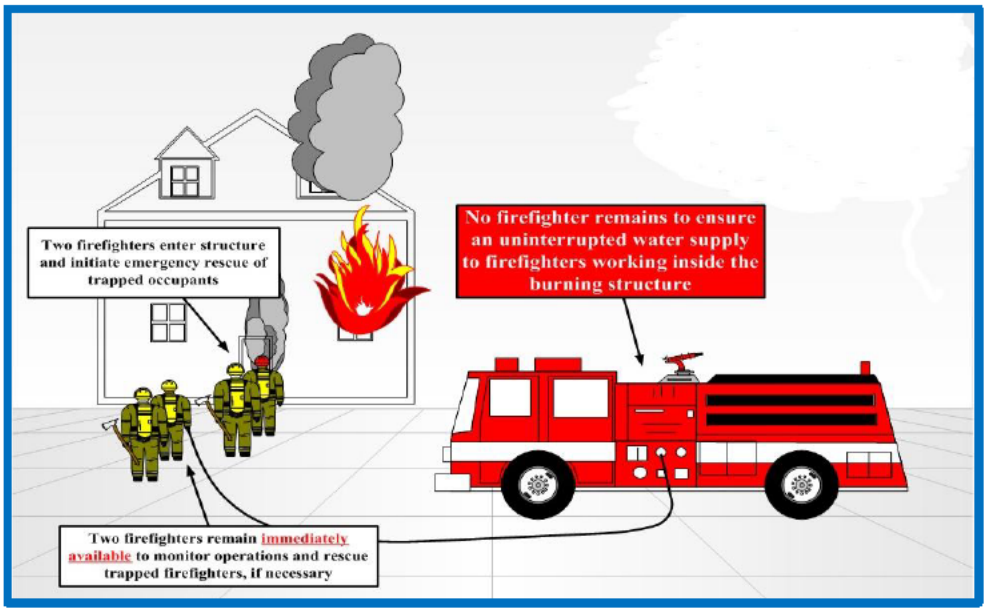


Figure 35
OSHA TWO-IN/TWO-OUT
Image Credit: IAFF 266

To comply with the "Two-In/Two-Out" rule, a team of four firefighters must be assembled before an interior fire attack can be made when the fire has progressed beyond the incipient stage, except in an imminent life-threatening situation when immediate action could prevent the loss of life or serious injury before the team of four firefighters are assembled. The serious concern of the MRI project team is that the OSHA "Two-In/Two-Out" rule permits an exception for life hazard or rescue situations. The reality is that in one of the most serious life hazard fire situations that can be encountered, trapped civilians, a firefighter may need to place himself/herself in extreme danger by entering the structure alone.

The OSHA:" Two-In/Two-Out" rule is an essential component of operational safety and should be the basis of fire service operations within the study communities. Despite the rural nature of the area and the reality of some elongated response times, interior operations beyond a visible rescue should not be initiated until four personnel arrive on the incident scene.

Paragraph 4.1, ***Fire Suppression Organization*** in NFPA 1720[10] states, fire suppression operations shall be organized to ensure that the Fire Department's fire suppression capability includes

[10] NFPA 1720, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments, 2014 edition (National Fire Protection Association, Quincy, MA) outlines organization and deployment of operations by volunteer/call, and primarily volunteer/call fire departments.

sufficient personnel, equipment, and other resources to deploy fire suppression resources effectively, efficiently, and safely. Paragraph 4.2.2, *Community Risk Management,* states the number and types of units assigned to respond to a reported incident shall be determined by risk analysis and/or pre-fire planning.

The operations necessary to successfully extinguish a structure fire and do so effectively, efficiently, and safely, requires a carefully coordinated and controlled plan of action, where certain operations, such as venting ahead of the advancing interior hose line(s), must be carried out with a high degree of precision and timing. Multiple operations, frequently where seconds count, such as search and rescue operations and trying to cut off a rapidly advancing fire, must also be conducted simultaneously. If there are not enough personnel on the incident initially to perform all the critical tasks, some will, out of necessity, be delayed. This can result in an increased risk of serious injury or death, to building occupants and firefighters and increased property damage. It is important that all communities give and receive mutual aid to fires with appropriate staffing of at least 4 personnel, one of whom should be an officer.
To address this concern, the community will need to make a conscious choice relative to service level through budgetary appropriation.

NFPA 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments,* 2014 edition outlines organization and deployment of operations by volunteer, and primarily volunteer fire departments.

Some of the key *provisions of NFPA 1720 are as follows:*

1. *Paragraph 4.3.1 on Staffing and Deployment states that the Fire Department shall identify minimum staffing requirements to ensure that enough members are available to operate safely and effectively.*

2. *Paragraph 4.3.2 on Staffing and Deployment states that Table 4.3.2* (Figure 35) shall be used by the authority having jurisdiction (AHJ) to determine staffing and response time objectives for structural firefighting, based on a low-hazard occupancy such as a 2,000 square foot, two-story, single-family, without basement or exposures.

Table 4.3.2, Staffing and Response Time				
Demand Zone	Demographics[1]	Minimum Staff to Respond	Response Time[2] (minutes)	Meets Objective (% of the time)
Special risks	AHJ	AHJ	AHJ	90 %
Urban	>1000 people/mi.^{2}	15	9	90 %
Suburban	500 - 1000 people/mi.^{2}	10	10	80 %
Rural	< 500 people/mi.^{2}	6	14	80 %
Remote	Travel distance > 8 mi.	4	Dependent upon travel distance	90 %

1 – A jurisdiction can have more than one demand zone.

2 – Response time in this table begins upon completion of the dispatch notification and ends at the time interval shown in the table.

Figure 36

Staffing and Response Times from NFPA 1720

3. *Paragraph 4.3.3 on Staffing and Deployment states that upon assembling the necessary resources at the emergency scene, the Fire Department should have the capability to safely commence an initial attack within two minutes, 90% of the time.*

4. *Paragraph 4.6.1 Initial Firefighting Operations states that initial firefighting operations shall be organized to ensure that at least four members are assembled before interior fire suppression operations are initiated in a hazardous area.*

5. *Paragraph 4.7.1 Sustained Firefighting Operations states that the Fire Department shall have the capability for sustained operations, including fire suppression; engagement in search and rescue, forcible entry, ventilation, and preservation of property; accountability of personnel; the deployment of a dedicated rapid intervention crew (RIC); and the provision of support activities for those situations which are beyond the capabilities of the initial attack.*

6. *Paragraph 4.7.2 Sustained Firefighting Operations also states that the capability to sustain operations shall include sufficient personnel, equipment,*

and resources to effectively, efficiently, and safely conduct the appropriate operations.

Note: While the NFPA standards are nationally recognized consensus standards, it is still the responsibility of the local jurisdiction to determine the acceptable level of risk and corresponding fire protection/EMS services.

Some jurisdictions add additional response resources and, in some cases, exceed the specifics of national benchmarking for personnel and other resources, particularly when the incident is in a larger structure where the life hazard may be higher and/or the potential fire situation much more complex.

Figure 36 identifies, and Figure 37 illustrates, the critical tasks and resource deployment required for low to moderate-hazard incidents such as one and two-family residential and small commercial structure fires. Although some people advocate that these types of incidents can be handled with less personnel, unless it is a small fire, there is the possibility that there will not be enough personnel available to perform all the critical tasks, necessitating that some be delayed.

CRITICAL TASK	NEEDED PERSONNEL
Incident Command	1
Continuous Water Supply/Pump Operator	1
Fire Attack via Two Handlines	4
Hydrant Hook-Up, Forcible Entry, Utilities	2
Primary Search and Rescue	2
Ground Ladders and Ventilation	2
Aerial Operator (if Aerial is Used)	1
Establishment of an IRIT (Initial Rapid Intervention Team)	2
Effective Response Force	14/15

Figure 37
Critical Tasking: Low and Moderate Risk Structure Fire

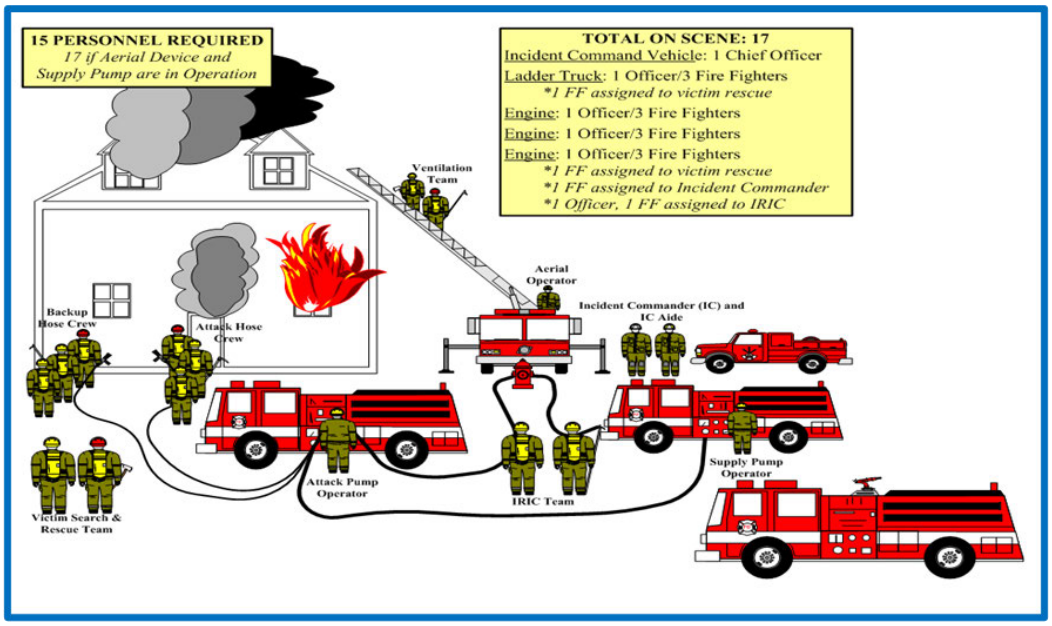


Figure 38
Typical Basic Staffing Needs for a Single-Family Dwelling Fire.
Image credit: IAFF 266

These tasks meet the minimum requirements of NFPA 1720 for the initial full-alarm assignment to a typical low-risk, 2000 square foot, 2-story residential structure. These are the proverbial "bread and butter" structural fire incidents that fire departments respond to, and which are, by far, the most common type of structure fire. Personnel requirements for fires involving large, more complex structures, such as commercial or industrial facilities or multifamily residential occupancies, will require a significantly greater commitment of personnel.

RECOMMENDATIONS:

VII-1 The HFD should require its personnel, and strongly encourage its officers, to obtain a certain level of fire officer certification as a job requirement, such as Fire Officer 2 for Captain, Fire Officer 3 for Deputy Fire Chief, and Fire Officer Level IV for Fire Chief.

VII-2 The HFD should require that all officers be certified as Incident Safety Officers (ISO). Additional personnel who may be interested should be encouraged to take this training and obtain this important firefighter safety certification.

VII-3 As part of the succession planning process, the Fire Chief should work to implement a professional development program to ensure that all officers can perform their superior's duties, as well as identify the core future leaders of the Department.

VII-4 Working with the training officer, future training should be planned, delivered, and documented. In an effort to keep members interested in training, the Department should be creative and offer training that is outside the normal programs. Making programs fresh, fun, and to some degree competitive may increase the participation by members. If it's the same old training, people will lose interest. Make it so they want to participate and, at the same time, meet training goals. Training should be conducted as a Department and not as companies.

VII-5 The HFD should set a minimum criterion for call members to remain in active status. This criterion should include both minimum training and response to incidents for a determined time period (one year). This criterion should also allow for people to go into an inactive status for a period of time due to approved circumstances. It would be important for inactive-status people to make up any important training prior to being put back on active status.

VII-6 The Fire Chief should expand the HFD social media presence and involve other members of the Department in this endeavor. The use of social media, like Facebook and Twitter, is what the younger generation uses, and a very active social media account has the opportunity to reach out to this group of people for hiring.

VII-7 Set and publish minimum criteria for active participation and ramifications for not meeting the minimums. A large roster is a false sense of security, and only people with proper training and skills who are dedicated (attend training and incidents) should be active.

VII-8 HFD should develop a series of team-based activities that build involvement in the organization, including both Fire and EMS staff as well as other Town Departments and mutual aid partners.

VII-9 All officer positions, from Captain to Fire Chief, should be filled based upon the person's firefighting/emergency services training, certifications, and experience, commensurate with the position being sought, along with successful completion of a formal, rank appropriate assessment process, and a basic practical skills evaluation.

VII-10 The HFD should ensure that all Department members are trained/certified to the minimal NIMS level required for their duties/responsibilities and ranks. In addition to the basic I-100/I-700 training mandated, it is MRI's recommendation that all officers should be trained to the ICS-300 level. All chief level officers should be trained to the ICS-400 level.

VII-11 Assign a Department Safety Officer who oversees all safety and safety issues within the Department. This person should have the training and experience to conduct this type of evaluation for both Fire and EMS, and concentrate on the stations and training as a primary focus, and be the lead on incidents if available.

VII-12 A guide or probationary manual needs to be developed and given to new staff so there are clear expectations for them to understand. Along with the expectations, a mentoring program should be set up, assigning new members to a seasoned person to shadow and train with. A training program for new hires should also be developed so that all people are trained to the same Department standard.

VII-13 The Department should create a mentoring program to work with future officers and be able to promote people who are well trained for the positions and ready to handle the responsibilities on day one of the promotion.

VII-14 The amount of time that is required to complete training programs should be rewarded. Staff should be paid for training. Stipends for meeting certain benchmarks are another way of compensating staff. Consideration should be given to giving one-time stipends for completing firefighter 1, firefighter 2, different fire officer levels, and EMS certifications are a way of rewarding people for taking the time and completing programs.

VII-15 Update all Job descriptions as needed, including requirements to hold a ranking position.

VII-16 Update and develop a Mission Statement, Vision Statement, and a set of Strategies and Goals.

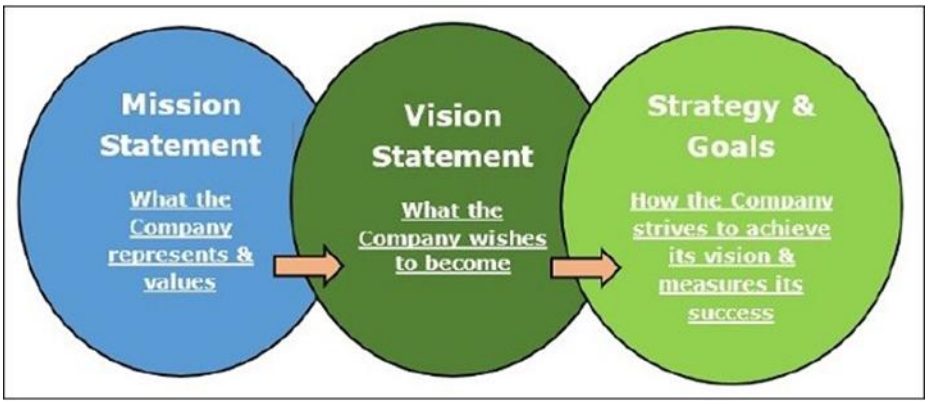


Figure 39
Mission, Vision and Goals

VII-17 The Town should consider the health and safety of Department members and therefore budget and offer an NFPA physical to be completed by all staff. Currently, physicals are only done on initial employment and never again. Some communities have allowed people to have their physicians (when capable and properly equipped) conduct these exams. At the conclusion of the exam, the Fire Chief should be given a letter stating the person has been examined and is duly physically and mentally fit to be able to conduct firefighting duties with no restrictions. If chosen, the Chief may accept some conditions that allow for people to drive only and not conduct any operations requiring the use of a self-contained breathing apparatus.

VIII: AUTOMATIC AND MUTUAL AID PRACTICES

Hancock Fire gives and receives mutual aid from surrounding towns on an as needed basis. Looking over the past three years, the Department has given mutual aid an average of 21.3 times a year and has received mutual aid an average of .66 times. In general, automatic and mutual aid allow for proper staffing on scene for any one of the multi-hazards the Department may respond to. The chart below is a breakdown of each year.

Mutual Aid	2022	2023	2024		Average
Given	17	26	21		21.3
Received	0	0	2		.66

Figure 40
Mutual Aid (Give and Take)

It is important to note that Automatic and Mutual Aid are not always guaranteed for several reasons. First is the actual availability of the resource(s) that are requested. For example, during a wind/electric storm, surrounding communities may be dealing with the same type and the same number of calls at the same time. Second is the staffing levels, both in the actual numbers as well as the qualifications of the staff, are lower today than ten years ago. Many departments are having the same staffing issues and concerns as outlined in this document. The bottom line is that automatic aid and mutual aid are needed in every community, and the ability to provide a needed resource is not always guaranteed to respond to every request. It is becoming more and more incumbent for communities to properly staff at a safe level to meet the basic needs for an average response to an incident.

Paragraph 4.1, *Fire Suppression Organization* in NFPA 1720[11] states, fire suppression operations shall be organized to ensure that the fire department's fire suppression capability includes sufficient personnel, equipment, and other resources to deploy fire suppression resources effectively, efficiently, and safely. Paragraph 4.2.2, *Community Risk Management,* states the number and types of units assigned to respond to a reported incident shall be determined by risk analysis and/or pre-fire planning.

The overall study has seen an increase in providing and receiving mutual aid from other area departments. This is a trend that has been increasing throughout the fire service in the country

[11] NFPA 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments,* 2014 edition (National Fire Protection Association, Quincy, MA) outlines organization and deployment of operations by volunteer/call, and primarily volunteer/call fire departments.

over the past few years. Most departments are requesting mutual aid sooner due in large part due to the low level of staffing to allow for safe operations at incident scenes and due to the larger fire volume and exposure threats that are being found.

At the time of this assessment, it appears that most departments do not have any minimum staffing requirements for their apparatus, so vehicles can respond with just one or two personnel rather than a much more desirable minimum of three or the recommended four. It is MRI's opinion that most departments, with their current personnel resources, will rarely be able to get either sufficient apparatus or firefighters to the scene of a significant incident without turning to their neighboring departments for assistance. Paragraph 4.7.3 of NFPA 1720 states, the fire department shall be allowed to use established automatic aid or mutual aid agreements to comply with the requirements of Section 4.7, *Sustained Firefighting Operations*. Paragraph 4.3.5, *Staffing and Deployment* states, standard response assignments and procedures, including mutual aid response and mutual aid agreements predetermined by the location and nature of the reported incident, shall regulate the dispatch of companies, response groups, and command officers to fires and other emergency incidents.
It is important that all communities give and receive mutual aid to fires with appropriate staffing of at least 4 qualified personnel, one of whom should be an officer.

RECOMMENDATIONS:

VIII-1 The Department should be receiving and giving automatic mutual aid to all surrounding towns in a coordinated effort to provide, at a minimum, a dedicated Rapid Intervention Team (RIT).

VIII-2 The Department should train at a minimum of 12 members to provide the rapid intervention function as three to four-person teams.

VIII-3: Although more stringent than the requirements found in Table 4.3.2 of NFPA 1720 for rural communities, through the utilization of automatic aid agreements with neighboring communities, Fire Departments should consider the adoption of an *Standards of Cover (SOC) with the goal of attempting to have at least 16 personnel on the scene of any reported structure fire within 14 minutes. This should involve at least one mutual aid town for RIT.

VIII-4: The Department should make it a priority to improve its first unit on scene response times, including the adoption of an SOC, for the Town. The SOC should be based upon a hybrid of the NFPA 1720/1720 and Commission on the Accreditation of Ambulance Services (CAAS) recommendations.

VIII-5: The HFD should review standards of cover benchmarks to have the first unit on scene within eight minutes after responding to all types of calls, 90% of the time.

VIII -6 The HFD should annually review the use of automatic aid to any reported structure fire or significant incident. This review should ensure that the proper equipment, with the properly trained staff, is responding to assist.

"Standards of Cover" is defined as "those adopted written policies and procedures that determine the distribution, concentration, and reliability of fixed and mobile response forces for fire, emergency medical services, hazardous materials, and other technical responses.

IX: GRANTS AND REVENUE

GRANTS

NOTE: At the time this document was drafted, there was great uncertainty about the former Federal government grant programs listed below. It is anticipated that these programs will return in the future, and the MRI team felt it was appropriate to include this section so the Department could be ready should the opportunity arise.

There are several federal and private grants available for fire departments and communities to consider for supplementing their budgets. If successful in receiving a grant award, most departments can acquire equipment, training, and programs that they would not be able to achieve through the normal budget process. Though the process can be difficult and time consuming, the outcomes can be very beneficial to the Fire Department.

While the economic challenges of the last decade have had an impact on grants from private entities and foundations, fortunately, the federal grant programs targeted the fire service, the Assistance to Firefighters Grants for equipment (AFG), the Staffing for Adequate Fire and Emergency Response Grants (SAFER) for personnel, and the Fire Prevention and Safety Grants (FP&S) for fire prevention and public fire education programs, continue to be funded, although not anywhere near their authorized levels.

The AFG program provides financial assistance directly to fire departments to enhance their capabilities with respect to fire and fire-related hazards. The AFG supports fire departments that lack the tools and resources necessary to more effectively protect the life and safety of the public and their emergency response personnel, with respect to fire and all other hazards. Since 2001, AFG has helped firefighters and other first responders obtain critically needed equipment, protective gear, emergency vehicles, training, and other resources needed to protect the public and emergency personnel from fire and related hazards.

The goal of the SAFER grants is to enhance the Fire Departments' ability to comply with staffing, response, and operational standards established by NFPA and OSHA (NFPA 1720 and OSHA 1910.134). Specifically, SAFER funds assist the Fire Department in increasing its staffing and deployment capabilities in order to respond to emergencies whenever they may occur. SAFER grants are awarded to departments for both hiring of career personnel and recruitment and

retention of volunteer/call personnel. However, a department cannot apply for both categories of grant in the same year.

Fire Prevention and Safety Grants support projects that enhance the safety of the public and firefighters from fire and related hazards. The primary goal is to target high-risk populations and mitigate high incidences of death and injury.

There are several other grants available to fire departments for various purposes. Some grants that may be available to departments are the Fireman's Fund Heritage Grants, Factory Mutual grants for fire investigation, and Wal-Mart community grants. Other large chains, such as Home Depot and Lowe's, are frequently willing to provide funding and/or enter into partnerships for specific projects. The key to success at this level is finding grants for which the department may be eligible and ensuring that the application is tailored to the grant program's priorities.

Like most fire departments, the experience within the study area indicates that departments have had a limited record of success regarding grants they have applied for. One of the shortcomings in the AFG program is that departments that submit grant applications that are ultimately not successful are notified of that fact; however, they are not informed as to why. Typically, only about 8% of all grant applications submitted are approved and funded. Nearly 50% of the applications fail to make it past the initial computer review, where statistical aspects of the application are reviewed to determine their compatibility with the established grant criteria/ priorities. It is included to illustrate the long odds of successfully obtaining a grant even with a strong application.

US Department of Agriculture Grants

Rural Development Grant Assistance – Program assistance is provided in many ways, including direct or guaranteed loans, grants, technical assistance, research, and educational materials. There may be an opportunity to compete for a grant for fire station enhancements through this grant. Visit the USDA's website for more details. USDA.gov

USER FEE BASED REVENUE

Revenue sources for smaller rural fire service organizations typically include EMS Transport fees, Motor vehicle accident hazard mitigation fees billed to the at fault drivers' insurance company, and fire prevention user fees. In Hancock, there are limited options for generating revenue. We recommend that the Town consider implementing a $250.00 hazard mitigation fee for securing each motor vehicle involved in a collision. Our experience is that many insurers will pay this fee

if it is specifically for hazard mitigation and not response. In addition, a checklist should be created to document how each vehicle was secured and what hazards were mitigated. Overall, we find that approximately 50% of insurers will pay this fee, while the remaining 50% will reject the bill. If adopted, a provision to write off the expected unpaid balance should be developed.

Fire prevention inspections offer perhaps the most sustainable source of user driven revenue. Many communities recognize this as a user driven program that needs to be supported by those who choose to utilize these services. As a result, several communities have increased fire prevention fees to cover the cost of providing these services. We recommend that the HFD provide a cost analysis that includes training, facility, and operational costs and present a fee schedule adjustment for consideration.

Peterborough provides transport EMS services, and based on the configuration of Hancock's fire prevention, services are limited. There are a few choices that would develop substantial revenue; however, optimizing the limited revenue stream should be considered by the Town.

RECOMMENDATIONS

IX-I: The Town should apply for a SAFER grant to begin to build a recruitment and retention program to staff and support all fire and EMS operations.

IX-2: Although time consuming to accomplish, the Department should apply for funds for eligible items on the AFG grants. Grant awards will help free up Town dollars that can be used for other fire department items that are not grant eligible.

IX-3: The HFD should hire a mentor to assist with the development of AFG and SAFER Grant applications.

IX-4: Once the Department has appropriate staffing, the Town and the Department should be looking at the State, Insurance companies, and other private organizations that have grant opportunities for equipment purchases.

IX-5: The Town should apply for rural development grant assistance through the United States Department of Agriculture to assist with funding the fire station renovation project. While no grant is guaranteed, we have seen this program provide low interest loans for station development.

IX-6: – The Town should consider billing at-fault insurance providers to evaluate and secure vehicles involved in a motor vehicle crash.

IX-7:– The Town should determine the cost to provide fire prevention services and consider adjusting user fees.

X: LOOKING FORWARD

As part of the review of the current and future operations of the Department the idea of the Department providing an ambulance service on its own was investigated. It was determined that even with adding the staff as recommended by this study, Hancock Fire is currently not able to provide a full ambulance service along with the current fire and EMS response that it provides today. Should the Town, in the future, decide to provide EMS transport services it is important to increase staffing to maintain a reasonable in-town response crew. The average turnaround time for an ambulance to respond to a call, transport to the hospital, transfer the patient, ensure the ambulance is clean and decontaminated, is 60 to 90 minutes. The current contracted cost being paid along with having local first responders, is a model that is currently cost-effective.

Hancock Fire is like many smaller town fire departments, at a crossroads. For decades, the Hancock Fire has used the dedication and service of volunteers and call firefighters. Many of the day-to-day activities (emergency responses, fire inspections, permits, reports, checking apparatus, cleaning the station, and equipment) required of the Department would be completed when personnel had time to complete them. Volunteer personnel often worked in town and could leave their place of employment to complete fire service tasks or respond to emergencies.

Today, the expanded role that Hancock Fire plays in the community, coupled with decreasing member availability, often results in a shortage of available responders. Consequently, it is not unusual to have a limited number of first responders in the Town of Hancock during the weekday and daytime hours. This shortage of human resources is the most prominent issue that the Town will face in the coming years. A theme revealed through interviews found that members' ability to allocate time to the Fire Department was becoming more difficult.

Another important point related to having sufficient personnel to respond to emergencies is that the public assumes that when they see a fire apparatus responding to an emergency, there is a full crew of four firefighters on an engine or ladder. The reality is that the greater majority of the time, it is a driver only or a driver and another firefighter that staff this apparatus. Often times, there is a significant delay in getting enough manpower to fight a fire and to meet the minimum number of firefighters on scene to comply with both the OSHA "Two In and Two Out" Standard,

and NFPA 1720, which is the standard for the organization and deployment of fire suppression operations by on-call and volunteer fire departments.

The National Volunteer Fire Council (NVFC) www.nvfc.org issued a fact sheet https://www.nvfc.org/wp-content/uploads/2019/04/NVFC-Fact-Sheet-2019.pdf that provides the current status of today's Volunteer Firefighter statistics.

Among other things, the fact sheet highlights that the ranks of volunteer/call firefighters nationwide are declining, due at least in part to an increasing demand for services. There are also various other factors that are prevalent in the reduction in the number of volunteer and on-call firefighters in communities such as Hancock. Among them is the fact that the demographics of many communities today do not support enough of the type of people who are attracted to the fire service in the 21st century; someone with time to dedicate to public service or a young person who wants to make a career of it. It has been stated that, on average, for every five on-call firefighters recruited, two will remain active after a period of 48 months has elapsed.

Several fire departments throughout New England are adapting to this growing problem by adding full-time firefighters to fill the gaps that develop when many on-call personnel are not available. This staffing transition supports the delivery of a timely response, during the day and night, when call members are least available. Currently, the Department is still providing the requested services with the roster of people they have. It is important that the community support the people they have and to continue to provide the resources needed to keep the Department a call-based system and not the need to hire full-time staff.

XI: MAPPING OUT THE FUTURE



"A Road Map to Success with proper timing and funding"

The MRI project team found that there was a common thread to many of the Department's needs, concerns, and desires. Based on all the information analysis and discussion, MRI proposed 54 recommendations for consideration for today and the future.

It is important to keep in mind that the recommendations made are in no order and are not based on the success of the ones before it. The project team has tried to allow the community to be able to implement the ideas that work best for them and then to take incremental steps to move toward success. Ultimately, it is up to the community and the area to decide what works best for them and what level of service/fire protection they wish to have.

Regionalization of the fire service is a term that many people are afraid to consider, as there is the thought that the local resources (fire apparatus, fire station, and firefighters) will go away, and that the local authority will be diminished. There have been several regionalization discussions that have gone nowhere, and some that have been highly successful. There is also a strong thought that regionalization will cost a community less than they are currently paying, and that they will get more. Although it is true that regionalizing will no doubt create an economy of scale, which can be the foundation of efficient services, it still will come with a cost. In the long term (10 plus years), there may be an indicator of cost savings or, in some areas, the development of a revenue stream to offset the overall costs.

To begin the process, all stakeholders in the Town, including the Fire Chief, Town Administrator, and the Selectboard, should take the time to thoroughly read and understand the information provided within this report. This group should then sit down as an informal group and discuss the

many options they have moving forward. It is MRI's hope that this discussion will lead to a basic plan where the community can decide the future of both fire and EMS within the community.

It is suggested that each of the recommendations be considered individually, then put into a priority that the group decides will work best. To build the collaboration, it is further recommended that the no cost items be pursued initially, and then after establishing a track record of success, move forward with items that will require cost.

All changes to current operations should be properly evaluated after they have been made and, if necessary, adjusted. It is generally an accepted practice to do an evaluation at a minimum of 30-day increments and a final in one year. Who does the evaluation and what the benchmarks are should be outlined from the onset.

Looking ahead, the community and the Fire Department should use this report to further define the most critical issues and service gaps facing the fire and EMS services. These service gaps and critical issues will then be utilized as the framework for establishing the priority for implementation of goals and recommendations in this strategic planning document. Based on the report, the project team believes Hancock has a strong potential to continue to create a robust level of service that has come to be expected by its residents. However, to be effective, the community will need to commit to this collaboration, agree to work together to meet future service expectations, and provide a high level of operational safety.

SEVEN MOST SIGNIFICANT <u>POTENTIAL</u> CHALLENGES FACING FIRE and EMS SERVICES IN HANCOCK

Based upon the findings and analysis of the team, the most significant potential challenges facing Hancock fire services are:

1. A diminishing staffing pool for fire and EMS operations, part of a nationwide trend. The cost associated with addressing this issue will be the biggest challenge ahead for all the internal and external stakeholders.
2. Emerging generational differences often produce a lack of understanding on both sides.
3. The time commitment required for certifications and continued training.
4. Tapping into the high school aged students and the ability to market the fire service.

5. Elongated response times based on a lack of available personnel, requiring mutual aid for even basic operations.
6. The skill set required in today's high-tech environment will need to be adapted to.
7. The need to train a new workforce before the active members age out.

IMPLICATIONS OF NOT TAKING ACTION

The challenges that are facing the fire and EMS services in all the departments in and around the study have sometimes been referred to as ***"a crisis without evidence".*** The MRI project team heard this multiple times. But make no mistake, there is a crisis that is slowly building, and has been for a considerable period. The reason that many stakeholders – municipal leaders and the public – do not see "evidence" is the long tradition in both the fire and EMS services of "getting the job done". It has long been known that when people have a problem they don't know how to deal with, they call the fire department because two things are certain when they do: 1) the fire department will come, and 2) they will figure out how to deal with the problem or find someone who can/will. Despite robust rosters, decreasing participation translates to longer response times and having fewer appropriately trained personnel on the incident scene.

Looking ahead, the implications of not acting will be quite simple: service levels will begin to diminish, some companies and EMS agencies may fold under financial pressures, and fewer and fewer (most likely) aging members will be trying to respond to an ever-increasing number of requests for service.

In the end, **ALL** the various stakeholders need to engage in open, frank, and honest dialogues regarding the fire and first response EMS delivery systems. There will need to be increased funding allocated, or funding can be re-appropriated. Priority should be given to innovative solutions to the recruitment and retention of on-call personnel, which will have costs associated with it, but it will be money wisely invested. Even with success, the reality is that the fire and first response EMS services in the area are going to evolve into more of a combination system with the need for an increasing number of career personnel to supplement on-call personnel. This, too, will come with an increased cost. However, this cost will be reasonable, and will be money well invested to help support what remains, a quality fire and first response EMS delivery system.

It has been said that a fire department can have all the best equipment and facilities, but they are useless without a well trained workforce to use them. Hancock has a very dedicated group of staff in the Fire Department who are proud to serve. The community has had the great fortune

of having Chief Bates as the leader in Fire - EMS and Emergency Management for many years. Chief Bates's ability to maintain a vibrant call firefighter force has been admired by many people in New England. Times are changing, and with some encouragement and support, the Chief will be able to continue to lead emergency services into the future. The Chief has, and always will have, the life and safety of the residents of Hancock be his number one priority.

XII: CONCLUSION AND IMPLEMENTING CHANGE

Based upon the analysis of the current day operations of the fire Department and EMS, the MRI project team has found the fire Department to be operating well and is providing a consistent, proper level of response. The Department is well respected in the area and is continuing to be a leader in retaining a call Department model that is working. During their time speaking with people for this project, the project team heard how much the Department does for the community and how much they are appreciated.

Having a sense of common vision is important in any organization to ensure that the organization and its personnel are moving in unison toward a common goal(s). Having a common vision is not only about making sure that all parties are aware they are in the same boat and rowing, but even more importantly, that they are rowing in the same direction. The impact of not sharing a common vision between the fire and EMS services will be very noticeable in the quality and quantity of work performed, but also in the spirit and passion that the work of the organization is accomplished. A common vision shared with the membership will create passion and results. A vision without strategy is an illusion.

The Fire Department lacks any type of long-range or strategic plan that charts its projected path to the future. A mission statement, if carefully developed and truly accurate, should provide the very foundation for the Department and why it exists. The mission statement should provide that broad direction that everything else that the Department does is going to be built upon. The Fire Department also does not currently have any formal vision statement, nor has it developed any core values that will help to drive the organization forward. It would be important that there is a single set of statements that is inclusive all of fire and EMS functions as a single department.

Looking ahead, the Fire Department possesses some definitive positive attributes, most notably the dedication of its core membership and the community leadership within each group. This shows there is a strong foundation upon which to build.

However, departments are also facing serious challenges both today and looking toward the future. There are senior staff people who will be retiring, and there is a lack of good, solid, experienced people coming in to fill the voids as they are created. Nationwide, the work force since 2019 is dropping and there are fewer people taking on the challenges of becoming a firefighter and or an emergency medical responder. We are seeing more people leaving their jobs after just a couple of years. The sense of pride and commitment to these professions is also decreasing.

The culture of the fire and EMS services is very resistant to change. This is not something new and certainly not just within the Town of Hancock. Whatever changes are made to the Department, they need to be implemented at a reasonable pace and, most importantly, communicated to all members ahead of time.

In conclusion, the missions performed by the public safety departments are some of the most basic and fundamental functions of government; to ensure the safety and protection of its residents and visitors. The real issue facing the Town, as it is for every community, is to determine an acceptable level of risk and then define an appropriate level of service for the community. There is no "right" amount of fire protection or first response EMS delivery in any community. It is a constantly changing level based on the expressed needs of the community. Determining the appropriate level of service also involves deciding upon the municipality's fiscal ability and willingness to pay for the desired level of service. These are decisions that the citizens of the Town and the Selectboard will ultimately need to make.

It is important that the Town continues to support the Department and help meet the needs of staffing and equipment so they may continue to protect and serve when they are called to do so. The Town is very fortunate to have a great core of dedicated members in its Fire and EMS Department. With some strong work, the Chief and the officer core can lead the Department members forward toward a common set of goals.

XIII: TEAM PROFILES

Director of Fire Services

Brian P. Duggan, Director Fire Services Group, retired from the Fire Department in Northampton, Massachusetts, where he instituted substantial changes to modernize and restructure the entire department, including equipment, facilities, personnel, and training. In conjunction with his staff, Brian integrated Emergency Medical Services (EMS) into the organization and created a regional Advanced Life Support (ALS) Program that currently serves 18 communities within the Northampton Area. He formerly commanded the Northborough, Massachusetts, Fire Department and has significant experience with the Massachusetts Department of Fire Services, where over three decades, he held several key positions. Following his retirement, Brian has continued his active fire service involvement by serving as both a volunteer chief fire officer and through continuing to develop training and certification programs as a program Coordinator for the Massachusetts Department of Fire Services.

Mr. Duggan developed and directed the Graduate and Undergraduate Fire Science Programs at Anna Maria College in Paxton, Massachusetts, from 1995 - 2003. Mr. Duggan has a Business Management/Fire Science degree from Providence College and a Master's Degree of Business Administration (MBA) from Nichols College in Dudley, Massachusetts. He is also a graduate of the National Fire Academy Executive Fire Officer Program and the Senior Executive Program for State and Local Leaders at Harvard University. In December 2012, Mr. Duggan received a Master's Degree in Homeland Security through the Naval Post Graduate School based in Monterey, California, where his thesis entitled "*Enhancing Decision-making during the First Operational Period of Surge Events"* was selected as an outstanding thesis. He was one of the first fire service professionals to be designated as a Chief Fire Officer by the Commission on Fire Accreditation International.

Brian led 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. Mr. Duggan has authored several publications, inclusive of writing Section 7, Chapter 3, Fire Department Information Systems, in the Nineteenth and Twentieth Editions of the National Fire Protection Association's Fire Protection Handbook. Chief Duggan has been affiliated with MRI as a subject matter advisor since 2002 and he has served as Director of Fire Services since 2015. Currently, Mr. Duggan is regarded as an expert specific to fire service response to photovoltaic and battery energy storage

system (BESS) emergencies. He has developed several nationwide training programs providing first responders with new insight on these emerging challenges.

Project Manager

David Houghton is a devoted fire and emergency management professional who has recently retired from the Wayland, Massachusetts, Fire Department after a distinctive 38-year career, from being a call firefighter and rising through the ranks to Fire Chief. Along with dedicating his service to the Town of Wayland, he continues to work for the Massachusetts Department of Fire Services as both an instructor and in the Special Operations Division, doing special projects. In 1999, he was given the challenge by the State Fire Marshal to develop and implement what today is known as Special Operations. This development included designing, building, and implementing specialized equipment and staffing to respond to Emergency and planned incidents throughout the Commonwealth. This program was a shared vision between David and the Fire Marshal and today has been shared in whole or in part in other areas of the country. David has a B.S. degree in Fire Science, an A.S. Degree in Fire Science and Technology, and has completed a Local Government and Management program with Suffolk University and the Massachusetts Municipal Association. David has a diverse background in Firefighting, EMS (ALS and BLS), Dispatch, Fire Prevention, Emergency Management, and operations. He is a nationally certified Firefighter, Fire instructor, Fire Inspector, Fire Officer. He is a certified Emergency Medical Technician both at the National Level and in the Commonwealth of Massachusetts. David has most recently continued his fire service career by being appointed as a call firefighter with the Town of Moultonborough Fire Rescue and is a certified New Hampshire Emergency Medical Technician. He continues to be active with the Commonwealth of Massachusetts Fire and Ambulance Mobilization team in the continuous updating and redevelopment of the program. Prior to his retirement as Fire Chief, David was an active member in the Massachusetts Fire District 14 where he was a driving force behind the creation of the District Operational budget, an operation manual and the formalizing of the various specialized teams within the district. David was also selected as the Chief overseeing the Fire District communications team and equipment as well as serving on several other progressive programs within the district. He is a member of the Fire Chiefs Association of Massachusetts, and the International Association of Fire Chiefs.

XVI: COMBINED RECOMMENDATIONS

CHAPTER III RECOMMENDATIONS:

III-1 ***The Department should continue a working group to review, update, add, and publish all Standard Operating Procedures (SOPS) to its employees. A process for acknowledging these SOP's should be developed for each employee to sign or initial. This document should be considered a living document and reviewed and changed as needed on a regular basis.***

III-2 ***The Department should review and update Rules and Regulations and should publish these for the employees to have.***

III-3 ***The Department should develop a set of goals and objectives for the next year, as well as long-term goals looking five years out, and be reviewed annually.***

III-4 ***The HFD should review and or develop a mission, values, and slogan that reflects the Department and should use these as a basis to educate the community.***

III-5 ***Create a work group to develop preplans for structures within the community. As part of this group's mission, they should be collecting information for structure fires that are shared with the CAD and RMS systems.***

III-6 ***The Department should continue to produce and distribute the "Fire Lines" Newsletter as a way of informing the public on the activities of the Department.***

III-7 ***SWNHDFMA Dispatch Center should be consulted and required to do testing of both mobile and portable radio coverage in all areas of the Town. Responder safety during an actual responder emergency is a real concern.***

CHAPTER IV RECOMMENDATIONS:

IV-1 ***The HFD should conduct a thorough Community Risk Assessment and use the assessment as a tool to move the Department into the future. Over the next year, a plan should be developed to utilize strengths to pursue opportunities and address weaknesses while mitigating threats. This should be an ongoing process that has member involvement and is moved forward by the officer core.***

IV-2 ***The Department should create an inventory of water supply sites, both with and without a dry hydrant. Each of these devices should have a unique ID number and should be flushed and or tested annually. All work done at the sites should be kept in a log. Each time a device or site is tested, the flow should be documented in a log.***

IV-3 ***The Department should continue to request and receive flow data from the water division to ensure the pre-plan model created can be supported by the pressurized hydrant system, and if not, that a plan is in place, and if practical trained on.***

IV-4 ***Based on the limitations and concerns of the hydrant system, it should be only utilized as an aid (harnessing a low and consistent flow) to fill tankers during fire suppression operations.***

IV -5 ***The Department should continue to monitor and encourage improvements to the municipal water supply. Improving fire flow would decrease concerns relative to use, and create a more sustainable source for fire suppression.***

IV-6 ***The Department should continue to develop and train on establishing a sufficient water supply both in and out of the hydrant district for an average structure that is 50% involved with no exposures. This should be the baseline and built upon as the involvement and exposures increase.***

IV-7 ***The Community and the Department should continue to invest and expand the training site behind the station and offer training to its members and the surrounding communities to train with them at a preferred local safe training ground.***

IV-8 ***All inspections need to be formally tracked and documented for Day Care Centers, Schools, Annual occupancy inspections, and all Special events.***

IV-9 ***The Department should consider having two tankers to move water. (See Apparatus Section.***

CHAPTER V RECOMMENDATIONS:

Station:

V-1 ***The current plan for adding space is a benefit and is an indirect result of the primary goal of safety and efficiency. This project needs to be funded and completed as the need has been outlined, and the costs will only increase each year it is not done.***

V-2 ***Cancer in the fire service is on the rise. All reasonable and proper methods to reduce the risk of cancer should be implemented as soon as practical. (Majority of these are included in the expansion plan proposed).***

V-3 ***The Town should consider making accommodations at this station for future use and needs. Items such as dormitories, kitchen, office, and dayroom areas that could be used during long-term emergencies, and or for housing student interns in the future.***

Apparatus and equipment:

V-4 ***The Auto extrication tools are 20 years old, and the airbags are out of date. It is recommended that these items be placed on the Hancock Capital Plan for future replacement.***

V-5 ***A 20-year capital plan should be reviewed on an annual basis.***

V-6 ***Purchase, train, and equip a side by side ATV or other off-road trail vehicle and trailer to store and move the equipment in.***

V-7 ***Based on the current cost of large capital items for the Fire Department, the Town should consider increasing and or creating a reserve fund of $250,000.00 a year.***

V-8 ***A second set of PPE should be purchased for each interior firefighter. The gear should be within date and will allow for proper decontamination of gear as needed, and allow the firefighter to respond to other incidents while the cleaning process is taking place.***

CHAPTER VII RECOMMENDATIONS:

VII-1 ***The HFD should require its personnel, and strongly encourage its officers, to obtain a certain level of fire officer certification as a job requirement, such as Fire Officer 2 for Captain, Fire Officer 3 for Deputy Fire Chief, and Fire Officer Level IV for Fire Chief.***

VII-2 The HFD should require that all officers be certified as Incident Safety Officers (ISO). Additional personnel who may be interested should be encouraged to take this training and obtain this important firefighter safety certification.

VII-3 As part of the succession planning process, the Fire Chief should work to implement a professional development program to ensure that all officers can perform their superior's duties, as well as identify the core future leaders of the Department.

VII-4 Working with the training officer, future training should be planned, delivered, and documented. In an effort to keep members interested in training, the Department should be creative and offer training that is outside the normal programs. Making programs fresh, fun, and to some degree competitive may increase the participation by members. If it's the same old training, people will lose interest. Make it so they want to participate and, at the same time, meet training goals. Training should be conducted as a Department and not as companies.

VII-5 The HFD should set a minimum criterion for call members to remain in active status. This criterion should include both minimum training and response to incidents for a determined time period (one year). This criterion should also allow for people to go into an inactive status for a period of time due to approved circumstances. It would be important for inactive-status people to make up any important training prior to being put back on active status.

VII-6 The Fire Chief should expand the HFD social media presence and involve other members of the Department in this endeavor. The use of social media, like Facebook and Twitter, is what the younger generation uses, and a very active social media account has the opportunity to reach out to this group of people for hiring.

VII-7 Set and publish minimum criteria for active participation and ramifications for not meeting the minimums. A large roster is a false sense of security, and only people with proper training and skills who are dedicated (attend training and incidents) should be active.

VII-8 HFD should develop a series of team-based activities that build involvement in the organization, including both Fire and EMS staff as well as other Town Departments and mutual aid partners.

VII-9 All officer positions, from Captain to Fire Chief, should be filled based upon the person's firefighting/emergency services training, certifications, and experience, commensurate

with the position being sought, along with successful completion of a formal, rank appropriate assessment process, and a basic practical skills evaluation.

VII-10 The HFD should ensure that all Department members are trained/certified to the minimal NIMS level required for their duties/responsibilities and ranks. In addition to the basic I-100/I-700 training mandated, it is MRI's recommendation that all officers should be trained to the ICS-300 level. All chief level officers should be trained to the ICS-400 level.

VII-11 Assign a Department Safety Officer who oversees all safety and safety issues within the Department. This person should have the training and experience to conduct this type of evaluation for both Fire and EMS, and concentrate on the stations and training as a primary focus, and be the lead on incidents if available.

VII-12 A guide or probationary manual needs to be developed and given to new staff so there are clear expectations for them to understand. Along with the expectations, a mentoring program should be set up, assigning new members to a seasoned person to shadow and train with. A training program for new hires should also be developed so that all people are trained to the same Department standard.

VII-13 The Department should create a mentoring program to work with future officers and be able to promote people who are well trained for the positions and ready to handle the responsibilities on day one of the promotion.

VII-14 The amount of time that is required to complete training programs should be rewarded. Staff should be paid for training. Stipends for meeting certain benchmarks are another way of compensating staff. Consideration should be given to giving one-time stipends for completing firefighter 1, firefighter 2, different fire officer levels, and EMS certifications are a way of rewarding people for taking the time and completing programs.

VII-15 Update all Job descriptions as needed, including requirements to hold a ranking position.

VII-16 Update and develop a Mission Statement, Vision Statement, and a set of Strategies and Goals.

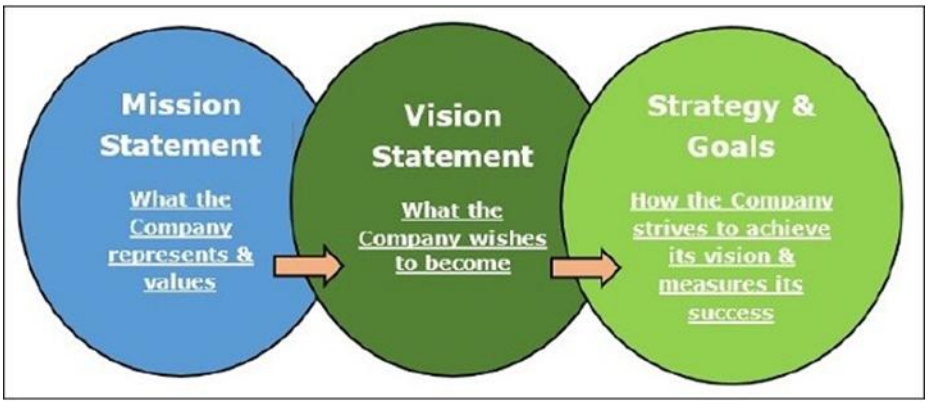


Figure 39
Mission, Vision and Goals

VII-17 The Town should consider the health and safety of Department members and therefore budget and offer an NFPA physical to be completed by all staff. Currently, physicals are only done on initial employment and never again. Some communities have allowed people to have their physicians (when capable and properly equipped) conduct these exams. At the conclusion of the exam, the Fire Chief should be given a letter stating the person has been examined and is duly physically and mentally fit to be able to conduct firefighting duties with no restrictions. If chosen, the Chief may accept some conditions that allow for people to drive only and not conduct any operations requiring the use of a self-contained breathing apparatus.

CHAPTER VIII RECOMMENDATIONS:

VIII-1 The Department should be receiving and giving automatic mutual aid to all surrounding towns in a coordinated effort to provide, at a minimum, a dedicated Rapid Intervention Team (RIT).

VIII-2 The Department should train at a minimum of 12 members to provide the rapid intervention function as three to four-person teams.

VIII-3: Although more stringent than the requirements found in Table 4.3.2 of NFPA 1720 for rural communities, through the utilization of automatic aid agreements with neighboring communities, Fire Departments should consider the adoption of an *Standards of Cover (SOC) with the goal of attempting to have at least 16 personnel on

the scene of any reported structure fire within 14 minutes. This should involve at least one mutual aid town for RIT.

VIII-4: The Department should make it a priority to improve its first unit on scene response times, including the adoption of an SOC, for the Town. The SOC should be based upon a hybrid of the NFPA 1720/1720 and Commission on the Accreditation of Ambulance Services (CAAS) recommendations.

VIII-5: The HFD should review standards of cover benchmarks to have the first unit on scene within eight minutes after responding to all types of calls, 90% of the time.

VIII -6 The HFD should annually review the use of automatic aid to any reported structure fire or significant incident. This review should ensure that the proper equipment, with the properly trained staff, is responding to assist.

"Standards of Cover" is defined as "those adopted written policies and procedures that determine the distribution, concentration, and reliability of fixed and mobile response forces for fire, emergency medical services, hazardous materials, and other technical responses.

CHAPTER IX RECOMMENDATIONS

IX-I: The Town should apply for a SAFER grant to begin to build a recruitment and retention program to staff and support all fire and EMS operations.

IX-2: Although time consuming to accomplish, the Department should apply for funds for eligible items on the AFG grants. Grant awards will help free up Town dollars that can be used for other fire department items that are not grant eligible.

IX-3: The HFD should hire a mentor to assist with the development of AFG and SAFER Grant applications.

IX-4: Once the Department has appropriate staffing, the Town and the Department should be looking at the State, Insurance companies, and other private organizations that have grant opportunities for equipment purchases.

IX-5: The Town should apply for rural development grant assistance through the United States Department of Agriculture to assist with funding the fire station renovation project. While no grant is guaranteed, we have seen this program provide low interest loans for station development.

IX-6: – The Town should consider billing at-fault insurance providers to evaluate and secure vehicles involved in a motor vehicle crash.

IX-7:– The Town should determine the cost to provide fire prevention services and consider adjusting user fees.