

**HARRISON, MAINE**

**HARRISON FIRE RESCUE DEPARTMENT  
ORGANIZATIONAL REVIEW AND STRATEGIC PLAN**

**Prepared by:**



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## I: Executive Summary

The team from Municipal Resources, Inc. is pleased to present this report and subsequent recommendations and timeline for the Town of Harrison. From the onset, it is very clear that the Town is fortunate to have a strong officer core managing the Department and a core group of committed and active firefighters protecting the community. It is extremely difficult to retain and strengthen a modern on-call fire department in communities similar to Harrison. This accomplishment should be recognized and celebrated.

Department personnel recognizes that they need to evolve based on a number of factors including:

- Increased call volume,
- Diversity of calls,
- Generational differences and diversity of personnel
- Recruitment and retention of personnel,
- Attrition, a struggle to maintain adequate training,
- Policy compliance,
- Equipment upkeep,
- Safety of responding firefighters and the communities they serve.

All of these issues place untenable demands on a team of volunteers, no matter how well trained and prepared they may be. Reflecting on the past it is no longer reasonable to expect the following:

- The entire membership of the call fire department works in town and can respond at a moment's notice.
- Employers will release personnel to respond to emergency incidents.
- Robust rosters with waiting lists of personnel seeking to join the organization.

The factors listed above translate into decreasing participation, longer response times and having fewer appropriately trained personnel on the incident scene-if they can respond at all. In Harrison, some calls have gone unanswered (27% of EMS calls had no response in 2023 from the Harrison Fire Rescue Department). It has not been validated that an ambulance responded to every one of these calls or was it known if there was an impact to life safety.

The challenges that are facing the Fire and EMS services in all of 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 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 call:

- 1) the fire department will come, and
- 2) they will figure out how to deal with the problem or find someone that can/will.

Often an emergency response can be perceived by the public as adequate in that there was a response, and the situation was addressed. However, often emergency responses lack sufficient resources (personnel and apparatus) and safety of both the public and the Department staff can be placed at risk. Looking ahead, the implications of not acting will be quite simple, community members will be left to deal with their worst day all by themselves or with less than adequate help.

The key findings in this report are critical to the life safety of all the residents in the community. This analysis contains the following key findings:

1. The workload of the Chief is such that the position should be increased to full-time.
2. A group of per diem staff should be created and used to fill full-day shifts, Monday through Friday.
3. A minimum of two trained personnel should be sent together on all incidents to assess a situation and if possible, mitigate the situation without the need for additional staff.
4. Policies and procedures (standard operating procedures and guidelines) should be expanded.
5. A twenty-year capital plan must be completed to create a gradual and appropriate growth trajectory for the fire department.
6. Communication from the command staff to the firefighters should be improved. This was one of the most common themes from our interviews.

During this project, our team conducted a SWOT analysis of the Department. This analysis lists the strengths, weaknesses, opportunities, and threats. The MRI team has also created a five-year layout of tasks to be accomplished. It is important to note that this report is reflective of the Town of Harrison being able to reasonably provide emergency services on its own as mutual aid by other communities or private agency’s (without a contract in place) cannot and should not be the solution to this complex problem. Putting the burden to always respond to Harrison on another community is not reasonable. Likewise, it would not be right for Harrison to always respond to another community if they had no first responders to handle a call.

Regionalization of emergency services is evolving in many areas of the Country. However, regionalization needs to be a partnership where all the participants come

together to share resources. Currently, there is some reasonable sharing of resources and response collaboration that is discussed within this document.

## II: Scope

The project will consist of providing fire service strategic planning services to the Town of Harrison. These services will focus on providing guidance to produce a foundation for the future of the Harrison Fire Department and as a steppingstone for the evaluation of regional fire service delivery options. The project will involve the following components:

- Provide advice and support to the Town Manager, Fire Chief and the Select Board on a as needed basis.
- Conduct a virtual or in person meeting with the Town Manager, Fire Chief, and the Select Board to determine the specifics of this project.
- On the same day as the meeting with the Select Board, deliver a nominal group process aimed at identifying the major issues and challenges facing the organization.
- Review staffing and response data for fire and EMS operations.
- Identify and comment on the level of service desired by and provided to the Town.
- Obtain a perspective on leadership and management within the Harrison Fire Department.
- Identify response trends and deficits.
- Develop a strategic staffing plan to address the emerging on-call response deficit.
- Review the fire/EMS facility and apparatus set.
- Review ongoing recruitment and retention efforts for on-call fire service personnel.
- Identify industry best practice relative to expanding the number of active on-call and volunteer personnel.
- Identify a preferred strategic path and set of action items.
- Develop a 15-to-20-page **management letter** that provides the Town Manager, Fire Chief, and the Select Board with an external practitioner-based perspective and identifies a series of action items that would address the organizational issues that were prioritized.

- This project is to be completed within 70 days, which is March 22, 2024, of the delivery of said signed agreement.

Based on your request, our team has developed this document to provide some guidance and strategic planning for the fire and emergency medical services (EMS) in the Town of Harrison. We hope that we have documented guidance that helps produce a good foundation for today and the future needs of the community.

The team has reviewed and evaluated the current department and has spoken to members of the Select Board as well as officers and firefighters in the department to obtain a local view of the current and future needs. The team used many documents provided by the Chief to help evaluate and to project current and future needs. We hope this letter is a steppingstone for the operations of the department and in some ways serves as a catalyst to begin to look at regionalization and/or shared services with surrounding communities.

### III: The Community

The Town of Harrison is a residential/recreational community that has a population that moves up and down with the seasons. The town is comprised of 33.19 square miles with 3.62 being water. It is in Cumberland County and is surrounded by the communities of Bridgeton to the West, Waterford, and Norway to the North, Otisfield to its East and Naples to the South. There are two main routes, Route 35 and Route 117 that cross the town. Harrison straddles Long Lake and Crystal Lake and these are the primary draws to the area in the summer months. The community has three kids' camps as well as an active recreation department that draws kids from all over the world.



The 2020 census recorded 2,315 people in 920 households with a population density of 70.1 inhabitants per square mile.

%	Age Group
25.4%	Under 18
5.4%	18-24
28.6%	25-44
27.1%	45-64
13.3%	65 Plus
Median Age is 44	

**Figure 1 – Population Percentages by Age**

What is truly unknown is what the actual population is during the peak summer months. It has been suggested that the town grows two to three times its Census recorded population during that time frame. A combination of the number of people as well as the ages of the people have a direct impact on the level and type of emergency services a community needs to consider for all public safety needs including fire and EMS.

## IV: The Fire Department



The Harrison Fire Department has a published mission statement as well as a published set of Department Core Values. The MRI project team believes that the Department members are striving to meet the service level expectations of the community and honor the organizational mission and values on a daily basis.

### MISSION STATEMENT

*It is the mission of the Harrison Fire/Rescue Department to provide the best possible public safety services to the people that live, visit and travel through the area served by the Harrison Fire/Rescue Department. We will also strive to provide the highest level of professionalism and care to all persons who require our services. We will provide mutual aid to our surrounding communities in such a way as to foster good working relationships with all mutual aid communities. We are constantly striving for improvements in the service delivered to the community, the quality of our membership, as well as the quality of training and education provided to our members.*

*Developed 2/5/2009*

### Core Values

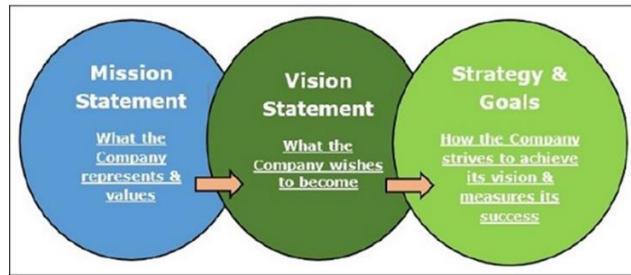
Integrity----Teamwork----Commitment----Safety

To fully understand a fire department there are many factors that need to be reviewed. For this study the MRI team has looked back over the past three years and calculated an average for the individual factors. This not only allows one to see a trend but more importantly allows for the projection of future needs. Considering the evolving mission of fire service agencies, we need to be cautious when we look at these numbers and project the future. In addition, New England communities are subject to a variety of weather-related events this could have an impact on resource needs at most any time of year, day of the week or time of the day.

The first item looked at is the type of calls the department responds to each year. For this, we have grouped calls into categories and have listed the number of calls per calendar year. The last column indicates the average number of calls for the category. These numbers should be looked at as trends for the types of incidents the department is responding to. These numbers along with other statistics help to plan the future needs of the department for both staffing and equipment.

**Note: All of the numerical data from this point forward has been taken from the Harrison Fire Rescue Electronic Records Management System. This data is also reported to the State and the National Fire Incident Reporting System.**





**Figure 2 – Mission-Vision-Goals**

INCIDENT TYPE	2021	2022	2023	Average	% of Type
Alarm Activations	12	26	24	20.7	6%
Assist Law Enforcement	0	2	1	1.0	0%
Carbon Monoxide Incidents	3	3	4	3.3	1%
Chimney Fire	4	2	2	2.7	1%
Electrical Problem	1	25	2	9.3	2%
Electrical Problem- Power line down	7	0	19	8.7	2%
Electical problem- Tree on wires	10	0	13	7.7	2%
EMS calls	219	199	94	170.7	46%
EMS Calls no response	0	0	96	32.0	9%
Gas Leak/spill	1	1	0	0.7	0%
Hazardous Materials Incident	2	0	1	1.0	0%
Ice Water rescue	0	1	0	0.3	0%
landing Zone	0	2	0	0.7	0%
Lockout	0	1	0	0.3	0%
Motor Vehicle Crash	29	41	40	36.7	10%
Mutual Aid - to another town	40	37	31	36.0	10%
Other	7	5	4	5.3	1%
Permitted Burn	7	6	7	6.7	2%
Propane Leak/ Smell of propane	1	3	2	2.0	1%
Public Service	3	6	9	6.0	2%
Smoke investigation	4	7	4	5.0	1%
Structure fire	3	6	4	4.3	1%
Trees down/storm damage	1	17	5	7.7	2%
Unpermitted burn	5	0	0	1.7	0%
Vehicle Fire	2	1	2	1.7	0%
Woods/grass fire	3	3	4	3.3	1%
<b>TOTAL</b>	<b>364</b>	<b>394</b>	<b>368</b>	<b>375.3</b>	

**Figure 3 – Incident Type and Volume**

EMS calls, Motor Vehicle Accidents (Car, truck, Boat, off road accidents) and Mutual Aid to other communities lead the call volume each year. Alarm Activations are second. This is typical in the New England states. There was no data available for no response to EMS calls for the years 2021 and 2022 that could be used for comparison.

In the next two charts (Figures 4 & 5) we take a look at the call or incident volume by day of the week and time of the day. Once again this helps us see trends and to project the future.

For the first chart we look at the day of the week. In Harrison the average number of calls by the day of the week is pretty flat. In other words, the percentage difference is very minimal between the days and indicates the need for services every day of the week. This is important to know when looking at when emergency responders are needed and when, if chosen, is one of the factors for when they should be scheduled to work.

Incidents by Day of the week										
	2021		2022		2023		3 Year Average			
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls		
Monday	54	15%	49	12%	74	20%	59	16%		
Tuesday	52	14%	48	12%	54	15%	51	14%		
Wednesday	63	17%	54	14%	51	14%	56	15%		
Thursday	47	13%	40	10%	38	10%	42	11%		
Friday	46	13%	59	15%	58	16%	54	14%		
Saturday	53	15%	72	18%	42	11%	56	15%		
Sunday	49	13%	71	18%	51	14%	57	15%		
<b>TOTAL</b>	<b>364</b>	<b>100%</b>	<b>393</b>	<b>100%</b>	<b>368</b>	<b>100%</b>	<b>375</b>	<b>100%</b>		

**Figure 4 – Incidents by Day of the Week**

The time of the day is the next important factor to consider. Not surprisingly the “awake hours”, when most people get up for the day till they go to sleep indicate the highest call volume. The MRI team sees this as normal in most reports they have done. The peak times are from 8AM to noon and then again from 4PM to midnight.

Time of Day										
Time	2021		2022		2023		3 Year Average			
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls		
0000-0359	25	7%	30	8%	30	8%	28	13%		
0400-0759	32	9%	46	12%	28	8%	35	13%		
0800-1159	78	21%	81	21%	75	20%	78	19%		
1200-1559	99	27%	86	22%	92	25%	92	18%		
1600-1959	86	24%	98	25%	89	24%	91	19%		
2000-2359	44	12%	52	13%	54	15%	50	18%		
<b>TOTAL</b>	<b>364</b>	<b>100%</b>	<b>393</b>	<b>100%</b>	<b>368</b>	<b>100%</b>	<b>335</b>	<b>100%</b>		

**Figure 5 – Incidents by Time of Day**



## Harrison Fire S.W.O.T. Analysis

A **SWOT** analysis is a business term utilized to identify the strengths, weaknesses, opportunities, and threats present within an agency's operating environment. This type of analysis involves specifying the objective or mission of an organization and identifying the internal and external factors that are favorable and unfavorable to achieve that objective.



**Figure 6 - SWOT Analysis Components**

1. **Strengths**: Characteristics of the agency that allow it to meet its mission, work toward achieving its vision, or provide exceptional service to a community.
2. **Weaknesses**: Characteristics of the agency that may create internal conflict, dysfunction, and/or frustrate organizational performance thus creating a disadvantage to the organization in its efforts to meet the goals established by its mission statement.
3. **Opportunities**: Elements that the organization could pursue or develop to its advantage.
4. **Threats**: Elements in the environment that could create organizational instability or reduce the ability of an agency to fulfill its mission and/or achieve its vision.

A **SWOT** analysis aims to identify the key internal and external factors seen as important to achieving an organizational objective. SWOT analysis generally groups key pieces of information into two main categories:

1. **Internal factors**: The strengths and weaknesses internal to the organization.
2. **External factors**: The opportunities and threats presented by the environment external to the organization.

Analysis may view the internal factors as strengths or as weaknesses depending upon their effect on the organization's objectives. What may represent strengths with respect to one objective may be weaknesses (distractions) for another objective.

A SWOT analysis can be used to:

- *Explore new solutions to problems.*
- *Identify barriers that will limit goals/objectives.*
- *Decide on direction that will be most effective.*
- *Reveal possibilities and limitations for change.*
- *To revise plans to refocus on an organization's mission statement.*
- *As a brainstorming and recording device as a means of communication.*
- *Creating a series of recommendations in the context of an organizational study.*

The **SWOT** analysis in public safety framework is beneficial because it helps organizations decide whether an objective is obtainable; therefore, enables agencies to set achievable goals, objectives, and steps to further the change, or enhance organizational development. It enables organizers to take visions and produce practical and efficient outcomes that effect long-lasting change. It also helps organizations gather meaningful information to maximize their potential. Completing a **SWOT** analysis is a useful process regarding the consideration of key organizational priorities.

This process, undertaken by the project team included an evaluation of both the external environment, as well as the Fire and first response EMS services internal factors and the interrelationship between the two. This was accomplished through virtual interviews, along with the analysis of data obtained from various sources. By approaching the **SWOT** analysis in this way, the process continues to reinforce a primarily – but not entirely - stakeholder-driven perspective.

**NOTE: For this SWOT analysis, data has been collected as part of the site visit by the project team as well as from emails and interviews from current Town Government and Fire Department staff. The items are direct from the notes from these visits and interviews and are not from the MRI team's views.**

### **Strengths**

- Willingness to respond and to work
- Good Equipment
- Good and well maintained station
- Commitment of current staff to make a difference
- Efficiency of members on scene

- Town supports the Department
- Good core of officers
- Good respect from other towns
- Good confidence in staff
- Tight group of people
- Good internal accountability
- Safety is taken seriously
- Top notch equipment
- We strive to remain a small town
- Chief has worked to improve facilities and equipment

### **Weaknesses**

- Staffing
- Availability
- Interior Firefighters (IDLH Qualified)
- Retention
- Accountability
- Day time coverage
- Some people pick and choose the calls they go on
- Personalities get in the way of progress
- Communications on: Equipment purchase and relocation of equipment
- Lack of response on repeat calls
- Some inconsistent training
- Follow up on items in suggestion box
- Lack of living quarters in station
- Diesel exhaust
- Lack of boat training and qualified members to drive
- Leadership and the need for an adaptive leadership program
- Lack of social activities to keep the department together

### **Opportunities**

- Collaboration with other town departments and other local fire EMS departments.
- Education
- Expanding first response for EMS
- Mentoring program for new hires and officer candidates
- Officer training on leadership skills and human resource topics
- Keep and train what we have and recruit

- Start with a small 2 to 3 person day crew (see section VIII for details)
- Keep up on good managed training
- Provide in house EMS programs to advance current staff
- Offering Fire/Police trained staff to mutual aid towns
- Go to one night a month to “Mutual aid town training”
- Renovation/addition of station to meet future needs
- Staff the station days with the right people
- Community Paramedicine
- Potential no tax revenue stream

### Threats

- Stay in your lane
- Understand your role
- Loss of good people
- Current response by only a few members
- Members aging out – institutional knowledge
- Growth and the ability to keep up
- Trust
- Funding
- Lack of qualified interior people
- Transparency
- Lack of recruitment
- Lack of Leadership
- Expensive future
- We want to remain a small town and have the small town feeling
- Overall Recruitment and retention
- Unionization
- No draw of local people to fill the jobs

Based on the observations and the collaborative notes and discussions the MRI team find the SWOT to be a good representation of the good, bad, and items that can be approved upon. Many of the items listed are discussed within this document and when appropriate, recommendations have been developed.

## V: Fire Station



**Figure 7 – Harrison Fire Station  
34 School Street, Harrison, Maine**

The fire station (Figure 7) located at 34 School Street was built in 1990 and is in a very good location and is in very good shape. The current operations of the department fit well within the building; however, the MRI team did find some health and safety issues that may be cause for short- and long-term concern.

- 1) There is no direct exhaust removal system tied to the apparatus that removes the carcinogens from the building when the vehicles are started and moved.
- 2) The lack of tightness or space from the “dirty atmosphere” on the apparatus floor to the kitchen.
- 3) The lack of a separate gear storage area that is off the apparatus floor. Once again this is a concern on the carcinogens and cancer.

- 4) There needs to be a clear dirty, decontamination, and clean areas within the station. It is important that people properly clean their equipment, personal protective equipment and wash and or shower after an incident and before they potentially bring the contaminate home with them.

The station and training tower area are in a great location and has the potential of being built out as the needs of the community and department grow.

## **Station Operational Considerations**

Key design goals and considerations for fire stations include the following:

### ***PROMOTE OCCUPANT QUALITY OF LIFE***

Fire stations may be occupied 24 hours a day, seven days a week by personnel at various times and for various lengths. Therefore, ensuring a comfortable living environment for the firefighters is paramount:

- Provide ample natural light
- Provide individual dorm rooms, if budget allows
- Provide ample recreation areas and separate noisy areas (such as a game room) from quieter areas (such as a television room)
- Avoid institutional and unnatural finishes, textures, and colors

### ***A. MAINTAIN A SAFE AND HEALTHY ENVIRONMENT***

As above, due to the continuous occupation of the facility by firefighters and the presence of hazardous materials, special attention must be given to designing the facility to accommodate equipment and operational strategies to both protect the occupants and maintain a healthy environment. Consider the following critical elements:

- Provide a secure facility for both personnel, apparatus, equipment and materials such as controlled medical supplies and hazardous fire suppression agents.
- Use non-toxic building materials and improved maintenance practices.
- Ensure good indoor air quality and abundant natural light in the residential and administrative areas.



- Ensure good ventilation of operational areas such as the apparatus bay and prevent contamination of clean spaces such as the SCBA maintenance areas.
- Separate personal protective equipment (PPE) from direct sunlight and exposure to apparatus contaminants (diesel particulates and foam).
- Ensure that equipment, furnishings, and finishes are functional and will last in the long term.

## **B. ENSURE FLEXIBILITY**

As firefighting technology evolves, fire stations need to evolve as well. Consider the following areas:

- Plan for potential expansion, both in the apparatus bay area and the residential areas
- Ensure appropriate product/systems integration
- Design for the changing nature of work

## **Recommendations**

***Recommendation I - Action Item - Apply for a Federal Act Grant to install an enclosed Diesel Exhaust removal system. This has been successfully accomplished by many communities as cancer awareness and prevention is still a very hot topic in the fire service as cancer is taking the lives of emergency responders daily.***

***Recommendation II- Action Item - As part of the Town's capital plan the station should have items included over the next 3 to five years. The first thing that needs to be done is a full special needs evaluation combined with a study of the current structure. This study should look now at the long-term needs that may include 24 hour living space as well as further evaluation on the air quality and keeping carcinogens out of the work and living areas of the building.***

***Recommendation III - Action Item - As a proactive prevention measure ask the Towns insurance provider to do a walk thru evaluation of the current building and to make further recommendations to help minimize any potential claims.***

## VI: Apparatus and Equipment



The MRI team conducted a cursory review of the current fire apparatus fleet to determine the average age of vehicles. A detailed apparatus replacement plan (capital improvement plan) should be developed and presented to the Town for future planning. The team has been informed that the NFPA required testing of all pumps, hoses, self-contained breathing apparatus etc... has been done on an annual basis. The number and types of equipment are correct for the size of the community as well as the number of responders on the department roster. Currently there is no demonstrated need to purchase an ambulance or ladder truck to add to the fleet. EMS transport services are provided by two private companies, and there are ladder trucks in the area that can be called for when needed. The department needs to be part of the town's 20-year capital plan for apparatus replacement.

Despite the lack of clear guidance in the various NFPA standards, there is a significant body of knowledge that suggests that fire apparatus definitely has a finite lifespan. The reasonable service life of fire apparatus will depend on a number of variables such as the level of use, local

environment, and operating conditions, and very importantly, the scope of preventative maintenance. It is generally accepted that lower use fire apparatus, such as units serving communities that are suburban in nature, might still be mechanically sound after twenty years or more, due to their lower frequency of use. However, after twenty years, technical and functional obsolescence may make the apparatus less desirable to use even if mechanically sound and serviceable. Nevertheless, that does not mean that it will still not be serviceable as a spare or reserve apparatus. Based on experience, most communities the size of Harrison replace an engine at 20 years of age depending upon use and condition.

One of the biggest factors that can impact the serviceable life of the apparatus is the level of preventative maintenance that is received. NFPA 1911: ***Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus (2012 edition)*** provides guidance on this important aspect of fire department support operations. Apparatus manufacturers also identify suggested programs and procedures to be performed at various intervals. As apparatus ages, it is reasonable to expect that parts will wear out and need to be replaced. It follows then that maintenance costs and overall operating expenses will increase. As a result, cost history and projected costs for the future must be considered as a factor in determining when to replace or refurbish a fire apparatus. In addition, the reliability of the apparatus must be considered. Experiencing low downtime and high parts availability are critical factors for emergency equipment maintenance and serviceability. A pro-active preventative maintenance program can assist with holding costs to an acceptable level.

A white paper developed by the Fire Apparatus Manufacturer's Association (FAMA) suggests that the front-line lifespan of active-duty fire apparatus in a suburban setting ranges from 16 to 19 years, with the possibility of an additional 9 to 10 years in a reserve, or spare status. The International City/County Management Association (ICMA) suggests that the lifespan of a fire pumper should be 20 years, and the lifespan of an aerial ladder should be 25 years. The National Fire Protection Association suggests 15 years in front line service with an additional five in reserve status.

As the value of the apparatus or vehicle depreciates, the maintenance costs are evaluated along with the age, mileage, and engine hours so that expected maintenance costs do not exceed the value of the apparatus or vehicle. When considering apparatus usage, hours on the engine and pump must be taken into consideration. Fire apparatus typically spend more time idling while at the scene of emergencies, or when operating the fire pump at a fire. A rule of thumb that can be used is that each hour on the motor is the equivalent of 30 - 35 miles of actual driving mileage.

## **Recommendations**

***Recommendation IV - Action Item - Purchase and properly equip with safety equipment a utility pick up truck for 24X7 fire department use.***

***Recommendation V - Action Item - Create a 20-year capital plan that encompasses all large cost items for the department. This plan will need to be reviewed and updated annually as the needs of the department change.***

***Recommendation VI - Action Item - Develop a specification and sign a contract within a year to replace one of the oldest trucks. Understand that when you sign a contract it may take 24 to 36 months to receive the truck and pay for it. The cost of fire apparatus has grown significantly and appears the cost are going to continue to rise for the foreseeable future.***

## VII: Emergency Medical Services

The EMS system in town is supported by Pace Ambulance in the North and United Ambulance in the South. With medical emergencies having the highest call volume in the community it is only proper that this service is given the most attention. Currently there is no written contract or agreement (that MRI was given when asked) and the transport services are of verbal understanding and at no cost to the community. This is highly unusual in today's environment as agreements and contracts for this type of service are commonplace along with a fee that is either a flat fee or a per capita based fee. If the private services approach the Town with a flat cost or a rate schedule to provide EMS and transport services, the town should consider a true cost benefit analysis for the proposed rates versus having a community fire-based EMS service. The MRI team that has completed this project would be able to assist the town with this analysis on a time and material cost that can be added to this project. If the town should ever decide to go to a fire-based EMS program MRI will also be able to assist with the many components that are needed and or required for a new system.

The Harrison Fire Rescue Department has some trained personnel and is equipped to handle proper assessment and treatment of medical emergencies prior to the ambulance transporting the patient. It is extremely important that the fire department continue to provide first response to all medical emergencies. Properly trained and properly equipped responders are making a difference every day. This is especially true when you have back-to-back or two calls simultaneously happening. There will come a time when the private service will not be able to respond immediate and they do not have an obligation to without an agreement in place. It is very common, especially in New England, that the fire service is looked at to provide the assessment and treatment of all regardless of who actually does the transport to the hospital.

A fire-based transport service would come with a cost to start up but will also have a revenue stream by billing for transports as well as the potential of providing this service to the area communities for a fee to further help with set up and operational expenses. This has the potential to put Harrison in the forefront of sharing resources between the towns.

Certification Level	#
EMR	1
EMT Basic	3
EMT Advanced	1
Paramedic	2
<b>TOTAL</b>	<b>7</b>

**Figure 8 – EMS provider levels**

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 that can arrive quickly and transport at the appropriate level of care are all key factors in a positive outcome of 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. Paragraph 4.1.2.1(4) of NFPA 1710<sup>1</sup>, which would be applicable to Harrison Fire Department 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<sup>2</sup> recommends that an ambulance arrive on scene within seven minutes, fifty-nine seconds (00:07:59) of dispatch.

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<sup>1</sup> 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*, 2014 edition (National Fire Protection Association, Quincy, MA), outlines organization and deployment of operations by career and primarily career fire departments.

<sup>2</sup> *The Commission on Accreditation of Ambulance Services (CAAS) is an independent commission that established a comprehensive series of standards for the ambulance service industry.*

## VIII: Staffing

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

Staffing is the biggest key to the success of any Fire and EMS service response. It was stated by a member of the community; “we need to have the right person with the right training and skills showing up at the right time”. For the most part, the average citizen only sees the amount of shiny red fire trucks and ambulances a department has and sees that as their fire department. 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 is now becoming a crisis in many communities.

Having a number of 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 show the real numbers and the level of service the department can deliver. To look at this closer a study was conducted on the years of service for each member, the total activity hours, and the total training hours of each person.

At the time that this assessment was completed, the Harrison Fire Department’s call firefighter roster listed 29 active personnel. This number is broken down as follows:

AGE BREAKDOWN		
Under 20	0	0%
20-29	2	7%
30-39	3	10%
40-49	7	24%
50-59	6	21%
60-69	5	17%
70 and older	6	21%
<b>TOTAL</b>	<b>29</b>	
<b>Youngest</b>	<b>23</b>	
<b>Oldest</b>	<b>84</b>	
<b>Average</b>	<b>55</b>	

**Figure 9 – Member Age Breakdown**

59% of the members are 50 years and older and only 2 are under the age of 30. The members of the department are beginning to age out for their own health and safety. This is a real concern for the department and the community.

Even in a small town such as Harrison, the size of the department from a call personnel perspective is not going to be adequate to handle the expected emergency workload. In addition, in almost any call/volunteer emergency services organization there is going to be a percentage of members whose names still appear on the “active” roster, yet they no longer truly are, or are minimally so, for a variety of reasons. Factor in that most members of the department have a primary job, other than the fire department, that probably limits their availability to respond mostly during normal business hours and the current staffing picture becomes much more of a concern.

In order to first look at the current staffing model we need to look at the overall credentials the staff are certified to operate within. The charts below show the number of staff within the Fire and EMS groups as well the operational level that currently exists.

Officers	8
Interior Firefighters	8
Support Firefighters	11
Fire Police Only	1
<b>Total</b>	<b>28</b>

**Figure 10 – Harrison Fire Department Personnel Assignment and Operational Level**

**Note:** Although the eight Officers are also interior qualified firefighters, there must be a Command staff in place to assure that firefighters are safe and that operations are being conducted in a safe manner. In general, a minimum of two Command positions must be filled. The role of Incident Command and Safety are primary and other command positions should be filled out based on incident size and complexity.

**Training**

In 2023 the department collectively participated in 770 hours of training. The average staff member registered 27.5 hours and other members had between 2 and 76 hours each. A total of fifteen members fell below average. Officers recorded an average of 35.875 hours; Interior Firefighters recorded an average of 21.16 hours and support staff averaged 26.125 hours.

**Incident Response**

In 2023 the department members responded to an average response of 48.2875 incidents each. The highest person responded to 176 incidents and the lowest person recorded 2 incidents for the year. Once again, the officers responded to the most calls with an average response of 65.375 calls, each followed by the support staff with an average response of 49.83 calls each and then the interior qualified personnel with an average response of 28.875 calls each.

**Management and Leadership**

The department has been struggling with staffing and with any change in the fire service, especially in the officer core can and often causes conflicts and issues amongst the members. The department appears to be mending itself from a significant change and with proper leadership it can and will no





doubt be a better place. If the Town chooses to move to a full-time Fire Chief, it is important that they select the best qualified person in tactics, strategy, EMS, human relations, and administration. The current management and leadership changes have caused some problems with personalities being the major component.

The department must have a written policy on how promotions and consideration for promotion are done. This needs to be addressed prior to any opening or promotion happening. The Chief should be charged with all administrative work including seeking grant funds from private, state and federal programs.

**Overall Staffing Needs**

The Department and the Town are approaching a crossroads where staffing is going to be a real concern. With the combination of fewer firefighters responding to incidents coupled with the lack of interior firefighters, and the aging of the department members are all factors that need to be addressed. The weekday hours do have people that can and are answering the calls however, the ability of these people to perform rescue and fire attack at a moment’s notice is a real concern. The key is having the right person show up at the right time with the right training and equipment to do the job that is needed. The Town cannot rely on mutual aid to provide the basic fire and EMS services. Many of these towns are or will be in the same position as Harrison is today. The department should consider having at least one (2 preferred) per diem staff working a day shift in the station and performing many tasks as directed by the fire chief. The MRI staff would recommend the town create this pool and to compensate them at an hourly rate with no benefits. A suggested hourly rate that would attract people and retain them is indicated in the chart below (figure 11).

Position	Hourly Rate
Certified Firefighter 1 NO EMS	\$18.00 per hour
Certified Firefighter 1 Basic EMT	\$20.00 per hour
Certified Firefighter 1 Advanced EMT	\$23.75 per hour
Certified Firefighter 2	Add .75 per hour

**Figure 11 – Suggested Per-diem Hourly Rate**



## **Weekly tasks to be performed.**

The fire service is a true 24/7 operation. Apparatus and equipment must be in a state of readiness at all times. A day person should be doing this work and in doing so leave the nights for training and not for doing equipment checks and facility cleaning. There is a lack of life safety inspections and public education from the department. This void can and should be filled with per-diem staff. These people would be the first responders on all calls, both fire and EMS.

**Recommendation VII – Action Item - The Town should consider hiring a full-time Fire Chief/Emergency Manager with both administrative and operational responsibilities. In order to properly complete this the following must be done:**

- 1) A complete and thorough job description needs to be developed and approved.**
- 2) A third-party service or group should conduct a full hiring process including interviews, assessment center and background check. The top two or three names forward to the town for Town Manager and Board Interview.**
- 3) Top one or two candidates should have a complete background check conducted.**

**Recommendation VIII – Action Item - The Town should consider having a pool of per-diem firefighters to workday shifts Monday thru Friday. This pool of people should be pre-hire certified to at a minimum of Firefighter 1 (Firefighter 2 preferred) and State of Maine Basic EMT.**

**Recommendation IX – Action Item – The command staff should review the Department roster and look at the members with low participation and find out what can be done to increase their involvement. Work with these members to increase their participation within a pre-determined time frame.**

**Recommendation X – Action Item - The Harrison Fire Department should set a minimum criterion for members to remain in active call 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.**

**Recommendation XI – Action Item - The Department should foster and support any member to be trained and certified to the Firefighter 1 / 2 level.**

**Recommendation XII – Action Item - With the majority of the incidents being medical emergencies, the department should look to increase the number of EMS providers to ensure this level of service can be maintained 24 hours a day seven days a week.**

***Recommendation XIII – Action Item - Working with a training officer more training should be planned and run. 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 your training goals.***

***Recommendation XIV – Action Item - The Department should take the lead and train once a month with neighboring communities. This “Regional Training” builds stronger working relationships that make an incident run much smoother.***

## **IX: On Call Recruitment and Retention**

The Town of Harrison has expressed a desire to retain a strong call firefighting force. We concur and believe that goal is realistic and achievable for the foreseeable future. However, it will require the implementation of program(s) to recruit and then retain personnel; a strong commitment from the town; and strong leadership in the fire department.

In March 2004, the International Association of Fire Chiefs (IAFC) issued a report by the Volunteer and Combination Officers Section, entitled *A Call for Action: Preserving and Improving the Future of the Volunteer Fire Service*. Although this article is 20 years old the facts and information are still relevant today. Among other things, the report highlighted the fact 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 to the reduction in the number of volunteer and on-call firefighters in communities such as Harrison. Among them is that the demographics of many communities today do not support enough of the types of persons 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. We have found that on average, for every five on-call firefighters recruited, two will remain active after a period of 48 months has elapsed. The task of recruitment and retention is further complicated when the department lacks leadership and a true commitment (whether real or perceived) to the on-call force.

Presently, the Harrison Fire Department has approximately twenty-eight members on its roster. On its own, this number may look to be sufficient for the activity level. However, in almost any call/volunteer emergency services organization there is going to be a percentage of members whose names still appear on the “active” roster, yet they no longer truly are, or are minimally so, for a variety of reasons. Factor in that most members of the department have a primary job, other than the fire department, that probably limits their availability to respond, mostly during normal business hours, and the current personnel picture becomes much more of a concern. Based upon our analysis only about three or four of the on-call personnel respond to incidents on a regular basis.

Over the next three to five years, a significant effort will need to be put forth towards recruitment and retention of on-call personnel. Although Harrison is far from alone in dealing with this reduction in on-call staff, it is essential that addressing this situation is clearly identified as a top priority of the fire rescue chief and be adopted as a shared mission of the entire department.

According to members of the department the Fire Department also does not have a formal recruitment and retention program for call personnel and has only very infrequently actively recruited for new members. The MRI study team was informed that most new members of the department are recruited by word of mouth or are “walk ins”. There is no mention of the need for additional members on the town or fire department’s websites, or even a person to contact if someone is interested in joining the department. This is something that is frequently displayed very prominently on the websites of many call/volunteer departments.

Even if the recruitment obstacles can be overcome, hurdles remain before a new member is a productive member of the department. Once an individual becomes interested in becoming an on-call firefighter, they must achieve a level of ever-increasing specialized skill that is time consuming. Often exit interviews reveal that the training commitment alone is daunting and one of the primary reasons that on-call personnel resign.

It is also costly to the department. To become a certified firefighter takes several hundred hours. Once certified, there are the dozens of hours training annually spent maintaining firefighter and EMT or paramedic (if required) skills and certifications. Unfortunately, in 2024, the average citizen does not want to spend a great deal of personal time dedicated to the fire and emergency services, especially when family commitments take priority. In addition, many on-call firefighters in departments that have a career force handling the day-to-day emergencies, find it hard to stay motivated if they are not being utilized frequently. Other reasons are for difficulty recruiting and retaining members include:

- An overall reduction in leisure time
- Employment obligations and the common need to maintain more than one job
- The virtual elimination of employers understanding and flexibility relating to this form of community service
- Increased family demands
- Generational differences
- Increasing training requirements
- The cost of housing in many affluent communities
- Organizational culture
- Internal respect
- Recognition of personnel
  - Internal communication
  - Department leadership styles and commitments

It is easy to believe that increasing the number of on-call firefighters can be a cure all to eliminate all staffing, and thus response problems. Unfortunately, in 2024, this is an increasingly difficult problem to overcome. However, there still appears to be a small town feel to Harrison, and perhaps more importantly, still a sense of community. These are key attributes that may increase the likelihood of success for any call firefighter recruitment and retention program.

As most rural and suburban communities across the United States are dealing with the reduction in volunteer and on-call staff, trying to reverse this trend has become a common issue in many places. When compared to the ever-increasing costs of employing additional full-time career personnel, many communities have come to the conclusion that investing in on-call personnel is the best, and more cost effective, practice, and to that end they have pursued some of the following strategies:

- A. Creating a marketing program to recruit new personnel into the department.
- B. Placing a prominent banner or link on the home page of the Town of Harrison and Harrison Fire Department websites.
- C. Conducting a recruitment mailing to all residential properties in the town with information about the fire department and recruiting new members.
- D. Placing signs at the entrances to town recruiting call members to the department.
- E. Placement of a temporary sign board at various locations in the community.
- F. Working with local businesses in an attempt to form partnerships that would allow employees to leave work to respond to emergency incidents when needed.
- G. Promote a volunteer firefighter “Recruitment and Retention Coordinator” to develop, implement and coordinate these activities. This could possibly be undertaken by a number of communities as a regional endeavor.
- H. Nurture the call fire department.
- I. Provide a tax abatement incentive for volunteer firefighters, this program should be modeled after the best practice concept in place in the State of Connecticut.
- J. Increasing compensation rates or the minimum hours paid for a response.
- K. Provide a reduction in property tax for on-call service.
- L. Provide on-call firefighters with community-based benefits
- M. Provide community-based awards and recognition.

**Recommendation XV – Action Item - The Town of Harrison should recognize that the only way to develop a more active and properly staffed fire department in the absence of hiring a larger force of career firefighters is to determine what would motivate potential responders and craft a program of investment that meets these extrinsic and intrinsic needs.**

**Recommendation XVI– Action Item - The Town of Harrison should convene a focus group to determine what concepts and recruitment and retention strategies are feasible and most attractive to potential candidates.**

**Recommendation XVII– Action Item - The Harrison Fire Department should set a realistic goal of recruiting at least 10 to 12 new members over the next three years, and simultaneously set a goal of increasing the overall call member force to around 30 to 35 active personnel. These personnel should be required to be properly trained and certified to the Firefighter I/II level, and preferably to the EMT-basic level.**

**Recommendation XVIII– Action Item - The Harrison Fire Department should make it a priority to develop an active on-call recruitment program led by an officer. At a minimum, this program should consist of:**

- 1. Developing a recruitment brochure and mailing it to all residents**
- 2. Holding periodic open houses at the fire station**
- 3. Performing public outreach through the local media**
- 4. Contacting community and service groups**
- 5. Developing an eye-catching banner on the town’s and fire department’s web sites**
- 6. Placing signs recruiting call/volunteer personnel at the main entrances to town**
- 7. Placing a temporary sign board at various locations within the community**
- 8. Placing signs for call/recruiting volunteers in local businesses, particularly high volume locations**
- 9. Implementing a fire explorer program**

**Recommendation XIX – Action Item - The Chief should develop a social media presence and involve other members of the department in this endeavor. The use of social media like Facebook and Twitter are what the younger generation use and a very active social media account has the opportunity to reach out to this group of people for hiring.**

**Recommendation XX – Action Item - The fire rescue chief should create a monthly “newsletter” that will highlight the positive things that the department has done the prior month. This newsletter should be posted on the town’s web page, shared in social media, given to the Town**

***Administrator who in turn should share with the Board of Selectmen. It is important that the public is made aware of all of the great people and all the good things the department does.***

***Recommendation XXI – Action Item - The Town of Harrison should explore the feasibility of utilizing, and in fact encouraging, town employees to perform “dual roles” by serving not only in their full-time positions, but also serving the town as call firefighters and/or rescue personnel. Caution is needed here though as there are provisions of the Fair Labor Standards Act that would be applicable, particularly if these personnel respond to incidents during times when they are not working.***

***Recommendation XXII – Action Item - The Harrison Fire Department should develop a series of team-based activities that build involvement in the organization.***

***Recommendation XXIII – Action Item – The command staff should visit the National Volunteer Fire Council website and review the cooperative programs they have posted to determine which programs can be beneficial to the Department. One of the newer programs is looking to attract returning or former military personnel into the fire service.***

Training is, without question, one of the three most important functions that a fire department should be performing on a regular basis; the others being response to emergency incidents and fire prevention activities. One could even make a credible argument that training is, in some ways, more important than emergency responses, because a department that is not well trained, prepared, and operationally ready, will be unable to effectively, efficiently, correctly, and safely, fulfill its emergency response obligations and mission. A comprehensive, diverse, and ongoing training program is critical to the fire department’s level of success. The need for well-trained officers, who may be faced with serious life and death decisions that must be made quickly and correctly are absolutely mission critical to any emergency services provider’s ability to perform their designated mission(s).

As has been noted previously, one of the major issues facing the Harrison Fire Department is the fact that very few of the current members of the department are even trained or qualified in EMS delivery or as interior qualified firefighters. During our review of the department, it was clear that a program needed to be developed and instituted to have as many people as possible trained, tested and approved for EMS response as well as to fight fires wearing a self-contained breathing apparatus. This is a very time-consuming project but is necessary. You can have the best equipment, but it is of no value if it can’t get to the scene.

All officer positions 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 rank appropriate assessment process, and a basic practical skills evaluation. We would highly recommend that these standards include some provision requiring completion of Fire Instructor Level I and Fire Officer Level I as a minimum. All officers should also be



required to have completed rank appropriate National Incident Management System (NIMS) training. Finally, they should be required to have completed incident safety officer training.

**Recommendation XXIV - Action Item - The Harrison Fire Department, with the support of the Town of Harrison, should make it a priority to develop and implement a plan for providing and requiring that all personnel, both per diem and call, attend, and successfully complete a training program that will result in their achieving basic Firefighter I/II certification and or Basic EMT certification.**

**Recommendation XXV – Action Item - All officer positions, from lieutenant 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.**

**Recommendation XXVI– Action Item - The Harrison Fire Department 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 our recommendation that all officers should be trained to the ICS-300 level. All chief level officers should be trained to the ICS-400 level.**

**Recommendation XXVII – Action Item - The Harrison Fire Department should strongly encourage its call officers to obtain a certain level of fire officer certification as a job requirement, such as Fire Officer I for lieutenant, Fire Officer 2 for Captain, Fire Officer III for deputy fire chief and Fire Officer Level IV for fire chief.**

**Recommendation XXVIII– Action Item - The Harrison Fire Department should require that all safety officers be certified as Incident Safety Officers. Additional personnel who may be interested should be encouraged to take this training and obtain this important firefighter safety certification.**

**Recommendation XXIX– Action Item - As part of the succession planning process, the fire chief should work to implement a career development program to ensure that all officers can perform their superior’s duties, as well as identify the core future leaders of the department.**



Figure 12 – Overview of the Mentoring Process



**Recommendation XXX – Action Item - The Department should create a formal written mentoring program and assign a mentor to each new hire to be not only the trainer but also to be the go-to person for all questions and issues that come up while on probation. Care should be made on the proper selection of a mentor. They are the key to retaining a good candidate.**

**Recommendation XXXI – Action Item - The Department should look to create a mentorship program for those that aspire or who are looked at as the next officers on the department. You don't just get the knowledge and experience with the badge. As a fire service we need to do a better job of training the future officers.**

## X: Mapping out the Future



### **“A Road Map to Success with proper timing and funding”**

Based upon our analysis of the current day-to-day operations of the Harrison Fire Department, we have found an organization that is currently governing, however there exists contention amongst some of the call department staff. The department has lacked singularly focused leadership for many years. This has led to a lack of focus, direction, and common vision within the department. In addition, having members leave the department for a variety of reasons has caused the call department to have informal “camps” that is showing to be harmful to the department.

The Fire Chief has made many progressive operational changes to the department over the past six months. The pace of the changes along with the lack of communication has created issues amongst the long-term membership of the department.

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 that 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 will be very noticeable in the quality and quantity of work performed, but also with the spirit and passion that the work of the organization is accomplishing. This is commonly referred to as *des esprit de corps*, the spirit and passion that is shared by a group.

The Department needs to develop a formal communication platform so that all staff can clearly understand changes that are occurring, and when they become effective. This can be done as minimally as a written Memo that can be posted and or emailed so all the members can read the message.

The Department lacks any type of long-range or strategic plan that charts its projected path to the future.

The Department membership needs to be updated to review any rules and regulations or Standard Operating Procedures Documents that are developed. These documents are critical to the operation of any department. They not only set a strict set of rules, but also set how the department operates

during emergency and non-emergency events as well as daily operations of the department. It is important that proper time is taken to draft, review, train and implement these. The Harrison Fire Rescue Department should put together a team to review these on an annual basis to be sure they reflect the current operation of the Department.

Looking ahead, the fire department does possess some definitive positive attributes, most notably the dedication of its core membership group. The most recent ISO evaluation conducted earned a rating of 5/5Y which is commendable for a primarily call fire department in a small town, without a very limited water supply system. This shows there is a strong foundation upon which to build.

However, the department is also facing serious challenges both today and looking toward the future. With volunteerism declining and the ranks of call emergency services personnel dwindling nationwide, the Town of Harrison faces the dual challenges of attempting to balance a credible emergency response system, staffed primarily with call members, while simultaneously facing a slowly increasing number of requests for service, both emergency and non-emergency.

To that end, we propose the following objectives as a roadmap for initiating the significant change and major rebuilding that needs to be done to the department. It should be noted that the items can and should be taken out of current order as the town deems it necessary to accomplish the goals and objectives that have been set.

### **Year 1:**

- 1. *The Town of Harrison transitions the position of Fire Chief from part-time to a full-time salaried position. The day-to-day management coupled with EMS need and the increased role of Emergency Management Director create more responsibilities and job functions than a part-time Chief can handle effectively.***
- 2. *The Fire Chief and the Town of Harrison should review and approve job descriptions for all ranks within the fire department. This should identify every position and the roles and responsibilities that are expected.***
- 3. *The Fire Chief should develop a Capital Improvement Plan (CIP) that identifies the replacement of all major apparatus, equipment (i.e. TICS, SCBA's, Extrication Equipment etc.) and facilities over the next 20 years.***
- 4. *The Town and Fire Chief should order a replacement engine as soon as possible. The Town can lock in on a purchase price and take the next 2 years to raise the funds on their terms as payment won't be due until the truck is completed. (Current build times on apparatus is 24-36 months)***

5. ***The fire chief should form a membership/management committee as soon as possible. This committee is designed to enhance communication, construct more positive relationships, and provide a mechanism for members to have an active voice within the organization and begin setting the direction for the future. This committee should consist of as many stakeholders as wish to participate. The chief should hold two meetings per month for the first six months to a year, and then meet monthly for the foreseeable future. Minutes of these meetings should be developed, shared with the department, the Board of Selectmen, and the town administrator, as an attachment to the chief's monthly report. If necessary, outside professional assistance is available to assist with facilitating this endeavor.***
6. ***The fire chief should immediately begin providing a weekly or at a minimum monthly e-mail update to all members of the Harrison Fire Department. This regular update, designed to enhance communications and help to foster a more collaborative group of members.***
7. ***The Harrison Fire Department's mission statement should be prominently displayed in the station, along with the vision statement and core values.***

## **Year 2:**

1. ***Review and update the CIP based on the department's needs and the need to adapt to the changes in town along with the incident response needs of the department.***
2. ***The Town of Harrison should complete driving records and background checks on all current members of the fire department to ensure that they are eligible to be firefighters.***
3. ***SOP development and review should continue. In departments such as Harrison, it normally takes two full years to have all SOPS for basic operations, tactics and strategies out and working.***
4. ***The Town should consider creating a pool of per diem staff (no benefits) to cover day shifts during the busy times of the day when available coverage is low. The Chief and this one position will create a two-person team for all initial responses. This bullet should move up to year 1 when the staffing of calls doesn't meet 3 certified level 1 firefighters at least 75% of the time on fire calls and 2 certified EMS providers for all EMS calls. Consideration should be given to making these per diem positions cross-trained as Firefighter/EMT's.***

5. ***Conduct a comprehensive review of existing training records. The fire chief should meet individually with each member to review the training file and develop a prescriptive training plan.***
6. ***A concerted effort should be made to certify as many on-call members as possible to the level of Firefighter I/II.***
7. ***The fire chief should begin to identify members of the department who could possibly possess the skills to be developed into officers and begin to mentor them and provide appropriate additional training. Part of this development process could include the delegation of certain assignments to these personnel.***
8. ***Harrison should enter into discussions with the municipal administrations, and fire department leaderships of its adjacent communities, for the purposes of identifying possible opportunities for shared services, and long-term explore the feasibility of a more regional approach to fire protection and EMS delivery systems.***

### **Year 3**

1. ***Review and update the CIP based on the department's needs and the need to adapt to the changes in town along with the incident response needs of the department.***
2. ***Consideration should be given to adding one additional per diem position during the daytime, weekdays, when the incidents and work load (incident response, inspections, public education and apparatus and equipment maintenance etc..) combined warrant the increase.***
3. ***The fire chief should form a committee for the purpose of putting together an aggressive and wide-ranging program for recruitment and retention of call personnel. While a long-term strategy to address this issue needs to be developed, there are also short-term actions that can be taken to try to immediately recruit additional personnel.***
4. ***SOP development and review should continue. In departments such as Harrison, it normally takes two full years to have all SOPS for basic operations, tactics and strategies out and working.***
5. ***Based upon the foundation that currently exists and building upon the results of the recommendations contained in this letter, the Town of Harrison and the Harrison***

***Fire Department should develop a formal process for implementing a long-term vision for the department and developing a strategic plan.***

- 5. The culture of the fire service is very resistant to change. This is not something new and certainly not just with the Harrison Fire Department. 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.***
- 6. A historical look at incident types and response times should be conducted on an annual basis. This look will help create a possible trend. This trend should be used to look at the current functions as well as the need to change staffing levels and or operations to meet a growing need.***

#### **Year 4**

- 1. Review and update the CIP based on the department's needs and the need to adapt to the changes in town along with the incident response needs of the department.***
- 2. SOP development and review should continue. In departments such as Harrison, it normally takes two full years to have all SOPS for basic operations, tactics and strategies out and working.***
- 3. Recruitment and retention efforts should continue.***
- 4. Consideration should be given to overnight coverage when the total missed call volume reaches 5% of the total call volume of the fire/EMS department or crew size is less than 3 certified level 1 firefighters 75% of the time on the night.***
- 5. Communication should continue to be assessed on a regular basis. Ensure that the weekly or monthly email is effective and accomplishes its goal of informing the membership of current activities and news within the department.***

## XI: Conclusion

In conclusion, the missions performed by the fire department 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 Harrison Fire Department and the Town of Harrison, 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. It is the opinion of the assessment team that having a combination of a call department and a core group of per diem staff is appropriate for the number of incidents and type of calls they respond to. The per diem program will need to evaluate for effectiveness on an annual basis for at least the first three years. There is no “right” amount of fire protection or EMS delivery in any community. It is a constantly changing level based upon the expressed needs of the community. Determining the appropriate level of service also involves deciding upon the municipalities’ fiscal ability, and willingness, to pay for the desired level of service. These are decisions that the citizens of the town and the board of selectmen will ultimately need to make.

It is important that the town continue to support the department and to help meet the needs in staffing and equipment so they may continue to protect and serve when they are called to do so. The town of Harrison is very fortunate to have a great core of dedicated members in its Fire Rescue Department. With some strong work the Chief Officers can lead this group forward to a common set of goals, while letting the past be that the past.

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 re-appropriated to bolster response structures. Priority should be given to innovative solutions to the recruitment and retention of a hybrid of per diem and 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 of a quality fire and first response EMS delivery system.

## XIII: SUMMARY OF RECOMMENDATIONS

### Chapter V

***Recommendation I - Action Item - Apply for a Federal Act Grant to install an enclosed Diesel Exhaust removal system. This has been successfully accomplished by many communities as cancer awareness and prevention is still a very hot topic in the fire service as cancer is taking the lives of emergency responders daily.***

***Recommendation II- Action Item - As part of the Town's capital plan the station should have items included over the next 3 to five years. The first thing that needs to be done is a full special needs evaluation combined with a study of the current structure. This study should look now at the long-term needs that may include 24 hour living space as well as further evaluation on the air quality and keeping carcinogens out of the work and living areas of the building.***

***Recommendation III - Action Item - As a proactive prevention measure ask the Towns insurance provider to do a walk thru evaluation of the current building and to make further recommendations to help minimize any potential claims.***

### Chapter VI

***Recommendation IV - Action Item - Purchase and properly equip with safety equipment a utility pick up truck for 24X7 fire department use.***

***Recommendation V - Action Item - Create a 20-year capital plan that encompasses all large cost items for the department. This plan will need to be reviewed and updated annually as the needs of the department change.***

***Recommendation VI - Action Item - Develop a specification and sign a contract within a year to replace one of the oldest trucks. Understand that when you sign a contract it may take 24 to 36 months to receive the truck and pay for it. The cost of fire apparatus has grown significantly and appears the cost are going to continue to rise for the foreseeable future.***



## **Chapter VIII**

***Recommendation VII – Action Item - The Town should consider hiring a full-time Fire Chief/Emergency Manager with both administrative and operational responsibilities. In order to properly complete this the following must be done:***

- 1) A complete and thorough job description needs to be developed and approved.***
- 2) A third-party service or group should conduct a full hiring process including interviews, assessment center and background check. The top two or three names forward to the town for Town Manager and Board Interview.***
- 3) Top one or two candidates should have a complete background check conducted.***

***Recommendation VIII – Action Item - The Town should consider having a pool of per-diem firefighters to workday shifts Monday thru Friday. This pool of people should be pre-hire certified to at a minimum of Firefighter 1 (Firefighter 2 preferred) and State of Maine Basic EMT.***

***Recommendation IX – Action Item – The command staff should review the Department roster and look at the members with low participation and find out what can be done to increase their involvement. Work with these members to increase their participation within a pre-determined time frame.***

***Recommendation X – Action Item - The Harrison Fire Department should set a minimum criterion for members to remain in active call 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.***

***Recommendation XI – Action Item - The Department should foster and support any member to be trained and certified to the Firefighter 1 / 2 level.***

***Recommendation XII – Action Item - With the majority of the incidents being medical emergencies, the department should look to increase the number of EMS providers to ensure this level of service can be maintained 24 hours a day seven days a week.***

***Recommendation XIII – Action Item - Working with a training officer more training should be planned and run. 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 your training goals.***

***Recommendation XIV – Action Item - The Department should take the lead and train once a month with neighboring communities. This “Regional Training” builds stronger working relationships that make an incident run much smoother.***

## **Chapter IX**

***Recommendation XV – Action Item - The Town of Harrison should recognize that the only way to develop a more active and properly staffed fire department in the absence of hiring a larger force of career firefighters is to determine what would motivate potential responders and craft a program of investment that meets these extrinsic and intrinsic needs.***

***Recommendation XVI– Action Item - The Town of Harrison should convene a focus group to determine what concepts and recruitment and retention strategies are feasible and most attractive to potential candidates.***

***Recommendation XVII– Action Item - The Harrison Fire Department should set a realistic goal of recruiting at least 10 to 12 new members over the next three years, and simultaneously set a goal of increasing the overall call member force to around 30 to 35 active personnel. These personnel should be required to be properly trained and certified to the Firefighter I/II level, and preferably to the EMT-basic level.***

***Recommendation XVIII– Action Item - The Harrison Fire Department should make it a priority to develop an active on-call recruitment program led by an officer. At a minimum, this program should consist of:***

- 1. Developing a recruitment brochure and mailing it to all residents***
- 2. Holding periodic open houses at the fire station***
- 3. Performing public outreach through the local media***
- 4. Contacting community and service groups***
- 5. Developing an eye-catching banner on the town’s and fire department’s web sites***
- 6. Placing signs recruiting call/volunteer personnel at the main entrances to town***
- 7. Placing a temporary sign board at various locations within the community***
- 8. Placing signs for call/recruiting volunteers in local businesses, particularly high volume locations***
- 9. Implementing a fire explorer program***

**Recommendation XIX – Action Item - The Chief should develop a social media presence and involve other members of the department in this endeavor. The use of social media like Facebook and Twitter are what the younger generation use and a very active social media account has the opportunity to reach out to this group of people for hiring.**

**Recommendation XX – Action Item - The fire rescue chief should create a monthly “newsletter” that will highlight the positive things that the department has done the prior month. This newsletter should be posted on the town’s web page, shared in social media, given to the Town Administrator who in turn should share with the Board of Selectmen. It is important that the public is made aware of all of the great people and all the good things the department does.**

**Recommendation XXI – Action Item - The Town of Harrison should explore the feasibility of utilizing, and in fact encouraging, town employees to perform “dual roles” by serving not only in their full-time positions, but also serving the town as call firefighters and/or rescue personnel. Caution is needed here though as there are provisions of the Fair Labor Standards Act that would be applicable, particularly if these personnel respond to incidents during times when they are not working.**

**Recommendation XXII – Action Item - The Harrison Fire Department should develop a series of team-based activities that build involvement in the organization.**

**Recommendation XXIII – Action Item – The command staff should visit the National Volunteer Fire Council website and review the cooperative programs they have posted to determine which programs can be beneficial to the Department. One of the newer programs is looking to attract returning or former military personnel into the fire service.**

**Recommendation XXIV - Action Item - The Harrison Fire Department, with the support of the Town of Harrison, should make it a priority to develop and implement a plan for providing and requiring that all personnel, both per diem and call, attend, and successfully complete a training program that will result in their achieving basic Firefighter I/II certification and or Basic EMT certification.**

**Recommendation XXV – Action Item - All officer positions, from lieutenant 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.**

**Recommendation XXVI– Action Item - The Harrison Fire Department 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 our recommendation that all officers should be trained to the ICS-300 level. All chief level officers should be trained to the ICS-400 level.**

**Recommendation XXVII – Action Item** - *The Harrison Fire Department should strongly encourage its call officers to obtain a certain level of fire officer certification as a job requirement, such as Fire Officer I for lieutenant, Fire Officer 2 for Captain, Fire Officer III for deputy fire chief and Fire Officer Level IV for fire chief.*

**Recommendation XXVIII– Action Item** - *The Harrison Fire Department should require that all safety officers be certified as Incident Safety Officers. Additional personnel who may be interested should be encouraged to take this training and obtain this important firefighter safety certification.*

**Recommendation XXIX– Action Item** - *As part of the succession planning process, the fire chief should work to implement a career development program to ensure that all officers can perform their superior’s duties, as well as identify the core future leaders of the department.*



**Figure 13 – Overview of the Mentoring Process**

**Recommendation XXX – Action Item** - *The Department should create a formal written mentoring program and assign a mentor to each new hire to be not only the trainer but also to be the go-to person for all questions and issues that come up while on probation. Care should be made on the proper selection of a mentor. They are the key to retaining a good candidate.*

**Recommendation XXXI – Action Item** - *The Department should look to create a mentorship program for those that aspire or who are looked at as the next officers on the department. You don’t just get the knowledge and experience with the badge. As a fire service we need to do a better job of training the future officers.*

## XIII: TEAM PROFILES

### Director of Fire Services

**Brian P. Duggan** 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 into 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 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.

## **Team Members**

**Michael McQuillen** currently serves as the Chief of the Berlin, Massachusetts Fire Department. He previously served as the Chief of Littleton Fire Rescue Department in Littleton New Hampshire. Michael started his fire service career in 1993 with the Londonderry Fire Department, rising through the ranks in his 27-year career to Operations Chief. He was one of the first paramedics in Londonderry participating in the inception of Advanced Life Support and integration of Emergency Medical Services into the fire department.

During his tenure in Londonderry, Michael developed a complete fleet replacement plan utilizing a lease purchase program providing a fleet division that is one of the most modern, up to date apparatus programs in New England. Michael identified the need to improve the communication operations, developed a plan to upgrade the system and make it interoperable with law enforcement, highway, fire rescue service and the Manchester-Boston Regional Airport. He was instrumental in obtaining the financing to fund the project. Upon completion, the communications center is P25 capable and brought the use of state-of-the-art equipment to the region for the towns that are dispatched. As a result of the upgrade, Londonderry

Communications Center expanded to two additional communities under Michael's leadership. Michael honed his communication, negotiation and his relationship building skills during many years working on labor/management issues from both perspectives. For over ten years Michael was union president for two different labor unions and then transitioned to a member of the administrative team. Michael completed his Associate Degree in Fire Science from the New Hampshire Technical College -Laconia in 1992, his Paramedic Certification from Elliot Hospital - Manchester in 1995. In 2017 Michael received his bachelor's degree in public service management and is currently working on his master's degree through Southern New Hampshire University in Emergency Management with completion anticipated in 2022.