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EMERGENCY MEDICAL SERVICES -STUDY

HATFIELD, MASSACHUSETTS

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HATFIELD, MASSACHUSETTS EMERGENCY MEDICAL SERVICES STUDY

I - PROJECT OVERVIEW, PURPOSE, SCOPE AND METHODOLOGY

Project Overview

The Town of Hatfield contracted with Municipal Resources, Inc. (MRI) to provide an organizational assessment and review of the manner in which the Emergency Medical Services (EMS) are provided within the community. Using this as a basis, the MRI team reviewed the organization and delivery of EMS services within the community including, a review of response metrics, a review of the current facility and apparatus set, and a review of the Advanced Life Support (ALS) services in the area. Our project team has developed recommendations for improvements that take into consideration the current and future needs of the Town of Hatfield, and options for providing an appropriate delivery system to provide the desired level of services to the Town.

MRI has developed this document containing recommendations for improvements to the current EMS system provided by the town with a focus on moving the department to an ALS model. The project team has developed this document which outlines appropriate modifications to the EMS systems to provide optimum service to the entire community. It has also evaluated the efficient use of resources, and whether the current organizational structure is appropriate or should be modified.

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

The goal of the project is to review and analyze the current resources and staffing, forecast future demands for service, and make recommendations regarding the future need of current resources, and staffing in order to fulfill the mission. Part of the objective is to conduct an analysis of the operation of the current EMS system with an emphasis on defining the expected service level of the community and identifying the impact of current response participation levels, demographics, and projected growth within the response area. An additional objective is to investigate other potential outside EMS services, the associated cost as well as the pros and cons of each. The results of this study will provide the Town of Hatfield with realistic recommendations for providing an efficient and effective EMS system for today and the future.

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

- Increased efficiency
- Improved effectiveness
- Preservation of a level of service
- Enhanced or expanded services
- Reduced costs
- Cost avoidance
- Coordination of regional planning
- Elimination of artificial boundaries
- Standardization of services and program

Scope of Work

The project will consist of providing EMS service-based technical assistance to the Town of Hatfield. To complete this project, MRI will complete the following activities:

- Provide advice and support to Chief Flaherty and the Select Board.
- Identify the level of EMS services expected by the Town of Hatfield.
- Identify the priorities necessary to maintain the service level expected by the Town and move the organization forward in terms of operational capability and safety.
- Identify the service needs- potential demand for all who live, work, visit and travel through the community.
- Identify and discuss the population and trends that influence EMS.
- Review staffing and response staffing model and data for EMS operations.

- Identify response trends and deficits.
- Respond to any ongoing EMS issues (if any)
- Provide not less than 2 EMS models with cost analysis and pros and cons for each.
- Identification of the cost of outsourcing including a comparative evaluation of current transport rates and requested annual stipends.
- Evaluation of workforce availability and stability.
- Conduct a Nominal Group session with fire / EMS staff.
- Interview any town department heads as needed.
- Review the fire/EMS facility and EMS equipment.
- Review ongoing recruitment and retention efforts
- Identify industry best practice relative to expanding the number of active on-call and volunteer personnel.
- Data analysis based on data sources or data provided by the Town and the Hatfield and the Hatfield Fire Department (as validated by Northampton Control).
- Identify a preferred strategic path and set of action items.
- Produce a twenty-five-to-thirty-five-page management letter that provides the Select Board an external practitioner-based perspective and identifies a minimum of 2 models of operation for the community to decide on the best model for them.
- Develop a series of action items and if needed, consulting assistance that would address the organizational issues that were prioritized.
- Develop and deliver a Community Presentation on the Management Letter and proposed recommendations.

PHASE 1: ORIENTATION, SERVICE LEVEL IDENTIFICATION, DATA GATHERING AND ANALYSIS

We will schedule a virtual or in-person kickoff meeting with the Town Administrator, Fire Chief, and any other stakeholders. In addition, MRI will interview the following officials, employees, and individuals of the Town to gain an understanding of the issues facing the department and the municipality, and to better understand the practices and procedures of the fire department used to provide services to the community:

- Members of the Command Staff
- Select fire/EMS personnel/responders
- Other local officials, employees, representatives of the town and community stakeholders, as necessary.

During this Phase, MRI, in partnership with the town, will also assemble the following documents and data:

- Current EMS volume and ALS/BLS split
- Current response and transport times
- Current level of service provided by Hatfield responders
- Current Fire/EMS budget
- Current EMS/ALS response related organizational policies and standard operating procedures (SOPs)

PHASE 2: SERVICE DEMAND ANALYSIS

In order to assess the demands on the current EMS/fire service delivery systems and the effective utilization of resources, MRI will identify the volume and magnitudes of responses managed and inventory levels of services provided, including:

- Current EMS volume and ALS/BLS split
- Current EMS call volume
- Mutual aid provided and received
- Current number of transports and destination facilities
- Current response and transport times
- Identify the level of service provided by Hatfield responders
- Review the Fire/EMS budget
- Review EMS/ALS response related organizational policies and SOPs

PHASE 3: PROGRAMMATIC MODELING – RESOURCES/CAPABILITIES

After completing the inventory and assessment tasks outlined above, our team will develop a detailed inventory of programmatic options to maintain or enhance the level of ALS service provided to the residents and visitors of the Town of Hatfield. This inventory shall include the identification of at least three service delivery methodologies and the development of the pros and cons of each option. During this phase, our emphasis will be placed upon:

- Internal Interviews
- Data examination (both internal and external)
- Department staffing and scheduling
- Operations management and financial documentation
- Numerous output data reflecting services/service levels provided
- Various other relevant performance and service delivery information

PHASE 4: FISCAL MODELING AND COST PROJECTION

MRI will analyze and compare all short and long-term costs associated with various methods of EMS service delivery, including costs related to staffing, operations, capital, minor equipment needs, and administration for ALS service enhancements.

- Review current and proposed billing rates.
- Develop an optimal set of EMS billing rates.
- Develop a projected revenue stream that includes ALS billing.
- Identify the organization's current level of personnel certification and capability to enhance the level of service utilizing current resources and personnel.
- Evaluate staffing patterns and resource needs associated with the various programmatic changes outlined in phase 3.
- Consider the need for training (didactic and hands-on) coupled with professional development necessary to implement the proposed changes needed to carry out the strategic plan.
- Review the department's EMS/ALS equipment and determine the current level of need, the needs created by a service level change, and procedures for procuring capital equipment, and vehicles.

Once this information is processed, we will produce a series of recommendations focused on enhancing the level of service and providing the best overall value to the Town of Hatfield.

MRI will develop a detailed element of the Final Project Report that will fully describe the evaluation methodology, standards, indices used, and documented conditions, trends, and data.

PHASE 5: PREPARATION OF A FINAL PROJECT REPORT AND ACTION PLAN RECOMMENDATIONS

Upon the completion of all the tasks outlined above, MRI will prepare a draft final report summarizing:

- Evaluation of the level of service;
- Identification of ALS delivery options;
- Evaluation of emergency response capabilities, resources, and planning;
- All other relevant data and trend observations; and
- Prioritized recommendations and related implementation schedule.

The final report and associated action plan shall consist of the following key elements:

- MRI will summarize all tasks undertaken, existing conditions, and operations of the department.
- MRI will develop a detailed set of recommendations on the management and viability of the recommended programmatic option that optimizes service and produces the best overall value for the Town of Hatfield.
- MRI will prepare a listing of critical success factors essential for operational and fiscal success.

MRI will develop a draft final report. The purpose of this draft is to allow key personnel the opportunity to review the document for accuracy, clarity, and to facilitate a brief comment period. After receiving the comments and advice of the appropriate local officials, MRI will prepare and deliver the final report, and will be required to make a virtual or in-person presentation to the Select Board.

PHASE 6: PRESENTATION OF A FINAL PROJECT MANAGEMENT LETTER AND ACTION PLAN RECOMMENDATIONS

- The management letter (25-30 pages) and recommendations will be presented at a virtual or in-person meeting at the direction of the Town.
- On a time and expense basis, and at the request of the Town, attend and participate in additional meetings. Participation at more than one meeting will not be a part of the basic services to be provided under the base fee proposal.

II - TOWN OF HATFIELD



Hatfield is located on the west bank of the Connecticut River at the mouth of the Mill River, 25 miles (40 km) north of Springfield and about 100 miles (160 km) west of Boston. It is bordered to the west by Horse Mountain (a typical New England granite glacial remnant) and the town of Williamsburg, to the north by the town of Whately, to the east and south across the Connecticut River by the town of Hadley, and to the southwest by the city of Northampton. The village of Hatfield is in the southern part of the town, next to the Connecticut River, while the villages of Westbrook, North Hatfield, and Bradstreet are near the northern border. West Hatfield is in the southwest part of Town, next to the Northampton border.

The Town consists of 16.8 square miles with 15.9 of it being land. The community has a rural setting with heavily traveled Route 5 and Route 91 running through. The community has seen a very minimal amount of both residential and commercial building over the past several years. Although the town remains rural and predominantly residential in nature, it does have pockets of large commercial development.

It is important to understand the amount of people that a fire and EMS system will need to provide for and even more important to understand the age group of potential patients. Although it is very clear that the residential population can be documented, the Town of Hatfield also needs to provide for all that work and travel in the community as well. Some of the larger tax paying properties do not get to vote on Emergency Services but the community must take them into consideration when making choices on services provided.

As indicated in the chart below the Town's population has decreased slightly and according to the US Census Data is projected to remain at its current level or slightly higher in future years. As a result of the commercial development in the area, the potential population to be served is projected to be between 6,000 and 8,000 people a day including all those living, working, and traveling through the community. It is important to note that there are some unknown hazards that are traveling the rails and highways that traverse through the town, all of which would require public safety to handle should there be an incident.

The age of the residents of the community has a direct correlation to the need for EMS services. According to the US 2020 Census, 46% of the community is over the age of 60, 25% are between the ages of 30 to 59 and 29% are between newborn to 29.

Year	Population	% increase	
1960	2330	0	
1970	2825	21.24%	
1980	3045	7.78%	
1990	3189	4.72%	
2000	3242	1.66%	
2010	3267	.80%	
2020	3252	-.4%	

Figure 1
Population Chart

2020 Snapshot of population by age ** US 2020 Census			
Age Bracket		Grouping	%
New to 9	2%		
10 to 19	16%	0 to 29	29%
20 to 29	11%		
30 to 39	4%		
40 to 49	7%	30 to 59	25%
50 to 59	14%		
60 to 69	26%		
70 to 79	12%	60 plus	
80 Plus	8%		46%
Veteran Status	3.9%		

Figure 2
2020 Age Chart

There are approximately 627 units of housing in approximately 588 households. The community has an active rail line that transports both freight trains of a wide variety and associated hazards, as well as commuter trains.

According to the Commonwealth of Massachusetts Department of Revenue, the following is the history of the tax rates for the Community.

FY Year	Rate
2019	\$13.89
2020	\$13.53
2021	\$14.19
2022	\$13.67
2023	\$13.48
2024	Not set – A potential 2 ½ override is being considered.

Figure 3
Tax Rate

According to the Commonwealth of Massachusetts Department of Revenue, the following is the history of the property taxable valuation for the Community.

Year	Residential	Commercial	Industrial	Total	Change	% Change
2019	\$412,788,695.	90,869,684.	18,960,250.	522,618,629.	0	0
2020	\$441,303,845.	94,506,714.	19,538,745.	555,349,304.	32,730,675.	6.262
2021	\$444,861,835.	93,973,399.	19,538,745.	558,373,979.	3,024,675.	.544
2022	\$472,111,589.	97,934,794.	20,145,935.	590,192,318.	31,818,339.	5.698
2023	\$500,240,929.	98,245,416.	20,206,105.	618,692,450.	28,500,132.	4.828

Figure 4
Taxable Valuation

III - FIRE AND EMS DEPARTMENT



EMS operations are an important component of a comprehensive emergency services delivery system in any community. Together with the delivery of police and fire services, it forms the backbone of the community's overall public health and life safety. If one looks at the overall incident volume of public safety services, it could be argued that EMS incidents constitute the greatest number of "true" emergencies, where intervention by quality trained staff truly does make a difference, sometimes literally between life and death. Hatfield has had EMS - provided by community members since 1982. Over the years the EMS service has grown and evolved and in 2010 was merged into the fire department to become a full fire-rescue-EMS department.

Understanding some of the history of the department is important. Below is a list of key dates for the growth of the department as told to the MRI team by past members.

1976	Strong Chief Law voted in, allowing the Chief to manage the Fire Department.
1980	Approximate – Department went from a full Volunteer Organization to an hourly paid department for incident response and not for training.
1982	Gold Cross Ambulance Service operating in Northampton stated no longer able to provide the service to Hatfield.
1982	Seventeen Hatfield residents completed a training and certification program at the Basic Life Support Level.
1983	Hatfield Ambulance in service April 1, 1983. First 6 months conducted 50 incidents. Projected to conduct 150 in the first full year. Average 17 providers until 1987
2001	Hired first fulltime firefighter-EMT
2006	Approximate – Call Department members started to be compensated for training
2010	Merged with the Fire Department (Approximate time frame) to increase staffing
2020	The Chief is the only fulltime employee (February 13, 2020)
2022	Started coverage with per diem staff operating Friday evenings and 16 hours a day on Saturday and Sunday by adding 12 basic and 5 paramedic level staff. (March 18, 2022)
2022	16 hours coverage 7 days a week using 2 current full-time and per diem staff. (July 1, 2022)
2022	Hired second full-time basic EMT who works two 16-hour shifts and one 8-hour shift a week. (November 28, 2022)

**Figure 5
Department Timeline**

CURRENT STAFFING

Department members are key to the success of the organization. As part of the process for this review, MRI held a listening session with fourteen members on March 9, 2023. Prior to this meeting, MRI met with the Chief and the Deputy Chiefs in separate meetings. These sessions were in-person meetings with fire and EMS staff members to openly discuss all things Hatfield Fire and EMS. At the conclusion of the meeting, people were given an opportunity to have a one-on-one with MRI staff via Zoom with the conversation remaining anonymous. The following is a bullet list of comments that came from these meetings and the comments listed created general themes that are included within this document.

- Department is made up of people with different trades and skill sets.
- Department members strive to deliver a high-quality professional level of service.
- Members learn, train, and work together as a team.
- A sense of a lack of support from “Town Hall”, the Chief seems to get a lot of pushback.
- Town likes to compare Hatfield to Hadley, and they are not the same.
- The current Chief has brought the department to a higher level and a much safer department.
- Over the past 25 years each Chief has done their part in moving the department forward and the management has been great.
- Facility needs to be updated to accommodate a current-day fire service.
- Pay scale needs to be more competitive.
- Chief is the only person responding at night to calls.
- Per diem model may not be as reliable as thought.
- Amount of work the Chief does is impressive but there is concern for sustainability without support.
- There is a lot of work to be done to educate the residents on what the Fire and EMS actually do and provide.
- Family needs are taking up more time and leaving less time for the Department.
- Cost of local housing for people who may want to work with fire and EMS.
- The department does have a good image in the community.
- Many older people think the department is a “good old boy club” and not the professional department that it truly is.
- Our community is aging, and our calls will be increasing
- There are not enough ambulances in the area to support future needs.
- Department needs minimal 24-hour coverage in the station.
- Being a small town and a lot of changes going on, the residents may not be adjusting to the needs and demands.

- Having the engine respond with only a driver is not a safe operation to continue.
- Although not all would agree the Chief has the best interest in the town and strives to do what is right.
- Hiring and promotions need to be done with caution to nepotism with those doing the hiring and promoting.

DEPARTMENT MAKEUP

Staffing is the biggest key to the success of any fire and EMS service response. For the most part, the average citizen only sees the amount of fire trucks and ambulances a department has and sees that as their “fire department”. It has often been said that the fire/EMS service can have all the best equipment, but that equipment is useless without a good and efficient crew to operate it. In today’s world, call, and volunteer firefighters are getting harder and harder to not only recruit but also to retain. This is a nationwide issue that in many communities is now becoming a crisis.

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

At the time of the review of the department for this report, there were 35 members listed on the Fire and EMS department with 26 of these being EMS providers. The breakdown of provider levels is listed below.

EMS Provider Levels			
	Fulltime/call	Per-Diem	Total
Paramedic	2	5	7
Advanced EMT	1	0	1
Basic EMT	7	11	18
Total			26

Figure 6
EMS Provider Level

The years of service each person has in the department is key to understanding how well a department functions. Having members for a longer period of time allows for institutional knowledge to be obtained and shared but is also a good indicator of how comfortable people feel and how much they appreciate being part of the department. Having seven members with less

than five years of service is a good start to allowing the department to be sustainable in the upcoming years.

Current Fire and EMS Staff Years of Service		
1 Year	4	18%
2-5 years	3	14%
6-10 years	4	18%
11-15 years	1	5%
16-20 years	3	14%
21-30 years	6	27%
Over 30	1	5%
Total	22	

Figure 7
Years of Service

The average age of the members of the Department is also a key indicator of the sustainability of the department. Hatfield Fire and EMS has an average age of its members being 36. With 13 members being under the age of 30 makes this a very young department by industry standards and that is considered a very good thing.

Current Fire and EMS Staff ages	
Average age	36
Age Breakdown	
18 to 30	13
31 to 40	11
41 to 50	7
over 50	5

Figure 8
Members Ages

Having several people listed on a roster may give a false sense of security and be misleading. Their participation in training, actual response to incidents shows the real numbers and the level of service the department can deliver. To look at this closer a study was conducted on the calendar year of 2022 and compared the participation of all of the members providing both fire and EMS services. The average number of calls each person responded to is 5 (5.24). If we took out the top 3 responders who range from 104 to 154 incidents, then the average drops to 2.95 incidents. Of the 35 people listed on the roster, 10 of them would be over the average number of incident responses, and if we once again take out the top three responders then 18 people would be above the average.

Calls Stats by person Calendar Year 2022					
Staff#	Calls	%			
			18	7	1.6
1	10	2.2	19	104	24.5
2	5	1.2	20	25	5.9
3	3	0.7	21	19	4.5
4	18	4.2	22	1	0.2
5	27	6.4	23	2	0.2
6	3	0.7	24	9	2.1
7	6	1.4	25	2	0.4
8	30	7	26	38	8.9
9	8	1.9	27	2	0.4
10	23	5.4	28	120	28.2
11	1	0.2	29	154	36.2
12	5	1.2	30	15	3.5
13	28	6.6	31	2	0.4
14	14	3.3	31	21	4.9
15	10	7.4	33	13	3.1
16	8	1.2	34	28	6.6
17	1	0.2	35	3	0.7
Average			21.857	5.24	
w/o top 3			12.09	2.95	

Figure 9
Participation Activity

The most common question that is hard to answer is not only why people are not responding more, but is the community better served with fewer but more active responders. This would result in setting a response and training standard and discontinuing the service of those personnel that do not have the time to meet that standard.

We do know that nationwide fewer people are taking on the time and commitment to being call fire and EMS responders. We also know that the number of responders that we had pre-COVID, and their participation levels were much higher than what we are seeing today. One way for a department to clearly see what is going on is to conduct a survey of its current members and ask questions that may be tough but will help understand and further help build the call and volunteer force.

Pay rates for staffing are one of many components that help with the participation of members. The chart below indicates the current pay scale for Hatfield and compares it to the average State rate in April 2023. We have seen many times that pay rates may and may not have as much of an effect as people would think on participation. It is very common in the industry to hear people say, "I am not in this for the money and just want to help." At the call and volunteer departments, we have seen departments throw money at participation issues only to find out that it helped for a few months then things went back to the previous levels. For full-time staffing, it is key to offer a competitive wage and benefit package in an effort to keep good people and to not be the revolving door or steppingstone as people look to move up.

Current Fire and EMS Pay Scale			Average State Rate
Fire	Fulltime FF	\$ 20.39	\$27.43
	Call Deputy	\$ 27.08	
	Call Captain	\$ 24.59	
	Call Lieutenant	\$ 22.28	
	Call FF	\$ 19.57	\$24.46
	Call Training	\$ 15.00	N/A
EMS	EMT - Basic	\$ 19.57	\$21.95
	Paramedic	\$ 24.79	\$25.00
	Paramedic on Call	\$ 15.00	N/A
	On Call Hourly Rate	\$ 2.73	N/A

Figure 10
Pay Scale

IV - FIRE AND EMS DEPARTMENT

EMS BY THE NUMBERS

The following series of charts have been included in the report to demonstrate various elements of data that are important to understand. The first chart reflects the total number of incidents over a three-calendar year period and an average for the period. This chart is indicative of what the MRI team has seen in other studies conducted. The goal is to always do what is best for the patient and waiting for a paramedic is not always in the patient's best interest.



Advanced Life Support (ALS) treatment and intercepts are required and dictated based on patient status, needs, and state EMS protocols. EMS providers should be trained as part of their basic patient assessments to determine and form a general impression of the patient and their medical state, determine a priority for care, and then request ALS resources as appropriate based on statewide EMS treatment protocols given the patient's presentation. These protocols further state that although ALS treatment is needed, and ALS resources have been requested, BLS resources can and should initiate transport as soon as possible without delay, with or without ALS capabilities.

Not every call for an ambulance results in a transport or the need for any EMS services at all. Many times, these types of EMS calls result in no transport because the patient wants to find alternative means to a healthcare facility, sometimes against medical advice. Other times, emergency services are called to a scene, personnel provide medical care, and the patient is stabilized and does not want to be transported to a healthcare facility at all. These types of calls are typical for personnel to obtain patient refusals as long as the patient is an adult or an emancipated minor, and is of sound mind, judgment, and can make an informed decision. Many of these calls are also for lift assistance, accidental medical alarm activations, or a call for other medical assistance that does not require medical evaluation or treatment. In 2022 69% of EMS calls in Hatfield resulted in transport and 31% did not. Our experience has seen most departments average around 15%-20% of an agency's overall call volume as no transport.

One of the more important figures to be understood is how many times Hatfield did not have the staffing to provide EMS on its own without having to call mutual aid from another agency to handle the call. The MRI team found the number to be higher than average and is also indicative of when the station is not staffed and relying on volunteers to handle the call. For Hatfield, this is typically an issue overnight and on weekends when the station is not staffed. This is truly an issue that needs to be addressed and this report includes options for the community to consider.

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

The first data set looked at was the month and day of the week the incidents are happening on. The data provided shows a flat data set indicating there is no real peak month or day of the week for incidents to happen.

Data Provided by Fire Chief

Incidents by Month										
	2020		2021		2022		3 Year Average		2023 Qrt 1	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
January	16	6%	32	9%	45	11%	31	9%	34	34%
February	34	12%	22	6%	20	5%	25	7%	35	35%
March	26	10%	30	9%	30	7%	29	8%	32	32%
April	12	4%	24	7%	36	8%	24	7%	N/A	N/A
May	19	7%	31	9%	43	10%	31	9%	N/A	N/A
June	22	8%	36	10%	21	5%	26	8%	N/A	N/A
July	20	7%	35	10%	21	5%	25	7%	N/A	N/A
August	27	10%	28	8%	42	10%	32	9%	N/A	N/A
September	24	9%	20	6%	33	8%	26	7%	N/A	N/A
October	28	10%	37	11%	32	8%	32	9%	N/A	N/A
November	19	7%	27	8%	47	11%	31	9%	N/A	N/A
December	26	10%	23	7%	55	13%	35	10%	N/A	N/A
TOTAL	273	100%	345	100%	425	100%	348	100%	101	100%

Figure 11
Incidents by month

Incidents by Day of the week										
	2020		2021		2022		3 Year Average		2023 Qrt 1	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
Monday	48	5%	45	5%	50	12%	48	14%	13	13%
Tuesday	39	4%	52	6%	68	16%	53	15%	8	8%
Wednesday	35	4%	52	6%	63	15%	50	14%	13	13%
Thursday	49	5%	53	6%	59	14%	54	15%	11	11%
Friday	37	4%	47	5%	55	13%	46	13%	21	21%
Saturday	36	4%	51	5%	65	15%	51	15%	20	20%
Sunday	29	3%	45	5%	65	15%	46	13%	15	15%
TOTAL	273	30%	345	37%	425	100%	348	100%	101	100%

Figure 12
Incidents by the day of the week



CALL TIMES

The time-of-day people are in need of emergency services has been reviewed over a three-calendar year period as part of this study. As it is reflected in the chart below the need is 24 hours a day seven days a week. There is a low volume time from midnight to 6 AM and that is a typical reflection of when people are least active.

Data Provided by Dispatch Center

Incidents by Time of Day										
	2020		2021		2022		3 Year Average		2023 Qrt 1	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
0000-0300	17	2%	23	7%	33	8%	24	7%	13	13%
0301-0600	15	2%	18	5%	27	6%	20	6%	2	2%
0601-0900	33	4%	34	10%	45	11%	37	11%	9	9%
0901-1200	49	5%	70	20%	79	19%	66	19%	24	24%
1201-1500	45	5%	63	18%	73	17%	60	17%	13	13%
1501- 1800	43	5%	51	15%	70	17%	55	16%	15	15%
1801-2100	39	4%	54	16%	52	12%	48	14%	15	15%
2101- 2400	32	4%	32	9%	40	10%	35	10%	10	10%
TOTAL	273	30%	345	100%	419	100%	346	100%	101	100%

Note: Only 419 records were provided from the dispatch records. That is 6 less than the records provided by the Fire Department

Figure 13
Incidents by the time of day

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 arrive quickly and transport at the appropriate level of care are all key factors in a positive outcome for patients.

For EMS incidents, nationally the standard of care based on stroke and cardiac arrest protocols is to have a unit on scene at a medical emergency within six minutes from receipt of the 9-1-1 call. Considering the future potential of this regional approach, Paragraph 4.1.2.1(4) of NFPA 1710¹, which would be applicable to departments that provide first response EMS operations since they are primarily provided by in station, per diem staff, recommends that for EMS incidents, a unit with first responder or higher level trained personnel and equipped with an AED, should arrive within four minutes of response (five minutes of dispatch of the call), and an Advanced Life Support (ALS) unit should arrive on scene within eight minutes (ten minutes of call

¹ 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.

receipt. Paragraph 4.1.2.2 recommends the establishment of a 90% performance objective for these response times. CAAS² recommends that an ambulance arrive on scene within eight minutes, fifty-nine seconds (00:08:59) of dispatch.

The response travel time is calculated from the time of dispatch to the time of arrival of the first piece of fire/EMS apparatus. It is also important to keep in mind that there are many possible variables to actual response travel times such as weather, physical location of the incident compared to the location of the station (travel distance) especially during mutual aid responses as well as other simultaneous calls that may be happening. It is once again important to note that the response time for when the station has staff typically reduces the overall time.

The chart below includes incidents that complete times where available and therefore does not include all incidents for the calendar year. Overall, the response time has gone down over the past three years from an average of 10:32 in 2020 to 8:54 in 2023. The MRI team believes this is due to the increase in on-duty staffing. It is also important to take note of the number of times Hatfield is not able to provide staffing and needs Mutual Aid. From the data provided 22% of the calls in 2020 had no Hatfield response and 12% of the calls in 2022 had no Hatfield EMS response as well. Over the past three years, an average of 19% of calls needed mutual aid and this is not an acceptable number by industry standards.

Data Provided by Dispatch Center

Response times										
	2020		2021		2022		3 Year Average		2023 Qrt 1	
# of Incidents Calculated	270 Incidents		202 Incidents		378 Incidents		283 Incidents		101 Incidents	
Response Time (tone to scene)	10:32		9:42		8:54		9:42			
<i>Note: Only incidents with validated data used in the response time calculations</i>										
	# Calls	Avg Time	# Calls	Avg Time	# Calls	Avg Time	# Calls	Avg time	# Calls	Avg time
Response time 0 Minutes to 8:59	160	5:53	181	5:22	225	4:54	189	5:23	61	5:25
Response time 9 Minutes to 19:59	88	14:07	133	12:57	175	12:51	132	13:18	32	7:02
Response time greater than 20 Min	22	30:02:00	28	25:33:00	11	24:38:00	20	26.24	5	23:10
Incidents not in calculations	3		3		8		5	NA	3	
TOTAL	273		345		419		346		101	
	# Calls	Avg Time	# Calls	Avg Time	# Calls	Avg Time	# Calls	Avg Time	# Calls	Avg Time
Calls By Northampton	33	16:35	39	14:00	40	15:31	37	15:22	9	17:44
Calls By Pioneer Valley	23	24:41:00	4	25:51:00	10	20:22	12	23:38	2	26:00:00
Calls By South County EMS	3	35:27:00	5	21:22	2	16:30	3	24:26:00	1	18:00
TOTAL	59		48		52		52		12	

Note: Only 419 records were provided from the dispatch records. That is 6 less than the records provided by the Fire Department

Figure 14
Response Times

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



Northampton average response time from the time they are dispatched to arrival on scene is 10 minutes and 26 seconds. The difference in the posted times in Figure 14 reflects Hatfield being dispatched first and with no response then Northampton is called.

It is important to note that the MRI team did notice response times are without question, are much better with staff in the station by several minutes. However, due to the current makeup of staffing, and being down one full-time firefighter and key call personnel due to illness and injury this number is not reflective of the average.

Below is a breakdown of reasons why Mutual aid was needed for an EMS incident in Hatfield.

Mutual Aid Received- Reasons										
	2020		2021		2022		3 Year Average		2023 Qrt 1	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
No Hatfield Staff responding	61	22%	73	21%	89	21%	74	22%	10	10%
Second Incident	0	0%	1	0%	1	0%	1	0%	1	1%
Weather related delay	0	0%	0	0%	0	0%	0	0%	1	1%
Cancelled enroute	0	0%	0	0%	7	2%	2	1%	3	3%
# Mutual aid Given	1	0%	2	1%	4	1%	2	1%	1	1%

Figure 15
Mutual Aid Needed



V - EMS BILLING AND COLLECTIONS

A fee for service is very common in the industry. A rate schedule should be reviewed on a regular basis and if changed, must be approved by the Select Board as required by Massachusetts Law. The Current rate schedule is well within the averages for the area and no action is needed at this time.

Current Billing Rates	
BLS	\$ 1,402.00
ALS 1	\$ 2,223.00
ALS 2	\$ 3,390.00
Specialty Care	N/A
Miles	\$ 35.00

Figure 16
Current Billing Rates

Medicare payments are set by the federal government and paid based upon rates they established regardless of what is billed by the providing service. Federal laws also prohibit balance billing to Medicare patients. Ambulance providers and suppliers must accept the Medicare allowed charge as payment in full and not bill or collect from the beneficiary any amount other than any unmet Part B deductible and the Part B coinsurance amounts. The amounts below reflect the changes between 2022 and 2023 for fees for service for Medicare and Medicare patients.

Medicare Rates	2022	2023
Mileage	8.10	8.54
ALS 1	498.49	526.07
ALS 2	721.50	761.42
BLS	419.78	443.01
Medicaid Rates	9/19/2019	11/01/2022
Mileage	2.99	6.45
ALS 1	299.97	396.86
ALS 2	434.17	574.40
BLS	252.61	334.19

Figure 17
2022 & 2023 Medicare / Medicaid Billing Rates
Note: ALS 2 rate applies when two or more ALS interventions are required.

Billing for health care including ambulance services is a very complex function. Some communities choose to keep the billing internal and assign personnel within their governmental structure out of town hall or have administrative personnel within the department assigned to this function. Other communities choose to have a third-party EMS billing service assigned to this function. These companies have the technical expertise to deal with all insurance companies and do this every day as part of their primary function. These third-party billing agencies have a strong understanding of each insurer’s policy and the procedures necessary in order to maximize the fees collected for the emergency services which were provided.

Hatfield is using a very reputable third-party billing service to handle all of its billing, claims, and payments. Coastal Medical Billing, Inc., located in Sutton, MA, currently is contracted for this service. This service is compensated on a monthly basis at a rate of four percent (4%) of all fees that they have actually collected during the month.

To understand how billing versus collections works the MRI team has attached the chart below with a basic detail on how the chart works and how the overall collection rate is calculated.

	Billed	Collected	Adjustments	Balance
FY 2021	\$281,854.57	\$90,396.79	\$259,181.07	
FY 2022	\$394,075.50	\$107,670.48	\$220,599.59	
FY 2023 (First 6 months)	\$290,972.82	\$72,616.43	\$154,933.23	\$254,188.51
Conservative Projected calculations for 2023	\$551,705.70	\$137,926.43		

Figure 18
Hatfield Receipts

The chart above reflects actual numbers provided by Coastal Medical Billing, Inc. for services provided during that 2.5-year period of FY 2021 through the first six months of 2023. It is important to understand that billing and receipts are a moving target and are based on many factors that are hard to predict, such as the number of transports per month, the billing service level, and what insurance was billed if known at the time of billing.

To understand the chart above, a detailed description of the terms is outlined below:

Billed - The standard amount billed based on the current billing rates. Each individual bill consists of a base rate (Basic or advanced level of care provided) and millage that is calculated from the location the patient was picked up at the emergency room (one way).



Collected- The amount of money that was collected during the year from insurance companies, Medicare, and Medicaid. It should be noted that it may take 90 or more days to receive payments from most insurance companies and actual collections were down during the pandemic as people were not working or processing claims during a substantial time frame. You cannot compare billed versus collected in any one month or year due to the lag in payments being received.

Adjustments- This is the amount or difference between what was billed and any settlement differences. For instance, all Medicare patients are billed at the same rate as everyone else. Once Medicare makes payments and if available any additional insurance is paid, the difference is reflected in the adjustments line. The percentage of adjustments for Hatfield is in line with similar EMS providers.

Balance- This amount reflects all money that has been billed less what has been collected and what has been adjusted. This money is still being sought after by the billing company and or collection agency. Since COVID 19 it is not unusual to see payments other than from Medicare and Medicaid take several months to receive.

VI - EMS SERVICE OPTIONS

As part of the overall review of Hatfield EMS, the Select Board as part of the project has tasked the MRI team to look at other options and to project costs, advantages, and disadvantages for each.

In this area of the Commonwealth, there are not a lot of options. Based on the low call volume and the actual call volume needed for a private company to be financially successful there a very few options for private EMS and limited options for public-based EMS that would be reliable and cost effective. Below are the options that the team has reviewed as well as a recommendation for the long-term approach to EMS in Hatfield.

OPTION 1

Contract with South County EMS

This service would be located in South Deerfield and is currently serving the Communities of Deerfield, Whatley and Sunderland.

In order for Hatfield to contract with this company for this service, all current towns serviced under contract will need to vote on it and all towns will see an increase in their current annual fees or assessment. It is unlikely that any town would accept an increase to bring on another town to the service contract. This does not appear to be a viable option to consider.

Advantages:

- This would be a third-party service with little to no oversight by Hatfield needed.

Disadvantages:

- Hatfield will have little to no control over EMS other than to sign a contract.
- There will be no revenue for transport back to the town to offset the cost of the contract.
- There will be no in town EMS response staff and little to no local people helping local people (a known person coming to the aid of a neighbor or resident... lose the small-town connection.)

OPTION 2

Contract with the City of Northampton

- Contract with the City of Northampton to provide all EMS response to Hatfield 24 hours a day seven days a week.
- Although this would still need to be officially negotiated between the City and the Town, Preliminary discussions outlined the following:
 - Year 1
 - \$200,00.00 contract cost ***PLUS***
 - Assign all new ambulance billing revenue to the city. The town collects all receipts for transports completed prior to transfer.
 - Turn over current ambulance and equipment to Northampton. This has an approximate value of \$400,000.00.
 - \$75,000.00 for Hatfield Fire to maintain an EMS response as available. This would cover hourly response as well as equipment.

Note: Still paying on a seven-year lease purchase of the current ambulance. Payments due total \$107,261.00.

TOTAL COST Year 1 – \$382,261.00 (actual negotiations will need to be done that may change the cost factor above.)

- Year 2
 - \$206,000.00 (3% increase)
 - \$75,000.00 (Hatfield EMS expenses)
- Year 3
 - \$212,000.00 (3% increase)
 - \$80,000.00 (Hatfield EMS expenses)

Advantages:

- This would be a third-party service with little to no oversight by Hatfield needed.
- Northampton will provide Paramedic level service on every call.
- The burden of quality control, recruitment, and retention would shift to the city.
- A substantial liability in terms of errors and omissions and the potential of injury would shift to the city.

- Northampton Fire operates an established and stable system that has exceptional equipment, and overall the Northampton EMS system is recognized as a regional leader.

Disadvantages:

- Hatfield will have little to no control over EMS other than to sign a contract.
- There will be no revenue for transport back to the town to offset the cost of the contract.
- After discussion at a group meeting with the fire and EMS staff as part of this project, there may be a strong possibility that there will be no in town EMS staff for incidents.
- If there is no longer an ambulance service provided by the town how many members will either be less active or resign from the Department?
- With any other agency doing the transport there will still be a need for a local EMS response for higher-level medical emergencies when an immediate (shorter response) is crucial to saving a life. If a third-party service is used there will still be a need for local EMS staff and a cost to provide this service within the town's budget.
- The City of Northampton has previously not renewed a similar agreement with Westhampton in 2014/2015. This would be like the situation that developed in 1982 when Gold Cross Ambulance discontinued service to Hatfield.

MRI NOTES:

- If this option is chosen, then Hatfield should not consider any contract less than 5 years in length and to be renewed at year 3. This would allow time for the Town to look at other options should the city choose not to renew.
- There must be strong language in a contract to protect Hatfield should the City need or want to terminate it sooner. With the lack of private EMS in the area combined with a low call volume needed for anyone to be viable, Hatfield will need to consider going back to providing its own service or try and find a creative way to do so.
- The value of the current ambulance and equipment should be verified and should be considered in any contract before being turned over.
- There is a history of other communities having to move to other providers due to communities no longer being able to support the service outside their town borders on a regular basis. This has happened in the past with Northampton providing services to Westhampton with a contract that did not get renewed by the City of Northampton Mayor.
- Prior to considering this option there should be a letter from Northampton Mayor and the Fire Chief to the Select Board in Hatfield committing to a minimum of five years and outlining long term stability.
- With the increase in EMS Nationwide there is a concern that the City will at some point no longer be able to provide the service due to either their own service needs or for financial reasons. With the uncertainty of EMS billing being consistent in the future this

may be a real concern. If this should happen Hatfield will be in the same position, they were back in 1982 when they began their own EMS system.

NOTE:

For options 3 and 4 – the total cost per employee for benefits paid by the town has been calculated. These costs include family medical plan, life insurance, unemployment, and workers compensation (specific to fire and EMS employees). For comparison reasons it is assumed that all full-time staff are getting all the highest level of benefits and these costs are reflected in the following options.

OPTION 3

Continue Operations using Current Staffing

Hatfield Fire and EMS at current level (16 hours a day with **no** overnight coverage)

While this is an option, this is not a viable option due to the continued lack of internal response to the incidents for the 8-hour overnight period and for when the full-time staff is on earned time off.

Continue as currently being operated. (No night in station coverage for both a quicker fire and or EMS response). A total of 4 full-time employees including the Chief.

Advantages:

- Keeps the service in Town and allows local people to provide EMS.
- Will keep dual role members (those that provide fire and EMS) active as majority of the calls are EMS in nature.

Disadvantages:

- Does not provide reliable overnight coverage and is very dependent on finding good per diem staffing that is willing and able to work a consistent amount to provide reliable scheduled shift coverage.
- Still relies on mutual aid that is delayed in response by dispatching protocols and causing an undue stress on Mutual Aid Communities.
- Still requires an amount of ALS intercept fees to be paid for calls that Hatfield handles that does not have a Hatfield Paramedic responding to.
- When there is no Paramedic on the call and there is a need for one then an intercept fee is paid to the providing service for that level. Currently, that rate is between \$250.00 and \$375.00 per call. In 2022 there were approximately 31 intercepts costing over \$10,000.00. This fee is paid to the providers by Hatfield regardless of billing.

Cost:

Option 3 - Current 16 hour coverage model	EMS Budget	\$ 121,922.00
	<u>Benefit Cost</u>	<u>\$ 62,593.84</u>
	Operating Cost	\$ 184,515.84
Less- Average ambulance revenue of \$100,000.00		\$ 100,000.00
	Total Cost	\$ 84,515.84

Figure 19
Cost: Option 3

OPTION 4

Hatfield Fire and EMS 24 X 7

Increase staffing at the station for 24-hour coverage 7 days a week, 365 days a year. Will still be backed up by call staff as they are available. A total of 9 employees including the Fire Chief.

Advantages

- Provides for an immediate EMS response cutting down on arrival time to an incident.
- Provide for an immediate Fire response cutting down on arrival time to an incident.
- Keeps the service in Town and allows local people to provide EMS.
- Will keep dual role members (those that provide fire and EMS) active as the majority of the calls are EMS in nature.

Disadvantages

- There will be a need to look at the current facility for the short and the long term.
 - Although it is possible to provide tight accommodations in the current building, a better short-term solution could be made by adding a leased temporary trailer to act as a day room and bunk rooms for the overnight. This trailer would not have restrooms and will only require power and backup power. A cost estimate of \$500.00 to \$ 900.00 per month (\$6,000 to \$11,000.00 annually) to lease a small trailer or a budget figure to purchase a trailer would be 20K to 30K. There will be a cost to power the trailer (with backup power) as well as the cost to deliver, set up and eventually remove the unit.



Figure 20
Example of a living trailer

- Long-term needs have been in the capital plan for FY29 and should be seriously looked at for all Public Safety departments, fire, EMS and police functions. A complete public safety needs assessment should be conducted by MRI or an outside agency to assist the town in looking at the needs today and projecting into the future.
- The limited call volume is not sufficient for a paramedic to retain a high level of competency and skill. Therefore, paramedics working in the system will need to focus on skill retention and or provide per diem services in other agencies.

Cost:

Option 4 - 24 hour 7 days a week coverage	EMS Budget	\$ 472,744.21
	Benefit Cost	\$ 140,836.14
	Operating Cost	\$ 613,580.35
	Estimated Optional Living trailer costs	\$ 11,000.00
	Sub Total	\$ 624,580.35
Less- Average ambulance revenue of \$100,000.00		\$ 100,000.00
	Total Cost	\$ 524,580.35

Figure 21
Cost: Option 4

COST COMPARISON

To have a complete cost comparison documented, all costs to both the Fire Department EMS operating budget and the town operating budget have been included for full-time employees.

For the town operating budget, these items include hard costs such as Health and Life insurance, Medicare, unemployment, County retirement, and 111F (Fire personnel workman's comp costs). For each employee, this is calculated to be \$35,055.22 each.

	Budget	Cost per thousand of assessed value	Cost per Taxable Property Value			
			250K	500K	850K	1 Million
Option 1	N/A	N/A	N/A	N/A	N/A	N/A
Option 2 ** Northampton model	\$ 382,261.00	\$ 0.62	\$ 155.00	\$ 310.00	\$ 527.00	\$ 620.00
Option 3 *** Current 16 hour coverage model	\$ 84,515.84	\$ 0.14	\$ 35.00	\$ 70.00	\$ 119.00	\$ 140.00
Option 4 ***Hatfield 24X7 coverage model	\$ 524,580.35	\$ 0.85	\$ 212.50	\$ 425.00	\$ 722.50	\$ 850.00

Figure 22
Option cost per thousand

** Does not include the transferred value of the ambulance or equipment (given to Northampton in year 1 or for lost ambulance billing receipts.)

*** Total cost has been reduced by \$100,000.00 (an average of the projected and conservative average annual ambulance billing receipts.)

Difference from Options 3 (Current model) and 4 (24X7)	Budget	Cost per thousand of	Cost per Taxable Property Value			
			250K	500K	850K	1 Million
	\$ 440,064.51	\$ 0.71	\$ 177.50	\$ 355.00	\$ 603.50	\$ 710.00

Year 1 difference from Options 2 (Northampton) and 4 (Hatified 24x7)	Budget	thousand of assessed	Cost per Taxable Property Value			
			250K	500K	850K	1 Million
	\$ 142,319.35	\$ 0.35	\$ 87.50	\$ 175.00	\$ 297.50	\$ 350.00

Figure 23
Option Cost Comparison

MRI Recommendation:

Our team has identified two viable options (2 and 4) which do not include continuing the current operational profile (Option 3). Ultimately the voters will need to decide who provides the services that the community receives. Whenever fiscally possible a community typically desires to provide all Fire and EMS responses to the average type of calls on their own having full control of all aspects of the response. The challenge is twofold, first is the Town willing and able to provide the needed funding to have twenty-four-hour fire and EMS in station response. Secondly, is the ability to recruit and retain the staffing going to be consistent if the in-town EMS system is going to be reviewed and questioned on an annual basis?

Is an in town immediate response of a local paramedic EMS system available 24 hours a day 7 days a week a service that is preferred over the Northampton model or other any other third party model?

From our experience

As the cost differential (option 2 and option 4) is approximately \$142,319.35 a year, this would translate into a cost of .35 cents per thousand dollars of valuation. This would produce a total average cost per household of 370,459.00 and produce a cost to the average household of approximately 129.66 per year. **The real question is what value does the \$142,319.35 provide to the Town of Hatfield.** This additional appropriation would provide the Town with two tangible benefits:

1. Full operational control and facilitate an immediate response from a centrally located point in Hatfield.
2. On average this would reduce the response time of a paramedic staffed transport ambulance by 5 minutes.
3. It would reduce the first engine out the door for fire calls by several minutes.

If the appropriation is approved, our team recommends investing in and retaining local services 24 hours a day 7 days a week that will enhance both a fire and EMS response.

There is a future risk that the town needs to consider. Both future contract costs and the longevity of a third-party service and their ability to continue to provide coverage by contract are real concerns. Hatfield went down this path in 1982 and may find themselves back in the same position again in the future.

VII - THE FUTURE

Implications of Not Taking Action

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

Looking ahead, the implications of not taking action will be quite simple: service levels will begin to diminish, response times will increase and the level of participation of staff will be reduced.

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

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

However, the departments are also facing serious challenges both today and looking toward the future. There are senior staff people who will be retiring and there is a lack of good solid experienced people coming in to fill the void they will create. Overall, the workforce since COVID-19 began is dropping and there are fewer people taking the challenges of becoming a firefighter and or an emergency medical responder and we are seeing more and more people leaving the jobs after just a couple of years. The sense of pride and commitment to these professions is also decreasing. Newer people tend to come in the door to work their assigned shifts and do not wish to go above and beyond and fill open shifts created by sickness or earned time off.

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

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

It is important that the town continue to support the department and 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 is very fortunate to have a great core of dedicated members in its Fire and EMS Department. With some continued strong work, the Chief can lead this group forward toward a common set of goals, while navigating through the cultural parameters of the past.

APPENDIX A



**Municipal
Resources, Inc.**

APPENDIX - A

Conceptual Proposal from Northampton Fire

This is a proposal only and the Town of Hatfield and the City of Northampton will need to officially negotiate a contract. This proposal was drawn up for the MRI team by Northampton Fire officials to have details included as an option for the town to consider. The information below is from an email sent to the MRI team from Northampton Fire.

The proposal below lists all items necessary for Northampton Fire Rescue to assume full ambulance coverage for the town of Hatfield, effective July 1, 2023. The requirements are:

1. *A three-year contract between Northampton Fire Rescue and the Town of Hatfield for ALS ambulance coverage. All payments are due July 1 of the fiscal year. The increases represent a 3% annual cost increase for supplies and fuel. The proposed payment schedule is as follows:*
 - a. *FY2024---\$200,000*
 - b. *FY2025---\$206,000*
 - c. *FY2026---\$212,180*
2. *Northampton Fire Rescue will receive all fees for service from the users of the ambulance (billable receipts).*
3. *The donation of HFD A1, the 2019 Ford Horton, to Northampton Fire Rescue for use for their service. As we will be providing 24/7 paramedic level coverage, and with the long turnaround times for new ambulances to be built, the town will donate their ambulance, and the equipment therein, for use by Northampton Fire Rescue.*

The above is a proposal only, and as such is subject to negotiations between the Town of Hatfield and the City of Northampton.

APPENDIX B



**Municipal
Resources, Inc.**

APPENDIX – B

Line Item Budget Reflected in Option 4

The document below was created by the Fire Chief as a budget document to calculate operational cost for full 24X7 Fire and EMS staffing utilizing proposed full-time Hatfield staffing. The figures in this document do not include any benefit cost. Full benefit cost is outlined below and on page 32, Figure 21.

Benefit costs

For options 3 and 4 – the total cost per employee for benefits paid by the town has been calculated. These costs include family medical plan, life insurance, unemployment, and workers compensation (specific to fire and EMS employees). For comparison reasons it is assumed that all full-time staff are getting all the highest level of benefits and these costs are reflected in options 3 and 4 found on pages 29-31. Figures provided by the town place this cost at \$15,586.41 per full-time employee.

Fiscal 2024 24/7 Departmental Request

Department # 231 AMBULANCE

Submitted By: Chief Robert Flaherty

Total Req. Dept Budget (FR24) 472,744.21

New Code	Description	2022 Actual Exp.	2023 Appr. Budget	2024 Dept Req.	Comments
5110	Fire Chief	4,345.40	4,673.92	4,790.77	
5112	Ambulance Full Time Salary		14,915.59	397,129.60	Provide 24/7 ALS ambulance and fire coverage
5118	Full Time/Part Time/Per-Diem - This includes summer and winter season help, employment of students, or other positions that are known to be one time or temporary in nature.	9,828.53			
5130	Overtime/Shift Coverage (General) - Includes training, in-service, professional development, and other additional work time above and beyond normally scheduled work. Can be used as a stand along code, or in conjunction with other specific overtime classifications (5131-5139)			33,873.84	Overtime and Holiday Pay for FT Employees
5140	Ambulance EMT On-Call	10,377.50	15,944.40		Overnight On-Call Program
5190	Ambulance Intermittent Employees	12,314.73	23,323.32		Incident Response
5195	Stipends; Non-Pensionable - Includes Clothing Allowances, Severance and Unused Vacation time, Town sponsored Tuitions, State of Emergency Overtime, Bonuses, Workers Compensation payments, and Unused Sick Time.				
5244	Ambulance Equipment Repairs & Maintenance	2,758.90	6,000.00	7,500.00	Includes Service Contracts
5300	Ambulance License	1,100.00	1,100.00	1,100.00	
5304	Advertising and Legal Notices - The cost of advertising in print and electronic publications for programs, collections, and public hearings and information meetings including Town Meetings, elections, and legal hearings held by Boards and Committees.				
5307	Billing/Collection/Printing - The cost of vendors who print tax and excise bills, departmental publications and newsletter, and provide collection and payment services. If postage is included in the bill printing services it can be charged here as well. If postage can be separately paid or identified, please budget under 5345.	5,383.54	5,250.00	6,500.00	
5308	Professional Development - The cost to attend meetings and other professional development training and seminars. Does not include any reimbursement for meals or travel to attend trainings, those are recorded under business travel.	-	11,500.00	11,500.00	EMT/Paramedic School
5311	Medical - Includes drug testing and evaluation, workers compensation and IOD assessments. For schools also includes the cost of nursing and doctors services.	140.00	450.00	450.00	
5300	Other Professional Services - The cost of additional services provided by an outside vendor that is not otherwise classified above.				
5330	ALS Intercept Fees	2,375.00	3,000.00	3,000.00	
5340	Telecommunications - Cost of phone, fax, cellphone, internet, and other communication services. Category also covers Public Safety remote communications through Aircards and other devices for cruisers and other similar vehicle.				Absorbed by PD
5345	Postage & Mailing - USPS, FedEx, and UPS mailing and shipping service, postage, annual postage permits, and supplies associated with shipping.				
5350	Community CPR/ Education Programs	243.98	500.00	500.00	

SALARIES & WAGES

Fiscal 2024 24/7 Departmental Request

New Code	Description	2022 Actual Exp	2023 Appr. Budget	2024 Dept Req.	Comments
5385	Software Licensing/SAAS - The cost of licensing software for Town operating platforms, software applications. Includes Software as a Services (SAAS) deliveries which have a monthly recurring charge for cloud based software delivery or ongoing licensing arrangements.	4,000.00	4,000.00	3,400.00	Ambulance Report Vault Storage
5420	Office Supplies	4,067.10	8,683.00	8,000.00	Absorbed by FD
5510	Medical Supplies - Supplies and materials required to provide internal professional development or training, or materials for providing information or education for the public using Town staff.	-	1,000.00	1,000.00	
5592	Uniforms - Costs related to cleaning, upkeep, repair, and other costs for the work uniform as required by the department or as outlined in the collective bargaining agreement. Also includes the costs of purchasing uniform parts and accessories when included as part of a collective bargaining agreement.	1,682.28	2,000.00	2,500.00	ANSI Compliant Coats/Part Time Uniforms
5580	Communications Radio/ Pagers				
5710	Business Travel - Fuel, tolls, hotel, mileage reimbursement, and other travel related costs. This category can also include per diem payments to employees when not part of payroll or counted as part of employee wages. Does not include dues and membership, training or meeting costs.				
5730	Dues/Memberships/Licensing - Cost of professional memberships or licensure required for position.	745.00	1,500.00	1,500.00	
5854	Capital: Public Safety Equipment - Other capital public safety equipment not classified under vehicles 5855 that cost more than \$5,000 with a useful life of more than 5 years.	13,719.12	-	-	
TOTAL Budget Request		69,481	100,240	472,744	
TOTAL Budget Request		69,481	100,240	472,744	
FY2022 Actual Exp to FY2023 Approved Budget Change			44%		
FY2023 Approved Budget to FY2024 Department Request Change				372%	

	Total Salaries	Ops & Maintenance Expenses	Services	Supplies	Other Expenses	Capital	Total Expenses
	36,866	2,759	9,643	5,749	745	13,719	32,615
	58,857	6,000	22,200	11,683	1,500	-	41,383
	425,794	7,500	26,450	11,500	1,500	-	46,950



VIII - THE PROJECT TEAM

Project Manager

David Houghton is a devoted fire and emergency management professional who has recently retired from the Wayland Massachusetts Fire Department after a distinctive 38-year career from being a call firefighter and rising through the ranks to Fire Chief. Along with dedicating his service to the Town of Wayland, he continues to work for the Massachusetts Department of Fire Services as both an instructor and in the Special Operations Division doing special projects. In 1999 he was given the challenge by the State Fire Marshal to develop and implement what today is known as Special Operations. This development included designing, building, and implementing specialized equipment and staffing to respond to Emergency and planned incidents throughout the Commonwealth. This program was a shared vision between David and the Fire Marshal and today has been shared in whole or in part in other areas of the country. David has a B.S. degree in Fire Science, an A.S. Degree in Fire Science and Technology, and has completed a Local Government and Management program with Suffolk University and the Massachusetts Municipal Association. David has a diverse background in Firefighting, EMS (ALS and BLS), Dispatch, Fire Prevention, Emergency Management, and operations. He is a nationally certified Firefighter, Fire Instructor, Fire Inspector, Fire Officer. He is a certified Emergency Medical Technician both at the National Level and in the Commonwealth of Massachusetts.

David has most recently continued his fire service career by being appointed as a call firefighter with the Town of Moultonborough Fire Rescue and is a certified New Hampshire Emergency Medical Technician. He continues to be active with the Commonwealth of Massachusetts Fire and Ambulance Mobilization team in the continuous updating and redevelopment of the program. Prior to his retirement as Fire Chief, David was an active member in the Massachusetts Fire District 14 where he was a driving force behind the creation of the District Operational budget, an operation manual, and the formalizing of the various specialized teams within the district. David was also selected as the Chief overseeing the Fire District communications team and equipment as well as serving on several other progressive programs within the district. He is a member of the Fire Chiefs Association of Massachusetts, and the International Association of Fire Chiefs.

Project Team Member

David Bengtson began his career in Woodbury CT. Volunteer Fire Department. He served with distinction and rose through the ranks to become Chief of the Department, a position he held for 8 years before accepting the position of Chief in Moultonborough NH. He has 41 years of real-world experience as a fire chief, state instructor, and mentor. As the fire chief/emergency management director in Moultonborough, he is responsible for a 25-member combination department providing fire suppression, emergency medical services, Haz-mat response, rescue services, fire prevention/investigation, and emergency management. Chief Bengtson is a Certified Fire Officer in accordance with NFPA 1021; a Certified Fire Inspector in accordance with NFPA 1031; a Certified Fire Service Instructor in accordance with NFPA 1041; and a Certified Safety Officer in accordance with NFPA 1521. Chief Bengtson is a member of the International Association of Fire Chiefs; the New Hampshire Fire Chiefs Association; the National Fire Protection Association. He serves as a Director and Executive Committee Member of the Lakes Region Mutual Fire Aid Association; is a member of the Central New Hampshire HAZMAT Team Oversight Committee.