

Newport, New Hampshire Fire Department Study

JLN ASSOCIATES
FIRE PROTECTION SERVICES
43 HATCHETTS HILL ROAD
OLD LYME, CT 06371



Executive Summary

In the fall of 2016, JLN Associates was engaged by the Town of Newport, New Hampshire to conduct a comprehensive study of the Newport Fire and EMS Services. It became immediately apparent there was an atmosphere of distrust and suspicion between the elected officials and a significant number of members of the Fire Department, including its Leadership. This has strained the relationship and resulted in two critical issues.

- 1) The elected officials have felt compelled to thoroughly review all actions and functions of the Fire Department including emergency responses. Feeling responsible for public safety has led to an instinctive reaction to directly manage the day to day Fire Department activities.
- 2) The Fire Department has become defensive and has assumed a low profile relative to communicating with the Board of Selectmen. Ultimately, emergency responders are feeling micro-managed by elected officials. This situation is unhealthy for both groups and, most importantly, the public, and needs to be resolved. We have made several recommendations to attempt to reduce this stress and improve the relationships.

Contributing to this situation and impacting both the Department and Elected Officials is a perception of nepotism within the Fire Department. Whenever members of the same family, or those who are related, serve in the same department, favoritism concerns can arise. Regrettably, a significant number of interviews and responses to an anonymous survey directly identified nepotism as a problem. It is possible for members of the same family to perform effectively with the correct guidelines and controls. We have made recommendations to assist with this issue.

One of the principal stimuli for this study involved the efficient provision of Fire and EMS services and the appropriate use of community funding in the Fire Department, specifically, Department spending and the sharing of resources through mutual aid. The use of EMS resources to provide mutual aid has become contentious over the past few years. It is our observation that the internal issues within the Department may have led to distrust and ultimately the Board of Selectmen's decision to modify the EMS response policy and ambulance charges. This decision exacerbated the relationship between the Fire Department and Board of Selectmen. It should be noted the EMS division is able to provide mutual aid and require minimal mutual aid assistance back into the community. Potential funding is directly related to the Ambulance billing policy. We have made recommendations to assist with this issue, as well.

The Fire and EMS Stations are not efficient and needs significant updating. The Stations are not designed for both male and female responders and need modifications. This will be addressed in the report, as well.



The Fire Department's process for both dispatching and record keeping needs to be addressed. Currently, it is be easy for citizens to misunderstand the actual number of emergencies the Department responds to. In addition, an antiquated process is used to dispatch units to emergencies. These need to be clarified and updated.





ABSTRACT

The Town of Newport offers Emergency Medical Services (EMS), as well as, traditional Fire Services through a hybrid responder system involving the Newport Fire - EMS Department. This service is offered by both Career Staff from 0600-1800 and Per-diem/Call Staff from 1800-0800 daily. The problem is confirming if the existing EMS service is best for the Town of Newport.

The purpose of this Study is to review the services delivered by the Newport Fire - EMS Department with expanded focus on EMS. In addition, the Fire Department's systems, support, response capabilities, equipment, facilities and traditional activities shall be studied.

Research questions answered were:

- 1) Is the present EMS system effective and efficient?
- 2) What changes, if any, could be made to improve the delivery of EMS for the Town of Newport?
- 3) What is the general health of the Newport Fire EMS Department?
- 4) Is the Newport Fire EMS Department prepared to successfully handle emergencies at its Target Hazards?



1.0 TABLE OF CONTENTS

ABS	ABSTRACT4				
1.0	TABLE OF CONTENTS	5			
2.0	PROCESS	7			
	2.1 Data	7			
	2.2 Report	8			
3.0	COMMUNITY HISTORY, GEOGRAPHY & DEMOGRAPHICS	9			
	3.1 History	9			
	3.2 Geography	<u>S</u>			
	3.3 Demographics	10			
	3.4 Medical Services	11			
	3.5 Education	11			
	3.6 Government	11			
	3.7 Citizen Incomes and Community Expenditures	12			
	3.8 Housing	13			
4.0	TOWN-WIDE RESEARCH	15			
	4.1 Community Risk				
	4.2 Concept of Risk	15			
	4.3 Community Risk Assessment	15			
	4.4 Municipal Airport	19			
	4.5 Strategic Planning	20			
	4.6 Community Risk Reduction	20			
	4.7 Emergency/Disaster Management	20			
5.0	FIRE DEPARTMENT	23			
	5.1 Organizational Statement/Mission Statement				
	5.2 Organizational History	23			



	5.3 Support Organizations	. 24
	5.4 Chain of Command	. 25
	5.5 Fire Division	. 27
	5.6 Emergency Medical Services Division	. 36
	5.7 Dispatch & Communications	. 41
	5.8 Hazardous Materials and Special Operations	. 45
	5.9 Facilities	. 45
6.0	STAFFING	.56
	6.1 Fire vs Suppression	. 56
	6.2 NFPA 1710 & NFPA 1720	. 57
	6.3 Fire Mutual Aid	. 59
7.0	CAPITAL IMPROVEMENT PLAN (CIP)	.64
	7.1 Rolling Stock	. 64
	7.2 Fire Equipment with CIP replacement dates	
	7.3 EMS Equipment with CIP replacement dates	. 68
8.0	WATER SUPPLY	.69
9.0	COMPARISON OF NEIGHBORING COMMUNITIES	. 70
10.0	0 KEY RESEARCH QUESTIONS	.71
11.0	O SPECIFIC CONCERNS FROM OUR RESEARCH	.73
12.0	0 RECOMMENDATION CHECKLIST FOR NEWPORT FIRE - EMS DEPARTMENT	. 75
13.0	O REFERENCES	. 77
14.0	0 PHOTOS	. 79
15.0	0 FIGURES	.82
16.0	0 ATTACHMENTS	.84



2.0 PROCESS

2.1 Data

The information in this report was developed based on the guidance provided on the Fire Risk Analysis for Community Fire Departments as delineated in the 18th and 19th Editions of the Fire Protection Handbook published by the National Fire Protection Association. The Report contains a review of the Newport Fire - EMS Department utilizing NFPA 1201 (2015) Standard for Developing Fire Protection Services for the Public. The following standards were used as references to draw comparisons including:

NFPA 1141 (2012), Standard for Fire Protection in Planned Building Groups.

NFPA 1201 (2015), Standard for Developing Fire Protection Services for the Public.

NFPA 1500 (2013), Standard on Fire Department Occupational Safety and Health Program.

NFPA 1561 (2014), Standard on Emergency services Incident Management System and Command Safety.

NFPA 1581 (2015), Standard on Fire Department Infection Control Program.

NFPA 1710 (2016), Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments.

NFPA 1720 (2016), Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments.

Documentation provided by the Department, State and Local EOP Planning Guidance was also referenced.

Travel times from Newport Fire - EMS Department to various commercial properties and businesses were calculated using the Apparatus Travel Time Formula provided by the ISO Commercial Risk Services, Inc. Apparatus driver response times to the Newport Fire - EMS Department were calculated by the same means.

Information contained in this report on the potential fire hazards within the community has been based on discussions and research utilizing:

Discussions with Fire Chief and Emergency Management Director Wayne Conway.

Discussions with Deputy Fire Chief Chris Marcotte.

Discussions with Captain Kenneth Carleton.

Discussions with Captain David McCrillis.



Discussions with the Planning Official.

Community tours and property visits by the staff of JLN Associates, LLC.

Research by JLN of the commercial and industrial properties within the response district.

Individual meetings with the Command Staff.

2.2 Report

This report, when applied as a whole, will provide a reasonable, realistic, and consistent template as a guide for planning and development. This report addresses the following areas:

- The delivery of Emergency Medical Services.
- The required fire protection, rescue, emergency response and potential disaster needs for the Town of Newport based on response trending data.
- The adequacy of the Newport Fire EMS Department's organization based on its bylaws and Standard Operating Guidelines.
- The Newport Fire EMS Department's use of current technology for monitoring inventory, maintenance of equipment, and maintaining response data.
- The Town of Newport's Emergency Management Response Plan's ability to address appropriate guidance for the fire department during town emergencies including Homeland Security issues.
- The Newport Fire EMS Department's current configuration and the anticipated facility needs.
- The needs of the Newport Fire EMS Department based on the potential growth of the town and department within the next 5, 10, and 20 years.
- Water supply needs of the Newport Fire EMS Department to adequately protect the Town of Newport.
- Condition, maintenance, and replacement schedule for fire apparatus and equipment.
- The Newport Fire EMS Department's Fire Prevention and Pubic Education Programs.
- Review of Newport Fire EMS Department's Mutual Aid Agreements.
- The available options to the Newport Fire EMS Department to enhance emergency response within the community.



3.0 COMMUNITY HISTORY, GEOGRAPHY & DEMOGRAPHICS

3.1 History

The Town of Newport was incorporated in 1761 (Retrieved July 3, 2016, from www.city-data.com)(n.d.), (Retrieved July 3, 2016, www.newportnh.net). It was granted in 1753 to Isaac Pennell and others, and was called 'Grenville.' It was re-granted in 1761 to Nathaniel Fish and others and incorporated and named after Newport, Rhode Island. In 1768 the First mill was built. A saw mill and grist mill to grind corn and wheat into flour is built in Guild upstream from the site of the present Dorr Woolen Mill. Benjamin Giles was builder and operator. In 1769, "The first town meeting was held on the 27th of Sept., 1769; Samuel Cole, justice of the peace, appointed it, as the inhabitants could not warn the first meeting. At 8 o'clock, on the appointed day, the people met and elected Benj Giles moderator, Amos Hull, town clerk, Sam'l Hurd, Jesse Wilcox and Amos Hull, selectmen. Sam'l Hurd being a strong man, was elected constable. To put things in perspective, on Sept. 5, 1774 the Continental Congress assembles in Philadelphia (Hill, E. (n.d.). Publication).

3.2 Geography

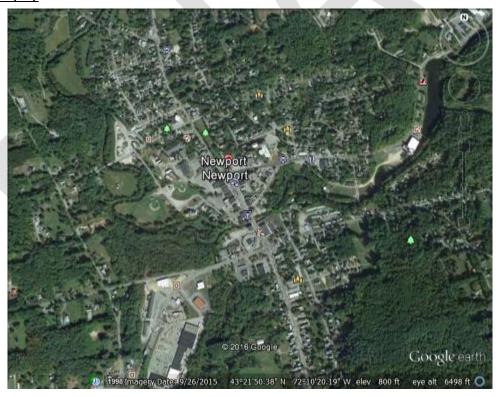


Photo 1: Newport by Google Earth

Newport covers a land area of 43.6 square miles in New Hampshire's Second Congressional District. Newport is at an average elevation of 797 feet. It is located between Interstates 89 and 91. Its closest communities are; Sunapee, NH (2.1 miles), Goshen, NH (2.2 miles), Croydon,



NH (2.2 miles), Blodgett Landing, NH (2.5 miles), Unity, NH (2.7 miles), Newbury, NH (2.8 miles), Claremont, NH 3.0 miles) and Lempster, NH (3.0 miles) Relative to major cities, it is located 44.8 miles from Manchester, NH (population 107,006), 90.7 miles from Boston, MA (population 589,141), 147 from Portland, ME (population 66,666) and 194.9 miles from Bronx, NY (population 1,332,650) (www.city-data.com). The ski areas of Mt. Sunapee, Whaleback Mountain, and Vermont's Mt. Ascutney are all close by. Lake Sunapee also provides opportunities to enjoy water-related activities. The vast majority of Newport's land area (92 percent) remains undeveloped. Forests occupy over 85 percent of the Town's 27,274 acres and thus represent the dominant land use in Newport. There are only two water bodies of significant size in Newport; Lily Pond at 11 acres and Chapin Pond at 12 acres (2016, Town of Newport Hazard Mitigation Plan).

3.3 Demographics

The population was 6,434 Citizens in 2014 with a median age of 45.5 years (n.d.) (Retrieved July 5, 2016, from http://factfinder.census.gov/). There were 3,069 males or 47.7%. There were 3,365 women or 52.3 % (factfinder.census.gov). This relates to a population density of 147.8 people per square mile. In 2014, 1,785 families resided in 2,806 households. The population is 92.6% Caucasian. The second most common race is American Indian – 3.2%, followed by Asian – 2.6%, multiple races – 1.4%, and Latino – 0.9%. The most common industries are; Business or Management at 1,085 positions or 31%, Construction and Maintenance at 535 or 10%, Office/Sales/Retail trade 847 or 24%, Production and Transportation 679 positions or 6%, Public Administration/Service 503 or 5% (factfinder.census.gov).

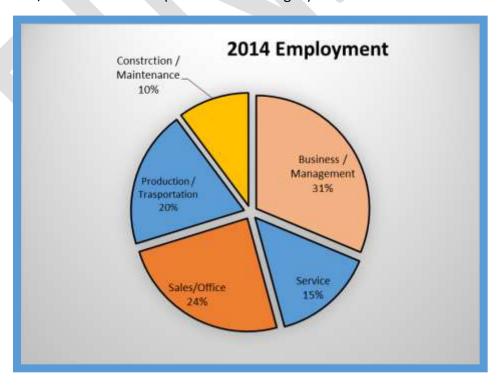


Figure 1: Community 2014 Employment by Percentage



LARGEST BUSINESSES	PRODUCT/SERVICE	EMPLOYEES	ESTABLISHED
Sturm Ruger & Co.	Sporting firearms	1,455	1949
Lake Sunapee Bank	Banking services	119	1865
LaValley Building	Supply Building	90	1962
Latva Machine Co., Inc.	Precision machine parts	85	1979
Premier Precision	Machine parts	69	2008
Sugar River Bank	Banking services	66	1895
Carroll Concrete	Concrete products	50	1973
Hartford Eichenauer, Inc.	Heating elements	45	1982

Table from http://www.nhes.nh.gov/. Original Information from Town of Newport Planning Department - Julie Magnuson, Planning & Zoning Administrator 15 Sunapee Street, Municipal Building Newport, NH 03773

Table #1 Largest Businesses by number of employees in Newport, New Hampshire

3.4 Medical Services

The Newport Health Center (Operated by New London Hospital) is located at 11 John Stark Highway). Summercrest Senior Living is located at 167 Summer Steet and Arbor View Mental Health is located at 163 Summer Street. In 2015, 695 individuals or 10.9% of the population did not have medical coverage (factfinder.census).

3.5 Education

The community is served by multiple schools. The Newport Middle/High School, a public school, is located at 245 North Main Street. It has a student population of 446 and serves grades 9 through 12. There is a private High School, the Granite Hill School, located at 135 Elm Street. It has a student population of 32 and serves grades 7 through 12. The Newport Middle School is located at 245 North Main Street. It has a student population of 261 students, grades 7 and 8. There are 3 Elementary schools. The Richards Elementary School is located at 21 School Street. It has a student population of 298 students, grades Pre-K through 4th grade. The Towle Elementary School is located at 86 North Main Street. It has a student population of 155 students, grades 5th and 6th. There is 1 private elementary/middle school in Newport. The Newport Montessori School is located at 96 Pine Street. It has a student population of 53 students, grades Pre-K through 7th grade (City-Data.com).

3.6 Government

The Town of Newport is managed by a Town Manager under the direction of a five member Board of Selectmen. The Municipal Office Building is located at 15 Sunapee Street. Mr. Hunter



Rieseberg serves as Town Manager. (Mr. Rieseberg was hired near the completion of the Study) Mr. Jeffrey F. Kessler is the Chairman of the Board of Selectmen. He is joined on the Board of Selectmen by Mr. Todd Fratzel as Vice Chairman. In addition, Mr. William T. Wilmot, Jr., Mr. David Hoyt and Mr. John H. Hooper II serve on the Board. They meet on a regular monthly basis, first and third Monday, to conduct the community's business (www.newportnh.net). The Town of Newport is the Sullivan County Seat.

3.7 Citizen Incomes and Community Expenditures

The mean household income in the community is \$62,076 [in 2014 inflation dollars]. Eleven point nine percent of the population falls below the poverty line (Factfinder.com). According to NH.gov, the Town of Newport's Budget for Municipal Appropriations in 2015-2016 was \$9,531,021; School Appropriations for 2015-2016 was \$17,357,544.

2013-2014 Final Expenditures	Request	Manager	BOS		
Ambulance	399,137	355,576	355,576		
Fire	368,729	355,027	355,027		
2014-2015 Budget Requests	Request	Manager	BOS		
Ambulance	374,835	352,755	352,755		
Fire	369,630	363,417	363,417		
2015-2016 Budget Request*	Budget	Manager	BOS		
Ambulance	482,469	464,123	460,101		
Fire	543,670	540,366	528,672		
2016-2017 Budget request	Budget	Manager	BOS		
Ambulance	635,683	532,368	500,000		
Fire	584,816	570,276	553,151		
*Including Employee Taxes and Benefits started					
Data received from Finance Director/Assistant Manager Paul Brown.					

Table #2 Budget Requests and Expenditures 2015-2017



^{*&}quot;Manger" refers to Town Manager. "BOS" refers to Board of Selectman

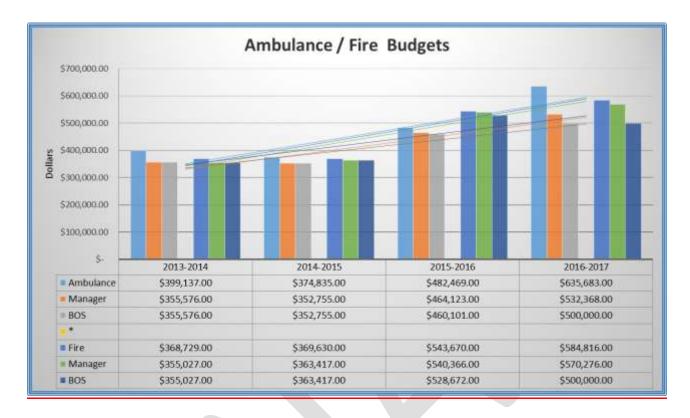


Figure 2: Ambulance/Fire Budgets

3.8 Housing

There are 2,806 homes in the community. In 2014, 66.2% were owner occupied. Thirty three point eight percent were rentals. A large percentage of the housing stock, 38.3% was built before 1939. The median value for owner-occupied homes in 2014 was approximately \$152,400. Thirteen percent of the homeowners lived in homes valued at less than \$50,000. Seven point three percent of the homeowners lived in homes valued between \$300,000 and \$500,000 (Factfinder.com).



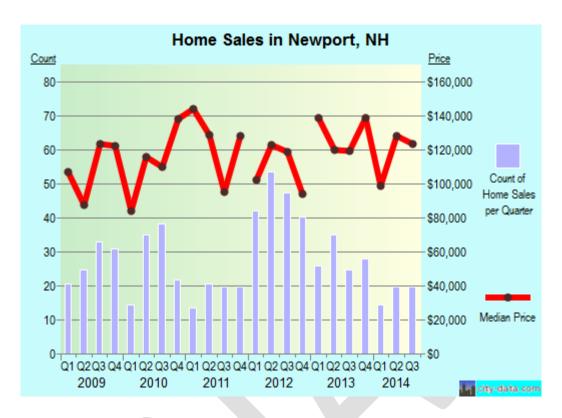


Figure 3: Newport NH Home Sales from city-data.com



4.0 TOWN-WIDE RESEARCH

4.1 Community Risk

Community Risk is the baseline for all projects produced by JLN Associates. It is the core of all activities and investments, a community should make, to protect its citizens.

4.2 Concept of Risk

NFPA 1201: 7-4 states an Emergency Services Organization that provides fire suppression, emergency medical services, hazardous materials response, or special operations shall develop an implementation plan to comply with all federal, state or provincial, and local applicable laws, codes, regulations, or standards and NFPA 1500, Standard on Fire Department Occupational Safety and Health Program.

4.3 Community Risk Assessment

JLN Associates (JLN) has conducted a community fire risk analysis to identify the size and scope of the potential fire problem in order to determine the necessary number and deployment of fire companies. This has been done to evaluate and redefine fire protection needs for the jurisdiction to support the strategic (master) planning process. The Town of Newport has several risks. A partial list from existing Newport documents include: Ruger Firearms, RDS Machine, Irving Gas, Amragas, Dead River Gas, and Industrial Gas Tanks. In addition, Newport lies on the main transportation route for trucks. These risks and examples of other risks identified by JLN are presented on the next few pages.



4.3.1 Examples

Schools



Photo 2: Sugar River Valley



Photo 4: Newport Middle & High Schools



Photo 3: Towle Middle School



- LP Gas



Photo 5: Bulk Propane Storage



Photo 6: Emergency Controls

Industrial:



Photo 7: Ruger Industries



Photo 8: RDS Machine

Fixed Sites:



Photo 9: Goodrich Oil



Photo 10: Goodrich Oil Storage





PHOTO 11: GOODRICH OIL STORAGE

Commercial Sites:



Photo 12: LaValley of Newport



Photo 13: Main Street



4.4 Municipal Airport



Photo 14: Airport Hanger



Photo 15: Emergency Station

Photo 16: Aviation Fuel

The Airport is home to 25 privately owned planes. Given its location in the northeast, it is a popular transit and fueling location. It had approximately 5,000 landings and take-offs at the site this past year. There are several planes which are housed in hangers at the field. The field is protected by a pull box to report field emergencies. An active group of pilots and volunteers do a great job of maintaining and caring for the airport. In addition, the Airport staff provides an emergency response seminar for Fire and EMS responders during the spring. The 90 minute program involves airplane emergencies and an airframe walk around. The airport would like to expand this type of training to include a table top drill. The airport is presently land-locked and has no plans for expansion.



Recommendation 1: The Airport and Fire/EMS services should conduct a table-top drill on a biannual basis.

4.5 Strategic Planning

Presently, there is no Strategic Plan for the Newport Fire/EMS Department. The Chief has concepts in mind but nothing has been put in writing. A Strategic Plan could help the Elected Officials and Public prepare for the future. The plan should encompass input from not only the Fire Department Leadership but also other Department Heads, Elected Officials and Members of the Economic Community who may have important information to share.

Recommendation 2: The Fire Department Leadership, in conjunction with the Town Manager, should create a Strategic Plan for the next 5, 10 and 15 years. The Strategic Plan should then be reviewed and Approved or Disapproved by The Board of Selectmen.

4.6 Community Risk Reduction

4.6.1 Fire Prevention

The Newport Fire – EMS utilize Public TV and Radio Stations to spread the public education message. They participate in Radio talk shows 3 times a year, and Television shows twice a year dealing in General Fire Safety Topics. In addition, the Department provides Kid's programs for school during Fire Prevention Week and Open Houses.

4.6.2 Code Enforcement

The Fire Chief also serves as the Fire Marshal/Fire Code Official. He is responsible for conducting Life Safety inspections. In addition, he works with the Planning and Building Departments on all new commercial and large scale projects. As with many Fire Marshals, the primary focus is on new development and high risk hazard inspections. The Fire Chief/Fire Marshal/Heath Officer can also write Abatements, and enforce Health Ordinances and Housing Regulations.

4.6.3 Investigations

The Fire Marshal conducts the fire investigations and, if needed, calls for assistance from the State of New Hampshire.

4.6.4 Public Health

The Fire Chief is also responsible for Health Department issues.

4.7 Emergency/Disaster Management

The Fire Chief fills the role of Emergency Manager. The Emergency Management workforce include Full-time Police, Fire, EMS, Public Works and Administrative staff. Mutual aid agreements exist for Police, Fire, and Public Works. The following plans have been prepared to



assist the community: Community Master Plan, Airport Master Plan, Community Emergency Plan, Hazard Mitigation Plan, School Emergency Plans and Building Code. The High School serves as the official shelter. It has emergency back-up power and is a Red Cross shelter. There is no official secondary emergency shelter. However, it is in the 100-year flood plan (Town of Newport, New Hampshire Hazard Mitigation Plan 2015).

There is an Emergency Operations Center located in the basement of the Police Station. The space appeared to be adequate for the size of anticipated emergency incidents. It did appear the space needed to be better maintained, organized and strategically laid out. A review of a large scale local incident, Severe Thunder Storms July 19, 2015, revealed potential areas for improvement. The regional event started happening at approximately 19:05 hrs. While several one to one communications took place, it took almost two and one half hours before the community/emergency leadership team met to create an overall plan. The Emergency Operations Center was never used. Important ICS positions: Operations, Planning, Logistics and Finance were never established and/or staffed. The National Incident Management System (NIMS), as required by the Town of Newport Emergency Operations Plan of 2010, was designed to assist communities address large scale emergencies. A major portion of the NIMS involves the use of the Incident Command System (ICS). The ICS, a scalable and expandable multidiscipline Management System, is the basis for managing today's Incidents. The use of ICS is required by the Town's Emergency Management Plan. The Emergency Operations Plan also contains Emergency Support Functions (ESFs). Attachment 8 contains the Federal Emergency Management Agency's ESFs.



Photo 17: Emergency Operations Center



Photo 18: Emergency Operations Center



Recommendation 3: The Emergency Operations Center should be enhanced and maintained in a ready status.

Recommendation 4: The Emergency Management Leadership Team should conduct annual drills to ensure the team's effectiveness.

Recommendation 5: Community Departments, Department Heads and Community Leadership should receive initial or refresher training in ICS.





5.0 FIRE DEPARTMENT



5.1 Organizational Statement/Mission Statement

While there is no Organizational Statement, the Fire Department does have a Mission Statement. It states; Newport Fire-EMS is a full services combination Fire and Emergency Medical Service provider operating as the divisions of Fire Operations and Emergency Medical Services. Each Division serves the community and its service area with dedicated and highly trained personnel. Each Division strives to work with one another to protect the life and property of our customers of our service area from the effects from fires and hazardous incidents whether natural or manmade in origin and handles the requests for emergency medical assistance (2013 Newport Fire-EMS Standard Operating Policies and Procedures, (March) 2016 Newport Fire-EMS Standard Operating Guidelines).

5.2 Organizational History

In 1832 the Newport Engine Co#1 was incorporated and purchased, by subscription, the hand tub "Dexter". In 1878, the hand tub "Newport" was purchased and put into Service. In 1872, the hand tub "Rapid" was purchase and the Engine Co. #2 was formed to take charge of the new unit (Annual Town Report for Newport, New Hampshire (pp. 25-30). (1998). Barret Press.). The first Steam Engine, the "Chateau" was purchased in 1886. The Department's first Line of Duty Death was Fire Fighter Rodney Tilton who was killed October 3, 1886 by a steam line from on top of the new Engine. An 1896 report listed the following equipment; a Silsby Steam Engine, a hose wagon with 900' of hose, a hose wagon with 500' of hose, a hose reel with 400' of hose, a hose sleigh with 1200 of hose, a hook and ladder with 55' extension ladder and assorted other ladders, 2,800 of rubber hose and a supply wagon which carried assorted appliances, fittings etc. The first motorized apparatus was purchased in 1920 and by 1929 the Department was fully motorized. The present Fire Station was built in 1912 and cost \$12,899.73. The station has been reinforced and modified repeatedly over the years (Annual Town Report for Newport, New Hampshire 1998).

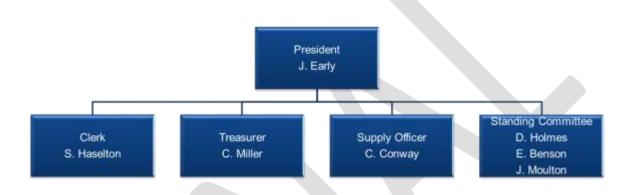


5.3 Support Organizations

5.3.1 Newport Firefighters' Association

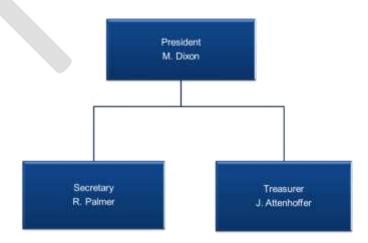
The Newport Fire Fighters' Association was created in 1982 to support the Newport Fire Fighters and Newport Fire - EMS Department. They are principally a support organization for the NFD and community needs.

5.3.1 Board of Directors/Non-Combat Structure



5.3.2 Newport Ambulance Attendant's Association.

There is a support organization for the EMS personnel as well. While it has no tactical authority, it does have a leadership structure.





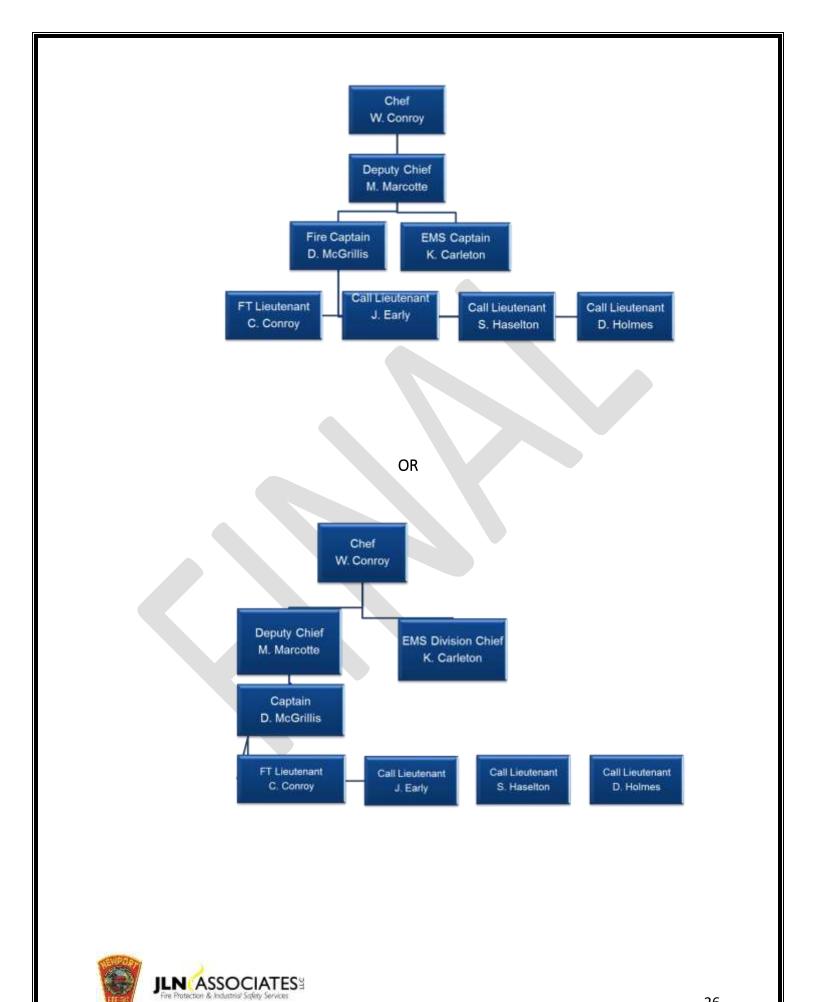
5.4 Chain of Command

At the beginning of the study, there was debate regarding the Chain of Command being used in the Newport Fire - EMS Department. During our research, the Chain of Command was changed in an attempt to address some of these concerns. The issue revolved around the direct line of supervision between the Fire Chief and the EMS Captain which by-passed the Call Deputy Chief. When the Fire Department assumed the EMS services, it was created as a standalone division. As a result, the Department Chain of Command can be run as traditional or with direct supervision of EMS as displayed below. It should be noted, however, the Deputy Chief should be in charge of the Career Captain/Division Chief during fire emergencies. This issue, however, shed light on a bigger topic involving the overall use of Leadership who are part of the Call membership in all aspects of the Department. In numerous interviews and the anonymous survey, failure to utilize the entire Chain of Command was referenced. In addition, it appeared the Call Deputy and Call Captain have significant experience, good reputations and are able to modify their schedules to be available. They should be utilized in the operation of the Fire Department. The failure of subordinate personnel, career or call, to follow direct orders from a higher ranking officer is the very essence of insubordination and is reason for significant discipline.

Recommendation 6: The use of Call Leadership should be increased and recommendations should receive higher consideration than in the past.

Recommendation 7: Department Rules and Regulations should be modified to directly address the issue of failing to follow orders as insubordination and appropriate discipline.





5.4.1 Policies and Guidelines

There are presently 3 individual sets of Standard Operating Guidelines in place for the Town of Newport Fire/EMS Department. The Career Staff, Call Members and EMS Responders all have specific guidelines for their operations. There are guidelines that are duplicated with multiple members who follow some or all of them. The existing documents should be modified into one all-encompassing document. In addition, these changes should be made with the input of the Department Leadership, Career and Call.

Recommendation 8: The multiple guidelines should be consolidated into one all-encompassing document utilizing all Department Leaders.

5.4.2 Responder Minimum Standards

Confusion exists regarding Fire Fighter and EMS participation. During the interview process there was an expectation the EMS personnel will cover an ambulance shift 12 hours a month. The 2013 Standard Operating Policies and Procedures, SOG # 210.1 require 18 hours minimum per month. During the interview process, minimum required participation was described as an experiment which requires Fire Fighters to respond to 10% of the Fire Responses. The 2016 Newport Fire-EMS Guidelines Section 101-Personnel Response Accountability requires Fire Fighters to respond to 10% of the calls for the fiscal year. It further calls for six month evaluations and conferences with those members not making the prescribed requirements. Failure to meet target solutions for participation could result in termination from the Department. There is a general feeling, at the leadership level, that strong enforcement of response standards, rules and guidelines may lead to an exodus of Call Members. Unfortunately, lack of discipline or the lack of rules and regulations being enforced often leads to a departure risk. Complicating matters is a feeling from the general group that everyone is not being treated equally.

Public Safety Organizations are quasi-military in nature, where individual respect, member accountability and personnel discipline is important. It is essential that all personnel are treated with respect and equality. A "Code of Conduct" guideline and its enforcement would be advantageous.

Recommendation 9: A "Code of Conduct" guideline should be created.

5.5 Fire Division

5.5.1 Services Offered

Public Fire Protection Services include, but are not limited to, fire suppression, fire prevention, fire investigations, public fire safety education, disaster management, rescue, emergency medical services, hazardous materials response, and response to other emergencies, as needed. To accomplish these missions, the Newport Fire - EMS Department operates out of the main station located at 11 Sunapee Street and a smaller second station at 15 Meadow Road.



NFPA 1201 states: The fire department shall have programs, procedures, and organizations for preventing the outbreak of fires in the community and to minimize the danger to persons and damage to property caused by fires that do occur. The fire department also shall carry out other compatible emergency services as mandated. The NFD has 57 Career and Volunteer members. They are divided into 2 divisions, Fire and EMS with some cross over participation as follows: 34 Fire Fighters, 17 of which are medically cross trained. Including the cross trained personnel, there are 40 Emergency Medical Services personnel. There are 21 members who only do EMS. There are also seven 7 career employees. The Career staffing is assignments are explained in the Staffing section (6.0).

5.5.1.1 Incident Reporting

According to the <u>Emergency Reporting</u> ™ software utilized by the Fire Department, in 2015, the NFD responded to 826 Fire Department calls for service. There appears to be a conflict between the Newport Police Department's (NPD) dispatch records and the Fire Department's records. The Police recorded 378 fire department responses. In 2015, the EMS Division's New Hampshire TEMSS reporting system recorded 1,479 responses. It should be noted, the number of EMS responses actually depicts the number of EMS contacts or patient treatment reports in the TEMSS system. For example, the treatment of three patients at a car accident would create three Patient Contact Reports (PCRs). The NPD recorded 1,165 EMS responses.

JLN found the fact that the Fire Station was listed under "Response by Property Use" 197 times or 24% of the time, unusual (Figure 8: 2015 FIRE Incidents by Property Use). Using Fire Station as Property Use is usually for walk-in reports of medical emergencies or fire calls. We researched the entries and found that calls were being generated for when coverage was needed at the station as a result of the Houseman covering ambulance calls. When there is only one EMS person on duty and an ambulance call comes in, the Houseman will make up the remainder of the crew. This then triggers the need for someone to be at the station. There is confusion relative to how the coverage should be reported. In addition to an EMS report, some members are filling out a Fire Report for the assistance rendered. If we do not consider this event one incident, the two reports, one fire and one EMS, would be appropriate. Some members, however, also fill out a Fire Report for the station coverage. We contacted the Nation Fire Incident Reporting System office at the U.S. Fire Administration. It would not be appropriate to report the second station coverage. It is part of supporting the EMS call. There needs to be consistency with the NFD incident dispatching and reporting.

Recommendation 10: Create a standard emergency reporting/dispatching system to be used by the Town.

The Newport Fire - EMS Department operates under the basic premise that all operations should result in the following primary objectives; the preservation of Life and its Safety, the methods needed for effective Incident Stabilization and efforts for proactive Property Conservation.



NFPA 1201: 4.3.5* The Emergency Services Organization shall provide customer service—oriented programs and procedures to accomplish the following:

- (1) Save lives
- (2) Prevent or mitigate fires, injuries, and emergencies
- (3) Work through a system of emergency management
- (4) Extinguish fire
- (5) Minimize damage to property and the environment
- (6) Protect critical infrastructure
- (7) Perform emergency medical services
- (8) Protect the community from other hazardous situations
- (9) Perform response to and mitigation of events of terrorism
- (10) Perform rescue services
- (11) Perform other community-related services

5.5.2 Response Data

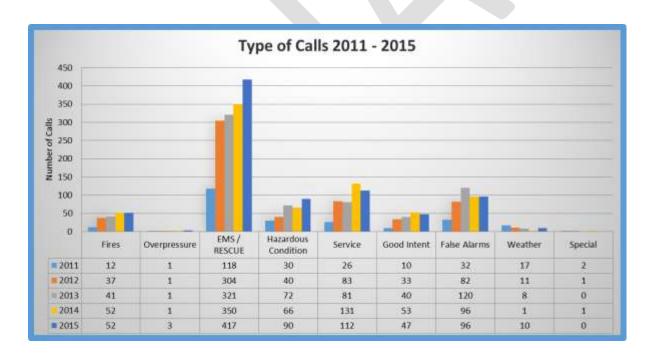


Figure 4: 2011-2015 FIRE Incidents by Type



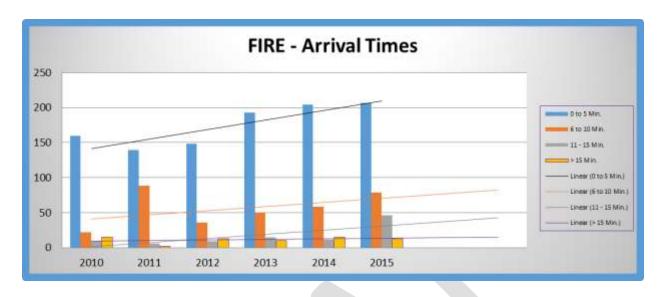


Figure 5: FIRE Arrival Times

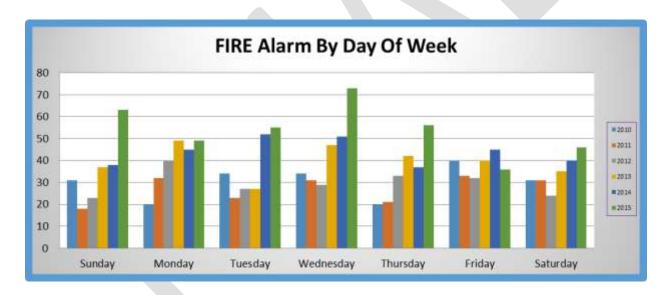


Figure 6: FIRE Alarms by Day of Week



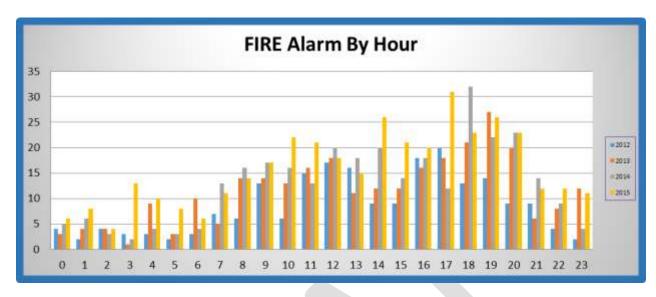


Figure 7: FIRE Alarms by Time of Day

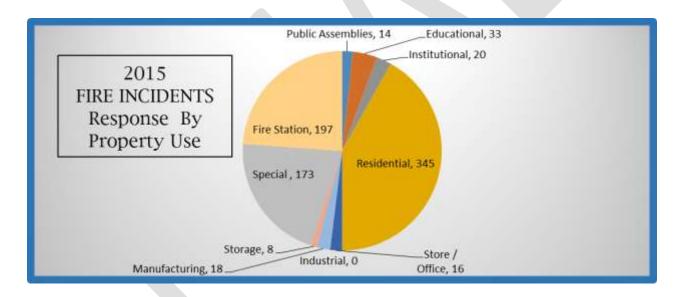


Figure 8: 2015 FIRE Incidents by Property Use



5.5.3 Responder Data

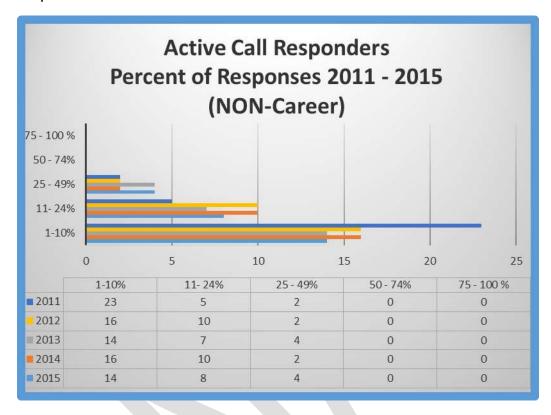


Figure 9: 2011-2015 Active Call Responders

The response data above shows the number of responders by percent participation for the years 2011 thru 2015. The Career Staff is not part of this figure. Due to the higher opportunity to respond as part of their work duties, the Career Staff is not part of the graph. This figure explores the changes of response patterns relative to the numbers of calls responded to. The highest numbers of responders for all 5 years is in the 1% to 10% of calls columns. This is typical. These members respond to 1 in 10 or less, of the number of calls per year. There is a significant drop in responders when we look at the 11% to 24% participation. The most dramatic reduction takes place when we review the 25% or greater participants. There are 4 or less call members responding a quarter of the time. These reductions in response are also typical in today's fire service. The challenge is to fight these losses and build the responders interest in coming to additional calls. The respect, inclusiveness, fair treatment, opportunity to succeed and moral support provided in a Code of Conduct Guideline as suggested in Recommendation 9 will help with this issue.

5.5.4 Training

In the 2015 Town of Newport Annual Report, the Fire Department reported, in addition to emergency response demands, an additional 1,200 hours were given for training and



professional development. The Department offers a monthly training program for its personnel. The program is well rounded.

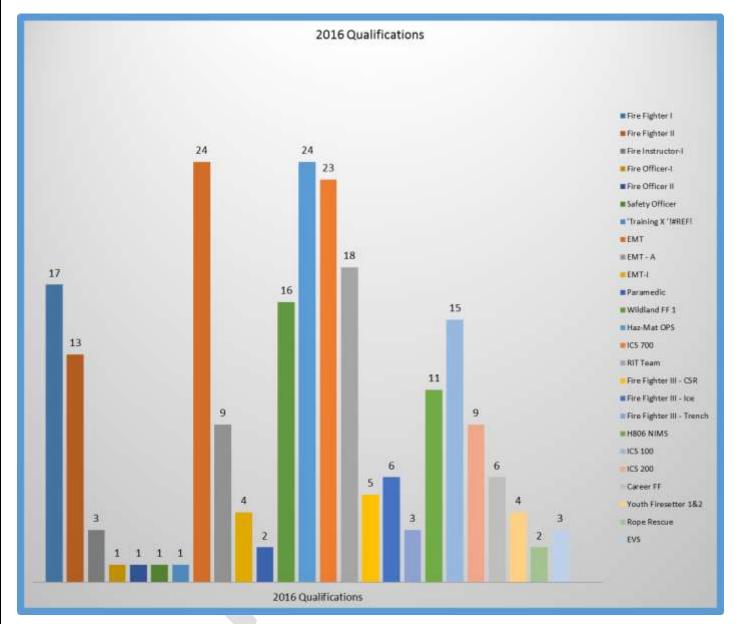


Figure 10: Membership Training Levels

Training levels were reviewed which confirmed an issue raised during the Department SWOT analysis. There is a disparity between training programs offered career staff and those offered to call personnel. Call personnel averaged between five to seven programs they were sponsored to attend, compared to the career force, who were allowed to attend roughly three times as many classes. One career officer has four times the number of certifications of call members and 25% more than the other career staff. Training is very important to ALL personnel and should be offered accordingly.



Recommendation 11: A Guideline should be created to ensure all members are provided the opportunity to attend responsibility appropriate level training. Further, Call members should be sponsored for Fire Fighter II and Fire Officer I Training. The Guideline should include internal advertisement requirements, a rubric to determine eligibility, record keeping and annual reporting.

5.5.5 Anonymous Survey

An anonymous survey was developed for the Newport Fire - EMS Department personnel to ensure everyone's thoughts and opinions were received by the evaluation team. The survey was by invitation only and available to NFD members. The complete results are in Attachment # 2. The questions and overall results are displayed below (Fig. 11). The respondent's choices were Agree, Agree Somewhat and Disagree. Seventeen respondents or 57% percent of the active personnel participated in the survey. They provided 338 specific responses to our request for examples related to the survey questions.

Questions:

- 1) There are positive aspects to being a member of the Newport Fire EMS Department.
- 2) There are negative aspects to being a member of the Newport Fire EMS Department.
- 3) There are positive reasons for community members to join the Newport Fire EMS Department.
- 4) There are negative reasons why community members do not join the Fire Department.
- 5) There are pressing issues you believe are critical to the Newport Fire EMS Department.
- 6) There are pressing issues you believe are critical to the Town of Newport.
- 7) There are things you DO NOT want to see changed in the Newport Fire Department.
- There are changes you would like to see for the Newport Fire EMS Department.
- 9) You would like to see changes with the Newport Fire EMS Department's Training programs.
- 10) Issues you believe need to be addressed in the report.
- 11) Issues you believe are holding the Newport Fire EMS Department back.



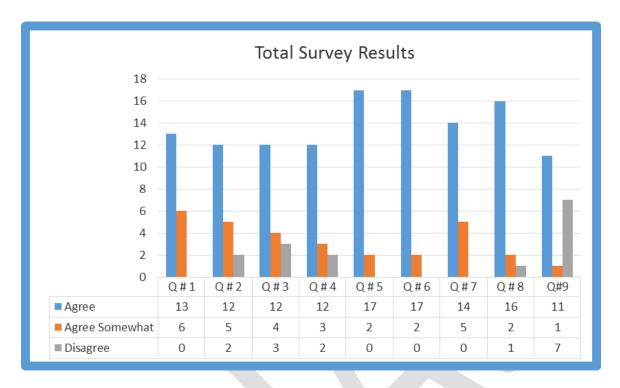


Figure 11: Anonymous Survey Results

5.5.5.1 Survey Results – Critical Issues

Multiple issues were raised through the Anonymous Survey. As expected, the existing atmosphere of distrust between the Board of Selectmen and the Fire Department is an issue. It was not, however, the largest issue [53 of 338 responses or 16%]. The Board's interest in the Fire Department has grown to significant proportions in an effort to ensure its efficient operation. Funding concerns and complaints which have been brought to the Selectmen have created an atmosphere where the Board has begun questioning daily operational decisions being made by the Fire Chief and his staff. This has led to resentment on the part of the responders. These issues can be addressed through improved communications and strategic meetings to resolve identified conflicts. The largest issues involved the need for management/leadership enhancement and specifically the prior empowerment of a Career Lieutenant [105 of 338 responses or 31%]. The repercussions of empowering the Lieutenant and concerns of nepotism were confirmed in multiple interviews. The remainder of the survey feedback dealt with multiple quality improvement issues.

The issue of nepotism can cause significant damage in an organization. It can lead to substantial fear and intimidation. When individuals feel they are above the rules, they can act out against other employees or citizens. Other members will stop making suggestions or participating beyond minimum requirements because they feel they are not appreciated. Having relatives as subordinates is not the definition of nepotism. Google defines nepotism as "the practice among those with power or influence of favoring relatives or friends, especially by giving them jobs". Family members can work for each other with proper controls in place.



Focused Research on Nepotism revealed the <u>Princeton University Human Resource Policy - 5.2.2 Nepotism & Personal Relationships in the Workplace</u> (Retrieved from https://www.princeton.edu/hr/policies/conditions/5.2/5.2.2/ on January 4, 2017). The policy included guidance for Supervisors regarding successful and positive workplace environments.

Supervisor's Responsibility "A supervisor bears an **affirmative responsibility** for sustaining a positive workplace environment and one which is conducive to the professional growth of all employees. A supervisor must be regarded as trustworthy and fair for such an environment to exist. It is important to understand that, even when arrangements have been made to minimize conflicts of interest regarding particular employment-related decisions, it is necessarily more difficult for a supervisor to be fair when a close relationship exists with an employee".

The direct supervision of family members and other employees can lead to multiple issues including intimidation and coercion against the other employees by the empowered family member. Given the concerns with nepotism involving existing employees, a practical plan should be initiated to counter existing concerns or potential problems. The plan should include the following;

- 1) Independent Executive or Leadership Level concurrence with decisions which profit the employee, i.e. Promotions, Special Duties or Projects which involve overtime or financial compensation.
- 2) Additional supervision between the Supervisor and Employee, i.e. other senior officers, career or volunteer.
- 3) A cares or concerns reporting system to report the appearance of nepotism or to respond to complaints should be created.
- 4) A follow-up system should be provided if concerns or complaints are not addressed in either direction. Discretion should be used when concerns and complaints are received. It should be remembered that not all reports will be legitimate. Communications regarding nepotism, however, should always be investigated and dispositions should be documented.

Recommendation 12: An Employee Concerns Policy should be developed to address nepotism and other quality of life issues for the membership.

5.6 Emergency Medical Services Division

In 1963, the EMS Division was started as a stand-alone Civil Defense unit. In 1964, they purchased the first ambulance from the Federal Government's Surplus Program. In 1967, Clinton Bartlett donated a new ambulance (Annual Town Report for Newport, New Hampshire (pp. 1-2). (2015)). The service continued to grow and expand its capabilities and



assets. In 1999, the Fire Department was re-organized and the Newport Ambulance was assimilated into the Department as a separate EMS Division.

5.6.1 Services Offered

The Newport Fire - EMS Department's EMS Division operates three ambulances out of two stations to provide 24-hour coverage to the community of Newport and the local area. Its members are a mix of Fire and EMS personnel. Several Fire Department members are cross trained in EMS. There are, however, members that only serve one service or the other. There are two paramedics and an assortment of Emergency Medical Technicians (EMTs), Advanced EMTs and EMT-Intermediates in the unit. The staffing for the ambulance involves Career, Call and Per-diem members. The EMS Captain is responsible for ensuring the ambulances are staffed. The Career personnel staff the ambulance during the day. Call and Per-diem members staff the units from 18:00 PM to 06:00 AM. Staffing the Ambulance during this time period is becoming more difficult and expensive.

5.6.2 Response Data

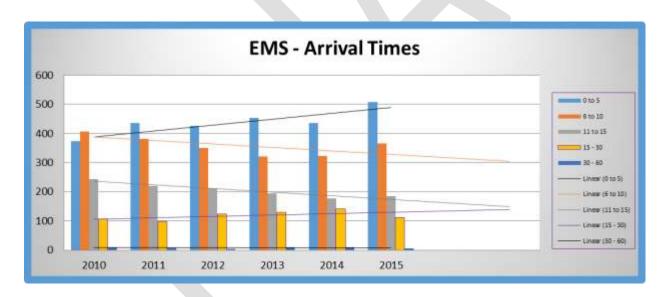


Figure 12: EMS Arrival Times



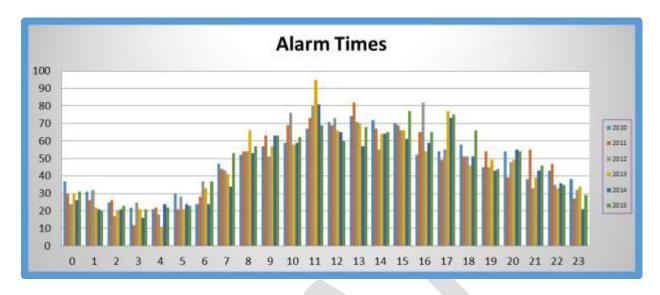


Figure 13: EMS Alarms by Time of Day

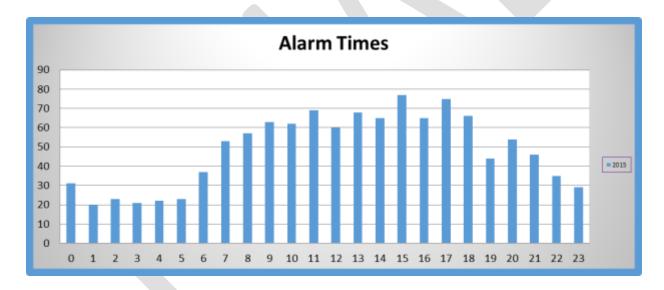


Figure 14: 2015 EMS Alarms by Time of Day

Figure 13 it shows a consistent response pattern through 2010-2015, further examination of the 2015 year's responses confirms a lull in activity after midnight and before 0600. Call personnel should be able to handle this time period.



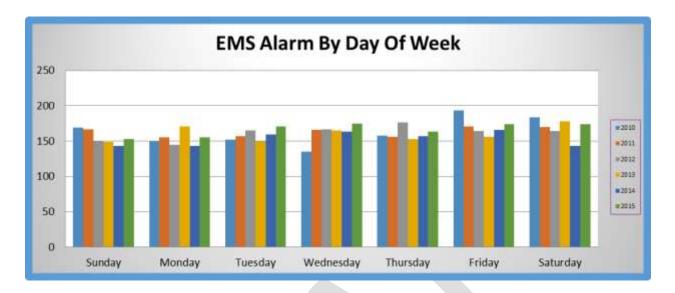


Figure 15: EMS Alarms by Day of Week

5.6.3 Responder Data

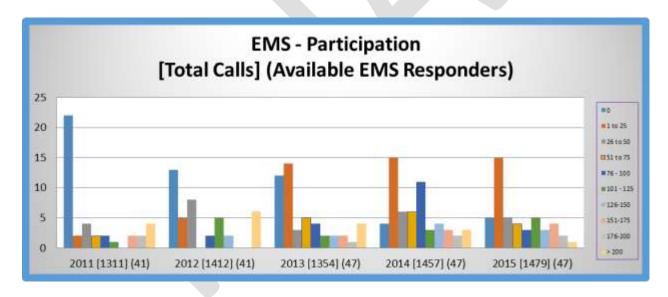


Figure 16: EMS Response Participation

5.6.4 Training

Captain Carleton is responsible for ensuring EMS training is conducted on a regular basis. The Department offers a monthly training program for its personnel and neighboring departments. Past students reported the EMS program was well rounded and planned. Fire training is conducted by the officers on a monthly basis as well.



5.6.5 Ambulance Staffing, Financial Challenges and Billing

As stated before, Career personnel staff the ambulance from 0600-1800. It should be understood that it takes two members to make an ambulance crew. There is a monthly scheduling meeting to give the Call personnel the opportunity to take evening 1800-000 and/or overnight 0000-0600 shifts. If someone takes a shift, they receive a standby pay of \$3.00 per hour to stand-by at home and \$13.00 per hour for any calls they respond to. This is the most cost effective way to cover these shifts. On a weekly basis, the EMS Captain reviews the upcoming schedule and determines what shifts are still vacant. For the remaining uncovered evening 1800-0000 shifts, Per-diem personnel are canvased to cover the shifts. If they accept the shifts, they cover from a station, and earn \$13.00 per hour. This is the next most cost effective plan. If only one person or no one is available for the 1800-0000 shift, three options are available. 1) If only one person is available, an on-duty Career Fire Fighter will make up the second person on the crew. 2) If no one is available, the on-duty Career Fire Fighter will respond and make patient contact to start treatment. Additional personnel will be called out and a Call Fire Fighter is activated to cover the call or stations. If no one is available, the call goes to mutual aid. The 0000-0600 shift is covered by Call personnel or, if needed, by callback procedures. This process for covering the evening and overnight shifts is in lieu of hiring additional Career personnel.

To offset the expenses of operating the ambulance service, the Town of Newport charges for the service. EMS service charges are prepared by the EMS Captain and forwarded to the Town Manager's secretary who sends out the bills. Presently, the collection rate is approximately 65% percent. There is a delay in the processing of the billing. As stated above, each report is reviewed by the EMS Captain to ensure both appropriate patient care and needed information and signatures. SOG # 3.1.1 of the 2013 SOP&P requires the duty crew to submit the required reports within 24 hours of the shift. This is not always accomplished. Given this is part of the Department's polices and New Hampshire Administrative rules, it should be completed or the involved members should not be offered the shifts.

In addition, Newport charges a contractual fee for providing the services to neighboring communities. During the recent past, concerns were raised by the Board of Selectmen regarding ensuring there are adequate resources in town to provide the expected services and abuses by the mutual aid partners. Countering this concern is a need to have the funding provided by the Ambulance. It should be noted the EMS division is able to provide mutual aid and require minimal mutual aid assistance back into the community. While these and multiple other issues contributed to the decision to reduce the EMS service area, funds collected through the delivery of EMS services have assisted many Fire and EMS Departments across the State and Nation in funding operations.

It does not appear to JLN that a business plan existed before or after the changes made by the Board of Selectmen. A solid business plan involving competitive bidding to neighboring jurisdictions, strict documentation to assist with billing, research into a commercial billing



service vs the existing system and improvements to the staffing plan could increase ambulance revenues while ensuring service to the citizens of Newport.

Recommendation 13: An EMS Business plan and the supporting requirements should be created to improve EMS Billing income.

5.7 Dispatch & Communications

5.7.1 Dispatch and Unit(s) Response by Type of Incident

Presently, the department utilizes a "Red Phone" or Hotline type of dispatch procedure. The 911 call is received by the NPD dispatcher and they ring the Fire station for direction. The onduty Fire Fighter then directs what resources are to respond. We had difficulty determining what standard procedures or guidelines are used for these decisions. This system is antiquated and has led to a lack of consistency with the process. The NPD has the capability, though Computer Aided Dispatching (CAD) software, to automatically dispatch appropriate units based on pre-determined and agreed upon criterion.

This issue has become a point of concern by the Board of Selectmen due to callback costs. A lack of clear direction regarding how many units respond to what, how many personnel (on duty or additional call back on overtime), are to respond, has created significant unease by the Board. Conversely, the use of career members through the callback process provides needed resources without the cost of fulltime positions. While it is common practice across the country to conduct callbacks for off-duty personnel for various types of serious emergencies, those types of incidents have been standardized and documented. This process, if managed correctly, can produce effective service levels. Given it being a focal point of much discussion, we have provided a Table to provide standardized response guidance relative to this issue. While this will help, Call-back policies and guidelines will be needed.

Recommendation 14: A callback guideline should be designed, justified and Instituted by the Chief of the Department.

Recommendation 15: The response designation procedure should be automated to ensure consistent services.



5.7.2 Standard Response Procedures

The NFD has a tiered response process. The definitions in Figure 17 are used relative to size and scope of responses (Forestry, Mass Casualty under development).

Still Alarm	Small or Simpler Incidents: – One Company, Houseman,
	Call Personnel
General Alarm	Large or More Complex Incidents: – Appropriate
	Apparatus, Houseman and All Personnel, Career Call Back
1 st Alarm, 2 nd , 3 rd , 4 th	Need for Additional Help. Mutual Aid Companies from
	throughout the area.
Box 100	Responses In Hydrant Area - Standard Mutual Aid
Box 200	Responses Outside Hydrant Area (plus or minus 40%) -
	More Tankers on Mutual Aid Assignments
Box 300	Responses in Commercial District - Larger Scale request
	for Mutual Aid

Figure 17: Response Types



A) Fire Incidents	
1) Structure Fire/Inside Structure	General Alarm
2) Box/Panel Alarms	General Alarm
3) Private Fire Alarm Activation	General Alarm
4) Smoke Detector Activation	General Alarm
5) Smoke Det./Alarm – Maintenance Issue	Still Alarm - Cold
6) Vehicle Fires	2 Engines
7) Truck/Cargo	2 Engines
7) Brush	1 Engines & Brush Unit
8) Outside Rubbish/Dumpster	2 Engines
9) Flooded Oil Burner	General Alarm
10) Marine	General Alarm
11 Bulk Storage/Tanks	General Alarm
12) Wires/Transformer	Still Alarm
,,	
B) Medical	
1) R-1	Still Alarm
2) Mass Casualty > 11 Victims	General Alarm
C) Rescue	
1) Motor Vehicle Accidents w/ Injuries	Still Alarm
2) Motor Vehicle Accidents w/ Entrapment	2 Engines up to Full*
3) Confined Space/Trench Rescue	General Alarm
4) Cold Water/Ice/Open Water Rescue	General Alarm
5) Building Collapse	General Alarm
6) Construction Accident Non–R1	General Alarm
7) Rescue from Heights	General Alarm
8) Search & Rescue (missing person)	Still Alarm
D) Hazardous Materials	2000
1) Motor Vehicle Accident – Liquids Spill	Still Alarm
2) Large Fuel Spill	General Alarm
3) Propane/Natural Gas Leak	General Alarm
4) Un-known Odor inside a building	General Alarm
5) Un-known Odor outside at/by Industry	General Alarm
6) Un-known Odor outside	Still Alarm
7) Fuel Oil inside	General Alarm
8) Fuel Oil outside	General Alarm
9) Carbon Monoxide – Maintenance Issue	Still Alarm General Alarm
10) Carbon Monoxide –	
11) Hazardous Materials Incident	General Alarm
G) Service Calls	
1) Flooded Basement	Still Alarm
2) Police Assist	Unit Requested

Commander Discretion

Figure 18: Response by Type of Emergency

3) Assistance Request/Investigation



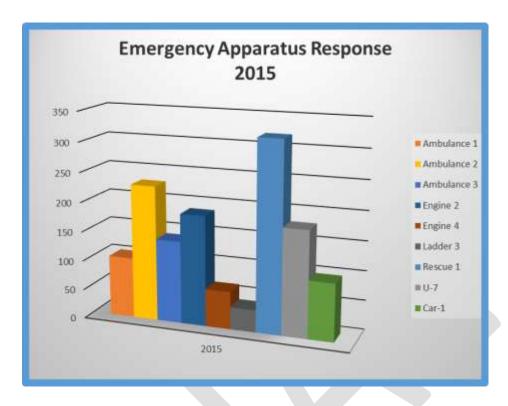


Figure 19: 2015 Apparatus Activity

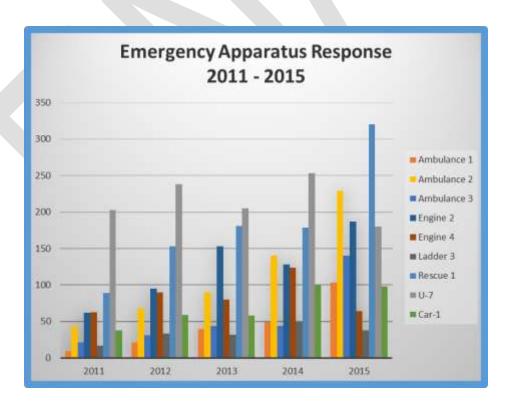


Figure 20: 2011 – 2015 Apparatus Activity



5.8 Hazardous Materials and Special Operations

The Newport Fire – EMS Department participates in the Midwestern New Hampshire Hazardous Materials Response Team.

5.9 Facilities

5.9.1 Headquarters



Photo 19: Fire Headquarters

The Fire Station, originally built in 1912, is wedged into the middle of the community adjacent to Town Hall. In some portions, space is extremely limited within the building. In others areas, space is available but not easily accessible or functional. In general, the building functions but is in need of functional space, significant updating and care. The building's offices and meeting space is not handicap accessible. Presently, there is no bunkroom for female members to sleep in. They resort to sleeping on a couch in the general meeting room. In addition, separate bathroom and shower facilities do not exist. The following photos depict the space limitations, conditions of the building and needed care. Significant funds may be needed to bring the building up to modern standards and requirements.



NEWPORT FIRE DEPARTMENT Second Floor Bunk Room Chief's Meeting Room Office DC Chief Closet EMS Capt. Office Office Bathroom

Figure 21: Headquarters Second Floor

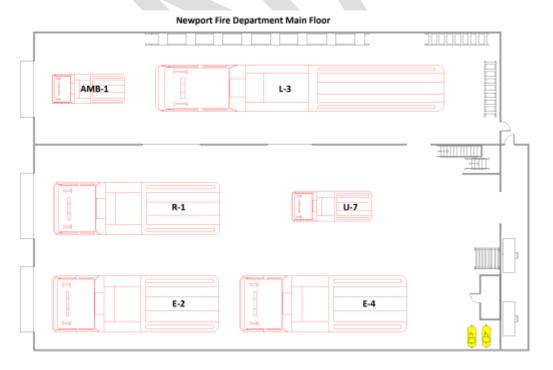


Figure 22: Headquarters First Floor



Space Limitations



Photo 20: Space Issues



Photo 22: Space Issues



Photo 21: Space Issues



Photo 23: Space Issues





Photo 24: Space Issues



Photo 25: Space Issues

General Conditions



Photo 26: Conditions



Photo 27: Conditions





Photo 28: Conditions

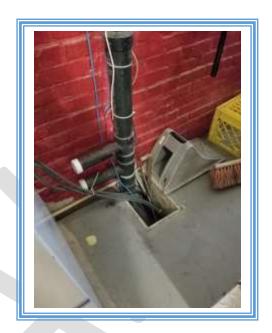


Photo 29: Conditions



Photo 30: Conditions





Photo 31: Conditions



Photo 32: Conditions

NEWPORT FIRE DEPARTMENT

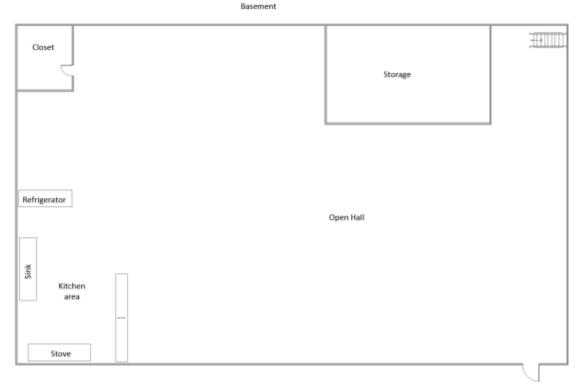


Figure 23: Headquarters Basement





Photo 33: Basement



Photo 34: Basement



Photo 36: Basement



Photo 35: Basement



Photo 37: Basement



Location	Adequacy
Apparatus Floor	No
Training/Meeting Room	Yes
Kitchen	Yes
Dispatch Radio room	No
Furnace Room	Yes
Storage Space	Yes
Office	No
Men's & Women's Bunkroom	No
Men's & Women's Bathrooms	No

Figure 24: Headquarters Size Matrix

5.9.2 Ambulance Station



Photo 38: Ambulance Station



The Department operates a second station out of the former Ambulance Building. This building has similar concerns relative to space and functionality. It is newer, however, and in better physical shape. This building is located very close to the Fire Headquarters. EMS Staffing float between the stations depending on who is working. There is one space used as an office, dayroom, kitchen and bunkroom. Issues arise, however, depending on who is staying at the station. Female members have expressed concerns regarding not having separate sleeping spaces. It should also be noted the sleeping accommodations are weak at best.

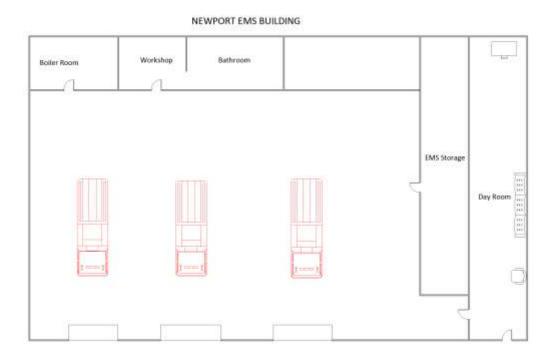


Figure 25: Ambulance Floor Plan



Space and Storage Limitations



Photo 39: Apparatus Floor



Photo 41: Space Issues



Photo 40: Space Issue



Photo 42: Space Issues



Location	Adequacy
Apparatus Floor	No
Training/ Meeting Room	No
Kitchen	Yes
Dispatch Radio room	No
Furnace Room	Yes
Storage Space	Yes
Office	No
Men's & Women's Bunkroom	No
Men's & Women's Bathrooms	No

Figure 26: Ambulance Station Size Matrix

Both stations need work. The Headquarters is in significant need of repairs and modifications. While Headquarters has space, it is not very functional. Given its age, additional structural issues should be anticipated. There are multiple flexibility and tactical reasons to have your resources together providing there are not response time issues. The two stations are so close, response times should not be an issue.

Recommendation 16: A plan for the replacement of both stations by a modern, handicap accessible, energy efficient and ergonomic building should started.



6.0 STAFFING

6.1 Fire vs Suppression

Responding personnel have a myriad of tactical responsibilities to prepare for regarding commercial locations, high hazard occupancies and high life safety facilities. These sites, in addition to typical residences, can tax the Newport Fire - EMS Department on arrival due to the number of resources required to conduct basic emergency operations and help evacuate and rescue individuals at the emergency scene. Fire dynamics are fuel, oxygen and time dependent.



Figure 27: Modern Fire Timeline and Flashover

The example above shows a fire progression from start to finish. It should be noted the process displayed above reaches its critical point (Flashover) between 3 and 5 minutes. The Star ("Flashover") on the example is at the 3 minute: 08 second point. Fire research and the national experience has led to the importance of the tactical objectives and time requirements stated below.

As stated below, specific actions need to be taken to ensure a successful outcome. Several specific challenges were apparent to the JLN team. First, the percentage of fire-type emergencies in the community is low compared to the other services offered by the Department. Second, residential home fires continue to be the number one cause of civilian fatalities. Third, other than heart attacks, thermal assault and structural collapse continue to kill fire fighters annually. Fourth, the low number of Newport Fire - EMS Department personnel available for responses can reduce operational capability.



The national experience for the minimum number of personnel for Fire Operations is 12-18 plus personnel within 8 minutes. These numbers are based on the individual/team jobs necessary to safely and successfully conduct fire suppression operations. These responsibilities include; Fire Attack (4), Water Supply/Shuttle (2-4+), Search and Rescue (4), Forcible Entry and Ventilation (2-4), Rapid Intervention Team and Command with an assistant (2). The numbers for personnel are for a 2,000 sq. ft. home. It is our opinion, given the response and survey information we have reviewed, the present system is not capable of delivering the appropriate number of human resources to adequately control a fire within the first 8 minutes.

NFPA 1720 (2014) 4.3.4* Upon assembling the necessary resources at the emergency scene, the fire department shall have the capability to safely commence an initial attack within 2 minutes 90 percent of the time.

Structure Fires: Career and/or volunteer staff respond to initial emergencies. Automatic or Alarm Driven Mutual Aid can respond on structural fires from neighboring Departments as part of Mutual Aid Agreements. There is significant Mutual Aid from numerous towns. Predesignated response procedures determine who will be the Rapid Intervention Team (RIT) etc.

6.2 NFPA 1710 & NFPA 1720

NFPA Standards - Deployment

There are two National Fire Protection Association Standards dealing with fire ground staffing. NFPA 1720 (2014) - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (Fig.28) and NFPA 1710 (2010) - Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (Fig.29).

The following figures show the principal differences regarding on scene staffing and response times. As is with many communities across the country utilizing Combination Departments, there is no clear delineation as to what standard to apply. JLN prefers to apply a task/risk based approach. For all emergencies there are a set of tasks that need to be performed for the emergency to have the best outcome possible. As described in the <u>Suppression Force Staffing</u> section of the report (6.0), tasks need to be performed and personnel are needed to do those tasks.



NFPA 1720 (2014) Table 4.3.2 Staffing and Response Time						
Area Demographics Responders Response Time (Min.) % of Time						
Suburban 500-1000 people/mi2 10 10 80						

Figure 28: NFPA 1720 Staffing and Response Times

NFPA 1710 (2010) Staffing and Response Time, 5.2.4.1 -5.2.4.2.2. (The initial full alarm assignment to a structure fire in a typical 2000 ft2 (186 m2), two-story single-family dwelling without basement and with no exposures)

Apparatus	Responders	Response Time (Min.)	% of Time
First Due Apparatus	4	4	90
Remaining Apparatus Water Supply	2	8	90
Remaining Apparatus Attack Line #2	2	8	90
Remaining Apparatus Attack Back up	2	8	90
Remaining Apparatus Search & Rescue	2	8	90
Remaining Apparatus Ventilation & Aerial	3	8	90
Remaining Apparatus Rapid Intervention	2	8	90
Incident Commander	1	8	90
Totals	18	8	90

Figure 29: NFPA 1710 Staffing and Response Times

6.2.1 Station(s) Staffing

The Town of Newport utilizes multiple shift configurations to ensure responders are in station and available to respond. The fulltime, 24 hour staff are referred to as "Housemen" and the work a rotation shift from 0600-0600, 24 hours on, followed by 2 days or 48 hours off, a 42 hour average. They are supported by a Fulltime Captain/Paramedic who works 0600-1800 hours Monday through Thursday. A Fulltime Fire fighter/EMT works 0600 – 1800 hours Tuesday through Friday. The minimum Staffing is 3 Fire Fighters/EMTs on duty approximately 18 hours per day. The schedule presented so far leaves several holes where only one person is on duty. Most notably, over the weekends. To address this issue, three forms of staffing are used; Call, Per-diem and Overtime. Call EMS personnel can sign up for coverage on a shift and are compensated \$3.00 per hour for standing by and \$13.00 if they respond to any calls. Per-diem personnel are hired to cover a shift if no Call EMS personnel are available or the Call EMS person lives outside the Town, in which case, they are compensated at the per-diem rate. If no one can be found, fulltime personnel are hired at the overtime rate.



TIMES	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
0600 - 0600	HOUSEMEN						
0600 - 1800	EMS CAPT.	EMS CAPT.	EMS CAPT.	EMS CAPT.	PER-DIEM	PER-DIEM	PER-DIEM
0600 - 1800	PER-DIEM	FF/EMT	FF/EMT	FF/EMT	FF/EMT	PER-DIEM	PER-DIEM
1800 - 0000	CALL/ EMS PER-DIEM						
0000 - 0600	CALL						

Figure 30: Station Staffing

6.3 Fire Mutual Aid

The Town of Newport participates in a robust Mutual Aid System. They give and receive Mutual Aid on a regular basis. They are part of KEARSARGE Valley Association Mutual Aid and the Southwest Regional Mutual Aid.

Two primary issues were raised relative to Mutual Aid during the study;

- 1) The amount of Mutual Aid given compared to received.
- 2) The appropriateness of some of the units designated to respond to Newport from receiving Mutual Aid.

Mutual Aid Agreements set forth the situations when Departments support each other and any special conditions each community feels necessary. An agreement needs to both deal with the tactical needs of the community's risk and the financial implications of that support. Ultimately, it is each municipality's responsibility to provide public safety services to their constituents.

Recommendation 17: A callback guideline should be designed, justified and Instituted by the Chief of Department.

Recommendation 18: The response designation procedure should be automated to ensure consistent services.

Mutual Aid is called based on the size and complexity of an incident. Traditionally, units are called based on two parameters. 1) Ability to respond quickly, i.e. neighboring Departments. 2) Needed Resources - specialized apparatus, equipment or staffing, i.e. ladders, specialized rescue equipment or number of responders coming. The Figure below could be used to determine what units should be assigned to respond on various levels of emergency.



Subject	Credit (Maximum)	
Proximity to Community, Neighbors	5	
Can Communicate with each other/Same ICS	4	
Number of Responders	3	
Skill Level of Responders	3	

A review of the present Run Cards was conducted and they appeared to be appropriate. A review of mutual aid given compared to received (Figure 32) showed comparable support. This information should be used in the mutual aid agreement process. The mutual aid agreement should be mutually beneficial to each department.

Recommendation 19: Run cards should be reviewed on a regular basis for effectiveness. All members of the Department Leadership should be involved in this process.



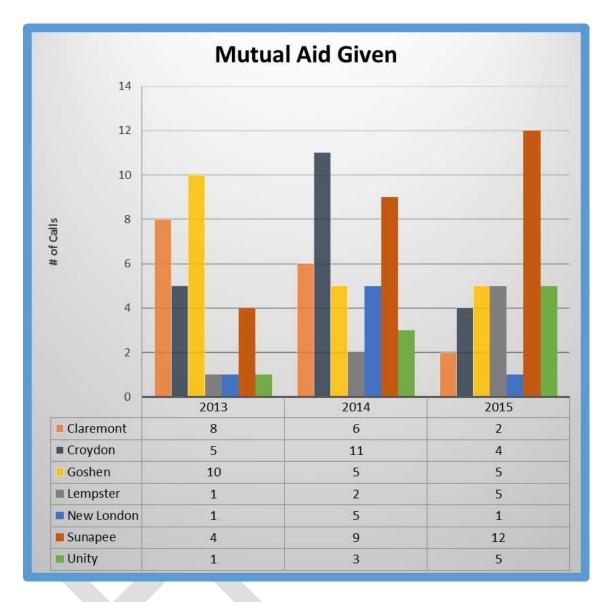


Figure 31: Mutual Aid Given

As stated above, Mutual Aid is called based on the situation being faced. Mutual Aid requests are documented as singular requests in the Incident Reporting Software. The requests, however, often involve multiple units from multiple Departments. In Figure 32 **Mutual Aid Given** by Newport, the Number of Times **Mutual Aid was Requested** by Newport and the number of times **Mutual Aid was Received** by Newport are depicted. Mutual aid received is the total number of times mutual aid companies came to Newport's aid. 1 mutual aid request could result in multiple mutual aid companies being received.



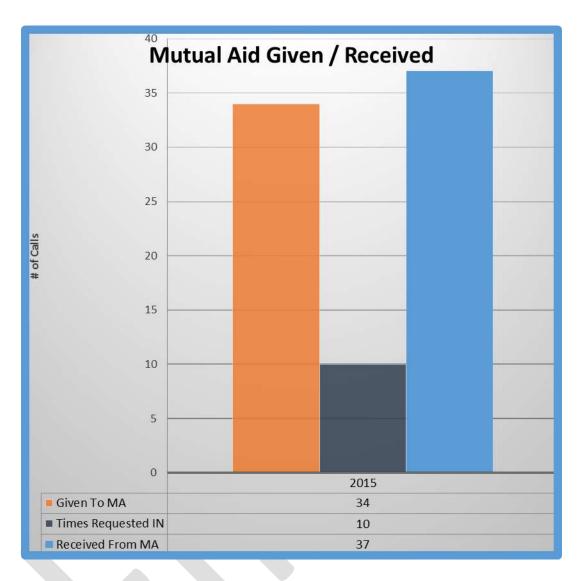


Figure 32: 2015 Fire Mutual Aid Comparison Given/Requested/Received



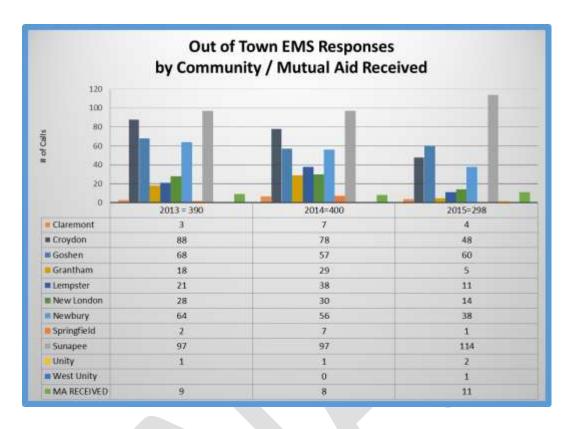


Figure 33: EMS Responses out of Town

In Figure 33 EMS responses out of town for 2013-2015 are depicted by community. It should be remembered that some of these jurisdictions are covered under EMS contracts. Regarding the issue of in-town EMS availability, the Town of Newport needed outside responses 9 times in 2013 (for 1,355 Patients), 8 times in 2014 (for 1,457 Patients) and 11 times in 2015 (for 1,479 Patients). The response system appears to be very robust.



7.0 CAPITAL IMPROVEMENT PLAN (CIP)

7.1 Rolling Stock

A review of the apparatus within the fire stations identified;

- Typical wear and tear that one would expect given the age of the apparatus.
- The conditions typical of being exposed to the New England climate.
- Wear and tear based on the average calls for service.

During the review of available documents, JLN found no comprehensive studies on apparatus life expectancy or clear-cut time frame for replacement. There were no definitive answers for how long a fire truck lasts. Regional differences are one factor cited for the absence of these studies. Variables such as weather, road conditions, run loads, and maintenance are listed as reasons for the inadequacy of any clear-cut information in this area (Peterson, 1994). Age, in itself, should not be the sole criteria for deciding to replace a fire apparatus. The vehicle's routine workload, its physical condition, and the degree of preventative maintenance it receives are usually more accurate indications of whether the apparatus is still reliable for first-line duty (Peters, 1994).

JLN did identify the publication of 'on average' data for apparatus replacement. These estimates ranged from 5 to 10, 10 to 15 years, and 15 to 20 years. Life expectancy varied greatly from one location to another. Generally, a 10 to 15 year life expectancy is normal for engines used daily in heavy to moderate response areas (Peters, 1994). For fire apparatus approaching or exceeding 15 to 20 years of age, corrosion, metal fatigue and crystallization in concealed areas can result in serious consequences (Freitag, 1984). Perhaps the most reliable of these resources, in reference to life service of fire apparatus, is the National Fire Protection Association (NFPA) Handbook, 17th Edition which states, "in general, a 10 to 15 year life expectancy is considered normal for first line pumping engines. In some types of service, including areas of high fire frequency, a limit of only 10 years may be reasonable for first line service" (Peterson, 1994).

The Chief stated there are written preventative maintenance and truck check plans along with SOG's. There are response plans in place for certain types of incidents for the Engine, Ladder, Rescue and Small Brush Apparatus. There are general SOGS that identify types of apparatus. The SOG's guidance was limited to driving, engagement, and staging discussions.

There is a general expectation of the life expectancy of fire apparatus to provide 15 years of front line service and 10 years of reserve or lighter duty service. Again, each locale is different but on average, these time frames are reasonable for all but the busiest municipal fire departments. It is a generally accepted fact that fire apparatus, like all types of mechanical devices, have a finite life. The length of that life depends on many factors, including vehicle mileage and engine hours, quality of the preventative maintenance program, quality of the driver training program, whether the fire apparatus was used within the design parameters,



whether the apparatus was manufactured on a custom or commercial chassis, quality of workmanship by the original manufacturer, quality of the components used, and availability of replacement parts, to name a few. In the fire service, there are fire apparatus with 8 to 10 years of service that are simply worn out. There are also fire apparatus that were manufactured with quality components, that have had excellent maintenance, and that have responded to a minimum number of incidents that are still in serviceable condition after 20 years. Most would agree that the care of fire apparatus, while being used, and the quality and timeliness of maintenance are perhaps the most significant factors in determining how well a fire apparatus ages.

7.2 Fire Equipment with CIP replacement dates

Rescue 1 2007 HME Rescue Pumper Purchased 2007 Replacement 2027 (20 yrs.)



Photo 43: Rescue 1

Engine 2 2002 HME/Ferrara Pumper Tanker Purchased 2003 Replacement 2023 (20 Yrs.)



Photo 44: Engine 2



Engine 4 1995 Spartan Pumper Purchased 1994 Replacement 2020 (26 Yrs.)



Photo 45: Engine 4

Ladder 5 2007 Ferrara Igniter Quint Purchased 2007 Replacement 2037 (30 Yrs.)



Photo 46: Ladder 5

Utility 7 GMC 2500 HD Utility Purchased 2007 Replacement 2020 (13 Yrs.)



Photo 47: Utility 7



Car 1 Ford Explorer Purchased 2013 Replacement 2023



Photo 48: Car 1

* Note: The Fire Department had in their plan to purchase a standalone tanker in 2015. Given the areas in town without water, the potential need for additional water is a risk. The concept of a 1,500-2,000 gallon water tank on the Engine 4 replacement would be a good compromise and should be considered.



7.3 EMS Equipment with CIP replacement dates

Ambulance 1 Purchased 2015 Replacement 2027 (12 Yrs.)



Photo 49: Ambulance 1

Ambulance 2 Purchased 2008 Replacement 2020 (12 Yrs.)



Photo 50: Ambulance 2

Ambulance 3 Purchased 2004 Replacement 2018 (14 Yrs.)



Photo 51: Ambulance 3



8.0 WATER SUPPLY

The community is hydranted but has areas that do not have water. The Fire Department has designed their responses based on whether the area has hydrants or not. The Town operates the water department. We are deferring water system recommendations to the existing Water System Study.





9.0 COMPARISON OF NEIGHBORING COMMUNITIES

Topic	Newport	Sunapee	Croydon	Unity	Bow
Population	+/- 6463	+/- 3365	+/- 764	+/- 1671	+/- 7573
Square Miles	+/- 43.6	+/- 21.1	+/- 37.4	+/- 36.9	+/- 28.2
Fire Calls	827 (15)	486	100	175	426
Members	57 Active	35 Active	11	8	29
Fire Service	Yes	Yes	Yes	Yes	Yes
EMS level	ALS-AMB	1 st . Resp.	1 st . Resp.	1 st . Resp.	ALS-AMB
Rescue Service	Yes	Yes	Yes	Yes	Yes
Haz-Mat	OPS	OPS	OPS	Awar.	Yes
SOPs/SOGs	3 versions	Yes	No	Yes	Yes
Engines	2	2	2	1	2
Engine Tankers	0	1	0	0	0
Tankers	0	1	0	0	2
Ladder	1	1	0	1	0
Rescue	1	1	1	1	1
Brush Trucks	1	1+ATV	0	0	1
Residential	Yes	Yes	Yes	Yes	Yes
Industrial	Yes	Yes	No	Yes	Yes
Commercial	Yes	No	No	No	Yes
Combination	Yes	Yes	No	No	Yes



10.0 KEY RESEARCH QUESTIONS

1) Is the present EMS system effective and efficient?

The existing EMS system is very effective. The use of fulltime, per-diem and call members cover a majority of the EMS calls. Funding for the EMS system should be reviewed and a business plan should be created which reconsiders the delivery of EMS to communities outside the Town. It is JLN's opinion that there is a reasonable compromise available involving the delivery of quality service to the Taxpayers of Newport and the funding that can be recouped by delivery of that same quality of care to neighboring communities.

2) What changes, if any, could be made to improve the delivery of EMS for the Town of Newport?

The difficulty filling call slots in the evenings between 1800-2400 hours is a concern. This issue will need to be addressed by some methodology. Included could be increasing call personnel participation requirements, increasing call stand-by pay, hiring additional per-diem for the shift or hiring additional fulltime staff for an evening swing swift, i.e. 1600-2400 shift Monday thru Friday. A mix of these concepts could be employed. Our research showed the call volume did drop after 2400 hrs.

3) What is the general health of the Newport Fire - EMS Department?

Fair: While the NFD delivers excellent emergency services, this rating is intended to address all aspects of the Department. The Newport Fire – EMS Department is facing many of the same issues impacting Fire and EMS Services across the Nation. The needs for services continues to increase and the types of services requested fall outside the traditional molds. Volunteerism is down and the needs of today's emerging workforce is different than in the past. While the traditional fire service is paramilitary and mission focused, today's candidates are more focused on how they are cared for and getting their personal needs addressed to succeed. It is apparent to us, that members of the Department do not believe everyone is treated equal generally. All personnel, male or female, need to be treated the same with respect by all members. In addition, there is a strong concern that certain members are treated special because of nepotism or friendships. This was by far the largest issue raised in the Anonymous Survey completed by a large number of members and our interviews. Following the family tradition is common in the fire service. In many cases, it is a great progression because of long-time family commitments to community service and caring for their fellow man. This process can also create difficulties based on how things are done and lack of an overarching corroboration process. Many times, family members or friends should benefit from their hard work and commitment. There needs to be a validated process understood



and approved by the general body to confirm who the best candidate to benefit from a process is. Whatever the benefit is.

Strong leadership is needed to deal with this and other issues. Leadership's confidence of knowing they have support throughout its chain of command makes strong leadership possible. The relationship between the Fire Department Leadership and the Board of Selectmen must be addressed and resolved. It is our experience that most issues can be worked out once open communication takes place.

4) Is the Newport Fire - EMS Department prepared to successfully handle emergencies at its Target Hazards?

The Newport Fire-EMS Department has trained its personnel to handle a wide range of emergencies. Additional training for call personnel, however, is needed for additional certifications. It possesses a large amount of specialized and traditional response equipment. They participate in a robust mutual aid system to bring additional resources. In general, they are prepared to handle the various emergencies they respond to and incidents at target hazards.



11.0 SPECIFIC CONCERNS FROM OUR RESEARCH

1) The relationship between the Fire Department Leadership and the Board of Selectmen.

Recommendation 2: The Fire Department Leadership, in conjunction with the Town Manager, should create a Strategic Plan for the next 5, 10 and 15 years. The Strategic Plan should then be reviewed and Approved or Disapproved by The Board of Selectmen.

Recommendation 13: An EMS Business plan and the supporting requirements should be created to improve EMS Billing income.

Recommendation 6: The use of Call Leadership should be increased and recommendations should receive higher consideration than in the past.

Recommendation 17: A callback guideline should be designed, justified and Instituted by the Chief of Department.

2) Equal Treatment of all personnel Career, Per-diem, Call. Nepotism Concerns.

Recommendation 7: Department Rules and Regulations should be modified to directly address the issue of failing to follow orders as insubordination and appropriate discipline.

Recommendation 9: A "Code of Conduct" quideline should be created.

Recommendation 11: A Guideline should be created to ensure all members are provided the opportunity to attend responsibility appropriate level training. Further, Call members should be sponsored for Fire Fighter II and Fire Officer I Training. The Guideline should include internal advertisement requirements, a rubric to determine eligibility, record keeping and annual reporting.

Recommendation 12: An Employee Concerns Policy should be developed to address nepotism and other quality of life issues for the membership.

Recommendation 14: A callback guideline should be designed, justified and Instituted by the Chief of Department.

3) Fire - EMS Form and Function Issues

Recommendation 8: The multiple guidelines should be consolidated into one all-encompassing document utilizing all Department Leaders.

Recommendation 10: Create a standard emergency reporting/dispatching system to be used by the Town.

Recommendation: 15: The response designation procedure should be automated to ensure consistent services.



Recommendation 16: A plan for the replacement of both stations by a modern, energy efficient and ergonomic building should started.

Recommendation 18: The response designation procedure should be automated to ensure consistent services.

Recommendation 19: Run cards should be reviewed on a regular basis for effectiveness. All members of the Department Leadership should be involved in this process.

4) Emergency Management Enhancement

Recommendation 1: The Airport and Newport Fire - EMS services should conduct a table-top drill on a bi-annual basis.

Recommendation 3: The Emergency operations Center should be enhanced and maintained in a ready status.

Recommendation 4: The Emergency Management Leadership Team should conduct annual drills to ensure the team's effectiveness.

Recommendation 5: Community Departments, Department Heads and Community Leadership should receive initial or refresher training in ICS.



12.0 RECOMMENDATION CHECKLIST FOR NEWPORT FIRE - EMS DEPARTMENT

Recommendation 1: The Airport and Newport Fire - EMS services should conduct a table-top drill on a bi-annual basis.
Recommendation 2: The Fire Department Leadership, in conjunction with the Town Manager, should create a Strategic Plan for the next 5, 10 and 15 years. The Strategic Plan should then be reviewed and Approved or Disapproved by The Board of Selectmen.
Recommendation 3: The Emergency operations Center should be enhanced and maintained in a ready status.
Recommendation 4: The Emergency Management Leadership Team should conduct annual drills to ensure the team's effectiveness.
Recommendation 5: Community Departments, Department Heads and Community Leadership should receive initial or refresher training in ICS.
Recommendation 6: The use of Call Leadership should be increased and recommendations should receive higher consideration than in the past.
Recommendation 7: Department Rules and Regulations should be modified to directly address the issue of failing to follow orders as insubordination and appropriate discipline.
Recommendation 8: The multiple guidelines should be consolidated into one all-encompassing document utilizing all Department Leaders.
Recommendation 9: A "Code of Conduct" guideline should be created.
Recommendation 10: Create a standard emergency reporting/dispatching system to be used by the Town.
Recommendation 11: A Guideline should be created to ensure all members are provided the opportunity to attend responsibility appropriate level training. Further, Call members should be sponsored for Fire Fighter II and Fire Officer I Training. The Guideline should include internal advertisement requirements, a rubric to determine eligibility, record keeping and annual reporting.
Recommendation 12: An Employee Concerns Policy should be developed to address nepotism and other quality of life issues for the membership.
Recommendation 13: An EMS Business plan and the supporting requirements should be created to improve EMS Billing income.
Recommendation 14: A callback guideline should be designed, justified and Instituted by the Chief of Department.



☐ Recommendation: 15: The response designation procedure should be automated to ensure consistent services.
☐ Recommendation 16: A plan for the replacement of both stations by a modern, handicap accessible, energy efficient and ergonomic building should started.
☐ Recommendation 17: A callback guideline should be designed, justified and Instituted by the Chief of Department.
☐ Recommendation: 18: The response designation procedure should be automated to ensure consistent services.
☐ Recommendation 19: Run cards should be reviewed on a regular basis for effectiveness. All members of the Department Leadership should be involved in this process.



13.0 REFERENCES

Chronology of Newport, NH, Evan Hill, 14 Sept. 2007

http://www.city-data.com/city/Newport-New-Hampshire.html

http://www.newportnh.net/

http://factfinder.census.gov/

https://www.nh.gov

Annual Town Report for Newport, New Hampshire, 1998

<u>Fire Protection Handbook</u>, 18th and 19th Edition, National Fire Protection Association, Quincy, MA.

NFPA 1001 -2002 Edition, <u>Standard for Fire Fighter Professional Qualifications</u>, National Fire Protection Association, Quincy, MA.

NFPA 1141 - 2003 Edition, <u>Standard for Fire Protection in Planned Building Groups</u>, National Fire Protection Association, Quincy, MA.

NFPA 1201 - 2000 Edition, <u>Standard for Developing Fire Protection Services for the Public</u>, National Fire Protection Association, Quincy, MA.

NFPA 1720 - 1999 Edition, <u>Standard for the Organization and Deployment of Fire Suppression</u>
<u>Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments</u>, National Fire Protection Association, Quincy, MA.

NFPA 1500 – 2002 Edition, <u>Standard on Fire Department Occupational Safety and Health Program National Fire Protection Association</u>, Quincy, MA.

NFPA 1901 - 2003 Edition, <u>Standard for Automotive Fire Apparatus</u> National Fire Protection Association, Quincy, MA.

NFPA 1021 – 2003 Edition, <u>Standard for Fire Officer Professional Qualifications</u>, National Fire Protection Association, Quincy, MA.

NFPA 1041 – 2002 Edition, <u>Standard for Fire Service Instructor Professional Qualifications</u>, National Fire Protection Association, Quincy, MA.

29CFR1910.134, OSHA Respiratory Protection.

29CFR 1910.120, OSHA Hazardous Waste Operations and Emergency Response.



<u>Public Protection Survey Information for Areas without Water Mains</u>, ISO Commercial Risk Services, Inc., Quincy, MA.

The Department of Transportation 2015 Emergency Response Guidebook.

Emergency Operations Plan, Town of Newport 2010.



14.0 PHOTOS

Photo 1: Newport by Google Earth	9
Photo 2: Sugar River Valley	16
Photo 3: Towle Middle School	16
Photo 4: Newport Middle & High Schools	16
Photo 5: Bulk Propane Storage	17
Photo 6: Emergency Controls	17
Photo 7: Ruger Industries	17
Photo 8: RDS Machine	17
Photo 9: Goodrich Oil	17
Photo 10: Goodrich Oil Storage	
PHOTO 11: GOODRICH OIL STORAGE	18
Photo 12: LaValley of Newport	18
Photo 13: Main Street	18
Photo 14: Airport Hanger	19
Photo 15: Emergency Station	19
Photo 16: Aviation Fuel	19
Photo 17: Emergency Operations Center	21
Photo 18: Emergency Operations Center	21
Photo 19: Fire Headquarters	45
Photo 20: Space Issues	47
Photo 21: Space Issues	47



Photo 22: Space Issues	47
Photo 23: Space Issues	47
Photo 24: Space Issues	48
Photo 25: Space Issues	48
Photo 26: Conditions	48
Photo 27: Conditions	48
Photo 28: Conditions	49
Photo 29: Conditions	49
Photo 30: Conditions	49
Photo 31: Conditions	50
Photo 32: Conditions	50
Photo 33: Basement	51
Photo 34: Basement	51
Photo 35: Basement	51
Photo 36: Basement	51
Photo 37: Basement	51
Photo 38: Ambulance Station	52
Photo 39: Apparatus Floor	54
Photo 40: Space Issue	54
Photo 41: Space Issues	54
Photo 42: Space Issues	54
Photo 43: Rescue 1	65



Photo 44: Engine 2	 65
Photo 45: Engine 4	 66
Photo 46:Ladder 5	 66
Photo 47: Utility 7	 66
Photo 48: Car 1	 67
Photo 49: Ambulance 1	 68
Photo 50: Ambulance 2	 68
Photo 51: Ambulance 3	 68



15.0 FIGURES

Figure 1: Community 2014 Employment by Percentage	10
Figure 2: Ambulance/Fire Budgets	13
Figure 3: Newport NH Home Sales from city-data.com	14
Figure 4: 2011-2015 FIRE Incidents by Type	29
Figure 5: FIRE Arrival Times	30
Figure 6: FIRE Alarms by Day of Week	30
Figure 7: FIRE Alarms by Time of Day	31
Figure 8: 2015 FIRE Incidents by Property Use	31
Figure 9: 2011-2015 Active Call Responders	32
Figure 10: Membership Training Levels	33
Figure 11: Anonymous Survey Results	35
Figure 12: EMS Arrival Times	37
Figure 13: EMS Alarms by Time of Day	38
Figure 14: 2015 EMS Alarms by Time of Day	38
Figure 15: EMS Alarms by Day of Week	39
Figure 16: EMS Response Participation	39
Figure 17: Response Types	42
Figure 18: Response by Type of Emergency	43
Figure 19: 2015 Apparatus Activity	44
Figure 20: 2011 – 2015 Apparatus Activity	44
Figure 21: Headquarters Second Floor	46



Figure 22: Headquarters First Floor	46
Figure 23: Headquarters Basement	50
Figure 24: Headquarters Size Matrix	52
Figure 25: Ambulance Floor Plan	53
Figure 26: Ambulance Station Size Matrix	55
Figure 27: Modern Fire Timeline and Flashover	56
Figure 28: NFPA 1720 Staffing and Response Times	58
Figure 29: NFPA 1710 Staffing and Response Times	58
Figure 30: Station Staffing	59
Figure 31: Mutual Aid Given	61
Figure 32: 2015 Fire Mutual Aid Comparison Given/Requested/Received	62
Figure 33: FMS Responses out of Town	63



16.0 ATTACHMENTS

Attachment 1 SWOT Analysis

Attachment 2 Anonymous Survey

Attachment 3 Apparatus Matrix

Attachment 4 Apparatus Operators Relative to Station Locations to Drive Apparatus

Attachment 5 High Risk Locations

Attachment 6 Life Safety Concerns

Attachment 7 Applicable NFPA Standards

Attachment 8 Emergency Management Emergency Support Functions



Attachment 1- Strengths, Weaknesses, Opportunities and Treats Analysis

A **S**trengths **W**eaknesses **O**pportunities **T**hreats analysis was conducted as part of the Fire Department meeting. These are the notes from that meeting.

Strengths: (2 Easel sheets)

Quality Service.

Team Work.

Apparatus/Equipment.

Diversity/Outside Skills.

In –House training, up to date.

Experience.

Self-contained, services offered, Training, hazardous Materials, EMS, Technical Rescue.

Cross Trained, multiple members both Fire and EMS.

Handle the Workload.

Response Times are good.

Mutual Aid and Support Relationships.

Members go with the flow and are adaptable.

Members think outside the box.

Weaknesses (4 Easel sheets)

Economics/Budget.

1 Medic in Department (only).

Weekday/Weeknight Attendance.

1 Fire Fighter on 24 Hrs.

Second Calls.

Manpower > Increased Risk from Conditions.

Chain of Command Use/Lack of Use.

Non-Emergent Calls/Skipping.

Dispatching – Consistency/Call Answering:

- Police First.
- Training for Fire Type Calls.
- Upper Level Issue Chiefs.

Poor Marketing and Poor Publicity.

EMS Open Shifts.

EMS Pay level for Shifts.

EMS Differences \$3 vs \$13.00 hour.

Funding for Training, * Call can only get funded for FF1 level*.

Community Zoning.

Morale needs to go up/Low respect for Fire Department.



Selectmen Increased Ambulance Fees.

Loss of Business outside of Town.

Increase in Taxes.

Job Security.

Communications between Elected Officials and Emergency Services.

The Parking Lot behind the Fire Station Freezes in Winter.

Ability to work within the Budget.

New London coming into Newport when Newport can't go into New London area.

There is confusion regarding Newport's responsibility and permission to honor Mutual Aid.

Requests from NON-Contract communities.

Is the Dispatch Center refusing requests?

Opportunities (1 sheet)

Make Community Better.

Make a Difference.

Grow the Department and its Skill Set.

Create Call Requirement.

Mutual Aid.

Return to Lost Call Areas.

Large Taxpayers, People Help, Funding, Support.

Threats (1 Sheet)

Morale Continues to fall.

Radio Communications in Ruger, Safety Issue, Big Bad Buildings.

Radios in General.

Town Owned Buildings.

Exhaust.

Ceilings.

Continued Funding and Adequacy.

Micro-Management of the Fire Department Continues to Increase.

Rumor Control.



Attachment 3- Apparatus

Rescue 1
2007 HME Rescue Pumper
1250 GPM Pump
750 Gallon Tank
Rescue Equipment
1000' 4" Supply Line
2.5" and 1.75" Attack Lines



Engine 2
2002 HME/Ferrara Pumper Tanker
1250 GPM Pump
1800 Gallon Tank
1000' 4" Supply Line
1.75" Attack Line



Ladder 3
2007 Ferrara Igniter Quint
107 Aerial Ladder
2000 GPM Pump
300 Gallon Tank
600' 4" Supply Line
2.5" and 1.75" Attack Lines





Engine 4
1995 Spartan Pumper
1250 GPM Pump
750 Gallon Tank
Vehicle Extrication Equipment
2000' 4" Supply Line
Blitzfire with 300' of 2.5" Hose
1.75 Attack Line



Utility 7
2007 GMC 2500 HD Utility
Forestry Equipment
Water Rescue Equipment
Rope Rescue Equipment



Ambulance 1 2015 Chevrolet Road Rescue Advance Life Support Unit





Ambulance 2 2008 Advance Life Support Unit Bariatric Capable



Ambulance 3 2004 Advance Life Support Unit



Car 1 2013 Ford Explorer Command Vehicle+





Attachment 4 - Apparatus Operators relative to Station locations to drive apparatus.

ID	Address	HQ Miles Time	CO#2 Miles Time
C-1	393 Oak St.	2 Mi. 5 Min.	2.1 Mi. 5 Min.
C-2	248 N. Main St.	.9 Mi 2 Min.	1 Mi. 3 Min.
C-3	93 Schoolhouse Rd.	1.7 Mi. 4 Min.	2 Mi. 7 Min.
C-4	48 Alexander Ave.	2.8 Mi. 7 Min.	2.9 Mi. 7 Min.
C-5	376 Bacon Rd.	24 Mi 35 Min.	25 Mi. 35 Min.
C-6	258 Maple St.	1 Mi. 3 Min.	1.2 Mi. 5 Min.
C-7	29 Old Goshen Rd.	1.6 Mi. 4 Min.	1.8 Mi. 6 Min.
C-8	57 Edgemont Rd.	6 Mi. 10 Min.	6.4 Mi. 12 Min.
C-9	97 Laurel St.	.5 Mi. 3 Min.	.7 Mi. 4 Min.
C-10	14 Fairbanks Rd.	.9 Mi. 3 Min.	1 Mi. 4 Min.
F-15	32-34 Central St.	.6 Mi 2 Min.	1 Mi. 4 Min.
F-16	1070 John Stark Highway	5.3 MI. 8 Min	5.3 Mi. 8 Min.
F-19	2 PSYZ Rd.	3.1 Mi. 8 Min.	3.4 Mi. 10 Min.
F-23	6 Belknap CT.	.3 Mi. 1 Min.	. 2 Mi. 1 Min.
F-25	155 Unity Stage Rd.	15.2 Mi. 28 Min.	15.2 Mi. 28 Min.
F-26	9A Fairbanks Rd.	.8 Mi. 3 Min.	.9 Mi. 4 Min.
F-29	90 Whitcher Rd.	2 Mi. 5 Min.	1.9 MI. 5 Min.
A/C 1	12 Golf Dr.	1Mi. 4 Min.	.2 Mi. 5 Min.



Attachment 5 - Potential Hazardous Materials Incident Properties

Company	Location	Process	Hazards	Distance from NFD (miles)	Travel Time (minutes)
Goodrich Oil Company and Propane	7 Putnam Rd.	Fuel Sales	Fire/Explosion	.9	3
Goodrich Propane	63 NH RT 11	Fuel Storage	Fire/Explosion	3.4	6
Citgo Station	571 Sunapee St.	Fuel Sales	Fire	2.9	5
Ruger	411 Sunapee St.	Manufacturing	Industrial Process	1.7	3
LaValley Hardware & Building Supply	247 Sunapee St.	Mercantile Sales	Products	1.4	3
Parts Plus Auto	67 Sunapee St.	Mercantile Sales	Products	.2	1
Irving Station	19 Elm St.	Fuel Sales	Fire	.2	1
Parlin Airfield	8 Airport Rd.	Airport	Field and Fuel	1.7	4
Noise-R-Us Fireworks	206 John Stark HWY	Firework Sales	Fireworks	1.4	3
Newport DPW	442 S. Main St.	Repair Facility	Fuels and Process	1.9	4
Stones Auto Body	613 Unity Rd.	Repair Facility	Fuels and Process	3.3	7



Attachment 6 - Life Safety Concerns

Properties with Significant Life Safety Concerns

Property	Location	Concern	Distance from NFD (miles)	Travel Time (minutes)
Newport Middle/ High School	245 N. Main St.	Student Population	.9	3
Newport Middle School	245 N. Main St.	Student Population	.9	3
Granite Hill School	135 Elm St.	Student Population	.9	3
Richards Elementary School	21 School St.	Student Population	.2	1
Towle Elementary School	86 N. Main St.	Student Population	.2	1
Newport Montessori School	96 Pine St.	Population	.7	2
South Congregational Church	20 Church St.	Congregation	.4	8
Sunshine Baptist Church	312 Sunapee St.	Congregation	1.2	3
Summercrest Senior Living	167 Summer St.	Occupants	.7	2
Arbor Crest Mental Health	163 Summer St.	Occupants	.7	2
Evangelical Church	70 Laurel St.	Congregation	.4	3
Episcopal Church- the Epiphany	65 Park St.	Congregation	.2	1
St. Patrick Catholic Church	32 Beech St.	Congregation	.3	6
St. Vasilios Greek Orthodox Church	45 Winter St.	Congregation	.4	2



Attachment 7 – NFPA Standards

Complied with or used Yes/No	NFPA STANDARDS
	HIGH FREQUENCY
YES	NFPA 471 Recommended practices for responding to hazardous materials incidents.
YES	NFPA 472 Standard for competence of responders to hazardous materials and weapons of mass destruction incidents.
YES	NFPA 473 Standard for competencies for EMS personnel responding to has materials and weapons of mass destruction incidents.
YES	NFPA 101 Life safety code.
YES	NFPA 1000 Standard for fire service professional qualifications accreditation and certification systems.
YES	NFPA 1001 Standard for firefighter professional qualifications.
YES	NFPA 1002 Standard for apparatus operator professional qualifications.
YES	NFPA 1006 Standard for technical rescuer professional qualifications.
YES	NFPA 1021 Standard for fire officer professional qualifications.
NO	NFPA 1026 Standard for incident management personnel qualifications.
NO	NFPA 1035 Standard for professional qualifications for fire and lay safety educator.
YES	NFPA 1041 Standard for fire instructor professional qualification.
NO	NFPA 1250 Recommended practices in fire and emergency service organization risk management.
YES	NFPA 1401 Recommended practice for fire service training reports and records.
YES	NFPA 1403 Standard on live fire training evolutions.
?	NFPA 1404 Standard for fire service respiratory protection training.
NO	NFPA 1410 Standard on training for initial emergency scene operations.
YES	NFPA 1500 Standard on fire Department occupational safety and health program.
YES	NFPA 1521 Standard for fire Department safety officer.
YES	NFPA 1561 Standard on emergency service incident management system.
YES	NFPA 1581 Standard on fire Department infection control program.
YES	NFPA 1582 Standard on comprehensive occupational medical program for fire departments.
YES	NFPA 1670 Standard on operations and training on technical search and rescue incidents.
YES	NFPA 1851 Standard on the selection care and maintenance of protective ensembles for structural firefighting.
YES	NFPA 1852 Standard on selection care and maintenance of open circuit self-contained breathing apparatus.
YES	NFPA 1901 Standard for automatic fire apparatus.
NO	NFPA 1914 Standard for testing fire Department aerial devices.
NO	NFPA 1915 Standard for fire apparatus preventive maintenance program.
YES	NFPA 1932 Standard on use maintenance and service testing of in-service fire Department ground ladders.
YES	NFPA 1962 Standard for the care, use, inspection, service testing, and replacement of fire hose, couplings, nozzles, and fire ,hose appliances.



YES	NFPA 1971 Standard on protective ensembles for structural firefighting and proximity firefighting.
YES	NFPA 1981 Standard on open circuit self-contained breathing apparatus for emergency services.
YES	NFPA 1982 Standard on personal alert safety systems.
	MEDIUM FREQUENCY
YES	NFPA 1 Fire Code.
YES	NFPA 10 Portable fire extinguishers.
YES	NFPA 13 Standard for fire sprinklers.
YES	NFPA 14 Standard for installation of standpipe hose systems.
?	NFPA 450 Guide for emergency medical services and systems.
?	NFPA 551 Guide for the evaluation of fire risk assessments.
YES	NFPA 1031 Standard for professional qualifications for fired inspector or plan examiner.
YES	NFPA 1033 Standard for professional qualifications for fire investigator.
NO	NFPA 1600: Standard on Disaster/Emergency Management and Business Continuity Programs
YES	NFPA 1936 Standard on power rescue tools.
YES	NFPA 1951 Standard on protective ensembles for technical rescue incidents.
	LOWEDFOLIENCY
	LOW FREQUENCY NUEDA 20 Elementale and combactible liquid as de
	NFPA 30 Flammable and combustible liquid code.
	NFPA 30 A code for moral fuel dispensing.
	NFPA 31 Standard for the installation of oil burning equipment.
	NFPA 54 National fuel gas code.
	NFPA 55 Compressed gas in cryogenic fuel.
	NFPA 58 Liquid petroleum gas code.
	NFPA 70 National electrical code.
	NFPA 72 National fire alarm and signaling code.



Attachment 8 - Emergency Management Emergency Support Functions (ESF)

ESF DESCRIPTIONS

- **ESF-1, Transportation** Provides for coordination, control and allocation of transportation assets in support of the movement of emergency resources including the evacuation of people, and the redistribution of food and fuel supplies.
- **ESF-2, Communications and Alerting** Provides emergency warning, information and guidance to the public. Facilitates the requirements and resources needed to provide for backup capability for all means of communication.
- **ESF-3, Public Works & Engineering** Provides for debris clearance, roads, highways and bridge repairs, engineering, construction, repair and restoration of essential public works systems and services, and the safety inspection of damaged public buildings.
- **ESF-4, Fire Fighting** Provides for mobilization and deployment, and assists in coordinating structural fire fighting resources to combat forest/wildland or urban incidents; provide incident management assistance for on-scene incident command and control operations.
- **ESF-5, Information and Planning** Provides for the overall management and coordination of Bow's emergency operations in support of local government. Collects, analyzes and disseminates critical information on emergency operations for decision making purposes.
- **ESF-6, Mass Care & Shelter** Manages and coordinates sheltering, feeding, and first aid for disaster victims. Provides for temporary housing, food, clothing, and special human needs in situations that do not warrant mass-care systems. In the event the local jurisdiction does not have an established Volunteers Active in Disasters (VOAD), this ESF can serve as the likely alternative for managing the receipt and distribution of donated goods and services. Provides assistance in coordinating and managing volunteer resources.
- **ESF-7, Resource Support** Secures resources through mutual aid agreements and procurement procedures for all ESFs, as needed. Provides for coordination and documentation of personnel, equipment, supplies, facilities, and services used during disaster response and initial relief operations.
- **ESF-8, Health and Medical Services** Provides care and treatment for the ill and injured. Mobilizes trained health and medical personnel and other emergency medical supplies, materials and facilities. Provides public health and environmental sanitation services, disease and vector control, and the collection, identification, and protection of human remains.



- **ESF- 9, Search & Rescue** Provides resources for ground, water, and airborne activities to locate, identify, and remove from a stricken area, persons lost or trapped in buildings and other structures. Provides for specialized emergency response and rescue operations.
- **ESF- 10, Hazardous Materials** Provides response, inspection, containment and cleanup of hazardous materials accidents or releases.
- **ESF** –11, Food Identifies, secures or prepares, and arranges for transportation of food for mass feeding to affected areas following a disaster.
- **ESF- 12, Energy** Coordinates with the private sector for the emergency repair and restoration of critical public energy utilities, (i.e., gas, electricity, etc.). Coordinates the rationing and distribution of emergency power and fuel, as necessary.
- **ESF- 13, Law Enforcement & Security** Provides for the protection of life and property by enforcing laws, orders, and regulations, including the movement of persons from threatened or hazardous areas. Provides for area security, traffic, and access control.
- **ESF- 14, Public Information** Provides for effective collection, control, and dissemination of public information to inform the general public adequately of emergency conditions and available assistance. Coordinates a system to minimize rumors and misinformation during an emergency.
- **ESF- 15, Volunteers and Donations** Manages the receipt and distribution of donated goods, volunteers, and services to support response operations and relief effort in a disaster.
- **ESF-16, Animal Health** Provides for a coordinated response in the management and containment of any communicable disease resulting in an animal health emergency.

