

# Town of Bow Bow Fire Department Capabilities Assessment 2015



Prepared by:

**JLN ASSOCIATES** LLC  
Fire Protection & Industrial Safety Services  
43 Hatchetts Hill Road  
Old Lyme, CT 06371

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## EXECUTIVE SUMMARY

In the spring of 2015, the Town of Bow requested JLN Associates (JLN) conduct a comprehensive evaluation of the Bow Fire Department, its relationship to the Community and the Community's risk. In addition to the collection of a significant amount of documents and information, the study would include individual meetings with the leaders of the Fire Department and a Strength Weaknesses Opportunities and Threats (SWOT) analysis work session with their memberships. In addition, meetings were held with the Town Manager, Board of Selectmen, Emergency Management Director, Police Chief and supporting Town of Bow Department Heads. Additionally, a confidential survey from the Fire Department membership was conducted.

The results of JLN's research included the following; the need for updating the Fire Department Leadership's Job Descriptions, the extensive use, if not over-use, of the Career Captain who essentially keeps the Fire Department running, a significant dysfunctional relationship between the Fire Department Leadership and Community Leaders and a dire need to replace the existing Fire Station.

The existing Fire Station has multiple detractors. Most notably, it has been cited by the State Fire Marshall's Office for Life Safety Code violations. The present turnout procedures are not efficient and could have negative effects on emergency operations. The public has been informed of these and other issues but continues to vote down a new Station. This is a critical issue and the most significant one found by the JLN team.

The relationship between Department Management and Community Leaders is strained. In addition, concerns were raised regarding the need to replace the existing Volunteer Fire Chief with a Full Time Chief. At the very least, the present Chief and Assistant Chief's roles and responsibilities need to be reviewed and appropriately addressed as needed.

An additional critical need involves the Career Captain/Training Officer. Captain Harrington ensures the Fire Department functions at capacity. He is so important to the form and function of the Department that he has a personal job description. It is unfair for him to be responsible for a majority of the Department's day to day functions and maintain his role as a Shift Commander.

Several specific questions were asked on behalf of the citizens of Bow. This report endeavors to answer those questions. A significant inquiry involved the appropriate number of emergency responders to provide the needed services. Our research determined that steps need to take place to ensure enough help on emergency scenes. These steps range from requiring volunteers to meet minimum response requirements to hiring additional career personnel.



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These and other issues are explored in this report and recommendations have been made to assist Community Leaders.

## INTRODUCTION

### TOWN OF BOW FIRE DEPARTMENT

This report provides a comprehensive capabilities analysis based on an assessment of the existing fire protection and emergency medical services, balanced with the needs of the Town of Bow. The assessment is inclusive of all available data obtained from individual fire departments records, personal interviews, data analysis, and personal observations. The recommendations that follow this research are offered respectfully and, indifference to the needs of the community within the scope of the analysis, the mission of the fire service. Here at JLN we recognize that a little courageous self-assessment improves your chances enormously in support of the primary mission of the fire service. The JLN mission, therefore, is to ensure that the information obtained and the recommendations put forth continue to provide clear direction to the Town of Bow, its governance, and first responders to protect those who cannot protect themselves. 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 required fire protection, rescue, emergency response and potential disaster needs for the Town of Bow based on response trending data.
- The adequacy of the Bow Fire Department's organization based on its bylaws and Standard Operating Guidelines.
- The Bow Fire Department's use of current technology for monitoring inventory, maintenance of equipment, and maintaining response data.
- The Town of Bow's Emergency Management Response Plan's ability to address appropriate guidance for the fire department during town emergencies including Homeland Security issues.
- The Bow Fire Department's current configuration and the anticipated facility needs.
- The needs of the Bow Fire Department based on the potential growth of the town and department within the next 5, 10, and 20 years.
- Water supply needs of the Bow Fire Department to adequately protect the Town of Bow.
- Condition, maintenance, and replacement schedule for fire apparatus and equipment.
- The Bow Fire Department's Fire Prevention and Education Program.
- Review of Bow Fire Department's Mutual Aid Agreements.
- The available options to the Bow Fire Department to enhance emergency response within the community.



**PROCESS**

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 18<sup>th</sup> and 19<sup>th</sup> editions of the *Fire Protection Handbook* published by the National Fire Protection Association. It contains a review of the Bow Fire Department utilizing NFPA 1201-1994, *Standard for Developing Fire Protection Services for the Public*. The following standards were used as references to draw comparisons including:

NFPA 1141, Standard for Fire Protection in Planned Building Groups,

NFPA 1201, Standard for Developing Fire Protection Services for the Public

NFPA 1500, Standard on Fire Department Occupational Safety and Health Program

NFPA 1581, Standard on Fire Department Infection Control Program,

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

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

Documentation provided by the Department of Environmental Protection, Introduction to State and Local EOP Planning Guidance was also referenced.

Travel times from Bow Fire Department to various commercial properties and businesses are calculated using *the Apparatus Travel Time Formula* provided by the ISO Commercial Risk Services, Inc. EMS responder and apparatus driver response times to the Bow Fire 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 Dana Abbott

Discussions with Assistant Fire Chief Richard Pistey

Discussions with the Police Chief Erin Commerford

Discussions with Inspector / Code Enforcement Officer Bruce Buttrick

Discussions with the Community Development Director Bill Klublen

Discussions with the Emergency Management Director Leland Kimball

Discussions with Board of Selectman:

Chairman Harold Judd

Vice Chairman Colleen Hunter

Selectman Eric Anderson

Selectman Jack Crisp

Selectman Benjamin Kiniry

Town Manager David Stack

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  
 Meeting with the Command Staff  
 Meeting with the Fire Company  
 An Anonymous Written Survey

## HISTORY & TOWN DEMOGRAPHICS

The Town of Bow was chartered in 1727. It is located 605 feet above sea level in Merrimack County, Lower New Hampshire. It occupies 28.1 square miles and has a population density of 268 people per square mile. The Community borders Concord, Hooksett, Dunbarton, Allenstown, Pembroke and Hopkinton. In addition, it is 2.1 miles from Suncook, 11.7 miles from Manchester and 61.3 miles from Boston, MA.

A study of Bow by citi-data.com found a fluctuation in home prices and a corresponding variability in home sales between 2009 and 2014.

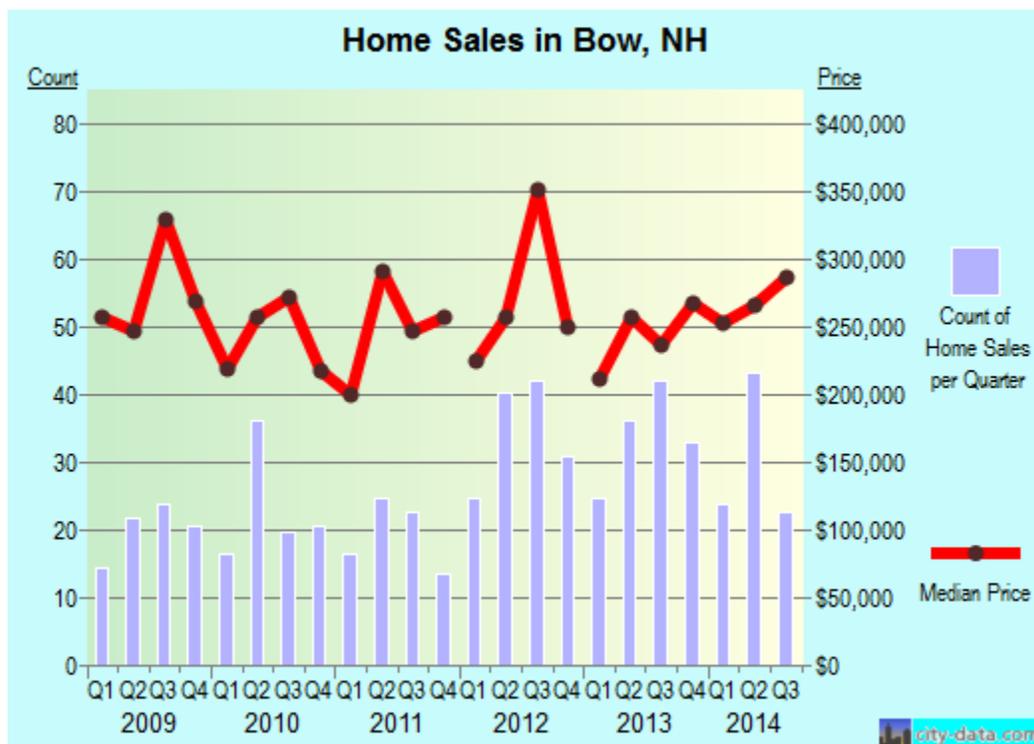


Figure 1. Home Sales in Bow N.H.

The Bow Fire Department provides protection from the Fire Station located at 2 Knox Rd. The Town of Bow is found at the junction of Route 93 and Route 89. The Merrimack River borders Bow to its east. A railway services Bow's commercial and industrial zones. The Concord Municipal Airport, Manchester - Boston Regional Airport, is 23 miles away, Logan International Airport in Boston, Massachusetts is 70 miles. The following Lakes, reservoirs, and swamps exist



in Bow; Greylore Farm Pond, Lewis Putney Pond, Spectacle Ponds, Turee Pond, Bow Town Pond, Putney Meadow Pond, The Meadow and Hornbeam Swamp. In addition, the Turkey River, One Stack Brook, Center Brook, Bow Brook, Bow Bog Brook, Boutwell Mill Brook and Horse Brook flow through the community.

In 2013, Bow's population was estimated to be 7,573. In 2010, Merrimack County's population was 125,927 according to the US Census Bureau. In 2013, it had a median age of 45.3 years old and its population was 97.7 percent white. These residents lived in 2,784 living units with a median household income of \$108,781 (2010.) In 2013, Seventy-one percent (71%) of the population worked within one half hour from their home. Ninety-five point three percent (95.3%) of the population worked within the State. Analyzed further, sixty-five point nine percent (65.9%) work within Merrimack County.

National Grid USA provides gas service in Bow.

## **BOW FIRE DEPARTMENT**

### **MISSION STATEMENT**

The Mission of the Bow Fire Department is to protect lives, property, and the environment, with effective and safe responses to all emergencies and calls to service. The Bow Fire Department is dedicated to improving the overall quality of living for each resident through life safety, education, and emergency response.

### **SERVICES OFFERED**

The Bow Fire Department offers the following services; Fire Suppression, Hazardous Materials Response, Emergency Medical Services at the Advanced Life Support level and multiple forms of Technical Rescue including Vehicle Extrication, Water Rescue, and High Angle Rescue. The Department provides Community Risk Reduction services including Fire Safety Education, Code Enforcement and Fire Investigation. In addition, the Department has a strong connection with the community and a dedicated drive for customer service.

These efforts substantially meet the NFPA 1201 Emergency Service Organization's requirements for customer service-oriented programs.

### **NFPA 1201**

*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*

**COMMUNITY RISK REDUCTION**

All potential opportunities; Code enforcement, Risk assessment, Water supply, Planning, Communications and Investigations, are used by the Department to prevent emergencies and reduce risk. A Career Officer is certified as an Inspector and conducts building inspections. The fixed water system is managed by the White Water Company. The Department has a Pre-Fire Planning program to prepare for emergencies at these hazards. Each shift conducts a plan and then shares then with the other personnel. They use a Regional Quick Access Plans format.

**TOWN HAZARDS/RISK ASSESSMENT**

The Fire Department Officers feel the risk in their community is a lot higher than surrounding towns. JLN Associates performed a risk review of the key primary response targets throughout the town. There is a very diverse set of hazards for the size of the community. The following target hazards are recognized as the key target areas the community should be prepared for in initial responses. Additional work in this area can be done by conducting a formal Risk Assessment. Examples of these types of risks would be the White Rock Senior Living, the Bow Public School System, Dyno Noble, the Bow Power Plant, Keller Products and special events including the Presidential Election happenings.



**Photo 1: Fuels/Flammable Gases**





***Photo 2: Power Production***



***Photo 3: Special Operations***

***Photo 4: Special Hazards***



**RESIDENTIAL**

The Bow Fire Department protects a large number of residential structures with varying structural designs and construction methods. These include traditional single family houses, residential board and care facilities for at risk populations and group homes.



***Photo 5: High Density Senior Housing***



***Photo 6: Individual Housing***





***Photo 7: Affordable Housing***

**CHURCHES AND SCHOOLS**

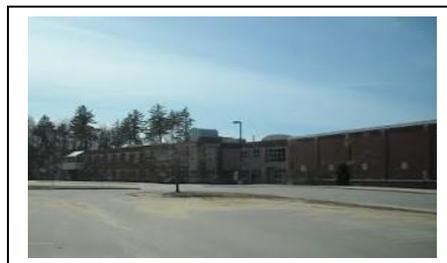
Churches include the Crossroads Community Baptist Church and United Methodist Church. Bow High School serves grades 9 through 12, at 32 White Rock Hill Road and has six hundred and forty (640) students. In addition, Bow Memorial School serves grades 5 through 8 at 20 Bow Center Road and has five hundred and ninety-two (592) students. Bow Elementary School serves grades Pre-K through 4 at 22 Bow Center Road and has five hundred and thirty-seven (537) students.



***Photo 8: Bow Elementary School***



***Photo 9: Bow Memorial School***



***Photo 10: Bow High School***



The Bow Fire Department's Fire Prevention Program focuses on presentations in schools during Fire Prevention Week which appear to have a positive effect on the children in the town. The fire prevention program includes members of the department presenting NFPA endorsed programs to the children during school reinforcing concepts such as Stop, Drop, and Roll, Home Escape Routes, etc.

### COMMERCIAL

Commercial processes and maintenance materials including cleaning solvents, fertilizers, lubricating oils, equipment fuel, heat generating equipment, explosives etc. are offered for sale. Although many of these can be found in a typical home, the sheer quantities and number of individuals handling these materials increase the risk of incident. The Town of Bow has a very diverse commercial base.



**Photo 11: Commercial Sales**



**Photo 12: High Volume Sales**

Included in the Commercial Occupancies of the Community are multi-tenant buildings which hold a wide diversity of service, sales items and hazards. The community has a large number of these buildings. In addition, the tenants of the various rental spaces change without warning.





**Photo 13: Examples of Multi-Tenant Occupancies**

## RISK ASSESSMENT

Several NFPA Standards offer guidance specifically to conduct Risk Assessments.

In particular, the department can utilize the following documents to assist in detailing a comprehensive risk analysis that can be utilized in the development of preplans and special training operations. Codes include:

- NFPA 551 guide for the evaluation of fire risk assessments.
- NFPA 1250 recommended practices in fire and emergency service organization risk management.
- NFPA 1500 details a Risk Management Plan.
- NFPA 1500: Chapter 4: Fire Department Administration,
  - 4.2 Risk Management Plan, The Fire Department shall develop and adopt a comprehensive written risk management plan. The risk management plan shall at least cover the risks associated with the following:
    - Administration,
    - Facilities,
    - Training,
    - Vehicle operations, both emergency and nonemergency,
    - Protective clothing and equipment,
    - Operations at emergency incidents,
    - Operations at nonemergency incidents
    - Other related activities.



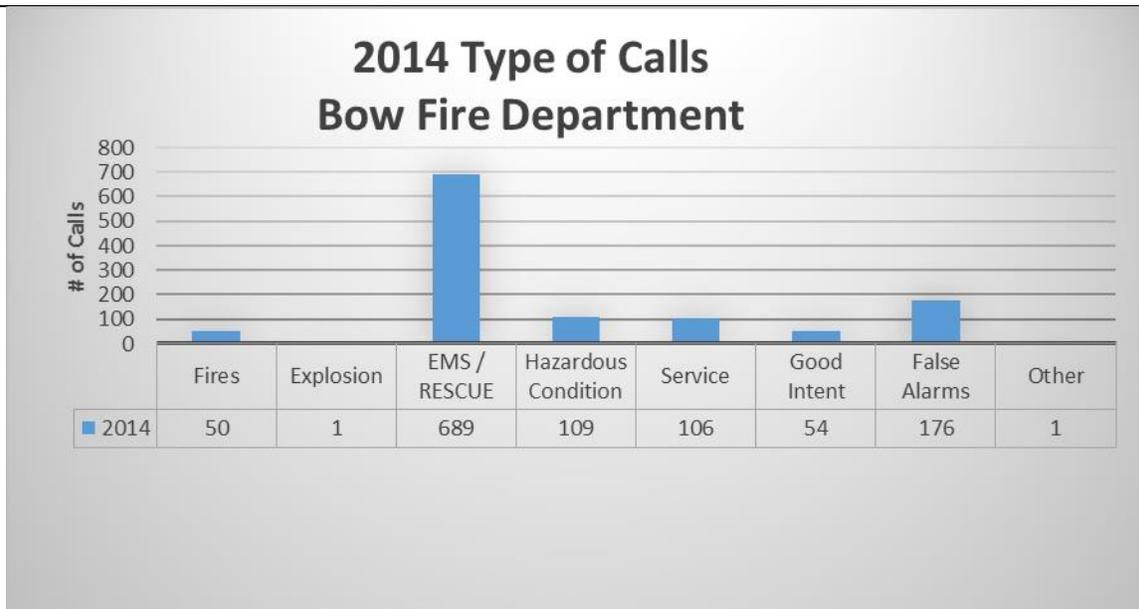


Figure 2: 2014 Type of Calls

### **FIRE, RESCUE AND EMERGENCY MEDICAL SERVICES**

All operations are based on the essential concepts of Life Safety, Property Conservation, and Incident stabilization. In 2014, EMS Calls accounted for fifty-eight percent (58 %) of all calls (Fig.2). This is about average for a Fire Department based EMS. False Alarms or Alarm Activations account for fifteen percent (15%) of the responses. The following chart (Fig.3) depicts all calls for service over the past five (5) years.



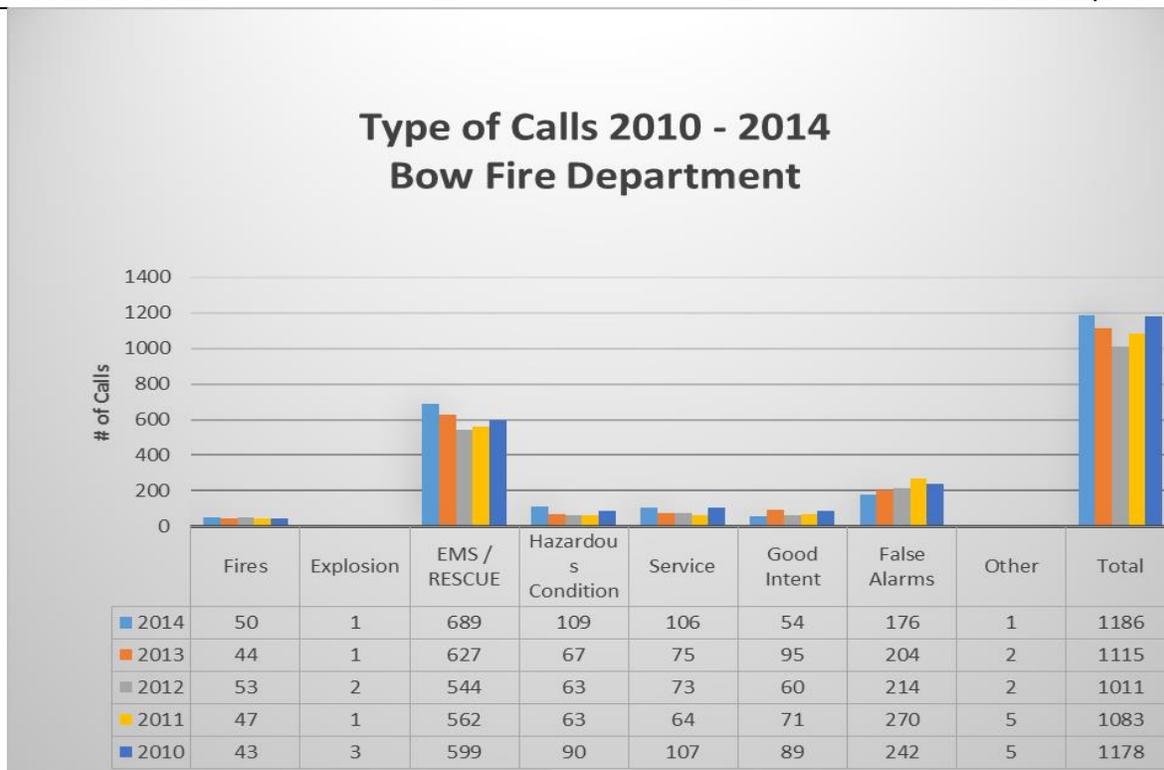


Figure 3: Type of Calls 2012-2014

## HAZARDOUS MATERIALS

A majority of the personnel are trained to the Awareness and Operations levels. There are 4-5 HazMat Technicians. The BFD is part of the Central New Hampshire Haz-Mat Team comprised of responders from the Capital Region and Lakes Region Regional Mutual Aid. Several occupancies in the community utilize hazardous materials in their industrial processes including Dyno Noble, and the Merrimack Power Station. A significant challenge relates to the large number of metal building rental spaces used by numerous forms of businesses.

**Recommendation 1: The metal building rental spaces should take priority in the Pre-Fire plan process.**





**Photo 14: Hazardous Materials Storage**

## **GOVERNMENT RESPONSIBILITIES**

### **FIRE DEPARTMENT DESIGNATION OR AGREEMENT**

Community Documents identify The Bow Fire Department as the responding agency for the Town. The overall management relationship between the Fire Department and the Elected Officials has been contentious at best.

Specifically, The Relationship between the Fire Department and the Community Leadership is stressed. There is a significant amount of distrust in both directions. This is impacting the funding for the new station. The relationship needs to improve. The Chiefs' voiced concern that the JLN Assessment Survey did not come from the Fire Department. The members feel there is nothing wrong with their department. A second issue raised is that funding was put into the budget for 2 months of Full Time Chief's pay. This was defeated by the taxpayers. Communications needs to be better and joint leadership cooperation needs to improve.



**STRATEGIC (MASTER) PLANNING**

The Town has an established capital plan for purchases and apparatus replacement. It is presently not being followed due to Fire station replacement plans. There is no formal Strategic Planning Process in place.

**RESEARCH AND PLANNING**

The formal research and planning is done by appointed Fire Department committees and work groups. There is a Truck Committee, for example. Research & Planning for Equipment is a group effort among Fire Department personnel. Small sub-committees are used when purchases come up for gear that is purchased through grants. Fire Department group discussions (among themselves) determine future purchases for the Department. Proper documentation resources in forms file.

**FIRE DEPARTMENT ORGANIZATION STRUCTURE**

A Traditional Chain of Command is used by the Fire Department.

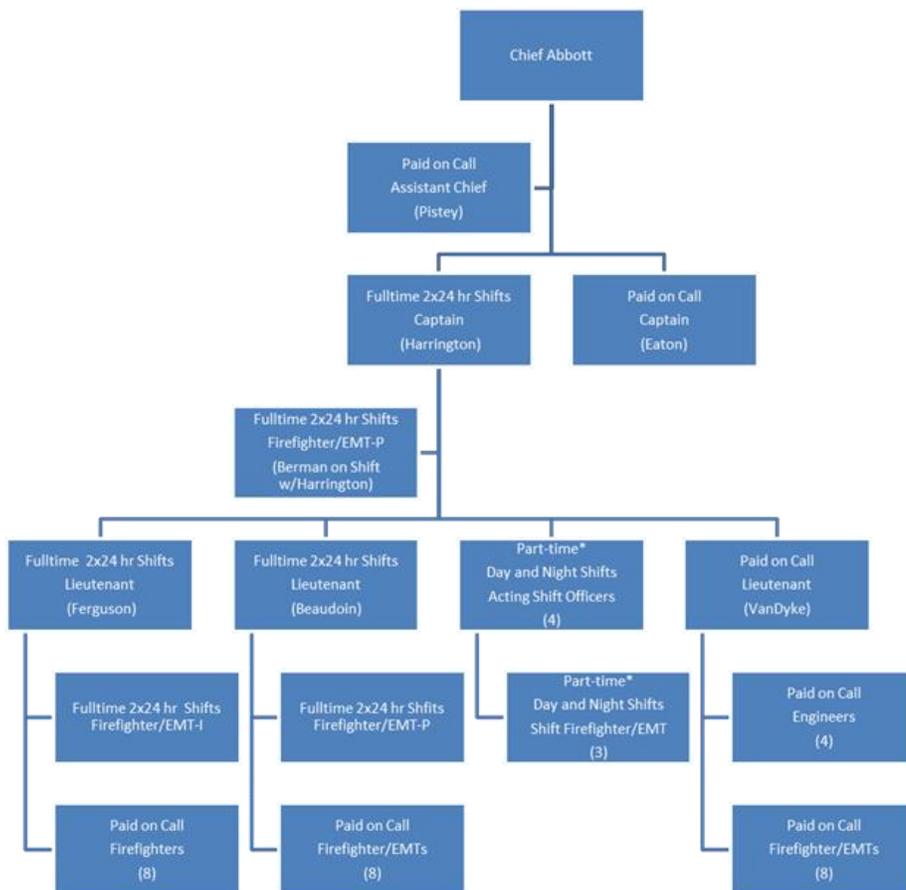


Figure 4: BOW Fire Department Chain of Command



## **FIRE DEPARTMENT COMMAND STAFF**

Significant feedback was received questioning the Town Manager and Board of Selectman's supervisory authority over the Fire Department's Command Staff. The Chief and Assistant Chief's Job Descriptions both contain language stating they work under the direction of the Town Manager and in his/her absence, the Chairman of the Board of Selectman.

### **Fire Chief Job Description** **Supervision Received**

*Carries out duties of running the department autonomously under broad and sometimes specific direction of the Town Manager and Board of Selectmen. Reports directly to the Town Manager or designee. In the absence of the Town Manager or designee, the Fire Chief will report to the Board of Selectmen Chair. The Fire Chief consults with the Town Manager, when unusual or difficult problems occur; work is reviewed by observation and through conferences and reports.*

In addition, Documents provided by the Town of Bow clearly give the authority to select and appoint the Fire Chief to the Board of Selectman and supervision by the Town Manager. Therefore, it would make sense the Town Manager and Board of Selectman have the authority to supervise the Fire Department Leadership and take actions they believe would benefit the community.

### **Fire Chief**

The sitting Chief, a forty-eight (48) year company member, was appointed by the Board of Selectman after the post-election recommendation by the Bow Fire Department in 1990. There has not been an election by the Bow Fire Department since. He has served the community as a Volunteer Fire Chief for twenty-five (25) years. As a person, everyone interviewed said he was a good and caring person and was grateful for the Chief's commitment to the Department and Community. There were concerns, however, regarding the Fire Department's cooperation with the Board of Selectman and a perceived disregard for governmental procedures and policies.

### **Minimum Qualifications Required**

The present "Fire Chief" job description (Attachment #9) primarily relies on time in the Department, ten (10) years, or some form of equivalent. It lacks specific training requirements or certifications to be achieved. Presently, the Chief has received Leadership I, Inspector I, Fire Fighter I Training and smaller supportive classes. He does not have Certifications in any of the Fire Officer or Instructor levels. In addition he has not received the ICS 100, 200 or 300 programs.



### **Assistant Chief**

Similar to the Fire Chief Job Description, the present "Assistant Chief" job description (Attachment #10) primarily relies on time in the Department, ten (10) years, or some form of equivalent. It lacks specific training requirements or certifications to be achieved. Presently, the Assistant Chief has received Leadership I, II, III, Fire Fighter I, ICS 100 and 200 Training and smaller supportive classes. He does not have Certifications in any of the Fire Officer, Inspector or Instructor levels.

### **Call Captain**

Presently, while requiring less time in the Department, only five (5) years, the Call Captain has more stringent minimum training requirements than the Chief or Assistant Chief. Presently, the Call Captain has received Fire Fighter I, II, Fire Officer I, ICS 100 and 200 training and smaller supportive classes. He does not have Certifications in any of the Inspector or Instructor levels. . As a result, the Sitting Call Captain does not have all the required certifications required by the Job Description.

### **Career Captain/Training Officer**

Similarly, while requiring less time in the Department, only five (5) years, the Career Captain/Training Officer has more stringent minimum training requirements than the Chief or Assistant Chief. The sitting Captain/Training Officer is the highest Trained and Certified member of the Fire Department. In fact, he meets or exceeds the requirements of the Job Description.

Captain Harrington is so vital to the function of the Bow Fire Department that he has his own supplemental Job Description. His roles and responsibilities touch every aspect of the agency. We have attached the Captain/Training Officer (Attachment #11) and the additional Job Description (Attachment #12) to the report for comparison. The requirements of the Supplemental Job Description alone could justify a Full Time Day position.

**Recommendation 2: The Job Descriptions for Fire Chief and Assistant Chief should be reviewed and modified to reflect the demands of the present day Fire/EMS Service. Additional Certifications and Training requirements need to be added to the minimum requirements. Included would be Fire Officer I, II and III, and the National Fire Academy Volunteer Leadership Program. Take additional actions as needed to improve the Department Leadership.**

### **Command Staff Response to Emergencies**

During the interview process, it became apparent there was a difference of opinion regarding the Command Staff's emergency response requirements. The Chief feels his focus should be on administrative and management matters rather than emergency responses. As a result, his



response numbers are low. While he does attend the weekly training sessions, he does not make a large number of calls.

The Board of Selectmen believes, given the fact he was issued a Command Vehicle, the Chief's response numbers should be higher. A review of the call response statistics for 2014 found the following results; there were 1,131 emergencies in 2014. Chief Abbott responded to forty-nine (49) or four point three percent (4.3 %) of the calls. Assistant Chief Pistey responded to one hundred and thirteen (113) calls or nine point nine percent (9.9%) of the calls. Call Captain Eaton responded to sixty-three (63) or five point five percent (5.5%) of the calls. Given the limited number of personnel on duty and low call member response numbers, Command response and supervision is a critical need. While Assistant Chief Pistey devotes a great deal of time supporting the Department by representing them with the Regional Mutual Aid System, his services could be more focused on Bow.

**Recommendation 3: The Chief, Assistant Chief and Call Captain create a response schedule where one of them is on call 24/7/365. There are numerous systems across the country which could be used as a guideline. In addition, the Command Car should be rotated with each duty assignment to ensure it is on scene for the Incident Commander to use.**

#### **Command Staff and Board of Selectmen Relationship**

During the Department Meeting, there appeared to be an atmosphere of stress between the Fire Department and community Leaders. The Chiefs specifically have felt threatened and the Board of Selectmen is becoming concerned about their organizational cooperation and the Fire Department's ability to protect Bow. During our interviews, it was related that this relationship had potentially impacted the critical need to replace the Bow Fire Station.

A quality relationship between the Department and Community Leadership is critical for Public Safety. Presently, the bond between the two needs improvement. It would be appropriate to attempt to mediate any conflicts between the Department and the Town. Ultimately, however, the Elected Officials have the responsibility and authority to provide quality Public Safety Services. In addition, they have the legal authority over the Fire Department. It is their actions which will be judged by the public.



**Recommendation 4:** The Fire Department Leadership, Town Manager and Board of Selectmen meet and discuss those issues which are causing the organizational divide.

**Recommendation 5:** The Town Manager and Fire Department Leadership meet and create short, medium and long term Goals and Objectives for the Fire Department. These Goal and Objectives should then be reviewed and Approved or Disapproved by the Board of Selectmen.

### **ANONYMOUS SURVEY**

An anonymous survey was developed for the Bow Fire Department personnel to ensure everyone's thoughts and opinions were received by the evaluation team. The survey was by invitation only and available to BFD members. The complete results are in Attachment # 15. The questions and overall results are displayed below (Fig.5).

The respondent's choices were Agree, Agree Somewhat and Disagree. Fourteen respondents or forty one percent (41%) of the active personnel participated in the survey. They provided three hundred and eighty four (384) specific responses to our request for examples related to the survey questions.

#### Questions:

- 1) *There are positive aspects to being a member of the Bow Fire Department.*
- 2) *There are negative aspects to being a member of the Bow Fire Department.*
- 3) *There are positive reasons for community members to join the Bow Fire 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 Bow Fire Department.*
- 6) *There are pressing issues you believe are critical to the Town of Bow.*
- 7) *There are things you DO NOT want to see changed in the Bow Fire.*
- 8) *There are changes you would like to see for the Bow Fire Department.*
- 9) *Issues you believe need to be addressed in the report.*
- 10) *Issues you believe are holding the Bow Fire Department back.*



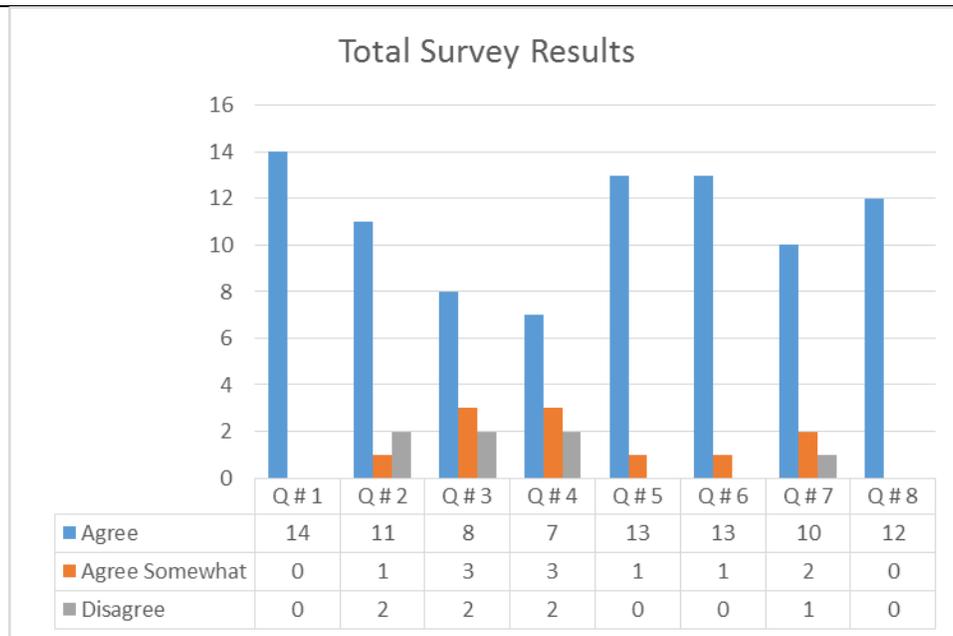


Figure 5: Anonymous Survey Results

### ORGANIZATIONAL STATEMENT

Presently, there is no Organizational Statement. An Organizational Statement, which depicts the Who, What, Where, How and Why the Fire Department exists is required by NFPA 1500. There is, however, a quality Mission Statement. The Mission Statement often reflects a philosophy rather than the form and function of the Organizational Statement.

*NFPA 1500 (2013): Chapter 4, fire department administration 4.1 fire department organizational statement. The fire Department shall prepare and maintain written policies and standard operating procedures that document the organizational structure, membership, roles and responsibilities, expected functions, and training requirements, including the following: (1) The types of standard evolutions that are expected to be performed and the evolutions that must be performed simultaneously or in sequence for different types of situations. (2) The minimum number of members who are required to perform each function or evolution in the manner in which the function is to be performed. (3) The number and types of apparatus in the number of personnel that will be dispatched to different types of incidents. (4) The procedures that will be employed to initiate and manage operations at the scene of an emergency incident. 4.1.3 The organizational statement and procedures shall be available for inspection by members or their designated representatives. 4.1.4 Fire Departments shall develop Pre- incident plans as determined by AHJ 4.1.4.1 Fire Department shall develop a construction or demolition fire safety program as determined by the AHJ.*



**Recommendation 6: Create an Organizational Statement that meets the NFPA 1500 (2013) Standard, Chapter 4.**

**OPERATING UNITS**

**Pumping Apparatus:**

The Department presently operates two engines, a 2009 Pierce and a 2004 International Commercial and 2 Tankers, a 1993 International (1750 Gallons) and 1997 International (1800 Gallons). In addition, they operate a 2004 F550 Brush Unit.

The two Tankers are up for replacement. They could be replaced with one (1) Engine-Tanker which would provide the needed tanker and can also function as an engine if needed.

**Aerial Apparatus:**

The community does not presently own a ladder truck. During the meeting with the Department it appeared there was apprehension relative to not having a Ladder Truck in the Department. There is some disagreement between the Department and the Town regarding purchasing one or Automatic Mutual Aid. A ladder truck is dispatched on all working structure fires. While the Department does not presently have the response capacity to effectively staff and operate a Ladder, the development in the community is continuing to grow. Conversely, the present ladder coverage is from Mutual Aid and the personnel who arrive with the mutual aid ladder provide critical tactical assistance.. While purchasing a ladder is not appropriate at this time, future financial planning should include a place holder for a future potential needs.

**Rescue Apparatus:**

The Department operates a 2007 Rescue Truck.

**Ambulances:**

The Department operates a 2014 Primary Ambulance and a 2007 Ambulance.

**Additional Emergency Response Equipment:**

The department operates several support units; a small 16ft inflatable boat, a Light Tower, the Police Department ATVs, and a Command Vehicle.

**FORMAL TASK ANALYSIS**

No Formal Task Analysis has taken place. A Task Analysis reflects the specific tasks or actions the Fire Department is expected to be able to do when addressing the various community hazards. To further define its components, we could use the Emergency Medical Service needs of the Town as an example. Typical required tasks would include, driving and arriving on scene safely, the delivery of medications and other treatments, the proper lifting and movement of patients and safe transportation to the Hospital. Future training and operations need be developed as a result of a Task Analysis combined with a Risk/Hazard Analysis.



**Recommendation 7: Conduct a Formal Task Analysis to ensure the resources are supporting the critical operations and prepares for the future.**

### SUPPRESSION FORCE STAFFING

There are two (2) Career Personnel on 24/7/365 from Sunday through Friday working a 24/48 schedule. They have Saturdays off. Part-time personnel work Saturdays. They are paid per hour. Call Personnel are activated for all calls and are paid by the hour, with a one-hour minimum.

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 Bow Fire 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.

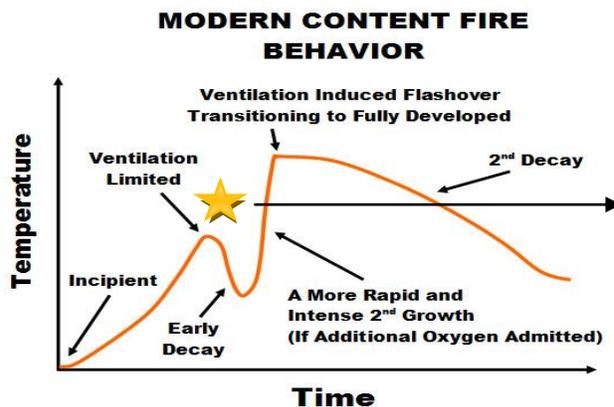


Figure 6: Modern Fire Timeline and Flashover

*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 three (3) and five (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 Bow Fire Department personnel available



for responses can reduce operational capability. The result of these factors exposes Bow to what safety experts call “Low Frequency/High Risk” emergencies. JLN recommends a review of the existing system to promote a structure designed around performance capabilities and positive outcomes. The national experience for the minimum number of personnel for Fire Operations is twelve to eighteen (12-18) plus personnel within eight (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 two thousand square foot (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 eight (8) minutes. The proliferation of metal multi-occupancy units in the town would require an increased response.

*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: During the week, career and call staff responds to emergencies. Automatic Mutual Aid responds on all structural fires from neighbors as part of a compact. A Ladder is part of Automatic Mutual Aid response. There is Automatic Mutual Aid from three (3) towns. The response zone determines who will be the Rapid Intervention Team (RIT). In Zone 1 Hooksett will be RIT and Concord will be RIT in Zone 2.

#### **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.7) 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.8).

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 Suppression Force Staffing section of the report, tasks need to be performed and personnel are needed to do those tasks.



NFPA 1720 (2014) Table 4.3.2 Staffing and Response Time				
Type of Area Time	Demographics	Responders	Response Time (Min.)	% of
Suburban	500–1000 people/mi <sup>2</sup>	10	10	80

Figure 7: 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 ft <sup>2</sup> (186 m <sup>2</sup> ), two-story single-family dwelling without basement and with no exposures)				
Apparatus Time	Responders	Response Time (Min.)	% of	
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	
<b>Totals</b>	<b>18</b>	<b>8</b>	<b>90</b>	

Figure 8: NFPA 1710 Staffing and Response Times

A review of the responding mutual aid personnel combined with the Bow personnel does not equal the fifteen to eighteen (15-18) members needed to attack a residential structure fire. The present system could be stressed to meet the lesser ten (10) responder threshold. It should be remembered that less resources equals less tasks being completed and higher risks to the responders and occupants. While Structural Fires responses are a small percentage of the Department's workload, they are "High Risk and Low Frequency" in nature and where most civilians die and a large number of fire fighters are injured or killed annually.

In town Motor Vehicle Accidents are handled by the Bow Fire Department. The ambulance responds first with the two Career personnel to tend to any injuries. The remaining apparatus, an Engine and a Rescue, are left for call drivers to respond with. In 2014 only six (6) of thirty (30) Call Drivers responded to more than ten percent (10%) of all emergencies (See Attachment #3 for a Drivers List). Those six (6) members did not, however, respond to more than twenty percent (20%) of the total calls. Mutual Aid or a Call back would need to be requested to get the needed remaining apparatus on scene. This action would cause response delays which would vary by location. Accidents on the interstate receive Automatic Mutual Aid depending on location. Call back for coverage is used if units are out on long mutual aid calls. Captain



Harrington is responsible for scheduling the shift coverage, Career and Call. In addition, he is responsible for all record keeping, payroll, Workers Compensation investigation and documentation.

**CALL RESPONDERS**

There were twenty nine Call Personnel listed in the 2014 response reports. The graph below (Fig. 9) displays the response characteristics of Call Personnel from 2010 through 2014. It is divided by percent of participation for calls each year. There is a dramatic reduction in the percentage of responders when greater than ten percent (10%) or one (1) in ten (10) calls is considered. Due to the higher opportunity to respond as part of their work duties, the Career Staff is not part of the graph. Their response percentages ranged between a low of twenty -one point four percent (21.4%) and a high of twenty-nine point four percent (29.4%). This is appropriate given their work schedules. Figure 10 displays the changes in the ten percent (10%) participation over the past five (5) years.

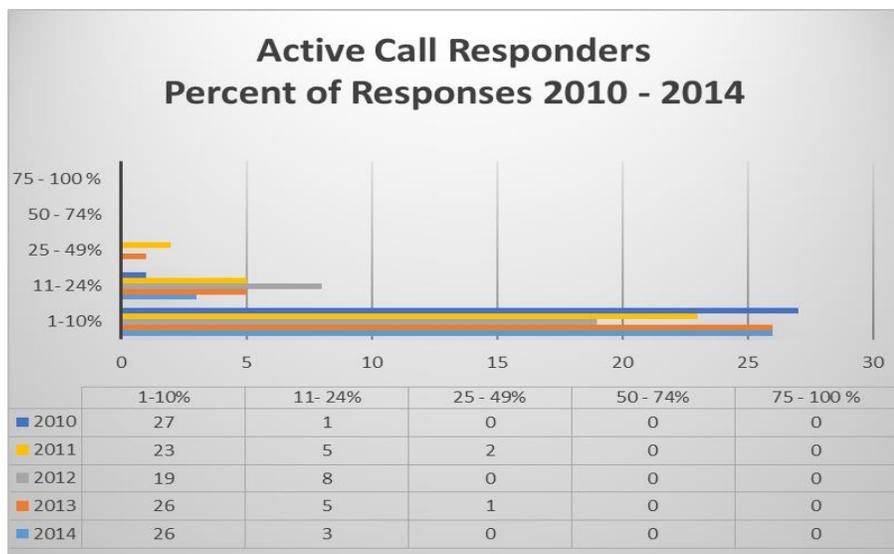


Figure 9: Call Responders, Percent of Responses 2010-2014



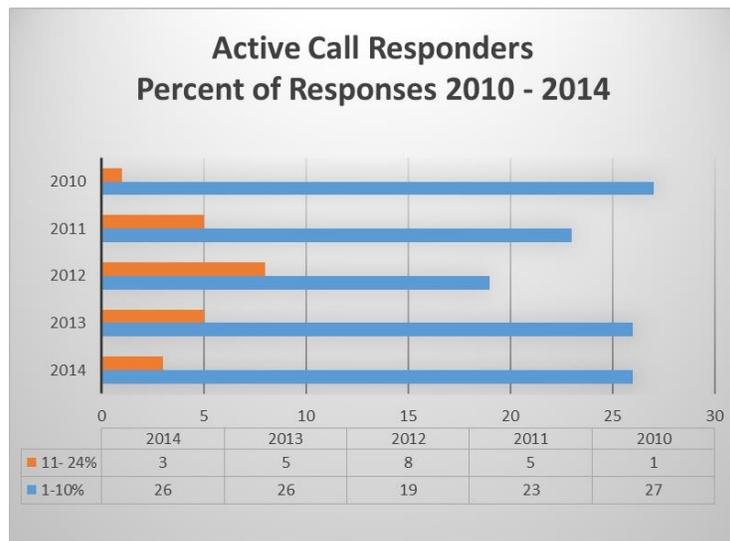


Figure 10: 1-10 % and 11-24% Active Call Responders Comparison by Year

Figure 10 shows the changes relative to the number of responders who attended at least ten percent (10%) of the emergencies and the number of personnel who respond between eleven and twenty-four percent (11-24%) of the emergencies. In 2012, there appears to be a movement by some responders from the ten percent (10%) bar to the next level up. Unfortunately, the eleven to twenty-four percent (11-24%) responses decline in 2013 and 2014. During the same time frame, the number of ten percent responders increased. A positive aspect of this research is the increase in total active responders. The goal is to get all responders above the ten percent (10%) participation rate.

#### **COMMUNITY COOPERATION AND MUTUAL AID**

The Bow Fire Department enjoys a working relationship with several other agencies that serve the Town of Bow. During emergency situations the Fire Department has worked with the New Hampshire State Police, State Fire Marshal's Office and Town Highway Department. The Bow Fire Department has worked with several offices for non-emergency circumstances including the Building Inspector / Code Enforcement Officer, Emergency Management), the Regional Fire Chiefs' Association and Federal Homeland Security.

The Fire Department is part of the Capital Area Mutual Aid Association. In addition to giving and receiving aid, the Association operates a Regional Dispatch Center for twenty (20) surrounding communities. There is a Regional Memorandum of Understanding in place.



The MOU addresses the following issues:

- Indemnity
- Liability for injuries
- Reimbursement for cost of service
- Authorization to respond

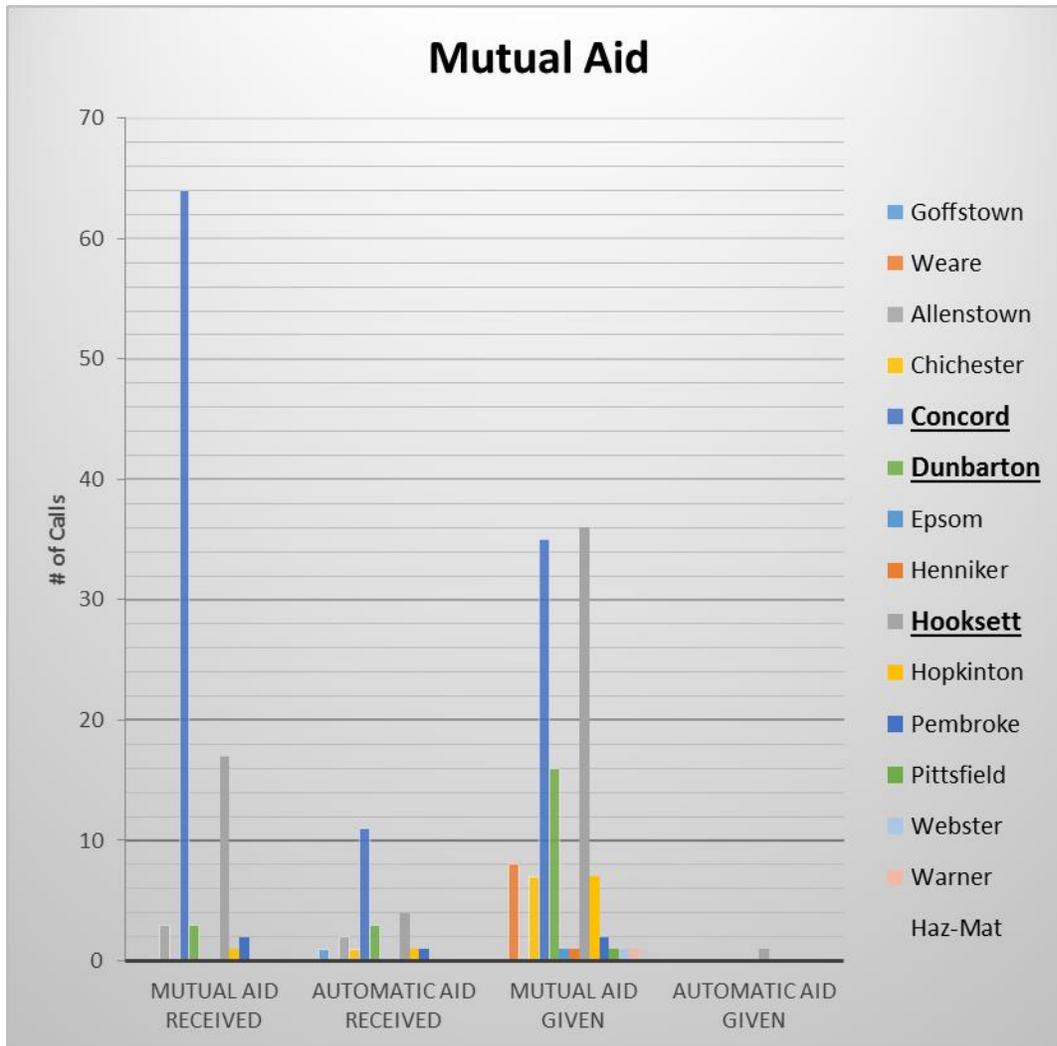


Figure 11: Mutual and Automatic Aid

The Capital Area Mutual Aid Association plan covers aid responses up to Five (5) Alarms.



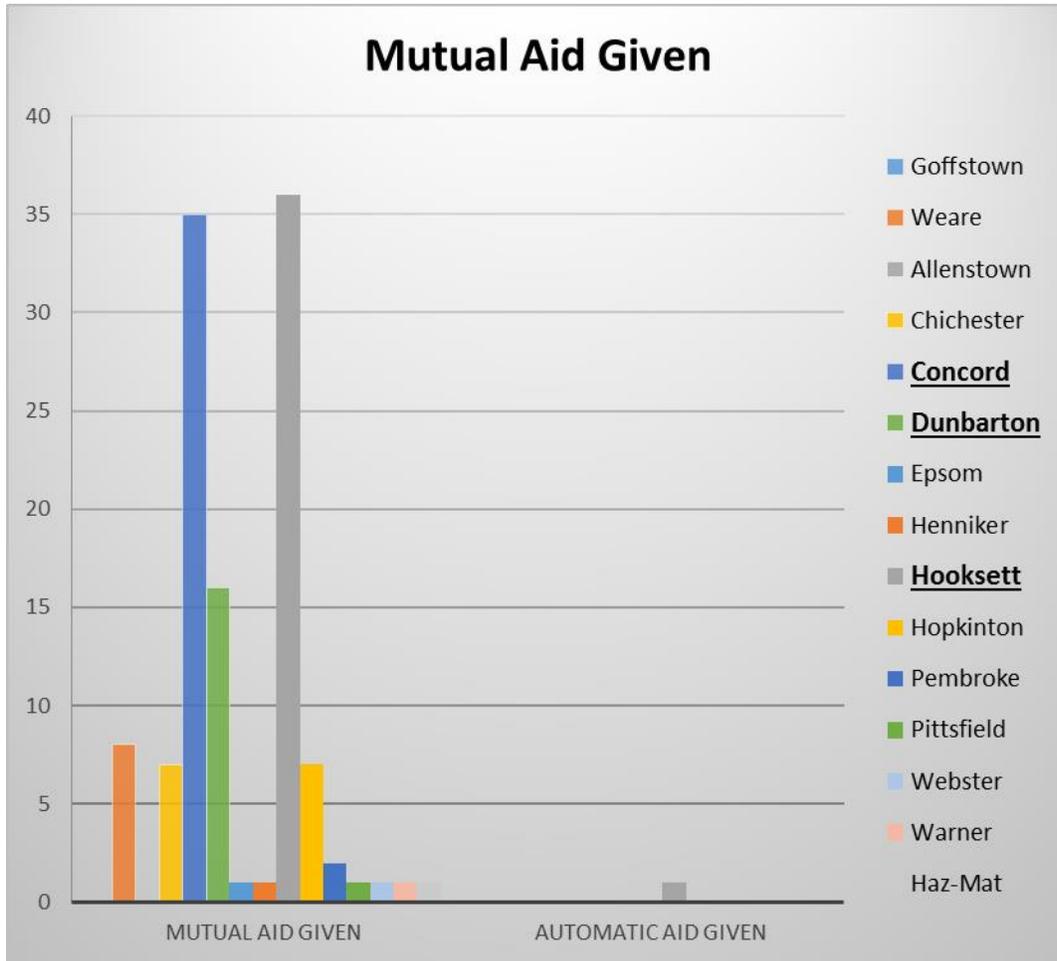


Figure 12: Mutual Aid Given



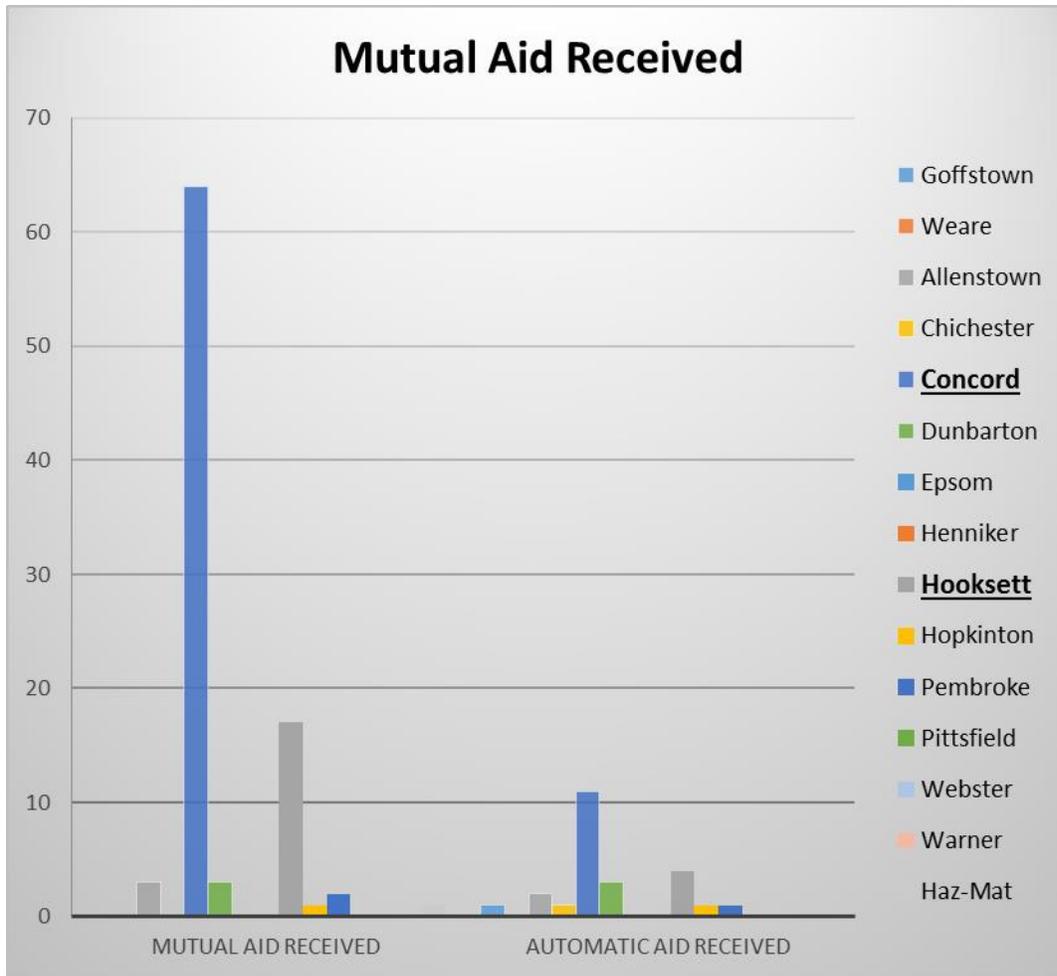


Figure 13: Mutual Aid Received

A review of Figures 11, 12, and 13 show the significant supportive relationship between Bow, Concord, Dunbarton and Hooksett. This relationship is vital and may even need to be expanded.



**Recommendation 8:** Minimum number of responder requirements should be created for each type of call the Department responds to. These responders could come from the BFD or Mutual Aid Companies. If needed, these responders could come from additional Mutual Aid built into the system, increased requirements on call personnel or increasing full-time staffing.

**Recommendation 9:** Take such actions as necessary to increase the number of responders to provide fifteen (15) to eighteen (18) qualified personnel to the scene of structural fires.

**Recommendation 10:** Minimum emergency response standards should be created for the BFD responders. These requirements could be tied into the funding they receive.

## FINANCIAL MANAGEMENT

Capital Improvement Plan (Fig. 14) is in place for the replacement of Ambulances and Trucks and for all major equipment, (Tanker 1 next year, on hold due to trying to get new building). An extensive documented CIP exists. There is some confusion; however, regarding if it is being followed.

Fire Department Equipment CIP								
Equipment	Purchased	New / Replacement	Life	NFPA Year to Replace	BOW CIP Expectancy	BOW CIP Year	Bow Estimate	Estimated Cost
Rescue	2007	Replacement	10 to 15	2023	20	2027	\$ 200,000.00	\$300,000.00
1 Ton Pick-up	2004	Replacement	15	2019	20	2024	\$ 60,000.00	\$60,000.00
Pumper	2002	Replacement	15	2017	15	2017	\$600,000.00	\$600,000.00
Pumper	2009	Replacement	15	2024	15	2024	\$600,000.00	\$700,000.00
Tanker 1	1994	Replacement	15	2009	20	2016	\$ 300,000.00	\$500,000.00
Tanker 3	1997	Replacement	15	2012	20	2017	\$ 250,000.00	\$500,000.00
Ambulance	2009	Replacement	10	2019	10	2019	\$ 240,000.00	\$250,000.00
Ambulance	2014	Replacement	10	2024	10	2024	\$ 240,000.00	\$250,000.00
Monitor / Defibrillator	2011	Replacement	10		10	2021	\$ 30,000.00	\$ 30,000.00
Monitor / Defibrillator	2011	Replacement	10		10	2021	\$ 30,000.00	\$ 30,000.00
Lucas Machine	2011	Replacement	10		10	2021	\$ 23,000.00	\$ 30,000.00
Lucas Machine	2011	Replacement	10		10	2021	\$ 23,000.00	\$ 30,000.00
SCBA	2008	Replacement	10	2018	10	2018	\$172,000.00	\$172,000.00
Air Compressor (SCBA)	2009	Replacement	10	2019	15	2019	\$172,000.00	\$188,000.00
SCBA Cascade	1999	Replacement	15	2024	15	2024	\$ 30,000.00	\$ 50,000.00
Vehicle Rescue Equip.	2010	Replacement	10	2020	10	2020	\$ 30,000.00	\$ 60,000.00
Brush Skid / Tank	2003	Replacement	15	2018	20	2023	\$ 96,000.00	\$ 96,000.00
Rescue Boat	2012	Replacement	10	2032	20	2032	\$ 18,000.00	\$ 20,000.00
Radio Equipment	2008	Replacement	10	2018	10	2018	\$100,000.00	\$ 100,000.00
Turnout Gear	2011	Replacement	10	2021	10	2021	\$120,000.00	\$ 150,000.00
Chief's SUV	2012	Replacement	10	2021	6	2018	\$ 45,000.00	\$ 55,000.00

Figure 14: Capital Improvement Plan Review



## HUMAN RESOURCES

Human Resource issues are dealt with by Captain Harrington or the Town Manager.

Captain Harrington - Supplemental Job Description

Typical Human Resource Examples

- *Develops and implements processes for hiring perspective members (call and fulltime)*
  - *Organize Oral Boards*
  - *Maintain related confidential files*
  - *Conduct back ground checks*
  - *Acquires/submits documentation from new employees-19, W4, General Applications, EMS Provider license applications, Etc.*
  - *Complete PARs*
  - *Coordinate and Schedule employee medical physicals, immunizations, and follow-up*
  - *Complete New Employee Orientation (provide rules, ID, access, equipment Etc.*
- *Develops and implements promotional processes for (call and fulltime) as well as the annual Acting Shift Officer Assessment Center.*
- *Writes and updates job descriptions*
- *Drafts personnel type correspondence for the Chief:*
  - *External letters of appreciation*
  - *Employee Acknowledgement*
  - *Personnel Action Requests*
  - *Written warnings*
  - *Suspensions*
  - *Terminations*
- *Administers the department's data management software and systems including; personnel records, incident records, preplans, inspection records, training records, forms, inventory, email server, and web page.*
- *Approves, submits, and records weekly payroll for Career Staff. Assistant Chief Pistey submits prepares and submits on-call payroll.*
- *Submits required monthly incident data to State and Federal agencies.*

## TRAINING

There are specific Job Descriptions for Fulltime, Part-time and Call Personnel. They have received training preparing for terrorism. They have also held regional drills and active shooter drills.



The Training Programs attempt to meet NFPA 1500 Section 4.1.2 including (1) The types of standard evolutions that are expected to be performed and the evolutions that must be performed simultaneously or in sequence for different types of situations (2) The minimum number of members who are required to perform each function or evolution and the manner in which the function is to be performed (3) The number and types of apparatus and the number of personnel that will be dispatched to different types of incidents (4) The procedures that will be employed to initiate and manage operations at the scene of an emergency incident.

## TRAINING FACILITIES



***Photo #15 Training Room (Presently Not Usable)***

Training is held on Wednesday nights and mainly done in house. In addition, monthly mutual aid drills are held with surrounding towns. Each Department is allotted two (2) slots a year for training at the State Academy. A majority of trainers are instructors but some are only subject matter experts. Core training is done by certified instructors. Certification training is all sent to the State Academy. Members are able to go to the National Fire Academy. Captain Mitchell is training coordinator and record keeper.

Presently, a majority of the personnel who respond hold Fire Fighter I, Hazardous Materials Awareness and Operations, Defensive Driving, ICS 700 (National Incident Management System) and Cardio Pulmonary Resuscitation.



## TRAINING COSTS

Training is an acceptable cost for a Fire Department. Good training costs money, however, the issue is how to get the biggest bang for the buck.

## ATTENDANCE AT TRAINING AND PARTICIPATION DURING EMERGENCIES

There did not seem to be a correlation between attendance at training sessions and the ultimate goal of attendance at emergencies. Yet pay for participation is tied to each activity. The records show that some personnel attend the weekly training but are not actively participating in emergencies to any significant degree if at all. There should be a clear relationship between Training and Responding. Funding control can assist in creating that relationship. For example, minimum response numbers to qualify for receiving any pay for attending training.

**Recommendation11: Compensation for attending training sessions should be restricted to those individuals who are actively responding. A minimum qualifying response percentage would need to be determined. Presently twenty-six (26) of the twenty-nine (29) responders responded to ten percent (10%) or less of the calls. This fact alone is an issue. Possibly, tying the two together could help both.**

## TRAINING ON DUTY

The routine training for the Career Staff could take place on duty. Special programs, i.e. Special Operations/Technical Rescue, could be done all together. The hours may work out to reduce the present expenditures. On-line training can assist personnel to meet FEMA and other Federal mandates.

## TRAINING LEVELS

Fire Training Standards used in full or partially by the Bow Fire Department

- NFPA 1000 standard for fire service professional qualifications and accreditation
- NFPA 1001 standard for firefighter professional qualifications
- NFPA 1002 standard for apparatus operator professional qualifications
- NFPA 1006 standard for technical rescuer professional qualifications
- NFPA 1021 standard for fire officer professional qualifications
- NFPA 1026 standard for incident management personnel qualifications
- NFPA 1031 standard for professional qualifications for fire inspector or plan examiner
- NFPA 1033 standard for professional qualifications for fire investigator
- NFPA 1035 standard for professional qualifications for fire and lay safety educator
- NFPA 1041 standard for fire instructor professional qualification
- NFPA 1401 recommended practice for fire service training reports and records
- NFPA 1403 standard on live fire training evolutions



This training should include the risks outlined in this review and the expectations of the Bow Fire Department to provide protection to the community. The training program should also include minimum training requirements as required by OSHA including the respiratory protection standard 29CFR 1910.134 and blood borne pathogens 29CFR 1910.1030.

Presently, several National Fire Protection Association (NFPA) standards are used to ensure Fire Fighter Safety and positive Fire Department operations. Specifically, NFPA 1851 the Standards for Turnout Gear, NFPA 1852 Self Contained Breathing Apparatus, NFPA 1901 Fire Apparatus Construction, NFPA 472 Haz-Mat Operations, NFPA 1002 Driver Qualifications, NFPA 1936 Rescue Equipment Testing and Maintenance, NFPA 1962 Hose Testing, NFPA 1852 Quantitative Face Piece Fit testing, NFPA 1001 Fire Fighter Training and NFPA 1021 Fire Officer Training. In addition, NFPA 1500, the Fire Fighter Health and Safety, progress is weak. Additional NFPA Standards are listed in Appendix #16.

**Recommendation 12:** It is the recommendation of JLN Associates that Bow Fire Department requires its members and officers to receive training commensurate to the duties expected of them and their positions. In addition, response requirements should be created to practice learned skills.

#### **JOB DUTIES AND ASSIGNMENTS**

Clear expectations should be established for all members regarding the duties expected of them and minimum standards should be set regarding training requirements for all members, officers, etc. The National Fire Protection Association Standards 1000 through 1061 provide guidelines for professional qualifications of fire service personnel. These standards should be reviewed by the line officers and applied to the members, officers, and EMS personnel where deemed applicable. Minimum training requirements should be built into an ongoing departmental training program with key subjects being prioritized on a frequency of response and the risk associated with that type of response. Due to the limited number of Career Personnel on duty, everyone should meet the same job expectations and requirements.

#### **ORGANIZATION FOR FIRE SUPPRESSION**

##### **SCHEDULING**

The Career Staff work twenty-four (24) hours on and forty-eight (48) hours off. They have Saturdays off. This is a forty-eight (48) hour per week shift. There is a wide ranging set of systems in the public venue for work weeks. The Twenty-four (24) hour on/forty-eight (48) hour off schedule is normally run over a twenty-one (21) day cycle and averages fifty-six (56) hours. Hours, normally eight (8) per week, are then credited back to the personnel to reduce the hours worked to forty-eight (48). The Part-time personnel covering Saturdays essentially does the same thing. The advantage to knowing Saturdays is the day off makes it easier to plan for and fund.

There are other Fire department shifts that are used. Traditionally, rotating eight hour shifts are primarily used by industrial departments. Municipal Fire Departments have resisted the



rotating eight hour shifts. There are several reasons for their resistance. First, Completion of assigned tasks and projects is disrupted and follow through by leaders is difficult. In addition, the resources and individuals needed to support the completion of the tasks are not available two thirds of the time. Second, studies have shown sleep deprivation and the changing of work and rest cycles has a negative impact on productivity and in some cases, safety. Third, the costs for such systems are often as expensive, if not more, costly.

**RESPONSE TO FIRE AND OTHER EMERGENCIES**

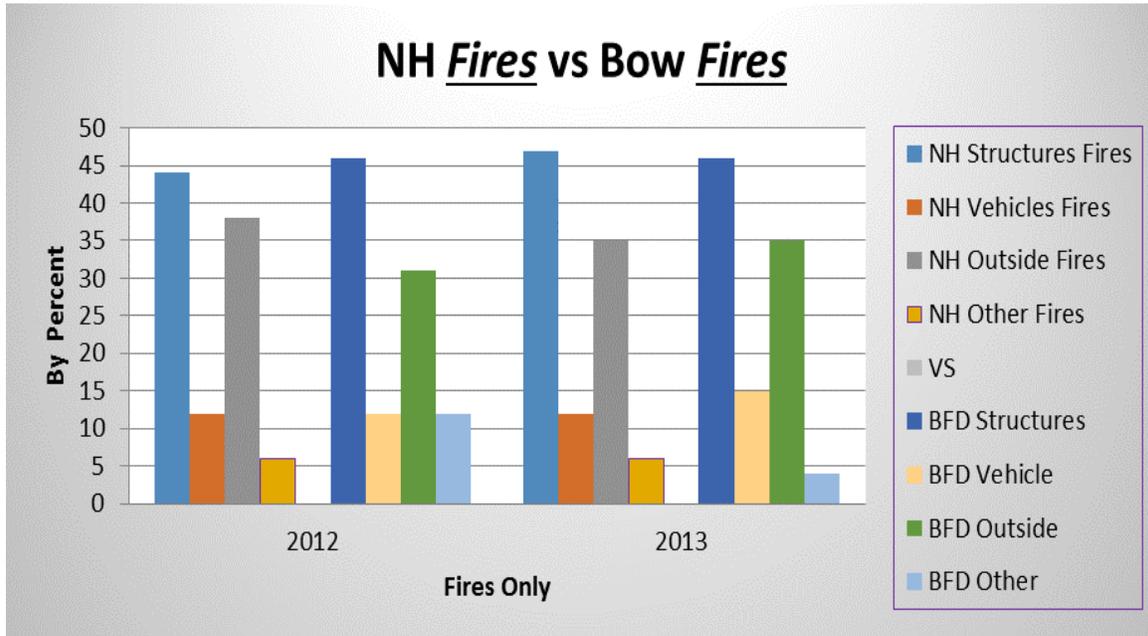


Figure 15: New Hampshire Fires Compared to Bow Fires

As depicted in Figure 15, Bow is tracking similarly to the rest of the State of New Hampshire. Further breakdowns for Bow are displayed in Figures 16 and 17.



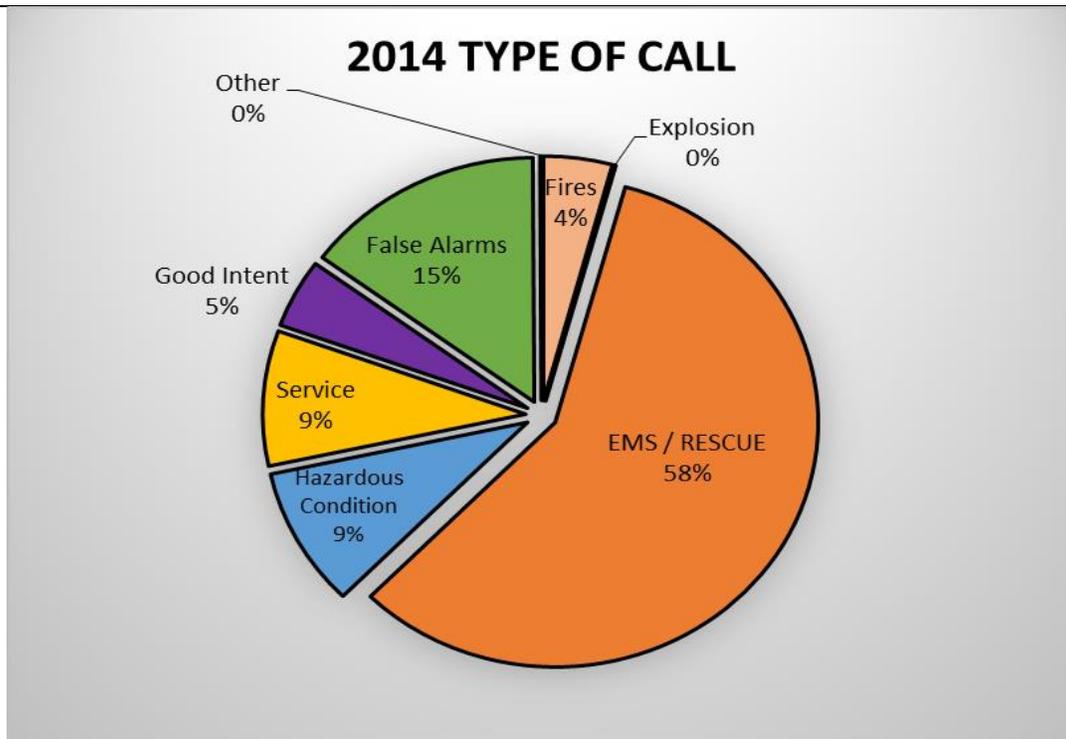


Figure 16: 2014 Type of Calls for the Bow Fire Department

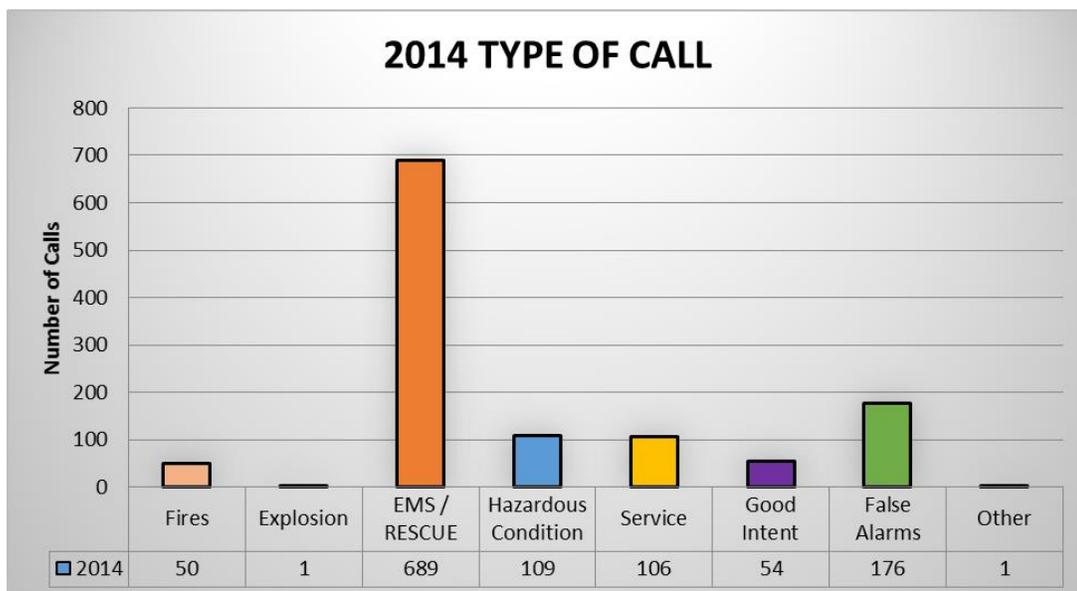


Figure 17: 2014 Type of Calls for Bow Fire Department - Specific Count

**FORESTRY**

There are multiple procedural documents and resources available relative to Forestry Prevention, Response and Training. The Department is State approved for reimbursement regarding forestry events.



## **EMERGENCY SCENE MANAGEMENT**

### **INCIDENT COMMAND SYSTEM**

The Incident Command System (ICS), as required by the National Incident Management System (NIMS), is used at all emergencies. A majority of the Bow Fire Department personnel and the Town's Emergency Management Personnel have been trained in ICS. The Capital Area Mutual Aid Fire Compact utilizes the ICS as well.

### **COMMUNICATIONS**

#### **PUBLIC REPORTING OF FIRES AND EMERGENCIES**

Requests for service are answered at one of two shared 911 Regional Public Safety Answering Points (PSAPs). The calls are then transferred to the appropriate Regional Fire & EMS Dispatch Center or Police Dispatch.

#### **FIRE AND EMS DISPATCH**

The Bow Fire Department is dispatched by the Concord Fire Department. Twenty-two (22) Regional Partners are based out of the Concord Fire Department. Concord is known by Bow for the very good services received. The per-community cost is based on the following formula; thirty-five percent (35%) based on population and sixty-five percent (65%) based the Town's Total Net Equalized Assessed Valuation set by the NH Department of Revenue Administration. Last year the Town of Bow's contribution was eighty-four thousand dollars (\$84,000). When going mutual aid they can share up to those 10 TAC (Tactical) channels. Radio coverage, however, is spotty in certain areas, particularly on the interstate. There are radios for every position on the Apparatus and each radio has a Mayday button. The Regional System delivers a significant global bang for the buck when you consider the amount of fire and EMS Mutual Aid communications that are used on a regular basis.

#### **ARRIVAL TIMES**

The trend lines in Figure 18 show the number of times units arrive in five (5) or less minutes is going up and the number of higher response times is declining. This is a very positive aspect of the service being provided. A caveat exists, however, relative to the number of responders in the responding vehicles. If the calls are for medical emergencies and two personnel are on board, the numbers carry weight. If the numbers are for fire calls and only one person is on the vehicle, the value drops.



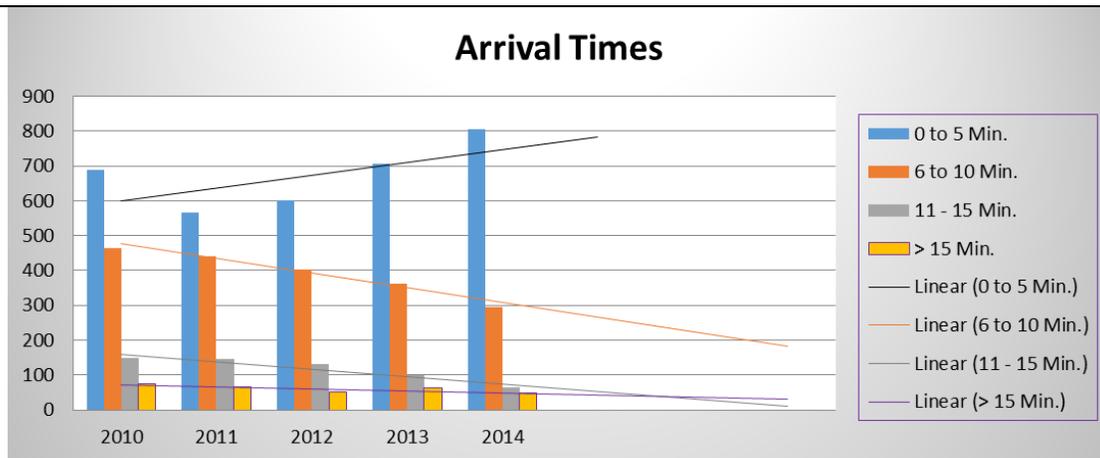


Figure 18: Arrival Times

## EMS

### RESOURCES

The Bow Fire Department is very well resourced with equipment covering a varied set of capabilities. In 2014, there were 698 EMS calls accounting for fifty-eight percent (58%) of the total calls. The Department has two ambulances in service. Presently, the first out ambulance is moved multiple times daily from the Fire Station to the living annex. The ambulance is kept with the on duty staff. The limitations of the Fire station, principally the lack of living and cooking space, leads to the need for spending time in the annex.

### PLANNING

The Department is very good at planning and preparation including public health. Significant number of job aids and guidance documents exist including the Mass Casualty Incident Plan.

### LEVELS OF SERVICE

The BFD utilizes Statewide Protocols and provides First Responder, Emergency Medical Technician, Advanced Emergency Medical Technician, Emergency Medical Technician – Intermediate and Paramedic level services.

### PUBLIC FIRE SAFETY EDUCATION

There are some fire prevention drills, school evacuation drills, Cardio Pulmonary Resuscitation and fire extinguisher training for businesses and schools (very little fire prevention).

### CODE ENFORCEMENT

Lieutenant Furgunson and Captain Harrington are trained to Fire Inspector II. The Fire Department does Fire Marshal Inspections. Extensive inspection programs including fee schedule exists. Checklists for Life safety, Oil Burners, Sprinklers, Fire Alarms and General Inspections were created.



### **FIRE INVESTIGATION**

A Career Lieutenant is Certified Fire Investigator and conducts investigations utilizing an extensive set of investigation documents. The Lieutenant handles initial investigation and will call the State Fire Marshal if needed.

### **EQUIPMENT**

**SEVERAL PIECES OF EQUIPMENT HAVE BEEN ACQUIRED THROUGH VARIOUS GRANTS. THE GRANTS ARE LISTED IN ATTACHMENT # 18**

### **MAINTENANCE OF HOSE AND LADDERS**

An attempt is made to do hose testing on a yearly basis. Ladder Testing is done annually but the 2015 testing has not been done yet.

### **PERSONAL PROTECTIVE EQUIPMENT**

BFD received a grant and everyone got new gear. Gear replacement is part of capital budget and some part of operating budget.

### **FIRE DEPARTMENT BUILDINGS**



**Photo # 16 Bow Fire Department Main Fire Station**

The existing station was relocated in 1956. The Recreation Center addition was built in 1957. Presently, garage space is shared between the Fire Department and Recreation Department in



the rear of the building. In addition, the building has, in the past, included the School and Highway Departments. The current Fire Station is very small and is not adequate (Fig. 19 & 20, Photos 17-26).

Several reviews and studies have been done on the Fire Station and possible remedies to the functional difficulties which have developed over time. JLN concurs with the previous studies and the Board of Selectman that the Fire Station needs to be replaced, sooner rather than later.

A significant concern experienced by JLN dealt with the ability to get emergency equipment on the road, known as turn out time, and the time it took to arrive on scene, known as response time. During all emergencies, elapsed time is often critical to patient survivability or damage reduction. During medical emergencies involving the heart, the sooner cardiac drugs are administered or Cardio Pulmonary Resuscitation is begun the better the potential outcome. During a fire, the sooner extinguishing agents are applied to the fire, the quicker it will go out. The present Apparatus storage configuration hinders the turn out efforts of the Bow Fire Department.



Bow Fire Department Stations

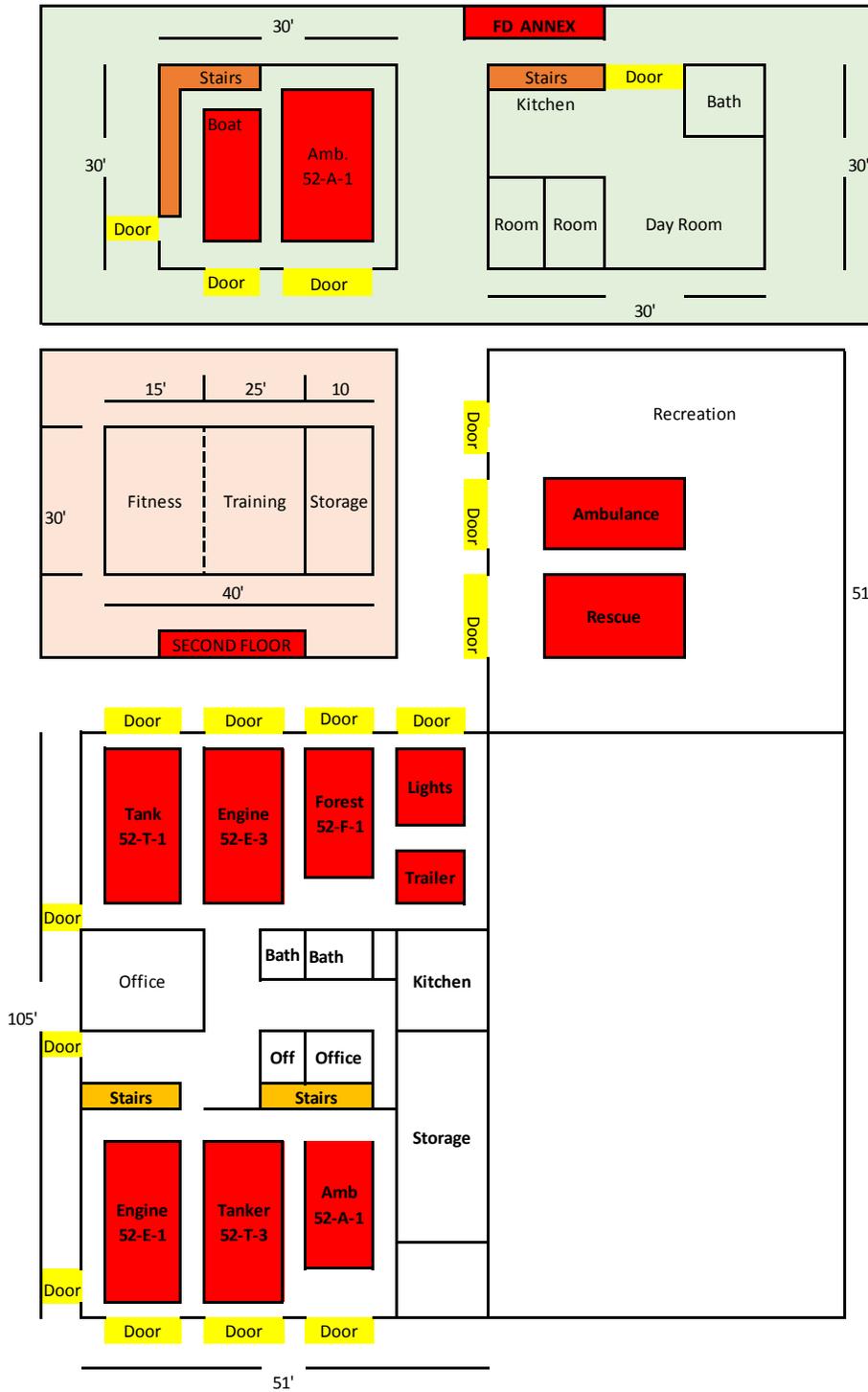


Figure 19: Bow Fire Station and Annex



The present fire turnout time is hindered by the inability of the responding personnel to be in the same building as the fire apparatus. The ambulance has been given priority response status relative to service delivery strategies. This decision being primarily based on response records and day to day experience. Unfortunately, having had to abandon the existing bunkrooms for safety reasons, the on duty personnel are now in a separate building from the majority of the apparatus. To complicate matters, the primary ambulance is moved multiple times a day between the main station and annex building depending on the shifts requirements. Ultimately, the shift personnel are in the annex overnight while the fire apparatus are in the main station.

The National Fire Protection Association Standard 1720 (2014) - Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments and 1710 (2010) - Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments both reference turnout time.

NFPA 1720 (2014) 4.3.3\* Where staffed stations are provided, when determined by the AHJ, they shall have a turnout time of 90 seconds for fire and special operations and 60 seconds for EMS, 90 percent of the time.

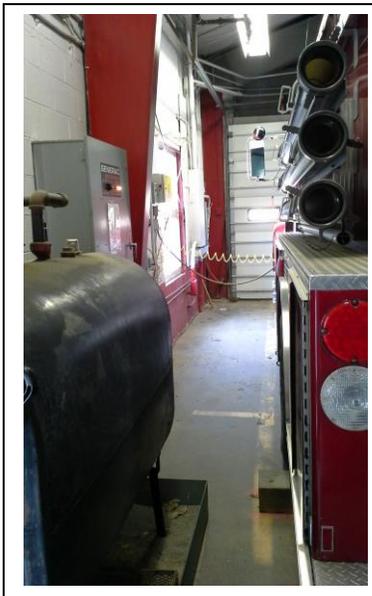
The present response configuration reduces the possibility of meeting this standard. The response personnel and apparatus need to be in the same building. It would be difficult to meet this standard in good weather. This past winter dramatically exhibited that weather can be a significant problem.



**APPARATUS SPACE**



*Photo # 17 Space Concerns*



*Photo # 18 Apparatus Spatial Concerns*

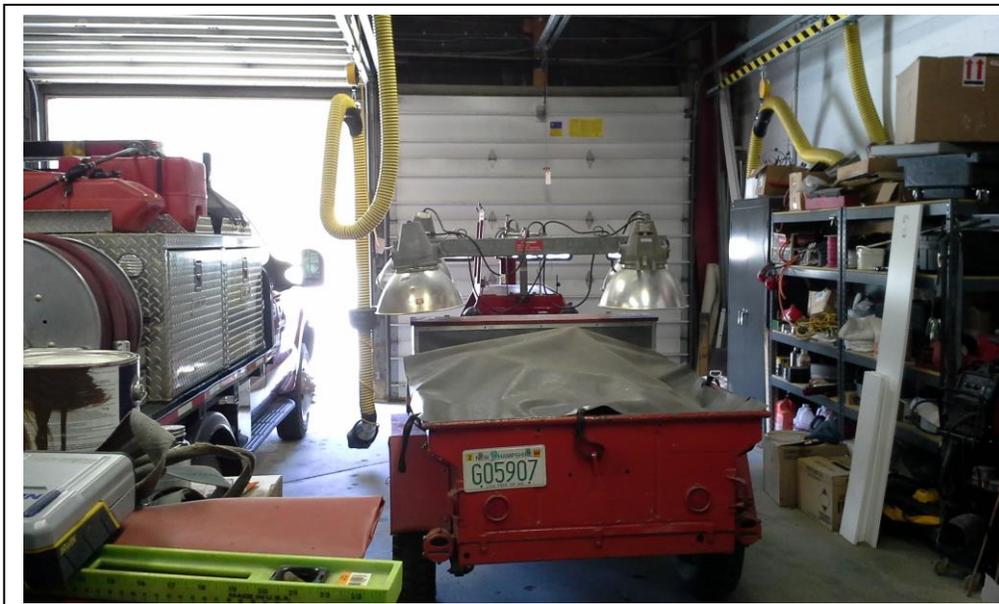


*Photo #19 Apparatus Spatial Concerns*



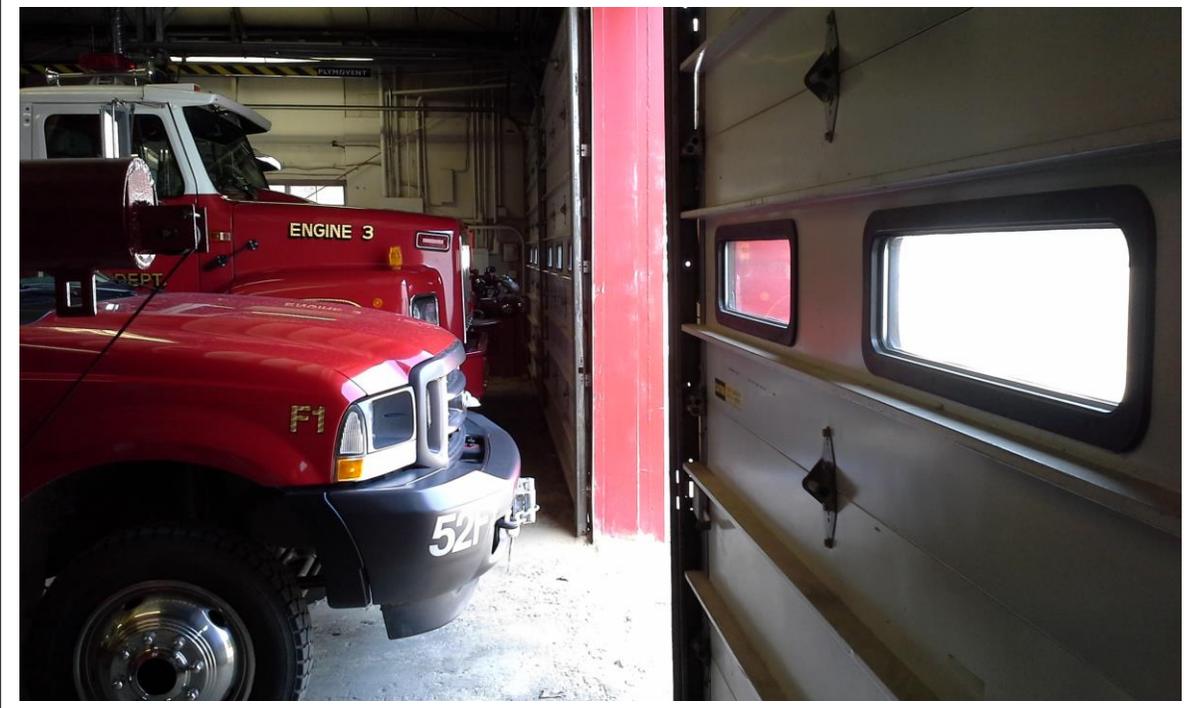


***Photo # 20 Rear of Station and Recreation Wing***

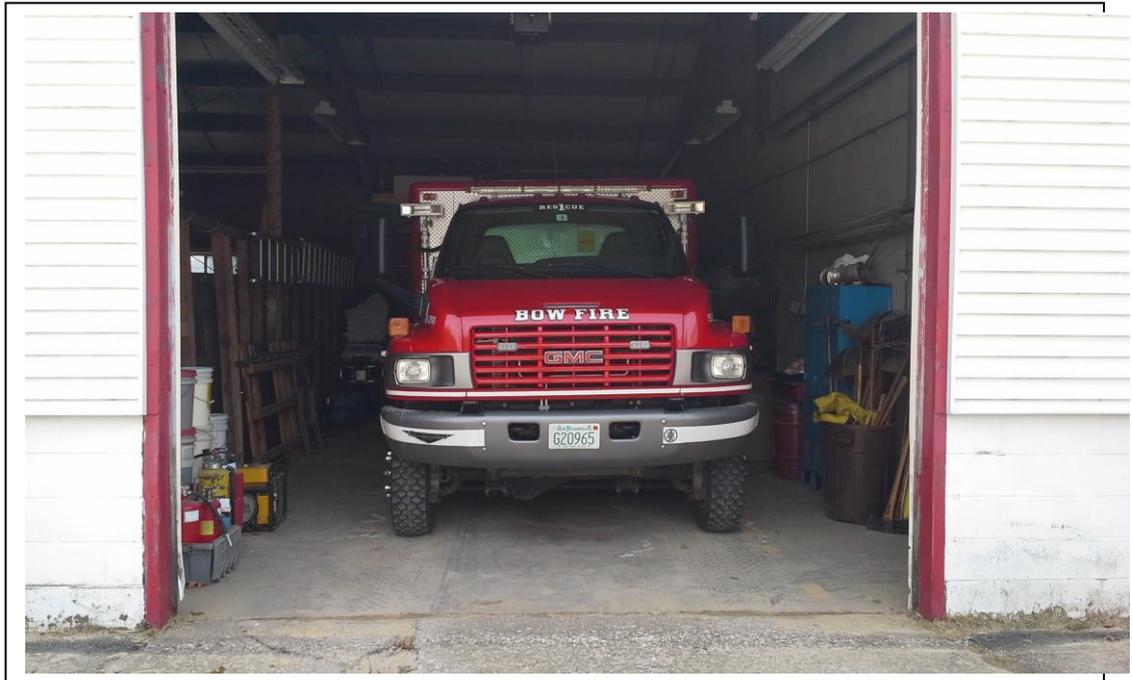


***Photo # 21 Spatial Concerns Rear Bays***





***Photo # 22 Spatial Concerns Rear Bays***

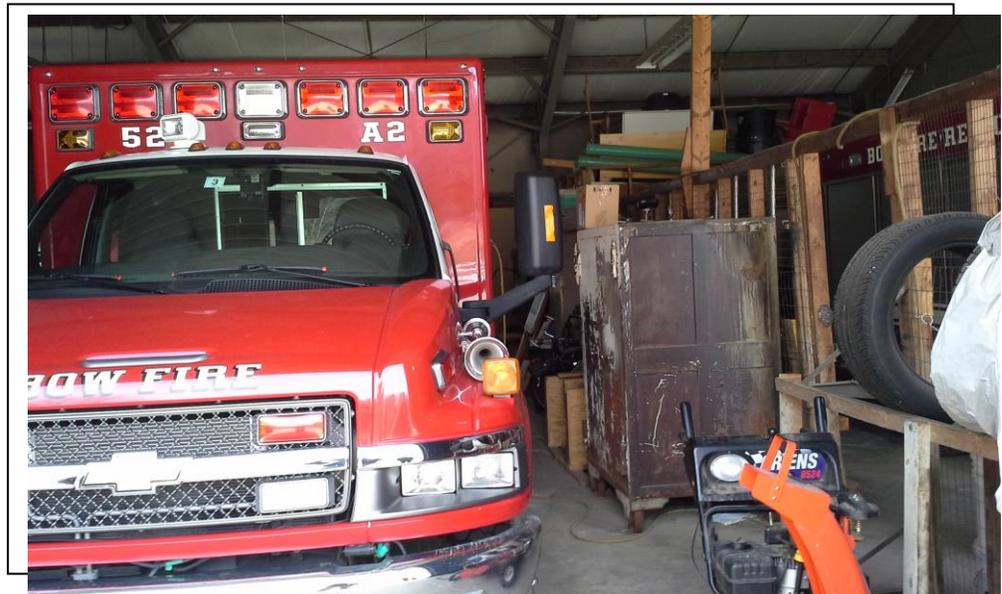


***Photo # 23 Recreation Space Concerns***





**Photo # 24 Functional Space Issues**



**Photo # 25 Recreation Space Storage Concerns**





**Photo # 26 Recreation Space Storage Concerns**

The Fire Department and Elected Officials are trying to replace the fire station but keeps getting shot down by town vote. Word on the street is “why does FD need such a nice building” and “too much money” - concerns for tax increase. The Fire Department feels town residents vote “no” due to raise in taxes. The State Fire Marshal has shut down the training room of the fire department and says the Town of Bow has until 2016 to bring the building up to State code. The Station has Asbestos and other issues that need to be addressed

Location	Space Assigned	Adequacy
Apparatus Floor	5175 Sq. Ft.	<b>NO</b>
Training/ Meeting Room	750 Sq. Ft.	<b>NO</b>
Kitchen	Not Usable	<b>NO</b>
Dispatch Radio room	In Office	<b>NO</b>
Furnace Room	800 Sq. Ft.	<b>NO</b>
Storage Space	800 Sq. Ft.	<b>NO</b>
Office	144 Sq. Ft.	<b>NO</b>
Men’s & Women’s Bathrooms	180 Sq. Ft.	<b>NO</b>

Figure 20: Station Space Assessment



## PHYSICAL FITNESS EQUIPMENT



***Photo # 27 Physical Fitness Equipment (Space is presently not usable)***

Recommendation 13: The Replacement of the Fire Station is of utmost importance and is a critical issue. JLN concurs with the research and studies that have already taken place. Its limitations go beyond standard living conditions and functional business operations. The present arrangement is dysfunctional in an emergency operations capacity. The continued use of this station could lead to both long term and short term harm to the public and response personnel. It is our strongest recommendation that the Station be replaced as soon as possible.

## LAND AND BUILDING MAINTENANCE

The main Fire Station is difficult to maintain. Caution must be used not to disturb any of the asbestos laden components. As presented already, the space is very tight. It is difficult to take a great deal of pride and become motivated to do the extra work needed for a building in such tough shape. While the auxiliary building is in better shape, it is probable some of the frustration from trying to maintain the Fire Station would transfer over.

## MANAGEMENT OF WATER SYSTEM

### HYDRANTS AND ALTERNATE WATER SUPPLIES

A hydrant system was installed in the industrial development area, Whitewater is in charge of the maintenance of the hydrants and water system. Whitewater does flow tests of hydrants on a regular basis. The Town, however, is primarily protected with rural water supply options.



The Department has an inventory of the water supplies in Town in our Firehouse Software-we review whether they are seasonal supplies on a regular basis-we work with the Planning Board during early phases of a development and require a 30,000 gallon cistern (to Fire Department Standards) in every development with more than 12 structures.

The Bow Fire Department presently provides the following roles and responsibilities recommended in NFPA 1201

- *Develop a comprehensive fire water source inventory.*
- *Assess the existing fire water sources for condition and adequacy.*
- *Establish a record keeping system to ensure the sources are inspected and tested at least annually.*
- *Determine seasonal impact on each fire water source.*
- *Develop a minimum needs document for the planning commission to use during the review process of new developments. This should become part of the permit process for planning commission review and approval. Developers proposing subdivisions should be required to address fire protection water in the plan. Plans should be reviewed and deemed acceptable by Fire Chief and Fire Marshal prior to the planning commission vote for acceptance.*

*This should include;*

- *Minimum water supply for type of development (30,000 gallons residential).*
- *Stand Pipe design criteria-minimum size, thread and strainer location.*
- *Determination that the water supply meets drought criteria recognized by ISO.*
- *Minimum access road dimensions and base.*

#### **HAZARDOUS MATERIALS MANAGEMENT**

Hazardous Materials locations are identified in the Pre-plan process and through Superfund Amendment and Reauthorization Act (SARA) reporting. The following sites are given as typical examples:





*Photo # 29 Kalwal Flat Sheet - Product Distribution System*



*Photo # 30 Keller Products Gas Storage*

### **HAZARDOUS MATERIALS INCIDENT RESPONSE**

The Bow Fire Department is principally trained to the NFPA Operational and Awareness levels. There are four to five (4-5) Hazardous Materials Technicians in the Department. The Bow Fire Department is part of the Central New Hampshire Hazardous Materials Team. This Regional Team responds throughout the area on a Mutual Aid basis.

### **MAJOR EMERGENCY MANAGEMENT**

#### **DISASTER PLANNING**

There is extensive Emergency Management Planning and Risk Documentation. In addition, a Point of Distribution Plan, which has been utilized, has been created. The Emergency Operations Plan, including community Emergency Support Functions, (Attachment # 17) is very well written and provided the necessary information for plan participants and the public.



### **EMERGENCY AND DISASTER MANAGEMENT**

Disaster planning and training is conducted with EOC and Emergency Management Semiannually. They have drilled for wind storms with power outages and active shooter situations. Fortunately, the Fire Department's Pre-plan process is in place and there is good cooperation between the Fire Department and the Emergency Manager. The Emergency Manager is an Emergency Management Professional who retired from the State's Office of Emergency Management.

### **EMERGENCY OPERATIONS FACILITY**

The large meeting room at the Town's Offices Facility is modified during Large Scale Emergencies to become the Town's Emergency Operations Center. The facility has multiple meeting spaces for planning needs, the ability to prepare food and Internet connectivity. Drills are held in the facility to ensure familiarity.

### **MANAGEMENT OF REPORTS AND RECORDS**

#### **GENERAL REPORT AND RECORDS MANAGEMENT**

The full time employee's personnel records are kept at the town hall. Part time and call member's records are kept at the station. Firehouse Cloud© incident reporting software is used to manage fire and emergency response reports. Captain Harrington is responsible for all records management.

### **SPECIFIC BOW CONCERNS**

#### **EMPLOYEE COMPENSATION**

A review of regional salaries revealed Bow personnel wages were midline to their neighboring departments. A majority of the area departments with career personnel work 42-43 hour work weeks.

#### **HOLIDAYS AND COMPENSATION**

There are multiple options for holiday time. One option is not to provide any incentive. The most common option used is to provide a bonus or salary multiplier for the personnel who work the holiday. We have seen, as is currently done by Bow personnel receive a "Holiday Payment", a dollar amount for each holiday regardless if the personnel work or not. The Bow policy of doing both is not unusual. We have also seen personnel receive a "Compensatory Day Off" for each holiday they are scheduled to work. While there is no additional cost for the person who works the day, there is a cost to fill their slot when they are off on the Compensatory Day Off. A cost comparison should be done to determine the most cost effective and fair.



## **MEDICAL CLEARANCE**

Personnel who, as part of their duties where an Self Contained Breathing Apparatus is used, shall be medically screened as required by NFPA 1500 Standard on Fire Department Occupational Safety and Health Program, and NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments. Presently, an NFPA baseline physical is provided for all new members as Town Policy. In the past, an effort was made to do annual physicals, but this has not been done yet. The loss of personnel due to illness or preventable injury, however, could cost the community a great deal of money. While it is understood that the State of New Hampshire is not an OSHA State, the regular physical screening required by 29 CFR 1910.134 would be less expensive and a good start.

## **PHYSICAL FITNESS STANDARDS**

The issue of Fitness for Duty spans across all assignments and duties. Many Departments across the United States have some form of Fitness Assessment. The National Fire Protection Association Standards 1582 (2013) - Standard on Comprehensive Occupational Medical Program for Fire Departments (Attachment #13) and 1583 (2015) - Standard on Health-Related Fitness Programs for Fire Department Members (Attachment #14) deal with the issue of Fitness standards and annual assessments. These standards use task based assessments and programs. This deals with the issue of whether or not everyone can do the tasks required to do the job. Chapter five (5) in NFPA 1582 and Chapter nine (9) in NFPA 1583 should be the basis of any Fitness Program.

## **MINIMUM/MAXIMUM AGE LIMITS FOR ACTIVE MEMBERS**

The issue of minimum and maximum age limits must be based on similar functional job requirements as the Physical - Fitness for Duty concern. Age is not the issue but the ability to perform. Again, a set of minimum standard performance objectives should be used as a measurement tool to determine the achievement of "Active Duty Status". Presently, the largest age demographic serving the Department ranges from thirty-six to forty-five (36-45) years of age. They are followed closely by the eighteen to twenty five (18-25) age group. (Fig. 21 &22)

While it can be very difficult, the decision to change someone's activity status is case specific to the individual. In addition, the person's physical abilities can be improved through therapy or worsen over time. It would be inappropriate for us to make a blanket recommendation based solely on age. The NFPA standards or at least the use of the Medical Questionnaire in the OSHA Respiratory standard would give some guidance.

**Recommendation #14: The National Fire Protection Association Standards 1582 (2013) - Standard on Comprehensive Occupational Medical Program for Fire Departments and 1583 (2015) - Standard on Health-Related Fitness Programs for Fire Department Members should be utilized to deal with the issue of Fitness Standards and Annual Assessments.**



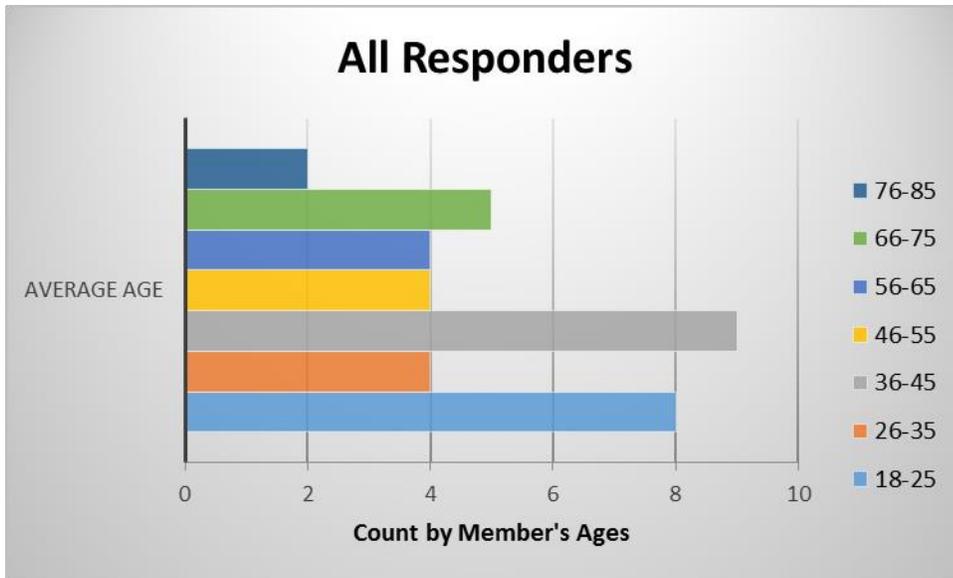


Figure 21: All Responders by Member's Age

**MEMBERS**

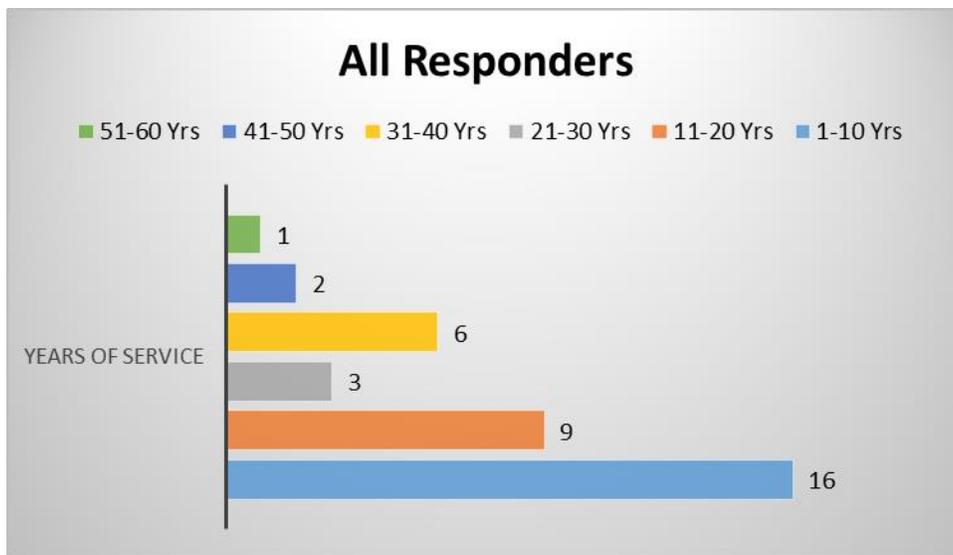


Figure 22: All Responders by Years of Service

**THE USE OF CAPTAIN HARRINGTON IN THE BOW FIRE DEPARTMENT**

Captain Harrington has become an integral part of the Bow Fire Department. In fact, there is not much that goes on relative to the Department that he is not involved with, if not in charge of. This issue was raised in the comments we received and the concerns of many that he is being overworked and could leave. He essentially keeps the Department running. JLN believes his efforts should be recognized and he should be used much more proficiently. Significant efficiencies and improvements would take place if he was off shift and assigned to a day position.



**Recommendation 15:** The Full Time Captain/Training Officer position should be transitioned into an Executive Officer - Days Position. The present Captain is overworked, overwhelmed relative to task completion and the Department's "catch-all person" for pressing issues. This situation should be addressed as soon as possible.

**NFPA STANDARDS UTILIZED.**

The National Fire Protection Association "Consensus " Standards, which apply to the Bow Fire Department, are displayed in Attachment #16.

**TOWN COMPARISON**

Historically, fire departments have always been relied upon by communities for fire suppression and initially were set up similarly. In large communities and cities, departments were separated into job specific companies. Engine companies for fire suppression, Ladder and Truck companies for rescue operations with emergency medical services sometimes separated into their own organization.

Today, demands on the fire service include dealing with hazardous materials, responding to natural disasters, homeland security issues, and complicated transportation accidents as well as the aforementioned events. Even these events have become more complicated based on the modern conveniences available to individuals over the last fifty years. Although all fire departments must address these issues, volunteer departments in smaller communities must provide all of these services under one organization. To complicate matters, although towns can be compared by population, land area, or population type (strictly residential, industrial, commercial, combination of all, etc.); it is difficult to compare the needs of the local fire department to a neighboring town unless that town is identical in population, area, and occupancy. A comparison of a community's fire protection needs based strictly on population would be impractical and erroneous.

**COMPARATIVE REVIEW OF FIRE SERVICE PARTNERS**

A comparative review of Mutual Aid Partners was conducted including its immediate neighbors specifically: Allenstown, Concord, Dunbarton, Hooksett, and Penbroke (Fig. 23). The research determined that these companies and the other contiguous partners of the Bow Fire Department have developed a robust mutual aid system. This includes the ability to communicate with each other during emergencies. Please see the following chart:



**COMPARATIVE REVIEW OF FIRE SERVICE PARTNERS**

Bow New Hampshire Community Comparison						
Topic	BOW	ALLENSTOWN	CONCORD	DUNBARTON	HOOKSETT	PEMBROKE
Population	7573	4326	4250	2750	13,591	7129
Square Miles	28.2	20.5	64.1	30.9	36.3	22.6
Budget	11,055,005	5,938,531	\$13, 196,903	83,875	4,000,000	325,000
Alarms	1115	620	7656	230	2165	350
Paid Staff Full #	6	2	31	0	30	0
Staff Part-time #	2	0	0	18	0	0
Call Members #	29	20	0	34	5	25
Shift Type	24/48	n/a	24/48/24/96	n/a	24/48/24/96	0
Req. Training	Yes	FF1	Yes	FF 1	FF 1	Yes
Fire Incidents	426	194	1,073	130	518	5 Fires
EMS Incidents	689	446	4,796	100	1272	On Request
Rescue Service	Yes	Yes	252	Yes	Yes	Heavy
Haz-Mat Incidents	Yes	Yes	Yes	Yes	Yes	OPS
Pre-Fire Planning	Yes	Yes	Yes	Yes	Yes	Yes
SOPs Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Engines #	2	2	6	1	4	3
Engine Tankers #	0	1	0	1	0	0
Tankers #	2	1	1	2	1	1
Ladder #	0	1	2	0	1	1
Ambulance #	2	0	5	1	2	0
Rescue #	1	0	0	1	0	1
Brush Trucks #	1	1	4	2	3	1
Boats #	1	1	3	1	2	0
Residential #	Yes	yes	Yes	Yes	Yes	Yes
Industrial #	Yes	Very Limited	Moderate	0	Minor	Limited
Commercial #	Yes	Limited	Major	Limited	Minor	Very Limited
Multi-Occup. #	Yes	Very Limited	Moderate	Very Limited	Very Minor	Very Limited
Public Assembly #	Moderate	Very Limited	Moderate	Very Limited	Minor	Very Limited
Inspections Y/N	Yes	yes	Yes	Yes	Yes	Yes
Physicals Y/N	At Entry	At Entry	At Entry	At Entry	At Entry	At Entry

Figure 23: Review to Fire Service Partners

**RECOMMENDED STRATEGIC PLAN FOR BOW FIRE DEPARTMENT**

The following list should be considered the top four (4) priorities for the Bow Fire Department to ensure they maintain adequate emergency services to the Town of Bow:

- A. Fire Station Replacement**
- B. Standard Expectations for Command Staff**
- C. Recruitment/Retention & Minimum Response Standards/Emergency Response Requirements**



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## D. General Operations Recommendations

### FIRE STATION REPLACEMENT

#### SUMMARY:

Fire stations should be designed to meet their respective service demands in terms of the practical utilization by apparatus and personnel. Such facilities should provide for efficient, safe, and convenient functioning of the emergency fire/medical service. The current facility does not meet its expected service demands in regards to managerial, storage, training, physical space, apparatus space, American with Disabilities Act Issues and personnel space. In addition, it has asbestos and other structural issues.

- Recommendation 13: The Replacement of the Fire Station is of utmost importance and is a critical issue.

JLN concurs with the research and studies that have already taken place. Its limitations go beyond standard living conditions and functional business operations. The present arrangement is dysfunctional in an emergency operations capacity. The continued use of this station could lead to both long term and short term harm to the public and response personnel. It is our strongest recommendation that the Station be replaced as soon as possible.

It is recommended that the building be replaced and consider the following items addressed in the Bow Fire Station:

- Additional and improved office area for the line officers providing desks, lockable storage and a lockable door.
- Adequate Dormitory and Shower space should be provided for male and female members of the department.
- Overall storage space for training, records, equipment and supplies.
- Administrative space with the needed technologies including a photo copier, fax machine and printers.
- Provide an additional Bay for expansion space and possible storage for future acquisitions.

#### BENEFIT:

It is our first and strongest recommendation to fund the new station as soon as possible. The Community will benefit from having a modern, safe and functionally efficient station. The previous studies and architectural renderings have provided excellent solutions to the problems with the present station. The larger challenge is to convince the public to support the replacement funding. The station is impacting morale, the opportunities for recruitment and emergency response.



**FINANCIAL IMPACT:**

The above recommended facility replacement will have a significant financial impact on the Bow Fire Department and the Town of Bow. Replacement of the existing station, however, will address the above noted deficiencies as well as many others. The capital planning process should include the facility replacement to begin as soon as possible.

**STANDARD EXPECTATIONS FOR COMMAND STAFF**

**SUMMARY**

There is a significant disconnect between the Bow Fire Department Leadership, the Town Manager and the Board of Selectmen. It is clear from the documents that have been presented to us that the Fire Chiefs are to be supervised by the Town Manager and in his absence the Board of Selectmen. Up to this point in time, there was some discussion regarding Administrative Supervision. It is JLN’s opinion Community Leadership supervises the Fire Department as part of their duties. The Fire Department Leadership should engage the Community Leaders for support and assistance. Included would be strategic and long terms planning. Ultimately, the Town Manager and Board of Selectman have the authority to take such actions as needed to protect the community of Bow.

It is recommended that the following actions be taken:

Recommendation 2: The Job Descriptions for Fire Chief and Assistant Chief should be reviewed and modified to reflect the demands of the present day Fire/EMS Service. Additional Certifications and Training requirements need to be added to the minimum Requirements. Take additional actions as needed to improve the Department’s Leadership.

Recommendation 3: The Chief, Assistant Chief and Call Captain create a response schedule where one of them is on call 24/7/365. There are numerous systems across the country which could be used as guidelines. In addition, the Command Vehicle should be rotated with each duty assignment to ensure it is on the scene for the Incident Commander to use.

Recommendation 4: The Fire Department Leadership, Town Manager and Board of Selectmen meet and discuss those issues which are causing the organizational divide.

Recommendation 5: The Town Manager and Fire Department Leadership meet and create short, medium and long term goals and objectives for the Fire Department. These goals and objectives should then be reviewed and approved or disapproved by the Board of Selectmen.

Recommendation 14: The Full Time Captain/Training Officer position should be transitioned into an Executive Officer - Days position. The present Captain is overworked, overwhelmed relative to task completion and the Department’s “catch-all person” for pressing issues. This situation should be resolved as soon as possible.



**BENEFIT**

It is critical that everyone in Leadership roles clearly understand their responsibilities and the Chain of Command. Any disputes regarding roles and responsibilities should be clarified. A meeting to clear up these and other issues needs to take place. These issues impact every aspect of the Fire Department. There was also a concern that the strained relationship has impacted the efforts to replace the station. A unified approach is needed to achieve this critical need.

**FINANCIAL IMPACT**

There should be limited financial impacts to clarify Command roles and responsibilities. Some legal fees for drawing up documents may be required. Alternately, funds may be saved by better organizing response plans and responsibilities.

**RECRUITMENT/RETENTION & MINIMUM RESPONSE STANDARDS/ EMERGENCY RESPONSE REQUIREMENTS**

**SUMMARY**

Providing Fire/EMS and Rescue services is very personnel intensive. A Combination Department capitalizes on the spirit of volunteerism and the added security of on-duty staffing. It is very important the Volunteer or Call System be supported and expanded to meet today's response needs. Included in this process is the need for response requirements and minimum standards.

There are a number of functions that need to take place at the various emergencies the Bow Fire Department responds to. To ensure these actions take place, a minimum number of responders needs to be on scene. Steps need to be put in place to ensure an adequate response. These steps could include the following options; expand the recruitment and retention plan, increase the number of Mutual Aid personnel who respond to various emergencies, and/or, add additional Career Staff in some configuration to enhance safe operations. Ultimately, emergencies require personnel to effectively handle them.

Recommendation 8: Minimum number of responder requirements should be created for each type of call the Department responds to. These responders could come from the BFD or Mutual Aid Companies. If needed, these responders could come from additional Mutual Aid built into the system, increased requirements on call personnel and/or increasing full-time staffing.

Recommendation 9: Take such actions as necessary to increase the number of responders to provide fifteen (15) to eighteen (18) qualified personnel to the scene of structural fires.

Recommendation 10: Minimum participation standards should be created for the BFD responders. These requirements could be tied into the funding they receive.

Recommendation 11: Compensation for attending training sessions should be restricted to those individuals who are actively responding. A minimum qualifying response percentage would need to be determined. Presently twenty-six (26) of the twenty-nine (29) responders responded to ten percent (10%) or less of the calls. This fact alone is an issue. Possibly, tying the two together could help both.



**BENEFIT**

The ability to deploy adequate human resources to emergencies increases the ability to carry out tasks and to do them with a higher level of safety. In addition, a strong core of active Call members or Career Staff permits expanded levels of service. Present levels of response personnel limit both emergency and non-emergency capabilities.

**FINANCIAL IMPACT**

The Financial Impact of this recommendation could be minor or costly. The costs need to be assessed against the additional service and capabilities they will provide. A well-funded Recruitment and Retention program or quality Call Member Funding program would cost less than additional Career Personnel. The ability to find adequate numbers of active Call Personnel, however, may be difficult.

**GENERAL OPERATIONS RECOMMENDATIONS**

**SUMMARY**

Several recommendations have been grouped together to provide some future direction. They cover both administrative and tactical practices. The completion of these items will support the safe operations of the Bow Fire Department.

Recommendation 1: The metal building rental spaces should take priority in the Pre-Fire plan process.

Recommendation 6: Create an Organizational Statement that meets the NFPA 1500 (2013) Standard, Chapter 4.

Recommendation 7: Conduct a Formal Task Analysis to ensure the resources are supporting the critical operations and prepares for the future.

Recommendation 12: It is the recommendation of JLN Associates that Bow Fire Department require its members and officers to receive training commensurate to the duties expected of them and their positions. In addition, response requirements should be created to practice learned skills.

**Benefit**

The creation of an Organizational Statement combined with the Department’s Mission Statement provides a clear path for the Department to follow. It is recommended the Community Leaders participate in the creation of the Statement.

The prominence of multi-tenant commercial occupancies stresses the importance of conducting pre-plans. These commercial buildings combine a wide variety of risks and hazards. While an office in the facility may not contain any hazardous materials, the auto-body shop next door may have flammable gases and multiple hazardous substances. The existing Pre-fire plan program should focus on these types of occupancies.



Conducting a task analysis combined with the information acquired from the pre-plan will provide the direction for future training. Training should prepare personnel for the actions they will need to take to handle the specific hazards. Response requirements would support the continued provision of quality service.

### **Financial Impact**

These recommendations have a limited financial impact. They represent an expansion of some existing programs and the addition of one process. Captain Harrington, if relieved of other duties, is qualified to conduct the Task Analysis. The Task Analysis should not be added to the Captain's responsibilities **without** other reductions being made.

## **SUMMARY-PLANNING AND PRIORITIZATION**

The Recommendations are separated into immediate needs, within the next 5 years, within the next 6 to 10 years, and within 11 to 20 years to assist the department to develop immediate and long term plans consistent with the recommendation of NFPA 1201. More importantly, it emphasizes what the department's and town's immediate needs are to ensure adequate fire protection is maintained.

## **TWO TO FIVE YEARS**

Recommendation 1: The metal building rental spaces should take priority in the Pre-Fire plan process.

Recommendation 2: The Job Descriptions for Fire Chief and Assistant Chief should be reviewed and modified to reflect the demands of the present day Fire / EMS Service. Additional Certifications and Training requirements need to be added to the minimum Requirements. Take additional actions as needed to improve the Department Leadership.

Recommendation 3: The Chief, Assistant Chief and Call Captain create a response schedule where one of them is on call 24/7/365. There are numerous systems across the country which could be used as a guideline. In addition, the Command Car should be rotated with each duty assignment to ensure it is on scene for the Incident Commander to use.

Recommendation 4: The Fire Department Leadership, Town Manager and Board of Selectmen meet and discuss those issues which are causing the organizational divide.

Recommendation 5: The Town Manager and Fire Department Leadership meet and create short, medium and long term Goals and Objectives for the Fire Department. These Goal and Objectives should then be reviewed and Approved or Disapproved by the Board of Selectmen.

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Recommendation 14: The Full Time Captain / Training Officer position should be transitioned into an Executive Officer - Days Position. The present Captain is overworked, overwhelmed relative to task completion and the Department's "catch-all person" for pressing issues. This situation should be fixed as soon as possible.

## **SIX TO TEN YEARS**

- 1) Continue to follow the Capital Improvement Plan.**
- 2) Continue to follow Recommendations #7,8, and 9**



**REFERENCES**

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

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

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

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

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

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

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

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

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

29CFR1910.134, OSHA Respiratory Protection.

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

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

The Department of Transportation 2004 Emergency Response Guidebook.



**ATTACHMENTS**

Attachment 1	Recommendation Summary
Attachment 2	Recommendation Checklist
Attachment 3	Driver/ Responder Locations & Estimated Response
Attachment 4	High Risk Locations
Attachment 5	Life Safety Concerns
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Attachment 7	Bow FD Apparatus Matrix
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Attachment 9	Fire Chief Job Description
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Attachment 15	Bow Fire Department Anonymous Survey
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Attachment 17	Emergency Management Emergency Support Functions
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**ATTACHMENT #1**

**SUMMARY OF RECOMMENDATIONS**

***Recommendation 1:***

***The metal building rental spaces should take priority in the Pre-Fire plan process.***

***Recommendation 2:***

***The Job Descriptions for Fire Chief and Assistant Chief should be reviewed and modified to reflect the demands of the present day Fire/EMS Service. Additional Certifications and Training requirements need to be added to the minimum Requirements.***

***Recommendation 3:***

***The Chief, Assistant Chief and Call Captain create a response schedule where one of them is on call 24/7/365. There are numerous systems across the country which could be used as guidelines. In addition, the Command Car should be rotated with each duty assignment to ensure it is on scene for the Incident Commander to use.***

***Recommendation 4:***

***The Fire Department Leadership, Town Manager and Board of Selectmen meet and discuss those issues which are causing the organizational divide.***

***Recommendation 5:***

***The Town Manager and Fire Department Leadership meet and create short, medium and long term Goals and Objectives for the Fire Department. These Goal and Objectives should then be reviewed and Approved or Disapproved by the Board of Selectmen.***

***Recommendation 6:***

***Create an Organizational Statement that meets the NFPA 1500 (2013) Standard, Chapter 4.***

***Recommendation 7:***

***Conduct a Formal Task Analysis to ensure the resources are supporting the critical operations and prepares for the future.***

***Recommendation 8:***

***Minimum number of responder requirements should be created for each type of call the Department responds to. These responders could come from the BFD or Mutual Aid Companies. If needed, these responders could come from additional Mutual Aid built into the system, increased requirements on call personnel and/or increasing full-time staffing.***

***Recommendation 9:***

***Take such actions as necessary to increase the number of responders to provide fifteen (15) to eighteen (18) qualified personnel to the scene of structural fires.***



**Recommendation 10:**

***Minimum participation standards should be created for the BFD responders. These requirements could be tied into the funding they receive.***

**Recommendation 11:**

***Compensation for attending training sessions should be restricted to those individuals who are actively responding. A minimum qualifying response percentage would need to be determined. Presently twenty-six (26) of the twenty-nine (29) responders responded to ten percent (10%) or less of the calls. This fact alone is an issue. Possibly, tying the two together could help both.***

**Recommendation 12:**

***It is the recommendation of JLN Associates that Bow Fire Department requires its members and officers to receive training commensurate to the duties expected of them and their positions. In addition, response requirements should be created to practice learned skills.***

***Recommendation 13: The Replacement of the Fire Station is of utmost importance and is a critical issue. JLN concurs with the research and studies that have already taken place. Its limitations go beyond standard living conditions and functional business operations. The present arrangement is dysfunctional in an emergency operations capacity. The continued use of this station could lead to both long term and short term harm to the public and response personnel. It is our strongest recommendation that the Station be replaced as soon as possible.***

**Recommendation #14:**

***The National Fire Protection Association Standards 1582 (2013) - Standard on Comprehensive Occupational Medical Program for Fire Departments and 1583 (2015) - Standard on Health-Related Fitness Programs for Fire Department Members should be utilized to deal with the issue of Fitness Standards and Annual Assessments.***

**Recommendation 15:**

***The Full Time Captain/Training Officer position should be transitioned into an Executive Officer - Days Position. The present Captain is overworked, overwhelmed relative to task completion and the Department's "catch-all person" for pressing issues. This situation should be addressed as soon as possible.***



**ATTACHMENT #2**

**RECOMMENDATIONS CHECKLIST**

*The metal building rental spaces should take priority in the Pre-Fire plan process.  
Create an inventory of Occupancies fitting the target description.  
The Job Descriptions for Fire Chief and Assistant Chief should be reviewed and modified to reflect the demands of the present day Fire/EMS Service. Additional Certifications and Training requirements need to be added to the minimum Requirements. Take additional actions as needed to improve the Department Leadership.*

Options from least expensive to most expensive.

*Create new Job Descriptions for the Executive Officers detailing their responsibilities.  
Add the appropriate Certifications at the Executive Level.  
Create a Performance Improvement Plan for the Chiefs to achieve with timelines.  
Repeat the Fire Chief(s) Election and Appointment Process using the new Job Descriptions.  
Replace the Volunteer Chief with a Career Chief.*

- The Full Time Captain/Training Officer position should be transitioned into an Executive Officer - Days Position. The present Captain is overworked, overwhelmed relative to task completion and the Department's "catch-all person" for pressing issues. This situation dysfunctional and should be addressed as soon as possible.

*The Chief, Assistant Chief and Call Captain create a response schedule where one of them is on call 24/7/365. There are numerous systems across the country which could be used as guidelines. In addition, the Command Car should be rotated with each duty assignment to ensure it is on scene for the Incident Commander to use.*

Options

*A common and successful schedule involves rotating the Command responsibilities for a week at a time. Two weeks has also been popular.  
It should be understood that member's employment will impact the ability to respond.  
The Fire Department Leadership, Town Manager and Board of Selectmen meet and discuss those issues which are causing the organizational divide.*

Options

- Each group submits a list of their concerns for discussion to allow for research and positive interactions.
- A potential option is to utilize a moderator or facilitator to mediate the discussions.

*The Town Manager and Fire Department Leadership meet and create short, medium and long term Goals and Objectives for the Fire Department. These Goals and Objectives should then be reviewed and Approved or Disapproved by The Board of Selectmen.*

*The recommendations of this report, the items addressed in the SWAT analysis and if appropriate the results of the Confidential Survey would provide several topics to be discussed.*

*Create an Organizational Statement that meets the NFPA 1500 (2013) Standard, Chapter 4.*



***Conduct a Formal Task Analysis to ensure the resources are supporting the critical operations and prepares for the future.***

- The task analysis should take into account the Department's responder numbers and capabilities to ensure they can deliver the correct level of service.

***Minimum number of responder requirements should be created for each type of call the Department responds to. These responders could come from the BFD or Mutual Aid Companies. If needed, these responders could come from additional Mutual Aid built into the system, increased requirements on call personnel and/or increasing full-time staffing.***

- If needed, functional testing could be conducted for each of the operational tasks the Department delivers. The NFPA Standards should be used as delivery guidelines.

***Take such actions as necessary to increase the number of responders to provide fifteen (15) to eighteen (18) qualified personnel to the scene of structural fires.***

- If needed, functional testing could be conducted for each of the operational tasks the Department delivers. The NFPA Standards should be used as delivery guidelines.

***Minimum participation standards should be created for the BFD responders. These requirements could be tied into the funding they receive.***

- Call Staff funding could be modified to include a minimum participation benchmark for payment approval. The issue of receiving funds for attending training, while not responding to utilize that training, is inappropriate.
- Part-time staff should receive their hourly rate for the scheduled hours worked but should also be required to meet some minimum standard.
- JLN's recommendation for minimum participation is twenty (20) to twenty-five (25) percent of all calls, including station coverage during EMS calls. A possible compromise would be to require a percentage of non-EMS calls.

***Compensation for attending training sessions should be restricted to those individuals who are actively responding. A minimum qualifying response percentage would need to be determined. Presently twenty-six (26) of the twenty-nine (29) responders responded to ten percent (10%) or less of the calls. This fact alone is an issue. Possibly, tying the two together could help both.***

- Call Staff funding could be modified to include a minimum participation benchmark for payment approval. The issue of receiving funds for attending training, while not responding to utilize that training, is inappropriate.
- Part-time staff should receive their hourly rate for the scheduled hours worked but should also be required to meet some minimum standard.
- JLN's recommendation for minimum participation is twenty (20) to twenty-five (25) percent of all calls, including station coverage during EMS calls. A possible compromise would be to require a percentage of non-EMS calls.



***It is the recommendation of JLN Associates that Bow Fire Department requires its members and officers to receive training commensurate to the duties expected of them and their positions. In addition, response requirements should be created to practice learned skills.***

- This issue principally affects the Chief Officers.
- The members appear to have had many opportunities to attend training.

***The Replacement of the Fire Station is of utmost importance and is a critical issue. JLN concurs with the research and studies that have already taken place. Its limitations go beyond standard living conditions and functional business operations. The present arrangement is dysfunctional in an emergency operations capacity. The continued use of this station could lead to both long term and short term harm to the public and response personnel. It is our strongest recommendation that the Station be replaced as soon as possible.***

- While combining the Fire and Police agencies in one building has its advantages, the Fire Station has been formally ordered to meet the Fire Code. In addition to Life Safety Fire Code issues, the building has asbestos and other health issues.
- A primary proposal should be created dealing with the Fire Station Replacement.
- Additional options could be selected by the taxpayers to meet their preferences. There may be an interest to add a new Recreation building.
- Options could be given for adding sections over time, potential future bonding measures.
- A functional Fire station must be the highest priority.

- **The National Fire Protection Association Standards 1582 (2013) - Standard on Comprehensive Occupational Medical Program for Fire Departments and 1583 (2015) - Standard on Health-Related Fitness Programs for Fire Department Members should be utilized to deal with the issue of Fitness Standards and Annual Assessments.**

***Utilize NFPA 1582 to assess personnel's Medical Clearance.***

- Utilize NFPA 1583 to assess personnel's Fitness Levels.

***The Full Time Captain/Training Officer position should be transitioned into an Executive Officer - Days Position. The present Captain is overworked, overwhelmed relative to task completion and the Department's "catch-all person" for pressing issues. This situation should be addressed as soon as possible.***



## ATTACHMENT # 3

## DRIVER/ RESPONDER LOCATIONS &amp; ESTIMATED RESPONSE TIMES

Dana Abbott	32 Putney Rd	Bow, NH	5 Mi.	9 Min.
<b>Justin Abbott</b>	<b>23 Logging Hill Rd</b>	<b>Bow, NH</b>	<b>4.3 Mi.</b>	<b>1 min.</b>
Jacob Anderson	22 Vaughn	Bow, NH	2.7 Mi.	5 Min.
Edwin Bardwell	14 Bow Bog Rd.	Bow, NH	1.2 Mi.	2 Min.
<b>Jim Beaudoin</b>	<b>151 Tibbetts Rd</b>	<b>Alton, NH</b>		
<b>Craig Beaulac</b>	<b>5 Rand Rd.</b>	<b>Bow, NH</b>	<b>1 Mi.</b>	<b>2 Min.</b>
<b>Eliot Berman</b>	<b>78 Woodhill Hookset Rd.</b>	<b>Bow, NH</b>	<b>4.5 Mi.</b>	<b>10 Min.</b>
<b>Richard Bilodeau</b>		<b>Pembroke NH</b>		
<b>Greg Brown</b>		<b>Concord, NH</b>		
Tony Camp	30 Dunbarton Center Rd.	Bow, NH	3.1 Mi.	5 Min.
Jonathan Duford	99 Clinton St.	Concord, NH	4 Mi	7 Min
<b>David Eastman</b>	<b>1 Poor Richards Dr.</b>	<b>Bow, NH</b>	<b>1.5 Mi.</b>	<b>3 Min.</b>
Donald Eaton	2 Allen Rd.	Bow, NH	3.1 Mi.	5 Min.
<b>Matthew Espinosa</b>	<b>99 Clinton St.</b>	<b>Concord, NH</b>	<b>4 Mi.</b>	<b>7 Min.</b>
<b>Thomas Ferguson</b>	<b>132 Broadway</b>	<b>Concord, NH</b>	<b>2.5 Mi.</b>	<b>6 Min.</b>
Margaret Francoeur	25 Vaughn Rd.	Bow, NH	2.7 Mi.	5 Min.
Jillian Gamelin	10 Heather La.	Bow, NH	2 Mi.	4 Min.
Christopher Girard	44 Rockingham St.	Concord, NH	2.2 Mi.	5 Min.
Chris Gow	33 Logging Hill Rd	Bow, NH	.5 Mi.	1 Min.
<b>Mitchell Harrington</b>	<b>521A Fourth Range Rd.</b>	<b>Pembroke, NH</b>	<b>7.6 Mi.</b>	<b>13Min.</b>
<b>Tim Ives</b>	<b>6 Bow Bog Rd.</b>	<b>Bow, NH</b>	<b>1.2 Mi.</b>	<b>2 Min.</b>
Kenneth Judkins	37 Robinson rd.	Bow, NH	2.4 Mi	5 Min.
Leland Kimball	32 Ridgewood Dr.	Bow, NH	1.1 Mi.	3 Min.
Maria Koustas	100 West Haven Rd.	Manchester, NH	13.4 Mi	16 Min.
<b>Keith Lambert</b>	<b>8 Meadow La.</b>	<b>Allenstown, NH</b>	<b>10.8 Mi.</b>	<b>19 Min.</b>
Kevin Marquis	109 Bow Bog Rd.	Bow, NH	1.2 Mi.	2 Min.
Anne Mattice	49 Robinson Rd.	Bow, NH	2.4 Mi.	5 Min.
Mark Mattice	49 Robinson Rd.	Bow, NH	2.4 Mi.	65Min.
Anna McGee Hanson	14 Grandview	Bow, NH	1.1 Mi.	2 Min.
Parker Moore	42 Knox Rd.	Bow, NH	.7 Mi.	1 Min.
Richard Pitsey	3 Shore View Dr.	Bow, NH	1.2 Mi	4 Min.
Robert Purcell	1 Stack Dr.	Bow, NH	4.4 Mi.	9 Min.
Adam Seligman	52 Brown Hill Rd.	Bow, NH	3.8 Mi.	7 Min.
Brandon Skoglund	142 Stark Highway S.	Bow, NH	6.9 Mi.	12 Min.
Bayley Ulrich	3 Dunnmoore Dr.	Bow, NH	1.3 Mi.	3 Min.
Michael VanDyke	20 Albin Rd.	Bow, NH	.6 MI.	1 Min.
William Wood	7 Bela View Dr.	Bow, NH	4.9 Mi.	9 Min.

**Drivers > 10% but < 20% of Responses Participation****Career Staff**

- Based on information provided by Google Maps©



**ATTACHMENT # 4  
HIGH RISK PROPERTIES**

**Potential Hazardous Materials Incident Properties**

<b>Company</b>	<b>Location</b>	<b>Process</b>	<b>Hazards</b>	<b>Distance from BFD (miles)</b>	<b>Travel Time (minutes)</b>
Antifreeze Technology	85 River Rd	Antifreeze Technology	Sales	3.8	7
Autologic	7 Gordon Rd.	Foreign and Domestic	Sales and Service	3	5
Automotive Consultants	65 River Rd	Auto and Trailer Repair	Auto & Trailer Repair	3.5	7
Blue Seal Feed	520 Hall St.	Animal Feed & Supplies	Agricultural Products	1.7	3
Bovie Screen Printing	4 Northeast Ave	Screen Printing	Sales	1.8	3
Bow Auto Parts	1317 Route 3-A	Auto Salvage	Parts and Repairs	4.7	8
Bow Bus Garage	12 Robinson Rd	Town School Buses	Transportation	2.7	5
Bow Mobile	519 South St.	Service station	Gas and Food	1	2
Bumper to Bumper Auto Body	65 River Rd.	Auto Body	Collision Repair	3.4	7
Capital Construction	3 Johnson Rd.	Construction	Supplies and Equipment	4.9	9
Champny's Fireworks	1222 Route 3-A	Fireworks	Sales	4.7	8
Dick's Service Station	521 South St.	Auto Repair	Auto Parts	1	2
Diesel Fuel Injector Service	42 Dunklee Rd.	Diesel Injector Systems	Repair / Rebuilding	4	7
Dyno Noble	30 Johnson Rd			4.8	8
Energy North Propane	6 Johnson Rd	Full Service Provider	Sales and Service	4.8	8
Extreme Machines	1188 Route 3-A	Consignment Parts	Sales and Service	4.7	8
First Line Auto	1175 Route 3-A	Sales	Sales and Repair	4.7	8
Goddards Automotive	65 River Rd.	Automotive Repairs	Repairs	3.4	7
Grappone	530 Route 3-A	Car Sales	Sales and Service	1.7	3
Irving Mainway	501 Route 3-A	Service Station	Food and Fuel	1.7	3
Lewis Arms	730 Route 3-A	Firearms And Ammo	Sales	4.3	7
N.E. Truck Tire Centers	134A River rd.	Tire Dealer	Combustible Tire Storage	4.4	8

<b>Company</b>	<b>Location</b>	<b>Process</b>	<b>Hazards</b>	<b>Distance from BFD (miles)</b>	<b>Travel Time (minutes)</b>
Sullivan Tire	1644 Route 3-A	Tire Retread Plant	Combustible Tire Debris	4.7	8
Supreme Auto	720 Route 3-A	Car Sales	Sales and Service	4.3	7
Value Auto Sales	1474 Rt. 3-A	Car Sales	Sales and Service	4.7	8
Merrimack Power Station	97 River Rd.	Power Plant	Coal, Anhydrous Ammonia	5	9

**ATTACHMENT # 5**

**LIFE SAFETY CONCERNS**

**Properties with Significant Life Safety Concerns**

<b>Property</b>	<b>Location</b>	<b>Concern</b>	<b>Distance from BFD (miles)</b>	<b>Travel Time (minutes)</b>
Bow Elementary School	22 Bow Center Rd	Elementary School Students	.5	1
Bow Middle School	20 Bow Center Rd.	Middle School Students	.5	1
Bow High School	32 White Rock Hill Rd.	High School Students	.3	1
Celebrating Children, Bow	10 Grandview Rd	Child Care	1	2
Child Care @ Baptist Church	6 Branch Londonderry Turnpike East	Church Congregation Child Care	1.9	3
Crossroads Community Baptist Church	6 Branch Londonderry Turnpike East	Church Congregation	1.9	3
Hampton Inn	515 South St.	Hotel Guests	1.6	2
Meeting House Montessori School	28 Logginghill Rd.	Student Population	.2	.5
United Methodist Church	271 South St.	Church Congregation	1.2	2
White Rock Senior Living Elderly Housing	6 Bow Center Rd.	Residential Senior Population	.08	.25

**ATTACHMENT # 6**  
**NFPA 1201 Standard for Developing Fire Protection Services for the Public Checklist.**  
*This Checklist is often customized to address Customer Needs*

<b>Code Requirement</b>	<b>Comply</b>	<b>Basis/Supporting Info for Meeting the Standard</b>
AGENCY		Bow Fire Department, Bow New Hampshire (Co#52)
GENERAL NOTES FROM INTERVIEWS		
NFPA 1201 Standard for developing Fire Protection Services for the public		
Legislation or Resolution Creating Fire Department		Under dispute. NOTES,? of FD as support association
Chapter 1 general 1-1 * Scope		Support organization for FD registered with Secretary of State
A-1-1		
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.		The Bow Fire Department offers the following services; Fire Suppression, Hazardous Materials Response, Emergency Medical Services at the Advanced Life Support level and multiple forms of Technical Rescue including Vehicle Extrication, Water Rescue, and High Angle Rescue. In addition, the Department provides Community Risk Reduction services including Fire Safety Education, Code Enforcement and Fire Investigation.
This standard is intended for the use and guidance of those charged with providing fire protection (safety) services to protect lives, property, and the environment from the effects of fire and, in many cases, other perils.		
1-3* Introduction.		
This standard discusses public fire departments that serve a defined area and are generally under the auspices of a local government authority.		Town of Bow, New Hampshire, Non – profit support organization.
1-4 Relationship to Other Standards.		
The requirements of other NFPA standards that contain mandatory provisions related to the operation of a fire department and the delivery of fire protection shall be met.		Several NFPA standards are used in several aspects of the Department. See List.
1-5* Concept of Risk.		
The level of service provided and the degree of risk accepted by the jurisdiction shall be subject to local determination.		FD Officers feel the risk in their community is a lot higher than surrounding towns. They would like that to be reflected into the survey and show that surrounding areas do not have all the high risk (Potentials).

<p>Safety/Health/Risk Management. An ESO 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.</p>		<p>Training includes Risk Management on a regular basis. "Risk a lot to Save a Lot." Etc. High Risk/Low Frequency events.</p>
<p>1-6* Fire Protection Alternatives.</p>		
<p>Where possible, fire departments shall periodically evaluate and redefine fire protection needs for their jurisdiction through the strategic (master) planning process.</p>		<p>Differing objectives between the department and town leadership.</p>
<p>Chapter 2 Purpose of a Fire Department</p>		
<p>2-1 Purpose. 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.</p>		
<p>MISSION STATEMENT</p>		<p>The Mission of the Bow Fire Department is to protect lives, property, and the environment, with effective and safe responses to all emergencies and calls to service. The Bow Fire Department is dedicated to improving the overall quality of living for each resident through life safety, education, and emergency response.</p>

The ESO 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

All of the service oriented programs are supported. They include; to save lives, prevent or mitigate fires, injuries, and emergencies, work through a system of emergency management, extinguish fire, minimize damage to property and the environment, protect critical infrastructure - power plant, interstate, highways, rail lines , perform emergency medical services, protect the community from other hazardous situations – anhydrous ammonia, perform response to and mitigation of events of terrorism – training for awareness, active shooter, bomb squad responses, perform rescue services, perform other community-related services.

5. Review of Bow Fire Department services for past 3 years

- a. Type of calls
  - Ambulance
  - Fire
  - Mutual aid response
- b. Equipment deployed

2-2 Fire Prevention and Risk Reduction.

This process shall encompass consideration of relevant engineering challenges and potential solutions with respect to the following:

- (1) Code enforcement
- (2) Risk assessment
- (3) Water supply
- (4) Planning
- (5) Communications
- (6) Investigations

All of these opportunities; Code enforcement, Risk assessment, Water supply, Planning, Communications and Investigations, are used by the Department to prevent emergencies and reduce risk. A Career Officer is certified as an Inspector and conducts building inspections. The fixed water system is managed by the White Water Company. BFD Officers feel the risk in their community is a lot higher than surrounding towns. They would like that to be reflected into the survey and show that surrounding areas do not have all the high risk (Potentials).

2-2.1\*

<p>Every fire department shall have a program under which its personnel regularly examine every part of the community where a significant fire problem might develop. Personnel shall inspect real property in the community with an emphasis on those occupancies identified by a risk schedule as subject to a high level of hazard to life and property.</p>		<p>The Department has a Pre-Fire Planning program. Each shift conducts a plan and then shares then with the other Personnel. They use the Quick Access Plans format.</p>
<p>2-3 Fire Suppression.</p>		
<p>2-3.1</p>		
<p>The fire department shall be organized to effectively combat fires that occur within the area it serves. A department's commitment to provide nonemergency services activities shall not interfere with its ability to effectively combat fires when they occur.</p>		
<p>2-3.2</p>		
<p>The priority of goals in the suppression of fire shall be as follows:  (a) Save lives  (b) Limit the spread of the fire  (c) Extinguish the fire  (d) Minimize property damage from fire-related hazards.</p>		<p>Basic LIP: Life Safety, Property Conservation, and Incident stabilization.</p>
<p>2-4 Rescue and Emergency Medical Services.</p>		<p>2014 EMS Calls- 45-55% of all calls.</p>
<p>2-4.1*</p>		
<p>Preservation of human life shall be the primary responsibility of the fire department during fires and other emergencies.</p>		
<p>2-5 Hazardous Materials.</p>		
<p>2-5.1*</p>		
<p>The fire department shall be prepared to carry out at least first responder level functions in the event of hazardous materials incidents in its jurisdiction. Occupational Safety and Health Administration (OSHA) regulations require that all fire departments be trained to handle hazardous materials incidents at the first responder level.</p>		<p>A majority of the personnel are trained to the Awareness and Operations levels. There are 4-5 HazMat Techs Technicians. The BFD is part of the Central New Hampshire and Lakes Region Regional Hazardous Materials team.</p>

2-6 Disaster Planning.		Drilled for wind storm with power outage, active shooter.
2-6.1*		Disaster Planning Training is conducted with EOC and Emergency Management semi annually.
Comprehensive response plans shall be prepared in writing describing the fire department role and providing for management and coordination of all public and private services called into action in natural and technological (man-made) disasters.		The Pre-plan process is in place and there is good cooperation between the Fire Department and the Emergency Manager.
Chapter 3 Governmental Responsibilities		
3-1 Local Government.		
3-1.2*		
The fire department shall maintain a close working relationship with the agencies responsible for law enforcement and water supply, among others, in order to operate in an effective and cooperative manner.		The Relationship with the Community Leadership is stressed. There is a significant amount of distrust in both directions. This is impacting the funding for the new station. The relationship needs to improve. The Chiefs voiced concern the Assessment Survey did not come from Fire Department. The members feel there is nothing wrong with their department. A second issue is that funding was put into budget for 2 months of Full Time Chief pay. This was defeated by the tax payers. Communications needs to be better and joint leadership cooperation needs to improve. Mutual Aid Coordinator: Keith Gilbert , 603-222-8988 EMS Coordinator: Sue Prentis, 603-227-7000, x 3608
Chapter 4 Strategic (Master) Planning		
4-1* Purpose.		
The fire department, in conjunction with the community administration, shall develop and implement a total concept strategic (master) plan for a community-wide balanced and cost-effective fire control strategy that takes existing conditions and anticipated overall community growth into consideration.		Master Planning - The Town established a capital plan for purchases and apparatus replacement. During the Fire Department meeting, the opinion was it is presently not being followed due to Fire Station replacement plans.
4-2 Research and Planning.		
4-2.2		

<p>The research and planning function shall encompass examination of any or all aspects of the fire department's activities, both generally and specifically. It shall be directed toward improving and maintaining the efficiency and effectiveness of the fire department and toward maintaining a responsive approach to the community's changing needs for service.</p>		<p>The formal research and planning is done by appointed Fire Department committees and work groups. There is a Truck Committee for example. Research &amp; Planning for Equipment is a group effort among Fire Department personnel. Small sub-committees are used when purchases come up for gear that is purchased through grants. Fire Department group discussions, among themselves, determine future purchases for the Fire Department.</p>
<p>4-3 Strategic Planning Process.</p>		
<p>4-3.1*</p>		
<p>The strategic planning process shall be designed to evaluate the kind and level of fire risk in a community and to establish future objectives for minimizing or reducing that risk.</p>		<p>There is no formal Strategic Planning Process in place.</p>
<p>4-3.2*</p>		
<p>The strategic planning process shall attempt to project the future fire protection needs of a community for periods of 10 and 20 years.</p>		
<p>Chapter 5 Organizational Structure of the Fire Department</p>		<p>Captain Harrington Provided</p>
<p>5-1 Purpose.</p>		
<p>The fire department shall have an organizational structure that facilitates efficient and effective management of its resources to carry out its mandate as required in Chapters 2 and 3.</p>		<p>A Traditional Chain of Command is used by the Fire Department.</p>

<p>1910.156(b)(1) Organizational statement. The employer shall prepare and maintain a statement or written policy which establishes the existence of a fire brigade; the basic organizational structure; the type, amount, and frequency of training to be provided to fire brigade members; the expected number of members in the fire brigade; and the functions that the fire brigade is to perform at the workplace. The organizational statement shall be available for inspection by the Assistant Secretary and by employees or their designated representatives.</p>		<p>There presently is no formal Organizational Statement.</p>
<p>Organizational Statement</p>		
<p>1500 - 4.1.1 The fire department shall prepare and maintain a written statement or policy that establishes the existence of the fire department, the services the fire department is authorized and expected to perform, and the basic organizational structure</p>		<p>There is no Organizational Statement.</p>

1500-4.1.2 The fire department shall prepare and maintain written policies and standard operating procedures that document the organization structure, membership, roles and responsibilities, expected functions, and training requirements, including the following:  
 (1) The types of standard evolutions that are expected to be performed and the evolutions that must be performed simultaneously or in sequence for different types of situations (2) The minimum number of members who are required to perform each function or evolution and the manner in which the function is to be performed (3) The number and types of apparatus and the number of personnel that will be dispatched to different types of incidents (4) The procedures that will be employed to initiate and manage operations at the scene of an emergency incident

There are numerous written policies and procedures. They include the following topics;

- I. Membership
- II. Conduct
- III. Protective Clothing
- IV. Department Uniform
- V. Breathing Apparatus
- VI. Department Equipment
- VII. Response to Fires
- VIII. Warning Devices
- IX. Fireground (Incident) Operations
- X. Mutual Aid
- XI. Training
- XII. Business Meetings
- XIII. Chain of Command
- XIV. Officers' Duties
- XV. Housekeeping
- XVI. Security
- XVII. Probationary Restrictions
- XVIII. Personnel Radio Call Signs
- XIX. Privacy
- XX. Support Division

Captain Harrington is responsible for maintaining the Departments records and has created a majority of the Policies and Procedures.

5-4 Fire Department Organizational Plans.

5-4.1\*

The fire department shall have an organizational plan that illustrates the relationship of the individual operating divisions to the entire organization.

The Bow Fire Department operates with a traditional Chain of Command NO ELECTION IN SEVERAL YEARS

5-5 Operating Units.

5-5.1\*

i. All response vehicles

Fire companies whose primary functions are to pump and deliver water and perform basic fire fighting at fires shall be known as engine or pumper companies.

The Department presently operates two engines a 2009 Pierce and a 2004 International Commercial and 2 Tankers a 1993 International (1750 Gallons) and 1997 International (1800 Gallons). In addition, they operate a 2004 F550 Brush Unit.

5-5.2*		
Fire companies whose primary functions are to perform the variety of ancillary services associated with ladder truck work, such as forcible entry, ventilation, rescue, utility control, illumination, overhaul, and salvage work, shall be known as ladder companies.		They do not presently do not have ladder truck. There is a disagreement between Department and Town regarding purchasing one or Automatic Mutual Aid. Presently, the Ladder coverage is from Mutual Aid. A Ladder is dispatched on all structure fires.
5-5.3*		
Other types of companies equipped with specialized apparatus and equipment shall be provided to assist pumper and ladder companies where deemed necessary as part of established practice.		The Department operates a 2007 Rescue Truck.
EMS UNITS		2 Ambulances
SUPPORT UNITS		The Department operates a 2014 Primary Ambulance and a 2007 supporting Ambulance. In addition, they operate several support units; a small 16ft inflatable boat, a Light Tower, the Police Department ATVs, and a Command Vehicle.
5-5.4*		
The department shall maintain a periodically updated 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.		No formal task analysis has been done.
5-6 Fire Suppression Force Staffing.		
5-6.1*		

The fire company or response group assigned to respond to a fire call shall be comprised of the numbers necessary for safe and effective fire-fighting performance relative to the expected fire-fighting conditions. These shall be determined through task analysis procedures. The conditions to be considered shall include:

- (a) Life hazard to the populace protected
- (b) Provisions of safe and effective fire-fighting performance conditions for the fire fighters
- (c) The potential property loss
- (d) The nature, configuration, hazards, and internal protection of the properties involved
- (e) The types of fire ground tactics employed as standard procedure, the type of apparatus used, and the results expected to be obtained at the fire scene
- (f) Budgetary constraints.

There are two (2) Career Personnel on 24/7/365 from Sunday through Friday working a 24/48 schedule. They have Saturdays off. Part-time personnel work Saturdays. They are paid per hour. Call Personnel activated for all calls and are paid by the hour.

Structure Fires: During the week, career and call staff responds to emergencies. Automatic Mutual Aid responds on all Structural Fires from neighbors as part of compact (a Ladder is part of Automatic Mutual Aid response). There is Automatic Mutual aid from three (3) towns. It depends on which response zone for who will be Rapid Intervention Team (RIT). In Zone 1 Hooksett will be RIT and Zone 2 Concord will be RIT.

In town Motor Vehicle Accidents are handle by the Bow Fire Department, but, Accidents on the interstate requires Automatic Mutual Aid depending on location. Call back for coverage if out on long mutual aid calls.

Captain Harrington is responsible for scheduling the shift coverage, Career and Call. In addition, he is responsible for all record keeping, payroll, Workers Compensation investigation and documentation.

Comparison with comparable communities:

- a. Define comparable communities
- b. Staffing
  - Full time
  - Call
  - Officers
- c. Compensation
  - Full Time
  - Call
  - Officers

Review of personnel needs to meet requirements of town:

- a. Compare with staffing, full time and call
- b. Projection of staffing needs next 10 years

4. Shift coverage:

- a. Evaluate present coverage

Captain over tasked.

b. Evaluate number of call personnel deployment for past 3 years Enrolled Trained Stand a shift Respond to calls		
5-8 Intercommunity Organization (Mutual Aid).		
5-8.1		
Where practical and as conditions require, the fire department shall have an effective mutual aid arrangement with neighboring jurisdictions.		Capital Region Compact, 22 towns dispatched out of Concord.
Mutual aid agreements shall address issues that include but are not limited to the following: (1) Indemnity (2) Liability for injuries (3) Reimbursement for cost of service (4) Authorization to respond (5) Level of staffing (6) Types of equipment (7) Resources to be made available (8) Designation of the incident commander		There is a Regional Memorandum Of Understanding in place. The MOU addresses the following issues: Indemnity, Liability for injuries, Reimbursement for cost of service, Authorization to respond, Level of staffing – 2 personnel minimum plus Call personnel, Types of equipment, Resources to be made available - can call back for more personnel and Designation of the incident commander.  The plan covers aid responses up to Five (5) Alarms.  Mutual Aid Agreements - Reimbursement for forestry events, State approved.
5.8.4		
Apparatus for responding to mutual aid incidents shall be equipped with radios that allow personnel to communicate with incident commanders and sector officers. Separate frequencies shall be provided that allow mutual aid companies to communicate without disruption of their local frequency.		Yes, as part of Regional Dispatch System.
Chapter 6 Financial Management and Budgeting		CIP is in place for the replacement of Ambulances and Trucks, (Tanker 1 next year). An extensive documented CIP exists. Department Members felt Is NOT followed, plus larger equipment.
Chapter 7 Human Resources Management		

Chapter 8 Training

8-1 Purpose. The fire department shall have a training program and policy that ensures that personnel are trained and competency is maintained in order to effectively, efficiently, and safely execute all responsibilities consistent with the Department's mandate in Chapters 2 and 3.

8-2 Management Functions.

8-2.1\* The fire chief shall be responsible for the department training program and shall designate an individual to act as

Administrator of the program. The fire chief shall budget for training facilities, expendable supplies, training aids, and training staff, including both in-house and guest instructors, where used. The department shall utilize training services furnished by the National Fire Academy and state, provincial, and regional training programs where available and practicable.

8-2.2 Chief officers shall be required to fully support and ensure that the training activities developed by the training officer are carried out within their respective commands. They shall coordinate training with other activities, report on training completed, and assist the training officer in evaluating the effectiveness of the program.

Specific Job Descriptions for Fulltime, Part-time and Volunteer Personnel. They have received training preparing for terrorism. They have also held regional drills and active shooter drills.

Training is held on Wednesday nights and is mainly done in house. In addition, monthly mutual aid drills are held with surrounding towns. Each Department is allotted two (2) slots a year for training at the State Academy. The majority of trainers are instructors, but some are only subject matter experts. Core training is done by certified instructors. Certification training is all sent to State Academy. Members are able to go to National Fire Academy.

Captain Harrington is training coordinator and record keeper.

1910.156(c)(1)

The employer shall provide training and education for all fire brigade members commensurate with those duties and functions that fire brigade members are expected to perform. Such training and education shall be provided to fire brigade members before they perform fire brigade emergency activities. Fire brigade leaders and training instructors shall be provided with training and education which is more comprehensive than that provided to the general membership of the fire brigade.

1910.156(c)(2)

The employer shall assure that training and education is conducted frequently enough to assure that each member of the fire brigade is able to perform the member's assigned duties and functions satisfactorily and in a safe manner so as not to endanger fire brigade members or other employees. All fire brigade members shall be provided with training at least annually. In addition, fire brigade members who are expected to perform interior structural fire fighting shall be provided with an education session or training at least quarterly.

<p>Bow Specific Issues</p> <p>3. Training:</p> <p>a. Scheduling of training Full time and call personnel</p> <p>b. Cost of training In-house and other Personnel cost, i.e., who is paid to train</p> <p>c. Review of level of training required by town Operate equipment EMT: number on force &amp; number needed today and in future Other</p>		
<p>Chapter 9 Organization for Fire Suppression</p>		
<p>9-1 Purpose.</p>		<p>ISO 9/6</p>
<p>Fire suppression operations shall be organized to ensure adherence to an operational guideline that includes fire company procedures and staffing; officers; and duty requirements and responses to fire and other emergencies that achieve effective, efficient, and safe execution of the fire department's mandate.</p>		
<p>9-3 Fire Company Procedures and Staffing.</p>		
<p>9-3.1*</p>		
<p>Personnel designated to respond to fires and other emergencies shall be organized into company units or response teams and shall have appropriate apparatus and equipment assigned to such companies or teams.</p>	<p>Y</p>	
<p>9-3.2</p>		
<p>The fire department shall identify minimum staffing requirements to ensure that a sufficient number of members to operate safely and effectively are available to respond with each company or response team.</p>	<p>Y</p>	
<p>6. Holiday scheduling &amp; compensation</p>		

9-3.6		
Fire companies shall be responsible for identifying all target hazards or unusual properties in their districts and for developing pre-fire plans for use in the event a fire or other related emergency occurs at such a location.		While there are SOP/SOGs, they were not created with a risk assessment for the community. They incorporate the “high risk low frequency” into their trainings (every 2 years).
9-7 Response to Fires and Other Emergencies.		
9-7.1		
Standard response assignments and procedures, predetermined by the location and nature of the reported incident, shall regulate the dispatch of companies, response groups, and command officers to fires and other emergency incidents.		
9-7.2		
The dispatcher shall be responsible for maintaining awareness of the location and status of all units and their availability to respond at all times and shall have some latitude in dispatching assignments within prescribed limits.		Dispatched by Concord. Very good opinion of services received. Formula 35% on Population and 65% on the Town’s Total Net Equalized Assessed Valuation set by the NH Department of Revenue Administration.. Last year = \$84,000.
9-7.3*		
The number and type of units assigned to respond to a reported fire incident shall be determined by risk analysis and pre-fire planning based on specific location or neighborhood.		
Chapter 10 Emergency Scene Management		
10-1* Purpose.		
An incident management system shall be provided to form the basic structure of all emergency operations of the fire department, regardless of the scale of the department or the emergency. An effective incident management system shall be designed to manage incidents of different types, including structure fires, wildland fires, hazardous materials incidents, emergency medical operations, and other types of emergencies that might be handled by the department.		Very good use of NIMS in various applications, emergent and non-emergent.
Chapter 11 Emergency Medical Systems		

11-1 Purpose.		
11-1.1		
Where the department provides or participates in emergency medical systems (EMS), the fire department shall provide appropriate resources, planning, and training that are consistent with the level of EMS service the community expects from the department.		Very good planning and preparation including public health.  MCI Plan.  Statewide Protocols.  Significant number of job aids and guidance documents.
11-1.2*		Asst. Chief is health officer for the town.
Where a fire department organization provides or participates in EMS, the provisions of this chapter shall apply.		
11-2 Resources.		
11-2.1*		
The fire department shall analyze and report to the governing authority its resource needs and ability to provide the level of emergency medical service to which it is committed in addition to its fire-fighting and other responsibilities.		Proper documentation resources in forms file.
11-3 Planning.		
11-3.1*		
The fire department shall participate in community-wide planning to assure residents of the most effective available services at all times and at the levels to which it is committed.		
11-4 Level of Service.		FR, EMT, EMT-I, Paramedic
11-4.1*		
Based on local needs, preferences, and resources, the community shall develop a policy statement that specifies the type of emergency medical service to be provided for the community and the role to be played by the fire department in delivery of that service.		
FORESTRY		Multiple documents and resources relative to Forestry Prevention, Response and Training. Reimbursement for forestry events, State approved.
Chapter 13 Public Fire Safety Education		
13-1 Purpose.		

The fire department shall carry out a public fire safety education program to achieve/develop a level of fire safety awareness and attitude that assists the fire department in the management and reduction of the fire risk in the community.		Some fire prevention drills - school evacuation drills, fire extinguisher training for businesses (very little fire prevention).
Chapter 14 Code Enforcement		Code Enforcement - Lieutenant of FD is trained in Fire Inspector II, FD does Fire Marshal Inspections.
14-1 Purpose.		
14-1.1		
The fire department, subject to legal authority, shall establish policies and procedures for the enforcement of fire and life safety codes that enhance compliance with applicable fire safety legislation.		Extensive inspection programs including fee schedule. Checklists for Life Safety, Oil Burners, Sprinklers, Fire Alarms and General Inspections.
Chapter 15 Fire Investigation		Code Enforcement - Lieutenant of FD is trained in Fire Invest 2.
15-1 Purpose.		
15-1.1		
The fire department, subject to legal authority, shall investigate all fires by gathering information that assists in developing an effective fire prevention program, improving fire safety legislation, identifying public education programs, describing the community's fire problems, evaluating fire protection capability and assisting law enforcement.		Career Lieutenant conducts investigations utilizing an extensive set of investigation documents. Career Lieutenant is a Certified Fire Investigator. Lieutenant handles initial investigation and will call State Fire Marshal if needed.
Chapter 16 Communications		
16-1 Purpose.		
16-1.1		
The fire department shall have a reliable communications system to facilitate prompt delivery of public fire services.		Regional Dispatch System
16-1.2*		

A secure communications center shall be provided and staffed to receive requests for emergency assistance from the public, to dispatch that assistance, to coordinate communications with units providing emergency services, and to provide overall coordination and control of fire department operation communications.		Fire Department is part of Capital Dispatch System. 22 Regional Partners based out of the Concord Fire Department. Communications - Radios 10 TAC channels. When going mutual aid they can share up to those 10 TAC channels. Radio frequency is spotty, and portables are spotty in certain areas. Radios have mayday buttons. Radio for every position of the apparatus.
16-3 Public Reporting of Fires and Emergencies.		Multiple Tactical Channels, Interoperability.
16-5 Radio Communications.		
16-5.1*		
Radio transmitter/receivers shall be provided at headquarters and in emergency vehicles. Every chief officer and company officer shall be provided with a portable transmitter/receiver while assigned to emergency duty.		Portables by position.  No major problems, some areas (interstate) can be spotty.
16-5.2*		
The fire department shall have a selective alerting system by which it can summon designated on-call personnel, including volunteers and career staff, at any hour of the day or night.		Portables are equipped with Man-Down button.
16-5.3*		
Sufficient radio frequencies shall be provided to accommodate the operational needs of the fire department or communications system, based on the amount of radio traffic that is anticipated and the need to communicate simultaneously with different individuals or groups.		The system includes multiple Dispatch and tactical Channels.
16-5.4		
Frequency allocations shall meet the requirements of the Federal Communications Commission in the United States or Transport Canada.		
Chapter 17 Equipment and Buildings		
17-1 Purpose.		
17-1.1		

<p>The fire department shall maintain an inventory of all equipment, buildings, and land owned, leased, utilized, or maintained by the fire department to assist in day-to-day operations and for future planning.</p>		<p>Building- Relocated in 1950. Recreation Building built in 1957, attached to side of FD with School and Highway Building Departments.</p> <p>Trying to replace but keeps getting shot down by town vote. State FM has shutdown training room of FD. State FM says Town of Bow has until 2016 to bring up to State code. Building has Asbestos. FD feels town residents vote no due to raise in taxes. Word on streets is “why does FD need such a nice building” and “too much money”. Concerns for tax increase. Current FD is small and combined with community recreation center. Lack of Trust.</p>
<p>17-1.2*</p>		
<p>The fire department shall maintain a current inventory of all apparatus, vehicles, and equipment owned, leased, utilized, or maintained by the department. This inventory shall include the current status of all assets of the department, project the remaining service life, and serve as a programming tool for future needs and procurement of requisite approvals for acquisitions.</p>		
<p>d. Equipment maintenance: Certification needed for: Vehicles Other equipment</p>		
<p>17-2 Purchasing of Equipment.</p>		
<p>17-2.1*</p>		
<p>Specifications shall be prepared for the acquisition of all pieces of fire apparatus, vehicles, major equipment, and minor equipment as needed. Fire apparatus shall be acquired in accordance with the requirements of the appropriate NFPA 1900 series standards, which address such vehicles.</p>		<p>Financial Management &amp; Budgeting - Tanker 1 next year (on hold due to trying to get new building). CIP in place for all major equipment.</p>
<p>17-3 Maintenance.</p>		
<p>17-4 Hose.</p>		
<p>17-4.1*</p>		

<p>A complete inventory of all fire hose, including purchase date, cost, and results of acceptance and annual service tests shall be maintained. To facilitate such record maintenance, each length of hose or each hose coupling shall be given a unique serial number for inventory purposes.</p>		<p>Hose Testing- Try to yearly Ladder Testing- Haven't for 2015 yet</p>
<p>17-4.2</p>		
<p>The department shall adopt standards for the amount and size of hose carried on each piece of apparatus, depending on department operating practices, rated apparatus pump capacity, and its operational utilization in delivering fire flows.</p>		
<p>17-4.3</p>		
<p>Hose coupling and connection threads, including those on all master stream and other water delivery devices, shall be standardized throughout the department. Where threaded connection couplings are employed, coupling threads shall conform to the American National Fire Hose Connection Screw Thread as specified in NFPA 1963, Standard for Fire Hose Connections.</p>		
<p>17-5 Personal Equipment.</p>		
<p>17-5.1</p>		
<p>Firefighter response gear, e.g., appropriate number of turn out gear</p>		
<p>10.1.2* NFPA 1851 Structural fire fighting ensembles and ensemble elements shall be retired in accordance with 10.2.1 or 10.2.2, no more than 10 years from the date the ensembles or ensemble elements were manufactured.</p>		<p>Fire Gear - Received grant and everyone got new gear. Gear replacement is part of capital budget and part of operating budget.</p>

Members of the department shall be provided with personal protective clothing and equipment prior to engagement in any fire department response or hands-on training activity. This requirement shall be applicable to both fire-fighting and EMS functions that might be carried out. All equipment necessary to meet the requirements of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, as well as federal, state, provincial, or local law, shall be provided.

17-5.1.1\* When purchasing personal protective equipment for fire fighting and medical protection, such as breathing apparatus, protective clothing, gloves, footwear, and helmets, special consideration shall be given to meeting the NFPA standards for such personal protective clothing and equipment.

17-6 Fire Department Buildings.

17-6.1 Building Records and Planning.

17-6.1.1\* A file record shall be established for all buildings and structures owned, occupied, or utilized by the fire department, with future building needs identified.

17-6.2 Land Needs Planning.

17-6.2.1\* Land for fire department buildings shall be obtained in accordance with a planned program of development and acquisition. Measures shall be taken to prepare sites for future fire department use.

17-6.3 Maintenance of Land and Buildings.

<p>17-6.3.1* Routine maintenance procedures shall be established for all fire department facilities, including land, buildings, and grounds. These procedures shall address the building structure, including exterior and interior finish, as well as each major component of the building services, including plumbing, heating, and air conditioning.</p>		
<p>17-6.3.2* Fire stations shall be designed to meet their respective service demands in terms of space for practical utilization by apparatus and personnel. Construction specifications shall include details of facilities to be provided in new fire stations that provide for efficient, safe, and convenient functioning of the emergency fire service. Specifications shall comply with the requirements of NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, and NFPA 101®, Life Safety Code®.</p>		
<p>17-6.4 Training Facilities.</p>		<p>Need a FULL TIME TRAINING OFFICER, Mitchell does work.</p>
<p>17-6.4.1* Sufficient training facilities shall be provided for the department's in-service, special skills, and probationary programs. These shall include adequate classroom, lecture hall, conference room, library and study room, assembly area, and audiovisual facilities for the needs of the fire department.</p>		
<p>17-6.4.2 Adequate audiovisual and reference materials shall be available to support the department's training activities and subjects addressed in the NFPA professional qualifications standards for respective ranks of personnel in the department.</p>		

17-6.4.3* The department shall have access to facilities for ground ladder training, live smoke and fire training, flammable liquids fires, pumping and drafting operations, and apparatus driver training.		
Chapter 18 Management of Water for Fire Protection		
18-1 Purpose.		
18-1.1		
The fire department shall carry out and maintain a program for evaluating all sources of water supplies and delivery systems for firefighting within the community and facilitate the delivery of adequate water supply consistent with the fire risk and the fire department capabilities.		Hydrants - (51) Whitewater in charge of the maintenance of hydrants. Whitewater does flow tests of hydrants.
18-1.2*		
The fire department shall carry out a continuing program of evaluation for all water supplies for fire fighting, maintaining a liaison with the water authorities on fire protection water supply matters.		
18-1.3*		
The fire department shall assess the adequacy or weakness of water supplies in relation to the fire risk throughout the community in conjunction with its pre-fire inspection or planning program.		
18-1.4*		
The fire chief shall assign a full- or part-time water officer to assist the chief and keep the department informed of the available water supplies for fighting fires from all sources and to maintain regular contact with the managers of public and private water systems.		
18-4 Hydrant Service.		
18-4.1*		

<p>All hydrants shall be inspected and tested at least once per year, preferably twice per year, and after use at fires if problems related to hydrant performance have been experienced. If not inspected and tested by the water utility, the hydrants shall be inspected and tested by the fire department. Where problems or deficiencies are identified, the fire department shall file a report with the water utility requesting specific relocations, repairs, or other adjustments to correct the problem.</p>		<p>Hydrants - (51) Whitewater in charge of the maintenance of hydrants. Whitewater does flow tests of hydrants.</p>
<p>18-6 Alternate Water Supplies.</p>		
<p>18-6.1*</p>		
<p>The fire department shall study alternate sources of water supply to be used in the event of a major disruption in public water supply capabilities.</p>		
<p>Chapter 19 Hazardous Materials</p>		
<p>19-1 Purpose.</p>		
<p>19-1.1</p>		
<p>The fire department shall have a viable plan for the protection of the community from the risks associated with storage, use, and transportation of hazardous materials.</p>		
<p>19-1.2*</p>		

The fire department shall assume one of the lead agency roles in protecting the community from risks associated with storage, use, and transportation of hazardous materials. The fire department shall participate in the process of gathering and organizing information, identifying risks, and regulating the storage, use, transportation, and disposal of hazardous materials and hazardous wastes. The fire chief shall ensure compliance with NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, and NFPA 473, Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents.

Hazardous Materials Response - Bow FD trained to Ops and awareness level. 4-5 HazMat Techs.

19-2 Hazardous Materials Incident Response.

19-2.2

To safely and effectively manage hazardous materials incidents, fire service personnel shall be trained and equipped properly and shall have access to resources in addition to those normally used for fire suppression, including specialized protective clothing and breathing apparatus, disposal containers, neutralizing agents, monitoring equipment, reference materials, and communication with other agencies and sources of information that might be needed in the event of a leak or spill.

Chapter 20 Major Emergency Management

20-1\* Purpose.

The fire department shall have a viable plan for the protection of the community from the anticipated risks associated with natural and technological emergencies that are more severe than the scale of most fires and hazardous material incidents and have the potential to exceed the resource capabilities of a particular jurisdiction.		
20-2 Disaster Planning.		Extensive EM Planning and Documentation
20-2.1*		
A disaster plan shall be developed that is broad enough to encompass all situations that a community might face (all-hazard approach).		
20-2.2		
The disaster plan shall identify and evaluate risk (hazard analysis), formulate objectives, determine resource requirements and availability, assign responsibilities, develop special situation plans, provide the structure for directing and managing response operations, and develop plans for short- and long-term recovery.		Point of Distribution Plan
20-2.3*		
Local disaster plans shall be coordinated with any county and state or provincial emergency plans as well as with plans by federal agencies.		
Chapter 21 Management Reports and Records		
21-1* Purpose.		

<p>A management information system shall be maintained to support the management of the fire department by providing the fire chief and other administrative officers with data that indicates the effectiveness of the department in preventing, suppressing, and investigating fires and all other major services and functions of the department. The records system shall provide data for reports on department activities, accomplishments, and long-range needs. The management information system shall be used to develop reports to the governing officials or members of a fire department.</p>		<p>Records - Full time employee's records kept at town hall. Part time and call members' are kept at the station.</p>
<p>21-2 Records Retention. 21-2.1*</p>		
<p>The fire chief shall review legal requirements relating to reporting and retention of records and specify the records to be kept and the methods of gathering data. A records retention and disposal system shall be instituted.</p>		
<p>21-3 Incident Reporting. 21-3.1*</p>		
<p>Reports on emergency operations shall outline conditions encountered at an emergency and all actions taken by the department to control the condition, and they shall serve as a basis for determining incident responsibility.</p>		
<p>Medical Clearance</p>		<p>New members – NFPA 1582, nothing after that.</p>

1910.156(b)(2)

Personnel. The employer shall assure that employees who are expected to do interior structural fire fighting are physically capable of performing duties which may be assigned to them during emergencies. The employer shall not permit employees with known heart disease, epilepsy, or emphysema, to participate in fire brigade emergency activities unless a physician's certificate of the employees' fitness to participate in such activities is provided. For employees assigned to fire brigades before September 15, 1980, this paragraph is effective on September 15, 1990. For employees assigned to fire brigades on or after September 15, 1980, this paragraph is effective December 15, 1980.

1910.134(e)(1)

General. The employer shall provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. The employer may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.

1910.134(e)(2)(i)

The employer shall identify a physician or other licensed health care professional (PLHCP) to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire.

1910.134(e)(2)(ii)

The medical evaluation shall obtain the information requested by the questionnaire in Sections 1 and 2, Part A of Appendix C of this section.

#2: At a minimum, the medical screening as required by OSHA 29 CFR 1910.134 Respiratory Protection should be provided as detailed. The national consensus standard National Fire Protection Association 1582- Standard on Comprehensive Occupational Medical Program for Fire Departments provides a more detailed and in-depth medical process would be preferred.

Option A) Personnel who, as part of their duties where an Self Contained Breathing Apparatus, shall be medically screened as directed in 29 CFR 1910.134.

Option B) Personnel who, as part of their duties where an Self Contained Breathing Apparatus, shall be medically screened as required by NFPA 1500 Standard on Fire Department Occupational Safety and Health Program, and NFPA 1582: Standard on Comprehensive Occupational Medical Program for Fire Departments.

Medical - baseline physical for all new members (Town Policy)  
Fire Fighter physical

- NFPA standard for physicals
- Made effort to do annual physicals but has not been done yet.

<p>Physical fitness:</p> <p>a. Typical standard for fitness (e.g., 50th percentile for age group on the standard by the NH Police Standards and Training Council -- <a href="http://www.pstc.nh.gov/faqs.htm#coopers">http://www.pstc.nh.gov/faqs.htm#coopers</a>)</p> <p>b. Typical standard for physical fitness review (e.g., annual, quarterly, etc.)</p>		
<p>9. Minimum and maximum age limits for active members</p>		
<p>Meeting Officers</p>		<p>Dana Abbott- Chief 25 years. 48 years as member.  Richard Pistey - Asst. Chief - 37 years as member, Compact training Committee.  Tom Ferguson - Lieutenant. Full time 19 years. Joined in 1983. Fire Inspector/Investigator. Level 2 State Inspector.  Michael Van Dyke - Call Lieutenant. 22 years in Department.  Don Eaton - Call Capt. 39 years in Department.  Mitchell Harrington - 15 years in Department. Capt. Fulltime  Jim Beaudoin – Lieutenant. 10 ½ years in Department. Full time medic.</p> <p>Closing Remarks - Chief says he has heard rumors that if town goes over a 1 million dollar budget they want a full time chief. The Officers feel this is a town official issue.</p>
<p>INTERVIEWS</p>		
<p>Town Manager</p>		<p>New Station Funding Meeting, funding failed in last 30 Days. Has failed multiple times. NEED TO DOCUMENT SPACE AND ISSUES.  Department Controls needed. Call personnel – paid hourly/by position/per month/per qualification.  Payroll - Call personnel hours, paid for everything? Scheduled stand-by hours? Rate. Career payroll by hours.</p>

Police Department Chief -  
Erin Commerford

13 years in Police Department. 7 years as chief  
11 Full Time Employees - 7 patrol, 1 Lieutenant, 1 Detective & 2 Sergeants.  
Her thoughts and opinion on questions JLN asked:  
Great working relationship with FD. In years past this always hasn't been the case.  
Emergency management has come a long way with credit to the Emergency Management director.  
In the past communication has been an issue, new director has brought things back with regards to better communication.  
Fire department needs a full time chief.  
Feels that there is animosity towards the town hall due to the fact the town elected officials has expressed interest in a full time chief.  
New building created a morale issue.  
Expressed feelings that town residents don't think before they vote (example is town approved a daycare for the same amount of money for the public safety building).  
There is an organized group of town residents that have huge influence on many residents.  
Rise in drug use and call volume with changing community.  
The highway that flows through town is a networking highway for trafficking.  
Having a part time chief is hard to make progress with.  
PD has done active shooter drills with FD and a hospital drill.

<p>Building Inspector ? Code Inforcement - Bruce Buttrick</p>		<p>Future Development of Community: Town added public water system, feels this might boost industrial growth in the area. With the addition of industrial buildings potentially growing or building there will be a need for more FD responses possibly. Feels there is unproductive work for code enforcement. The FD Lieutenant does fire codes and he can be doing code work and then has to go out on calls. Hard to keep track of inspections when they can be pulled from it from time to time due to emergency calls. Bruce sends plans to Tom F. (FD Lieutenant) for review. Feels there is a little slow time when he sends the plans towards the end of week. In the town there is no enforcement on when businesses change in a building. Doesn't require an occupancy inspection. This could lead to problems for FD because they don't know what the business is or has inside. There should be enforcement in case a new ventilation addition needs to be done due to the occupancy change. There is a natural gas pipeline in BOW, spotty within the community, Feels Fire Department has an odd leadership structure. Feels it is rare to have a full time fire department in a small town.</p>
<p>Community Development Director: Bill Klubben</p>		<p>What's coming down the road? Have room for more industrial buildings. Maybe 200-400,000 sq. footage. Whether it is a few 20,000 sq. foot buildings or a few 100,000 sq. foot buildings. Addition of the water system has helped businesses. Buildings with sprinkler systems to grow. Some buildings may even install private hydrants. Whitewater Company is contracted by the town. Whitewater Co. is the Water Company. Active railroad. Railroad goes into the Merrimack Power Plant and into town. Residents approximately 7,600. Cap on residents would be around 13-13,500 people. Building lots are two acres. Mainly septic and well. Tax Rate is hindering new residents to come and live. People who can afford the tax rate come to Bow for the school system. Feels if PD wasn't in the new public safety building plans that it would have passed. PD does have issues with their own building.</p>

<p>Emergency Management Director - Leland Kimball</p>		<p>Risks in community. Very active emergency management team. All plans are up to date. White Rock senior living facility is a big concern no backup generator). Not assisted living facility. 200-300 units in area. FD EMS are there 2-3 times daily on average. Bow is major intersection of two highways. Power Plant is a concern for community. Asst. Chief and Chief maybe respond to 50% of calls (Non EMS). Full time staff has too many duties and not enough time. Need a full time chief. No elections since the present chief started. Chief delegates all work to Captain Mitchell. Mitchell handles all discipline and personnel issues. No consistency in appointing officers. Some officers are appointed and some have to interview.</p>
<p>Chief Dana Abbot</p>		<p>Member since 4/1967, Chief for 25 Years. No Elections, Was elected and forwarded to the Town Manager to the Board of Selectman who approved and appointed him. Assistant Chief appointed by Chief. Qualified on every apparatus. Dropped EMS Certification but can drive the Ambulance Minimum training in Job Description Certified Fire fighter for Three Years. Now Motor Pump Operator Mitch is a Scheduler, Supervisor, Training Officer, Trying to get him moved up to Deputy Chief. Goals: New Facility is a priority, Additional Staff-up to three per shift. *Building – Training Challenge * Need better communications from board to department. ? Part time Job, Chief does not need to go to emergencies. - Chief handles Administration - Support the Staff. More time available now – Retired Public – Just go for Station, issues with Police station as well, improve sales of idea.</p>

<p>Assistant Chief Richard Pistey</p>		<p>From Bridgeport, CT, Air Force Veteran, Pees Air Force Base, Grand Union Supermarket - Manager,- owned his own store. Worked in Radio – Sales and Marketing / General Manager.  1978 = Joined Bow Fire Department. Fire Fighter 1, MRT – EMT, Still going to schools, 1980 LT, 1983 Capt., 18.5 Years, 2001 Assistant Chief, 14 Years,  Health Officer 10 Years  NO Election, by appointment. AC on Promotions Board Hiring.  Reviewed Table of Organization  Very active in Compact, Training Committee and Chairman, Treasurer  Budget Property Taxes only, No sales or Income Tax.  - Firehouse vs. Public safety Building.  Fire Department makes due with what they get. Do not go over Budget. Adapt / overcome i.e. Bunkrooms.  175 K in EMS Billing, 91% Collection Rate.</p>
<p>Captain – Mitchell Harrington</p>		<p>Chief is seeing the change and opening up a little to let members do more.  Small issues with full time staff and on-call volunteers (no issues on emergency scenes).  Has noticed that people come at night for training or meetings but won't help for calls at night that are down the road from members.  Feels FD bites off more than they can chew.  No space to do work completely and effectively.  Captain handles all admin tasks, schedules, vacations, time off, insurance claims, discipline, and payroll.  Goes to all meetings in place of chief of department.  Issues that come up unexpectedly go to Mitch.  No administrative support.</p>

**ATTACHMENT # 7**

**APPARATUS MATRIX**

**BOW APPARATUS MATRIX**

Apparatus	Water Supply	Equipment
52-Engine 1 2009 Pierce	1000gal 1700 GPM	1500' - 4" Supply Hose 300' - 2 1/2" Hose Pre-Connect, 200' Dead (3) 200' - 1 3/4" Hose Pre-connect, 300' Dead 40' 6" Hard Suction 50 gal Class A foam Medical Equipment Stabilization Thermal Imaging Camera Hand Tools & Salvage 6500 W Generator/Lighting 35', 12' 8' Ground Ladders Holmatro Hydraulic Rescue Combi System Power Saws, Rotary, Chain, Saws All 4 - Gas Meter
52Engine-3 2002 International	1000gal 1500 GPM	1200 = 4" Supply Hose 300' - 2 1/2" Hose Pre-Connect, 200' Dead (3) 200' - 1 3/4" Hose Pre-connect, 300' Dead 35' 6" Hard Suction 50 gal Class A foam Medical Equipment 5500 W Generator/Lighting Hand Tools & Salvage Atmospheric Monitoring Haz-Mat Thermal Imaging Camera 35', 12' 8' Ground Ladders Power Saw

Apparatus	Water Supply	Equipment
52Tanker -1 1994 International	1800 Gallon 1000 GPM	500' 4 " Supply Hose 300' – 2 ½" Hose Deadload (2) 200' – 1 ¾" Hose 30' – 5" Hard Suction Medical Equipment 2100 Gal. Porta-tank PPV Fan
52Tanker –3 1997 International	1700 Gallon 1000 GPM	500' 4" Supply Hose 300' – 2 ½" Hose Deadload (2) 200' – 1 ¾" Hose 30' – 5" Hard Suction 50 gal Class A foam 2100 Gal. Porta-tank Traffic Control
52Rescue -1 2007 GMC 4X4	No Water	Portable power/lighting 6500 W Generator Cascade System w/ Booster Pump & Fill Stabilization Traffic Control Rope Rescue: 300', (4) 150', 200' Pre-rigged, (3) Rigging kits, (4) Class 3 Harnesses, (2) Skeds Ice Rescue Equipment, (2) Suits, Lines, Vets Air Tools Haz-Mat Equipment Medical Equipment Full Set of Holmatro Extrication Equipment Spreaders, Cutters, Rams High Pressure Air Bag Set Thermal Imager

Apparatus	Water Supply	Equipment
52-Forestry 1 2004 Ford Chassis With Skid Tank	250 gal 400 GPM	100' 2 ½", 500' 1 ½", 400' 1", 150' 1" Booster 30' 2 ½" Hard Suction (2) 150 GPM Portable Pumps 400 Gallon Porta tank Hand Tools Indian Tanks Chain Saw
2003 14' Achilles Boat, 40 HP, with Trailer		(4) Life Vests (2) 50' Throw Bags

## **ATTACHMENT # 8**

### **STRENGTHS WEAKNESSES OPPORTUNITIES AND THREATS (SWOT) ANALYSIS**

A Strengths Weaknesses Opportunities Threats analysis was conducted as part of the Fire Department meeting. A large contingent of members were present including the Chief Officers, a number of Call Officers and a number of Career Staff. These are the notes from that meeting.

#### **Strengths-**

Training  
Initial Response  
Reputation  
Diversity in membership - mechanics, school teachers, plumbers, electricians. Large group of talents  
Retention and recruitment  
EMS and level of competence  
Equipment/Outlook on equipment replacement  
Mutual Aid System  
Survivability/Adapt to situations where they are weak  
Experienced leadership  
Compensation (On call and doing things for department on the clock)  
Camaraderie  
Mentoring

#### **Weaknesses-**

Public Relations (Majority vote)  
Additional help (Toning for additional personnel on calls)  
Facility (Fire House) - ability to function  
Inter. Dept. Cooperation- Inability to fix equipment. Town says they are not allowed to fix it themselves. Town facilities handle all repairs or fixes - large or small (light bulbs to circuit breaker to pumps).  
Follow through on issues, topics, ideas. Example - doing a function and then having to respond.  
Follow through when done with run doesn't happen.  
Lines of communication - internal communication. Information down and responses back.  
Workloads - staffing, short staffed at times - covers all aspects.  
SOGs are weak.  
\*\*Trust of the Elected Officials of the Town\*\*

#### **Opportunity-**

Technology  
Future development of industrial trade (helps financial, tax base)

Safety complex

Training/Bunk facility - if they had a proper facility there could be opportunity for live in residents as recruitment/junior program.

Mentoring and capitalizing on that

Community Para medicine

### **Threats-**

Community Division

Tax groups- certain members in the town are against FD, tax groups are teaming up against the FD.

People's time, call members and availability

Losing a lot of experience over the next 5 years

Industrial growth and not being prepared to handle it

Staffing growth and service growth - with only 2 on per day they should be adding more as town growth happens

Emerging threats on scenes of calls (shootings, driving distractions) scene safety

## **ATTACHMENT # 9**

Position Title: **FIRE CHIEF**

### Job Summary

The Fire Chief serves as the executive officer of the Bow Fire Department. He/she performs supervisory and administrative work in planning, organizing, coordinating, and directing the activities of the Fire Department.

### Supervision Received

The Fire Chief carries out duties of running the department autonomously under broad and sometimes specific direction of the Town Manager and Board of Selectmen. Chief reports directly to the Town Manager or designee. In the absence of the Town Manger or designee, the Fire Chief will report to the Board of Selectmen Chair. The Fire Chief consults with the Town Manager when unusual or difficult problems occur. Work is reviewed by observation and through conferences and reports.

### Supervision Exercised

The Fire Chief provides absolute supervision of the Bow Fire Department: Facilities, Equipment, and Personnel through direct interactions, observing, reporting, delegating, and commanding.

### Examples of Duties

(The listed examples are illustrative only and may not include all duties found in this position.)

1. Responds to fire alarms and other emergency calls; at scene of an emergency, conducts initial size-up and supervises personnel as needed; may direct initial placement of equipment at emergency scene and participates in emergency control activities.
2. Takes command of major emergencies, including multiple alarm fires, mass-casualty incidents, hazardous materials incidents, public health crises, and other natural and human-made events.
3. Ensures force protection for all responders operating under Fire Department command.
4. Oversees and approves the development of the annual Fire Department operating budget and capital improvements plan.
5. Oversees the Department's fee schedule and ambulance billing and any other Department generated revenue.
6. Is the Authority Having Jurisdiction (AHJ) in relation to NFPA codes and standards.

7. Interprets, makes appropriate exceptions and final decisions on circumstances related to enforcing fire prevention codes and standards.
8. Oversees the development of Department operational policies, including response practice, customer service, and standards compliance.
9. Develops and modifies strategic plans for executing programs in disparate areas.
10. Attends, conducts, and leads meetings.
11. Attends required meetings, work details, and training sessions.
12. Oversees and reviews the work of staff responsible for managing major department programs such as maintenance, facilities, training, staffing, EMS, fire prevention, and personnel.
13. Utilizes best business practices in leading a health care provider agency, including full knowledge of HIPPA, health care economics, billing practices, and medical ethic.
14. Serves as the main Departmental public relations representative; attends public meetings; meets with citizens and business leaders whose requests are not satisfied by subordinate levels within the department.
15. Provides Department-head level approval for all hiring of new personnel and promotions of departmental personnel and approves competitive process for same.
16. Confers with Town Manager and Board of Selectmen to keep them informed on key issues and progress and to gain their support and approval and makes recommendations to assist management in making needed improvements.
17. Other duties as assigned.

#### Knowledge, Skills and Abilities Required

Working knowledge of modern Firefighting and EMS techniques, methods and procedures.  
Knowledge of fire codes, laws and ordinances relating to fire suppression and public safety.

Ability to analyze situations quickly to determine the proper course of action to be taken.

Skill in the operation of fire equipment and apparatus.

Knowledge of first aid and rescue operations.

Knowledge and ability to effectively operate in the incident command system in a management and command level capacity thorough knowledge of department and town policies and procedures.

Ability to enforce town and department policies.

Ability to work under physically and emotionally stressful conditions.

Ability to maintain effective working relationships with other co-workers (call and full-time), other fire departments, other Town Departments, and the general public.

Ability to use tact, discretion, initiative and independent judgment within established guidelines. Communicating clearly and effectively.

Ability to train and instruct in the use of machines and equipment; ability to plan, assign and supervise the work of others.

#### Minimum Qualifications Required

High school diploma or GED-plus any education, training and experience which would provide the knowledge, skills and abilities to function in this position.

Individual must have a minimum of ten years of Firefighting and EMS experience OR any equivalent combination of education and experience which demonstrates position of the required knowledge, skills, and abilities.

#### **WORKING CONDITIONS**

While performing duties as a Fire Chief, the individual may be exposed an extreme variety of working conditions including but not limited to, extreme heat, extreme cold, lifting or carrying loads in excess of one hundred pounds, and come in contact with people that may be hostile or offensive. The Fire Chief may also be exposed to infectious disease.

Employee is often required to do several tasks expeditiously and concurrently. Work is often interrupted by telephone calls, visitors, inquiries from co-workers, etc., the individual must be able to handle demands for information or action in a timely and judicious manner.

#### Tools and Equipment Used

Typical tools and equipment used in fighting fires, rescue services and providing EMS. Computer and/or tablets with Windows, Apple OS, Microsoft Office programs and industry specific software, calculator, phone, fax and copy machine.

#### Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable

accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to sit, walk and talk or hear. The employee is occasionally required to use hands to operate, finger, handle, or feel objects, tools, or controls; and reach with hands and arms.

The employee must occasionally lift and/or move up to 150 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

#### Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The noise level in the work environment is usually moderately loud and may exceed damaging levels requiring the use of protective devices.

#### Sensory Requirements

For communicating with others, talking is required; for taking instructions from others, hearing is required; and for doing the job effectively and correctly, sight is required.

## **ATTACHMENT # 10**

Position Title: **ASSISTANT CHIEF**

### **Job Summary**

The Assistant Chief serves as an executive officer of the Bow Fire Department. He/she performs supervisory and administrative work as needed to assist the Fire Chief in planning, organizing, coordinating, and directing activities of the Fire Department.

### **Supervision Received**

The Assistant Chief carries out duties of running the Department mostly under specific direction of the Fire Chief. He/she reports directly to the Fire Chief. In the absence of the Fire Chief or designee the Assistant Chief will report to the Town Manager. The Assistant Chief will consult with the Fire Chief when unusual or difficult problems occur; work is reviewed by observation and through conferences and reports.

### **Supervision Exercised**

The Assistant Chief provides executive level supervision of the Bow Fire Department as determined by the Chief which may include: facilities, equipment, and personnel through direct interactions, observing, reporting, delegating, and commanding.

### **Examples of Duties**

(The listed examples are illustrative only and may not include all duties found in this position.)

1. Responds to fire alarms and other emergency calls; at scene of an emergency, conducts initial size-up and supervises personnel as needed; may direct initial placement of equipment at emergency scene and participates in emergency control activities.
2. Takes command of major emergencies, including multiple alarm fires, mass-casualty incidents, hazardous materials incidents, public health crises, and other natural and human-made events.
3. Ensures work-force protection for all responders operating under Fire Department command.
4. Assists with the development of the annual Fire Department operating budget and capital improvements plan.
5. Participates in the development of Department's fee schedule and ambulance billing and any other department generated revenue.
6. Assists in the development of operational policy, including response practice, customer service, and standards compliance.
7. Participates in strategic planning.
8. Attends, conducts, and leads meetings.

9. Attends required meetings, work details, and training sessions.
10. Oversees and reviews the work of staff responsible for managing major Department programs such as maintenance, facilities, training, staffing, EMS, fire prevention, and personnel.
11. May serve as the main Departmental public relations representative; attends public meetings; meets with citizens and business leaders whose requests are not satisfied by subordinate levels within the department.
12. Participates in processes for hiring of new personnel and promotions of Departmental personnel; approves competitive process for same.
13. Confers with the Town Manager and Board of Selectmen to keep them informed on key issues and progress and to gain their support and approval; makes recommendations to assist management in making needed improvements.
14. Other duties as assigned.

**Knowledge, Skills and Abilities Required**

Working knowledge of modern Firefighting and EMS techniques, methods and procedures

Knowledge of fire codes, laws and ordinances relating to fire suppression and public safety

Ability to analyze situations quickly to determine the proper course of action to be taken

Skill in the operation of fire equipment and apparatus

Knowledge of first aid and rescue operations

Knowledge and ability to effectively operate in the incident command system in a management and command level capacity

Thorough knowledge of department and town policies and procedures

Ability to enforce town and department policies

Ability to work under physically and emotionally stressful conditions

Ability to maintain effective working relationships with other co-workers (call and full-time), other Fire Departments, other Town Departments, and the general public

Using tact, discretion, initiative and independent judgment within established guidelines

Communicating clearly and effectively

Ability to train and instruct in the use of machines and equipment; ability to plan, assign and supervise the work of others

### **Minimum Qualifications Required**

High school diploma or GED-plus any education, training and experience which would provide the knowledge, skills and abilities to function in this position

Individual must have a minimum of ten years of Firefighting and EMS experience OR any equivalent combination of education and experience which demonstrates position of the required knowledge, skills, and abilities

### **WORKING CONDITIONS**

While performing duties as a Assistant Fire Chief, the individual may be exposed an extreme variety of working conditions including but not limited to, extreme heat, extreme cold, lifting or carrying loads in excess of one hundred pounds, and come in contact with people that may be hostile or offensive. The Fire Chief may also be exposed to infectious disease.

Employee is often required to do several tasks expeditiously and concurrently. Work is often interrupted by telephone calls, visitors, inquiries from co-workers, etc. The individual must be able to handle demands for information or action in a timely and judicious manner.

### **TOOLS AND EQUIPMENT USED**

Typical tools and equipment used in fighting fires, rescue services and providing EMS. Computer and/or tablets with Windows, Apple OS, Microsoft Office programs and industry specific software, calculator, phone, fax and copy machine.

### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to sit, walk and talk or hear. The employee is occasionally required to use hands to operate, finger, handle, or feel objects, tools, or controls; and reach with hands and arms.

The employee must occasionally lift and/or move up to 150 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

**WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderately loud and may exceed damaging levels requiring the use of protective devices.

**SENSORY REQUIREMENTS**

For communicating with others, talking is required; for taking instructions from others, hearing is required; and for doing the job effectively and correctly, sight is required.

## **ATTACHMENT # 11**

### **CAPTAIN/TRAINING OFFICER (Full Time)**

#### Job Summary

The Captain/Training Officer for the Fire Department performs work and supervises the general activities of Fire/EMS personnel at emergency incidents or at the Fire Station unless or until relieved by a superior officer. He/she provides on-going training and evaluation of assigned personnel. The Captain/Training Officer oversees the staffing and training components of the Department. He/she researches, develops, and implements significant Town and Department directives. The Captain/Training Officer represents the Department in absence of the Chief or Assistant Chief. While not responding to calls, the Captain/Training Officer performs maintenance, housekeeping, training, and administrative assignments.

#### **SUPERVISION RECEIVED**

The Captain/Training Officer works with significant independence in performing regularly assigned duties and emergency activities; consults with a supervisor when unusual or difficult problems occur. Work is reviewed by observation and through conferences and reports. He/she follows the chain of command on all incidents. The Captain/Training Officer reports to the Fire Chief and Assistant Chief for administrative issues or the Town Manager in their absence.

#### **SUPERVISION EXERCISED**

The Captain/Training Officer provides direct or general supervision to a group of firefighters and or EMTs involved in assigned duties and emergency activities; makes specific assignments and provides technical guidance as needed; exercises full supervisory responsibilities at station and at scene of emergency in absence of superior officers, which includes making final decisions which may affect personal safety of subordinates and property saving. He/she may make decisions and give instruction on patient care, within scope of practice, when lesser qualified EMS providers are present. He/she reviews the work of assigned subordinates by observation and through conferences and reports. The Captain/Training Officer provides coaching when necessary to correct subordinate performance, may provide verbal warnings to correct subordinate performance and may temporarily dismiss subordinates from work to alleviate dangerous or hostile situations. The Captain/Training Officer issues written warnings for corrective actions when needed and recommends suspensions and/or terminations when appropriate.

#### **EXAMPLES OF DUTIES**

(The listed examples are illustrative only and may not include all duties found in this position.)

Responds to fire alarms, connects and lays hose, ventilates burning buildings, searches out victims, operates fire equipment to extinguish fires

Responds to medical emergencies and administers emergency medical care at their EMS licensed level and in accordance with the most current NH Patient Care Protocols

Operates any/or all pieces of emergency equipment, engines, tankers, or ambulances, when necessary, in the absence of other qualified personnel

Responds to fire alarms and other emergency calls; at scene of an emergency, conducts initial size-up and supervises personnel until relieved by a superior officer; may direct initial placement of equipment at emergency scene and participates in emergency control activities

Completes and approves Incident Run Reports and EMS run reports following responses

Operates internal database software for incident logging, investigation reports, hazardous materials reports, billing, payroll, and statistical reporting

Performs inspections to insure that all station equipment is in good working order at all times

Conducts and leads meetings, work details, and department wide training sessions under the direction of superiors

Conducts in-service training programs as assigned; instructs personnel in the operation of a variety of firefighting vehicles and related equipment

Supervises and performs routine maintenance work and custodial duties at the Fire Station and Rescue building

Supervises and performs preventative maintenance and minor repairs to Fire Department equipment.

Attends required meetings, work details, and training sessions

Regularly represents the department at special committee meetings

Advises and instructs owners and occupants of buildings in fire prevention methods in the removal of fire hazards, and makes recommendations for reducing potential hazards

Confers with upper management to keep them informed on key issues and progress and to gain their support and approval; makes recommendations to assist management in making needed improvements.

Manages the Fire and EMS training program within confines of budget and department directives

Manages the staffing component of the Fire Department within confines of budget and Department directives

Performs highly administrative tasks for Chief and Assistant Chief which could be confidential in nature and outside the normal chain of command

### **KNOWLEDGE, SKILLS AND ABILITIES REQUIRED**

Working knowledge of modern Firefighting and EMS techniques, methods and procedures

Knowledge of fire codes, laws and ordinances relating to fire suppression and public safety

Ability to analyze situations quickly to determine the proper course of action to be taken

Extensive knowledge of pumping apparatus and practices

Skill in the operation of fire equipment and apparatus

Knowledge of first aid and rescue operations

Knowledge and ability to effectively operate in the incident command system in a supervisory capacity

Thorough knowledge of department and town policies and procedures

Ability to enforce town and department policies

Ability to work under physically and emotionally stressful conditions

Ability to maintain effective working relationships with other co-workers (call and full-time), other Fire Departments, other Town Departments, and the general public

Using tact, discretion, initiative and independent judgment within established guidelines

Communicating clearly and effectively

Ability to train and instruct in the use of machines and equipment; ability to plan, assign and supervise the work of others

### **MINIMUM QUALIFICATIONS REQUIRED**

High school diploma or GED-plus any education, training and experience which would provide the knowledge, skills and abilities to function in this position

Individual must have a minimum of ten years of Firefighting and EMS experience, five of which at the company officer level OR any equivalent combination of education and experience which demonstrates position of the required knowledge, skills, and abilities.

Individual must have these licenses and certifications:

1. Meets NH Administrative Rules Part FIRE Chapters 700 Firefighter Mandatory Standards at the time of hire
2. Associates Degree in Fire Science or other closely related field
3. NH Firefighter II or Firefighter II Certified by IFSAC or Pro-Board
4. NFPA Fire Officer I and II (or equivalent)
5. NFPA Instructor I, II, III
6. NH EMS Licensed Emergency Medical Technician Intermediate (minimum)
7. Current American Heart Association (or comparable) CPR Provider
8. Current American Heart Association (or comparable) BLS CPR Instructor
9. NH EMS Licensed Instructor Coordinator
10. Valid State Issued Driver's License (CDL-with Airbrake and Tank endorsements)
11. Incident Command System (16 hrs), ICS-100, ICS-200, ICS-300

**WORKING CONDITIONS**

While performing duties as a Captain/Training Officer, the individual may be exposed an extreme variety of working conditions including but not limited to, extreme heat, extreme cold, lifting or carrying loads in excess of 150 pounds, and come in contact with people that may be hostile or offensive. The Captain may also be exposed to infectious disease.

Employee is often required to do several tasks expeditiously and concurrently. Work is often interrupted by telephone calls, visitors, inquiries from co-workers, etc. The individual must be able to handle demands for information or action in a timely and judicious manner.

**TOOLS AND EQUIPMENT USED**

Typical tools and equipment used in fighting fires, rescue services and providing EMS. Computer and/or tablets with Windows, Apple OS, Microsoft Office programs and industry specific software, calculator, phone, fax and copy machine.

### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to sit, walk and talk or hear. The employee is occasionally required to use hands to operate, finger, handle, or feel objects, tools, or controls; and reach with hands and arms.

The employee must occasionally lift and/or move up to 150 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus.

### **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderately loud and may exceed damaging levels requiring the use of protective devices.

### **SENSORY REQUIREMENTS**

For communicating with others, talking is required; for taking instructions from others, hearing is required; and for doing the job effectively and correctly, sight is required.

**ATTACHMENT # 12**

**Captain Harrington Supplemental**

Position Title: **Captain/Training Officer (fulltime)**

Individuals Name: Mitchell Harrington

Note: This list reflects CURRENT responsibilities in ADDITION to scheduled shift responsibilities, all of Lieutenant/EMT-I, such as: responding to fire/EMS calls, responding to public inquiry/concerns, house chores, apparatus checks and immediate maintenance, issuing permits, completing incident and patient care reports etc, while only working (2) 24 hr shifts per week.

**Staffing Responsibilities**

Oversees and conducts performance evaluations of full time staff

Seeks availability from part-time staff to fill part-time shifts fairly and consistently

Authorizes overtime as needed within the limits set forth in policy

Approve/schedule swaps of fulltime personnel

Schedule coverage for fulltime staff due to training, illness, or annual leave

Schedule/coordinate crews for special details and mutual aid drills

Develops and implements processes for hiring perspective members (call and fulltime)

Organize Oral Boards

Maintain related confidential files

Conduct back ground checks

Acquires/submits documentation from new employees - I9, W4, General Applications, EMS Provider license applications, etc

Complete PARs

Coordinate and Schedule employee medical physicals, immunizations, and follow-up to Complete New Employee Orientation (provide rules, ID, access, equipment etc)

Develops and implements promotional processes for (call and fulltime) as well as the annual Acting Shift Officer assessment center

Writes and updates job descriptions

Coordinate assistance to other town departments-cleaning schedules of community building, assisting DPW with culverts, providing CPR and first aid to police etc.

### Training Responsibilities

Develops and implements the department's Fire and EMS training program.

Organize schedule, and present training to maintain Fire and EMS knowledge and skills through:

- Weekly Wednesday evening training
- Monthly Sunday training
- Mutual aid drills in town and out of town
- One-on-one remedial training

Develops, implements, and instructs specialized training programs such as:

- Driver Training
- Pump Operator
- Leadership/Management
- Hazardous Materials
- National Incident Management Systems
- EMS Transition Modules
- Specialized rescue such as elevators, rope rescue, extrication etc.

Provides internal EMT Refresher Program

Maintains ability to teach all NH approved transition modules as required for EMS providers license

Proposes and manages the departments training budget

Develops, implements, and maintains training contracts for members seeking additional training

Develops, implements, and maintains training records including forms, electronic databases, files, and reports

### Administrative

Prepares written documents such as town report excerpts, special projects plans, and emergency operations plans

Attend various committees representing the department such as water sewer, occupational health and safety, CIP committee, department head meetings (if needed) etc

Writes department policy and procedures, distributes, and acquires acknowledgement receipt

Drafts personnel type correspondence for the Chief:

- External letters of appreciation
- Employee Acknowledgement
- Personal Action Requests
- Written warnings
- Suspensions
- Terminations

Administers the department's data management software and systems including; personnel records, incident records, preplans, inspection records, training records, forms, inventory, email server, and web page

Approves, submits, and records weekly payroll

Submits required monthly incident data to State and Federal agencies

Audits ambulance billing service to ensure accurate billing, reporting, and receipt of funds

Writes grants to secure funding to meet the departments needs when available and reporting requirements associated with grant awards

Implement deliverable requirements of successful grant awards

#### Deputy Emergency Management Director Responsibilities

Assists the EMD in overall Emergency Management planning

Attends monthly meetings

Develops town wide interoperable communications plan

Trains EMS members in Web Emergency Operation Center interface

Fill high level Emergency Operations Center positions during times of emergencies and exercises such as:

- Emergency Ops Center Manager
- Town of Bow Area Commander
- Public Information Officer
- Operations Section Chief

Deputy Health Officer Responsibilities

Assists the Health Officer in his overall performance of duties

Maintains knowledge of municipal public health policy and practices

Attends Capital Area Public Health Network meetings

Investigates health related complaints in town, takes corrective action, and writes reports

Forwards pertinent health related information/complaints to state agencies

Conducts routine health inspections as related to child care and food industry

Other Town Responsibilities

Health and Safety Committee-Management Representative

Drinking Water Protection Committee-Potential Contamination Source Inspector

## ATTACHMENT # 13

NFPA 1582

Chapter 5 Essential Job Tasks

5.1 Essential Job Tasks and Descriptions.

5.1.1 The fire department shall evaluate the following 13 essential job tasks against the types and levels of emergency services provided to the local community by the fire department, the types of structures and occupancies in the community, and the configuration of the fire department to determine the essential job tasks of fire department members and candidates:

(1)\*While wearing personal protective ensembles and self-contained breathing apparatus (SCBA), performing firefighting tasks (e.g., hose line operations, extensive crawling, lifting and carrying heavy objects, ventilating roofs or walls using power or hand tools, forcible entry), rescue operations, and other emergency response actions under stressful conditions including working in extremely hot or cold environments for prolonged time periods

(2) Wearing an SCBA, which includes a demand valve–type positive-pressure face piece or HEPA filter masks, which requires the ability to tolerate increased respiratory workloads

(3) Exposure to toxic fumes, irritants, particulates, biological (infectious) and non-biological hazards, and/or heated gases, despite the use of personal protective ensembles and SCBA

(4) Depending on the local jurisdiction, climbing six or more flights of stairs while wearing a fire protective ensemble, including SCBA, weighing at least 50 lb (22.6 kg) or more and carrying equipment/tools weighing an additional 20 to 40 lb (9 to 18 kg)

(5) Wearing a fire protective ensemble, including SCBA, that is encapsulating and insulated, which will result in significant fluid loss that frequently progresses to clinical dehydration and can elevate core temperature to levels exceeding 102.2°F (39°C)

(6) While wearing personal protective ensembles and SCBA, searching, finding, and rescue-dragging or carrying victims ranging from newborns to adults weighing over 200 lb (90 kg) to safety despite hazardous conditions and low visibility

(7) While wearing personal protective ensembles and SCBA, advancing water-filled hoselines up to 2 1/2 in. (65 mm) in diameter from fire apparatus to occupancy [approximately 150 ft (50 m)], which can involve negotiating multiple flights of stairs, ladders, and other obstacles

(8) While wearing personal protective ensembles and SCBA, climbing ladders, operating from heights, walking or crawling in the dark along narrow and uneven surfaces that might be wet or icy, and operating in proximity to electrical power lines or other hazards

(9) Unpredictable emergency requirements for prolonged periods of extreme physical exertion without benefit of warm-up, scheduled rest periods, meals, access to medication( s), or hydration

(10) Operating fire apparatus or other vehicles in an emergency mode with emergency lights and sirens.

(11) Critical, time-sensitive, complex problem solving during physical exertion in stressful, hazardous environments, including hot, dark, tightly enclosed spaces, that is further aggravated by fatigue, flashing lights, sirens, and other distractions

(12) Ability to communicate (give and comprehend verbal orders) while wearing personal protective ensembles and SCBA under conditions of high background noise, poor visibility, and drenching from hose lines and/or fixed protection systems (sprinklers)

(13) Functioning as an integral component of a team, where sudden incapacitation of a member can result in mission failure or in risk of injury or death to civilians or other team members

5.1.2 The fire department physician shall consider the physical, physiological, intellectual, and psychological demands of the occupation when evaluating the candidate's or member's ability to perform the essential job tasks.

5.1.3 Medical requirements for candidates and members shall be correlated with the essential job tasks as determined by 5.1.1.

5.1.4 The fire department shall provide the fire department physician with the list of essential job tasks to be used in the medical evaluation of members and candidates.

5.2 Essential Job Tasks for Specialized Teams.

5.2.1 If the fire department operates specialized teams such as hazardous materials units, self-contained underwater breathing apparatus (SCUBA) teams, technical rescue teams, emergency medical services (EMS) teams, or units supporting tactical law enforcement operations, the fire department shall identify for each team it operates additional essential job tasks and specialized personal protective equipment (PPE) not specified in

5.1.1(1) through 5.1.1(13) that would apply to the members of that team.

5.2.2 The fire department shall provide the fire department physician with the list of essential job tasks and specialized PPE specific to each specialized team.

5.2.3 When performing the medical evaluation of members of a specialized team, the fire department physician shall consider the following:

- 1) Additional medical and/or physical requirements that are related to the job tasks being performed by the team that are not enumerated in this standard.
- 2) The impact on members of having to wear or utilize specialized PPE that can increase weight, environmental isolation, sensory deprivation, and/or dehydration potential above levels experienced with standard fire suppression PPE.

## ATTACHMENT # 14

NFPA 1583

Chapter 9 Essential Job Tasks — Specific Evaluation of Medical Conditions in Members

9.1 Essential Job Tasks.

9.1.1 The essential job tasks listed by number in this chapter are the same as those listed in Chapter 5 and shall be validated by the fire department as required by Chapter 5.

9.1.2 The fire department physician shall use the validated list of essential job tasks in evaluating the ability of a member with specific medical conditions to perform specific job tasks.

9.1.3 Essential job tasks referenced throughout this chapter by number only shall correspond to the following model list:

(1)\*Wearing personal protective ensemble and SCBA, performing fire-fighting tasks (hoseline operations, extensive crawling, lifting and carrying heavy objects, ventilating roofs or walls using power or hand tools, forcible entry, etc.), rescue operations, and other emergency response actions under stressful conditions, including working in extremely hot or cold environments for prolonged time periods.

(2) Wearing an SCBA, which includes a demand valve–type positive-pressure facepiece or HEPA filter masks, which requires the ability to tolerate increased respiratory workloads

(3) Exposure to toxic fumes, irritants, particulates, biological (infectious) and nonbiological hazards, and/or heated gases, despite the use of personal protective ensembles and SCBA

(4) Depending on the local jurisdiction, climbing six or more flights of stairs while wearing fire protective ensemble weighing at least 50 lb (22.6 kg) or more and carrying equipment/tools weighing an additional 20 to 40 lb (9 to 18 kg)

(5) Wearing fire protective ensemble that is encapsulating and insulated, which will result in significant fluid loss that frequently progresses to clinical dehydration and can elevate core temperature to levels exceeding 102.2°F (39°C)

(6) Wearing personal protective ensemble and SCBA, searching, finding, and rescue-dragging or carrying victims ranging from newborns to adults weighing over 200 lb (90 kg) to safety despite hazardous conditions and low visibility

(7) Wearing personal protective ensemble and SCBA, advancing water-filled hose lines up to 2 1/2 in. (65 mm) in diameter from fire apparatus to occupancy [approximately 150 ft (50 m)], which can involve negotiating multiple flights of stairs, ladders, and other obstacles

(8) Wearing personal protective ensemble and SCBA, climbing ladders, operating from heights, walking or crawling in the dark along narrow and uneven surfaces, and operating in proximity to electrical power lines and/or other hazards.

(9) Unpredictable emergency requirements for prolonged periods of extreme physical exertion without benefit of warm-up, scheduled rest periods, meals, access to medication(s), or hydration.

(10) Operating fire apparatus or other vehicles in an emergency mode with emergency lights and sirens

(11) Critical, time-sensitive, complex problem solving during physical exertion in stressful, hazardous environments, including hot, dark, tightly enclosed spaces, that is further aggravated by fatigue, flashing lights, sirens, and other distractions

(12) Ability to communicate (give and comprehend verbal orders) while wearing personal protective ensembles and SCBA under conditions of high background noise, poor visibility, and drenching from hose lines and/or fixed protection systems (sprinklers)

(13) Functioning as an integral component of a team, where sudden incapacitation of a member can result in mission failure or in risk

**ATTACHMENT # 15**

**BOW FIRE DEPARTMENT  
BOW, NEW HAMPSHIRE  
ANONYMOUS MEMBERSHIP SURVEY**

An anonymous survey was developed for the Bow Fire Department personnel to ensure everyone’s thoughts and opinions were received by the evaluation team. The survey was by invitation only and available to BFD members. The Survey and its results are presented below.

Please answer the following questions. These questions offer you the ability to safely and privately contribute to the assessment process. Please identify if you agree, disagree or are somewhat in agreement with the statement.

**1) There are positive aspects to being a member of the Bow Fire Department.**

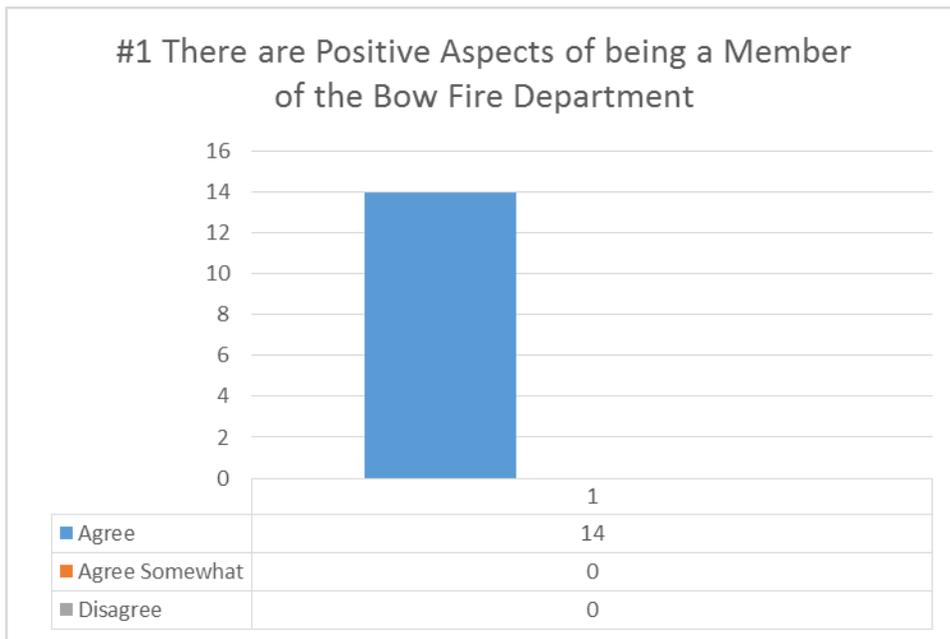


Figure 23 Positive Aspects of being a member.

**Examples: Thirty-nine (39) Responses.**

- brotherhood, bond, friends, training
- knowledge to deal with issues or problems
- We cover a wide range of Residential, Commercial and other target hazards.
- We have a great chance for a variety of responses.
- Create some good relationships within our department and the community.
- Good Public Service
- Positive Teamwork Place
- Safety oriented culture on a micro level. For example, people aren't afraid to mention safety concerns during operations. Seatbelts, PPE, Driving, RIT, Accountability etc. Safety on a macro level such as staffing, health and wellness, age limits, competencies etc. is lacking
- There is no bullying or hazing
- Modern, Adequate, and Well Maintained Apparatus
- Modern, Adequate, and Well Maintained SCBA/PPE
- Modern Radios
- Department provided email
- Very competitive compensation and benefits (career, per diem, and paid on call)
- Appealing schedule (career AND per diem)
- Chief supports the troops and is approachable
- Great working relationships with mutual aid
- Decent reputation amongst peer departments
- Modern, progressive, well rounded training program
- Chief supports professional development and advanced classes
- Proximity to the State Fire Academy
- Very talented group
- Call members bring a lot to the table from their Fulltime careers
- Retention of call members and full time staff
- EMS is taken seriously and is prioritized as much as the other disciplines
- Active non-profit association organizes dept. social events, fundraisers, and community events.
- Relatively loose structured organization but still disciplined and structurally sound.
- There are positive aspects of being a member of the Bow Fire Department (BFD). Being a member of the BFD allows you to meet and work with some of the most outstanding individuals I have ever met. This not only includes the people that are members of Bow Fire itself but also Fire and EMS people in the surrounding communities.
- The training opportunities with Bow Fire are fantastic. BFD has always supported and all training that the employees want to take to better themselves. The BFD has always not only paid for the class itself but also financially compensated the individual. If that person was fulltime, BFD provided coverage for that person.
- Bringing a Community Together

- Community Service Opportunities
- Entry Level Training for advanced Professional Opportunities.
- Helping the Community.
- Being Part of a team that is recognized by other Fire departments to be Proficient and Professionals. Unlimited training opportunities within reason.
- Contributing to the Community.
- Good equipment, Good Pay.
- Good Pay, Self Satisfaction.
- Providing worthwhile service to our community.
- Pride in providing quality service.
- Teamwork approach in responses, training, projects and events.

**2) There are negative aspects to being a member of the Bow Fire Department.**

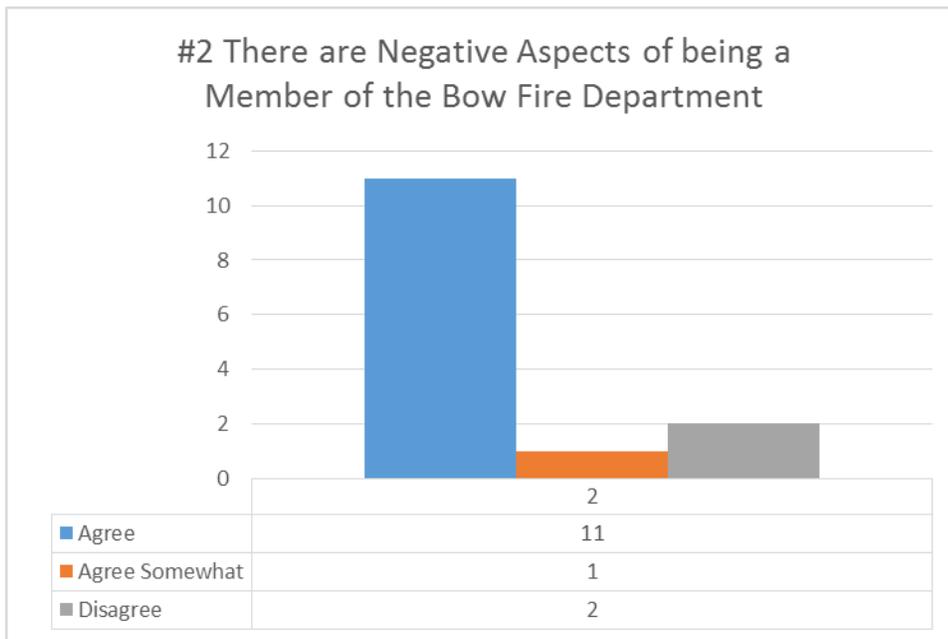


Figure 24 Negative aspects of being a member.

**Examples: Thirty (30) Responses**

- limitations due to facility, equipment
- There is a lack of communication from the top down in Chain of Command.
- There is a lack or no leadership from Chief and Assistant Chief which hurts the members training and knowledge set. Everything gets dumped on the Captain.
- With the Captain (fulltime) actually running the Department has not been able to do his job and responsibilities which snowballs from there.
- Captain Harrington does a great job but is overwhelmed.

- The Call Captain is not active so it puts a lot more stress on people working shifts.
- Not enough time to obtain extra specialty training on your own time.
- The Fire Station is horrendous, not safe, unproductive, and frustrating to work out of. The issue has divided the community and the negative publicity makes you feel like the only solution is to not exist.
- Constantly trying to do too much with too little help: Calls, maintenance, programs, requests, changes in law/protocol etc. We are organizationally overwhelmed which has added layers of stress at so many levels.
- Lacking command presence (around the station and on calls)
- Lacking open communication and flow of information
- Lacking direction and planning. Seems like we are always treading water and constantly being reactive
- So much uncertainty over the past 3 years. Facility and Leadership.
- Call volume.
- Lots of selfishness-“what do I get out of it” or “what’s in it for me” attitudes.
- Communications on items of participation.
- If a person is instructing a class, have a back-up plan if it fails to work out.
- There are negative aspects to being a member of the Bow Fire department (BFD). The two biggest negative issues I feel with the BFD are lack of competent leadership and manpower.
- It is my opinion that the top leadership is incompetent and lacks the management skills, education, training and knowledge to run this Department efficiently. I believe this is hurting this department’s morale, growth and the reputation of the Department with the surrounding towns.
- Although the BFD has about 35 or so members on its roster, participation in training and responses to actual calls is lacking. The full time duty crew is responding to the majority of the calls with no additional help. No one is responding to calls anymore. I would say less than 5 are somewhat active with the balance not active. Many times, calls to dispatch for additional manpower go unanswered. Unless it is a building fire or some other major event, members are not responding to calls.
- Lack of Administrative Continuity.
- Living Conditions.
- We do not have complete Class A or B Uniforms. Cannot use Command Car to go to classes and have to use own fuel when Command car sits at house.
- Drawing a pittance hourly salary which some people think we should volunteer.
- Our Leadership at the top is lacking. Experience in our Chief’s is lacking.
- Upper Management is out of touch with modern Fire Department.
- Public feels we do not do enough, would like more calls and better experience.
- Necessary time commitment to maintain active and / or support membership.
- Frustration with timelines of department Management issues.
- Perceived lack of community support for ‘Public Safety Complex’.

### 3) There are positive reasons for community members to join the Bow Fire Department.

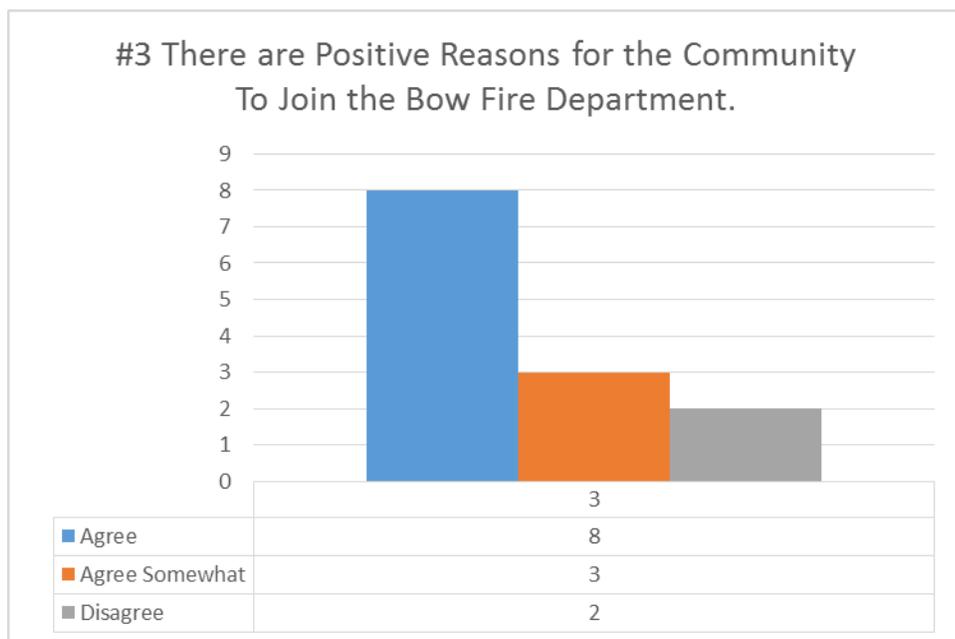


Figure 25 Positive Reasons to join the BFD

#### Examples: Twenty-four (24) Responses.

- Brotherhood, bond, friends, training
- Knowledge to deal with issues or problems
- It helps the Community understand what we do for the town.
- We need the help.
- Members joining, however, need to be involved instead of using it like a social time.
- Build good community relations.
- Pretty much number 1.
- High School Fire Science “feeder program”
- Pay for new call members to attend FFI and/or EMT.
- Real friendly group.
- Diverse age groups and backgrounds.
- Many opportunities depending on the level of involvement one desires.
- On the Job Training and Ride Along opportunities.
- Duty crew available 24/7-to mentor on calls/train when not.
- Community service, local interest in helping save town property.
- The only positive reason can see to join the Bow Fire department is that it provides an individual with being able to experience the best job in the world. To be able to help people and work with some of the most outstanding individuals I have ever met, to include other Fire departments and Hospital’s Staff. Being in the fire and EMS field not only provides with the ability to be involved

with your community but also allows you opportunity's to be part of state and Regional teams such as New Hampshire Wild Fire Crew, Haz-Mat Team, USAR Team, Swift Water Rescue Team, local SWAT Team etc.

- Community Service Opportunities.
- Being an Active Member.
- Anyone who wants to help out has a great opportunity. Commitment needed to get certified is not worth the paid compensation.
- There is no organization for hiring of new personnel.
- Helping your friends and neighbors.
- Community is mostly White Collar.
- Positive involvement in community service.
- Various skill sets / expertise diverse community members bring to the agency.
- Continued promotion and safety awareness for our citizens.

**4) There are negative reasons why community members do not join the Fire Department.**

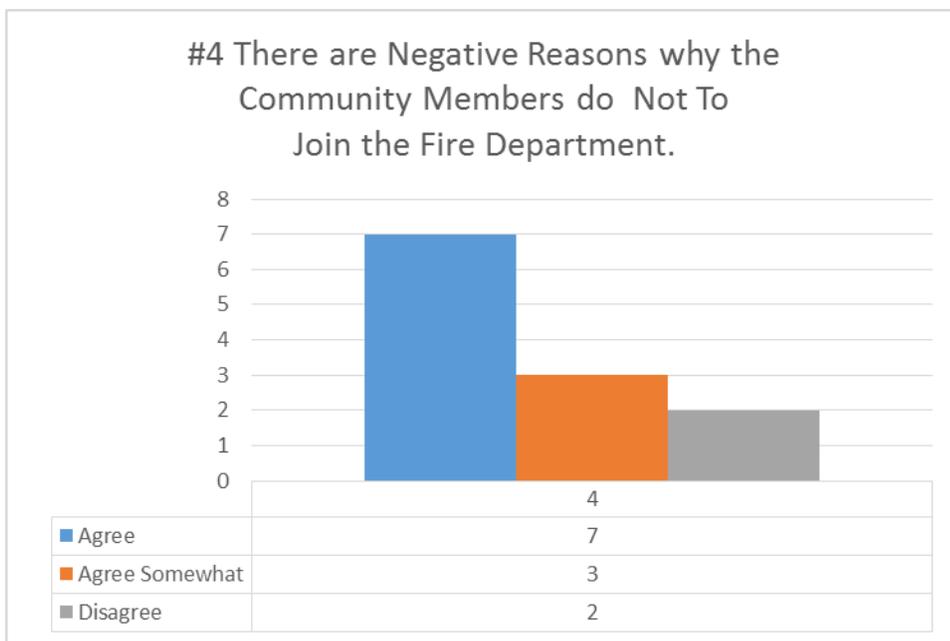


Figure 26 Why Community Members do not join the BFD.

### **Examples: Thirty (30) Responses.**

- New Applicants are young and have no training. Lives at home with their parents.
- Bow has no affordable housing for them.
- The high cost of Training, Certifications and Personal Equipment.
- These factors make it hard to keep personnel on the Call staff, a negative for the BFD and Applicant.
- We lose help.
- People don't want the commitment of being al call all hours of the night.
- We are being professional and held accountable for our actions.
- The FD isn't the "Good old Boy club" anymore. It's not something that we do it's just the nature of the job.
- It is a commitment; you have to love what you do. Not everyone can be a public servant.
- Time commitments
- SO MANY more volunteer opportunities in Bow (compared to other towns) that don't involve getting out of bed at 2am, risking your life, nor require certification.
- Community Socio Economics-disproportionate amount of high income professionals to blue collar workers as compared to other communities. Bow HS has extremely high rate of seniors going away to post-secondary education leaving less young adults to volunteer.
- Bow seems to attract younger families with busy schedules or retirees.
- Lack of affordable housing. (Again blue collar workers tend to join call fire depts.)
- Many residents travel extensively for work.
- Local employers are reluctant to allow employees to leave for calls.
- Training and Licensing Requirements
- Members are only allowed to drive and pump AFTER completing Firefighter I and have experience. (we have passed up few "I just want to drive the big truck")
- Bow FD lacks a recruitment program.
- Call volume.
- Limited resources to volunteer from, owners of businesses don't let people respond to help.
- I feel that one of the negative reasons why community members do not join the Bow Fire Department has to do with demographics. The Town of Bow is primarily made up of white-collar professionals. These people are more interested in joining the Bow Rotary Club than the local Fire Department. The demand of time and training commitment is another factor. The thought of being a Fire Fighter or EMT sounds great until that person figures out the commitment needed to the job.
- Another negative aspect I believe has to do with what I was talking about in question two, the reputation of the BFD as a result of the poor leadership or lack thereof.
- Poor facilities.
- Large Time is needed to get a Fire/EMS Certification. Certain Full-Time leadership has difficulty adjusting to New Members.
- Organization
- Public Perception is still poor.

- Lack of sustained positive recruitment efforts.
- Appearance and condition of station.
- Necessary time commitment to actively contribute.

**5) There are pressing issues you believe are critical to the Bow Fire Department.**

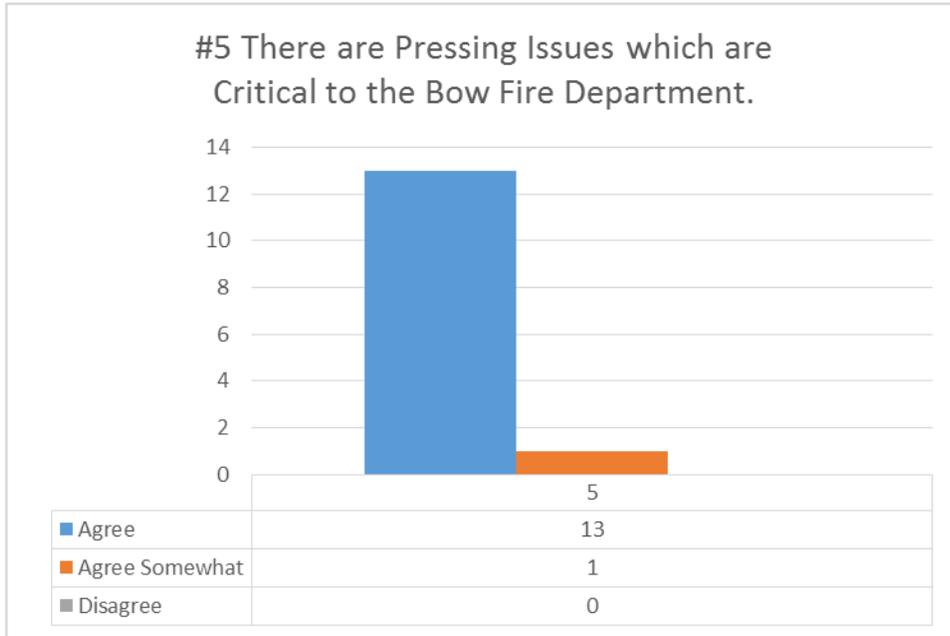


Figure 27 Critical Pressing Issues to BFD.

**Examples: Fifty (50) Responses.**

- Short Staff on both Call and Full Time personnel
- Station Health Hazards
- Lack of storage /housing/office space/training room.
- We have issues with the Leadership of the Department. Chief and Assistant Chief and Call Captain. The problem is there is no leadership and the job has evolved past their capabilities and education.
- I don't feel comfortable with them taking control of a scene or them to run the day to day operations.
- We need more help as well. Call/Volunteer Departments are a great idea when they work. Bow FD call force does not work anymore.
- We have a hard time getting response. To a second call or just to get help for the on duty crew's call.
- We rely heavily on mutual aid for responding.
- We have 30 or more members and only 16 are active. All call people do is show for meeting nights.
- We need more people on the floor full time. Just adding one per shift would help greatly.

- Last but not least is our selectman, our work environment is horrible. The building has gone beyond its life span.
- Budget, Equipment needs, increased services and demands.
- The demands of specialized services; i.e. WMD, Technical Rescue, Mass Casualty.
- Funding and the training and the purchase of the equipment to be able to respond to those services.
- Facility, Facility, Facility
- Lacking confidence from elected officials
- Chief and Town Manager need to communicate better (both ways)
- Internal/External Communications
- Fire Prevention
- Staffing
- Leadership
- Lack of responding personnel
- We are going into a 5-10 year period that we will lose a lot of experience.
- If more full time people available, more trucks / engines could respond faster from station.
- There are three pressing issues that I believe are critical to the Bow Fire Department and they are:
  - Having a Fulltime Fire Chief
  - Hiring additional Full Time Staff
  - The construction of a new fire station
  - Efficient use of BFD members.
- Lack of Leadership
- Building
- Lack of day to day Leadership has caused issues with follow-up. No clearly defined Chain of Command with personnel and other response issues. Station is in a state of disrepair.
- Construction of a safe working environment – Priority
- Retain the replacement of vehicles on the previously agreed to cycle.
- Lack of Leadership
- Lack of Discipline
- Lack of Communication
- Lack of Progression
- Department not keeping up with the times.
- Too much pressure put on a few to carry the load for others.
- Policies are weak and not followed well.
- Top Leadership is not leading by example.
- Chief avoids confrontation, allowing members to do as they please and does not fight for the Department.
- Lack of Leadership within the top two (2) Positions.

- Need for Fulltime Administration (i.e. Chief, Assistant Chief, Captain & Inspector) based on response levels, projects/activity levels, \$1Million+ budget, etc.
- Sustaining, proactive public education program promoting Department’s activities and initiatives.
- Establish timely, efficient and effective lines of communications, (greater use of Dept. Website.
- Assistant Chief stirs the pot when issues come up.
- Chief lies to the department on information he gets from the Town officials.
- Chief gives wrong information to the members and members believe what the chief tells them.
- Chief of Department is not an Administrator

**6) There are pressing issues you believe are critical to the Town of Bow.**

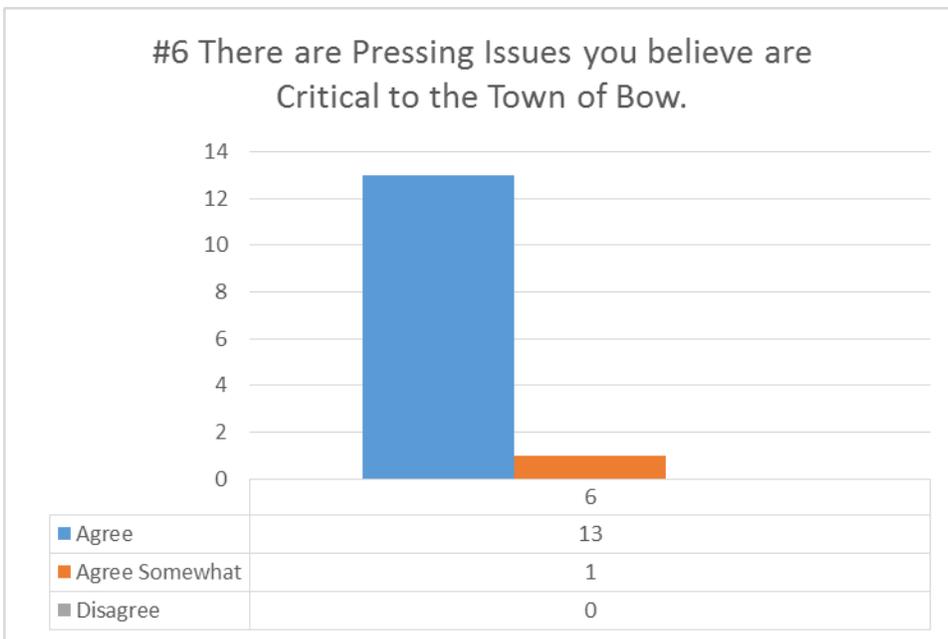


Figure 28 Critical Pressing Issues to Bow.

**Examples: Thirty seven (37) Responses.**

- Staffing / Facility for Staffing in a healthy environment
- Example - MVA, three pieces should respond (Ambulance, Engine, and Rescue). For the most part only two on-duty staff takes the Ambulance. Other equipment does not get out. There, two personnel attempt to Control Scene Safety, Life Safety, Property Protection, Fire Suppression, Extrication and Ambulance transport.
- The station is a big issue since it is unsafe to be in that building
- How are we as fire fighters supposed to enforce codes if we don’t follow them in our own building?
- For us to work safely as a fire department, to protect the community there should be three people working on duty.

- The town is growing and the services need to keep up.
- Facility, Facility, Facility
- Other neglected infrastructure roads, bridges, other municipal buildings, short-staffed depts.
- Decreased/Decreasing of Power Plant and associated litigation
- State retirement system costs
- Employee health care costs
- State downshifting costs
- Increasing workers compensation costs
- Political pressure to keep taxes flat
- State and Federal grant diminishing
- There are three pressing issues that I believe are critical to the Town of Bow and they are:
  - Having a Fulltime Fire Chief
  - Hiring additional Full Time Staff
  - The construction of a new fire station
  - Efficient use of BFD members.
- Focus on Reducing Taxes. A focus on bringing in businesses to reduce the tax burden, as well as, taking a closer look at the school budget.
- Lack of Leadership
- Lack of Discipline
- Lack of Communication
- Lack of Progression
- Too much micro-management.
- Infrastructure has not grown with Town.
- Lack of trust between Fire Department and Board of Selectmen.
- Need for a new facility.
- Better Management.
- Need for a Full Time Chief.
- New Generation does not understand the working of town Government and are here for High School only.
- The Department is run by the Full time captain. The Chief's and Call Officers provide limited support due to personal commitments.
- Continue efforts to expand commercial base.
- Continue to positively resolve "Public Safety Complex" issue.
- Consider quarterly or semi-annual mailing of town-wide bulletin on status of various projects.

**7) There are things you DO NOT want to see changed in the Bow Fire Department.**

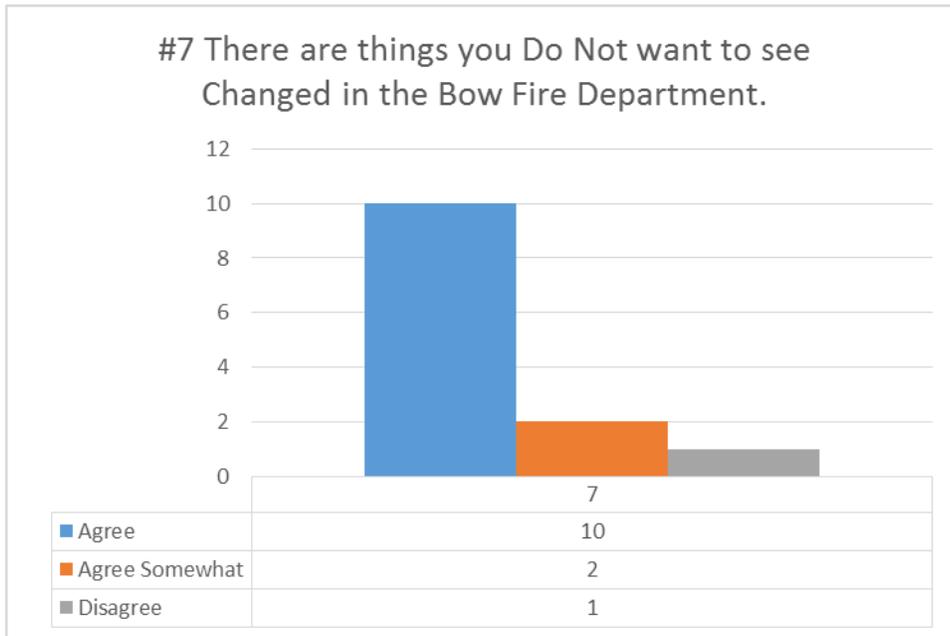


Figure 29 Changes you do NOT want to see.

**Examples: Twenty five (25) Responses.**

- The Town has expressed they wanted a new Chief.
- Upper Management is not where we need more full time employees.
- Need more personnel to safely handle the issue of ongoing emergency.
- We have a great relationship with most of the community. Mostly everyone that we serve and care for have genuinely stated that they like us to come and help.
- There will always be a need to change as the population/industry and technology changes and grows.
- The combination make-up of the dept.
- CIP Methodology (although specific prioritization/needs could use some re-alignment)
- The integration of call members working shifts.
- Requiring shift personnel to be FF's and EMS and cleared to operate all apparatus.
- I don't want to see the department get a ladder truck.
- I don't want to see the department lose any fulltime positions.
- Peer review of every patient care report.
- I don't want to see any more workloads without supportive staffing.
- Not to go to a full time department. Cost would be high, Local on call people are available.
- The Leadership of the Bow Fire Department starts with Captain Harrington. Without Captain Harrington, this Department would not be functioning as well as it is today. What I don't want to see changed is the loss of Captain Harrington.

- Disagree - We need new upper management in the Chief Officers.
- I do not want to the Chief set-aside. He has committed years to our town. He is committed to this town – changing from an all-volunteer to a semi-permanent/volunteer that take time, patience - training.
- We have been progressive, members are a valued in decisions, like truck design. Members have greater chances of being part of change.
- Call Member Participation.
- Purchasing cycles of equipment/apparatus.
- Our equipment.
- Value of Combination “Career” and “Call” Department.
- Weekly Department training/meeting sessions.
- Saturday 24 - Hour “D” shift coverage.
- Continue positive Fire and EMS reputation of the Bow Fire Department in the Public safety Community.

**8) There are changes you would like to see for the Bow Fire Department.**

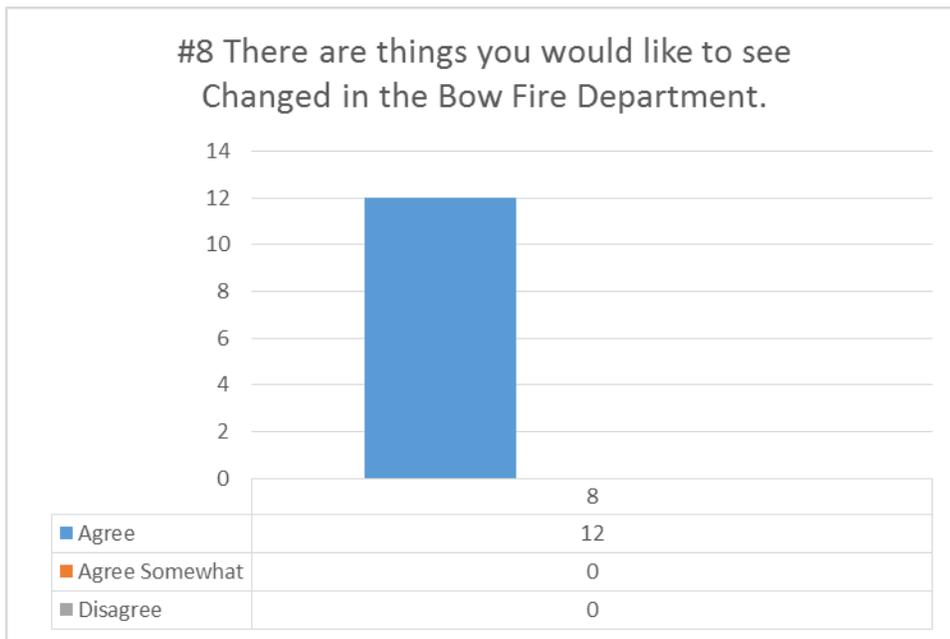


Figure 30 Changes you would like to see.

**Examples: Fifty one (51) Responses.**

- The future always brings new needs (The Change in Times)
- We seemed to have stalled and out grown our times. We need to catch up with today’s issues and volume of calls.
- Expansion of equipment, Facility and Personnel on floor.

- I would like to see us get more structured and organized. I think it would help us and the community. To see us run as a Department should, from the top down.
- Facility, Facility, Facility
- More accountability
- Strategic Planning: 2 year, 5 year, and 10 year plan
- A formalized Fire Department Health and Safety Program
- Shift level performance standards. Define what a crew of 2 is expected to do.
- Defined fire prevention scope and resources; adopt policies, check sheets, etc to support it. Town Code should formally adopt any requirements the dept has that exceed the state fire code.
- Create and formalize a public education program
- Be more engaged in town safety committee, school disaster planning, and emergency management
- Incentives/Requirements to get more responders on calls.
- Find an alternative for members who don't respond to calls to help the town. CERT etc.
- More comprehensive and organized SOPs/Rules and Regulations
- Follow and enforce Rules/SOGs/SOPs or modify/eliminate accordingly
- Formalized process to develop and review SOGs/SOPs on regular intervals
- Less focus on equipment more focus on organizational needs
- More focus on outcomes than inputs
- Professional programming/installation of radios (currently done haphazardly in house)
- Command Presence
- Less talking, more doing
- Concerns of the Town Manager/Elected Officials should be justified, accepted, or addressed and MOVE ON!
- More aggressive ambulance billing regarding rates, perusing claims, and auditing.
- A clearer separation of Bow Volunteer Fire Department Association business from Town of Bow Fire Department business.
- Quality Control of documentation of incidents, investigations, inspections, and finances.
- Formalized way to address complaints
- Formalized way to construct budgets
- Annual employee reviews
- More member recognition in addition to annual "Chiefs Award".
- Consistent issuance of uniforms to call/per-diem staff.
- Regular updating of QAPs/Preplans.
- Formalized orientation/mentoring program for new call members.
- Add 1 Full Time person FF/EMT for fire and med response.
- I would like to see a change in Leadership. This could include additional training and education up to and including termination and replacement with qualified individuals.
- More full-time Personnel.
- New Station.
- Better Communications.

- Call members responding to more calls.
- Full time Chief.
- New Station is a Priority.
- We also need Clear leadership authority lines such as call companies with supervisors who are willing to commit to the development of subordinates.
- Hiring a Full-Time Chief.
- Re-organizing of the Officer's positions.
- Stronger Top Leadership.
- More people on shift.
- Future or master plan for Fire Department.
- An appropriate building for the personnel and equipment. Nothing fancy – but usable.
- More effective and timely "Lines of Communications" internally and externally.
- More effective use of Department website.
- An improved and innovative use of membership expertise.

**9) Issues you believe need to be addressed in the report.**

**Examples: Forty eight (48) Responses**

- Above plus additional equipment (Ladder Truck, Etc.)
- Station / Manning for the Fire Department
- Issues with leadership
- Is the call department still working?
- Budget Issues:
  - Lack of Funding increased trainings and certifications.
  - Lack of Funding to repair, replace equipment and apparatus
  - Lack of funding to hire Staff and retain staff.
  - Lack of Funding to build a new station, current station has many limitations.
- Things we do well.
- Things we don't do well.
- Things we should be doing.
- Things we should be prepared for given Town growth or contraction.
- A realistic staffing proposal.
- Benefits of the current state of regionalization
  - Mutual Aid
  - Auto Aid
  - Regional Haz-Mat Team
  - Dispatch Center
- Capacities and potentials for other regionalization benefits.
- Community comparisons OK, but more emphasis on risk/need for Bow
- Answers to ALL the Town Manager/Selectman's questions (if possible) so we can MOVE FORWARD.
- Does the Leadership have the proper training, education, experience and knowledge to run the Bow Fire Department?

- Would the Bow Fire Department benefit from having a Full Time Chief?
- Is the Bow Fire Department properly staffed to handle the everyday operations and incidents productivity and safety?
- Is the current facility safe and adequate for the Bow Fire Department?
- Efficient use of BFD Members.
- The Townspeople to team up and be a community – don't divide, hearing "New Comers" to town and thinking their word is always truthful with no other agenda.
- Lack of adequate personnel to complete daily tasks outside of calls and station.
- Updating policies.
- Training for Top Management.
- Trust between Fire Department and Board of Selectman.
- Staffing and promotional possibilities.
- Community Hazards.
- Facility needs.
- The conditions personnel have to live and work in.
- Pros and Cons of Elected Fire Chief to that of appointment.
- Leadership.
- Lack of Personnel.
- New Station !!!!!
- Fulltime Fire Chief
- More fulltime Personnel.
- Organization.
- Safety Concerns.
- Administration positions suggestions based on size and activity levels of the Department.
- Recommendations on development, implementation and sustainment of citizen education.
- Strategic planning recommendations for Department – Town administration – Public Interface.

**10) Issues you believe are holding the Bow Fire Department back.**

**Examples Fifty (50) Responses**

- Over Spending, out of control budget school system
- Parks & Recreation attached to BFD
- High Taxes
- Power Plant in Bow Announcing Sale
- Selectmen not willing to split new building construction.
  - Phase I Build FD only (Seemed like town supported this)
  - Phase II Add on PD, after Phase I is paid.
  - Phase III consider Park & Recreation needs.
  - Phase IV Demo Old Building
- Affordable Housing
- White Collar- Doctors, Lawyers, CEOs don't join the Fire Department,
- Blue Collar Workers can't afford the Town.

- Call side – most employment don't let employees leave to chase a call during their working hours.
- If we had a more active and organized Chief and administrative staff, I think we could be a better department all around.
- I believe that we should look more beyond the Call Department. Those times have passed and we are not getting the response like we were in the past
- The reason things get done and we have such a great relationship with the town is the because of the hard work and great response of the full timers.
- Volunteers attend more hours of training as new threats and technologies. A Training Officer to focus on these would be helpful.
- Increasing costs to outfit all the department members with specialty equipment and clothing.
- Lack of a training center/meeting center.
- Many of the full-timers have multiple roles and wear multiple hats, plus the day to day operations can lead to burnout.
- Indecisiveness of the elected officials
- Internal and External Communication
- Relationships with elected officials
- Relationship with Town Manager
- Lack of strategic planning
- Lack of public relations
- Lack of succession planning
- Lack of consistency in operations, administration, and discipline
- Staffing
- People that don't want change
- People that don't want to be held accountable
- Relationship/communications with other Town Departments-specifically Emergency Management, DPW, Building Department, and Police.
- Facility, Facility, Facility
- The major issue holding up the Bow Fire Department would be the lack of competent leadership.
- Chief, Assistant Chief, Call captain.
- Fire department has lack of communication from the two leaders ( Asst. Chief and Chief)
- Fire department chiefs do not answer communications from town hall.
- There is no confidence in the Asst. Chief and Chief.
- Lack of Communications.
- New station would boost Morale.
- The condition of where personnel have to live and work in and train in.
- Leadership.
- Members doing as they please.
- No plans for the Future.
- Past mistakes by the Board of selectman that have caused the Town to have no trust.
  - Spending double their budget to build a High school.

- Bonding a water and sewer project they couldn't finish.
- Poor Capital Improvement Planning for purchases.
- Poor budgeting all together, i.e. not enough Overtime in budget to cover all sick and vacation time.
- Upper management, Department is stagnant with a few doing the work for others.
- The Budget – well I'm not rich – I have a "tight budget" as well. But being "penny wise and pound foolish" is just plain stupid.
- Promote Association's current and future role(s).
- Lack of sufficient Administration personnel for size of Department.
- Continued and innovative use of "per diem" personnel to assist with Department Activities.

**ATTACHMENT # 16**  
**APPLICABLE 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.

<b>Complied with or used Yes / No</b>	<b>NFPA STANDARDS</b>
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,
	<b><u>MEDIUM FREQUENCY</u></b>
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 fire 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,
	<b><u>LOW FREQUENCY</u></b>
	NFPA 30 Flammable and combustible liquid code
	NFPA 30 A code for motor 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

**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.

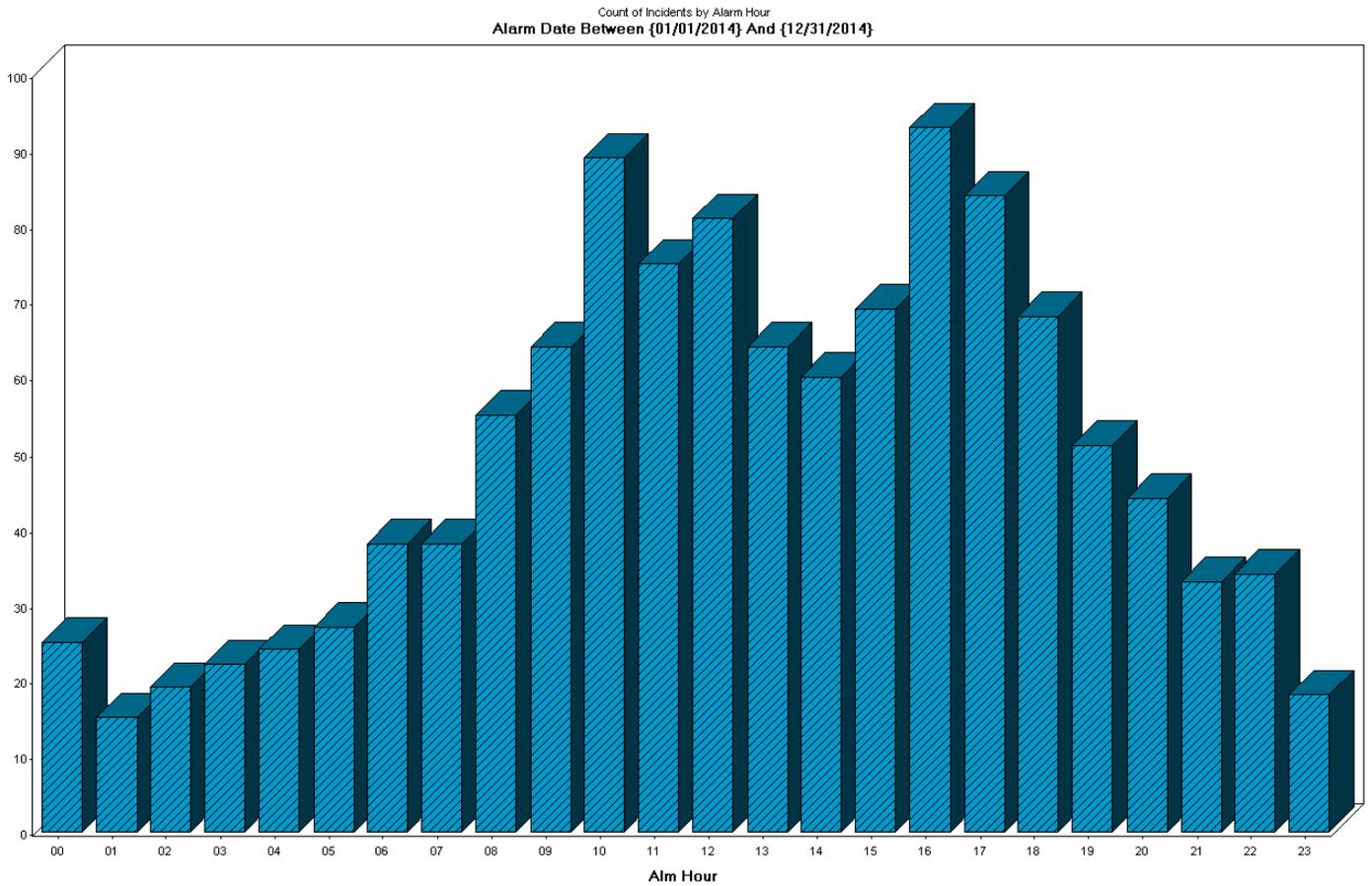
**ATTACHMENT # 18**

**Successful Grant Awards**

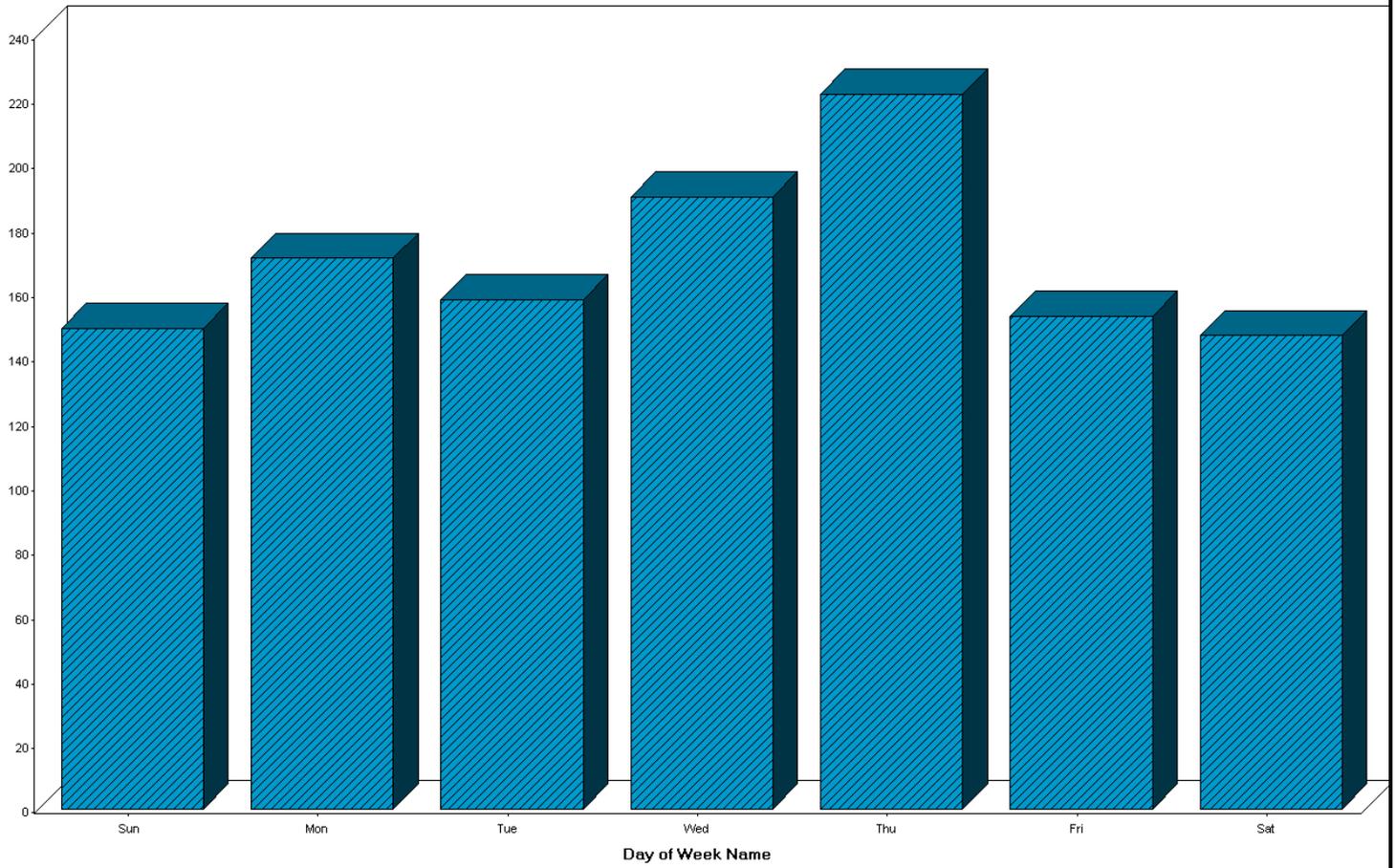
- 1) 2003 Fire Act Grant Award-Operations and Safety \$40,536 Thermal Imagers and Portable Radios.
- 2) 2005 Fire Act Grant Award-Operations and Safety \$18,620 for a Tank, Pump, and Equipment for the Forestry Truck.
- 3) 2008 Fire Act Grant Award-Operations and Safety \$163,000 Air Pack Replacement and air tank filling station.
- 4) 2010 Fire Act Grant Award-Operations and Safety \$186,000 Firefighting Gear Replacement and Vehicle Exhaust Capturing Equipment.
- 5) 2011 Bow Volunteer Fire Department Association and Concord Hospital Purchases (2) Automatic CPR Devices for \$26,000 and donated to the Town.
- 6) 2012 State Haz-Mat and Rescue Training Reimbursement Grant \$16,590
- 7) 2015 State Forestry Equipment Grant \$2,400

# ATTACHMENT # 19

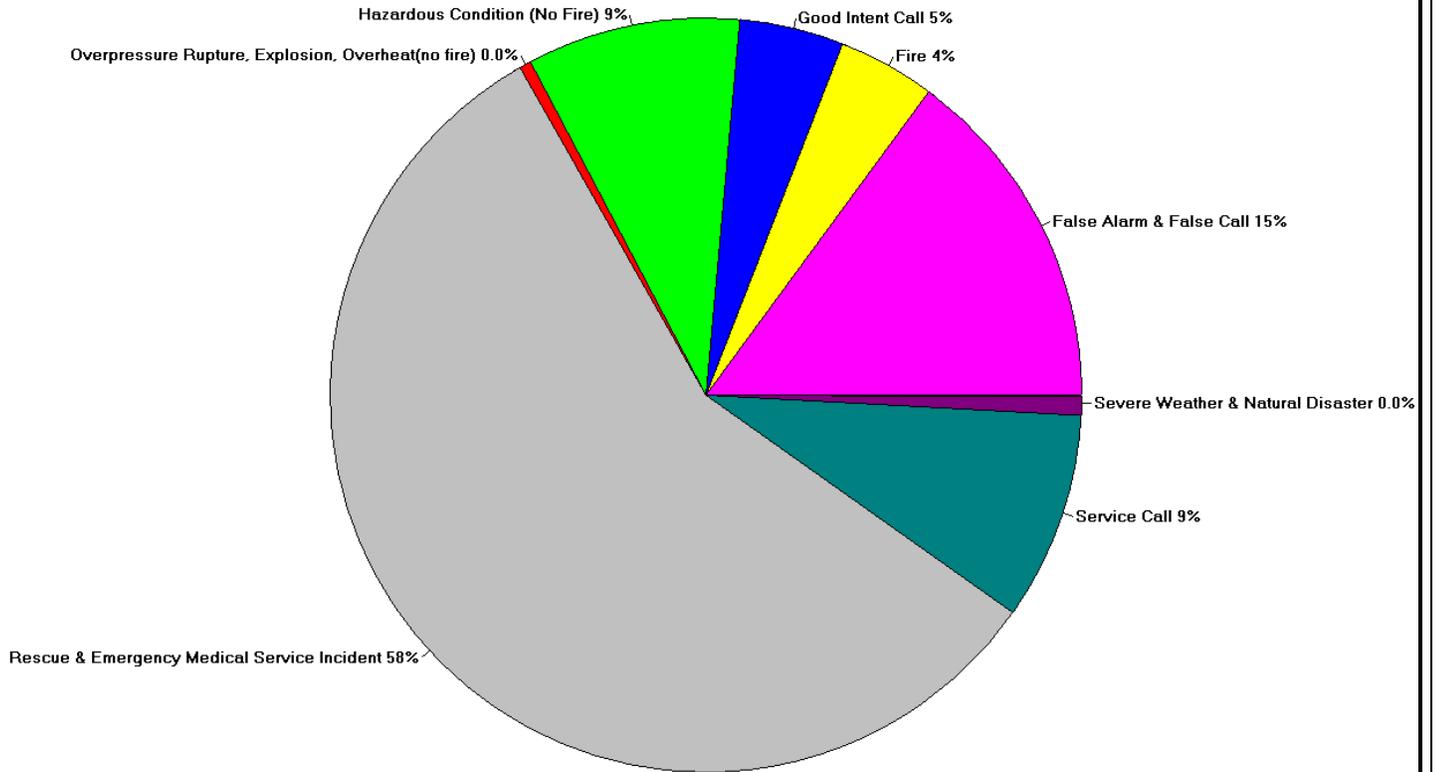
## National Fire Incident Reporting System (Firehouse©) GRAPHS



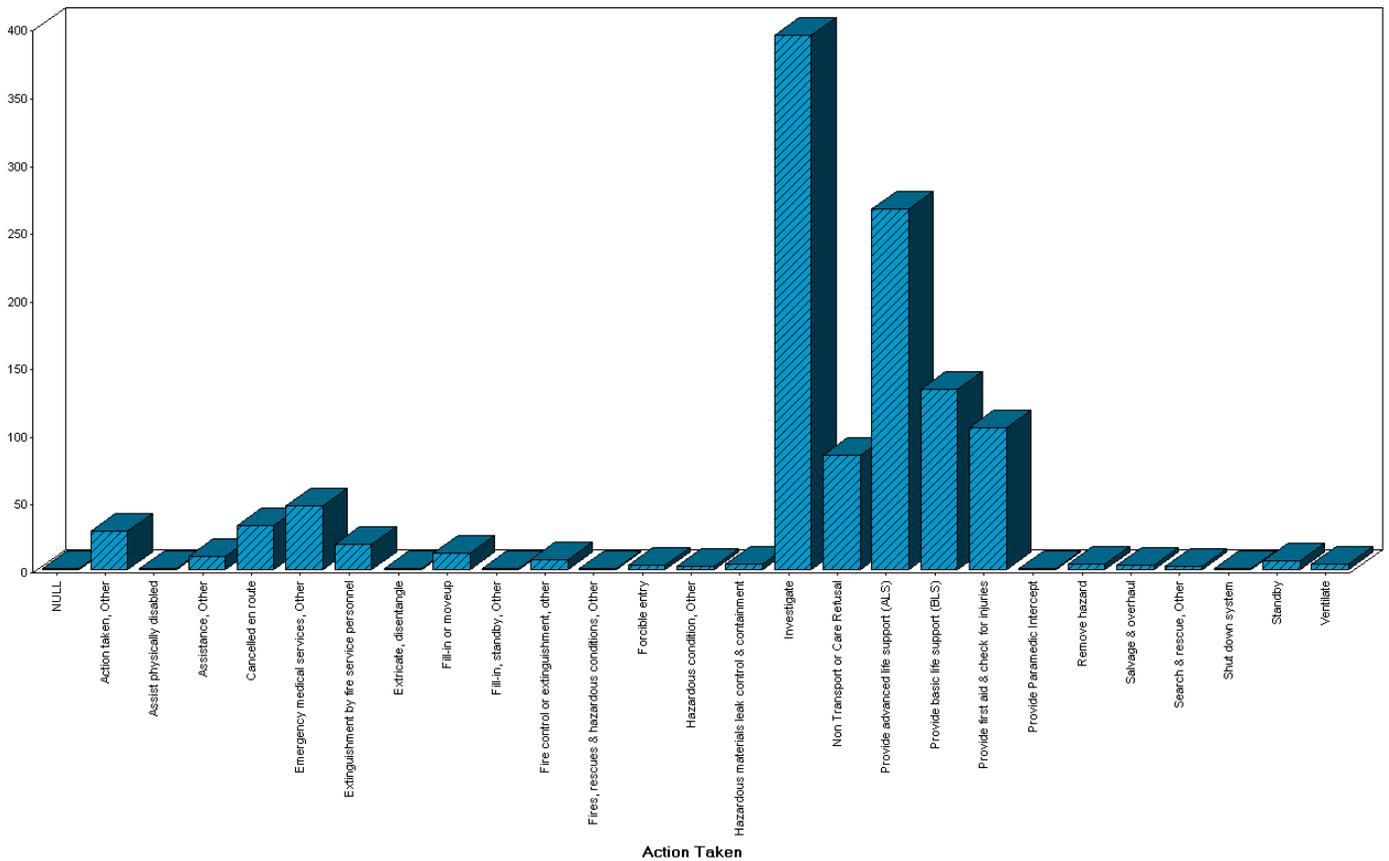
Incident Responses by Day of Week  
Alarm Date Between {01/01/2014} And {12/31/2014}



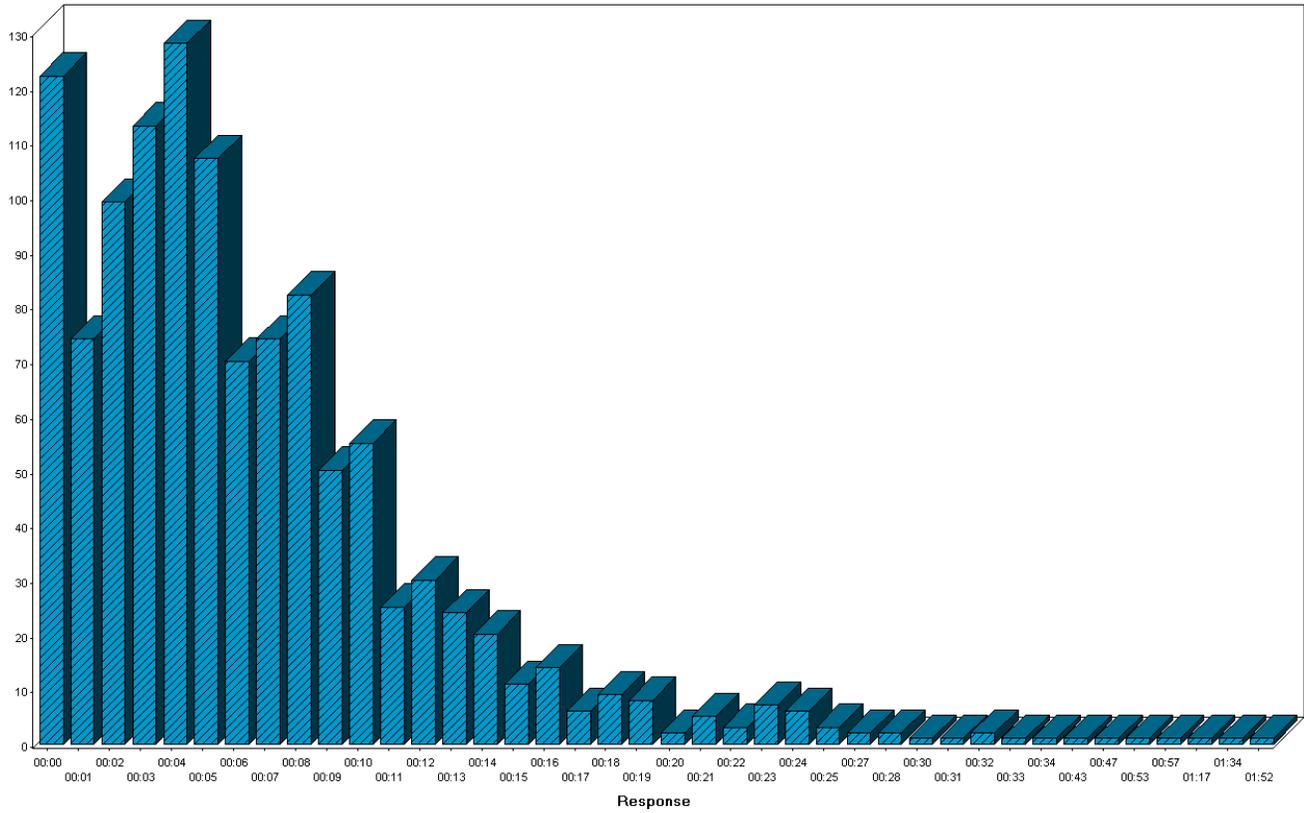
Incident Type Summary  
Alarm Date Between {01/01/2014} And {12/31/2014}



Type of Action Taken Graph  
 Alarm Date Between {01/01/2014} And {12/31/2014}



NFIRS Incidents by Response Time (in minutes)  
Alarm Date Between {01/01/2014} And {12/31/2014}



**ATTACHMENT 20**  
**COMMENTS AND RESPONSE**

Comment #	Author	Bow Fire Department, Bow Hew Hampshire- Text	Fire Department Capabilities Assessment Response
1	Stack	Does the Town have the right type and number of pieces of equipment for a community our size and the space need to house the equipment? Is the current fleet of trucks/equipment adequate for fire protection? Too big of a fleet? Too small?	Added Text to the Apparatus Section. The two Tankers are up for replacement. They could be replaced with one (1) Engine-Tanker which would provide the needed tanker and can also function as an engine if needed.
2	Stack	Min and max age limits. A recommendation re: when someone moves from active to auxiliary would be helpful. Ditto minimum age recommendations for activities, if they exist, would be desirable. I.e., who is eligible, measured by age, to be considered a qualified responder?	Modified Text, While it can be very difficult, the decision to change someone's activity status is case specific to the individual. In addition, the person's physical abilities can be improved through therapy or worsen over time. It would be inappropriate for us to make a blanket recommendation based solely on age. The NFPA standards or at least the use of the Medical Questionnaire in the OSHA Respiratory standard would give some guidance.
3	Stack	<u>Page 6 and similarly elsewhere.</u> "Captain Harrington runs the department" While Capt. Harrington does have an abnormal and difficult work load, responsibilities, etc.; his work is assigned by the Fire Chief. He seeks the Chief's approval and guidance when he is not sure on matters. His position is not autonomous of the Chief. The Chief is the department head and he runs the department.	Modified Text, An additional critical need involves the Career Captain/Training Officer. Captain Harrington ensures the Fire Department functions at capacity.

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| 4 | Stack | <p><u>Page 17, 50 and Attachment 4.</u> Central New Hampshire Haz-Mat Team is the Town's Regional Haz-Mat Team it is comprised of responders and equipment from both Lakes Region Mutual Aid and Capital Area Mutual Aid. There is no Lakes Region Haz Mat Team. HAZMAT responsibility is understated. The accompanying list of sites and materials should be considered. In particular, one of the largest concentrations of Anhydrous Ammonia in the State is at Merrimack Station. Attachment 4 is a partial list of High Risk Properties, and Capt. Harrington is willing to help with making this section more complete.</p> | <p>Modified Text, The BFD is part of the Central New Hampshire Haz-Mat Team comprised of responders from the Capital Region and Lakes Region Regional Mutual Aid . Several occupancies in the community utilize hazardous materials in their industrial processes including Dyno Noble, and the Merrimack Power Station.</p> |
| 5 | Stack | <p><u>Page 21.</u> Recommendation is for additional certifications and training. Identification of those would be helpful.</p>  | <p>Modified Text, Additional Certifications and Training requirements need to be added to the minimum requirements. Included would be Fire Officer I, and II and III, and the National Fire Academy Volunteer Leadership Program.</p>  |
| 6 | Stack | <p>Page 22. Re: atmosphere of doubt "between the Fire Department, Town Manager and some members of the Board of Selectmen." Selectman Judd believes this is true with the Chief and perhaps Asst. Chief, but not with the department members.</p>   | <p>Modified Text, During the Department Meeting, there appeared to be an atmosphere of r stress between the Fire Department and community Leaders. The Chiefs specifically....</p>   |
| 7 | Stack | <p><u>1. Page 22.</u> Anonymous survey. Should note the sampling group, which is understood to be members of the BFD only.</p>  | <p>Modified Text, An anonymous survey was developed for the Bow Fire Department personnel to ensure everyone's thoughts and opinions were received by the evaluation team. The survey was by invitation only and available to BFD members.</p>   |

8

1. Page 24. Aerial Apparatus. Again, the statement of disagreement between the department and the town suggest unanimity of position by members of BFD. Selectman Judd believes that some members believe a ladder truck is desired, but most do not.

Stack

Modified Text, Aerial Apparatus: The community does not presently own a ladder truck. During the meeting with the Department it appeared there was apprehension relative to not having a Ladder Truck in the Department. There is a some disagreement between the Department and the Town regarding purchasing one or Automatic Mutual Aid. A ladder truck is dispatched on all working structure fires. While the Department does not presently have the response capacity to effectively staff and operate a Ladder, the development in the community is continuing to grow. Conversely, the Presently, the ladder coverage is from Mutual Aid and. the personnel who arrive with the mutual aid ladder provide critical tactical assistance. A ladder truck is dispatched on all structure fire's. While purchasing a ladder is not appropriate at this time, future financial planning should include a place holder for a future potential needs.

9

Page 28. Figure 10. Please provide some more detail on the 10%. Is it 10%? Up to 10%? 10% and Greater?

Stack

Changed Graph and Added Paragraph, Figure 10 shows the changes relative to the number of responders who attended at least ten percent (10%) of the emergencies and the number of personnel who respond between eleven and twenty-four percent (11-24%) of the emergencies. In 2012, there appears to be a movement by some responders from the ten percent (10%) bar to the next level up. Unfortunately, the eleven to twenty-four percent (11-24%) responses decline in 2013 and 2014. During the same time frame, the number of ten percent responders increased. A positive aspect of this research is the increase in total active responders. The goal is to get all responders above the ten percent (10%) participation rate.

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| 10 | Stack | <p><u>Page 39.</u> PUBLIC FIRE SAFETY EDUCATION. The Department also provides CPR and fire extinguisher training at Bow Schools.</p>  | <p>Modified Text, added CPR and Extinguishers</p>   |
| 11 | Stack | <p>Page 39. CODE ENFORCEMENT. The Department also has a second full-time employee that is a State certified Fire Inspector II.</p>  | <p>Modified Text, added Captain Harrington</p>  |
| 12 | Stack | <p><u>Page 50.</u> The Department does not have a designated Water Supply Officer. However, the Department currently has done all of the items listed. The Department has an inventory of the water supplies in Town in our Firehouse Software-we review whether they are seasonal supplies on a regular basis-we work with the Planning Board during early phases of a development and require a 30,000 gallon cistern (to Fire Department Standards) in every development with more than 12 structures.</p> | <p>Modified Text, as requested</p>  |
| 13 | Stack | <p><u>Page 53.</u> Physical fitness. The report identifies some possible standards. A recommendation as to what would be appropriate for Bow, and the implementation schedule would be very helpful.</p>  | <p>Added Recommendation.<br/> Recommendation #14: The National Fire Protection Association Standards 1582 (2013) - Standard on Comprehensive Occupational Medical Program for Fire Departments and 1583 (2015) - Standard on Health-Related Fitness Programs for Fire Department Members should be utilized to deal with the issue of Fitness Standards and Annual Assessments.</p> |

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| 14 | Stack | <p><u>Page 68.</u> “Part-time staff should receive their hourly rate for scheduled hours worked but should also be required to meet some minimum standard.” They do and the documentation can be found in the shared OneDrive folder JLN/Training/Req Training to Work Shifts/Shift Work Requirements and Apparatus Training Requirements. Both documents are required competencies to work shifts off all fulltime and part-time employees. Examples include competency check sheets to operate all apparatus to finite knowledge of streets, target hazards, and water supplies. Additional check sheets on operating specialty equipment such as tech rescue and air monitoring equipment.</p> | <p>Modified Text Recommendation #11 Modified ,A minimum qualifying response percentage would need to be determined.</p> |
| 15 | Stack | <p><u>Page 71.</u> Mileage table needs to be validated. Several members appear to be way off.</p>   | <p>Utilized new program for updated numbers.</p>  |
| 16 | Stack | <p>Chapter 5, Sect. 5-1. “Mitch will send” – what is needed?</p>  | <p>Modified Text, interview note</p>  |
| 17 | Stack | <p>Chapter 4, Sect. 4-2.2. Who appoints the research and planning groups and the Truck Committee for equipment purchases? Is it a mix of officers and call and full-time personnel? Is the Town’s Fleet Mechanic involved?</p>  | <p>Modified Text, From Company Meeting</p>  |
| 18 | Stack | <p>Chapter 4, Sect. 4 -1. “The Town established a capital plan for purchase and apparatus replacement. <u>It is presently not being followed due to Fire Station replacement plans.</u>” and</p>  | <p>Modified Text, Information from Group.</p>   |
| 19 | Stack | <p>Chapter 6. Extensive documented CIP exists. <u>Is NOT followed</u>, plus larger equipment. - please explain</p>  | <p>Modified Text, Information from Group.</p>   |

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| 20 | Stack | Please add some context for the SWOT; Date conducted, location, department members present, etc.   | Modified Text, STRENGTHS WEAKNESSES OPPORTUNITIES AND THREATS (SWOT) ANALYSIS<br>A Strengths Weaknesses Opportunities Threats analysis was conducted as part of the Fire Department meeting. A large contingent of members were present including the Chief Officers, a number of Call Officers and a number of Career Staff. These are the notes from that meeting. |
| 21 | Stack | Applicable NFPA Standards. Low and Medium what? Complexity, Risk, Expense, Conformance? Also, is a High category missing?  | Frequency, Modified text.  |
| 22 | Stack | Interviews - Chief and Assistant Chief interviews need to be included  | Added Interviews   |
| 23 | Stack | Interviews - Captain-Mitchell Harrington (comment provided by Capt. Harrington) "While I handle many administrative tasks I don't handle ALL. For example I have next to nothing to do with budgeting, CIP, Mutual Aid etc. Chief does this. I assist the Deputy Health Officer but the Assistant Chief and Lieutenant does the majority of this work. It also states I attend all meetings that Chief cannot. This is incorrect. I have filled in for Chief in the past, but MOST of the time the Assistant Chief attends meetings in his absence." |  |
| 24 | Stack | <u>Page 6, paragraph 3.</u> The existing Fire Station has multiple detractors. Most notably, it has been <del>sighted</del> <b>cited</b> by the...   | Modified Text  |
| 25 | Stack | <u>Page 8.</u> Need to correct the following titles and names  |  |
| 26 | Stack | <del>Building Official</del> <b>Inspector/Code Enforcement Officer</b> Bruce Buttrick  | Modified Text  |

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| 27 | Stack | <del>Planning</del> <b>Community Development</b><br><del>Director Bill Lablew</del> <b>Klubben</b>   | Modified Text |
| 28 | Stack | Emergency <del>Manager</del> <b>Management</b><br><del>Director</del> Leland Kimball   | Modified Text |
| 29 | Stack | <del>Community First Selectman</del> <b>Board of</b><br><b>Selectmen</b>   | Modified Text |
| 30 | Stack | <u>Page 20, paragraph 3.</u> In addition,<br>Documents provided by the Town of Bow<br>clearly give the authority to select and<br>appoint the Fire Chief to the <del>Board of</del><br><del>Selectmen and supervision by the Town</del><br>Manager. Therefore, it would make sense<br><b>that</b> the Town Manager <del>and Board of</del><br><del>Selectmen</del> has the authority... (See opinion<br>letter from Town Counsel)  |               |
| 31 | Stack | <u>Page 25.</u> Call pay minimum is 2 hrs. The<br>current practice is minimum 1 hr.  | Modified Text |
| 32 | Stack | <u>Page 27.</u> Captain Harrington prepares<br>weekly shift payroll. Assistant Chief Pistey<br>prepares and submits the monthly paid on<br>call payroll.   | Modified Text |
| 33 | Stack | <u>Page 29, para. 1.</u> During emergency<br>situations, the Fire Department has worked<br>with the <del>Massachusetts State Police</del> <b>New</b><br><b>Hampshire State Police</b> , State Fire<br>Marshal's Office, and <del>Town Highway</del><br><del>Department</del> the Town's Emergency<br>Management, Police and Fire Departments.<br>The Bow Fire Department has worked with<br>several offices for non-emergency<br>circumstances, including the Building<br>Inspector/ <b>Code Enforcement Officer</b> , the<br><del>Zoning Officer</del> , Emergency Management,<br>( <del>Emergency Manager is the First</del><br><del>Selectman</del> ), the Regional Fire Chiefs'<br>Association, and the State and Federal<br>Offices of Homeland Security. <del>OSHA</del> | Modified Text |

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| 34 | Stack | <u>Page 31.</u> Add Dunbarton to the list of towns in the first paragraph   | Modified Text                     |
| 35 | Stack | <u>Page 31. Figure 14.</u> Capital Improvement Plan Review. Numbers in chart need to be corrected to reflect current CIP Plan (FY2015-16 through FY2020-21)   | Revised and Modified Chart        |
| 36 | Stack | <u>Page 35.</u> (48) Hour hours per week. The second “hours” should be deleted  | Modified Text                     |
| 37 | Stack | <u>Page 38.</u> FIRE AND EMS DISPATCH<br>Need to strike <del>The financial contribution to Concord is \$21,000 for each of the 22 Departments and then an additional per-community cost.</del> The per-community cost is based on the following formula: thirty-five percent (35%) based on population and sixty- five percent (65%) based on <del>tax base.</del><br><b><i>the Town’s Total Net Equalized Assessed Valuation set by the NH Department of Revenue Administration.</i></b> | Modified Text                     |
| 38 | Stack | <u>Page 39.</u> EMS Levels of Service. Bow also provides Advanced EMT level service.  | Modified Text, added Advanced EMT |
| 39 | Stack | <u>Page 39.</u> Fig 18 is missing 2012 data.  | Updated Graph                     |
| 40 | Stack | <u>Page 40.</u> Last paragraph. The Fire Station was built in 1956, not 1950.   | Modified Text                     |
| 41 | Stack | <u>Page 51.</u> Photo #28 is not identified. The picture is covering the description.   |                                   |
| 42 | Stack | <u>Page 55.</u> Spelling of “Hookset” is incorrect; should read Hooksett. Spelling of “Penbroke” is incorrect; should read Pembroke.  | Modified Text                     |
| 43 | Stack | <u>Page 55, par. 2.</u> Spelling and typo - <del>“Concensus” Statndards”</del> <b><i>“Consensus” Standards</i></b>  | Modified Text                     |

44	Stack	<u>Page 58.</u> Summary, (2nd sentence) “It is clear from the documents that have been presented to us that the Fire Chiefs are to be supervised by the Town Manager.” <del>and in his absence the Board of Selectmen.</del>	
45	Stack	(7 <sup>th</sup> sentence) “Ultimately, the Town Manager <del>has and Board of Selectmen have</del> the authority to take such actions as needed to protect the community of Bow.”	
46	Stack	<u>Attachment 4.</u> All pages are numbered 5	Modified Text
47	Stack	<u>Attachment 6, chapt. 2.</u> #5 appears to not belong here; it is not an NFPA standard	Modified Text, BOW issue added to work sheet.
48	Stack	<u>Attachment 6, chapt. 8.</u> #3 appears to not belong here; it is not an NFPA standard	Modified Text, BOW issue added to work sheet.
49	Stack	<u>Attachment 6, Chapter 5.</u> “Mitch will send” Captain Harrington made this available on 4/1/15.	Modified Text, Research Note
50	Stack	<u>Attachment 6, Chapter 8.</u> “Capt. Mitchell” should read Capt. Harrington	Modified Text
51	Stack	<u>Attachment 6, Chapter 8.</u> Dispatch by City of Concord Fire Department is under a Contract through the Capital Area Mutual Aid Fire Compact. Assessment formula in text is not correct.	Updated Text, The per-community cost is based on the following formula; thirty-five percent (35%) based on population and sixty-five percent (65%) based the Town’s Total Net Equalized Assessed Valuation set by the NH Department of Revenue Administration.
52	Stack	<u>Attachment 6. 11-4 Level of Service.</u> Add Paramedic	Modified Text
53	Stack	<u>Attachment 6. 18-1.1 Hydrants</u> – (half town) is not correct. The Town has 50 +1- fire hydrants that cover the Industrial/Commercial parts of Town, not half of the Town	Modified Text

54 Attachment #7. page 5. P. 5-Engine 1 pump is a 1,500 GPM 52-K1 should be 52 Tanker 1 Modified Text  
52-K2 should be 52 Tanker 3 52-F1 Brush should be 52-Forestry 1  
The 2003 14' Archiles boat should be a 2013 16' boat\

Stack

55 Attachment #8. Page 105. DPW does not do pump service; the Fire Department does this in-house by a person that is certified to do pump service.\ Comment from SWOT

Stack