

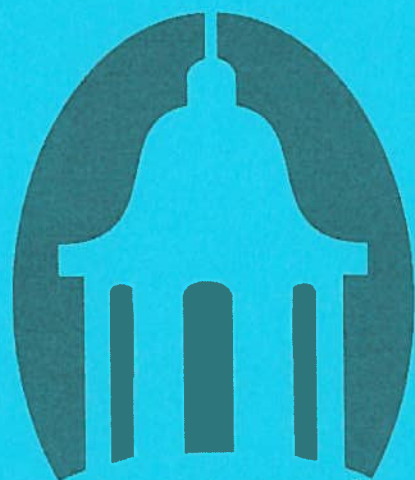
TRURO, MA
FINAL REPORT
FIRE SERVICES ORGANIZATIONAL ANALYSIS
TRURO FIRE & RESCUE
MARCH 2014



Prepared by:
Municipal Resources, Inc.
120 Daniel Webster Highway
Meredith, NH 03253
603-279-0352
866-501-0352 Toll Free
603-279-2548 Fax
all@municipalresources.com
www.municipalresources.com



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Municipal
Resources
Inc.

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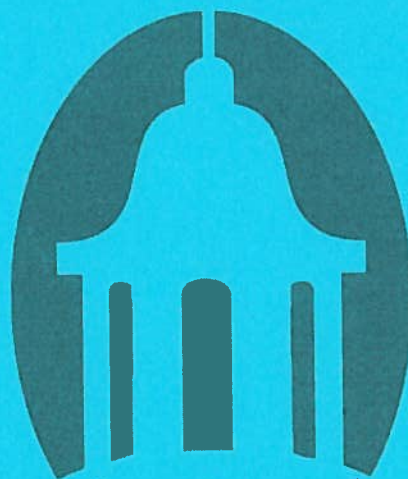
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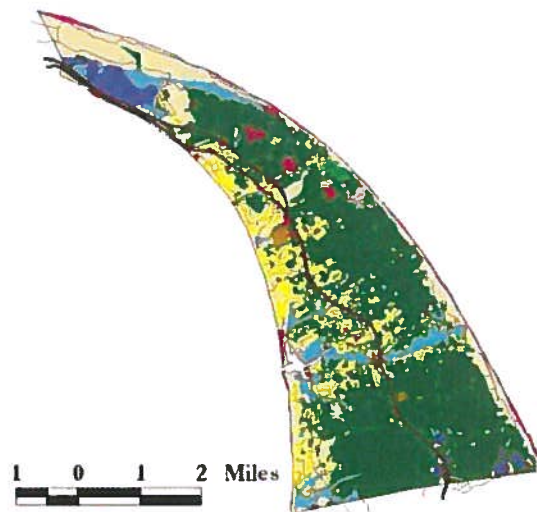
Fire Services Organizational Analysis

Truro Fire & Rescue

March 2014

EXECUTIVE SUMMARY

The Town of Truro, Massachusetts, covers 26.3 square miles (21.1 square miles consists of land) and has a base, year round population of 2,003 (2010 Census). Based upon the seasonal nature of the community, population swells to more than 15,000 – 20,000 residents and visitors during the summer months. As the peak season has elongated over the years, weekends also see a tremendous increase in population. Demographics indicate that Truro has experienced controlled growth at a rate of 1.3% per year over the previous two decades. Truro is one of the more exclusive towns on the Cape, noted for its affluent residences, rolling hills, and sand dunes along the coast.



The town is served by an on-call fire service organization, which was organized in 1930. Presently, the department is composed of a handful of on-call/part-time personnel, including the chief of the department, an administrative assistant, a captain, a lieutenant, and a handful of firefighters. (It is important to note that currently the fire captain also serves as the administrative assistant.) Availability of on-call personnel for weekday daytime response is marginal. During our field visits to Truro, we developed a significant concern with the level of fire protection provided in the community and feel that the town, although well covered in terms of Emergency Medical Services (EMS) response, lacks an effective level of fire protection.

Echoing what we have communicated to the Truro Fire & Rescue Advisory Committee and the town administrator, we believe that the town is at substantial risk. During our field visits it was apparent that the level of service actually provided by the fire department does not match the level of service that the town desires and believes is in place. The current members of the department have worked to provide the town with the best possible level of protection that they can. However, their efforts have been thwarted by a lack of sufficient organization and a significant lack of administrative depth at the level of chief and officers. Long-term efforts to improve this situation will need to focus on recruitment, retention, training, and certification of personnel. The Truro Fire & Rescue Advisory Committee is aware of this situation and sought this report to focus the efforts of the town and produce the best value as the community further invests in a fire protection service level that matches the needs of the community.

As the study progressed, six themes emerged:

- The need to recruit and retain on-call personnel
- The need to enhance the level of training and certification
- The need to staff with part-time personnel that are properly trained and certified as firefighters
- The need to provide a stronger level of organization and leadership within Truro Fire & Rescue
- The need to escalate the level of leadership in the department
- The need to recognize that current efforts focus on EMS at the expense of fire protection despite the fact that the Lower Cape Ambulance is the agency with primary EMS responsibility for the town

This report will concentrate on the following ten focus areas. These areas can serve as a foundation for action and are discussed more fully in the body of this report:

- I. Organizational Design
- II. Job Descriptions
- III. Facilities, Equipment and Capital Planning
- IV. Recruitment and Retention of Personnel
- V. Training and Certification of Personnel
- VI. Benchmarking and Comparative Analysis

- VII. Emergency Medical Services
- VIII. Regional Options
- IX. Organizational Culture and Employee Survey
- X. Fire Service Grants

The real issue facing Truro is to determine an acceptable level of risk and then define an appropriate level of service for the community. Planned growth of the department is essential to provide a consistent service level to the community now and in the future.

During the previous two years, a separate fire service related study was completed by Roy Jones, a well-respected, recently retired local fire chief. Although this study identified some credible issues, it lacked the objectivity that is provided when a team with no ties to the area is engaged in this process. Based on the proximity and previous history of the individuals, and the writing style utilized, the Jones' Report provided a scathing assessment of the organization and its leadership. This report was viewed as a blow to the department that lacked a realistic plan for improvement. Members of the department viewed this report as an attack and assumed a defensive posture.

As we initiated the study process, we asked the fire chief and administrative assistant/fire captain to provide us with foundational data. Typically, this data is sorted, analyzed, and incorporated into our report. In Truro we found that data was difficult to obtain or non-existent. The minimal data set received would support the following observations:

- The emergency call volume in Truro is not excessive for a well-organized on-call fire service organization
- The town has provided Truro Fire & Rescue with an excellent apparatus set
- The town has provided Truro Fire & Rescue with an excellent public safety facility
- Based on the location of the current station, there is no need to consider the development of additional facilities

As the study progressed, a survey was distributed to the officer core; this survey initially had only one response. After significant prodding, and the direct influence of the committee chair, the other officers responded. A more intense on-line survey was then developed and all current and recently separated employees of the Truro Fire Department had the opportunity to respond; nine (9) responses were received.

Based upon national averages, Truro should have the following resources to conduct effective fire service operations:

- 2 pumpers
- 1 tender
- 1 wildland suppression vehicle
- 1 wildland urban interface vehicle
- 1 fire station

Of note is that Truro has only 6 extremely active on-call firefighters, significantly fewer than other communities of Truro's size who often utilize on-call and career forces jointly. The lack of on-call and volunteer personnel is an issue faced by communities across the country. This scarcity of human resources is driven by the following factors:

- An overall reduction in leisure time
- Employment obligations and the common need to maintain more than one job
- The virtual elimination of an employer's understanding and flexibility relating to this form of community service
- Generational differences and increased family demands
- Increasing training requirements
- The cost of housing in many affluent communities

In terms of operational safety, we are concerned with the department's ability to meet the Occupational Safety and Health Administration's (OSHA) *Two-In/Two-Out* rule that requires four firefighters on the scene of an incident prior to initiating an interior fire attack (except to perform a visible rescue). The fire chief shrugged when we asked about compliance with the OSHA rule and indicated that Truro Firefighters do what is necessary to get the job done. One part-time firefighter recounted stories of his actions when arriving at various fire incidents without other personnel. These stories may be heroic, but clearly, this situation placed both personnel and the community at an unnecessary level of risk once immediate rescue operations have been undertaken.

Our experience in other Massachusetts' communities documents fire crews doing what is necessary to get the job done and prevent fire spread with no consideration of either the Federal OSHA Rule or their own safety. Although this is a tribute to the dedication of the Truro Firefighters, it is a dangerous equation that can rapidly result in the serious injury or death of a firefighter, and points to a lack of training and strong operational leadership.

Truro presently schedules one person on duty during some shifts and even with the immediate activation of mutual aid fire departments, National Standards such as NFPA 1720 *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments*, 2014 Edition, will be almost impossible to meet given the rural and isolated nature of Truro and the size of adjoining departments.

Specifically a brief overview of the organizational analysis conducted in Truro would support the following:

- The need to hire a full-time fire chief and strengthening the level of organization of the department. The recruitment of the new fire chief should be pursued rapidly to ensure an overlap with the current fire chief.
- Shifting the emphasis of the department from EMS toward fire protection. This is consistent with the role of a fire rescue organization.
- Increasing the level of training and certification of personnel.
- Enhancing recruitment and retention efforts and considering the workforce that exists on a year round basis within the Town of Truro.

Based on the findings of this study, we believe that the Town of Truro will need to confront the challenges listed below and consider the recommendations as a means to incremental improvement.

Top Five Challenges for the Town of Truro

1. Deciding upon an acceptable level of risk for the community as it pertains to fire, rescue, and emergency medical services.
2. Increasing the level of organization of the department and refocusing the organization on providing an enhanced level of fire protection to the community.
3. Recruitment and retention of sufficient personnel to provide the level of service selected by the community.
4. Enhancing the training and certification of personnel.
5. Ensure that all part-time personnel are qualified as both firefighters and driver operators.

Our Top Six Recommendations

1. Truro Fire & Rescue needs to pursue a balanced approach to providing emergency response and refocus on providing fire protection to the community.
2. Truro Fire & Rescue should immediately cease allowing untrained personnel to staff on a per diem basis. The organization needs to recruit per diem personnel with qualifications in the following priority:
 - A. Firefighter I/II Training program completion
 - B. Firefighter I/II certification by the Pro Board or IFSAC

- C. Completion of Emergency vehicle operations program
 - D. Current First Responder Training
 - E. Massachusetts or National Registry EMT – Basic licensure
 - F. Massachusetts or National Registry EMT – Paramedic licensure
3. Prior to allowing personnel to respond to calls, Truro Fire & Rescue should provide each member with an orientation to the community, and training relative to driving and operating each vehicle. Each of these orientation steps should be documented in a personnel and training file. Personnel who do not have at least documented and complete Firefighter I/II training should not be allowed to work.
 4. Recruit, assess, and hire a full-time fire chief as detailed within in this report. Executive assistance should be provided to the interim chief to begin implementation of these recommendations, including the search for a new chief as soon as possible. It may be advantageous for the new chief to start employment prior to the removal of the interim chief to provide for a sufficient period of transition.
 5. The organization should focus on enhancing the training program and on the recruitment and retention of on-call members.
 6. Truro Fire & Rescue should immediately implement a formalized program of automatic aid when a structure fire or significant incident is reported.

GLOSSARY OF TERMS

Accountability System: a system used on the fireground or incident scene to methodically track the location of personnel operating at that location.

ALS (Advanced life support): refers to pre-hospital interventions that can be brought into the field by paramedics. Typically, this service level includes the ability to bring much of the emergency room capability to the patient. Paramedics can administer intravenous fluids, manage a patient's airway, provide drug therapy, utilize the full capabilities of a 12 lead cardiac monitor, and provide a vital communication link to the medical control physician who can provide specific medical direction based on the situation.

BLS (Basic life support): refers to pre-hospital interventions that can be brought into the field by basic level emergency medical technicians (EMTS). This would include semi-automatic cardiac defibrillation, oxygen administration, patient assessment, and stabilization.

Board of Engineers: A method of governance where several department members are designated as "Engineers" and one member is designated as the "Chief Engineer". This model dates back to the formation of volunteer fire services in America and is no longer common.

CAAS: Commission on the Accreditation of Ambulance Services.

CAD: Computer aided dispatch. This computer system tracks and documents the deployment of resources to emergency incidents.

Calendar Year: The twelve-month period from January to December within a given year.

Capital Project: A project with a cost that exceeds \$10,000 and the asset being procured has a life span of at least five years.

Cross Staffing: a fire service practice of assigning personnel to multiple emergency response vehicles. As an example, these personnel may staff both an ambulance and an engine. They would respond to whichever call comes in first, if it was a fire call the engine would respond and the ambulance would then be placed out of service until the fire call was concluded. Although a common practice, service is provided on a first come first serve basis as a risk management strategy.

EFR: Emergency first response unit. This designation applies to non-transport units that have been approved to carry paramedic level equipment.

EMD: Emergency Medical Dispatch, a systematic program of classify emergency medical calls by severity and providing callers with pre arrival instruction.

EMD: Second definition – Emergency Management Director is the person designated by the community to manage overall emergency operations and be the primary point of contact with MEMA.

EMS: Transport based emergency medical services which often include the ability to deliver advanced life support.

EMS Revenue: The income generated primarily from insurance companies for providing transport based emergency medical services to the community.

FireAct Grant: The annual competitive grant program administered by the Federal Emergency management Agency. This program provides funding for emergency response vehicles, safety equipment, training, minor fire station renovations and the development of regional activities.

Fiscal Year (FY): The 12-month period from July – June within a given year. Most municipal budgets are based upon a fiscal year rather than a calendar year.

First Due: The first piece of fire apparatus that will arrive at an emergency scene.

ICMA: The International City / County Management Association

Incident: An event requiring the response of fire service resources.

Incident Volume: The total of fire suppression and emergency medical response demand for a given period of time.

Industrial/residential mix: The percentage of industrial or commercial property compared to the number of residential dwellings in a community.

IOD: Injured on duty status. This is a status provided to firefighters injured in the line of duty under Massachusetts General Law Chapter 41, Section 111F.

ISO: Insurance Services Office fire protection rating schedule. This is a number ranging from 1-10 that provides a perspective on the fire protection capabilities of an organization. 1 is the best possible score while 10 indicates no substantive protection exists.

Long-term Absence: An absence from a scheduled shift for a period of more than two weeks.

MCVFA: The Massachusetts Call and Volunteer Firefighters Association.

Medicare Rate: The rate that Medicare will pay for emergency medical interventions and transportation. This is typically well below the market rate and has become a standard foundation to base ambulance service rates upon.

MEMA: The Massachusetts Emergency Management Agency.

NFPA: The National Fire Protection Association (NFPA) is an international organization that develops professional consensus based standards for the fire service. This organization is based in Quincy, Massachusetts.

NFPA 1001: Standard for Fire Fighter Professional Qualifications. Current Edition: 2013. This document serves as the basis for the evaluation of basic firefighter job performance requirements.

NFPA 1720: The Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments, 2014 Edition.

NFPA 1500: The NFPA Standard on Fire Department Occupational Safety and Health Programs.

NFIRS: The National Fire Incident Reporting System.

NPQB: The National Professional Qualification Board. This is the organization that provides certification for fire service skill within Massachusetts.

OEMS: The Massachusetts Office of Emergency Medical Services

Officer: A first line supervisor (lieutenant) or Shift Commander (captain).

OSHA: The Occupational Safety and Health Administration

Quint: A piece of fire apparatus that is outfitted was a pumper but also has a junior aerial ladder, typically 75-85 feet. This concept allows the rapid deployment of a unit that can quickly effect rescue and produce the best possible firefighter safety.

Response Time: The time elapsed from when an emergency call is received until fire emergency responders arrive on the scene of an event. Typically, this includes both dispatch process and turnout time.

Run Card: A matrix that defines what resources are to respond to a given area or community at various levels of incident escalation (e.g., Working Fire, First Alarm, and Second Alarm).

SAFER: The Federal Staffing for Adequate Fire and Emergency Response grant program.

Scratched: A fire service term that means that the company or Department that has been activated is unable to fulfill the response request due to a lack of availability of personnel or apparatus.

Shift Float: The difference between the number of personnel assigned to a work group and the number of personnel required to maintain the minimum operational shift strength selected.

Target Hazard: A structure that based on occupancy, construction, or location creates a higher than average fire protection risk to the community. Examples of target hazards are nursing homes, hospitals, corrections facilities, large commercial complexes, industrial facilities, and facilities that utilize hazardous materials.

Technical Rescue: Special rescue operations requiring unique training and equipment. Examples of technical rescue operations are trench and building collapse.

Tender: A piece of fire apparatus specially designed to transport a large volume of water to fire scene where a municipal water supply is not available. This unit is also commonly referred to as a tanker.

Turnout Time: The time from when the fire department is alerted to respond to an incident until the responding unit leaves the fire facility. Typically, this is approximately 90 seconds.

Two in Two Out: The OSHA rule (1910.134) relative appropriate respiratory protection and commencing safe operations on the fireground.

Weak Chief: A form of governance in which the fire chief reports to the Board of Selectmen. The Board of Selectmen function as the appointing authority for the purpose of hiring, disciplinary action, and termination.

PURPOSE, SCOPE, AND METHODOLOGY

MRI (Municipal Resources, Inc.) was engaged by the Town of Truro to review the operation of the fire department, to determine how it compares to contemporary fire service practices, and to assess the need for both staff and facilities. We have attempted to produce a report containing recommendations that will assist Truro Fire & Rescue and the Town of Truro to set a clear course of action for future improvement.

OUR OBJECTIVES

- To help municipalities and agencies obtain maximum value for limited tax dollars;
- To raise public awareness of the value and professionalism of their municipal resources; and
- To help local leaders develop and execute plans that best meet their community's needs, given available resources.

SCOPE OF SERVICES

This project will include five distinct but overlapping parts. These aspects are detailed below:

- Provide primary support to the Truro Fire & Rescue Advisory Committee formed by the Board of Selectmen;
- Conduct a comprehensive analysis and operational evaluation of the Truro Fire & Rescue Department;
- Develop Job Descriptions for all fire service positions recommended through the organizational analysis;
- Evaluation of alternative Fire and Emergency Medical services delivery options inclusive of regional service development;
- Identify merger options and present a detailed plan for organizational transition.

The study will review the manner in which fire, rescue, and emergency medical services are provided within the town. Using this review as a basis, MRI will make recommendations for improvements that are to take into consideration the current and future financial ability of the town, appropriate modifications to the delivery systems to provide optimum response time and service to the entire town, location or expansion of physical facilities and equipment, and whether the current organization is appropriate or

should be modified. Emphasis will be placed on the following and will include the evaluation of emergency medical services:

1. Provide primary support to the Advisory Committee.
2. Gather (with the assistance of the town) and analyze relevant data include previous studies and reports.
3. Develop and/or reviewing and modifying a Capital Plan, including assessment of equipment.
4. Evaluation of call type and volume of calls for service including emergency medical service requests. This analysis will develop a trend graph, which will compare historical data with current incident volume.
5. Utilize trend analysis to develop a forecast of expected call volume for future years. This analysis will consider population, development seasonal activity and other demographic factors.
6. Operational deployment of resources, including assessment of station location and response time.
7. Development of external comparative analysis with five communities selected in conjunction with the advisory committee.
8. Developing a master plan that meets the community's present needs and presents a risk management strategy.
9. Conduct an assessment of issues presently confronting employees.
10. Conduct an assessment relative to the fire department's culture. This assessment will be open to both current and former department members.
11. Plan for a strong partnership between the community and the emergency services organizations into the future.

METHODOLOGY

There were sixteen major work elements involved in this review. These are:

1. A review of compiled data provided by the department regarding key fiscal and operational aspects of the department.
2. A review of standard operational procedures (SOPs) of the department.

3. A thorough tour of the community to gain a sense of the physical environment, the primary fire and life safety risk exposures, and the location of population and commercial centers in relation to existing facilities.
4. A target hazard analysis based on the unique tourist and seasonal aspects present within the Town of Truro.
5. Interviews with key individuals including the board of selectmen, fire chief, department members, members of the Truro Fire & Rescue Advisory Committee, and multiple interested citizens, including by telephone and e-mail.
6. A literature review and internet based research.
7. Conducted a survey directed at department officers and delivered an online comprehensive survey open to all employees.
8. Interviews with part-time and on-call personnel.
9. A review of previous reports.
10. Response time trials.
11. Evaluation of two regional options.
12. A review of facilities and equipment.
13. A review of response time statistics.
14. Develop a summary benchmarking analysis using national norms and practices of other eight Massachusetts' communities. This analysis compared several data points.
15. Interview area fire chiefs, including a discussion relative to regional fire and EMS solutions that may exist.
16. Review of department grants.

To address the scope of this project, members of the study team held an initial orientation meeting with town officials, The Truro Fire & Rescue Advisory Committee, and the fire chief, and in partnership with them, gathered a variety of statistical information and data on the department. As noted previously, it was discovered that only a minimal data set existed and that some of the requested data was non-existent. MRI consultants performed several days of on-site work, interviews, and observations in Truro.

This study investigated areas such as the command structure, chain of command, span of control, recruitment, selection and training, budgeting, staff recall, service demand, fire prevention services, deployment of personnel, communications and data processing functions, internal discipline, working relationships with other persons and agencies, responsiveness, internal regulations, facilities and equipment, and compliance with various state and federal regulations.

Following the on-site visits, the data collected and observations made were subjected to analysis by the project team, both individually and collectively. The information was then compared with contemporary fire service and public safety practices, in order to formulate the recommendations contained in this report.

We would be remiss in not thanking the people of the Town of Truro who demonstrated their concern in person, by telephone and e-mail to us, to the board of selectmen, the Truro Fire & Rescue Advisory Committee, Fire Chief Davis, and the entire staff of the Truro Fire & Rescue who were most cooperative and helpful in assisting us in carrying out our work.

DISCUSSION & RECOMMENDATIONS

As we developed the report, we produced a series of recommendations that are detailed in the following pages.

Recommendations shaded in gray have been listed earlier in the document and are duplicated for the purpose of reference.

I. ORGANIZATIONAL DESIGN

The primary purpose of this study was to consider the current organizational design and determine the operational capability of Truro Fire & Rescue. The Truro Fire & Rescue Advisory Committee asked us to develop a series of recommendations that would provide an incremental and fiscally attainable path to improvement.

The town is served by an on-call fire service organization, which was organized in 1930. Recently the town changed the organization of the fire department from a “Board of Engineers” to a “weak” chief that reports directly to the Board of Selectmen. Our experience indicates that this change enhances the operation of a modern fire department. Presently, the department is composed of a handful of on-call/part-time personnel, including the chief, who works a part-time schedule, and an administrative assistant, whom also serves as the fire captain. Availability of on-call personnel for weekday, daytime response is marginal.

Personnel are also assigned to “squads” and compensated to be on-call. Although this is an excellent idea, that is typically utilized to activate only a small group of responders for certain incidents, this system is plagued by a lack of staffing in Truro. Based on the current configuration, it is not uncommon for a single squad member to respond to an automatic fire alarm activation or other emergency call that would require only the response of a small team of trained personnel. Our concern is that when a single person responds, they could be entering an unsafe environment with no backup, and a single person has a very limited capability to mitigate an escalating emergency.

We observed that a significant area of organizational conflict is the role of the administrative assistant. Although the goal of the position was to have an individual who was trained in first aid and CPR (in the event that there was a walk in request for assistance while the duty shift was out), the incumbent in the position feels that it is a job requirement to be a member of the department. Additionally, the current chief does not have a clear understanding of his role as compared to that of the administrative assistant.

We have heard of several instances where administrative duties (submission of payroll to the town hall for example) have been delayed due to the administrative assistant performing operational duties. The administrative assistant refers to herself as the chief’s “handler.” We found that designation to be a derogatory and disrespectful to the

fire chief. This comment is symptomatic of an internal power struggle where an individual is attempting to show dominance at the expense of his/her supervisor. This is a common situation in an organization with unclear roles and responsibilities.

Under the current setup, a dynamic is created where an operational subordinate (the administrative assistant is the second in command of the department, holding the rank of captain) is essentially running the day-to-day operations of the department. By self-admission, she will regularly leave her administrative job to respond to fire calls. It is our understanding that there is difference in pay for the two jobs (she makes more as a fire captain) this creates a dynamic of conflicting priorities where the fire call is more self-fulfilling than her administrative job.

We do not believe that it is a good practice to have this dual loyalty and recommend that the administrative assistant not be a firefighter. In the short term, the study team believes that the town should provide executive level assistance to the fire chief. This part-time position could help the fire chief organize the transition and provide personnel with some firefighter skills instruction. The board of selectmen will need to work with the fire chief and executive officer to establish clear performance objectives, as well as goals for the department.

During our field visits to Truro we developed a significant concern with the level of fire protection provided in the community and feel that the town although well covered in terms of emergency medical services (EMS) response lacks an effective level of fire protection. This level of concern developed within the study team based on the following observations:

- It was reported that there are only six or seven active on-call members.
- Personnel are hired on a per diem basis to staff the station during some daytime hours. These personnel are not required to be trained or certified at the level of Firefighter I/II as outlined by NFPA 1001.
- Personnel that are hired on a per diem basis are not required to be properly trained and or certified to operate a piece of fire apparatus.
- Per diem personnel are required to have EMT or Paramedic certification even though the primary responsibility for EMS response within the community has been delegated to Lower Cape Ambulance.
- When a medical emergency occurs, Lower Cape Ambulance responds from the Truro Public Safety Complex with a paramedic ambulance. Truro Fire & Rescue responds with one person in another ambulance and hopes to meet an on-call member on the scene of the emergency. Interviews during our field visits reaffirmed that despite the fact that the Lower Cape ambulance was staffed with two paramedics, it remains standard operating practice for all on-duty personnel to respond to a medical

emergency utilizing one of the two ambulances owned by Truro Fire & Rescue. The rationale provided for leaving fire apparatus unmanned was the belief (which was later reaffirmed by Chief Davis) that is far more likely that the next call would in fact be a medical emergency. Since fire apparatus does not carry EMS equipment, the chief feels that the better choice is to utilize their ambulance as a response vehicle. As the Truro Ambulance does not transport except in a backup role, this practice bewildered the study team.

- It was reported to the study team that some individuals are allowed to work as per diem staff may have injuries or other conditions that would impact their ability to function successfully as a firefighter.
- Several members commented that they felt uncomfortable with the level of training that they had received.
- Some of the members that we interviewed indicated that selection for open shifts may be driven by family connection rather than qualification and training.

As we discussed these concerns with the Truro Fire and Rescue Advisory Committee and other town personnel, it was clear that although many knew that issues existed, the level of services provided does not match what the town believed to be in existence. The observations detailed above indicate that the organization has drifted toward an organizational focus on EMS. Although EMS produces the highest percent of emergency responses and it is admirable to provide additional Advanced Life Support (ALS) coverage to the community, this should be done while preserving a credible level of fire protection for the community. This is especially true in a department where a staffed ALS ambulance from another partner agency has primary patient treatment and transport responsibility. As such, Truro Fire & Rescue is a secondary (backup) EMS provider and the sole provider of fire protection within the community.

The risk factors listed above combine into an equation in which both Truro Fire & Rescue personnel and the community are at substantial risk. In addition, the Town of Truro is not receiving a level of service that it believes is in place.

When designing fire protection services, the predominant question is what level of risk is the community willing to accept. As an example, a community with an all career fire department may indicate that they want to have an operational capability to deploy a first due unit onto the emergency scene within four to six minutes ninety percent of the time. National standards provide community guidance when developing the level of fire protection and acceptable level of risk.

Several national standards come into play; these include the following:

- The Occupational Safety and Health Administrations (OSHA) *Two-In/Two-Out* rule which requires four firefighters on the scene of an emergency prior to initiating operations within a structure that is on fire (except to perform an immediate rescue).
- National Fire Protection Association (NFPA) Standard 1720 which requires a first alarm response of 13 firefighters to provide basic fire attack and rescue operations within eight minutes ninety percent of the time.
- The Emergency Medical Service standard of care for cardiac and stroke patients is to have a basic life support response on scene within six minutes.

When comparing staffing to the benchmark communities selected by the town, it is apparent that the department is in need of expanding the on-call force and developing a means to quickly deploy the first due piece of fire apparatus with properly trained and certified personnel.

| Demand Zone | Demographics | Minimum Staff to Respond | Response Time (minutes) | Meets Objective (%) |
|---------------|---------------------------------|---------------------------------|---------------------------------------|---------------------|
| Urban area | >1000 people/mi ² | 15 | 9 | 90 |
| Suburban area | 500–1000 people/mi ² | 10 | 10 | 80 |
| Rural area | <500 people/mi ² | 6 | 14 | 80 |
| Remote area | Travel distance ≥ 8 mi | 4 | Directly dependent on travel distance | 90 |
| Special risks | Determined by AHJ | Determined by AHJ based on risk | Determined by AHJ | 90 |

Table 1 - NFPA 1720 Emergency Response Goals

Based on a review of the table above, we do not believe that the current organization is capable of providing this level of service. During our field visits, personnel informed the study team of several calls in which the department had to “scratch” (cancel response) based on an insufficient response of personnel.

To meet the goals outlined by NFPA 1720, the department should be reenergized and provided with the resources necessary to attain this goal. Development of this response capacity will require an increase in the level of organization and an escalation of the number of active (trained and certified) personnel. The first step in this process is to ensure that trained and certified firefighters are hired to serve as per diem staff.

Although it would be desirable for these individuals to be certified as EMTs or EMT paramedics, EMS certification should not be the primary requirement.

It is obvious that the current pool of trained per diem personnel is insufficient to properly staff the existing schedule. Based on the current situation, immediate action is required to enhance the level of protection to the community. Based on the lack of responding personnel documented by Chief Davis, per diem firefighters should be hired to provide the initial response of apparatus on a 24/7 (or other schedule) basis. As a result, Truro should recruit currently trained On-call personnel from departments across the State. Although some feel this is unrealistic, many call members will travel a long distance to work a full 24-hour shift. This strategy is currently utilized successfully in Boxborough and Southampton, Massachusetts. As outlined above, the goal should be trained and certified firefighters who are also licensed EMTs/Paramedics. It may be necessary to start with personnel who have been trained to the level of Firefighter I/II if certified personnel are not readily available.

The per diem firefighter staffing the station should respond to all calls in a piece of fire apparatus. Based on capability, we would recommend that the fairly new, but out of service, wildland interface vehicle be properly equipped and selected for this assignment. In the event of a medical call where no other ambulances from Lower Cape Ambulance are available, Ambulance 487 should respond as a transport vehicle provided sufficient staffing responds. In this case, we would still recommend the response of Engine 482 as the first responder unit and EMTs responding to the call should pick up Ambulance 487 on their way to the call. If the per diem staff member is an EMT or higher, he or she could then be the second EMT on Ambulance 487 which could then transport the patient. If the per diem staff member is a first responder, then two EMTs would be needed to staff Ambulance 487. If staffing Ambulance 487 does not rapidly occur, a mutual aid ambulance should be requested and Engine 482 should remain on scene as a first responder vehicle.



Figure 1 - Truro Engine 482 - Wildland Interface Unit

In addition to reinforcing per diem staffing, the number of active and properly training on-call personnel should be increased to 20. This will be further discussed in Chapter IV. To accomplish the delivery of the desired level of service, Truro Fire & Rescue will need to be reorganized, starting with the hiring of a full-time fire chief. The new chief should be a seasoned and innovative career fire service professional that has extensive experience with the development of on-call and volunteer fire service organizations. The new chief should be recruited through an assessment process and hired to coincide with a six-month overlap with the mandatory retirement of Chief Davis. This individual should have the following qualifications:

- Have a minimum of ten years of career fire service experience
- Be licensed as a Massachusetts/National EMT or higher (or required to obtain EMT – basic certification within 1 year)
- Five years as a command officer (captain or above)
- Have an Associate's degree in Fire Science, Business, Public Administration, or Emergency Management
- Pro Board or IFSAC certification as a Fire Officer, Fire Inspector, and as a Fire Instructor

In addition to the development of a full-time fire chief position, the position of administrative assistant and fire captain should be separated. The administrative assistant should be a full-time position that performs the following tasks:

- Scheduling personnel
- Hiring
- Billing
- Payroll
- Personnel records
- Training records
- Fire prevention coordination and scheduling
- Organize ongoing communication with all personnel through an e-mail system

Based on the leadership required during this transition, an additional captain's position should be developed, and one captain and one lieutenant should be assigned to each squad. The deputy chief should assume the role of training officer and the new chief should handle all fire prevention activities within the community. These changes could be implemented by July 2014. In addition to reinforcing per diem staffing, the number of active and properly training on-call personnel should be increased to 20. Once 20 active on-call personnel have been trained, a third squad could be formed by redistributing personnel.

A current Truro Fire & Rescue Organizational Chart has been inserted on the following page:

Current Organizational Chart Truro Fire Rescue Department

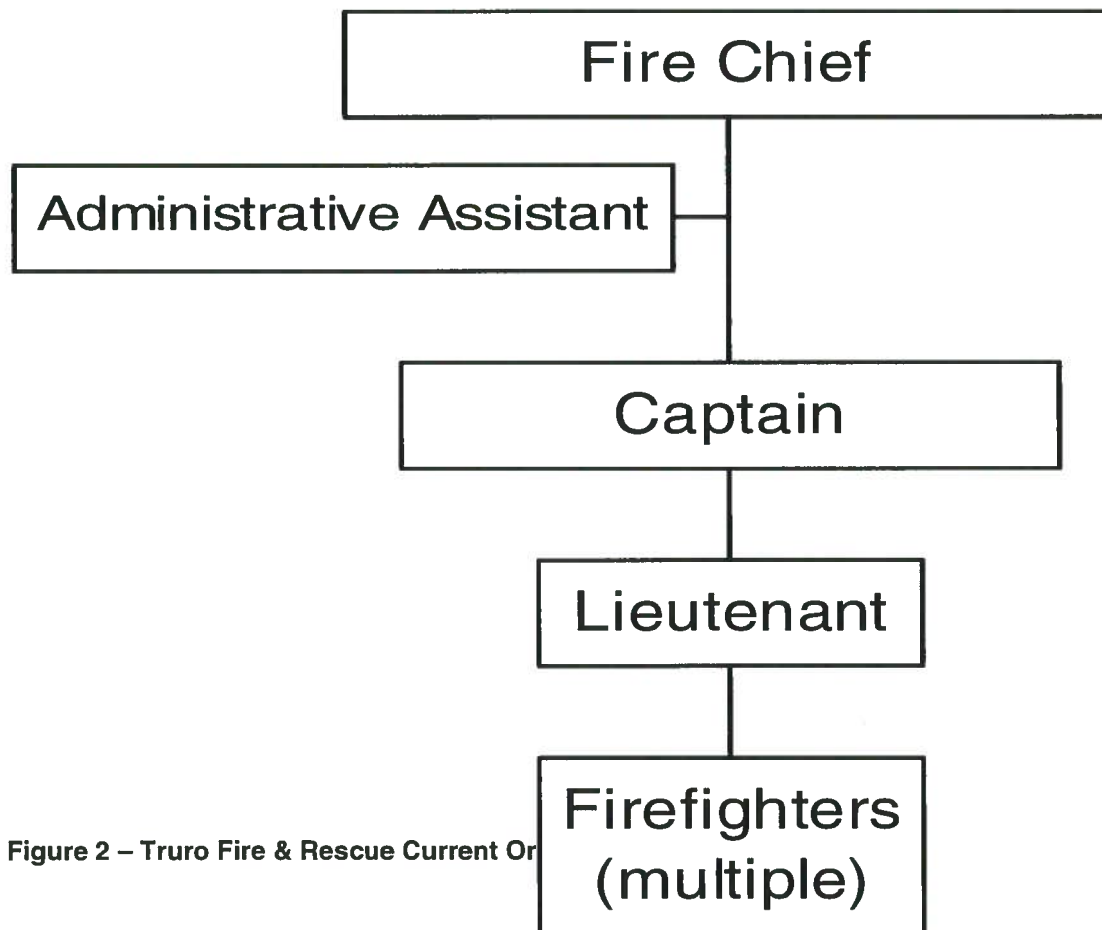


Figure 2 – Truro Fire & Rescue Current Or

The Organizational Charts on the following pages provide a timed guide to the organizational progression outlined on the previous pages. The timing of this progression should be driven by qualification. Obviously, the first priority is to enhance firefighter training. The proposed officers' positions should not be filled until staff are qualified to fill those positions.

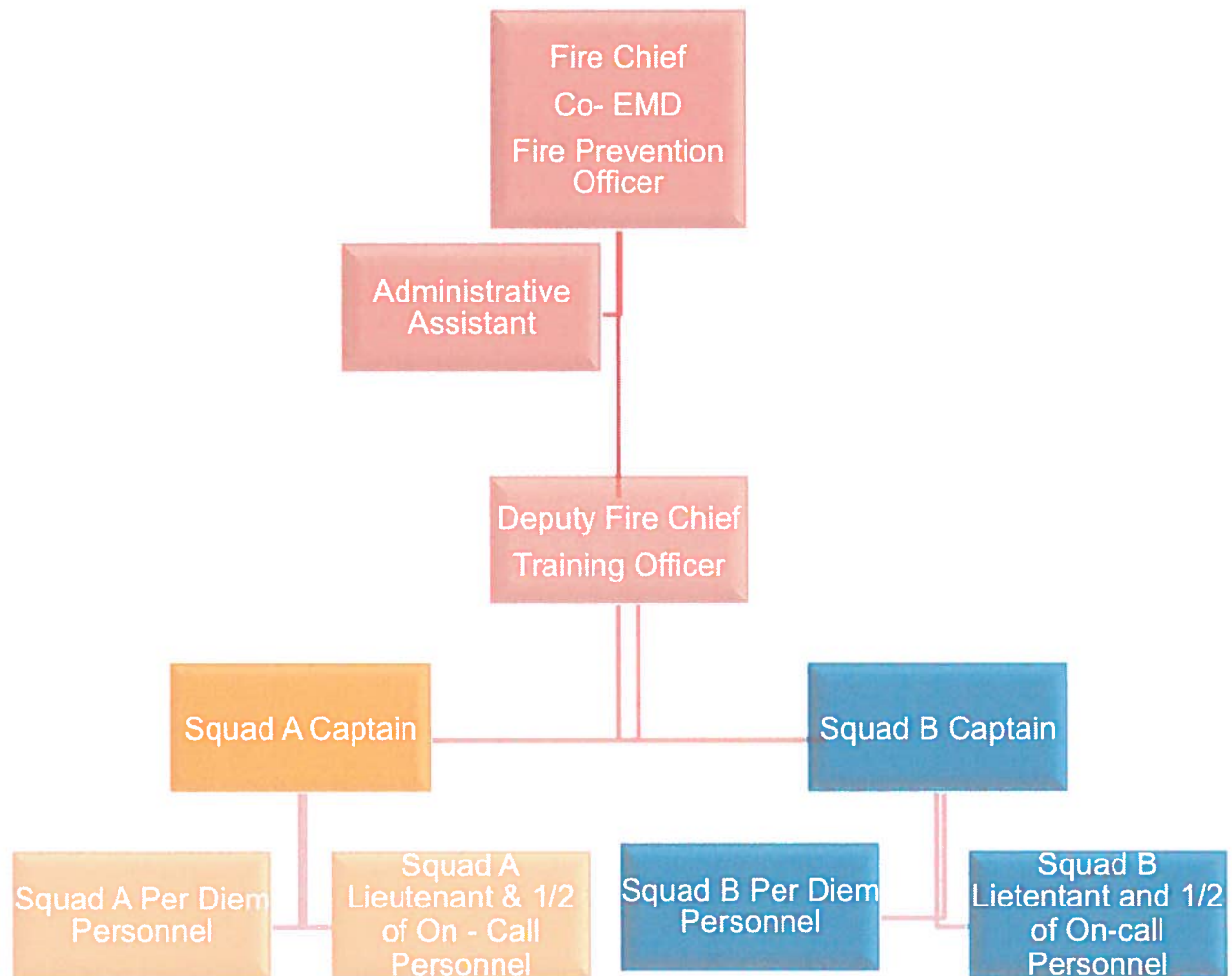


Figure 3 - July 2014 Truro Fire & Rescue Proposed Organizational Structure

The organizational chart above provides a graphic that details the immediate reorganization of the department. This includes the development of a larger pool of qualified per diem personnel, restructuring the role of fire captain, development of a second captain's position, development of the position of on-call deputy fire chief, and elimination of one squad.

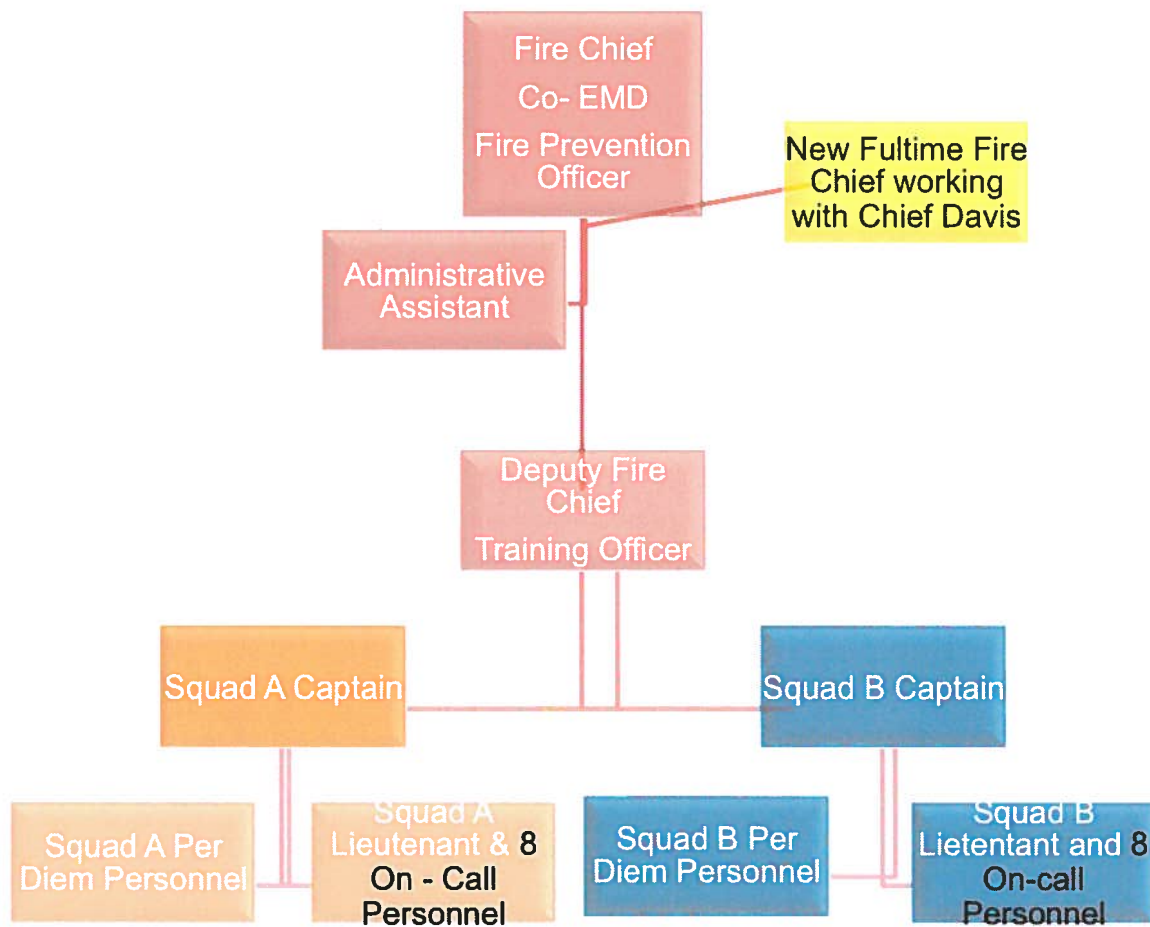


Figure 4 - Truro Fire & Rescue Proposed Organizational Structure January - July 2015

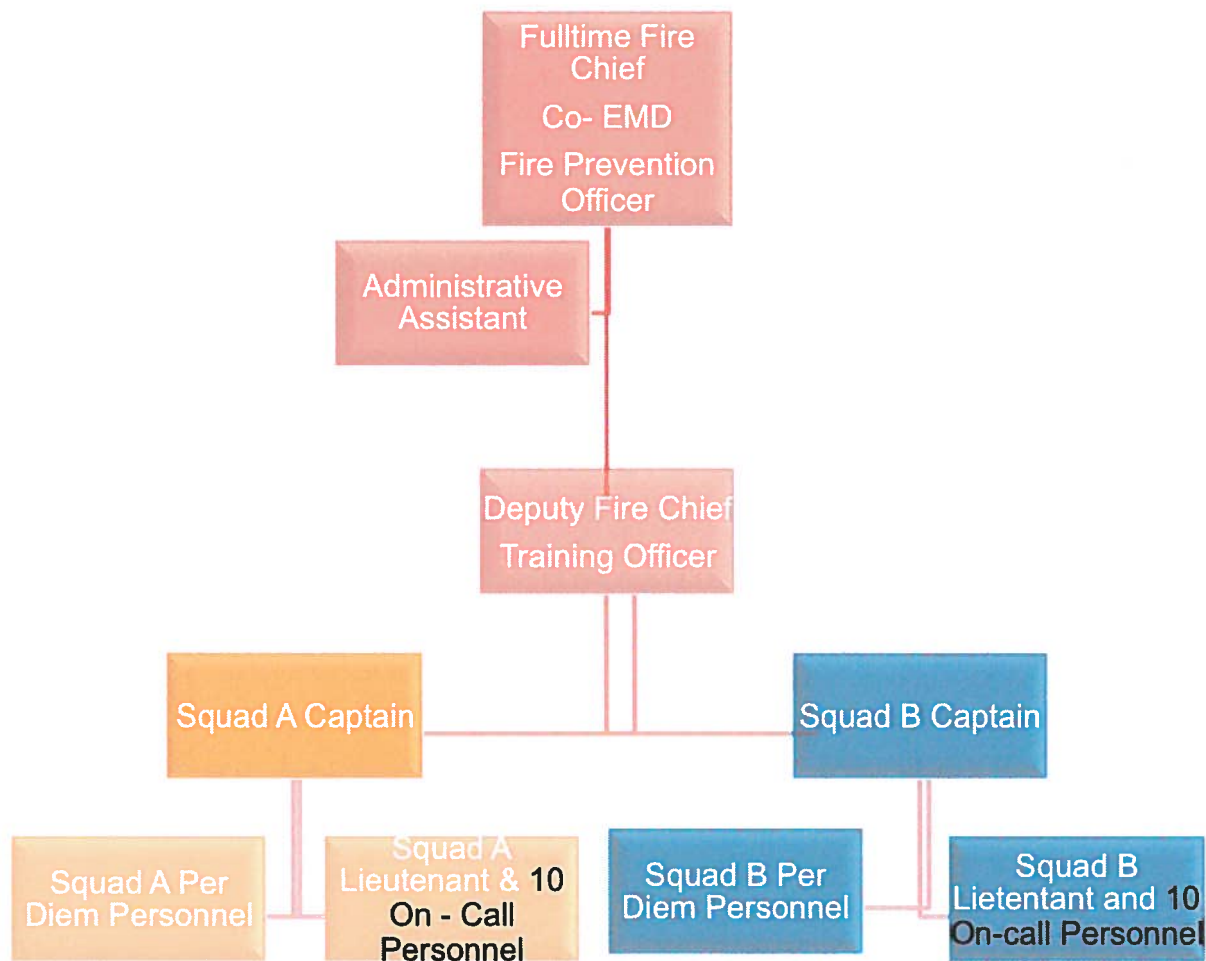


Figure 5 - Truro Fire & Rescue Proposed Organizational Structure January 2016

All department members who work shifts should, at a minimum, be trained to the level of Firefighter I. Ideally, they should all be trained and certified to the level of Firefighter II. The town should immediately stop the practice of untrained firefighters responding to calls as the duty crew.

RECOMMENDATIONS

- I.1 The town should provide executive level assistance to the current fire chief. This assistance can provide a resource for the chief as the organization enters the transformation described in this report.
- I.2 Truro Fire & Rescue needs to pursue a balanced approach to providing emergency response and refocus on providing fire protection to the community.
- I.3 The Town of Truro should adopt the response criteria outlined by NFPA 1720 as the level of service and level of risk acceptable to the community.
- I.4 Truro Fire & Rescue should immediately cease allowing untrained personnel to staff on a per diem basis. The organization should recruit per diem personnel with qualifications in the following priority:

- 1. Firefighter I/II Training program completion
- 2. Firefighter I/II certification by the Pro Board or IFSAC
- 3. Completion of Emergency vehicle operations program
- 4. Current First Responder Training
- 5. Massachusetts or National Registry EMT – Basic licensure
- 6. Massachusetts or National Registry EMT – Paramedic licensure

Prior to employment Truro Fire & Rescue should provide each member with an orientation to the community and training relative to driving and operating each vehicle. Each of these orientation steps should be documented in a personnel and training file. Personnel who do not have at least documented and complete Firefighter I/II training should not be allowed to work.

- I.5 Immediately increase the level of per diem staffing to a minimum of two (2) trained firefighters 24/7, to ensure adequate fire response in the community
- I.6 Truro Fire & Rescue should obtain a mailing list of firefighter I/II trained personnel that exist within Massachusetts from either the Pro Board, IFSAC, or the Massachusetts Fire Training Council. A post card mailing should be done, outlining the opportunity to work shifts and inviting interested personnel to apply.
- I.7 Increase the number of on-call personnel to 20 and require that these personnel are properly training and certified.
- I.8 Restructure the organization to have two rather than three squads until such time that three groups can generate a reliable response.
- I.9 Recruit, assess, and hire a full-time fire chief as detailed within in this report. Executive assistance should be provided to the interim chief to begin implementation of these recommendations, including the search for a new chief

as soon as possible. It may be advantageous for the new chief to start employment prior to the removal of the interim chief to provide for a sufficient period of transition.

- I.10 Assign the deputy chief as the training officer and hold that position accountable to ensure that all existing personnel attain training to the level of firefighter I/II (NFPA 1001), incident command (ICS 100, 700), hazardous materials operations level responder and, at a minimum, medical first responder training. [NOTE: Currently the position of deputy chief is vacant. Later in this report, we recommend filling that position.]
- I.11 Develop a second captain's position and restructure the role of fire captain as the squad leader.
- I.12 Set the goal of developing 16 active on-call firefighters by July 2015.
- I.13 Set the goal of developing 20 active on-call firefighters by January 2016.
- I.14 A nepotism policy should be developed and all personnel should be trained on this policy.
- I.15 Emphasis should be placed on keeping per diem and on-call personnel working together, they should be seen as equal within the Truro Fire & Rescue chain of command.
- I.16 All supervisors should attend the Fire Officer I class concurrent with Firefighter Level I/II certification.

II. JOB DESCRIPTIONS

In an effort to facilitate organizational transformation, we have worked to develop the job descriptions for positions that we feel will be needed within Truro Fire & Rescue in the next five years. The positions that we have listed are subject to the development of personnel and should only be filled when qualified personnel exist.

We have coordinated our efforts with the Truro Fire and rescue Advisory Committee and with the vendor retained by the town to perform a wage and class study. This wage and class study will include the development of new job descriptions. It is our hope that the job descriptions that we have developed in **Appendix A** provide a foundation for the growth of the department and serve as a resource for the ongoing wage and class study. Job Descriptions were developed for the positions of:

- Fire Chief
- Call Deputy Fire Chief
- Administrative Assistant
- Call Fire Captain
- Call Fire Lieutenant
- Firefighter/EMT

As the department desperately needs an increased level of energy and organization, the new full-time fire chief should utilize job descriptions to clarify the roles and responsibilities of each position. Based on our observation and comments from personnel, these roles and responsibilities are presently ambiguous. An example of the format utilized to develop these job descriptions is in Appendix A.

RECOMMENDATIONS

- II.1 The Job Descriptions and associated changes in responsibility should be adopted by the town.
- II.2 The Firefighter/EMT job description should cover both on-call and per diem personnel.
- II.3 It should be recognized that to attract qualified applicants to the new position of full-time fire chief, the town will need to provide an initial compensation package commensurate with the desired qualifications.
- II.4 The administrative assistant should not be a uniformed member of the fire department. The current dual role position should be divided into two separate positions thus removing the inherent conflict of roles.

- II.5 Roles and responsibilities are presently unclear. Job descriptions should be utilized as tools to clarify the qualifications to serve and the roles and responsibilities of each position.
- II.6 The department should operate two administrative vehicles, one for the chief of department and a second unit (which could be a recycled police vehicle) as a unit assigned to the on-call duty officer.

III. FACILITIES, EQUIPMENT AND CAPITAL PLANNING

Truro operates one central Public Safety Complex that is located at 344 Route 6. This facility is properly located and in relatively good condition. Based upon a review of response travel time and incident volume our team rapidly determined that the Town of Truro was well served by a single station model. We then considered response time standards associated with NFPA 1720, the CAAS Emergency Medical Service Standards and the response time standards set by medical directors within the Commonwealth of Massachusetts; the team concluded that this facility is poised to meet the needs of the community for the next twenty years.



Figure 6 - Truro Public Safety Complex

An evaluation of this facility found that it had all of the major components of a modern public safety facility. The facility was found to be in good repair and had a large amount of space to accommodate the growth of Truro Public Safety Forces.

Department Apparatus

Truro Fire & Rescue operates eight pieces of apparatus as detailed below. The team reviewed each piece of apparatus and found all equipment to be in acceptable condition other than Engine 482, which is a new wildland interface unit and was found to remain out of service based on a lack of organization and equipment. Apparently, this situation

has continued for an extensive period of time. Although once a new piece of apparatus arrives, it will take 30-60 days to mount equipment and provide operational training, Engine 482 remains out of service and unequipped after several months. **In addition, we have a concern that the lighting on the front of Engine 482 does not meet NFPA Standards and should be enhanced with internal LEDs in the cab or on the roof.**

Considering national standards and best practices this apparatus set was found to be optimal for the Town of Truro.

Table 2 - Comparison of apparatus set

| Current Apparatus Set | Recommended Apparatus Set |
|----------------------------------|----------------------------------|
| 2 fire pumpers | 2 fire pumpers |
| 1 tanker pumper | 1 tanker pumper |
| 1 wildland unit | 1 wildland unit |
| 1 Wildland Interface Unit | 1 Wildland Interface Unit |
| 2 ambulances | 2 ambulances |
| 1 administrative vehicle | 1 administrative vehicle |

As noted in the chart above, the complement of apparatus is consistent with both national averages and what the consulting team feels is appropriate for the Town of Truro. One exception is that the town owns two ambulances. These units regularly respond to medical emergencies but do not transport patients unless all Lower Cape Ambulances are already assigned to calls and a crew that meets the Regulations of the Massachusetts Office of Emergency Medical Services (OEMS) has responded to the incident.

Although we see that retaining the newest ambulance, as a backup is a good practice given the remote nature of the community, retaining a second unit is not efficient. The second unit is often loaned to Lower Cape Ambulance when one of their units is out for repair. We believe that the town would be well served to surplus the second unit. Although the unit could be sold, it could also be transferred to Lower Cape Ambulance. If the unit is transferred, the cost of maintaining the unit should also be transferred to Lower Cape Ambulance and to provide sufficient space for growth, this unit should not be stored at the Truro Public Safety Complex.

Overall, we found that equipment should be reorganized and the Fiscal 2015 budget should consider the need to replace some equipment, hose, and appliances. It was noted that several pieces of military surplus equipment are stored behind the Public Safety Complex. These units have fallen into disrepair and are inoperable. As such, these units should either be returned to the originating military surplus program or sold at auction. The sale of these units, if permissible under the guidelines of the surplus program that provided these units could be used to inject a higher level of equipment and organization onto Truro Fire Apparatus.



Figure 7- Military Surplus Units in Disrepair

Structural Response Units



Figure 8 - Engine 483 – 2006 HME/Ferrara Pumper 1500 GPM Pump, 1,000 gallon tank – serves as a Structural Attack Engine - Good Condition



Figure 9 - Engine 485 – 197 Freightliner FL80/E-One Pumper, 1,500 GPM Pump, 40 gallons of foam - Good Condition

Wildland Urban Interface Response Vehicle



Figure 10 - Engine 482 – 2013 International/Rosenbauer Timberwolf AWD 1,250 GPM Pump, 750 gallon tank, 30 gallons of foam - Urban Interface Quick Response Unit - New Not in Service

Forestry Unit



Figure 11 –Forestry 480 – 2001 Ford F 350 4X4 built by FireOne. 200 GPM Pump, 250 gallon tank - Good Condition

Water Supply Unit (Tender)



Figure 12 - Tender 484 – 1987 Tanker – GM Top Kick/Maxim, 500 GPM Pump, 2,0000 gallon tank - Acceptable Condition

Emergency Medical Services Units



Figure 13 - Ambulance 487 – 2010 Chevrolet 4500, Osage Ambulance - Good Condition



Figure 14 - Ambulance 486 – 2003 Ford E-450, Braun Ambulance -Marginal Condition

Administrative Vehicle

Chief Davis has recently received a new Ford Explorer. This vehicle is assigned to the chief of Department. A digital image could not be provided.

CAPITAL PLANNING

Chief Davis could not provide us with a substantive capital plan. Given that most apparatus meets the needs of the community and is good condition, the table below provides a replacement schedule based on age. Industry practice indicates that in a community the size of Truro one major piece of apparatus should be replaced every five years. The typical life span of an engine should be 16 years front line and 11 years in reserve based on operations in a suburban setting such as Truro. Therefore, the total life expectancy of an engine/tanker in Truro should be 27 years and an ambulance should be utilized for 12-14 years depending upon condition and issues uncovered during the periodic OEMS Inspection. This replacement schedule assumes that there is not a dramatic increase in emergency response but that these resources are utilized more often for the training of personnel.

A white paper developed through the Fire Apparatus Manufacturers Association (see **Appendix B**) suggests that the life span of active duty fire apparatus in a suburban setting ranges from 24-27 years. The International City Management Association (ICMA) suggests that the life span of a fire pumper should be 20 years. The current apparatus set was found to be in good condition and not replacement of units is not imminent. However, based on the condition and age of Tender 484, this unit is recommended as the only major capital purchase during the next five years.

Table 3 - Proposed Truro Fire & Rescue Capital Plan

| | | | | |
|---|--|---|--|--------------------------------------|
| | | TOWN of TRURO | | |
| | | FIVE YEAR DEPARTMENTAL PROJECT | | |
| | | PRIORITIZATION | | |
| | | FISCAL YEAR 2012 - 2016 | | |
| | | | | |
| DEPARTMENT: 220 | | FIRE/RESCUE DEPARTMENT | | |
| | | | | |
| | | PROJECT TITLE/DESCRIPTION | | AMOUNT REQUESTED |
| Fiscal 2015 | | | | |
| 1 | | Fire Nozzles, Appliances and Adapters | | \$28,000 |
| 2 | | Updated Thermal Imaging Camera | | \$12,500 |
| 3 | | Retrofit Ambulance 587 power load stretcher and lift system | | \$25,000 |
| TOTAL | | | | \$65,500 |
| | | | | |
| Fiscal 2016 | | | | |
| 1 | | Replace Tanker | | 385,000 |
| 2 | | CO-Oximeters | | \$11,400 |
| 3 | | SCBA Replacement Cylinders | | \$22,500 |
| 4 | | Fire Nozzles, Appliances and Adapters | | \$ 14,000 |
| TOTAL | | | | \$432,900 |
| | | | | |
| Fiscal 2017 | | | | |
| 1 | | Paramedic Equipment for two Engines (used monitors) | | \$50,000 |
| 2 | | Large Diameter Hose Replacement | | \$15,000 |
| 3 | | Vehicle Mobile Data Terminals | | \$18,500 |
| 4 | | Radios/Pagers | | \$32,500 |
| TOTAL | | | | \$116,400 |
| | | | | |
| Fiscal 2018 | | | | |
| 1 | | Vehicle Mobile Data Terminals | | \$18,500 |
| 2 | | Mobile and Portable Radios | | \$20,000 |
| 3 | | Large Diameter Hose Replacement | | \$15,000 |
| TOTAL | | | | \$53,500 |
| | | | | |
| Fiscal 2019 | | | | |
| 1 | | Replace wildland Response Unit | | 75,000 |
| 2 | | Self Contained Breathing Apparatus | | 75,000 |
| TOTAL | | | | \$150,000 |
| | | | | \$818,300 |
| Fiscal 2015-2019 Total Request | | | | \$163,660 per year on average |

RECOMMENDATIONS

- III.1 All pieces of structural response apparatus should be equipped to operate as EMS first responder vehicles.
- III.2 All apparatus should be reviewed for consistent configuration and emphasis should be placed on organizing tools and equipment.
- III.3 The military surplus units that are located at the rear of the Public Safety Complex are in disrepair, these vehicles should be disposed of.
- III.4 The concept of licensing one first line response pieces as paramedic level Emergency First Response (EFR) units should be considered in the next five years. This would equip two units to provide paramedic level care in the event that a paramedic was available to provide therapy but a transport ambulance was delayed.

IV. RECRUITMENT AND RETENTION OF PERSONNEL

Presently Truro has a handful of active on-call members. This number is insufficient to provide a sufficient service level to the town. When we spoke to Chief Davis and asked him how he recruits, he said that he has tried multiple recruitment strategies and indicated that he has given up and nothing has worked. There was also some controversy relative to the captain holding the applications and frustrating the interview process. The chief assured us that he had already addressed that issue.

Over the next five years, a significant effort will need to be put forth the recruit and retain on-call personnel. Although Truro is not alone in dealing with a reduction in on-call staff, it is essential that addressing this situation become a primary focus of Truro Fire & Rescue and the Truro Fire and Rescue Advisory Committee.

There are various factors that are prevalent to the reduction in the number of volunteer and on-call firefighters in communities such as Truro. Chief among them is that the current demographics do not support the type of person who is attracted to the fire service in the 21st Century – someone with time to dedicate to public service or a young person who wants to make a career of it. We have found that on average for every five on-call firefighters recruited, two will remain active after a period of 48 months has elapsed.

Once an individual becomes interested in becoming an on-call firefighter, they must achieve a level of ever increasing specialized skill that is time consuming. Often exit interviews reveal that the training commitment alone is daunting and one of the primary reasons that on-call personnel resign. To become a certified firefighter takes several hundred hours. And, add to that over 160 hours to become a state-certified emergency medical technician. Then there are the dozens of hours training annually spent maintaining firefighter and EMT skills and certifications. The average citizen does not want to spend a great deal of personal time dedicated to the fire service, especially when family commitments take priority. Many on-call firefighters in departments that have a career force handling the day-to-day emergencies find it hard to stay motivated if they are not being utilized frequently. Other reasons are:

- An overall reduction in leisure time
- Employment obligations and the common need to maintain more than one job
- The virtual elimination of an employer's understanding and flexibility relating to this form of community service
- Generational differences and increased family demands
- Increasing training requirements
- The cost of housing in many affluent communities

It is easy to believe that increasing the number of on-call firefighters can cure staffing problems. Unfortunately, in 2014, this is a difficult solution to achieve and many organizations are hiring a small complement of career staff to ensure that the service level expected by the community is delivered.

The federal government has a version of the SAFER Act that pertains strictly to volunteer and on-call firefighters, however. It provides competitively awarded funds to municipalities to retain and recruit on-call and volunteer firefighters. The grants provide funds for college curriculums in fire science, for EMT and paramedic training, health insurance, physical fitness, uniforms and other tax incentives to offer to attract candidates to join fire departments. The bottom line, though, is that if a community's demographics will not support an on-call firefighting force, the federal grant program will be of little assistance.

We believe that the department should attempt to secure a SAFER grant to recruit and retain on-call members; however, this grant should note the staffing crisis that currently exists and indicate that the grant would be an attempt to meet the NFPA 1720 fire response standard for the first time. A target of twenty (20) total on-call firefighters would be advantageous. The demographic and societal changes driving the reduction in on-call participation need to be reversed through utilizing innovation and best practices.

As most rural and suburban communities across the United States are dealing with the reduction in volunteer and on-call staff, this has become a common issue. Many communities have come to the conclusion that investing in on-call personnel is the best practice and to that end they have pursued some of the following strategies:

- Provide a reduction in property tax for on-call service
- Provide on-call firefighters with community based benefits such as free dump sticker, beach stickers etc.
- Provide community based awards and recognition
- Provide gift certificates for local restaurants, concerts or other entertainment

In the public sector, many of these benefits can be controversial. After considering these strategies, we have focused on developing an innovative strategies for the Town of Truro. One example of a unconventional and innovative best practice that we feel would work in Truro is to provide a health insurance package for self-employed year round residents provided they complete training, certification and provide the town with a high level of immediate response. As mentioned above a portion of this cost may be eligible to be incorporated in to a SAFER Grant. Typically, this type of program attracts electricians, plumbers, fishermen, mechanics, and other trades that would be beneficial to the organizations.

Appendix C provides two research papers and an article on best practices relating to the recruitment and retention on volunteer and on-call personnel.

An example of this best practice has worked successfully in the Town of Holliston, Massachusetts for several years. Viewed as costly and unconventional, this program has retained a high level of active personnel that provide an immediate response on a 24/7 basis. This strategy to invest in the on-call force avoided the need for career personnel and compared to a smaller neighboring community produced an overall cost (including health insurance) of 5% of what the neighboring community pays for fire protection. We believe a program of this nature is a good fit for Truro and should be considered. During our research, a member of the study team visited Chief Michael Cassidy in Holliston and conducted an interview pertaining to this concept. An overview of that interview has been inserted below:

Holliston is a community of approximately 14,500 residents. It has a call firefighting force of 50, with an additional call EMS force of approximately 28 persons. Chief Cassidy is the only full-time employee other than a few hourly workers who provide dispatch services. All of these folks are eligible to participate in a town's health insurance program. Chief Cassidy reports that turnout at all incidents regularly exceeds NFPA 1720 standards. A recent structure fire that occurred midweek, midday drew a response of 32 call firefighting personnel to the incident.

All call firefighters are required to be certified as least to the level of firefighter I/II, the roster is currently full an authorized strength and Chief Cassidy reports a waiting list of approximately 15 to 20 persons. He stated that the health insurance benefit, offered to his call firefighters is most definitely the driving factor in his ability to maintain such a robust and adequately trained call firefighting force. Below is a breakdown of some of the numbers:

- *Chief Cassidy stated that approximately 55% of the current membership elects to take the health insurance benefit. Though additional compensation is provided to the call firefighter should he or she elect not to participate in the benefit group.*
- *Chief Cassidy stated that most all of the members that participated were self-employed tradesmen. Many of those who elect not to participate are young adults who might still be on their parent's health insurance. Since members can become call firefighters at age 18, and the department also has a very active Explorer post, which acts as a feeder pool for the department, a sizable number of the current call force within the 18 to 26-year-old category- and may still participate in their parents health insurance program.*
- *All call firefighting personnel must first successfully complete firefighter I/II training, no compensation is provided until after successful completion. If selected for employment, the call firefighter has the option of participating within the town's health*

insurance program.

- *Those that elect to enroll in an HMO program have 60% of their expenses covered by the employer. (Family or individual plan). Members that prefer a P.P.O. style plan have 50% of that cost paid by the employer. Please refer to the attached documents to see the actual rate sheets for these programs.*
- *Holliston call firefighters also enjoy a very generous compensation program. Active members receive a base retainer as well as, hourly compensation for time actually spent working at incidents. Recently, the compensation package was expanded to provide a flat fee of \$75 per month for those who regularly attend the bimonthly training sessions.*

We Asked Chief Cassidy if the rising cost of healthcare had cause local government officials any concern in providing these benefits to such a sizable number of part-time employees. Mike responded in saying that the trade-off was considered minimal in that the community enjoyed a consistent professional response by its call firefighters and EMTs without the cost of a full-time, unionized workgroup.

Obviously, health insurance is expensive and costs seem to escalate on an annual basis. However, self-employed tradesmen are also confronted with this cost. The ability to join the town's insurance in itself may reduce their cost. Furthermore, the town could develop a sliding scale that would pay a percentage of the health insurance cost equal to the level of response provided by the responding firefighter. We have suggested rate cost sharing in the table below:

Table 4 - Proposed Health Insurance percentages

| Percentage of Training and incident Response | Proposed of Health Care expense paid by the Town |
|---|---|
| 90% or greater participation | 60% |
| 70% - 89% participation | 50% |
| 50 – 69% participation | 40% |
| 33 – 49% participation | 20% |
| Under 33% participation | Eligible to enroll at employees cost |

RECOMMENDATIONS

- | IV.1 Recruitment and Retention of on-call personnel needs to become a primary focus of Truro Fire & Rescue, this program should be an ongoing effort.
 - I.7 Increase the number of on-call personnel to 20 and require that these personnel are properly training and certified.
 - I.12 Set the goal of developing 16 active on-call firefighters by July 2015.
- IV.2 The fire chief should be the person responsible for all recruitment and retention activities within Truro Fire & Rescue. He/she should be held accountable for results provided that the town invests and provides the chief with the tools as detailed in the remainder of this report.
- IV.3 The town should pursue a SAFER Grant for the recruitment and retention of on-call personnel during 2015.
- IV.4 The Town of Truro should consider the development of a program that would provide active responders with the opportunity to obtain health insurance. The Town of Truro should pay a graduated percentage of this program based upon the percentage table located in Chapter IV.
- IV.5 The Town of Truro should recognize that the only way to develop a more active and properly staffed fire department in the absence of hiring a force of career firefighters is to determine what would motivate potential responders and craft a program of investment that meets these extrinsic and intrinsic needs.
- IV.6 The Town of Truro should convene a focus group to determine what concepts and recruitment and retention strategies are feasible and most attractive to potential candidates.
- IV.7 Enhance communication with department staff by providing e-mail addresses and a newsletter which should be distributed twice per month. This project should be supervised by the administrative assistant and organized by a Fire captain as assigned by the chief.
- IV.8 Develop a series of team based activities that build involvement in the organization.
- IV.9 Increase the level of communication with the community relative to the need for on-call firefighters. Examples of this strategy should include periodic open houses, community mailings, newspaper coverage, and radio and media advertisement. The proposed SAFER Grant could be utilized to cover many of these expenses.

- IV.10 Seek Assistance from the Massachusetts Call and Volunteer Firefighters Association (MCVFA) relative to enhancing recruitment efforts in Truro.
- IV.11 Develop a set of incentives that are attractive to the self-employed tradesmen that are year round residents in the Town of Truro.

V. TRAINING AND CERTIFICATION OF PERSONNEL

Training is, without question, one of the three most important functions that a fire department should be performing on a regular basis; the others being response to emergency incidents and fire prevention activities. One could even make a credible argument that training is, in some ways, more important than emergency responses because a department that is not well trained, prepared, and operationally ready will be unable to effectively, efficiently, correctly, and safely, fulfill its emergency response obligations and mission. A comprehensive, diverse, and ongoing training program is absolutely critical to the fire department's level of success. In Truro, we found that the training program was insufficient and in some areas approached nonexistent.

An effective fire department training program must cover all of the essential elements of that specific department's core missions and responsibilities. The program must include an appropriate combination of technical/classroom training and manipulative or hands-on/practical evolutions. Most of the training, but particularly the practical, standardized, hands-on training evolutions should be developed based upon the department's own operating procedures and operations while remaining cognizant of widely accepted practices and standards that could be used as a benchmark to judge the department's operations for any number of reasons. Failure to use widely accepted firefighting practices was a significant conclusion in the many investigations that were conducted after the Charleston, South Carolina Super Sofa Store fire in June 2007 that resulted in the deaths of nine firefighters. As with all other fire department operations, there must be consistency in how the training is being conducted.

Certain Occupational Safety and Health Administration (OSHA) regulations dictate that minimum training must be completed on an annual basis, covering various topics including: a review of the respiratory protection standard, self contained breathing apparatus (SCBA) refresher and user competency training, SCBA fit testing (29 CFR 1910.134); Bloodborne Pathogens Training (29 CFR 1910.1030); Hazardous Materials Training (29 CFR 1910.120), Confined Space Training (29 CFR 1910.146), and structural firefighting training (29 CFR 1910.156). In addition, National Fire Protection Association (NFPA) standards contain recommendations for training on various topics such as a requirement for a minimum of 24 hours of structural firefighting training annually for each fire department member.

There are a number of ways to evaluate the effectiveness of the fire department's training program. One increasing common way is through the use of annual skills proficiency evaluations where all members of the department are required to successfully perform certain skills, and/or complete standardized evolutions, either individually, or, as part of a team. Post course evaluations, post incident critiques, and, evaluation of incident operations and statistics can also provide important feedback regarding the training program. **It is important that all training, no matter how minor or inconsequential should be documented.** Failure to do so can expose the department and town to significant liability.

Professional development for fire department personnel, especially officers is also an important part of overall training. There are numerous excellent opportunities for firefighters and officers to attend training on a wide range of topics outside of Truro, including the Barnstable County Fire Academy, the Massachusetts Firefighting Academy in Stow, and, the Volunteer Incentive Program (VIP) at the National Fire Academy in Emmitsburg, Maryland. Beyond the practical benefits to be gained from personnel participating in outside training, encouraging personnel to earn and/or maintain various specialized certifications such as Fire Instructor, or Fire Officer, increases the positive professional perception of the organization and can help to demonstrate a commitment to continued excellence.

The MRI study team looked at the Truro Fire & Rescue Department's training program. Through personnel interviews, and an evaluation of the current training program, the team reached the conclusion, that the training program is not a priority, has been neglected for a number of years, and, with few exceptions, has been inconsistent, and in a number of ways, almost non-existent.

The Truro Fire & Rescue Department does not have a dedicated Training Division, as the department is small and has a variety of other functions it is engaged in. This is not uncommon for a department of this size. After speaking with Chief Davis, it was unclear if there is a single person responsible for organizing training. There is an attempt to publish a training calendar on a regular basis so members are aware of upcoming training sessions. However, the training program is based upon their perceptions of what is needed, there is apparently little to no direction from the chief officers on this.

It was reported to the study team that only a small group of firefighters had completed Firefighter I/II training, and are certified by the Massachusetts Fire Training Council. In Massachusetts, even basic firefighter training is not a mandatory requirement for new call members who join the department. Initial in house indoctrination and familiarization training for new members who are waiting to attend Firefighter I training is sporadic, and, in many cases contingent upon the new person's level of motivation and interest in/desire to learn. As several members interviewed by the study team observed, "You can't force them to come to the station for training".

It should be noted that the Barnstable County Fire Academy provides training programs that will result in both Firefighter I and Firefighter II level certifications. In addition, the Massachusetts Firefighting Academy offers a call and volunteer training program throughout the State. Typically, the completion of this six-month e-blended adult learning program will result in Firefighter I/II certification.

As previously noted, the department roster lists approximately 16 department members, but only about 6 or 7 are really active and this includes attending training sessions. It was reported to the study team that in many cases, few of the officers even show up for training. A random review of the very limited training reports/records available appeared to confirm that officer attendance is limited and sporadic.

Truro's internal training program is loosely modeled after the Massachusetts Firefighting Academy's Call/Volunteer Firefighter I/II program. A formal lesson plan for each session is not formulated but subject matter is based upon material from the State and County Fire Academies, International Fire Service Training Association (IFSTA) and/or National Fire Protection Association (NFPA). Although we commend their efforts, and fully understand the time constraints facing the members of the department who are voluntarily attempting to provide some level of training, the lack of formal lesson plans are a serious issue. Each training session needs a written lesson plan with goals and objectives and measured performance standards.



Figure 15: Periodic live fire training exercises at a dedicated training facility need to be conducted in order for personnel to maintain their skills proficiency.

At the time of this assessment, no annual skills or proficiency evaluations, or reviews, are conducted.

The department has limited EMS transport responsibility, but operates a backup ambulance which is licensed by the Massachusetts Office of Emergency Medical Services (OEMS). A First Responder certificate, and, valid CPR card is required of all members of the department that are not certified as Emergency medical technicians (EMTs).



Figure 16: EMTs conduct patient stabilization and packaging training.

The department's training resources such as reference and text books, videos and DVDs, etc. are very limited. Being as the department only has limited computer technology at the present time, access to general fire service and training web sites, and, any type of internet based training, safety and other resources is substandard. Numerous excellent training opportunities such as the annual Firehouse Expo in Baltimore, and, the Fire Department Instructors Conference in Indianapolis have been ignored, as have the previously mentioned Barnstable County Fire Academy, Massachusetts Firefighting Academy and, the National Fire Academy.

The study team did note that very basic and brief training reports are being completed for most of the training that the department conducts. However, no one could say for certain if they were being completed for all training that was being conducted. As with the lack of formal lesson plans this is a significant problem because even outstanding training in essence did not happen if it is not properly documented. This practice could lead to serious perception and/or liability issues for the department and the town for a wide range of reasons.

Member's individual personnel files are devoid of any type of record/log/listing that details weekly, or, any other training session participation and/or subject matter covered. The only way to determine if a member attended a particular training session would be a manual, hand search of the training reports. The files do have copies of outside agency certificates of attendance for training, but only if members voluntarily provide these to the department. There is no procedure that mandates they be provided.

Better written documentation of all training needs to occur and all members' individual skills and certificates need to be kept up to date. Unfortunately, the department's current lack of clerical support makes this task very difficult. The Firehouse software, and other fire department management software programs have comprehensive training modules for documenting training, however, the issue again comes back to someone finding the time to enter the necessary information.

The number of new members in the department, along with the critical need for all members to maintain their basic skills proficiency, dictates that a comprehensive training program with proper documentation is required. The department should have a comprehensive fire, rescue, and EMS training program based upon the State Fire Academy model, with supporting training aids from NFPA, IFSTA and the National Fire Academy systems. If the recommendations contained within this report are enacted, there should be reason for considerable optimism that the training program will be given its appropriate level prominence in the department's operations. There are numerous opportunities for firefighters, even call/volunteer personnel with limited time, to engage in training at least weekly. The Truro Fire & Rescue Department should seek to maximize, support, and encourage, these opportunities.

RECOMMENDATIONS

- V.1 The Truro Fire Department should conduct a formal training needs assessment for the purpose of determining training program priorities. Part of this needs assessment should be an initial evaluation of the current basic firefighting skills proficiency of ALL department personnel.
- V.2 Based upon the results of the needs assessment, the Truro Fire Department should begin the development of a comprehensive training program that addresses, but is not limited to: mandatory OSHA training, recommended NFPA training, and every operational mission and responsibility of the department. The training should comply with accepted and/or recommended practices and standards, should include standardized evolutions, and should be consistent with Truro Fire Department standard operating guidelines and procedures.
- V.3 The new position of deputy chief should be assigned to develop and coordinate the Departments Training Program.
- V.4 Formal training of some type, lasting a minimum of two hours, should occur weekly. The training should be lesson plan driven, and when appropriate EMT continuing education credit hours should be applied for through the state Office of EMS. Additional opportunities for training can be found during related activities such as weekly/monthly apparatus and equipment inspections, and building pre-planning activities.

- V.5 Additional, high intensity training on various subjects, including periodic live fire training, should be conducted on a quarterly, or semi-annual basis at a formal fire academy where appropriate training facilities, structures and props are available.
- V.6 To the extent possible, training should be delivered and/or conducted utilizing formal, standardized lesson plans that include objectives and performance criterion. However, when this is not possible, or practical (a frequent occurrence in the fire service), a detailed description of the training should be included in the narrative section of the training report.
- V.7 All training that is conducted, no matter how brief, or inconsequential it may seem, **MUST** result in the completion of a formal training report. Training reports should include the date, time training commenced, time duration of the training, the instructor, the officer in charge, names of all personnel trained, and include a detailed description of the training, or reference the formal lesson plan utilized. All persons trained should sign or initial either a printed hard copy of the training report, or if this is not practical, a sign in sheet should be attached. The officer in charge, and when possible, the instructor should also sign the hard copy training report. A formal operational procedure on the completion of training reports should be developed. The training module of whatever records management software program the department selects should be utilized for completion of training reports and to assist with the development of a training data base, keeping track of certifications, and related lapse dates, etc.
- V.8 The department should develop a separate training file for each member that can provide a supplement to the member's main personnel file. The training file should, at a minimum, include all course completion certificates, professional certifications, skills performance evaluation sheets and reports, and, an annual summary of completed training.
- V.9 As part of the development of a new comprehensive training program, the department should implement periodic basic skills proficiency evaluations for ALL personnel. These proficiency evaluations, consisting of standardized evolutions, can be based upon recognized standards and benchmarks, in conjunction with performance criterion, and benchmarks, established through evaluation of, and based upon, Truro Fire & Rescue Department standard operating guidelines and procedures.
- V.10 In order to assist with the large amount of training that needs to be done, and in recognition of their important role in the delivery of training and the success of the program, the Truro Fire & Rescue Department should request to host a Massachusetts Firefighting Academy Fire Instructor I training program to provide fire instructor training for any members of the organization who wish to take it. All officers should be formally certified at Fire Instructor Level I.

- V.11 The Truro Fire & Rescue should encourage personnel to seek additional training on their own, and to the financial and practical extent possible, send personnel to outside training opportunities such as the Firehouse Expo in Baltimore, and the Fire Department Instructors Conference in Indianapolis. Information gained at this training can then be brought back and delivered to other members of the department. Training reports should be completed for all of this training and copies of any certificates earned should be placed in the member's personnel and training files. A training bulletin board should be placed in each station where upcoming training opportunities can be posted for all personnel to review. These opportunities should also be posted on the department's web site and could be e-mailed to every member once addresses are established.
- V.12 The Truro Fire & Rescue should seek annual funding in the training budget to upgrade its training resources such as manuals, DVDs, and subscriptions to other available training resources.
- V.13 The Truro Fire & Rescue should, as part of its written communications system, develop Training Bulletins, which would be issued to serve as reference with regard to tested and approved methods of performing various tasks and Safety Bulletins, which should be issued to serve as references with regard to general and specific safety and health issues.
- V.14 All members of Truro Fire & Rescue should be trained in the use of incident command. They should all complete ICS 100, 700 as offered on-line by the Federal Emergency Management Agency.
- V.15 Truro Fire & Rescue should make a concerted effort to certify as many on-call members as possible to the level of Firefighter I/II through the Massachusetts Fire Training Council.
- V.16 All supervisors should attend Fire Officer I training and once they achieve Firefighter I/II certification test to certify to this level.
- V.17 The Fire captains, deputy chief, and fire chief should be trained and certified to (at least) the level of Fire Officer II.

V. BENCHMARKING AND COMPARATIVE ANALYSIS

As the study progressed, we contacted the five benchmark communities selected by the Advisory Committee. This is done purposefully to avoid any contention that members of Truro Fire & Rescue selected favorable comparables. The communities of Holliston, Lee, Lenox, Provincetown and Wellfleet were selected. The data provided by these communities indicates the following and should be one of several tools utilized to provide the town with a perspective on department operations.

This survey reveals the following pertinent points:

- Truro is a smaller community than the average of peer communities in terms of population but larger in terms of physical area;
- The Fire Rescue budget is lower than average and even when adjusted to accommodate the difference in overall community budgets there should be consideration for increasing this allocation of resources;
- All public safety budgets combined are 81% of the average;
- Response times are significantly better in peer communities;
- Truro experiences approximately 50% of the volume of EMS calls and 65% of the volume of fire related calls when compared to the peer communities;
- Truro has roughly 33% of the number of department members as other similar communities;
- Truro covers 33% of the shifts when compared to the peer community average;
- Truro provides 25% of the average internal response to structure fires. This means that on average for every responder in Truro four firefighters respond in other communities. This ratio also applies to all other emergency calls;
- Following the same theme as the item above, engine company crew size is very low when compared to the average;
- Truro has an ISO rating of 9. ISO rates communities on a 1(best) to 10 (no protection) scale. Truro has a higher rating indicating a lower level of protection than the peer community average;

- Truro does not meet national response standards (OSHA two in, two out or NFPA 1720). Based on the benchmarking survey other communities are capable of meeting these standards;
- Training in Truro is very limited and based on some interviews almost nonexistent. When compared to the peer communities Truro provides 15% of the fire training and 66% of the EMS Training. It should be noted that as all other communities require firefighter I/II training as a foundation, the impact of a lack of formal training in Truro is amplified;
- Truro Fire & Rescue could not identify the level of firefighter training that is required before a firefighter is allowed to participate in interior operations at a structure fire;
- Although conflicting information exists, interviews indicate that several calls (especially mutual aid requests) are scratched based on insufficient staffing;
- Truro only receives mutual aid a few times during the year, this supports the indication that automatic aid is not utilized or requested as often as it should be;
- Truro provides a single person to respond to emergency calls 4 times as often as other communities. A single person responds to 1 out of every 3 emergency calls. The response of a single firefighter to an automatic alarm activation or other emergency situation is a dangerous practice that places both the firefighter and community at risk;
- The cost per call in Truro is lower than the average but the cost per capita is average.

The 18 tables of data which are located on the following nine pages represent the information collected through the comparative analysis survey that was developed for Truro Fire & Rescue. This information should be considered as a perspective and the reader should recognize that not all of the communities selected are demographic matches to the Town of Truro.

| Community | District or Community Population | Square Miles |
|---------------------|---|---------------------|
| Holliston | 14,789 | 19.2 |
| Lee | 5,216 | 27 |
| Lenox | 5,069 | 21.22 |
| Provincetown | 3,112 | 10 |
| Wellfleet | 2,750 | 20.5 |
| Average | 6,187 | 19.58 |
| Truro | 1,903 | 26.3 |
| Deviation | 31% | 134% |

| Community | Fire Budget for Fiscal Year 2013 | Community Budget Fiscal 2013 |
|---------------------|---|---|
| Holliston | \$ 776,324 | 57,075,298 |
| Lee | \$ 162,705 | 22,279,710 |
| Lenox | \$ 800,772 | 19,913,365 |
| Provincetown | \$ 614,834 | 21,340,454 |
| Wellfleet | \$ 1,201,267 | 14,610,188 |
| Average | \$ 711,180 | \$ 27,043,803 |
| Truro | 335,549 | 16,384,369 |
| Deviation | 47% | 61% |

| Community | Public Safety Budget (Fire, Police, EMS, Emergency management, Building, Health) Fiscal 2013 | Average response time (in Minutes) of first staffed unit |
|---------------------|---|---|
| Holliston | 3,603,908 | 7.75 |
| Lee | 1,170,726 | 5 |
| Lenox | 1,981,472 | 4 |
| Provincetown | 4,489,657 | 4 |
| Wellfleet | 3,046,806 | 6 |
| Average | \$ 2,858,514 | 5.35 |
| Truro | 2,305,478 | Unclear |
| Deviation | 81% | |

| Community | EMS Calls in 2013 | EMS Level ALS/BLS |
|---------------------|--------------------------|--------------------------|
| Holliston | 838 | ALS |
| Lee | 780 | ALS |
| Lenox | 1,032 | ALS(intermediate) |
| Provincetown | 1,062 | ALS |
| Wellfleet | 767 | ALS |
| Average | 896 | ALS |
| Truro | 433 | ALS |
| Deviation | 48% | |

| Community | Fire Calls 2013 | Total Number of Personnel |
|--------------|-----------------|---------------------------|
| Holliston | 483 | 77 |
| Lee | 234 | 50 |
| Lenox | 550 | 67 |
| Provincetown | 161 | 60 |
| Wellfleet | 313 | 26 (10FT&16Call) |
| Average | 348 | 51 |
| Truro | 226 | 19 |
| Deviation | 65% | 37% |

| Community | Operational Recall Budget | Minimum Shift Strength |
|--------------|---------------------------|------------------------|
| Holliston | N/A | 0 |
| Lee | N/A | 0 |
| Lenox | N/A | 2 |
| Provincetown | N/A | 0 |
| Wellfleet | \$57,034 | 2 |
| Average | \$11,407 | 0.8 |
| Truro | \$23,000 | 0.3 |
| Deviation | 202% | 41% |

| Community | Number of personnel on average - Structure Fire Response | Number of personnel on average - All Calls |
|---------------------|---|---|
| Holliston | 31 | 3 |
| Lee | 25 | 15 |
| Lenox | 11 | 6 |
| Provincetown | 25 | 8 |
| Wellfleet | 10 | 8 |
| Average | 20.40 | 8 |
| Truro | 5 | 2 |
| Deviation | 25% | 25% |

| Community | Minimum Engine Company Crew Size | ISO Rating |
|---------------------|---|-------------------|
| Holliston | 3 | 4/9 |
| Lee | 4 | unknown |
| Lenox | 2 | 5 |
| Provincetown | 2 | 4 |
| Wellfleet | 2 | 4 |
| Average | 3 | 3 |
| Truro | 1 | 9 |
| Deviation | 38% | 346% |

| Community | Dispatch Platform - Fire , Police, Civilian, Regional | Number of Primary and Backup ambulances |
|---------------------|--|--|
| | | 3 |
| Holliston | Fire | 3 |
| Lee | Civilian | 2 |
| Lenox | Regional | 1 |
| Provincetown | Police | 3 |
| Wellfleet | Regional | 3 |
| | | |
| Average | Various | 2 |
| Truro | Police | 2 |
| Deviation | | |

| Community | Number of Engines | Number of Tenders |
|---------------------|--------------------------|--------------------------|
| | | |
| Holliston | 4 | 2 |
| Lee | 4 | 1 |
| Lenox | 4 | 0 |
| Provincetown | 5 | 0 |
| Wellfleet | 2 | 1 |
| | | |
| Average | 4 | 1 |
| Truro | 3 | 1 |
| Deviation | 79% | 125% |

| Community | Wildland Response Pieces | OSHA 2 in 2 Out Compliant |
|--------------|--------------------------|---------------------------|
| Holliston | 3 | Yes |
| Lee | 2 | Yes |
| Lenox | 1 | Yes |
| Provincetown | 0 | yes |
| Wellfleet | 1 | yes |
| Average | 1.4 | Yes |
| Truro | 1 | No |
| Deviation | 71% | |

| Community | NFPA 1720 Compliant | Personnel Accountability System Utilized |
|--------------|---------------------|--|
| Holliston | N/A | Yes-Clemens |
| Lee | Yes | Yes-tags |
| Lenox | Yes | Yes-tags |
| Provincetown | yes | yes-tags |
| Wellfleet | yes | yes-tags |
| Average | Yes | Yes |
| Truro | No | Yes - tags |
| Deviation | | |

| Community | Fire Training Hours per Month | EMS Training Hours per Month |
|--------------|-------------------------------|------------------------------|
| Holliston | 4 | 2 |
| Lee | 12 | 4 |
| Lenox | 8.5 | Varies |
| Provincetown | 3 | 3 |
| Wellfleet | 6 | 6 |
| Average | 7 | 3 |
| Truro | 1 | 2 |
| Deviation | 0.15 | 0.67 |

| Community | Min Hours of training prior to Structural Firefighting | Mutual Aid Calls 2013 (response out) |
|--------------|--|--------------------------------------|
| Holliston | 120 | 19 |
| Lee | 180 | 15 |
| Lenox | 180 | 30 |
| Provincetown | 180 | 6 |
| Wellfleet | 180 | 54 |
| Average | 180 | 25 |
| Truro | unclear if any | 26 |
| Deviation | | 1.05 |

| Community | Mutual Aid calls Scratched 2013 | Mutual Aid Received (calls into community) |
|--------------|------------------------------------|---|
| Holliston | 0 | 12 |
| Lee | 0 | 7 |
| Lenox | 0 | 3FD/109EMS |
| Provincetown | 0 | 25 |
| Wellfleet | 6 | 59 |
| Average | 1 | 21 |
| Truro | Several | 2 |
| Deviation | Unknown | 0.10 |

| Community | Automatic Aid Utilized Yes/No | Primary EMS Transport |
|--------------|----------------------------------|-----------------------|
| Holliston | Yes | Yes |
| Lee | Yes | No |
| Lenox | no | Yes |
| Provincetown | Yes | No |
| Wellfleet | Yes | Yes |
| Average | Yes | Yes |
| Truro | Partially | No |
| Deviation | | |

| Community | In Town calls - no response from FD | In Town calls 1 person response from Fire |
|--------------|-------------------------------------|---|
| Holliston | 0 | 2 |
| Lee | 0 | 0 |
| Lenox | 0 | 33- (inspections) |
| Provincetown | 0 | 156 (inspections) |
| Wellfleet | 0 | 15 (inspect/invest.) |
| Average | None | 61 |
| Truro | Unknown | 240 |
| Deviation | | 393% |

| Community | Cost per Call | Cost per Capita |
|--------------|---------------|-----------------|
| Holliston | \$ 587.67 | \$ 52.49 |
| Lee | \$ 695.32 | \$ 31.19 |
| Lenox | \$ 506.18 | \$ 157.97 |
| Provincetown | \$ 502.73 | \$ 197.57 |
| Wellfleet | \$ 1,112.00 | \$ 436.82 |
| Average | \$ 680.78 | \$ 175.21 |
| Truro | \$ 509.18 | \$ 176.33 |
| Deviation | 75% | 101% |

RECOMMENDATIONS

- VI.1 The Town of Truro should continue the current strategy of increasing the level of investment in Truro Fire & Rescue. This investment will enhance the level of service and reduce the level of risk in the community.
- VI.2 The Board of Selectmen should require that Automatic Aid policies and procedures be consistently followed and applied whenever there is a report of a structure fire or significant incident in the Town of Truro.
- VI.3 The Board of Selectmen should require that all per diem personnel are appropriately trained as firefighters and that all personnel working are qualified to do so.
- VI.4 The Board of Selectmen should require that Training and recruitment efforts be enhanced.
- VI.5 The Board of Selectmen should set a goal to reduce the ISO rating.
- VI.6 The Board of Selectmen should adopt NFPA 1720 and the rural response guidelines as the level of service acceptable to the Town of Truro.

VII. EMERGENCY MEDICAL SERVICES

Through a contract with Lower Cape Ambulance the town has 24/7 ALS transport service located in their station. In the current fiscal year, the TFD was funded with the goal of providing around the clock fire protection to the community. The schedule for this coverage is two firefighters around the clock during the peak summer season. In the off-season, there are two firefighters on duty during the day and one firefighter at night. The night shift is supported by an additional firefighter or firefighters (referred to as the "Squad") on duty to respond from home.

The operational model of the TFD is really an EMS service. Although Lower Cape Ambulance is the transport ambulance service, in the event of a medical call, the on duty TFD members also respond in the TFD ambulance and provide assistance to the medics from Lower Cape. In the event of multiple ambulance calls, the TFD staff will respond with their ambulance and wait on scene for the Lower Cape unit from Provincetown to arrive and provide transport. In the event of a fire call, the staff will return to the station with their ambulance and take the fire truck to the call.

The TFD has approximately 18 members on the roster. Several of these members live outside of, and a considerable distance from, Truro. Although this may not be a significant issue for shift work, it is problematic when you are relying on these staff to respond to calls. We have been told that a number of these members are inactive leaving the actual number of department members at less than 18.

With only a couple of exceptions, all members of the TFD are licensed as EMTs in the Commonwealth at either the basic or paramedic level. When we investigated the level of firefighter training, we were told that only a few of the members have formal fire service training and even a fewer number are certified as firefighters. It also appears that there is no requirement for either training or certification to be eligible to work shifts or respond to calls.

The partnership with Lower Cape Ambulance produces a high level of paramedic level advanced life support (ALS) for the community. We recommend that this relationship continue based on the quality of service provided.

Truro Fire & Rescue operates two ambulances that transport only in the rare event that the both Lower Cape units are unavailable and sufficient staff can be located to properly staff the Truro unit. In essence, Truro Fire & Rescue is a backup EMS service. As mentioned previously in this report we believe that a disproportionate level of importance has been placed on the EMS service that Truro Fire & Rescue offers to the community. The preoccupation with EMS often manifests itself at the detriment of fire protection within the community.

Given the secondary nature of the EMS service, the resources placed into equipping and maintaining two ambulances should be reconsidered by the town. The cost of acquiring, maintaining, and stocking the ambulances should be investigated in

comparison to the cost of renegotiating the contract with Lower Cape Ambulance to provide for complete transport service.

RECOMMENDATIONS

- VII.1 Based upon the quality of the regional service provided the Town of Truro should continue its relationship with Lower Cape Ambulance as the primary transport provider.
- VII.2 Truro Fire & Rescue should stop the practice of responding in the Truro Fire & Rescue ambulance along with Lower Cape Ambulance for medical calls. The on duty crew should respond in a fire engine. This will allow them to immediately respond to fire calls, or in the event of another medical, they can respond and begin to render aid until the back-up Lower Cape unit arrives.
- VII.3 All fire apparatus should be equipped with basic first aid supplies inclusive of oxygen, and a first in medical/trauma bag.
- VII.4 In addition to the above recommendation, all frontline fire apparatus and the wildland interface unit (Engine 482) should be fully outfitted with all equipment necessary to respond to medical emergencies. This would include the following:
- A first in medical/trauma bag
 - a portable oxygen unit
 - A spare oxygen tank
 - Pulse Oximetry and Carbon Monoxide detection equipment;
 - A back board and straps and immobilization supplies
 - A Kendrick Extrication Device (KED)
 - A cardiac monitor or semi-automatic defibrillator depending on what level the community intend to operate these units at
- VII.5 The concept of licensing one first line response piece as a paramedic level Emergency First Response (EFR) unit should be considered in the next five (5) years. This would equip a unit to provide paramedic level care in the event that a paramedic was available to provide therapy but a transport ambulance was delayed.

VIII. REGIONAL OPTIONS

During the course of the study, we consulted with chiefs from the Cape and reviewed regional options. Based on the distal location of Truro (outer Cape region) it was evident that the best regional partners would be either Provincetown or Wellfleet. Neither organization seemed to- be interested or in many ways compatible with the option of full formalized regionalization.

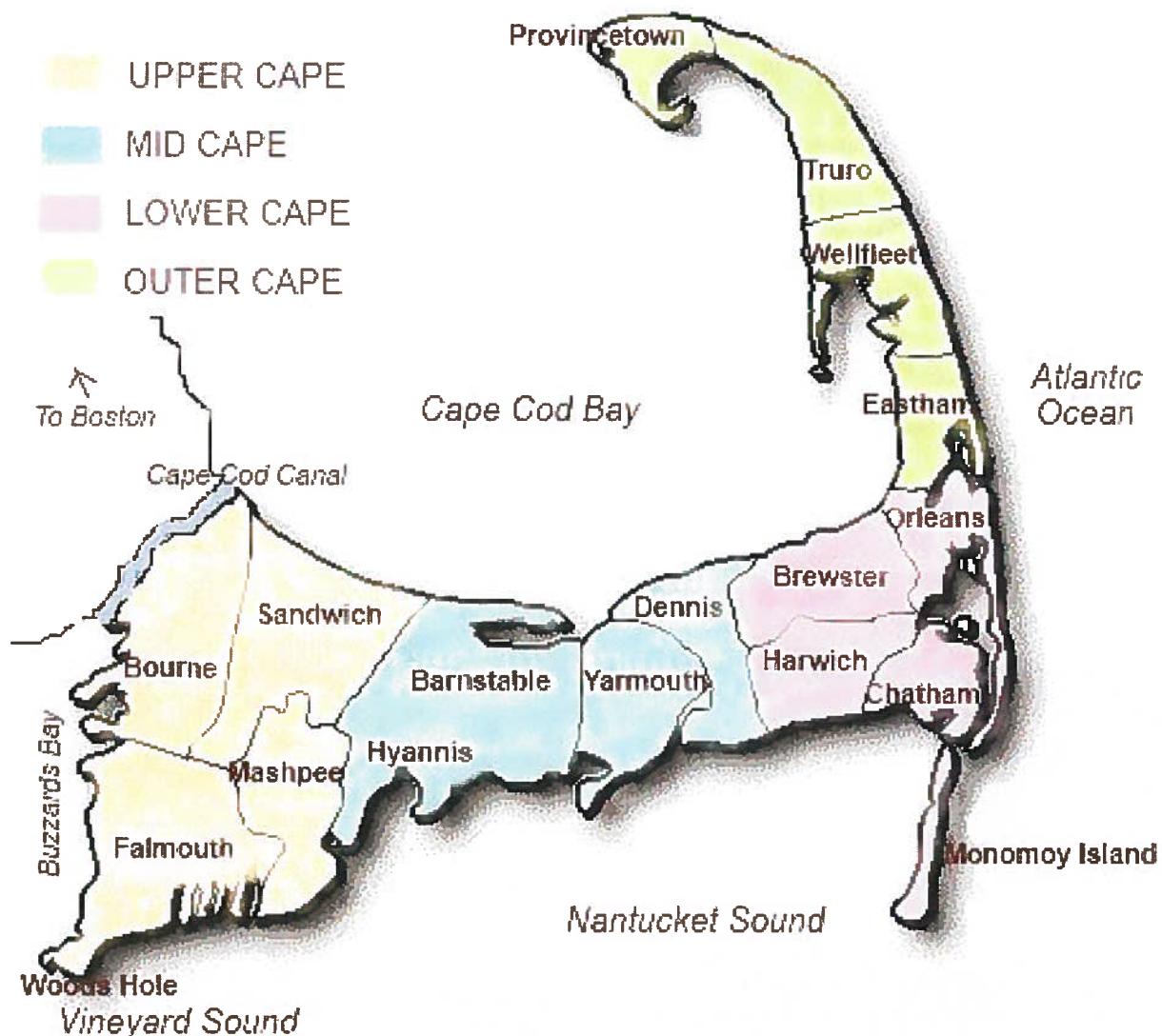


Figure 2 - Map of Cape Cod by Region

Informal regionalization is occurring to some degree although it seems to lack sufficient organization. As an example if Truro responds to a structure fire, Wellfleet may start an engine staffed with on-duty personnel if they are free and listening to the radio or if the Truro dispatcher remembers to contact them for aid. This lackadaisical strategy needs

to be formalized in to an automatic aid agreement and adjacent communities need to immediately respond to any situation that is likely to exceed Truro's resources. This would include the response to any reported structure fire, large wildland incidents, motor vehicle accidents with entrapment and hazardous materials situations.

As an example of this best practice several communities in Hampshire County have developed agreements in which several communities are automatically toned when a possible structure fire is reported. Specifically in the Town of Westhampton, five communities respond on a first alarm and three more are requested should the situation require escalation. This is especially important when adequate municipal water supply is not in immediate proximity to the incident scene. In this case, a water shuttle would be required and depending on the distance, five to seven tenders should be requested.

Developing regional organizations is often undertaken to provide a consistent level of protection to an area. Although this economy of scale has some inherent benefits, it is rarely successful in New England. Given that neither Provincetown nor Wellfleet had to believe that creating a regional organization from three dissimilar department is cost effective or advisable. Instead, we recommend that that informal regionalism that exist among these partners be strengthened and enhanced.

The best place to start an increased level of integration is through developing several shared training exercises on an annual basis. This interaction allows personnel to develop relationships and build skills together. This teamwork is already in place to some degree and could be expanded.

RECOMMENDATIONS

- VIII.1 Truro Fire & Rescue should develop apparatus response cards known as run cards to provide dispatch personnel a list of what resources must be requested based on type, severity and location of the incident. Many communities integrate this into their Computer Aided Dispatch (CAD) system
- VIII.2 Automatic aid agreements with Provincetown and Wellfleet should be consistently followed and applied when a structure fire or motor vehicle accident with entrapment is reported.
- VIII.3 The dispatch center should be held accountable for rapidly calling for automatic aid.
- VIII.4 Any response to a structure fire out of the municipal water district should be augmented by the response of a minimum of three additional tenders/tankers.
- VIII.5 The Departments of Provincetown and Wellfleet should periodically train with Truro Fire & Rescue.

VIII.6 Some specialty equipment such as a hazardous materials response trailer, public education resources and technical rescue equipment should be purchased cooperatively and shared between communities.

IX. ORGANIZATIONAL CULTURE AND EMPLOYEE SURVEY

In addition to direct observation, two attempts were made to provide employees of Truro Fire Rescue input into the study process. A survey was distributed to the officer core; this survey initially had only one response. After significant prodding, and the direct influence of the committee chair, the other officers responded. When we asked Chief Davis about this he noted that he did not want to respond as response could be used against him by the Town Administrator. As the study progressed, a more intense on-line survey was then developed and all current and recently separated employees of the Truro Fire Department had the opportunity to respond, nine (9) responses were received.

The study team observed that Truro Fire & Rescue presents as a fractured and struggling organization that needs strong leadership and a common vision. Although there are exceptional employees there seemed to be the absence of organizational energy and direction. Although department members clearly understand that the organization exists to serve the public, the organization seems to be devoid of passion.

We then provided all Truro Fire & Rescue employees the opportunity to respond to an anonymous on-line survey. There were nine respondents to this survey. A report containing charts, graphs, and specific comments has been included as **Appendix D**. The following point emerged from the survey:

- Respondents included 6 firefighter/EMTs, 1 paramedic and 2 officers
- The majority of respondents concur that the Truro public Safety Complex is a clean and safe facility
- 11% of respondents believe that the department is well managed while 56% do not believe the organization is well managed
- 66% of respondents do not believe that there is a high level of respect between ranks
- 66% of respondents do not believe that a common mission or vision among the membership
- 56% of respondents do not feel that discipline is fair or consistent
- Most respondents believe that adequate training is provided, yet training quality is poorly rated by department personnel
- Despite the issues listed above the majority of members gain personnel and professional satisfaction from their participation as members of Truro Fire & Rescue

- It appears that employee performance evaluations do not exist
- All agree that there has not been any discrimination or harassment, nor have employees felt threatened or intimidated
- A strong majority of respondents believe that the fleet of apparatus is adequate and well maintained
- Most respondents believe that promotions are not made fairly
- There was universal agreement that compensation was fair and adequate. In addition there was agreement that Truro is a good employer
- The majority of respondents believe that the department is keeping up with technology
- The majority of respondents are proud to be members and believe that the residents of Truro value their services
- Respondents indicated that the incident command system is only marginally utilized
- The majority of respondents believe that the level of fire protection provided to the community is not acceptable
- The vast majority of respondents believe that the department has service delivery issues

This Chapter provides a perspective on organizational culture and provided the employees of Truro Fire & Rescue an opportunity to provide honest and uninhibited feedback to the community. Although every anonymous survey generates a level of internal criticism and responses based on self-interest, the general themes of the survey should be considered. As we reviewed this information, we found it consistent with several recommendations that were previously made in Chapter IV. As there are no new recommendations specific to this section the pertinent recommendations listed in Chapter IV have been inserted.

RECOMMENDATIONS

- IV.6 The Board of Selectmen should convene a focus group to determine what concepts and recruitment and retention strategies are feasible and most attractive to potential candidates.
- IV.7 Enhance communication with department staff by providing e-mail addresses and a newsletter which should be distributed twice per month. This project should be supervised by the administrative assistant and organized by a Fire captain as assigned by the chief.
- IV.8 Develop a series of team based activities that build involvement in the organization.

X. FIRE SERVICE GRANTS

Truro Fire & Rescue has never applied for any substantive grants as the chief indicated they did not have the knowledge or ability. When questioned further, Chief Davis shrugged and indicated that he did not feel he had the time or that they would be awarded the grants. This self-defeatist attitude has cost the town the opportunity to enhance the fire services within the community.

Given the abundance of fire service grant opportunities that have developed since 9/11/2001 many departments have received more than one million dollars in funding for equipment, apparatus, training, staffing, interoperability, recruitment, retention, uniforms, protective gear, and other items. It is unfortunately that Chief Davis did not develop a team to pursue these grants or seek assistance from the town. The study team feels that Truro has missed a tremendous opportunity and forfeited several hundred thousand dollars that could have been utilized to enhance Truro Fire & Rescue. Many communities have utilized FireAct grant to defray capital costs that were beyond the fiscal ability of the community.

As an example of success, the Towns of Cheshire and Savoy obtained a recruitment and retention SAFER grant equal to more than ten cumulative years of their combined operating budgets.

Some active Grant programs include:

- Federal FireAct – a Federal grant program that supplies applicants with equipment, apparatus, and training. This program has injected hundreds of millions of dollars into the American fire Service. Examples of how this program could be applied in Truro would be to replace outdated safety equipment, enhance communications, and provide training.
- SAFER – Staffing for Adequate Fire and Emergency Response – This grant program has a special component for recruitment and retention efforts in on-call and volunteer fire service organizations.
- EMPG – Emergency management preparedness Grant – This grant is supervised by MEMA provides each Massachusetts community the ability to purchase needed emergency management supplies and equipment
- SAFE (Children and elderly) – The grant program administered by the Massachusetts Department of Fire Services (DFS) provide resources for local and regional community education efforts. This program presently focuses on educating both children and the elderly.
- Finally, the Department of Homeland Security also distributes grants, most notably for equipment not usually awarded in the FIRE Act grants, like

harbor boats, sophisticated hazardous materials or radioactive monitoring equipment or national security items.

The key to obtaining these grants is to meet the initial parameters as explained in the grant application and then build a convincing case that Truro needs the grant. As an example, many communities apply for grants under the category of firefighter Safety, an example of the type of justification necessary to be successful in obtaining a grant is detailed below:

Firefighter safety: meeting national standards: efficiencies and effectiveness in operations: and the ability to share the resource with neighboring communities are big selling points and receive favorable marks from peer reviewers.

RECOMMENDATIONS

- X.1 Recommendation – Seek external assistance in the development of Federal FireAct and SAFER Grant Applications.
- X.2 Recommendation – During the 2015 grant period, apply for a grant for to bolster recruitment and retention of on-call personnel in Truro.
- X.3 Recommendation – In 2015 apply for a FireAct grant for ten sets of Self Contained breathing Apparatus (SCBA) and a firefighter accountability system. This grant should request will be approximately \$80,000.
- X.4 Recommendation – In 2015 develop a prioritized list of emergency management needs so that the next round of Emergency Management Preparedness (EMPG) grants can be focused effectively.
- X.5 Recommendation – In 2017 apply for a Federal FireAct grant to replace turnout gear.

SYNOPSIS OF RECOMMENDATIONS

In an effort to provide the best possible organization, we have listed all of the recommendations that have been listed in the body of the report by section:

I. ORGANIZATIONAL DESIGN

- I.1 The town should provide executive level assistance to the current fire chief. This assistance can provide a resource for the chief as the organization enters the transformation described in this report.
- I.2 Truro Fire & Rescue needs to pursue a balanced approach to providing emergency response and refocus on providing fire protection to the community.
- I.3 The Town of Truro should adopt the response criteria outlined by NFPA 1720 as the level of service and level of risk acceptable to the community.
- I.4 Truro Fire & Rescue should immediately cease allowing untrained personnel to staff on a per diem basis. The organization should recruit per diem personnel with qualifications in the following priority:
 - 1. Firefighter I/II Training program completion
 - 2. Firefighter I/II certification by the Pro Board or IFSAC
 - 3. Completion of Emergency vehicle operations program
 - 4. Current First Responder Training
 - 5. Massachusetts or National Registry EMT – Basic licensure
 - 6. Massachusetts or National Registry EMT – Paramedic licensure

Prior to employment Truro Fire & Rescue should provide each member with an orientation to the community and training relative to driving and operating each vehicle. Each of these orientation steps should be documented in a personnel and training file. Personnel who do not have at least documented and complete Firefighter I/II training should not be allowed to work.

- I.5 Immediately increase the level of per diem staffing to a minimum of two (2) trained firefighters 24/7, to ensure adequate fire response in the community
- I.6 Truro Fire & Rescue should obtain a mailing list of firefighter I/II trained personnel that exist within Massachusetts from either the Pro Board, IFSAC, or the Massachusetts Fire Training Council. A post card mailing should be done, outlining the opportunity to work shifts and inviting interested personnel to apply.
- I.7 Increase the number of on-call personnel to 20 and require that these personnel are properly training and certified.

- I.8 Restructure the organization to have two rather than three squads until such time that three groups can generate a reliable response.
- I.9 Recruit, assess, and hire a full-time fire chief as detailed within in this report. Executive assistance should be provided to the interim chief to begin implementation of these recommendations, including the search for a new chief as soon as possible. It may be advantageous for the new chief to start employment prior to the removal of the interim chief to provide for a sufficient period of transition.
- I.10 Assign the deputy chief as the training officer and hold that position accountable to ensure that all existing personnel attain training to the level of firefighter I/II (NFPA 1001), incident command (ICS 100, 700), hazardous materials operations level responder and, at a minimum, medical first responder training. [NOTE: Currently the position of deputy chief is vacant. Later in this report, we recommend filling that position.]
- I.11 Develop a second captain's position and restructure the role of fire captain as the squad leader.
- I.12 Set the goal of developing 16 active on-call firefighters by July 2015.
- I.13 Set the goal of developing 20 active on-call firefighters by January 2016.
- I.14 A nepotism policy should be developed and all personnel should be trained on this policy.
- I.15 Emphasis should be placed on keeping per diem and on-call personnel working together, they should be seen as equal within the Truro Fire & Rescue chain of command.
- I.16 All supervisors should attend the Fire Officer I class concurrent with Firefighter Level I/II certification.

II. JOB DESCRIPTIONS

- II.1 The Job Descriptions and associated changes in responsibility should be adopted by the town.
- II.2 The Firefighter/EMT job description should cover both on-call and per diem personnel.
- II.3 It should be recognized that to attract qualified applicants to the new position of full-time fire chief, the town will need to provide an initial compensation package commensurate with the desired qualifications.

- II.4 The administrative assistant should not be a uniformed member of the fire department. The current dual role position should be divided into two separate positions thus removing the inherent conflict of roles.
- II.5 Roles and responsibilities are presently unclear. Job descriptions should be utilized as tools to clarify the qualifications to serve and the roles and responsibilities of each position.
- II.6 The department should operate two administrative vehicles, one for the chief of department and a second unit (which could be a recycled police vehicle) as a unit assigned to the on-call duty officer.

III. FACILITIES, EQUIPMENT, AND CAPITAL PLANNING

- III.1 All pieces of structural response apparatus should be equipped to operate as EMS first responder vehicles.
- III.2 All apparatus should be reviewed for consistent configuration and emphasis should be placed on organizing tools and equipment.
- III.3 The military surplus units that are located at the rear of the Public Safety Complex are in disrepair, these vehicles should be disposed of.
- III.4 The concept of licensing one first line response pieces as paramedic level Emergency First Response (EFR) units should be considered in the next five years. This would equip two units to provide paramedic level care in the event that a paramedic was available to provide therapy but a transport ambulance was delayed.

IV. RECRUITMENT AND RETENTION OF PERSONNEL

- IV.1 Recruitment and Retention of on-call personnel needs to become a primary focus of Truro Fire & Rescue, this program should be an ongoing effort.
- IV.2 The fire chief should be the person responsible for all recruitment and retention activities within Truro Fire & Rescue. He/she should be held accountable for results provided that the town invests and provides the chief with the tools as detailed in the remainder of this report.
- IV.3 The town should pursue a SAFER Grant for the recruitment and retention of on-call personnel during 2015.

- IV.4 The Town of Truro should consider the development of a program that would provide active responders with the opportunity to obtain health insurance. The Town of Truro should pay a graduated percentage of this program based upon the percentage table located in Chapter IV.
- IV.5 The Town of Truro should recognize that the only way to develop a more active and properly staffed fire department in the absence of hiring a force of career firefighters is to determine what would motivate potential responders and craft a program of investment that meets these extrinsic and intrinsic needs.
- IV.6 The Town of Truro should convene a focus group to determine what concepts and recruitment and retention strategies are feasible and most attractive to potential candidates.
- IV.7 Enhance communication with department staff by providing e-mail addresses and a newsletter which should be distributed twice per month. This project should be supervised by the administrative assistant and organized by a Fire captain as assigned by the chief.
- IV.8 Develop a series of team based activities that build involvement in the organization.
- IV.9 Increase the level of communication with the community relative to the need for on-call firefighters. Examples of this strategy should include periodic open houses, community mailings, newspaper coverage, and radio and media advertisement. The proposed SAFER Grant could be utilized to cover many of these expenses.
- IV.10 Seek Assistance from the Massachusetts Call and Volunteer Firefighters Association (MCVFA) relative to enhancing recruitment efforts in Truro.
- IV.11 Develop a set of incentives that are attractive to the self-employed tradesmen that are year round residents in the Town of Truro.

IV.V. TRAINING AND CERTIFICATION OF PERSONNEL

- V.1 The Truro Fire Department should conduct a formal training needs assessment for the purpose of determining training program priorities. Part of this needs assessment should be an initial evaluation of the current basic firefighting skills proficiency of ALL department personnel.
- V.2 Based upon the results of the needs assessment, the Truro Fire Department should begin the development of a comprehensive training program that addresses, but is not limited to: mandatory OSHA training, recommended NFPA

training, and every operational mission and responsibility of the department. The training should comply with accepted and/or recommended practices and standards, should include standardized evolutions, and should be consistent with Truro Fire Department standard operating guidelines and procedures.

- V.3 The new position of deputy chief should be assigned to develop and coordinate the Departments Training Program.
- V.4 Formal training of some type, lasting a minimum of two hours, should occur weekly. The training should be lesson plan driven, and when appropriate EMT continuing education credit hours should be applied for through the state Office of EMS. Additional opportunities for training can be found during related activities such as weekly/monthly apparatus and equipment inspections, and building pre-planning activities.
- V.5 Additional, high intensity training on various subjects, including periodic live fire training, should be conducted on a quarterly, or semi-annual basis at a formal fire academy where appropriate training facilities, structures and props are available.
- V.6 To the extent possible, training should be delivered and/or conducted utilizing formal, standardized lesson plans that include objectives and performance criterion. However, when this is not possible, or practical (a frequent occurrence in the fire service), a detailed description of the training should be included in the narrative section of the training report.
- V.7 All training that is conducted, no matter how brief, or inconsequential it may seem, **MUST** result in the completion of a formal training report. Training reports should include the date, time training commenced, time duration of the training, the instructor, the officer in charge, names of all personnel trained, and include a detailed description of the training, or reference the formal lesson plan utilized. All persons trained should sign or initial either a printed hard copy of the training report, or if this is not practical, a sign in sheet should be attached. The officer in charge, and when possible, the instructor should also sign the hard copy training report. A formal operational procedure on the completion of training reports should be developed. The training module of whatever records management software program the department selects should be utilized for completion of training reports and to assist with the development of a training data base, keeping track of certifications, and related lapse dates, etc.
- V.8 The department should develop a separate training file for each member that can provide a supplement to the member's main personnel file. The training file should, at a minimum, include all course completion certificates, professional certifications, skills performance evaluation sheets and reports, and, an annual summary of completed training.

- V.9 As part of the development of a new comprehensive training program, the department should implement periodic basic skills proficiency evaluations for ALL personnel. These proficiency evaluations, consisting of standardized evolutions, can be based upon recognized standards and benchmarks, in conjunction with performance criterion, and benchmarks, established through evaluation of, and based upon, Truro Fire & Rescue Department standard operating guidelines and procedures.
- V.10 In order to assist with the large amount of training that needs to be done, and in recognition of their important role in the delivery of training and the success of the program, the Truro Fire & Rescue Department should request to host a Massachusetts Firefighting Academy Fire Instructor I training program to provide fire instructor training for any members of the organization who wish to take it. All officers should be formally certified at Fire Instructor Level I.
- V.11 The Truro Fire & Rescue should encourage personnel to seek additional training on their own, and to the financial and practical extent possible, send personnel to outside training opportunities such as the Firehouse Expo in Baltimore, and the Fire Department Instructors Conference in Indianapolis. Information gained at this training can then be brought back and delivered to other members of the department. Training reports should be completed for all of this training and copies of any certificates earned should be placed in the member's personnel and training files. A training bulletin board should be placed in each station where upcoming training opportunities can be posted for all personnel to review. These opportunities should also be posted on the department's web site and could be e-mailed to every member once addresses are established.
- V.12 The Truro Fire & Rescue should seek annual funding in the training budget to upgrade its training resources such as manuals, DVDs, and subscriptions to other available training resources.
- V.13 The Truro Fire & Rescue should, as part of its written communications system, develop Training Bulletins, which would be issued to serve as reference with regard to tested and approved methods of performing various tasks and Safety Bulletins, which should be issued to serve as references with regard to general and specific safety and health issues.
- V.14 All members of Truro Fire & Rescue should be trained in the use of incident command. They should all complete ICS 100, 700 as offered on-line by the Federal Emergency Management Agency.
- V.15 Truro Fire & Rescue should make a concerted effort to certify as many on-call members as possible to the level of Firefighter I/II through the Massachusetts Fire Training Council.

- V.16 All supervisors should attend Fire Officer I training and once they achieve Firefighter I/II certification test to certify to this level.
- V.17 The Fire captains, deputy chief, and fire chief should be trained and certified to (at least) the level of Fire Officer II.

IV.VI. BENCHMARKING AND COMPARATIVE ANALYSIS

- VI.1 The Town of Truro should continue the current strategy of increasing the level of investment in Truro Fire & Rescue. This investment will enhance the level of service and reduce the level of risk in the community.
- VI.2 The Board of Selectmen should require that Automatic Aid policies and procedures be consistently followed and applied whenever there is a report of a structure fire or significant incident in the Town of Truro.
- VI.3 The Board of Selectmen should require that all per diem personnel are appropriately trained as firefighters and that all personnel working are qualified to do so.
- VI.4 The Board of Selectmen should require that Training and recruitment efforts be enhanced.
- VI.5 The Board of Selectmen should set a goal to reduce the ISO rating.
- VI.6 The Board of Selectmen should adopt NFPA 1720 and the rural response guidelines as the level of service acceptable to the Town of Truro.

IV.VII. EMERGENCY MEDICAL SERVICES

- VII.1 Based upon the quality of the regional service provided the Town of Truro should continue its relationship with Lower Cape Ambulance as the primary transport provider.
- VII.2 Truro Fire & Rescue should stop the practice of responding in the Truro Fire & Rescue ambulance along with Lower Cape Ambulance for medical calls. The on duty crew should respond in a fire engine. This will allow them to immediately respond to fire calls, or in the event of another medical, they can respond and begin to render aid until the back-up Lower Cape unit arrives.
- VII.3 All fire apparatus should be equipment with basic first aid supplies inclusive of oxygen, and a first in medical/trauma bag.

VII.4 In addition to the above recommendation, all frontline fire apparatus and the wildland interface unit (Engine 482) should be fully outfitted with all equipment necessary to respond to medical emergencies. This would include the following:

- A first in medical/trauma bag
- a portable oxygen unit
- A spare oxygen tank
- Pulse Oximetry and Carbon Monoxide detection equipment;
- A back board and straps and immobilization supplies
- A Kendrick Extrication Device (KED)
- A cardiac monitor or semi-automatic defibrillator depending on what level the community intend to operate these units at

VII.5 The concept of licensing one first line response piece as a paramedic level Emergency First Response (EFR) unit should be considered in the next five (5) years. This would equip a unit to provide paramedic level care in the event that a paramedic was available to provide therapy but a transport ambulance was delayed.

IV.VIII. REGIONAL OPTIONS

VIII.1 Truro Fire & Rescue should develop apparatus response cards known as run cards to provide dispatch personnel a list of what resources must be requested based on type, severity and location of the incident. Many communities integrate this into their Computer Aided Dispatch (CAD) system

VIII.2 Automatic aid agreements with Provincetown and Wellfleet should be consistently followed and applied when a structure fire or motor vehicle accident with entrapment is reported.

VIII.3 The dispatch center should be held accountable for rapidly calling for automatic aid.

VIII.4 Any response to a structure fire out of the municipal water district should be augmented by the response of a minimum of three additional tenders/tankers.

VIII.5 The Departments of Provincetown and Wellfleet should periodically train with Truro Fire & Rescue.

VIII.6 Some specialty equipment such as a hazardous materials response trailer, public education resources and technical rescue equipment should be purchased cooperatively and shared between communities.

IV.IX. ORGANIZATIONAL CULTURE AND EMPLOYEE SURVEY

No Recommendations.

IV.X. FIRE SERVICE GRANTS

- X.1 Recommendation – Seek external assistance in the development of Federal FireAct and SAFER Grant Applications.
- X.2 Recommendation – During the 2015 grant period, apply for a grant for to bolster recruitment and retention of on-call personnel in Truro.
- X.3 Recommendation – In 2015 apply for a FireAct grant for ten sets of Self Contained breathing Apparatus (SCBA) and a firefighter accountability system. This grant should request will be approximately \$80,000.
- X.4 Recommendation – In 2015 develop a prioritized list of emergency management needs so that the next round of Emergency Management Preparedness (EMPG) grants can be focused effectively.
- X.5 Recommendation – In 2017 apply for a Federal FireAct grant to replace turnout gear.

THE STUDY TEAM

The following MRI personnel participated in the study:

Project Manager:

Brian P. Duggan now commands the Fire Department in Northampton, Massachusetts, where he has instituted substantial changes to modernize and restructure the entire department including equipment, facilities, personnel, and training. In conjunction with his staff, Brian has created a regional Advanced Life Support Program that currently serves eighteen communities within the Northampton Area. He formerly commanded the Northborough, Massachusetts, Fire Department, and has significant experience with the Massachusetts Department of Fire Services where he held several key positions. Mr. Duggan developed and directed the Graduate and Undergraduate Fire Science Programs at Anna Maria College in Paxton Massachusetts from 1995 - 2003. Mr. Duggan has a Business Management/Fire Science degree from Providence College and a Master's Degree of Business Administration (MBA) from Nichols College in Dudley, Massachusetts. He is also a graduate of the National Fire Academy Executive Fire Officer Program and the Senior Executive Program for State and Local Leaders at Harvard University. In December 2012, Mr. Duggan received a Master's Degree in Homeland Security through the Naval Post Graduate School based in Monterey, California, where his thesis entitled "Enhancing Decision-making during the First Operational Period of Surge Events" was selected as an outstanding thesis. He is one of only a few fire service professionals to be designated as a Chief Fire Officer by the Commission on Fire Accreditation International. He leads the Massachusetts fire service through his affiliation as Chairman of the Fire Chief Association of Massachusetts Technology Committee and as a Regional Director on the Massachusetts State Fire Mobilization Committee. Mr. Duggan has authored several publications, inclusive of writing Section 7, Chapter 3, Fire Department Information Systems, in the Nineteenth and Twentieth Editions of the National Fire Protection Association's Fire Protection Handbook. Chief Duggan has served as a subject advisor to MRI since 2002 and will occasionally work on a project team.

Team Leader:

Edmund M. Walker began his fire service career over 30 years ago while a student at the University of Maine, Orono, on their volunteer fire department. Upon graduation, Mr. Walker began his career with the Weston, MA, fire department where he was appointed chief of department in 2002. As the chief, Mr. Walker managed the operation of the department's BLS ambulance service and served as the town's emergency management director. In 2007, Mr. Walker took the position as director of the Massachusetts Firefighting Academy, the training division within the Massachusetts Department of Fire Services (DFS), where he brought fresh ideas and innovation to the division including the incorporation of national certification into the Call/Volunteer Firefighter Training Program and the Chief Fire Officer Management Training Program.

In addition, Massachusetts is now a national leader in fire service professional development through the collaboration between the fire academy and higher education across the Commonwealth under the United States Fire Administration's Fire and Emergency Services Higher Education (FESHE) program. As a member of DFS management team Mr. Walker served in a lead role at the State Emergency Operations Center for a number of disasters including several Presidential Disaster Declarations. Mr. Walker holds bachelor's degrees in Psychology (University of Maine Orono) and Fire and Life Safety Engineering Technology (University of Cincinnati) as well as an MBA and graduate certificate in Geographic Information Systems from Northeastern University. Currently he is enrolled in the Masters of Science program in Business Continuity, Security, and Risk Management at Boston University.

MRI Associates:

Robert F. Loomer has enjoyed a successful career as a fire service leader, state instructor, and mentor, and still remains active in each of those fields with over 40 years of real-world experience. In 2012, Bob retired as Chief of the Wayland, Massachusetts Fire Department culminating his 38 years as a career fire service professional. As chief, he successfully commanded a combination fire department with an annual operating budget of \$2.5 million which provided a full array of fire, rescue, emergency medical, and emergency management services to a community of 15,000 residents. During his tenure, Chief Loomer successfully advanced that department's emergency medical services delivery model to the paramedic level and also successfully implemented a fire service based, regional approach to providing advanced life-support services. During his fire service career, Bob has been extremely active in all aspects of fire service training. Today, Bob remains active as a program coordinator and senior fire instructor with the Massachusetts Department of Fire Services. Recently, Chief Loomer was chosen to coordinate that state's Chief Fire Officer Training Program. Chief Loomer remains a credentialed Fire Chief and Fire Prevention Officer for the Commonwealth of Massachusetts. He obtained his AS in Fire Protection Technology from Oklahoma State University in 1973, and is a 1996 graduate of the University of Massachusetts/Donahue Institute Chief Fire Officer Program. Mr. Loomer is nationally certified as a fire officer level IV, a certified fire inspector, and a nationally certified fire instructor. Since joining Municipal Resources as a subject expert in 2012, Chief Loomer has served as an Interim Fire Chief for a Massachusetts client, as well as, provided coaching and mentoring services to a New Hampshire fire department during a period of leadership transition in that organization. Bob also serves on recruitment and project teams.