

I. EXECUTIVE SUMMARY

MFS Consulting, Inc conducted this Fire & Ambulance Department Operations Study to examine the current and future capability of the Plymouth Fire Department to provide an appropriate level of emergency medical, fire suppression, rescue, hazardous materials, fire prevention and related emergency services. This report is intended to provide guidance to both elected and appointed officials for improvement in the organization, operations, deployment, and management of the Department. The report is broken down into two parts consisting of:

Part I – Introduction. Part I describes the rationale behind some of the study’s findings and recommendations. Included is an overview of the study’s scope of work, a description of the Town of Plymouth and its fire risks, and a general review of the Plymouth Fire Department. An introduction and overview is also made of the community fire defense system and fire department response criteria and standards applied during the study.

Part II – Findings and Recommendations. This part includes a discussion of each critical issue identified by the study and includes the Project Team’s findings and recommendations. Included also is an assessment of the Plymouth Fire Department addressing the following elements:

- Organization
- Administration and Management
- Human Resources
- Risk Management
- Deployment of Personnel and Resources
- Emergency Operations
- Facilities and Equipment
- Emergency Communications
- Training and Education
- Water Supply

Part II also includes findings of an comparative review of New Hampshire communities that have similar demographics and service areas.

Observations

Overall, the Department appears to be operating well and providing an excellent service to the community. Long overdue, plans are in place to replace the current station with a new combination public safety facility fire station that will provide much needed and updated space for the Department's current and future mission. New apparatus has been placed into service in recent years and the Department is planning for future replacement of older apparatus. Members of the Department are dedicated and committed to the job. Not as clear are internal challenges that will require additional focus on interpersonal relationships to insure the Department continues to live up to its reputation as an effective and efficient force. Some of the more pressing Challenges include:

- Long-range planning and related performance measurements linked to the Town's budget process.
- Optimum support from local citizens.
- Recruitment and retention of paid-call members.
- Management of available resources and staffing.

Recommendations

Recommendations in this report address a wide range of topics and relate to organization, management, human resources, deployment, and operations. The following are the major recommendations in the order they are listed in the report.

1. The Town should maintain at a minimum the level of service currently provided. Increase of on-duty staffing may be necessary due to call volume, training, and maintenance and testing of equipment, and fire prevention duties.
2. The Department can greatly enhance its effectiveness and efficiency by increasing the on-duty strength (career or paid-call) during high call demand times. This can be accomplished with minimum of additional costs through many different configurations of personnel such as:

Option A. Employ part-time career personnel to work during peak demand times, primarily during weekday business hours.

Option B. Increase the workweek of career shift firefighters from 40-42 hours to between 48 and 56 hours. This work schedule is in line with approximately 75-80 percent of career firefighters in the United States. A longer workweek would allow for more firefighters per shift.

Option C. Recruit, train and utilize paid-call personnel to staff the second ambulance on an as need basis, or staff the unit during peak demand times.

Option D. Increase the number of on-duty firefighters from 2 to 3. This approach would double the number of career firefighters assigned to shift work from 8 to 12. This approach may not be the most fiscally feasible due to the current budgetary limitations the Town currently faces.

3. Increase the use of paid-call members through various programs including:
 - A “Bunk” program where call personnel are assigned to specific schedules in the fire station during evening hours.
 - A daytime program much like the bunk program where paid-call personnel augment career personnel during times of high call load.
 - Increase their training and competency levels for call personnel including apparatus driving and EMS skills that will allow for greater flexibility and the use of all paid-call personnel.
4. The Plymouth Board of Selectmen should authorize the Fire Chief to implement a formal master planning program that incorporates the elements of the U. S. Fire Administration’s Community Fire Defense Master Planning Model which allows for a community participation based process. Another program that is useful for planning related elements is the Commission on Fire Accreditation’s Fire Department Self Assessment and accreditation program.
5. As part of a master planning process, the Department should consider built-in fire control technologies as part of a Standard of dispatch and deployment policies. Properties protected with and without automatic fire sprinkler and associated suppression and detection systems should be considered for a reduced level of immediate response protection.
6. The Town should consider the appointment of a building official to work in conjunction with the Plymouth Fire Department and Land-use Code Official. Due to the size of the community, the Board of Selectmen may chose to fund the position on a part-time basis. The duties of the building official would be to

insure the Town's building and related codes are enforced and issue permits and related activities.

Option. Incorporate the duties and responsibilities of the building official position in the current Land-use/Management position or creation of a new part-time position.

7. Insure that all senior and mid-level officers are trained in interpersonal dynamics and communication skills.
8. Improve the line of communication between management and staff. Create a management/staff committee that provides input and feedback to Department issues in a non-threatening and objective way.
9. As part of an implementation of the proposed fire defense master planning process, incorporate a process that measures the effectiveness and efficiency of the overall fire defense system to determine the cost effectiveness of programs and services provided.
10. Continue to provide under contract EMS services to the five outlying communities. Consider including in future agreements benchmarking for level, kind and quality of service as part of the master planning process.
11. Consider expanding EMS funding programs such as subscription/user programs that charge an annual fee for services rather than an "emergency transport charge."
12. Increase revenues by charging residents of all contracted towns the same charges as those incurred by non-contracted users of the EMS Service.
13. Maintain the multi-year agreement with Plymouth State University while seeking improvement of the Life Safety Agreement with Plymouth State University by increasing the annual amount of the agreement to 30 percent of the Fire Department's budget. The increase is reflective of the amount of service and resources needed by the Department to serve the level and kind of risks and call frequency for the campus. Revise the agreement to incorporate benchmarking of level, kind, and quality of services.
14. At this time it is recommended the Town maintain the current practice of providing EMS through the Plymouth Fire Department. This recommendation, coupled with elements found within other recommendations found within this report will assist in minimizing costs for services while providing quick and efficient service under the direct oversight of the Plymouth Board of Selectmen.

15. Insure an open line of communication exist between the Fire Chief, Deputy Fire Chief and line officers with regard to daily duties and responsibilities and special programs assigned to each line officer. The fire chief should establish a formal process for the review and assessment of the completion of tasks assigned to each officer.
16. Broaden recruitment and retention of local townspeople within the ranks of the paid-call force.
17. The Department should establish a budget development process which requires the participation of the fire chief, deputy chief, line officers, and at least one representative from the paid-call members.
18. As part of the budget process, line items should reflect performance objectives set forth within a Community Fire Defense Master Plan.
19. The Department should adopt policies and procedures similar to those found within civil service systems that insure all candidates for appointment and promotions are objectively and fairly tested. Tests should be based on technical, problem solving and relevant physical attributes.
20. The Department should consider using assessment centers as part of the promotional process for all line officer and chief officer positions.
21. A selection process should be in place for all future paid-call candidates are as mentally and physically capable of performing the duties of firefighter and/or medic as career staff.
22. The Department should develop education and training standards for all members including those of the paid-call force.
23. The Department should formally incorporate a professional development program for each individual member of the department that defines a career path including forecasted education and training opportunities.
24. The Department should develop a performance appraisal process for chief officers and other members of the Department.
25. Insure the management of all fire department records are collected and maintained through the use of upgrading software systems.
26. The Department should insure the Deputy Fire Chief receives sufficient education and training in building and fire code enforcement and plans check and be certified as a plans checker by the appropriate model code group.

27. All members of the Department assigned to fire prevention duties should have documented basic fire inspection training.
28. The Department should continue to respond with a minimum of three engines and a ladder or service truck.
29. Consider better utilizing paid-call personnel through a Bunk Program that can accommodate a minimum of six members at one time in the fire station. Train and certify qualified members of the paid-call force to drive and operate apparatus and equipment and provide a minimum of basic EMS first responder training. It should be noted that OSHA requires not less than four fully equipped firefighters on the scene before an interior fire attack can be mounted. In a practical sense, this number should probably be five or six in order to provide adequate incident management and fire pump operation.
30. Insure all EMS calls the Department responds to within the Town of Plymouth have at a minimum four personnel responding on the initial call. This may be accomplished by adopting one of the below options:
 - Broaden the use of current paid-call members as first responders who respond to EMS incidents by personal vehicles.
 - Recruit additional paid-call personnel whose services are limited to “EMS” only calls.
 - Create a volunteer unit within the Department whose specialty is to provide first responder service (support to the ambulance) to the community.
31. Insure all members of the career and paid-call forces are trained in the use and application of the ICS. Formal documentation of all training in the use of NIMS and ICS should be recorded in accordance with the Department of Homeland Security guidelines.
32. The Department should adopt policies and procedures to insure all members meet applicable criteria per all state and local health and wellness guidelines.
32. As part of a future master planning process, the Department should project future growth trends and call demand trends in the Tenney Mountain Highway area. Based on these trends the Department should forecast the need for an additional fire station in the vicinity of Tenney Mountain Highway and Route 3-A and request adequate property for such a station as a requirement for future development.
33. Insure the proposed fire station provides space for a paid-call bunking program with parking space. Consider referencing minimum apparatus and personnel

living quarter design set forth in the National Fire Protection Association's Fire Protection Handbook, Fire Chiefs Handbook, and related reference material.

- 34.** All apparatus pumps, hose and related equipment should be tested annually in accordance with ISO and NFPA recommended practices. Consideration should be given to the use of paid-call personnel for all or part of these tests.
- 35.** The Department Training Officer and all other members of the Department routinely engaged in the delivery of training should be certified as instructors by the New Hampshire Fire Standards and Training Commission. All line officers should be included in this training/certification.
- 36.** The Fire Chief should provide more focus and direction to the training program and increase the support of the Training Officer's duties including allowing for on-duty time to develop comprehensive training subject and schedules for both career and paid-call members. Either the Fire Chief or the Deputy should assume the task of "training director," establishing training goals and specific objectives as to training subjects, time, and required testing.
- 37.** All paid-call members should be trained and certified to the Firefighter I and EMS First Responder levels.
- 38.** Paid-call members should be drilled routinely in basic firefighting and EMS skills including hose lays, ladder work, breathing apparatus, CPR, and incident command. Drills should occur frequently and in conjunction with career personnel to insure a close working relationship between the two forces. Formal "company" drills observed by a Chief officer should occur at least quarterly by all members of the Department and be witnessed by a Chief officer. Training hours should at a minimum meet ISO guidelines.
- 39.** The Department should insure adequate space is available in the proposed new fire station that will allow for classroom work for a minimum of 40 members. Designated training sites throughout the Town should be identified that include open space for apparatus placement and access to fire hydrants and written permission be obtained from property owners prior to their use.
- 40.** Where applicable, all training material should be replaced with the most recent editions of firefighting, EMS manuals and related training aids.
- 41.** The Department should work in conjunction with the water district to allow for all fire hydrants in the Town to be inspected at least twice per year to insure their operation and dependability during emergencies.
- 42.** All new fire hydrant installations should be coordinated with the Department code official to insure proper placement and installation.