

***CITY OF GLOUCESTER, MA
MANAGEMENT AUDIT SERVICES
FOR THE
PUBLIC SAFETY DEPARTMENTS***

***FINAL REPORT ON THE
GLOUCESTER FIRE DEPARTMENT***

SEPTEMBER 2009

**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**



TABLE OF CONTENTS



**Municipal
Resources
Inc.**

TABLE OF CONTENTS

Chapter 1: Executive Summary 1

Observations..... 3

Lack of Up-to-date Department Policies and Rules 3

Lack of a Formal Training Program 4

Obsolete, Inadequate and Unsafe Central Fire Station 5

Inadequate Emergency Communications Capabilities..... 6

Lack of Pre-Planning and In-Service Inspections..... 6

Lack of an Adequate Fireground Safety Program 7

In Conclusion 8

Chapter 2: Background and Demographics 9

History and Setting 9

Definition of the “Community” 10

Select Demographics 10

Some Community Infrastructure..... 13

Summary or, Rather, “Disclaimer” 14

Chapter 3: Summary of Key Recommendations 16

Facilities..... 16

Vehicle Fleet..... 18

Fire Department Equipment 20

Communications 20

Fire Prevention, Inspections, Investigations & Public Health 21

Use of Technology..... 24

Policies & Procedures; Rules & Regulations..... 25

Citizen Complaints & Internal Discipline..... 26

Municipal and Department Personnel Policies, Practices and
Personnel Evaluations..... 27



	Staffing & Scheduling	28
	Fire & EMS Operations, ICS, Safety & Mutual Aid	30
	Training and Professional Development	31
	Compensation.....	33
	Fire & EMS Reporting System.....	33
	Emergency Management	34
	Sense of Common Vision	34
	Funding by the Municipality, Utilization of Grant Funding & Fiscal Management.....	35
	Relationship with Elected Officials	36
	Evaluation Methodologies	36
Chapter 4:	Introduction and Scope of Work	37
	Introduction	37
	Scope of Work	37
	Methodology	39
Chapter 5:	Fire Department Facilities.....	42
	Overview.....	42
	Observations.....	42
	Central Station	43
	Recommendations – Central Fire Station	46
	Outlying Stations	49
	Recommendations – Outlying Stations	49
Chapter 6:	Fire Department Vehicle Fleet.....	51
	Overview.....	51
	Observations.....	51
	Engines.....	52



	Aerial Ladders	52
	Ambulances	53
	Forestry Units	53
	Staff Vehicles	54
	Trailers	54
	Recommendations	56
Chapter 7:	Fire Department Equipment	59
	Overview	59
	Observations	59
	Recommendations	61
Chapter 8:	Communications	64
	Overview	64
	Observations	64
	General	64
	Radio	64
	Telephone	65
	Municipal Fire Alarm System	66
	Data	66
	Cellular Telephones	66
	Recommendations	66
Chapter 9:	Fire Prevention, Inspections, Investigations, and Public Education	70
	Overview	70
	Observations	70
	Recommendations	73



Chapter 10:	Use of Technology and Records Systems	77
	Overview	77
	Observations.....	77
	Recommendations.....	81
Chapter 11:	Policies and Procedures; Rules and Regulations	84
	Overview.....	84
	Observations.....	84
	Recommendations.....	87
Chapter 12:	Citizen Complaints and Internal Discipline	91
	Overview.....	91
	Observations.....	92
	Recommendations.....	93
Chapter 13:	Municipal and Department Personnel Policies, Practices and Personnel Evaluations	96
	Overview.....	96
	Observations.....	97
	Recommendations.....	101
Chapter 14:	Staffing and Scheduling.....	105
	Overview.....	105
	Observations.....	107
	Recommendations.....	112
Chapter 15:	Fire & EMS Operations, ICS, Safety & Mutual Aid.....	115
	Overview.....	115
	Observations.....	116
	Recommendations.....	119



Chapter 16:	Training and Professional Development	122
	Overview.....	122
	Observations.....	124
	Recommendations.....	128
Chapter 17:	Compensation.....	132
	Overview.....	132
	Observations.....	132
	Stipends.....	133
	Longevity benefit	133
	Training overtime (guaranteed)	133
	Clothing allowance	133
	Cleaning allowance	133
	Sick days	134
	Sick leave buy back.....	134
	Personal days.....	134
	Overtime	134
	Holidays	134
	Health insurance.....	134
	Vacation days	134
	Pay scale	134
	Light duty assignments.....	134
	Salary Comparisons for all Ranks, FY09	135
	Recommendations.....	136

Chapter 18:	Fire and EMS Reporting System	137
	Overview	137
	Observations.....	138
	Recommendations.....	142
Chapter 19:	Emergency Management	145
	Overview.....	145
	Observations.....	145
	Recommendations.....	147
Chapter 20:	Funding by the Municipality, Utilization of Grant Funding & Fiscal Management	148
	Overview.....	148
	Observations.....	150
	Community Comparisons	150
	Funding and Fiscal Management.....	152
	Grant Funding.....	156
	Recommendations.....	158
	Community Comparisons	158
	Funding and Fiscal Management.....	158
	Grant Funding.....	160
Chapter 21:	Sense of Common Vision	161
	Overview.....	161
	Observations.....	161
	Recommendations.....	163



Chapter 22:	Relationship with Elected Officials.....	165
	Overview.....	165
	Observations.....	165
	Recommendations.....	167
Chapter 23:	Evaluation Methodologies	168
	Overview.....	168
	Observations.....	170
	Recommendations.....	171
Chapter 24:	About MRI.....	172
	Team Profiles.....	173

APPENDICES

Employee Survey	A
Organizational and Staffing Charts	B
Comparables	C



FINAL REPORT



**Municipal
Resources
Inc.**



CITY OF GLOUCESTER, MA
MANAGEMENT AUDIT SERVICES
FOR THE
PUBLIC SAFETY DEPARTMENTS

REPORT ON THE
GLOUCESTER FIRE DEPARTMENT

CHAPTER 1

EXECUTIVE SUMMARY

OVERVIEW

The purpose of the Executive Summary is to offer a brief synopsis of the key issues and recommendations found in the study as an overview of the complete report. It is not intended to provide the reader with a detailed analysis of the results in a few pages; nor is it intended to direct attention to certain issues or suggest that others, developed in more detail in the main body of the report, are less important. The complete report

should be read, in all of its detail, to gain a full understanding of the issues facing the Gloucester Fire Department as evaluated by Municipal Resources, Inc.

It is our sincere hope that this report will be used by the City and the fire department's leadership and membership as a road map to improving the delivery of fire and emergency medical services in the community. The department clearly has the potential to become an effective, highly trained and motivated organization that meets or exceeds nationally recognized standards for operational readiness. The challenges are many, but as will be seen, many of the recommendations can be accomplished within existing budgetary restrictions. The City and the fire department should determine a reasonable time line and plan for adopting the recommendations that have been proposed by the MRI fire study team.

Municipal Resources, Inc. (MRI) of Meredith, New Hampshire, was engaged by the City Council of Gloucester, Massachusetts, to conduct a management audit of the fire department as required by the City Charter. Such a review assesses the manner in which fire and emergency medical services (EMS) are provided by the City and offers recommendations for potential improvements. For this initiative, MRI assembled a team of three former fire chiefs to take an in depth look at the Gloucester Fire Department and how it is organized to provide services. This research led to a snapshot view of the department in the spring of 2009. The MRI fire study team spent time with key personnel of the Gloucester Fire Department to gain an understanding of the organizational, operational and management systems and approaches currently in place. The team then compared and contrasted the current structures against contemporary practice and convention.

The MRI fire study team conducted extensive interviews both inside and outside the department; offered a confidential survey to all department employees to identify attitudes and perceptions within the department; inspected fire stations; evaluated equipment; reviewed and analyzed numerous documents and records; and collected and evaluated data from comparable communities. Further details concerning the scope of the project and the data used are contained in Chapter 4, *Introduction and Scope of Work*.

MRI identified a significant number of areas that require improvement within the Gloucester Fire Department. Although some practices do meet contemporary standards for municipal fire and EMS agencies, many do not. It appears that the Gloucester Fire Department has been resistant to modernization of policies and practices that are common in similar departments. It would appear that for many years, the fire department has not been required to achieve a level of fire protection services that the residents deserve in keeping with national best practices.

The role of MRI is to identify immediate and/or potential problem areas and make recommendations for improvement. The complete report contains a great deal of information and numerous recommendations for the future. Our purpose is not to

embarrass the department or any individuals, but rather to point the way for progress to be made. The hope and expectations that come with the delivery of a report of this nature is that with time and direction, many of the recommendations will be adopted and result in a much better functioning organization.

The mission performed by the fire department is one of the fundamental functions of government: to ensure the safety and protection of its residents and visitors. While there are several nationally recognized consensus standards that can provide guidance, ultimately, the expectations for the quality and quantity of fire and EMS services provided in each community must come from its residents and other taxpayers. There is no "right" amount of fire protection and EMS delivery. It is a constantly changing level based on the expressed needs of the community. It is the responsibility of elected officials to translate community needs into reality through direction, oversight and the budgetary process. It is their unenviable task to maximize fire, EMS and other services within the reality of the community's ability to pay.

OBSERVATIONS

MRI has identified six (6) areas of major concern:

1. Lack of up-to-date department policies and rules
2. Lack of a formal training program
3. Obsolete, inadequate and unsafe Central Fire Station
4. Inadequate emergency communications capabilities
5. Lack of fire pre-planning and in-service inspections
6. Lack of an adequate fireground safety program

Lack of Up-to-date Department Policies and Rules

The use of rules and regulations, operational procedures and various other forms of written communications are vital parts of a fire department's overall operations. Rules and regulations establish expected levels of conduct and general obligations of department members, identify prohibited activities and provide for the good order and discipline necessary for the credible operation of a modern emergency services organization. Operational procedures insure the consistent, effective, efficient and safe operation of various aspects of the department's operations, both emergency and routine.

The existing Operations Manual consists of three books: Organization; Routine Operations; and Emergency Operations.

Many of the operational procedures are outdated and some of them are more than 25 years old. A majority are between 10 and 20 years old. None of them appear to have been reviewed, revised or updated. Staff interviews confirmed that this is the case. Attempts by some senior staff members to periodically update procedures were met with frustration when an updated procedure was never issued by management, or if it was, it bore little resemblance to the proposed and submitted revision. It is also important to note, that while some procedures do make reference to various documents, including National Fire Protection Association (NFPA) standards, because the procedures are so old, the NFPA standard being referenced has probably been revised several times, rendering the referenced sections inaccurate.

The procedural manuals that were provided to MRI as part of the requested documentation to be evaluated included a number of procedures that contained serious inaccuracies regarding current fire department operations and equipment. We also noted the lack of several mandatory plans/programs including a Respiratory Protection Plan and Bloodborne Pathogens/Exposure Control Plan.

A complete revision of fire department procedures and policies will improve operational efficiency, establish measurable performance and evaluation criteria, and will improve employee performance and morale by establishing defined expectations. The department's new operations deputy chief, with the support of Chief Dench, has reportedly commenced writing some new operational procedures, and revising a few existing ones. However, in order to maximize the benefits of this endeavor it cannot be performed in a vacuum. Input should be solicited from the department membership, possibly through formation of a committee that will be tasked with this responsibility. The required mandatory plans should be developed as soon as possible.

Lack of a Formal Training Program

Training is, without question, one of the two most important functions that a fire department should be performing on a regular basis; the other being response to emergency incidents. One could even make a credible argument that training is, in some respects, 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 on-going training program is absolutely critical to the fire department's level of success.

Under the current leadership, the department has begun to place emphasis on training. Training has recently been completed on several important subjects including incident management and rapid intervention team/firefighter rescue. However, the fire

department does not have a training plan, does not have a training policy, and does not publish a training calendar. Although many members of the department have earned college degrees, "hands-on" firefighting skills are deficient due to the lack of regular, performance-based training. Despite its size, the Gloucester Fire Department does not have a senior officer dedicated full-time to the training function. There is clearly a need for daily, documented training that is based on organized lesson plans.

With few exceptions, the department has not encouraged the use of outside training resources, such as the National Fire Academy or the Massachusetts Firefighting Academy. Once a probationary firefighter graduates from the mandatory classes at the Massachusetts Fire Academy, no further training or certification is required. Supervisors are not required to hold fire officer certifications, and there is no system for professional development in anticipation of promotion.

EMS continuing education and refresher training is performed in accordance with state regulations.

The City should establish a new position of assistant fire chief. This non-union position would serve as the second-in-command of the fire department and would be the training officer. The department should implement a comprehensive training plan that includes daily, in-service training on practical skills; specialized training; supervisory and leadership training; and professional development.

Obsolete, Inadequate and Unsafe Central Fire Station

The adequacy, quality and appearance of fire station facilities have a great impact on the performance of the department as a whole. Attractive, functional, clean, and well-designed quarters contribute substantially to the morale, productivity and operational effectiveness of the agency, as well as to its public image, dignity and prestige. Well-designed fire and EMS facilities enable staff to perform their duties efficiently and effectively. As a facility ages, it may no longer meet the needs of an evolving department, thus negatively affecting morale, efficiency, safety, security, technology and overall efforts to provide quality fire, rescue, and emergency medical services. Old and obsolete facilities are also expensive to maintain due to inefficient energy systems.

The Central Fire Station is obsolete and dysfunctional in all respects. It presents significant hindrances to the safe and efficient operation of the fire department, and building occupants are at significant risk from a number of fire safety hazards. Due to the age and condition of the central station and current space and usage needs, we believe that it is impossible to economically upgrade or renovate the building.

The 84-year-old Central Fire Station has long outlived its usefulness to the City of Gloucester. There is no practical way to renovate or update this facility to meet the needs of a modern fire department. Therefore, we strongly recommend that the City

take immediate steps to design and construct a new central fire station that can also serve as the City's emergency operations center for disasters.

Inadequate Emergency Communications Capabilities

An efficient communications system is central to the full spectrum of services delivered by a fire department. Redundancy must be built into the system so that the failure of one or more components will not compromise emergency operations. There must be interoperability between systems to ensure that the fire department can communicate with Federal, state, regional, mutual aid and other local agencies during a major incident or a catastrophic event.

Emergency 9-1-1 calls are relayed to the fire department from the Gloucester Police Department dispatch center in an inconsistent fashion. Calls are sometimes relayed over the non-emergency business telephone line. The fire department does not record incoming emergency calls or two-way radio traffic. The existing two-way radio system does not provide complete, reliable coverage throughout all sections of Gloucester. The department's telephone system does not have enough capacity for even routine fire department business activities. The callback system for off-duty personnel is obsolete, although a modern recall system is being installed. There are not enough portable radios available for off-duty personnel recalled for emergencies to use, which is a significant safety concern. There is no security for the fire department alarm room. An on-duty firefighter performs dispatching functions, which eliminates the availability of that individual for fireground duties.

All aspects of the fire department's communications system would be significantly enhanced through affiliation with a regionalized emergency communications center. The City should participate in the proposed Essex County public safety regional dispatch center effort that is under development.

Lack of Pre-Planning and In-Service Inspections

Fire prevention should be promoted as a key component of the vision of the Gloucester Fire Department and should be a major aspect of its primary mission. Aggressive fire prevention programs are the most efficient and cost-effective way to reduce fire risks, fire loss, and fire deaths and injuries in the community. Every member of the department should have a responsibility for fire prevention.

There is currently no in-service inspection or formal pre-fire planning program conducted by on-duty companies. On-duty personnel should be assigned the responsibility for "in-service" inspections to identify and mitigate fire hazards in buildings and to familiarize firefighters with the layout of buildings, identify risks that may be

encountered during firefighting operations, and to develop pre-fire plans. Pre-fire plans enable the department to operate more efficiently and safely at fire incidents.

The department should establish a formal in-service fire safety inspection program. On-duty companies should conduct regular fire safety inspections of buildings within their respective response districts. The purpose of these inspections is to: a) identify and mitigate fire hazards and fire code violations; b) enable firefighters to become thoroughly familiar with buildings, including the building design, layout, structural conditions, building systems, and hazards and challenges to firefighting operations; c) educate property owners and occupants on good fire safety practices; and d) establish a positive relationship with property owners and occupants.

The department should establish a formal fire pre-planning program. The purpose of a fire pre-planning program is to develop a fire response plan for buildings in the City. A pre-fire plan includes data such as the occupancy type, floor plans, construction type, hazards to firefighting, special conditions in the building, apparatus placement plan, water supply plan, and forcible entry and ventilation plan. Pre-fire plans should be reviewed regularly and tested by tabletop exercises and on-site drills. In addition, the department should develop a plan to make pre-fire plans accessible on mobile data terminals (notebook/laptop computers) on fire apparatus for use en route to an incident and while on-scene.

Lack of an Adequate Fireground Safety Program

Of primary importance to fire department operations at any incident is the adherence to recognized safety procedures and practices. Failure to do so can result in death or injury to firefighters, building occupants and innocent bystanders, and can also result in the total failure of fire department operations. An established safety program is a key component of the incident command system (ICS).

Until recently, the department had not adopted a formal ICS system. In response to a recommendation in the Lorraine Apartment Building Fire After Action Report, the City appropriated funds to enable the fire department to train all personnel in ICS. The initial training has recently been completed. The implementation of ICS occurred after the site visits by MRI had been completed; therefore, we have not evaluated the performance of the fire department's ICS system.

A critical component of ICS is the establishment of the role of safety officer to monitor conditions at an incident scene to ensure that appropriate safety procedures are being followed. The Gloucester Fire Department has not instituted a formal safety officer program as of the drafting of this report. Written procedures concerning operational safety are either outdated or non-existent.

The lack of an organized training program compounds the department's vulnerability to a catastrophic fireground incident that could result in death or injury to firefighters.

The department should establish a fireground safety officer program. All department officers should receive safety officer training, and an operational procedure should be implemented that results in a guaranteed response of at least one additional chief officer (in addition to the on-duty deputy chief) on every working/all hands incident. Safety should be the highest priority for all operational policies and procedures and training activities.

IN CONCLUSION

The full body of this report contains 229 recommendations in 24 Chapters. The report should be studied in its entirety to gain a complete picture of MRI's recommendations. While the recommendations are numbered, they have NOT been placed in any preferential manner or order of importance. The numbering is for reference purposes only. The areas that need improvement are not insurmountable or beyond the administration's ability to deal with them. However, there are a very large number of serious issues facing the Gloucester Fire Department. City and department leaders should prioritize the recommendations and coordinate solutions based on time, personnel, and fiscal realities.

In order to address the recommendations that have been identified in this report, the City and the department should:

1. Approach them strategically and systematically.
2. Use them to develop a long-term strategic plan for change and improvement.
3. Break them down to reasonably sized components. Categorize them as short-term and long-term goals, i.e., items that can be accomplished within existing resources and items that will require additional funding and/or time to accomplish in the coming years.
4. Refer to them when making recommendations, check them off as they are accomplished, and most importantly, recognize the positive achievements publicly.

CHAPTER 2

BACKGROUND AND DEMOGRAPHICS



COMMUNITY PROFILE GLOUCESTER, MA

March 2009



Source: www.seacapeann.com

HISTORY AND SETTING

Gloucester was founded by the Dorchester Company and was chartered in 1623 by James I. The first settlers landed at Half Moon Beach and settled nearby. However, the settlement was abandoned in 1626 and its residents moved to Naumkeag, present day Salem, Massachusetts. Later on, the area was resettled. It was initially incorporated in 1642. Gloucester was named after the great Cathedral City in Southwest England. Originally, Gloucester included the town of Rockport. However, the village was separated on February 27, 1840. The City of Gloucester was incorporated in 1873. [From: www.citytowninfo.com]

Gloucester, along with Rockport defines Cape Ann's pinnacle. The northeastern Massachusetts community is bound by Essex, Manchester by the Sea, and Ipswich (just barely!) on the west, Rockport to the east, and the Atlantic Ocean to the north and south (specifically Ipswich Bay and Massachusetts Bay, respectively). The City is located 27 miles northeast of Boston and about 245 miles from New York City. With its 41.5 square miles (26.0 land area), Gloucester is a community intertwined with historical heritage, natural beauty, and traditional port activity. The City strives to capitalize on its treasured past, natural splendor, and generally diverse economy as its base for balancing growth and development without causing detriment to the quality of life residents, businesses, and visitors expect. Most concentrated growth is focused in three distinct forms of land use – harbor and waterfront-related, downtown related, and village/neighborhood-related. Notably, that historic pattern of growth has respected the City's geographic terrain and other important natural areas. But, due to its suburban location to Boston, ease of access from major highways, and its coastal attractiveness, there is constant pressure for significant in-fill growth along the coastline and other scenic areas of the City. As such, Gloucester focuses its resources so the City continues as an attractive community in which to live, promotes economic vitality for new and existing business, and remains a long-term focal destination for visitors.

DEFINITION OF THE “COMMUNITY”

What is Gloucester's identity? Perhaps unlike many communities of the past, it is not any one central place, industry, theme, or folktale. Rather, the community is the sum of its parts. It is the rich history inclusive but not limited to Colonial and Revolutionary forefathers, home to internationally renowned painters Winslow Homer and Edward Hopper, and its widely recognized “Fisherman” tribute to those lost at sea. It is the ability to foresee a thriving seaside community for its 30,500 residents and its ever-challenging and growing summer visitor base. It is continuing success to maintain a personal identity while recognizing the influence of Boston's growth and the need to collaboratively work with neighboring municipalities to “push” back. Its unwavering support of its picturesque shoreline, bustling harbors and waterfront rooted in family-owned commercial fisheries, and a downtown catering to the entire Cape Ann region balanced with stewardship of its historical context and natural resources a plenty. It is the comfort citizens feel about Gloucester as a place to live due neighborhood diversity (e.g., Annisquam, Rocky Neck, Fort Square, and Lanesville), an abundance of recreational opportunities, and its proximity to urban activity in a suburban region. And, it's all the rest...

SELECT DEMOGRAPHICS

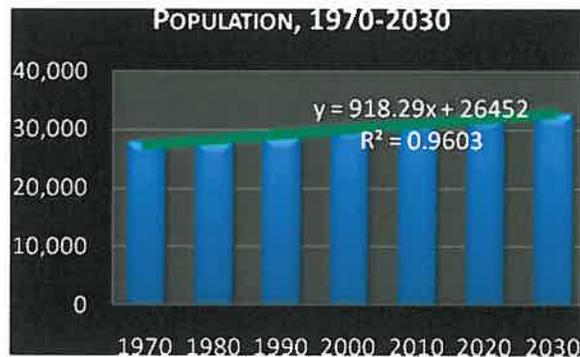
Latest population estimates place the City's population at 30,308 persons. Refer to below table and graph showing Gloucester's population trends.

POPULATION, 1970-2007			
Year	Population	#Δ	%Δ
1970	27,941	---	---
1980	27,768	-173	-0.62%
1990	28,716	948	3.41%
2000	30,273	1,557	5.42%
2001	30,549	276	0.91%
2002	30,627	78	0.26%
2003	30,595	32	-0.10%
2004	30,504	91	-0.30%
2005	30,403	-101	-0.33%
2006	30,377	-26	-0.09%
2007	30,308	-69	-0.23%

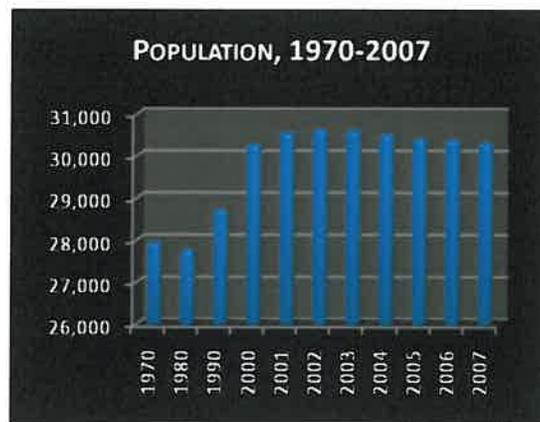
Note: 2001-2007 figures are estimates

Sources: Census 1970-2000 & MA Dept of Revenue, Div of Local Services

In addition, the Massachusetts Area Planning Council (MAPC) recently released population projections. According to those figures, Gloucester's resident population is expected to reach 32,742 by 2030.



Source: Census 1970-2000 & MAPC's MetroFuture: Making a Greater Boston Region, May 2008



The City's approximate 30,300 residents predominately reside in owner-occupied housing attributing to a land area density of about 1,165 persons/sq. mile (i.e., not including the summer transient population). According to the latest US Census (which reports a population of 30,273 persons), there is a greater number of women (52.1%) than men (47.9%) living in Gloucester. Resident median age equals 40.1 years and the population predominately is white (97.0%). Based on occupied housing units, average household size is 2.60 persons while average family size equals 3.00 persons. Over sixty-two percent (62.7%) of households are family households—48.8% are married-couple families, 20.2% are families with children under 18 years of age, and 10.6% are female householder (with no husband and over half of those women have children under 18 years of age). For non-family households (37.3%), 30.7% are householders living alone and 11.4% are 65 years of age or older.

In order to examine trends in household/family size, unfortunately, the US Census cannot be compared from decennial to decennial due to logistical survey data collection changes made for the 2000 Census. However, a comparison can be made using total

housing units (i.e., combination of occupied and vacant units). The following table and graph show Gloucester's population per total housing unit. The trend since 1970 indicates a decline in the number of persons per unit, which matches national trends. If the trend from 1970 to 2000 continues, by 2030 the number of persons per housing unit could dip as low as 1.5 – [To confirm such a low figure, it's recommended that additional analysis be conducted to include study of at least in-/out-migration, birth/death statistics, age categories, housing stock and inventory, and inclusion of the impending 2010 US Census].

PERSONS PER HOUSING UNIT, 1970-2000			
Year	Population	Housing Units	Persons / Housing
1970	27,941	10,505	2.660
1980	27,768	12,040	2.306
1990	28,716	13,125	2.188
2000	30,273	13,958	2.169
2010	31,311	N/A	See trend graph
2020	32,125	N/A	See trend graph
2030	32,742	N/A	See trend graph



According to state labor and industry statistics, the City's January 2009 labor force comprised 16,814 employees which is a growth of 369 workers since 2000. The unemployment rate in January 2009 dramatically rose to 11.1%. Comparatively, in 2000, the rate was 3.7% and in 2008, the rate was 6.4%. Of the 1,041 businesses needing to file reports to the state's labor and industry department, the 2007 average weekly wage equaled \$996. Fifty-seven (57) of the businesses were in the Manufacturing category with an average weekly wage of \$1,851 and 2,811



employees—notably the highest wage and greatest number of employees in all categories. Rounding out the top five included: Health Care & Social Assistance category (75 businesses; 1,381 employees; \$769 average weekly wage); Retail Trade (113; 1,227; \$548); Accommodation & Food Services (98; 972; \$332-lowest wage in all categories); and Other Services, Ex. Public Admin (140; 638; \$395).

City-Data.com reports several 2007 statistics related to Gloucester. The on-line source put median household income in several race-related householder categories as follows:

White, non-Hispanic	\$58,915
Black or African-American	\$57,659
Asian	\$67,990
Some other race	\$56,545
Two or more races	\$28,538
Hispanic or Latino	\$43,206

The data source also provided housing-related information as follows:

Median house or condo value, estimated	\$379,555
Mean price:	
Single-family, detached	\$487,484
Townhouse and other attached	\$412,479
Duplex	\$485,560
3-4 unit structures	\$447,105
5 or more unit structures	\$269,328
Median contract rent	\$861
Median rent asked for vacant for-rent units	\$871
Median gross rent	\$954

SOME COMMUNITY INFRASTRUCTURE

The principal highway to/from Gloucester is Route 128, with tertiary access to Interstates I-93 and I-95. Routes 127 and 133 also serve the City. Refer to the map at the end of this section. Notably, the Boston MPO in 2005 indicated that Route 128 in the Manchester/Gloucester area was under 75% capacity. Commuter rail service is available from the Gloucester and West Gloucester Stations to North Station (Boston). Travel time from Gloucester Station is about 58-65 minutes and there are 20 available MBTA parking spaces. West Gloucester Station takes about 53-60 minutes and is served by 44 parking spaces. Gloucester maintains membership in the Massachusetts Bay Transportation Authority. In addition, the town besides having access to Logan Airport has access to the Beverly Municipal Airport—a reliever (RL) facility with non-precision instrument approaches available.

The Gloucester School District relies on eight public schools to educate its children. For the 2009-10 academic year, enrollment is estimated to equal:

<u>School</u>	<u>No. Students</u>	<u>Grades</u>
Fuller	74	Pre-K
Beeman Memorial Elementary School	269	K-5
East Gloucester Elementary School	266	K-5
Plum Cove Elementary School	200	K-5
Veteran's Memorial Elementary School	251	K-5
West Parish Elementary School	401	K-5
O'Malley Middle School	797	6-8
Gloucester High School	<u>1,104</u>	9-12
Total, PreK-12	3,362	

At the municipal level, the City website lists many government services offered by the community. Many of those offerings may be relevant to first responder agencies and their future needs/planning. Several are listed below:

- Transfer/compost station off Dogtown Road.
- Seven public beaches.
- Twelve public cemeteries.
- Sewer/wastewater and water supply systems that have suffered Clean Water Act violations and are suffering from outdated infrastructure.
- Union contracts soon to expire balanced with fiscal issues at the City level.
- Transportation & pedestrian issues (e.g., Gloucester Cross/Sam Park and influx of summer residents and visitors).
- Implications of the Fire Department's "rolling closing strategy" along with all public safety department reductions in force and reductions in overtime.
- Status of a central public safety building?

SUMMARY OR, RATHER, "DISCLAIMER"

The above information is intended to provide a community "snapshot" of Gloucester. It is not intended to be all-inclusive or comprehensive. For the City's first responders it serves to put the City into some context as the department works to carry out the recommendations of this study. However, caution here is warranted. The above offers a general picture of the resident or citizen population. While significant, summer residents (maybe equal to about one-third of the resident population¹), visitors, and other transient persons are not adequately described in the summary. This occurs only because a source of reliable information does not appear to exist.

¹ Estimate of summer residents taken from the on-line (www.mass.gov) Gloucester, Essex County community profile "Narrative." Massachusetts Department of Housing and Community Development with reference that the community provided the narrative.

CHAPTER 3

SUMMARY OF KEY RECOMMENDATIONS

The following is a summary of key recommendations from each of the chapters. It is not all-inclusive or arranged in order of importance.

It is important to consider all recommendations in their proper context; therefore, the reader should not utilize this chapter as a substitute for reading the entire report. There are 229 specific recommendations found in this report. This section includes the top 100 recommendations that MRI prioritizes as central to the success of the Gloucester Fire Department. Recognizing the realities of the current economic challenges, an asterisk (*) denotes those recommendations that can likely be implemented at no cost or minimal cost.

FACILITIES

1. The 84-year-old Central Fire Station has long outlived its usefulness to the City of Gloucester. There is no practical way to renovate or update this facility to meet the needs of a modern fire department. We strongly recommend that the City take immediate steps to design and construct a new central fire station. The design of the fire station should include, but not be limited to the following:
 - Adequate space for fire apparatus, both current and future
 - Compliance with nationally recognized standards for fire station design and operation
 - Energy efficiency
 - A complete, automatic fire sprinkler system and smoke detection system
 - Modern training capabilities
 - Adequate, secure office space
 - Adequate, secure storage for equipment and records
 - Safe and secure living quarters for on-duty personnel

- Adequate apparatus exhaust system
- Handicapped accessibility for all areas
- Capability for decontamination and cleaning of firefighter protective clothing and equipment
- Vehicle maintenance area
- Adequate parking for staff vehicles and personal vehicles of on-duty personnel
- Adequate space for outside training
- Improved emergency response traffic patterns
- Building security
- Building integrity and capability for continuity of operations during disasters (e.g. emergency power, seismic protection, protection from flood and high winds, food storage, emergency medical supplies, redundant systems for water supply, sewage, and communications, etc.)

The American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111-5) provided the Department of Homeland Security with \$210,000,000 to fund the construction and modification of fire stations. The program will be administered by the Assistance to Firefighters Program Office under FEMA's Grant Programs Directorate. The grants under this new program will be awarded directly to the fire departments on a competitive basis. In order to improve the City's eligibility, we recommend that steps be taken to:

- Include the construction of a new fire station in the City's master plan and capital improvement plan
- Identify a site for the new fire station
- Develop a preliminary conceptual design and cost estimate

NOTE: During the drafting of this report, the City submitted an application for a fire station grant. We commend the City and the fire department for this effort.

2. *We have serious concerns about the life safety conditions in the Central Fire Station. Because of the shift schedule, personnel are provided with the opportunity to sleep during the overnight hours. The lack of a second means of egress, the lack of a fire safety separation between the first and second floors and the lack of an automatic fire sprinkler system, place on-duty personnel at significant risk from fire. As an immediate, stop-gap measure, we recommend that a fire watch system be established immediately. This can be accomplished by one of two methods:
 - Provide the alarm room watch-stander with a portable phone and require him/her to make frequent rounds (no less than one per hour) of the entire building to check for fire, OR
 - Require one additional firefighter to stay awake to make frequent rounds of the building to check for fire.

All activities of the person assigned to the fire watch should be documented in writing.

3. The Magnolia Station should be evaluated by a structural engineer to determine the extent of repairs that are needed to the roof and other portions of the building that have deteriorated. A plan should be developed to repair and renovate this building or to replace it.
4. Disconnect switches should be installed and interfaced with alarm notification systems on all kitchen stoves to automatically shut them off to prevent kitchen fires during responses to alarms.

VEHICLE FLEET

5. The department should review the recommendations in NFPA 1911, *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus* (National Fire Protection Association, 2007 edition) and update and revise its vehicle fleet maintenance program.
6. *The department should establish a daily apparatus inspection and serviceability procedure that includes a written or electronic report form. This inspection would be the equivalent of a daily pre-trip inspection as outlined in commercial driver manuals. NFPA 1911 also has a section in the back of the standard with suggestions for routine vehicle and component inspection and testing. The daily inspection should also include an inventory and serviceability check of the tools, equipment, and (Self-Contained Breathing Apparatus) SCBA that is carried on the apparatus.

7. *The department should establish an annual program of pump testing in accordance with NFPA and ISO standards. All tests and any corrective action taken should be documented.
8. *The department should establish an annual program of aerial and ground ladder testing in accordance with NFPA and ISO standards. All tests and any corrective action taken should be documented.
9. The on-duty firefighter mechanic program should be continued. A senior mechanic should be designated with the responsibility of coordinating the maintenance program. The senior mechanic should report to a captain or deputy fire chief, not the fire chief. The supervisory officer and/or the senior mechanic should have responsibility for developing and administering the vehicle maintenance budget.
10. *In preparation for the annual budget process, the department should prepare a vehicle replacement plan that projects all vehicle replacement, refurbishing and purchase needs for a minimum of ten years. Due to the extremely high cost of fire apparatus and the significant lead-time required for specification development, bidding and manufacturing, purchasing of this equipment should be carefully scheduled to minimize spikes in the budget. If the purchase of fire apparatus is classified as a capital budget appropriation by the City, the replacement plan should also be included in the City's capital improvement plan. Time estimates for apparatus replacement vary depending on usage and condition, but a practical goal for fire pumpers is ten years in front-line service and twenty to twenty-five years for overall service. Refurbishing/overhaul of major apparatus at least once during its service life is often warranted to ensure the safety and functionality of the vehicle.
11. The fire department should seek funding for the design and acquisition of a fire-rescue boat that is capable of operating in the harbor and in coastal waters. The firefighting capabilities of the boat should be based on a risk assessment of the waterfront, including buildings, facilities and the types and size of vessels that frequent the area. The boat should be capable of transporting EMS patients, and consideration should be given to response capabilities to environmental spills. The boat should be designed for year-round use and kept in a ready state in the water. Federal funds may be available for the purchase of a boat. We recommend that the City review the recent fireboat acquisitions made by Portland, ME, and Portsmouth, NH, for design ideas and risk assessment strategies.

FIRE DEPARTMENT EQUIPMENT

12. *The department should inventory all equipment and review compliance with NFPA, ISO and Occupational Safety and Health Administration (OSHA) criteria. The inventory should be updated annually.
13. *The department should establish a formal replacement plan for equipment so that equipment can be replaced on an incremental, scheduled basis. The regular replacement of large cost items such as hose and SCBA on an incremental basis will avoid major one-time increases in the operating budget. The life expectancy of these items can be estimated based on usage and manufacturer's recommendations.
14. The department should maintain a supply of spare turnout gear (coats, pants, gloves, hoods, helmets, etc.) for use when turnout gear is damaged, is being cleaned or has been placed temporarily out of service for drying/thawing during winter operations. The department should adopt and enforce an updated standard operating procedure concerning the specification, purchase and use of station uniforms to ensure compliance with the most current NFPA and OSHA standards and to ensure the consistent and professional appearance of fire department members.
15. *The department should purchase a supply of spare SCBA masks in a variety of sizes. A minimum of one spare mask of each size should be placed on each apparatus for emergency use in the event of the failure of a mask during emergency operations.
16. *An annual schedule of fit-testing for SCBA masks should be established in accordance with the requirements of the OSHA *Respiratory Protection Standard*, 29 CFR 1910.134, and NFPA 1500, *Standard Fire Department Occupational Safety and Health Program* (National Fire Protection Association, Quincy, MA, 2007 edition).

COMMUNICATIONS

17. *Receipt of emergency response requests for fire and medical emergencies should be immediately forwarded to the fire department without delay by the police department. The 911 system should be utilized as the emergency line rather than the fire department business line. A thorough review of the policies and procedures relative to this process should be conducted jointly by both departments and enforced consistently. The City should explore the feasibility of enabling the simultaneous answering of 9-1-1 calls by the fire department dispatcher, or the ability to relay the actual caller to the fire dispatcher, along with ANI (automatic number identification) and ALI (automatic location information).

18. *The City should consider installing a direct "ring-down" telephone line between the fire and police dispatch centers to provide instant, secure communications between the two departments.
19. Additional portable radios should be purchased to ensure that during major incidents involving the recall of off-duty personnel, every responding member is equipped with a portable radio.
20. A signal strength audit should be conducted throughout the City and, if indicated, consideration of mobile repeaters should be undertaken to augment portable radio capability. Typically, a combination VHF/UHF system is employed for this function.
21. Fire alarm systems at all fire stations should be connected, supervised and monitored to provide notification of an alarm when stations are not occupied.
22. A digital recording and instant playback system should be installed on the fire department telephone lines and two-way radio system.
23. Additional outside trunk lines should be installed on the Central Fire Station internal telephone system.
24. *In conjunction with the police department, a communications continuity of operations plan should be established and tested.
25. *With the assistance of the police department, a security evaluation of the Central Fire Station should be conducted. Physical changes and procedures should be considered that would limit or deter unwanted intruders or vandalism.
26. All aspects of the fire department's communications system would be significantly enhanced through affiliation with a regionalized emergency communications center. The MRI study team is aware of the ongoing development of an Essex County 911 center, and we strongly recommend that the City participate in this effort.

FIRE PREVENTION, INSPECTIONS, INVESTIGATIONS & PUBLIC EDUCATION

27. *Fire prevention should be promoted as a key component of the vision of the Gloucester Fire Department and should be a major aspect of its primary mission. Aggressive fire prevention programs are the most efficient and cost-effective way to reduce fire risks, fire loss, and fire deaths and injuries in the community. Every member of the department should be responsible for fire prevention.

28. The department should restore the part-time clerical position to support the fire prevention program. This position would be responsible for administering a permit management system, scheduling fire inspections, filing, and other related duties.
29. *The fire chief should establish written procedures concerning the receiving and handling of payments for permits. This procedure should include:
- A permit numbering system
 - Providing customers with receipts
 - Elimination of cash transactions
 - Daily or weekly reconciliation of receipts, in accordance with City policy
 - Daily or weekly deposits, in accordance with City policy
 - Auditing of the permit receivables in accordance with City policy
30. *The department should maintain detailed statistics concerning fire prevention and inspection activities and produce an annual report that includes the following:
- Number of inspections by occupancy type
 - Number of permits by type
 - Revenues
 - Number of plan reviews by occupancy type
 - Number of acceptance tests observed/monitored by type of inspection
 - Number of in-service inspections by occupancy type
 - Public fire education activities
31. The department should continue to support training and professional development activities for the fire inspector and the deputy chief in charge of fire prevention. Current activities include attendance at the Fire Prevention Association of Massachusetts, Massachusetts Firefighting Academy, and the

New England Arson Seminar. Personnel should also be required to attend fire prevention and management courses at the National Fire Academy.

32. Training opportunities in fire prevention should be provided for fire officers and firefighters, with the goal of establishing fire prevention duties as an important component of career development within the Gloucester Fire Department. A program should be established that requires officer candidates and/or new officers to be assigned to full-time fire prevention duties for a minimum of six months. This type of program will strengthen their personal communication skills, will enable them to interact more closely with property owners and the business community, improve their knowledge of buildings in the City, and will provide them with expertise that will be valuable in their role as a supervisor and incident commander.

33. *The department should establish a formal in-service fire safety inspection program. On-duty companies should conduct regular fire safety of inspections of buildings within their respective response districts. The purpose of these inspections is to a) identify and mitigate fire hazards and fire code violations; b) enable firefighters to become thoroughly familiar with buildings, including the building design, layout, structural conditions, building systems, and hazards and challenges to firefighting operations; c) to educate property owners and occupants on good fire safety practices; d) to establish a positive relationship with property owners and occupants. In order to establish an in-service inspection program, it will be necessary to:
 - Train personnel on proper procedures
 - Develop standard operating guidelines for in-service inspections
 - Establish inspection schedules
 - Establish a system for documenting inspections and notifying property owners of fire hazards
 - Establish a follow-up inspection system to ensure that hazards have been mitigated
 - Require on-duty personnel to conduct regular in-service inspections of all building construction sites in the City

34. *The department should establish a formal fire pre-planning program. The purpose of a fire pre-planning program is to develop a fire response plan for buildings in the City. A pre-fire plan includes data such as the occupancy type, floor plans, construction type, hazards to firefighting, special conditions in the building, apparatus placement plan, water supply plan, and forcible entry and

ventilation plan. Pre-fire plans should be reviewed regularly and tested by tabletop exercises and on-site drills. In addition, the department should develop a plan to make pre-fire plans accessible on mobile data terminals (notebook/laptop computers) on fire apparatus for use en route to an incident and while on-scene.

35. *The City should establish a risk management and inspection program for City-owned and operated buildings and facilities. We recommend that the fire department be responsible for managing this program. Since facility security is a key component of a risk management program, the police department should also provide expertise and resources to the risk management program. The risk management program would be the first step toward a comprehensive disaster continuity of operations/continuity of government plan.

USE OF TECHNOLOGY

36. *In conjunction with the City IT Department, the Gloucester Fire Department should conduct a comprehensive inventory of its current computer hardware, and concurrently conduct a current and future needs assessment with regard to hardware requirements. This assessment should include its needs relative to up-to-date computers for all stations, key officers/personnel, the watch desk/alarm room area, as well as for apparatus and command/staff vehicles.
37. *In conjunction with the City IT Department, the Gloucester Fire Department should conduct a comprehensive assessment of current computer system databases, software capabilities and resources with respect to operational criticality and what is needed to support those systems.
38. The City of Gloucester and the Gloucester Fire Department should determine a feasible, reliable and cost effective way of connecting the Bay View and Magnolia stations into the fire department/City computer network(s).
39. *The Gloucester Fire Department should take steps to insure that the *Firehouse* database is utilized for all aspects of the department's management, operations and recordkeeping including incident reporting, training, inventory, fire prevention and inspections, maintenance, staffing and scheduling, personnel and pre-fire planning. For records such as personnel records and vehicle and equipment maintenance records, efforts should be undertaken to retroactively enter critical data. To the extent possible, information that is stored in databases other than *Firehouse* should be moved to the *Firehouse* database.
40. *The Gloucester Fire Department should continue to update its web site on a regular basis to provide its customers, and other interested parties, as much information as possible on fire safety, fire prevention, and the department's

profile and programs. The department should also work actively with the IT department to make on line permitting, inspection scheduling, etc. a reality.

POLICIES & PROCEDURES; RULES & REGULATIONS

41. *The Gloucester Fire Department should form a committee, as soon as possible, to perform a comprehensive update and revision of the Department's Operational Manual, including the addition of mission critical procedures such as, but not limited to, *Structure Fires, Basic Engine Company and Truck Company Operations, Rapid Intervention Team Operations, Marine Vehicle Fires, Vehicle Extrication Operations, and Thermal Imaging Camera and Automatic External Defibrillator Use*. The addition of numerous other procedures covering routine administrative operations and training procedures (a number of these are delineated as recommendations in other Chapters of this report); deletion of unnecessary procedures; and possibly restructuring the manual will be necessary. The committee should be comprised of members of each rank and include specific representation by a senior officer of the union. Due to the urgency of this task, and its significant importance to the Department's future success, the committee should be given whatever support is necessary to complete this task within one year.
42. *The Gloucester Fire Department should form a management-labor committee to develop a comprehensive, and stand alone, Rules and Regulations document that identifies, in detail, expected and prohibited behaviors. This document, which should be submitted for approval by the City Council, should then be distributed to and signed for by each member of the department.
43. *The City of Gloucester should negotiate with Local 762 of the International Association of Firefighters to remove the staffing provisions from the collective bargaining agreement and allow the operational procedure committee to develop a more flexible procedure that will allow for adjustments in staffing assignments (not levels) to be made as current conditions may warrant.
44. *The Gloucester Fire Department should immediately develop a comprehensive Respiratory Protection Plan in accordance with 29 CFR 1910.134 and a Bloodborne Pathogens/Exposure Control Plan in accordance with 29 CFR 1910.1030. Additional operational procedures that implement various components of these plans should also be developed. Annual training as required should then be provided to all personnel.

CITIZEN COMPLAINTS & INTERNAL DISCIPLINE

45. *The Gloucester Fire Department should develop a formal procedure for handling citizen complaints. The procedure should include a provision that verbal complaints should immediately be referred to the on-duty deputy chief for initial documentation and investigation, with the fire chief formally notified as soon as practical as determined by the severity of the complaint. The procedure should include a formal complaint form that could possibly be adapted from the police department's internal affairs complaint form. The procedure should include a provision that the fire chief will determine who will conduct the investigation and if necessary, will refer the complaint to the police department, City human resources department, or City legal counsel, if appropriate. The complaint should be fully investigated, the investigation documented in writing and the complainant (if known) and the personnel involved formally notified of the results. The disposition status of complaints should be recorded as: *Sustained*, *Not Sustained*, *Unfounded*, and *Exonerated*. If necessary, disciplinary action can be initiated. The procedure should specify that even anonymous complaints must be received and investigated and it should specify how completed investigation reports are filed and maintained.
46. *The Gloucester Fire Department should develop a procedure for the handling of formal commendations, thank yous and other positive acknowledgements of the department, its services and/or personnel, whether they are made verbally or in writing. The procedure should include a recommendation that the fire chief respond in writing to the person delivering the compliment, commendation, thank you, or acknowledgement. The procedure should include a provision that all department personnel are notified of the positive feedback that was received along with an acknowledgement by the fire chief. Finally, a copy of the letter, or a memorandum from the department if the feedback was verbal, should be placed in the personnel file of all personnel involved.
47. The Gloucester Fire Department should give consideration to the implementation of a procedure to actively seek feedback from "customers" to whom the department has provided service. It is recommended that this procedure involve a formal customer satisfaction survey instrument that can be sent to every customer, or at a minimum, is sent to some statistically valid and reliable sampling or percentage of those the department has served. In order to be effective, the feedback must be analyzed and, if necessary, corrective action taken on any identified deficiencies.
48. *The Gloucester Fire Department should develop a procedure for the handling of complaints from the public on fire safety and/or fire code related issues. The procedure should include a designated form for receiving the complaint and specify how it is processed depending upon the immediate availability of the fire inspector or fire prevention deputy chief to assess its severity and/or urgency.

Off-hour complaints should be forwarded to the on-duty deputy chief for evaluation. The procedure should designate how complaint investigations are documented and how the reports are filed and maintained for future reference.

49. *In conjunction with the union and the City's human resources department, the Gloucester Fire Department should develop a formal internal disciplinary procedure that is consistent with the City's existing Progressive Discipline Policy. This will result in discipline being administered much more consistently throughout the department. The procedure should delineate various levels or severity of infractions and what the recommended progressive discipline steps are for each level or severity of infraction. The procedure should also reiterate and/or expand upon the Disciplinary Article that should be contained in the Department's Rules and Regulations discussed in Chapter 11.
50. *The department should provide formal in-service training to all officers to ensure that all citizen complaints are handled properly and consistently.
51. *The department should provide formal training to all supervisors on the Progressive Discipline Policy.

MUNICIPAL AND DEPARTMENT PERSONNEL POLICIES, PRACTICES AND PERSONNEL EVALUATIONS

52. *The City of Gloucester should develop and implement a uniform and standardized policy for candidate selection, promotion, and special assignments. All employees should be fully aware of the requirements and/or qualifications necessary for special assignments or promotion.
53. *In order to comply with the Management Performance Evaluation Program policy that is already in place, the fire department should commence annual personnel performance evaluations on all personnel ranked captain and above, and including the EMS Coordinator.
54. *The City of Gloucester and the Gloucester Fire Department should negotiate with Local 762 of the International Association of Firefighters for the purpose of implementing a reasonable, fair, and objective annual performance evaluation program for all employees within the fire department. This performance evaluation would be separate and distinct from the routine skills proficiency evaluations recommended in Chapter 16, Training and Professional Development. However, the skill evaluations should be considered as one component of the overall performance evaluation.
55. *The City of Gloucester and the Gloucester Fire Department must make a formal determination where the "official" personnel file for each employee is located. A

policy should then be developed that spells this out. The policy should also identify how files for former employees are maintained. If the "official" file is maintained in the Personnel Department at City Hall, it would make sense, for convenience sake, for a duplicate file to be maintained in the fire chief's office at the fire department. A sub-folder should be created for all employee health records and related documents. Health records should be maintained separately from general documents within the file.

56. *The City of Gloucester and Gloucester Fire Department should negotiate with Local 762 of the International Association of Firefighters for the purpose of revising the light duty provisions to permit injured personnel to be returned to light duty at any time, including immediately, depending upon the nature and severity of their injury. The policy should also be revised to put firefighters on light duty on an alternative work schedule of day work, where they can accomplish various administrative tasks for the department.
57. *It is our understanding that the City has initiated the process to remove the position of fire chief from Civil Service. We concur and believe that the City should have considerable flexibility and discretion in the recruitment and selection of a future fire chief.

STAFFING & SCHEDULING

58. *In order to accurately analyze incident response times and number of personnel responding/on scene, in an ongoing manner, and compare them to established benchmarks, the Gloucester Fire Department should ensure that all information being entered into the Firehouse National Fire Incident Reporting System (NFIRS) database is complete and accurate. Additional data may need to be entered in order to develop the necessary statistics. This procedure should be contained in a written operational procedure.
59. The Gloucester Fire Department should take steps to achieve compliance with the response time and personnel benchmarks established by NFPA 1710 for a 90% compliance rate of the first arriving engine company at the scene of a fire suppression incident within four minutes or less and/or the entire full first alarm response, with a minimum of 16 personnel on scene within eight minutes. For EMS incidents, a unit with first responder or higher-level trained personnel should arrive within four minutes and an Advanced Life Support (ALS) unit should arrive on scene within eight minutes with the same 90% performance rate.
60. *The City of Gloucester should negotiate with Local 762 of the International Association of Firefighters for the purpose of redeploying firefighters stationed at Headquarters as follows: Reassign the fifth firefighter from Engine 1 and the Mechanic/ Houseman to Ladder 2, which would permit Ladder 2 to always

respond with a minimum of three (3) personnel and potentially up to five (5) firefighters if Rescue 2 was not out on a call.

61. *The Gloucester Fire Department, in consultation with the City administration, should analyze the short and long-term benefits, commitment, and any potential liabilities for the City of applying for a Staffing for Adequate Fire and Emergency Response (SAFER) Grant. Being awarded a SAFER grant could have a significant positive impact on the fire department's chronic staffing shortage, which will result in improved public safety. With the matching fund requirement of this program currently suspended, the decision that the City would need to make is if they could continue to afford the additional personnel after the grant funding ends in five years.
62. Contingent upon the City's conclusions regarding recommendation #61, above, the City of Gloucester should apply for a SAFER grant for sixteen (16) additional personnel. These personnel should be deployed to the West Gloucester and Bayview stations, permitting those engines to be staffed with four (4) personnel each to achieve compliance with NFPA 1710.
63. If the City of Gloucester successfully applies for and receives a SAFER grant, it should consider creation of the position of lieutenant in the Gloucester Fire Department. Those officers should be assigned to the West Gloucester and Bayview stations to insure adequate supervision on each platoon (see Recommendation #64 below). Consideration should also be given to assigning a lieutenant to Ladder 2 to provide proper supervision and provide a more manageable span of control at Fire Headquarters. The position of lieutenant will allow the necessary supervision to be provided in a more cost effective manner than if all of the officers were captains.
64. The position of captain assigned to sub-stations should be eliminated and replaced with a new position of lieutenant (see above). Sub-station officers, regardless of rank, should be assigned additional supervisory and staff functions. Alternatively, captains should be regularly re-assigned to headquarters on a rotational basis in order to more fairly balance their duties and to maintain their skill levels.
65. *The Gloucester Fire Department should insure that the revised operational procedure on EMS responses by engine companies is issued and implemented in order to reduce low priority EMS responses by engine companies.
66. *As established by City policy, and permitted by the collective bargaining agreement, the City of Gloucester and the Gloucester Fire Department should aggressively and consistently monitor and track use of sick leave and injury leave as ways to identify, and then take appropriate action to reduce, or even eliminate abuse.

FIRE & EMS OPERATIONS, ICS, SAFETY & MUTUAL AID

67. Under Chief Dench's leadership, the Gloucester Fire Department has begun to address many of the operational deficiencies that have been identified in this study. In order for these efforts to be successful, effective, and long lasting, the fire chief should initiate a formal department-wide master planning and risk assessment process. This project could have several components, including re-evaluating and re-affirming the department vision and mission, setting goals and objectives, establishing a prioritized schedule of completion, and conducting a risk assessment of the community, including the harbor/waterfront area. The risk assessment will enable the department to identify its operational priorities, which in turn will be useful during the preparation of the budget. There are many resources available to guide the department in the development of a master plan and risk assessment. However, the department should consider engaging an outside facilitator to provide guidance and support during the initial phases of this effort.
68. *The department should establish a fireground safety officer program. All department officers should receive safety officer training, and an operational procedure should be implemented that results in a guaranteed response of at least one additional chief officer (in addition to the on-duty deputy) on every working/all hands incident.
69. *The leadership of the fire department and the police department should meet regularly to identify and resolves issues of mutual concern. The goal of these meetings is to improve operational effectiveness and coordination. For example, the issue of police cruiser placement can be resolved easily with training and the development of a standard operating guideline. Police department personnel have identified actions by the fire department that affect their operational effectiveness. Topics that should be addressed include, but are not limited to:
- communications
 - training
 - operational tactics and response
 - incident command
 - crime scene and evidence control
 - scene safety and security
 - emergency medical services

- vehicle operations
 - disaster response
 - dissemination of information to the public
70. *The Gloucester Fire Department should take the lead in strengthening the mutual aid system in the region with training, drills, increased sharing of resources, and a more in depth assessment of the actual capabilities of fire departments to provide more formal mutual aid or automatic aid. The volunteer/call fire departments that border Gloucester may have better availability during evening and night hours, which could be factored into Gloucester's response procedures. Although the national trend toward regionalization of fire protection services has not been promoted heavily in New England, the Gloucester Fire Department should actively consider the feasibility of sharing resources, capabilities, and costs with neighboring jurisdictions, even if on a limited basis.
71. *In acknowledgement of the fact that they frequently operate in a minimal staffing mode, despite the operational challenges identified above, the Gloucester Fire Department should develop standardized tactical operations that will enable them to quickly develop, and place in-service, high volume fire flows of 1200 to 1500 gallons per minute (if the water supply will permit this), utilizing multiple lines/devices. This flow should be able to be developed within three (3) to five (5) minutes after arrival of an engine staffed with four (4) personnel.

TRAINING AND PROFESSIONAL DEVELOPMENT

72. The City of Gloucester should provide funding as soon as possible to permit the Gloucester Fire Department to create a second-in-command chief officer who is also responsible for overseeing the department's training program. This position should carry the rank of assistant chief and would be responsible for managing the department in the absence of the fire chief. The position should be exempt from state civil service in order to provide the City with maximum flexibility on recruiting and selecting a qualified individual for this position.
73. *Based upon the results of the needs assessment, the Gloucester Fire Department should begin the development of a comprehensive training program that addresses, but is not limited to: mandatory OSHA training, recommended NFPA training, every operational mission and responsibility of the department and specialized training and personnel/officer development. The training should comply with accepted and/or recommended practices and standards, should include standardized evolutions and should be consistent with Gloucester Fire

Department's operations and procedures. The training program should target each member for a minimum of twenty (20) hours of basic, in station training per month, supplemented by appropriate advanced and/or specialized training.

74. *Formal training of some type, lasting a minimum of two hours, should be mandated to take place on every duty day on every platoon. Personnel can swap off response assignments for training purposes to insure, as much as possible, that all personnel get to complete the training. Additional daily opportunities for training can be found during related activities such as daily/weekly apparatus and equipment inspections, building pre-planning activities, and short duration (10-15 minute) shift change and/or coffee break drills. Training should occur even on weekends and holidays, and can also be conducted during evening hours.
75. *A formal operational procedure on the completion of training reports should be developed. Training reports should, at a minimum, include the date, time training commenced and concluded, time duration of the training, the instructor, the officer in charge, names of all personnel trained, 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.
76. *The Gloucester Fire Department should develop a training file for each member that is kept in the Training Division and 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.
77. *As part of the development of a new comprehensive training program, the Gloucester Fire Department should implement periodic skills proficiency evaluations for ALL uniformed department 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, Gloucester Fire Department's operations and procedures.
78. Since a large percentage of its emergency responses are EMS related, the contractual job requirement that all personnel obtain and maintain an EMT certification for the duration of their employment should be reinstated.
79. *The Gloucester Fire Department should implement a formal officer training and development program, based at least in part on the NFPA Fire Officer Standards. There are several excellent programs available including from the International Association of Fire Chiefs and the Phoenix, Arizona, Fire Department. This

program can also include bringing well-known fire service experts and instructors to Gloucester to provide training for the officers and firefighters who may aspire to be officers. The department should further seek to require its officers to obtain a certain level of fire officer certification as a job requirement such as Fire Officer I for Lieutenant (if this position is created), Fire Officer II for Captain, Fire Officer III for Deputy Chief, and Fire Officer IV for Fire Chief.

80. The Gloucester Fire Department should make a concerted effort to send as many officers as possible to the National Fire Academy (NFA). Officers who meet the admission's criterion should be encouraged to enroll in the Academy's Executive Fire Officer Program. Training reports should be completed for any NFA training, and copies of certificates placed in the personnel and training files.

COMPENSATION

81. The collective bargaining agreement should be reviewed and updated. The practice of adding pages that contain the most recent changes to the front of the previous contract should be stopped. The current practice leads to confusion with out-of-date language remaining indefinitely.

FIRE & EMS REPORTING SYSTEM

82. *The Gloucester Fire Department should develop a comprehensive operational procedure on the completion of fire incident reports. The procedure should include, but should not necessarily be limited to:
 - a requirement that accurate dispatch, response, on location and in-service/available times be recorded for each unit that responded to the incident
 - a requirement that incident under control time be recorded for any working and/or significant fire or other incident
 - a requirement that the ranking officer/senior firefighter on the scene of the incident complete the primary incident report/narrative and that other officers/senior firefighters complete additional supplemental reports/narratives, as appropriate
 - a requirement that all necessary additional reports pertinent to the incident be completed fully and accurately, including appropriate supplemental narratives, fire, structure fire, apparatus, personnel and civilian, and fire service casualty reports

- a requirement that estimated property values and losses be completed for any fire incident
- a requirement that the officer in charge of the incident and the member completing the report be listed on the NFIRS–1 Basic report

EMERGENCY MANAGEMENT

83. The City of Gloucester should contact the Massachusetts Office of Emergency Management to request assistance in developing and executing an updated comprehensive emergency management plan. It is likely that federal grant money is available to support this effort. An effective plan should draw from a combination of all available public and private resources, including guidance from the Federal Emergency Management Agency (FEMA) and NFPA 1600, *Standard for Disaster/Emergency Management and Business Continuity Programs*, 2007 edition (National Fire Protection Association, Quincy, MA). Consideration should be given to developing the plan under the auspices of the Cape Ann Emergency Plan so that it includes all four communities in the immediate region. Since federal funding is available for this type of activity, the City should consider retaining a consultant to update the plan, to conduct training on the updated plan, and to facilitate at least one tabletop exercise to test the updated plan.
84. *As the City's Emergency Management Director (EMD), the fire chief should ensure that the emergency management plan is kept up-to-date, is revised as necessary, that resources are maintained as appropriate, that key personnel including the local elected officials are aware of their duties and responsibilities during a time of emergency, and that appropriate exercises are conducted on a periodic basis. Many of the duties and responsibilities of the EMD can and should be delegated to command and staff officers within the fire department and other City departments.

SENSE OF COMMON VISION

85. *Chief Dench should develop a formal process for developing a long-term vision for the fire department and to revise the department's mission statement. The current mission statement is more of a goals and objectives statement and should be updated. This effort could be included as part of the master planning process that has been recommended in Chapter 15, *Fire & EMS Operations, ICS, Safety and Mutual Aid*.
86. *Elected officials of the City should take an active role in setting appropriate goals and a vision for the fire department. City officials should include residents

and the department in an open and honest discussion within the goal setting process.

87. *The Mayor and the City Council should establish an annual goal-setting workshop with the fire chief to develop the sense of common vision necessary to improve the department and the quality of fire and EMS services the City receives.
88. *The Mayor, City Council, fire union and the fire chief must come to agreement on the proper role of the union when it comes to the operation of the Gloucester Fire Department. Unions have a lawful and legitimate say on issues of benefits and working conditions. However, there must also be an acknowledgment of the rights of management in dealing with administrative and operational matters that do not fall within the purview of the union negotiation process. Once a working consensus is achieved, agreement to live within its bounds must be acknowledged and maintained.
89. *Morale within the Gloucester Fire Department must continue to be improved. Efforts to develop a new sense of vision, maintain open lines of communication, delegate responsibility and authority, involve all members through participatory management, and institute training and professional development programs will help to expand a sense of pride in the organization.
90. *As part of the development of goals, objectives, and/or benchmarks, in a long-range strategic plan, the Gloucester Fire Department should identify and attempt to correct ISO deficiencies with a goal of seeking a reevaluation by ISO when appropriate and beneficial, to attempt to improve the current ISO rating.

FUNDING BY THE MUNICIPALITY, UTILIZATION OF GRANT FUNDING & FISCAL MANAGEMENT

91. *Future fire department budgets should be the result of on-going dialogue between the Mayor, the City Council, and the fire chief. Efforts on the part of the fire department to make budget submissions more transparent and to shift resources within the budget to meet current needs should be met with a positive response by the City Council and the Mayor.
92. *The fire department should continue to closely track and monitor overtime expenditures for the purposes of identifying trends, future needs, and justification for staffing levels. Leave use, by type, for each member of the department should also continue to be tracked for trends, patterns, and potential abuse.
93. Due to its critical operational importance, the City should ensure that adequate funding is provided to keep the West Gloucester sub-station staffed at all times.

94. *The fire department should maintain an up-to-date capital equipment plan.
95. *The City should explore the feasibility of assigning the police department business manager with similar duties in the fire department. This action would in essence make him the public safety business manager and would provide Chief Dench with much needed administrative assistance at an executive level.
96. *The fire department should identify and prioritize its most critical equipment, training, and/or operational needs and continue to apply annually to the Assistance to Firefighters Grant (AFG) program.
97. *The fire department should identify and prioritize its fire prevention and public fire education needs and apply annually to the Fire Prevention and Safety Grant (FP&S) program.

RELATIONSHIP WITH ELECTED OFFICIALS

98. *The fire chief should provide regular briefings and reports to the City Council concerning the operations of the fire department. The chief should communicate regularly with the Council to receive feedback on the performance of the department. Submission of annual reports should be reinstated.
99. *The fire department should consider offering building tours and ride-alongs to elected officials and other department heads to further familiarize them with fire operations. Officials could also participate in or observe training activities.

EVALUATION METHODOLOGIES

100. *The Gloucester Fire Department should seek to increase day-to-day compliance with the recommendations, and as appropriate, benchmarks found in NFPA Standards. This should include, but not necessarily be limited to, the development of operational procedures; training programs, lesson plans and performance evaluations; safety initiatives; equipment inspections and maintenance; and administrative operations.

CHAPTER 4

INTRODUCTION AND SCOPE OF WORK

INTRODUCTION

This report has been prepared pursuant to Gloucester City Ordinance 7-12 regarding the completion of a management audit of each City agency on a regular basis. The purpose of the management audit is to identify current organizational strengths, as well as, areas that may hinder or prevent the City agency from reaching its potential and to point out obstacles to the attainment of its goals. The review of the Gloucester Fire Department has included its current management practices, policies, fiscal controls, organization, staffing, vision and mission, goals and objectives, facilities, and department equipment.

The study reviewed the manner in which fire protection and emergency medical services are provided by the City. Using this review as a basis, MRI made a number of recommendations for improvements that take into consideration the present status of the fire department, as well as the financial ability of the City. MRI has recommended significant modifications to the department's current policies, practices and methods.

SCOPE OF WORK

The organizational assessment of the Gloucester Fire Department by MRI included a review of many areas of the department's operations including, but not limited to:

Training	Emergency Management	Capital Equipment
Public Education	Risk Management	Records & Reports
Technology	Inspections	Fire Investigations
Calls for Service	Statistics	Personnel Utilization
Procedures	Communications	EMS Quality Assurance
Vehicle Fleet	Equipment	Compensation

Mutual Aid	Incident Command	Staffing
Funding	Grants	Facilities
Vision & Mission	Morale	Leadership

Comparable departments were reviewed and studied for useful differences that might be beneficial for the Gloucester Fire Department to consider. Opportunities for cost savings and operational efficiencies were sought, and department operations and practices were compared against nationally recognized standards such as those promulgated by NFPA.

The MRI study team shares the frustration of the members of the fire department concerning the 1992 Study of the Gloucester Fire Department written by MMA Consulting Group. This document is extremely thorough and provided a full range of solid recommendations that, in our opinion, have been largely disregarded by the City of Gloucester and the Gloucester Fire Department in the intervening seventeen (17) years. The following is a listing of some of the major points made in the MMA study of 1992:

- The City should relocate Central Station and consolidate the Central Station with the East Gloucester Station.
- The fire department should operate substations with three-person crews.
- The fire department should create an additional deputy chief's position. The deputy chief should act as an assistant chief and be considered the second in command of the department. The assistant chief should be a non-union employee.
- The City's public safety dispatch services should be consolidated.
- The need for a more aggressive fire prevention program.
- Develop detailed training plans for the department.
- Explore regional approaches to service delivery.
- Ensure that there is a qualified safety officer on-duty or on call at all times.
- Fully develop the incident command standard operating procedures.
- Develop a health and safety program for firefighters.

- Review past progress toward reaching NFPA 1500, *Standard for Fire Department Occupational Safety and Health Program*.

During the evaluation of fire and EMS services, Chief Barry McKay retired and Deputy Chief Phil Dench was appointed to succeed him. Chief Dench and his command staff should review the MMA report for a historical perspective and then carefully review this 2009 management study by MRI.

METHODOLOGY

Following the selection of MRI for this assessment, key personnel from MRI and the City of Gloucester met to discuss implementation. Expectations and anticipated needs were established. A team of experienced fire and EMS consultants was assembled and began to review the requirements for this project. Meetings were held with the Ordinance and Administration Committee of the Gloucester City Council and the City Auditor was assigned the responsibility of point of contact for the MRI study team. An employee survey was developed and distributed to every employee with returns going directly to the MRI corporate office in Meredith, NH, for tabulation. The City auditor sent out a total of 78 employee surveys and 38 were completed and returned. The results of this survey were integrated into the appropriate Chapters of the report. The complete results of the survey are attached as Appendix A.

At MRI's request, the City of Gloucester assembled a great deal of data for review by MRI consultants. This information included:

- Copies of the fire budget
- City personnel rules
- Fire and EMS response statistical data
- Mutual aid data
- Current salaries for all positions
- Rules, regulations, policies and standard operating procedures of the department
- Demographic information
- Capital improvement plan

- Fire department annual report
- Copy of the collective bargaining agreement
- Organizational chart

The MRI fire study team made numerous visits to Gloucester during the course of the study. Those visits included the following activities:

- Introductory meetings with Mayor Carolyn Kirk and City Auditor Marcia McInnis
- Interviews with fire employees at an off-site location, at fire stations, and via telephone. Those department employees who chose to take advantage of this opportunity were asked a number of questions regarding the operation of the Gloucester Fire Department and were given the opportunity to provide their own observations. This information was extremely helpful to the team by helping us to focus on potentially serious issues and by giving us a perspective on the morale, attitude and motivations of the employees.
- Extensive interviews with outgoing Chief McKay and the newly appointed Fire Chief Phil Dench.
- Interviews with current and past leadership of Local 762, Gloucester Professional Firefighters, International Association of Fire Firefighters (IAFF)
- Inspection of all fire department facilities and equipment
- Interviews of deputy chiefs, fire inspector, EMS coordinator and several mechanics
- Review and analysis of records
- Review and analysis of EMS billing practices
- Tours of the City to evaluate hazards and risks in the community
- At the request of the MRI police study team, the MRI fire study team conducted a fire safety inspection of the police headquarters facility (see the *MRI Report on the Gloucester Police Department*, June 2009)

A survey questionnaire was specifically constructed for use with this assessment. Usually department employees are referred to a specific web site and the survey is taken on-line. In the case of Gloucester, where there was a very high level of suspicion regarding knowledge of who was completing the survey, paper surveys were distributed to each employee, with a stamped, self-addressed envelope to return the survey directly to MRI. A total of 38 fire department employees completed and returned the survey.

The MRI fire study team gathered information through research, observation and extensive interviews with individuals inside the department with subject matter expertise and historical perspective. Members of the Gloucester City Council were interviewed along with a number of department heads and key City employees. The team spoke with the fire chiefs of the comparable communities as it gathered data for comparison purposes. The MRI fire study team coordinated its efforts with the MRI police study team to ensure consistency in areas of mutual concern, including facilities, communications, and emergency management.

This report, which includes twenty-four (24) Chapters, plus Appendices, is the work product of several months of extensive observation, information gathering, research and analysis. The observations made within this report are believed to be accurate based on the information gathered and the combined judgment of the entire MRI fire study team. The resulting recommendations are based upon an acknowledgement that fire departments are living and constantly evolving organizations. They must constantly change and adapt to current, and anticipated, conditions and realities. A municipal fire and EMS service, while steadfastly holding onto traditions, is an organization that must be progressive and proactive, and requires a perpetual commitment to improvement. The modern fire service is constantly besieged with ever increasing demands from the public and must readily adapt to changes in technology, constantly evolving risks and hazards, and new generations of men and women entering this highly rewarding and challenging public service career. The delivery of high quality fire and EMS services requires energetic, enlightened, progressive and proactive leadership at all levels of the fire department. Every day must include an effort to improve and move forward.

MRI would like to take this opportunity to thank the City of Gloucester, the City Council, the Mayor and the members of the Gloucester Fire Department for their cooperation and assistance with this endeavor. We reserve a special thank you to City Auditor Marcia McInnis for her outstanding coordination efforts between MRI and the City. We especially appreciate the candor and integrity of Chief Phil Dench and the members of the Gloucester Fire Department who demonstrated their professionalism and genuine desire to improve and strengthen the fire and EMS services that they deliver to the citizens of Gloucester.

CHAPTER 5

FIRE DEPARTMENT FACILITIES

OVERVIEW

The adequacy, quality, and appearance of fire station facilities have a great impact on the performance of the department as a whole. For example, attractive, functional, clean, and well-designed quarters contribute substantially to the morale, productivity and operational effectiveness of the agency, as well as to its public image, dignity and prestige. Most citizens have little contact with the fire service and often make judgments which are, at least partially, based upon their impression of fire station facilities. It follows then, that a good image of the department must be maintained not only by proper department of the individual officers, but also by the appearance of their physical surroundings.

Well-designed fire and EMS facilities enable staff to perform their duties efficiently and effectively. As a facility ages, it may no longer meet the needs of an evolving department, thus negatively affecting morale, efficiency, safety, security, technology and overall efforts to provide quality fire, rescue, and emergency medical services. Old and obsolete facilities are also expensive to maintain due to inefficient energy systems. When these conditions occur, typical remedies include replacing, expanding or renovating the existing facilities.

OBSERVATIONS

The Gloucester Fire Department operates four stations. A fifth station, in East Gloucester was eliminated several years ago after remaining vacant and becoming extensively deteriorated. Staffing reductions have resulted in the closure of stations during interim and, more recently, extended periods with the Magnolia Station typically being the first to close, followed by the Bay View Station.

Fire station ages and locations:

1. Central Station (headquarters), built in 1925, located at 8 School Street
2. Magnolia Station, built in 1931, located at Fuller Avenue
3. West Gloucester Station, built in 1966, located at 33 Concord Street
4. Bay View Station, built circa 1971, located at 891 Washington Street

Central Station

The Central Station is a two-story brick building. The first floor includes five (5) apparatus bays, a maintenance/repair area, an alarm (dispatch) room, a small office for the fire inspector, and a lavatory. The second floor includes the fire chief's office (shared with an administrative assistant), kitchen area, day room (which also serves as a training room), dormitory rooms, toilet and shower facilities for both men and women, an office that is shared by the duty officers (deputy chiefs and captains) and the EMS coordinator, and several storage closets. A hose drying tower is located in the northwest corner of the building. The building is served by a single, unprotected wooden stairwell on the north side of the building, and several fire poles provide quick access to the apparatus floor when an alarm occurs. The building is equipped with an emergency generator and heat and smoke detectors that are connected to a four-zone fire alarm panel in the alarm room.

The building is equipped with a vehicle exhaust extraction system to limit the exposure of building occupants to exhaust fumes. The system is designed to enable apparatus operators to attach a large flexible hose to the exhaust pipe before backing into the station. The system fan automatically discharges vehicle exhaust to the outside atmosphere. When the vehicle is driven out of the station, the discharge hose automatically releases.

Limited efforts have been made to upgrade the facility to improve energy efficiency and comfort. Recent repairs include replacement of all windows, apparatus bay floor drain system repairs, and heating system replacement. However, floor drains still do not operate properly when dumping large quantities of water, such as draining booster tanks in apparatus. The heating system does not effectively distribute heat throughout the second floor and there is no central air conditioning for the living quarters or office space. The kitchen has been renovated with the cooperation of the firefighters who have provided the labor and expertise to complete an extensive upgrade that includes the installation of new appliances and a commercial grade hood and duct system over the stove.

Unfortunately, the Central Fire Station is obsolete and dysfunctional in all respects. It presents significant hindrances to the safe and efficient operation of the fire department, and building occupants are at significant risk from a number of fire safety hazards. Due to the age and condition of the Central Fire Station and current space and usage needs, we believe that it is impossible to economically upgrade or renovate the building.

The following summarizes our observations concerning the deficiencies of the facility.

- The facility is not in compliance with the requirements and recommendations of the *Standard on Fire Department Occupational Health Program*, NFPA 1500, 2007 edition, as published by the National Fire Protection Association, Quincy, MA. NFPA 1500 is the nationally

recognized standard for health and safety in fire departments and includes requirements for fire station facilities. Selected examples include but are not limited to the need for isolated areas for decontamination of personnel and equipment, security of personnel and equipment, storage of flammable liquids, air quality, and life safety egress.

- The width of the apparatus bay doors is not adequate for modern day fire apparatus. Bay door casings are struck on a frequent basis, resulting in damage to the building and to fire apparatus.
- Low overhead ceiling height prevents the raising of tilt cabs for vehicle checks and maintenance. Additionally, hose and equipment cannot be efficiently loaded/unloaded inside during cold or inclement weather, nor can equipment be removed from the apparatus and set up for training and maintenance activities.
- The apparatus maintenance bay area is inefficient and unacceptable. There is no space for lifting vehicles or for the secure storage of tools and service equipment.
- Containers of kerosene, gasoline, and waste oil are stored in an unsafe manner in the maintenance area.
- There is no physical security for the alarm room. The public entrance door immediately adjacent to the alarm room has a large plate glass window. The entrance door to the alarm room is not lockable.
- The fire inspector's office is small and cramped. It is only accessible by passing through the alarm room. There is no space for meeting with property owners, contractors, architects or engineers. There is no space for the review of blueprints and construction documents.
- There is no handicapped access to the alarm room or the fire inspector's office.
- The second floor has no handicapped access.
- The second floor is accessible by only one stairway, therefore it has no second means of egress (note: the fire poles do not qualify as a means of egress for the purposes of compliance with fire and safety codes). This situation presents a serious life safety risk to the firefighters and to the members of the general public who may be in the building.

- The floor openings for the fire poles are not protected to prevent the spread of fire and smoke in the event of a fire in the apparatus floor area.
- The large central room serves as a dining area, lounge, meeting and training room, and is the main thoroughfare to the duty officers' office, dormitory area, and bathrooms. Training cannot be conducted without significant distraction from other day-to-day activities. There is no classroom-style seating; all activities are conducted around a large table, which is not conducive to effective training or testing activities. The only modern training aid is a computer projector and a pull-down projection screen.
- Although there is an exhaust extraction system in the apparatus bay area, all areas of the second floor have poor air quality due to the lack of a ventilation system with positive pressurization. Diesel exhaust soot accumulates on interior surfaces, which may also be the result of not attaching the exhaust extraction hoses to apparatus before backing into the station; the narrowness of the bay doors (as noted above) prevents this important step.
- During several visits to the Central Fire Station, we observed that fire apparatus operators had not attached the exhaust extraction hose to their equipment.
- The fire chief does not have a private office; he shares his office with an administrative assistant. As a result, the fire chief's ability to maintain the confidentiality of personnel and administrative issues is extremely limited.
- One office is shared by the on-duty deputy chief, on-duty captain, and the EMS coordinator. As with the fire chief's office, there is no privacy for supervisors to conduct confidential meetings with subordinates. The EMS coordinator, who is responsible for quality assurance oversight of advanced life support (ALS) services, has no privacy for discussion or review of confidential patient records, which may result in violations of the federal Health Insurance Portability and Accountability Act (HIPAA) patient confidentiality requirements.
- Records storage is inadequate. A file cabinet in the deputy/captain/EMS coordinator's office contains personnel records, but we observed that the cabinet was not locked to prevent unauthorized access. There is no system for archiving old records; historic incident records dating back to the 19th century are stored on a shelf in the office.

- Electrical outlets are insufficient to support electronic office equipment.
- There is no records vault and there is no storage space for equipment.
- Bunkroom and bathroom areas are archaic and furniture, including beds, tables, desks and chairs are broken and worn out.
- Personnel lockers are located in the exit corridors of the bunkroom areas.
- Records concerning the maintenance and testing of the fire alarm system and emergency generator were unavailable.
- Although the building is equipped with an emergency generator, the building is not adequately prepared or protected for continuity of operations during a disaster. It does not comply with current seismic protection requirements, and does not have redundant systems for water supply or sewage. There is no long-term storage of food or emergency medical/disaster supplies.

The exterior site is equally dysfunctional. The station is located on a one way street, hampering flexibility for rapid direct emergency response routing. There is no extended front ramp area to provide parking and expanded turning radius for apparatus exiting or re-entering the station. The adjacent parking areas are privately owned, resulting in no available parking for personal vehicles, fire department staff vehicles, vendors, or the visiting general public. Emergency responses constantly require the moving of staff vehicles which are often parked across the front apparatus bay door area. The firefighter's union leases parking spaces for its members from an adjacent church to provide the on-duty shifts with parking. Adequate parking for responding off-duty personnel who are called back due to emergencies is non-existent.

RECOMMENDATIONS - CENTRAL FIRE STATION

- 5.1 The 84-year-old Central Fire Station has long outlived its usefulness to the City of Gloucester. There is no practical way to renovate or update this facility to meet the needs of a modern fire department. Therefore, we strongly recommend that the City take immediate steps to design and construct a new central fire station. The design of the fire station should include, but not be limited to the following:
- a. Adequate space for fire apparatus, both current and future
 - b. Compliance with nationally recognized standards for fire station design and operation
 - c. Energy efficiency

- d. A complete, automatic fire sprinkler system and smoke detection system
- e. Modern training capabilities
- f. Adequate, secure office space
- g. Adequate, secure storage for equipment and records
- h. Safe and secure living quarters for on-duty personnel
- i. Adequate apparatus exhaust system
- j. Handicapped accessibility for all areas
- k. Capability for decontamination and cleaning of firefighter protective clothing and equipment
- l. Vehicle maintenance area
- m. Adequate parking for staff vehicles and personnel vehicles of on-duty personnel
- n. Adequate space for outside training
- o. Improved emergency response traffic patterns
- p. Building security
- q. Building integrity and capability for continuity of operations during disasters (e.g. emergency power, seismic protection, protection from flood and high winds, food storage, emergency medical supplies, redundant systems for water supply, sewage, and communications, etc.)

The American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111-5) provided the Department of Homeland Security with \$210,000,000 to fund the construction and modification of fire stations. The program will be administered by the Assistance to Firefighters Program Office under FEMA's Grant Programs Directorate. The grants under this new program will be awarded directly to the fire departments on a competitive basis. We encourage the City to pursue funding under this program. In order to improve the City's eligibility, we recommend that steps be taken to:

- Include the construction of a new fire station in the City's Master Plan and Capital Improvement Plan
- Identify a site for the new fire station
- Develop a preliminary conceptual design and cost estimate

5.2 We have serious concerns about the life safety conditions in the Central Fire Station. Because of the shift schedule, personnel are provided with the opportunity to sleep during the overnight hours. However, the lack of a second means of egress, the lack of a fire safety separation between the first and second floors. and the lack of an automatic fire sprinkler system place on-duty personnel at significant risk from fire. As an immediate, stopgap measure, we recommend that a fire watch system be established immediately. This can be accomplished by one of two methods:

- Provide the alarm room watch-stander with a portable phone and require him/her to make frequent rounds (no less than one per hour) of the entire building to check for fire, or
- Require one additional firefighter to stay awake to make frequent rounds of the building to check for fire.

All activities of the person assigned to the fire watch should be documented in writing.

5.3 Historical records should be duplicated (computer scan or microfilm). The local historical society may have an interest in storing or displaying these records and they may have the capability and expertise for the proper preservation of these documents.

5.4 All personnel records should be properly secured in a central location. A written procedure should be established concerning the access and security of these records.

5.5 A written procedure should be established and enforced that prohibits the parking of staff vehicles and personal vehicles in front of front-line apparatus.

5.6 A written procedure should be established and enforced to require apparatus operators to attach the exhaust extraction equipment to their vehicle whenever the apparatus is in quarters.

5.7 The gasoline, waste oil and kerosene storage tanks should be removed from the building and all flammable and combustible liquids should be stored in the existing flammable liquids cabinet.

Outlying Stations

The Magnolia station, located at Fuller Avenue, houses Engine 5 and Rescue 4 (reserve), and is staffed by two (2) firefighters. It is usually the first sub-station closed due to decreased staffing. It was built in 1931 and is in disrepair. Interior ceilings, walls, and floors show signs of significant water damage. Mold is visible and is impacting air quality, particularly when the station is closed for extended periods. It is in need of an energy audit with resulting system upgrades, in addition to structural roof repairs to eliminate ongoing water damage.

The West Gloucester station, located at 33 Concord Street, was built in 1966. It houses Engine 6 and Ladder 1 (reserve) and is staffed by two (2) firefighters. An enclosed trailer is parked outside containing technical rescue equipment.

The Bay View station, located at 891 Washington Street, was built circa 1971. It houses Engine 3, a reserve rescue and a hazardous materials decontamination equipment trailer. It is staffed by two (2) firefighters.

All stations are equipped with emergency generators. MRI could not determine if generators are tested in accordance with NFPA standards.

RECOMMENDATIONS – OUTLYING STATIONS

- 5.8 Energy audits should be conducted to determine cost effective improvements for energy conservation (such as window replacement).
- 5.9 The Magnolia Station should be evaluated by a structural engineer to determine the extent of repairs that are needed to the roof and other portions of the building that have deteriorated. A plan should be developed to repair and renovate this building or to replace it.
- 5.10 All stations should be equipped with complete, automatic fire sprinkler systems for the protection of the occupants, buildings and equipment, as well as complete, supervised smoke detection systems that transmit an alarm to the fire dispatch center.
- 5.11 Disconnect switches should be installed and interfaced with alarm notification systems on all kitchen stoves to automatically shut them off to prevent kitchen fires during responses to alarms.
- 5.12 Emergency generators in all stations should be tested on a regular basis in accordance with the requirements of NFPA 110 *Standard for Standard for*

Emergency and Standby Power Systems, 2005 edition (National Fire Protection Association, Quincy, MA).



CHAPTER 6

FIRE DEPARTMENT VEHICLE FLEET

OVERVIEW

A fire department vehicle fleet includes major emergency apparatus, such as pumpers (engines), aerial apparatus, heavy rescue trucks, and ambulances. Specialized emergency equipment often includes trailers for unique applications such as technical rescue, hazardous materials equipment, hazardous materials decontamination, building collapse rescue equipment, marine units, breathing air supply, firefighting foam supplies and mass casualty incident supplies. Support vehicles that are critical to fire department operations include command post and emergency communications vehicles, staff vehicles and maintenance vehicles. Fire departments in maritime and port environments typically have marine units that are equipped for firefighting, emergency medical and environmental spill response operations. These units are often maintained in the water for rapid response.

The demographics, geography, infrastructure, and construction features of Gloucester requires the fire department to have multiple tactical capabilities for its firefighting, rescue, and EMS readiness. The Gloucester Fire Department must maintain the ability to move and apply large fire flows because of the close proximity of wood frame and masonry/wood frame buildings in the downtown residential and commercial districts. These buildings create significant exposure hazards and the potential for conflagration conditions. Large commercial buildings, high rises and target hazards such as the Addison Gilbert Hospital require apparatus and equipment capabilities that are different from those required for operations in a single-family dwelling. The harbor area presents significant challenges due to the size of the commercial buildings, the presence of above ground fuel storage tanks, the storage of anhydrous ammonia for commercial fish refrigeration systems, and boat storage yards. Congestion and access limitations present additional concerns for fire department tactical operations in the harbor and downtown areas. All of these factors must be taken into consideration when specifying and purchasing fire department apparatus and equipment.

OBSERVATIONS

The following data summarizes the Gloucester Fire Department vehicle fleet:

Engines

Engines 4 & 6	2005 Sutphen Monarch Pumpers	1250 gpm pump capacity 700 gallon water tank
These two engines serve as front line attack units. Due to their identical specifications and age, they share common strengths and weaknesses in design and maintenance characteristics.		
Engine 3	1998 Pierce Pumper	1000 gpm pump capacity 750 gallon water tank
This engine operates from the Bay View Station. It is in average condition for its age and is appropriately assigned as the third most active engine.		
Engines 1 & 5	1989 Pierce Dash Pumpers	1000 gpm pump capacity 750 gallon water tank
These two engines serve as reserve engines. Due to their age, they are at the end of their service life. Both units exhibit significant rust-through.		

Aerial Ladders

Ladder 1	1966 Mack Tractor with 1985 LTI Aerial Ladder	106 foot aerial ladder
This tiller (rear steering) ladder serves as a reserve ladder. It is housed at West Gloucester. This unit will be replaced upon delivery of a new ladder truck later this year.		
Ladder 2	1987 Pierce Arrow 75 foot aerial ladder	1000 gpm pump capacity 300 gallon water tank
This ladder operates from the Central Station. It will be placed into reserve status upon delivery of a new ladder truck later this year.		
NOTE: A scheduled refurbishment of this apparatus was deferred this year (2009) in order to fund Central Fire Station renovations.		

Ambulances

Rescue 1	2009 International/Horton
This ambulance serves as the primary EMS/ALS unit, housed at Central Station	
Rescue 2	2002 International/Road Rescue
This ambulance serves as the second due EMS/ALS unit, housed at Central Station	
Rescue 3	1996 International/Horton
This ambulance serves as a reserve EMS unit, housed out of service at Bay View Station	
Rescue 4	1993 Ford/P.L.Custom Body
This ambulance serves as a reserve EMS unit, housed out of service at Magnolia Station.	

All four ambulances are licensed by the Massachusetts Office of Emergency Medical Services.

Forestry Units

Forestry 1	1983 Ford	250 gpm pump capacity 250 gallon water tank
Forestry 2	2004 Chevrolet	
Forestry 3	1997 Ford	250 gpm pump capacity 200 gallon water tank

Staff Vehicles

Car 1	2000 Ford Sedan
This vehicle is assigned to the Fire Chief	
Car 2	2009 Ford Expedition
This vehicle serves as the command unit, assigned to the on-duty Deputy Chief	
Car 3	1997 Ford Pick Up
This vehicle is used by the fire inspector and by on-duty personnel as a utility unit	

Trailers

Air Supply Trailer	2004 CMC Utility
Used to refill SCBA bottles	
Hazardous Materials Decontamination Trailer	2002 International Travel Trailer
Used to store hazardous materials decontamination supplies	
Hazmat Trailer 1997	
Used to store hazardous materials response equipment	
Technical Rescue Trailer	
Used to store technical rescue equipment, but equipment has not been maintained in serviceable condition	
Boat Trailer	1972
Used to transport 1986 aluminum 14 foot boat with 1986 Mariner 15 HP outboard motor	

The fire department vehicle fleet includes two sets of matching pumpers purchased in 1989 and 2005. While duplicate vehicles may provide a cost reduction per vehicle at the time of purchase, they also preclude the ability to stagger replacement costs and reduce budget spikes because both units are due for replacement simultaneously.

During our interviews with FD staff, there was discussion regarding the merits of replacing the larger style ambulances, which have heavier drive trains with an extended service life, with smaller ambulances which would provide enhanced maneuverability and lower purchase cost. The smaller chassis ambulances would also have a less rigid suspension system, which improves patient comfort. The change to smaller ambulances would require removing the hydraulic extrication tools and transferring them to a pumper or ladder truck. The decision to convert to smaller units must also factor in shorter service life resulting in more frequent replacement intervals.

An additional forestry firefighting unit was also mentioned as desirable by several department members.

The fire department is to be commended for retaining on-duty firefighter/mechanics on each platoon. This approach provides significantly reduced out of service time for apparatus. Completing preventive maintenance and significant repairs in house also reduces overhead costs and enhances driver/operator familiarity and knowledge of the apparatus. This program is flawed, however. There is no master mechanic assigned to coordinate the program. Consequently, the chain of command has been bypassed with mechanics reporting directly to the fire chief. This is an unacceptable time management practice.

Fire department mechanics perform routine repairs and preventive maintenance activities. More complex tasks and specialized repairs are contracted out to specialized repair shops (i.e. drive train, fire pumps, aerial ladder systems, etc.). This practice is common for fire departments that are similar in size to Gloucester.

Apparatus weekly checks are conducted on Mondays and are augmented by monthly checks; however, there is no formal daily check form or process. Fire Department staff were unable to immediately locate records upon our request.

A review of the maintenance bay area reflects a need for improved organization and general housekeeping. The lack of adequate maintenance facilities and unsafe conditions due to the storage of gasoline and fuel oil is referenced in Chapter 5, *Facilities*.

The low headroom in the Central Fire Station prevents access to the engine compartment of fire apparatus because the cab cannot be raised. Low station headroom also makes hose reloading operations more difficult.

Annual aerial ladder certification and pump testing has not been completed in recent years. The most recent ladder test was performed by American Test Center on April 10, 2006. Pump test records cease in 2003. There is significant liability presented by failure to conduct these tests. They also provide an indicator of apparatus condition and are a valuable tool in budget planning. Often, as a result of this testing, minor maintenance issues can be resolved which will delay or eliminate major repairs.

The existing 14-foot aluminum outboard motor boat is not suitable for firefighting or rescue operations in Gloucester harbor, the Annisquam River or surrounding coastal waters. The fire department cannot depend upon the availability of the U.S. Coast Guard or the harbor master to support firefighting and EMS operations due to the specialized equipment and training that is required. In addition, those agencies are committed to other priorities consistent with their respective missions. The fire and hazardous materials risks along the waterfront warrant the acquisition of a specialized fire-rescue boat that can be maintained in a ready state in the water year-round.

The team noted that one of the specialized trailers was being stored outside of the station. This practice is not conducive to a long service life, especially in a New England coastal environment. It was also reported to us that many personnel in the department have never even looked inside these trailers, have no knowledge of what equipment is located inside of them, and have not received training on the equipment. The department currently has only one vehicle, Car 3 for general utility purposes and for use by the fire inspector. Considering the number of trailers the department has, the needs of the mechanics to visit the sub-stations, pick up parts, etc, normal routine department needs for a utility type of vehicle and the daily workload of the fire inspector, it is not difficult to envision frequent competition for this single resource. As a result, productivity is going to suffer as personnel wait for the vehicle to be available so they can complete their duties. From the fire inspection standpoint, not having a vehicle available is not acceptable.

RECOMMENDATIONS

- 6.1 Due to significantly heavier use of Central Station assigned apparatus (Engine 4) than West Gloucester (Engine 6), consideration should be given to rotating their respective station assignments to better balance their service life expectancy.
- 6.2 The department should review the recommendations in NFPA 1911, *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus* (National Fire Protection Association, 2007 edition) and update and revise its vehicle fleet maintenance program.
- 6.3 The department should establish a daily apparatus inspection and serviceability procedure that includes a written or electronic report form. This inspection would be the equivalent of a daily pre-trip inspection as outlined in commercial driver manuals. NFPA 1911 also has a section in the back of the standard with suggestions for routine vehicle and component inspection and testing. The daily inspection should also include an inventory and serviceability check of the tools, equipment, and SCBA that is carried on the apparatus.

- 6.4 The department should establish an annual program of pump testing in accordance with NFPA and ISO standards. All tests and any corrective action taken should be documented.
- 6.5 The department should establish an annual program of aerial and ground ladder testing in accordance with NFPA and ISO standards. All tests and any corrective action taken should be documented.
- 6.6 The on-duty firefighter mechanic program should be continued. However, a senior mechanic should be designated with the responsibility of coordinating the maintenance program. The senior mechanic should report to a captain or deputy fire chief, not the fire chief. The supervisory officer and/or the senior mechanic should have responsibility for developing and administering the vehicle maintenance budget.
- 6.7 In preparation for the annual budget process, the department should prepare a vehicle replacement plan that projects all vehicle replacement, refurbishing and purchase needs for a minimum of ten years. Due to the extremely high cost of fire apparatus and the significant lead-time required for specification development, bidding and manufacturing, purchasing of this equipment should be carefully scheduled to minimize spikes in the budget. If the purchase of fire apparatus is classified as a capital budget appropriation by the City, the replacement plan should also be included in the City's capital improvement plan. Time estimates for apparatus replacement vary depending on usage and condition, but a practical goal for fire pumpers would be ten years in front-line service and twenty to twenty-five years for overall service. Refurbishing/overhaul of major apparatus at least once during its service life is often warranted to ensure the safety and functionality of the vehicle.
- 6.8 As part of the proposed vehicle replacement plan, Engines 1 and 5 (1989 Pierce Dash pumpers) have reached the end of their service life and should be replaced as soon as possible.
- 6.9 The fire department should seek funding for the design and acquisition of a fire-rescue boat that is capable of operating in the harbor and in coastal waters. The firefighting capabilities of the boat should be based on a risk assessment of the waterfront, including buildings, facilities and the types and size of vessels that frequent the area. The boat should be capable of transporting EMS patients, and consideration should be given to response capabilities to environmental spills. The boat should be designed for year-round use and kept in a ready state in the water. Federal funds may be available for the purchase of a boat. We recommend that the City review the recent fireboat acquisitions made by Portland, ME and Portsmouth, NH for design ideas and risk assessment strategies.

- 6.10 The fire department should insure that all specialized operations trailers are properly stored inside of a station and in such a way as to permit their rapid deployment to an emergency incident.
- 6.11 The fire department should conduct an inventory, and thorough inspection, of the equipment carried in each trailer to insure that it is operational and should furthermore insure that all personnel are familiar with its use. Of particular concern is the technical rescue trailer. The MRI study team was informed that the equipment in this trailer was purchased with a grant and has not been removed from the trailer for many years.
- 6.12 The fire department should acquire a vehicle for primary use by the fire inspector. This will allow him to maximize use of his time by always having a vehicle available and will allow him to outfit it with necessary inspection and investigation tools and equipment. Availability of this vehicle will enable the fire inspector to more readily commit to and be on time for scheduled inspections throughout the community.

CHAPTER 7

FIRE DEPARTMENT EQUIPMENT

OVERVIEW

The technology and standards for fire department equipment are constantly evolving to improve the effectiveness, efficiency and safety of firefighters. Today's fire departments are obligated to establish and document formal programs and procedures to ensure that equipment is replaced regularly, maintained properly, and deployed in accordance with accepted standards and department procedures. Proper training on the use and maintenance of equipment is essential to safe firefighter performance and minimizes the City's risk exposure.

NFPA 1901, *Standard for Automotive Fire Apparatus* (National Fire Protection Association, Quincy, MA, 2009 edition) and ISO (formerly known as Insurance Services Office) provide standards for equipment carried on apparatus. It is important to recognize that each agency has different requirements for apparatus and equipment. NFPA focuses broadly on the safety and performance of the apparatus, while ISO focuses specifically on the fire suppression capabilities of the apparatus as it potentially can impact the fire insurance rating for a community. These differences are most significant for equipment carried on pumpers and aerials. Differences between NFPA and ISO equipment for pumpers include hose, monitors, ground ladders, foam and radios. Differences for aerial equipment include self-contained breathing apparatus (SCBA), ground ladders and radios.

Personal protective equipment (PPE) includes the full ensemble that encapsulates a firefighter: helmet, Nomex® hood, turnout coat, turnout pants, boots, SCBA, gloves, eye shield, and station uniform. The specifications and requirements for PPE can be found in various NFPA standards. The use of PPE is regulated by OSHA.

OBSERVATIONS

The fire department has a typical selection of portable and service equipment utilized for firefighting. Equipment appears to be organized and serviceable, however past practice has been to purchase new apparatus without equipment, transferring old equipment from replaced apparatus. This has resulted in a significant amount of dated equipment still in service on front line apparatus and less than complete equipping of reserve apparatus. The MRI study team was advised that the replacement ladder truck currently on order is being purchased with equipment.

The department reported that it conducts service tests on hose and ladders, but did not produce any documentation concerning these tests.

Turnout gear (bunker coats and pants) has been in service since 2003. There is no spare inventory available for replacements when turnouts must be cleaned, removed from service due to contamination or need for repair. This circumstance results in gear being borrowed from other members or wearing outdated, unapproved or personally owned gear. It was noted that there was no annual inspection of turnout gear as required by NFPA 1851, *Standard on Selection, Care and Maintenance of Protective Ensemble for Structural Firefighting and Proximity Firefighting*.

Standard issue helmets are replaced with leather helmets purchased through clothing allowance money. There is some diversity of helmet styles and related safety equipment such as eye shields and chin straps.

Self-contained breathing apparatus (SCBA) appear to be properly maintained and are compliant with integrated personal alert safety system (PASS) devices. The department owns 45 SCBA units and 90 air bottles. Flow testing was completed in October 2008. Air refilling is accomplished with a compressor/cascade system at the Central Fire Station and a compressor/air cascade trailer with the capability of filling two bottles at a time. MRI observed that the outside air intake pipe to the fire station compressor unit had been disconnected from the sleeve that passes through the outside wall.

Masks with voice amplification were initially fit tested at the time of issue, however there has not been any updated fit testing performed. The OSHA Respiratory Protection Standard, 29 CFR 1910.134 and NFPA 1500, *Standard Fire Department Occupational Safety and Health Program* mandate that annual fit testing be completed, after personnel have been medically cleared to wear SCBA. There are no spare masks available; consequently, a minor mask component malfunction or failure places a firefighter out of service for SCBA deployment.

A rapid intervention team (RIT) PAK (a portable air supply for providing air to a downed or trapped firefighter) has been purchased and is carried in the deputy chief command vehicle. Support training for RIT operations has been recently completed.

A captain is assigned to coordinate the breathing air equipment program. There are two certified field technicians on the department. The captain maintains a running list of repairs made in a notebook. There is no individual inspection and/or maintenance record maintained for each SCBA. There is no formal SCBA repair request form, or, daily/after use inspection form to track the history of the SCBA.

A washing machine is located at the Bay View Station for cleaning PPE. Turnout clothing appeared clean and in good condition, subject to routine wear. The regular cleaning of PPE ensures that dangerous and unhealthy contaminants from fire scenes, accidents, medical calls and hazardous materials incidents are removed from PPE in order to avoid long-term exposure to firefighters and their families.

Station uniforms vary between t-shirts, sweatshirts and uniform shirts. Flame retardant station uniforms are an important component of the PPE ensemble, but flame retardant ratings may not be available for all alternate uniform styles.

The department has acquired two new Bullard thermal imaging cameras (TIC) which will be placed in service on Engine 4 (headquarters) and Rescue (ambulance) 1. These cameras replace two older units that are no longer functional. The department is awaiting the delivery of two more cameras, also Bullard but a different model. One unit will go to West Gloucester, the other to either Bayview or Ladder 2 (headquarters). The department has applied for a federal grant to purchase five additional TIC's.

ALS ambulances are equipped with 12-lead external defibrillators, which enable the transmission of patient telemetry to the hospital. Front line apparatus is equipped with automatic external defibrillators (AED), and certified personnel are able to treat cardiac patients using this critically important life-saving tool. Reserve apparatus, fire inspector and command vehicles are not equipped with AED's.

The department is equipped with combustible gas detectors.

RECOMMENDATIONS

- 7.1 The department should inventory all equipment and review compliance with NFPA, ISO and OSHA criteria. The inventory should be updated annually.
- 7.2 The department should establish a formal replacement plan for equipment so that equipment can be replaced on an incremental, scheduled basis. The regular replacement of large cost items such as hose and SCBA on an incremental basis will avoid major one-time increases in the operating budget. The life expectancy of these items can be estimated based on usage and manufacturer's recommendations.
- 7.3 The department should adopt a policy of purchasing new NFPA 1901 and ISO compliant equipment when new apparatus is purchased. This policy will ensure that equipment is the most technologically up-to-date and that it is safe and functional. It will also make it possible to keep reserve apparatus fully equipped for immediate use.

- 7.4 The department should ensure that future expanded special operations capabilities (as outlined in Chapter 15) include the procurement of proper equipment.
- 7.5 The department should update record keeping (electronic) for documentation of inventories, maintenance and testing programs, such as ground ladders, foam systems, hose, personal protective equipment (PPE) and self-contained breathing apparatus (SCBA).
- 7.6 The department should develop an operational procedure and an inspection form and train all officers to conduct annual turnout gear inspections as required by NFPA 1851, *Standard on Selection, Care and Maintenance of Protective Ensemble for Structural Firefighting and Proximity Firefighting*.
- 7.7 The department should maintain a supply of spare turnout gear (coats, pants, gloves, hoods, helmets, etc) for use when turnout gear is damaged, is being cleaned or has been placed temporarily out of service for drying/thawing during winter operations.
- 7.8 The department should adopt and enforce an updated standard operating procedure concerning the specification, purchase and use of helmets to ensure standardization and compliance with the most current NFPA and OSHA standards.
- 7.9 The department should adopt and enforce an updated standard operating procedure concerning the specification, purchase and use of station uniforms to ensure compliance with the most current NFPA and OSHA standards and to ensure the consistent and professional appearance of fire department members.
- 7.10 The department should purchase a supply of spare SCBA masks in a variety of sizes. A minimum of one spare mask of each size should be placed on each apparatus for emergency use in the event of the failure of a mask during emergency operations.
- 7.11 An annual schedule of fit-testing for SCBA masks should be established in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134 and NFPA 1500, *Standard Fire Department Occupational Safety and Health Program* (National Fire Protection Association, Quincy, MA, 2007 edition).
- 7.12 The department should develop an operational procedure, and appropriate forms (paper or electronic) as may be necessary, to provide for daily and after use inspection of all SCBA and provide detailed tracking of any and all repairs made to each individual SCBA unit/component.

- 7.13 With the establishment of specialized response capabilities, such as technical rescue, hazardous materials, water rescue and forestry, attention should be given to reviewing and issuing appropriate personal protective equipment for each discipline. Structural firefighting equipment is not always suitable for these types of incidents. For example, forestry PPE includes a lightweight fire retardant overshirt/jacket and pants that are used in place of a structural firefighting turnout gear. Technical rescue and forestry operations call for a different style of helmet.
- 7.14 The outside air intake pipe on the Central Fire Station breathing air compressor should be reconnected to ensure that outside air is being processed by the compressor.
- 7.15 The department should consider equipping command vehicles, the fire inspector vehicle and selected reserve apparatus with automatic external defibrillators (AED).

CHAPTER 8

COMMUNICATIONS

OVERVIEW

An efficient communications system is central to the full spectrum of services delivered by a fire department. Encompassed within the communication system are internal and external (inter-agency and public) elements. To be effective and reliable, all fire department communications must be operational 24 hours per day, seven days per week. Redundancy must be built into the system so that the failure of one or more components will not compromise emergency operations. There must be interoperability between systems to ensure that the fire department can communicate with Federal, state, regional, mutual aid and other local agencies during a major incident or a catastrophic event. The MRI study team evaluated the primary components of the communications system including radio, telephone, fire alarm and data, together with their integrated support systems. Numerous national standards and agencies are available for referencing acceptable criteria for these critical components.

OBSERVATIONS

General

As noted in Chapter 5, *Fire Department Facilities*, the alarm/dispatch room is not secure. There is no lock on the entry door, and the public entrance to the building is located immediately adjacent to the alarm room. The public entrance door is one-half plate glass, which would be easy to breach.

There is no sound barrier between the alarm room and the apparatus floor, which results in high noise levels from responding apparatus, sirens, and air horns that could impede emergency radio communications and incoming emergency calls.

The department has not created a formal continuity of operations plan for establishing dispatch and communications capabilities if the alarm room was inoperable.

Radio

The radio system, including bases, mobiles and portables operates in a VHF (FM "high-band") format. The system has deteriorated in recent years.

The majority of portable radios are Motorola HT 1000 models. They are inoperable at times with dead spots throughout the City preventing transmit and/or receive modes to function. There is no preventive maintenance program to provide proper battery cycling for recharging; therefore, batteries develop a memory preventing full charging and discharging. Portables have failed to function even in face-to-face and line of sight proximity. There are inadequate spare radios for recalled personnel to respond with or to replace radios that are out of service for repairs. Frequencies are not labeled; therefore, personnel do not know how to properly use alternate frequencies.

Mobile radios are satisfactory. There are base radios at each station with the alternate (back up) base located at West Gloucester to augment the primary base at the central station. A voting receiver system is utilized, permitting the best available signal strength receiver to manage each transmission. There is an interference problem with a Maine fire department that periodically causes disruption of clear transmissions. This is related to an encoding problem wherein both departments are utilizing the same private line code combination. All base radios are connected to back up generators for emergency power supply. There is no pager system to notify off-duty members when needed.

Fire department two-way radio communications are not recorded.

Telephone

The telephone system is comprised of two components: fire department business operations, which utilize three trunked lines; and fire alarm (dispatch center) operations, which are linked to the police department for receipt of emergency 911 calls. Business operations are hampered by limited line and handset availability for administrative, operations, fire prevention, maintenance, and on-duty shift personnel. This is a critical deficiency at the central station.

An on-duty firefighter in the Central Fire Station alarm room answers incoming business and emergency calls and uses an internal public address system to notify staff. Emergency 9-1-1 calls are relayed to the fire department by the police department dispatcher. The procedures for relaying emergency calls to the fire department have not been standardized; procedures vary depending on the wishes of the on-duty police department watch commander.

The present hardware and software system is outdated and presents significant liability in its present condition. The police department screens emergency calls for the fire department prior to forwarding the call to the fire department. This process negates the use of ANI and ALI by the fire department. Numerous incidents were described to the MRI study team wherein the police have received the call, hung up, investigated the call internally, and then advised the fire department of the incident, resulting in a delayed response by the fire department. This situation has caused fire department members, their families and the general public to bypass the 911 system and to call the fire

department on a business line to report emergencies. There is no recording or instant playback system on any of the telephone lines at the fire department. There is no telephone recall system to notify off-duty personnel when needed.

Municipal Fire Alarm System

The fire department maintains a municipal fire alarm system consisting of approximately 100 alarm box locations. Of that number, two are street boxes (installed on utility poles), approximately 75 are Gamewell master boxes (connected to a building fire alarm system), and approximately 30 are master boxes that are connected to the new Intellibox digital radio box system. The department is in the process of eliminating the Gamewell box system that is interconnected with City-owned cables that are strung on utility poles and replacing it with the radio box system. All schools are connected via Intelliboxes. Maintenance of the municipal alarm box system is provided by an outside private contractor.

Data

Data management, storage and retrieval is an expanding dimension of fire department communications. Primary areas include records storage, incident reporting, dispatch, and fire alarm operations. Outlying stations are not connected to central to provide for data input or retrieval. This results in central station staff having to input all data for those stations in addition to their own. Although there is alarm data stored in the watch room/dispatch center, it is segmented and not interactively supported by a software system to accomplish computer aided dispatching functions. Work stations at the central station are not networked. Data is not backed up on a daily basis.

Cellular Telephones

Fire department command staff have recently been provided with Nextel cellular telephones, The Nextel "direct connect" function allows for confidential two-way radio communications for administrative functions and for emergency operations. Although the commercial wireless network can become quickly overloaded during peak use or during a disaster, it is an effective and convenient secondary means of communications for the fire department.

RECOMMENDATIONS

- 8.1 Receipt of emergency response requests for fire and medical emergencies should be immediately forwarded to the fire department without delay by the police department. The 911 system should be utilized as the emergency line rather than the fire department business line. A thorough review of the policies and procedures relative to this process should be conducted jointly by both departments and enforced consistently. The City should explore the feasibility of

enabling the simultaneous answering of 9-1-1 calls by the fire department dispatcher, or the ability to relay the actual caller to the fire dispatcher, along with ANI/ALI data.

- 8.2 The City should consider installing a direct "ring-down" telephone line between the fire and police dispatch centers to provide instant, secure communications between the two departments.
- 8.3 A battery recharging program for all portable radios should be implemented immediately. Consideration should be given to replacing batteries with lithium-ion batteries which are less prone to developing a memory during discharge/recharge cycles.
- 8.4 All radios should be labeled with channel frequencies/agencies.
- 8.5 All portable radios should have the primary fireground operational frequency programmed into the first and last position on every frequency bank. This will allow personnel to easily locate the primary channel by simply turning the channel selector knob fully in either direction. This could be an important life safety enhancement if the frequency knob is bumped and changes frequency in low visibility conditions, or, if the firefighter falls, is struck by an object, or, is otherwise incapacitated and needs assistance.
- 8.6 Additional portable radios should be purchased to ensure that on major incidents involving the recall of off-duty personnel that every responding member is still equipped with a portable radio.
- 8.7 A signal strength audit should be conducted throughout the City and, if indicated, consideration of mobile repeaters should be undertaken to augment portable radio capability. Typically, a combination VHF/UHF system is employed for this function.
- 8.8 Increasing base radio antenna heights utilizing 50-foot towers should be considered.
- 8.9 The interference problem with the Maine fire department should be investigated. A change in assigned private line codes or the use of a directional base radio antenna may resolve this issue.
- 8.10 Establishment of a radio over internet protocol (ROIP) connecting all base radios could eliminate lease charges for telephone lines to support this function.
- 8.11 A back up set copy of all dispatch manuals, assignments, resources, protocols, etc. should be placed at each sub-station so that back-up dispatching function can be quickly transferred in an emergency.

- 8.12 Fire alarm systems at all fire stations should be connected, supervised and monitored to provide notification of an alarm when stations are not occupied.
- 8.13 Fire station kitchen stoves should be interconnected to each station notification system so that, upon receipt of an alarm the stove is shut off automatically, preventing the possibility of a kitchen fire while personnel are responding to an alarm.
- 8.14 Notification of off-duty personnel through a telephone recall system (reverse 911) should be considered. It is the understanding of the MRI study team that this process is currently under way and that proposals have been requested by the fire department from several vendors. Other alternatives include issuing radio pagers, cell phones or portable radios to all personnel.
- 8.15 Data management could be enhanced through the establishment of a department email system (see Chapter 10).
- 8.16 A digital recording and instant playback system should be installed on the fire department telephone lines and two-way radio system.
- 8.17 Additional outside trunk lines should be installed on the Central Fire Station internal telephone system.
- 8.18 In conjunction with the police department, a communications continuity of operations plan should be established and tested.
- 8.19 With the assistance of the police department, a security evaluation of the Central Fire Station should be conducted. Physical changes and procedures should be considered that would limit or deter unwanted intruders or vandalism.
- 8.20 All aspects of the fire department's communications system would be significantly enhanced through affiliation with a regionalized emergency communications center. The MRI study team is aware of the ongoing development of an Essex County 911 center. Although the previous fire chief chose not to participate in the development of the center, it is strongly recommended that the City reconsider this position. The potential benefits include, but are not limited to:
 - a. redeploying on-duty firefighters from dispatching duties to emergency response functions
 - b. the ability to provide updated enhanced 911 technical capabilities
 - c. updated policies and procedures

- d. distribution of operating expenses on a regional basis
- e. ability to provide EMT-Dispatch medical instructions to callers during a medical emergency
- f. improved coordination of mutual aid and disaster response events
- g. faster and more effective deployment of region-wide resources

8.21 Because the fire department dispatch center has so much obsolete equipment and so many facility deficiencies, this is an opportune time to transfer operations to a regional communications center.

CHAPTER 9

FIRE PREVENTION, INSPECTIONS, INVESTIGATIONS & PUBLIC EDUCATION

OVERVIEW

Fire prevention activities in a municipal fire department typically include fire safety inspections; fire code enforcement; issuance and oversight of permits; review of construction plans for new buildings and the renovation of existing buildings; public fire safety education programs. Fire prevention efforts should involve all members of the department. For example, on-duty personnel can be assigned with the responsibility for “in-service” inspections to identify and mitigate fire hazards in buildings and to familiarize firefighters with the layout of buildings, identify risks that may be encountered during firefighting operations, and to develop pre-fire plans. On-duty personnel in many departments are assigned responsibility for permit inspections and public fire safety education activities.

Fire prevention activities, such as plan reviews, permits, and inspections should be coordinated with similar activities in the municipal building inspection department and the planning department. Inspection and code enforcement procedures and policies must conform to Commonwealth of Massachusetts statutory requirements and the regulations and the policies of the Massachusetts Department of Fire Services, Office of the State Fire Marshal. The local fire chief or designee is authorized to enforce 527 CMR, Board of Fire Prevention Regulations, also known as the Massachusetts Comprehensive Fire Safety Code.

Investigation of the origin and cause of fires also falls under the responsibility of a fire prevention bureau in a fire department.

OBSERVATIONS

Fire prevention and inspection activities in the Gloucester Fire Department are supervised by a deputy fire chief who handles these responsibilities on a part-time basis in addition to his shift supervisory responsibilities. The fire prevention duties of this deputy fire chief include review and coordination of major projects and developments, liaison with the City planning board, and conducting inspections when on-duty. The fire prevention deputy fire chief also coordinates the department’s annual Fire Prevention Week activities each October.

Day-to-day fire inspection duties are performed by a full-time fire inspector who is assigned to a weekday work schedule. The incumbent has served fourteen (14) years in this position. His primary duties include in-progress inspections of construction and renovation projects, issuing permits and conducting permit-related inspections, performing change-of-ownership smoke detector/carbon monoxide detector inspections in residential occupancies, observing acceptance tests of fire protection systems (fire alarm systems, automatic fire sprinkler systems, and fire extinguishing systems), and responding to citizen inquiries and complaints.

The fire inspector reports that he has a good relationship with the City building department. He reviews plans for fire sprinkler systems and fire alarm systems. In addition, he signs off on all certificates of occupancy for new buildings and renovated buildings.

The Gloucester Fire Department has not established a regular fire inspection and risk management program for its own facilities or for City-owned properties. Compliance with fire safety codes and practices in City-owned facilities not only sets a positive example for commercial property owners, but it is an essential aspect of the stewardship of publicly owned buildings. Most City-owned buildings are an essential part of the critical infrastructure of the community, and the loss of a facility could have a devastating impact on the ability of the City to provide essential services. A prime example is City Hall. This aging facility, with unenclosed exit stairwells, outdated electrical wiring, combustible storage, and a place of assembly area on an upper floor, is a prime example of a critical facility that should be inspected regularly and be subject to a comprehensive plan for risk management and rehabilitation. The fire department has the expertise to provide guidance to the City concerning fire prevention and risk management in its own facilities.

The fire inspector's office is a small office on the first floor that is accessible only through the fire alarm room. A small lavatory (marked "Women") is accessible through the fire inspector's office. The fire prevention deputy shares an office with the other deputies, captains, and the EMS coordinator (see Chapter 5 for additional information concerning facilities).

The fire inspector does not have clerical support. A part-time secretarial position (19 hours per week) was eliminated a number of years ago. There are no current statistics on fire prevention and inspection activities, although the department estimates that approximately 1300 to 1400 inspections are conducted each year. Detailed statistics were maintained until July 1, 2004.

The fire inspector uses a desktop computer for e-mail, access to the "Firehouse" software program, and Microsoft Word® for reports and record keeping. A printer is located in the fire inspector's office. The fire inspector reports that he frequently has difficulty in accessing an outside line on the Central Fire Station telephone system because of a limited number of outside lines. He has been provided with a department

Nextel cellular phone. The inspector has not been issued any basic equipment for inspections, such as a camera, hardhat, tape measure or measuring wheel.

The department maintains a subscription to the National Fire Protection Association (NFPA) National Fire Codes. The fire inspector attends meetings of the Fire Prevention Association of Massachusetts, attends training at the Massachusetts Firefighting Academy, and attends the annual New England Arson Seminar at St. Anselm College, Manchester, NH.

The department has a fee schedule for forty-one (41) permits and licenses that was established December 15, 2004. Fees are \$25.00 per permit, with the exception of the following:

Smoke detectors (new construction):	\$ 50.00
Smoke detectors (sale or transfer):	\$ 50.00
UST ² removals & installations:	\$200.00
New tank storage facility:	\$200.00

The authority for the issuance of permits/licenses is pursuant to Massachusetts General Laws Chapter 148 or 527 CMR. The authority to charge fees is derived from MGL Chapter 148.

No fees are charged for plans reviews.

Permit fees are collected at the Central Fire Station at the time that the application is received. Checks and cash are accepted, but no receipts are issued. Checks only are received for brush burning permits. There is no daily, weekly or monthly reconciliation of permit fees, and permits are not numbered for tracking purposes. Checks and cash that are received are placed in a slot in the top of a metal file cabinet in the fire alarm room and drop into the top drawer of the cabinet, which is locked. The money is removed and deposited in a bank account by the fire chief or his designee, but not on a designated schedule. We also learned that after the change in fire department administration, checks totaling approximately \$700 from 2006 and 2007 were found. The department is contacting the originators of these checks in an attempt to obtain replacement checks.

There is no regular in-service inspection program or formal fire pre-planning program. On an annual basis, in-service fire companies are assigned to collect data on business occupancies. They visit each occupancy and complete a form known as "Gloucester Business Occupancy File-Form 8". The information collected includes contact

² Underground storage tank

information for the business owner and key holders, descriptive information concerning the building, hydrant location, hazardous materials information, and other miscellaneous data. This information is then entered into a database using the "Firehouse" software program. If a serious fire hazard is detected in a building, it is reported to the fire inspector for follow-up.

The department does not have a formal, year-round public fire education program. During Fire Prevention Week in October, visits are made to the elementary schools to promote fire safety.

Basic origin and cause fire investigations are conducted by the fire inspector when requested by a fire incident commander. The Gloucester Police Department participates in the investigation of fires of suspicious origin or possible incendiary cause. Investigators from the State Fire Marshal's Office are requested to assist with large or complex fire investigations or when specialized investigative resources are required (such as an accelerant detection dog), which is typical for communities the size of Gloucester. The State Fire Marshal's Office is also called in for fires that result in a fatality.

The fire inspector has not been provided with any basic tools for evidence collection at fire scenes, such as evidence collection cans or basic hand tools. In addition, there is no secure storage capability for evidence that has been collected at a fire scene.

RECOMMENDATIONS

- 9.1 Fire prevention should be promoted as a key component of the vision of the Gloucester Fire Department and should be a major aspect of its primary mission. Aggressive fire prevention programs are the most efficient and cost-effective way to reduce fire risks, fire loss, and fire deaths and injuries in the community. Every member of the department should be responsible for fire prevention.
- 9.2 The department should restore the part-time clerical position to support the fire prevention program. This position would be responsible for administering a permit management system, scheduling fire inspections, filing, and other related duties.
- 9.3 The department should consider increasing the fees for permits within the allowable statutory amounts. For example, most of the \$25.00 fees may be increased to \$50.00, and additional fees may be charged for smoke detector/carbon monoxide inspections in multi-unit residential occupancy (see M.G.L. Chapter 148 section 10A).

9.4 The fire chief should establish written procedures concerning the receiving and handling of payments for permits. This procedure should include:

- A permit numbering system
- Providing customers with receipts
- Elimination of cash transactions
- Daily or weekly reconciliation of receipts, in accordance with City policy
- Daily or weekly deposits, in accordance with City policy
- Auditing of the permit receivables in accordance with City policy

9.5 The department should maintain detailed statistics concerning fire prevention and inspection activities and produce an annual report that includes the following:

- Number of inspections by occupancy type
- Number of permits by type
- Revenues
- Number of plan reviews by occupancy type
- Number of acceptance tests observed/monitored by type of inspection
- Number of in-service inspections by occupancy type
- Public fire education activities

9.6 The department should continue to fund the NFPA National Fire Code subscription service.

9.7 The department should develop a library of fire prevention reference materials, such as the *NFPA Fire Protection Handbook*, *NFPA National Fire Alarm Code Handbook*, *NFPA Automatic Fire Sprinkler Systems Handbook*, *NFPA Flammable and Combustible Liquids Handbook*, *Brannigan's Building Construction for the Fire Service*, and various fire prevention and inspection training manuals of the International Fire Service Training Association (IFSTA).

9.8 The department should continue to support training and professional development activities for the fire inspector and the deputy chief in charge of fire prevention. Current activities include attendance at the Fire Prevention Association of Massachusetts, Massachusetts Firefighting Academy, and the New England Arson Seminar. Personnel should also be required to attend fire prevention and management courses at the National Fire Academy.

9.9 Training opportunities in fire prevention should be provided for fire officers and firefighters, with the goal of establishing fire prevention duties as an important component of career development within the Gloucester Fire Department. A program should be established that requires officer candidates and/or new

officers to be assigned to full-time fire prevention duties for a minimum of six months. This type of program will strengthen their personal communications skills, will enable them to interact more closely with property owners and the business community, improve their knowledge of buildings in the City, and will provide them with expertise that will be valuable in their role as a supervisor and incident commander.

9.10 The department should establish a formal in-service fire safety inspection program. On-duty companies should conduct regular fire safety of inspections of buildings within their respective response districts. The purpose of these inspections is to a) identify and mitigate fire hazards and fire code violations; b) enable firefighters to become thoroughly familiar with buildings, including the building design, layout, structural conditions, building systems, and hazards and challenges to firefighting operations; c) to educate property owners and occupants on good fire safety practices; d) to establish a positive relationship with property owners and occupants. In order to establish an in-service inspection program, it will be necessary to:

- Train personnel on proper procedures
- Develop standard operating guidelines for in-service inspections
- Establish inspection schedules
- Establish a system for documenting inspections and notifying property owners of fire hazards
- Establish a follow-up inspection system to ensure that hazards have been mitigated
- Require on-duty personnel to conduct regular in-service inspections of all building construction sites in the City

9.11 The department should establish a formal fire pre-planning program. The purpose of a fire pre-planning program is to develop a fire response plan for buildings in the City. A pre-fire plan includes data such as the occupancy type, floor plans, construction type, hazards to firefighting, special conditions in the building, apparatus placement plan, water supply plan, and forcible entry and ventilation plan. Pre-fire plans should be reviewed regularly and tested by tabletop exercises and on-site drills. In addition, the department should develop a plan to make pre-fire plans accessible on mobile data terminals (notebook/laptop computers) on fire apparatus for use en route to an incident and while on-scene.

9.12 Tools and safety equipment should be provided for the deputy chief (fire prevention) and the fire inspector, such as:

- Safety helmet (hard hat)
- Safety glasses

- Hearing protection
- Digital camera
- Tape measure and measuring wheel
- Electrical voltage detector
- Evidence collection cans
- Basic hand tools for fire scene investigation

- 9.13 The fire department should establish a procedure and capability for the secure storage of evidence that has been collected at a fire scene, including a procedure for chain of custody of evidence. It may be possible to use the evidence storage facility at the police department for this purpose.
- 9.14 The City should consider charging a fee for the plans review services of the fire department.
- 9.15 The City should establish a risk management and inspection program for City-owned and operated buildings and facilities. We recommend that the fire department be responsible for managing this program. Since facility security is a key component of a risk management program, the police department should also provide expertise and resources to the risk management program. The risk management program would be the first step toward a comprehensive disaster continuity of operations/continuity of government plan.

CHAPTER 10

USE OF TECHNOLOGY AND RECORDS SYSTEMS

OVERVIEW

The MRI study team evaluated the Gloucester Fire Department's use of technology, including its computer hardware and software systems. This component of the study included interviews with Mike Wells, Director of the City of Gloucester Information Technology Department, Chief Dench and Operations Deputy Chief Schlichte. The study team also evaluated the department's use of new emergency scene technology such as thermal imaging cameras. We also reviewed the department's records management system as part of our review of the use of technology.

OBSERVATIONS

Prior to the study team performing this component of the study, we were lead to believe that the Gloucester Fire Department did not have even the most basic element of modern day technology, the personal computer. It was reported that nearly all of the computers currently being utilized by personnel in the department were personal units that were brought to work from home. Although the department does have some hardware and software limitations, the situation was not nearly as dire as had been reported.

The fire chief, the chief's secretary, the deputy chiefs, headquarters captains, EMS coordinator, fire inspector and the watch desk/alarm room area all have City desk top computers, although they are older models. The West Gloucester and Bay View stations also each have a City owned desktop computer. All of these computers are under City domain and control and are maintained by the IT Department. While they are not the most powerful, up-to-date computers available, these units seem to be meeting the department's current basic needs, although as the department gradually makes more use of its management software, the limitations of these older computers may become more obvious. The City of Gloucester has been expanding and upgrading its computer infrastructure and hardware for about the past four years. This is a program that will be beneficial to the fire department as it works to upgrade its equipment and capabilities. Chief Dench reported that the department is in the process of updating some computers and hardware in cooperation with the City IT department.

Panasonic Toughbook computers are carried on the ambulances to accomplish electronic completion and submission of patient care reports. These units are wireless network driven and are encrypted for security. No other apparatus or mobile units are currently equipped with computers.

There are a few training computers in use at Fire Headquarters that were bought either by the fire department or by individual members. These computers are networked together, by members of the fire department, on the department's internal network. They are not on the City network and are not under control of the IT Department.

The City of Gloucester utilized a cable internet system until approximately two years ago when it built a new fiber optic system. Fire Headquarters and the West Gloucester station are connected to this system, however, due to their locations, the Bay View and Magnolia stations are not, leaving these two stations unable to connect to either the fire department or City networks. This situation creates significant efficiency and productivity problems as the personnel assigned to these stations cannot access the *Firehouse* Fire Department Management program to complete incident reports, or to perform any other administrative functions. Finding an affordable and feasible solution to this limitation is critical to the fire department's information management program.

Due to reliability issues with the cable internet system, the fire department has its own internal controller and server. The current system is approximately four years old. With the advent of the fiber optic system and its inherent reliability, the City is gradually switching all departments to the City's central server. It is anticipated that this transition will occur for the Fire Department prior to the end of 2009, although some fire department specific database may remain on the department's own server. This change will allow the fire department much greater access to other databases and systems that they may have need to interact with.

The current fire department server is backed up nightly to the main City server. However, because the fire department is a 24 hour per day operation, the officers at Fire Headquarters are usually logged onto the system continuously. This causes problems with the daily back-up of the City server. While a solution is being worked on, an interim procedure in the fire department on backing up their own database would be helpful.

The fire department utilizes the *Firehouse* Fire Department Management software, a comprehensive and powerful program that can be employed for all facets of department management and operations including incident reporting, training, inventory, fire prevention and inspections, maintenance, staffing and scheduling, personnel and pre-fire planning. Currently, the Gloucester Fire Department only uses this program for incident reporting and, as noted in Chapter 18, *Fire and EMS Reporting*, the data being entered into this module is incomplete and, at times, inaccurate. This calls into question the validity of the limited statistics the Department has been able to develop. The

accuracy of data that is inputted into any software program has a direct correlation on the program's output, statistical accuracy, etc.

It was reported to the team that the fire department can currently access the tax assessor's address and owner database through the City network, although this resource is currently not being utilized. Consistent use of this database would greatly improve the accuracy of property owner information being entered into the Firehouse Incident Reporting module.

The study team was informed that the department is going to begin utilizing the training and personnel modules of the *Firehouse* system, however, at the time this report was prepared, that has not occurred. The department has recently purchased the *Firehouse* Inspections and Scheduling modules and is beginning to utilize both of them. While they do have some occupancy information, inspection and pre-fire planning information is almost non-existent. The lack of this information being readily available creates operational limitations for the department. Chief Dench reported that with the later program they are working with the payroll department to integrate this module with the weekly electronic reporting of timesheets/payroll.

The department has a number of its own stand-alone databases. Many of these are at least 15 years old and preceded the implementation of the *Firehouse* system. These include resources lists and box alarm lists located on a stand-alone computer in the watch desk/alarm room area. It was acknowledged that some of the information in these resources is outdated or incomplete. For example, the box list contains only the first due units, not any resources beyond first due. The department does not have any computer aided dispatch (CAD) capability at the present time.

One major electronic communication tool that is noticeably absent from the fire department is an e-mail account for every member. This is an issue of particular concern since, during our interviews, poor intra-department communications was mentioned repeatedly as a major problem. Currently, the fire chief, deputy chiefs and captains are the only members who have City e-mail accounts. In an effort to provide better communication within the department, Deputy Chief Schlichte has compiled a list of the personal e-mail accounts of all members of the department except two, who do not utilize e-mail. They are having some success utilizing this system as an interim solution.

The City IT department is not in favor of establishing an e-mail account for every firefighter, citing the lack of any use on many accounts when every member of the police department was set up with an account. However, Chief Dench would like to see every member have their own e-mail account. The study team concurs, believing that providing every member of the fire department their own City e-mail, in conjunction with development of a procedure that requires e-mail to be checked each shift, would significantly improve communications within the department. Documents that could be

distributed electronically include, but would not be limited to Operational Procedures, Standing Orders, Training Bulletins, Safety Bulletins, and Informational Bulletins.

The IT department does have geographic information systems (GIS) capability and a GIS specialist who handles the development of the main layers of the system. There has never been a formal contact within the fire department and there may have been some communication issues, possibly related to training, in the past. If the fire department is interested in expanding the GIS layers for their use with such information as hydrant locations, fireboxes, building pre-plan information, etc., they would need to enter their own data. IT could provide training and support for this process. The study team believes that while it is time consuming to get completed, this would be an excellent project that, in conjunction with the installation of computers in all apparatus, would significantly improve the real time information available to personnel responding to, or at the scene of an emergency.

The fire department has two web sites, both of which are moderate in the quantity of their content. One site is the fire department's own site which was developed by some Department members. It has not been updated in about five years. The official site is off of the main City web site and all updates here must go through the City IT department. This site does have a good deal of excellent information on it, including a number of fire prevention and safety tips. The City is currently considering significant updates to its web site that would expand a number of online applications. Issues being considered include the capability to apply for permits on line and have the permit issued electronically, schedule inspection appointments, etc. While not specifically web site based applications, the fire department does do all purchase requisitions, approvals and receipts electronically on line.

On the other side of web sites, is the issue of web site access. The City policy on internet use dictates that it is only to be utilized for City business, however, the internet is not filtered or blocked and the City does not routinely check log files on internet usage. As is frequently the case in fire stations that are staffed around the clock, personnel surf the internet during their free time, or when assigned to watch duties. This has caused a problem were the watch desk computer gets corrupted frequently with viruses. As the fire department places more emphasis on its various databases, it will need to effectively deal with this problem.

Beyond computers, there are a number of major technological advances that have had a very significant positive impact on fire service emergency operations over the past 10 to 15 years. These developments have allowed more effective, efficient and safer emergency scene operations. Most significant among these developments are thermal imaging cameras (TICs), automatic external defibrillators (AEDs), and advanced personnel accountability systems.

As has been noted in other chapters in this report, overall record keeping systems for functional areas such as personnel, vehicle and equipment maintenance, hose and

pump testing, building maintenance and fire pre-planning are seriously deficient or non-existent. It was reported that some written and electronic documents were lost or destroyed prior to immediately prior to the transition to a new fire chief administration. Efforts were made by the IT department to recover these documents, but the efforts were not completely successful.

The lack of an organized recognized management system makes the retrieval of important data extremely difficult, hinders administrative and emergency response functions, impairs the budget and planning process and makes it difficult to stay on track and on task with critical functions.

Personnel records are currently stored in a file cabinet in the office that is shared by the deputy fire chiefs, captains and the EMS coordinator. During several visits, the MRI study team noted that the fire cabinet was unlocked and the key was left in the lock.

There is one commendable exception to the department's record keeping system. EMS records and patient care reports (PCR's) are maintained on a state-of-the-art software system. The EMS coordinator performs regular quality assurance evaluations of reports in accordance with Commonwealth regulations and EMS best practices.

RECOMMENDATIONS

- 10.1 In conjunction with the City IT department, The Gloucester Fire Department should conduct a comprehensive inventory of its current computer hardware, and concurrently conduct a current and future needs assessment with regard to hardware requirements. This assessment should include its needs relative to up-to-date computers for all stations, key officers/personnel, and the watch desk/alarm room area, as well as for apparatus and command/staff vehicles.
- 10.2 In conjunction with the City IT department, the Gloucester Fire Department should conduct a comprehensive assessment of current computer system databases, software capabilities and resources with respect to operational criticality and what is needed to support those systems.
- 10.3 The City of Gloucester and the Gloucester Fire Department should determine a feasible, reliable and cost effective way of connecting the Bay View and Magnolia stations into the fire department/City computer network(s).
- 10.4 The IT Department and Fire Department should take steps ASAP to establish a City e-mail account for every member of the fire department. The Fire Department should also concurrently develop a procedure that requires every member of the department to check their e-mail at least once each duty shift. Establishment of the e-mail accounts, and this procedure, will significantly improve communications and flow of information within the Department.

Documents that could then be sent out electronically include, but would not be limited to, Operational Procedures, Standing Orders, Training Bulletins, Safety Bulletins and Informational Bulletins.

- 10.5 The Gloucester Fire Department should take steps to insure that the *Firehouse* database is utilized for all aspects of the department's management, operations and recordkeeping including incident reporting, training, inventory, fire prevention and inspections, maintenance, staffing and scheduling, personnel and pre-fire planning. For records such as personnel records and vehicle and equipment maintenance records efforts should be undertaken to retroactively enter critical data. To the extent possible, information that is stored in databases other than *Firehouse* should be moved to the *Firehouse* database.
- 10.6 The Gloucester Fire Department should develop an operational procedure that part of the daily routine by one of the officers at Fire Headquarters is to perform a back-up utility operation of the *Firehouse* database to a pre-determined location on the main server.
- 10.7 The Gloucester Fire Department should consider assigning personnel, as may be necessary, to receive training and to develop GIS layers that are applicable to the department's needs, such as building plans, occupancy information and hydrant locations and flows, main sizes and grids, etc. Elements of this process should be coordinated with the Public Works Department.
- 10.8 The Gloucester Fire Department should consider acquiring and installing laptop computers/mobile data terminals in all apparatus and command/staff vehicles to provide real time GIS, pre-plan and other information to responding and on-scene emergency units. Command and senior staff vehicles should be equipped with internet access.
- 10.9 The Gloucester Fire Department should continue to update its web site on a regular basis to provide its customers, and other interested parties, as much information as possible on fire safety, fire prevention, and the department's profile and programs. The department should also work actively with the IT Department to make on line permitting, inspection scheduling, etc. a reality.
- 10.10 The Gloucester Fire Department should develop, and enforce, an operational procedure on internet access by members of the department when on-duty. If non-business internet use is to be permitted, it is recommended that personnel be required to utilize their personal computers, and consideration should be given to an alternate portal to the internet than through the City and/or fire department networks.

- 10.11 The Gloucester Fire Department should consider assigning command staff personnel to training on records management in order to maximize the department's capabilities. Examples of National Fire Academy courses that include a records management component include "Advanced Analysis for Decision Making" and "Training Program Management".
- 10.12 A standard operation procedure for personnel records management should be developed and enforced. Confidential personnel records should be secured in the fire chief's office or at City Hall and accessible only to authorized personnel.

CHAPTER 11

POLICIES AND PROCEDURES; **RULES AND REGULATIONS**

OVERVIEW

The use of rules and regulations, operational procedures and various other forms of written communications are vital parts of a fire department's overall operations. Rules and regulations establish expected levels of conduct and general obligations of department members, identify prohibited activities and provide for the good order and discipline necessary for the credible operation of a quasi-military emergency services organization. Operational procedures insure the consistent, effective, efficient and safe operation of various aspects of the department's operations, both emergency and routine. One of many common denominators among the best fire departments across the United States is that they have a comprehensive and up-to-date operational procedural manual and all their personnel are well versed and well trained in those procedures. Enhancing the system even further through the inclusion of other documents such as Training and Safety Bulletins serves to make the system more effective.

The MRI study team evaluated the Gloucester Fire Department's current written policy and procedures system and found that, although it was extensive, it has not been significantly revised or updated in many years. It also lacks a sense of priority as evidenced by procedures that existed and the glaring absence of important procedures that are not included. The team also believes that separating out rules and regulations and policies would better clarify the system and should assist with emphasizing the relative importance of each type of document.

OBSERVATIONS

The study team was provided with, and reviewed, a rather extensive Operations Manual for the Gloucester Fire Department. This Operations Manual consists of three books.

Book I titled Organization includes seven chapters:

- Chapter I: Manual of Operations
- Chapter II: Definition of Terms (This chapter was discontinued in 1995)
- Chapter III: Fire Department Organization

- Chapter IV – General Administration
- Chapter V - Personnel Policies and Procedures
- Chapter VI - Rules and Regulations
- Chapter VII – Records and Reports (this chapter contains no procedures)

Book 2 titled Routine Operations includes five chapters:

- Chapter I: Station Operations
- Chapter II: Apparatus Operations
- Chapter III: Equipment Operations
- Chapter IV: Emergency Medical Service
- Chapter V: Fire Prevention

Book 3 titled Emergency Operations includes 11 chapters:

- Chapter I: Alarms and Response Procedures
- Chapter II: Emergency Communications
- Chapter III: Fire Company Operations
- Chapter IV: Emergency Medical Services
- Chapter V: Command Operations
- Chapter VI: Firefighting
- Chapter VII: Medical Emergencies
- Chapter VIII: Not included in the book
- Chapter IX: Rescue Operations
- Chapter X: Transportation Emergencies
- Chapter XI: Hazardous Materials Incidents

According to the personnel interviewed, the general set up and organization of the manual is good and is easy to utilize and cross-reference the necessary procedure. Once a familiarity was gained during review of the manual, the study team concurs. If personnel are going to be required to learn, and adhere to the department's procedures, then the format, organization and filing of them must be user friendly, otherwise they will sit on a shelf unused.

Overall, the existing procedures appear to be well written and are very detailed, sometimes with too much specific detail. For instance, many procedures that involve a necessity for notification contain the actual phone number(s) to be called. Some even contain the specific name of a person to be contacted. When the procedure is nearly 15 years old, it is certainly legitimate to question whether that person is still on the job, and if not, what should be done. At emergency scenes, no one is going to remember a specific phone number for notification. Operational procedures should contain general information regarding other departments, agencies or organizations to be contacted, however, the specific contact information should be available in the Alarm Room.

The team noted that many of the operational procedures are outdated; some of them are more than 25 years old. A majority are between 10 and 20 years old. None of them appears to have been reviewed, revised, or updated. Staff interviews confirmed that this is the case. Attempts by some senior staff members to periodically update procedures were met with frustration when the updated procedure was never issued by the fire chief, or, if it was, it bore little resemblance to the proposed and submitted revision. It is also important to note, that while some procedures do make reference to various documents, including National Fire Protection Association (NFPA) standards, because the procedures are so old, the NFPA standard being referenced has probably been revised several times, rendering the referenced sections inaccurate.

The operational manuals that were provided to MRI as part of the requested documentation to be evaluated included a number of procedures that contained serious inaccuracies regarding current Department operations and equipment. For instance, the 2-III-8, Self-Contained Breathing Apparatus was issued in 1994. Not only is this procedure more than 15 years old; but the department acquired new SCBA approximately 5 years ago of a different make than was previously utilized and respiratory protection standards and requirements have changed significantly in the past decade. Procedure 2-III-9, PASS Devices was issued in 1998 and refers to old, first generation, non-integrated PASS devices, not the current models that are fully integrated into the design and automatic operation of the SCBA currently in use. Another very significant operational procedure that was very outdated is 3-V-1, Incident Command System which was issued in 1995, long before changes to the Incident Management System brought on by the 2001 terrorist attacks were implemented.

It was reported to the study team that the recently appointed Operations Deputy, Chief Schlichte, has begun to revise and update these procedures, and has completed several of them. A few of the recently updated procedures were provided for review, however, several truly critical procedures such as the Incident Management System and Personnel Accountability were not included in the updated procedures packet provided to the team.

It was interesting to note that while there was a procedure on Beds (2-I-1) and a three page one on Parking – Private Vehicles (1-VI-5), there are no operational procedures in place to deal with mission critical operations such as *Structure Fires, Basic Engine Company and/or Truck Company Operations, Rapid Intervention Team Operations, Marine Vehicle Fires, or, Vehicle Extrication Operations*, just to name a few. There is also not a chapter, or single operational procedure, devoted to *Training*. These are the types of operational procedures that are most important and provide standardization and consistency of operations. Also, as with many other facets of Gloucester Fire Department operations, compliance with the existing procedures has been inconsistent.

Chapter V of Book 1 is titled Personnel Policies and Procedures; however, it does not reference any of the City of Gloucester personnel policies that were provided to the study team. With the exception of the Sexual Harassment and Smoking policies, the

fire department manual contains none of the City personnel policies. The integration of City and fire department policies and procedures is discussed in more detail in Chapter 16, Municipal and Department Personnel Policies, Practices and Personnel Evaluations. Chief Dench informed the MRI team that at this time the City policy manual is not available at the fire department.

Chapter VI of Book 1 is titled Rules and Regulations; however, this chapter contains only procedures. The procedure titled General Conduct (1-VI-1) is only two pages of very generic information and certainly does not establish the expected levels of conduct and prohibited actions of members of the department. Another procedure, titled Sexual Harassment (1-VI-6) by nature of its relative importance should be more appropriately established as a policy.

The current operational procedure manual appears to have been prepared unilaterally, perhaps even in a vacuum, by the previous fire chief. There was no input what-so-ever from anyone subordinate to the fire chief. In the modern fire service this is not conducive to effective operations, good communications, or, good labor–management relations. The personnel who are going to be required to adhere to, and follow, the procedures should have input into their development. Furthermore, it was noted that none of the procedures contain the fire chief's signature, or any indication as to who they were actually issued by.

Chief Dench and Deputy Chief Schlichte have expanded the written communication system with the use of Standing Orders. These are orders that cover various facets of Department operations but can be quickly issued as needed. They may cover a particular period of time regarding a special situation, or, may provide a temporary procedure pending development and issue of a full operational procedure. This is a good, proactive step in the right direction to have a mechanism in place to quickly be able to address situations that arise.

RECOMMENDATIONS

- 11.1 The Gloucester Fire Department should form a committee as soon as possible to perform a comprehensive update and revision of the department's Operational Manual, including the addition of mission critical procedures such as, but not limited to *Structure Fires, Basic Engine Company and Truck Company Operations, Rapid Intervention Team Operations, Marine Vehicle Fires and Vehicle Extrication Operations*; the addition of other procedures covering routine administrative operations and training procedures; deletion of unnecessary procedures; and, restructuring the manual as may be necessary. The committee should include members of each rank should and include specific representation by a senior officer of the union. Due to the urgency of this task, and its significant importance to the department's future success, the committee should be given whatever support is necessary to complete this task within one year.

- 11.2 Since City policies appear to apply to all City employees, which includes employees of the fire department, rather than attempting to develop its own policies that are consistent with the City's, the Gloucester Fire Department should utilize the established City policies to address appropriate topics such as discrimination, sexual harassment, etc. The City policy manual should be made available in each station (or on line) and policy training should be conducted for all personnel.
- 11.3 The first operational procedure, 1-I-1 should identify and explain the components of the revised Written Communication System, including the use and organization of the Operations Manual and other components of the system. This procedure should also contain a provision that the entire Operations Manual will be reviewed on a least an annual basis and that updates and revisions shall be made at any time, as necessary.
- 11.4 The Gloucester Fire Department standard operational procedure form should be revised to include a section for the inclusion of a revision date if a procedure is re-issued with only minor to moderate revisions. Full-scale revisions to a procedure should result in it being reissued with a new issue date. The form should also include an area for the approval and signature of the fire chief.
- 11.5 The Gloucester Fire Department should develop and implement a procedure that provides for the documented review of policies, procedures, standing orders, etc. that includes a provision requiring each member of the department to sign that they received the document, have read it, and understand it.
- 11.6 The Gloucester Fire Department should form a management-labor committee to develop a comprehensive, and stand alone, Rules and Regulations document that identifies, in detail, anticipated and prohibited behaviors. This document, which should be submitted for approval by the City Council, should then be distributed to and signed for by each member of the Department. It will also provide an indoctrination to the department's behavioral expectations for new personnel. While a number of excellent rules and regulations documents exist and can be used as the basis for the Gloucester document, Providence, Rhode Island has an excellent set of rules and regulations.

Some suggested sections for the Rules and Regulations could include, but are by no means limited to:

- a. A Preamble
- b. the Department's Mission Statement
- c. Objectives of the Department

- d. Purpose of the Rules and Regulations
- e. Organization
- f. Membership requirements
- g. General Rules of Conduct
- h. Officer Qualifications and Selection (May just reference current department procedure and/or civil service regulations)
- i. Officer Duties and Responsibilities (May just reference current department procedure)
- j. Training (May just reference current department procedure)
- k. Apparatus, Equipment and Protective Clothing (May just reference current department procedure)
- l. Uniforms and Grooming
- m. Discipline
- n. Conflicts Between Department Documents (state statutes, City policy, Rules and Regulations, Operational Procedures, Standing Orders)
- o. Other areas that may be agreed upon for inclusion

11.7 The Gloucester Fire Department should expand their written communications system beyond the recent addition of the Standing Orders. This expansion could include Training Bulletins, which would be issued to serve as reference with regard to tested and approved methods of performing tasks; Safety Bulletins, which are issued to serve as references with regard to general and specific safety and health issues; and, Informational Bulletins which are published for the general knowledge of recipients. A numbering system should also be implemented to keep track of these documents for indexing and future reference purposes.

11.8 The Gloucester Fire Department should develop an effective system for insuring that any new Operational Procedures, Standing Orders, Training Bulletins, Safety Bulletins and Informational Bulletins are distributed to all personnel and stations.

- 11.9 The City of Gloucester should negotiate with Local 762 of the International Association of Firefighters to remove the staffing provisions from the collective bargaining agreement and allow the operational procedure committee to develop a more flexible procedure that will allow for adjustments in staffing assignments (not levels) to be made as current conditions may warrant.
- 11.10 In accordance with any applicable Massachusetts statutes, or regulations, or, any local ordinances, policies, etc., the fire department should develop an operational procedure on incident report storage, destruction and disposal. The procedure should designate how long reports should be maintained, how they are destroyed and disposed of, and require that records be maintained of how and when the records were destroyed. The procedure should also specify that reports for very significant incidents should be maintained and archived permanently.

CHAPTER 12

CITIZEN COMPLAINTS AND INTERNAL DISCIPLINE

OVERVIEW

Obtaining feedback on the quality of the services that are being provided to customers is important to the long-term success of any organization, whether public or private. When there is no mechanism in place to evaluate customer satisfaction, there is no way to measure service levels being provided against customer expectations and/or satisfaction. While there are many ways to identify strengths and weaknesses in emergency operations, obtaining feedback from those who requested the services of the fire department is one method that can assist with what should be an ongoing and continuous evaluation process. It is also extremely important that the fire department appropriately handle the occasional, but inevitable, complaint about the service that was provided. Citizen complaints should be documented, investigated, and brought to a logical conclusion with the complainant informed of the outcome, provided they identified themselves. Conversely, formal letters or other acknowledgements by customers that personnel did a good job should be addressed in a positive manner within the department and to the person making the compliment.

Good discipline is critical to the efficiency and effectiveness of any organization. During emergencies, orders are given by means of the incident command system and must be complied with quickly in accordance with safe practices. In the firehouse, there must be a culture of mutual respect and courtesy at all times. The consistency and effectiveness of the department's discipline system can have a significant effect, either positive or negative, on morale--the all important *esprit de corps*. One of the hallmarks of the best, most progressive, fire departments is that they are not only well trained but they are also highly disciplined. It is, however, important to note that in the context of this discussion, discipline refers to the entire concept of rules, regulations, procedures, training, and behavior, not just to the punitive aspect of disciplining those who disregard or disobey the rules. We are not implying that a well-disciplined organization is one that is functioning under a militaristic or authoritarian leadership style.

The MRI study team looked at the fire department's current procedures for handling citizen complaints and/or compliments. The team also looked at the department's internal disciplinary policies and procedures. In all of these areas, the team found that there were really no formal written procedures in place, and that, historically, issues were handled on a case-by-case basis by the fire chief, with no input, involvement or communication with other department officers.

OBSERVATIONS

Based upon interviews with the interim fire chief, Chief Dench, and the senior staff, it appears that, like most fire departments, the Gloucester Fire Department handles the majority of its emergency incidents and requests for service without any formal thank yous or complaints from those who were served. As with any busy, full service department, there is the occasional citizen complaint or letter of thanks or appreciation. At the present time, there is no formal process in place to deal with positive or negative feedback. Previously, all complaints and commendations were handled by the fire chief. Rarely were any of the department's personnel informed of the final disposition of the matter. The study team also learned that in some cases, the complaint or compliment was handled by the on-duty deputy chief who just happened to receive the call. In these cases, the chief's office may not have been notified. This practice created a system with serious consistency problems which certainly could lead to credibility problems with the entire process.

The MRI study team includes the handling of compliments, thank yous and calls/letters of appreciation in this section because feedback of any type, positive or negative is important to the fire department's objective and overall evaluation of their operations. It is also vitally important that personnel be commended when they do a good job or handle themselves in a professional manner and their service, skills or demeanor are acknowledged, and reflect positively on the department.

Like most fire departments, the Gloucester Fire Department deals with feedback on its services strictly in a reactive manner as a result of the occasional "customer" complaint or compliment. Progressive departments have begun to take a more proactive approach to determining how well they are meeting their customer's expectations through the use of customer satisfaction surveys. These departments send out a survey to a statistically reliable percentage of customers to garner information on how well the department provided service. The responses are analyzed and are used to help the department correct deficiencies, enhance services, improve training and improve the department's stature and image.

There is no consistent process to deal with complaints from the public on fire safety or fire code related issues. These can include complaints about neighbors burning trash illegally, exit doors blocked or locked in a business, or illegal business operations such as an auto body shop with no approved paint spray booth. The potential implications of these actions can range from severe life threats to general neighborhood quality of life issues. The relative severity of the complaint will also dictate how quickly it should be investigated. There should be a formal procedure in place to receive these complaints and refer them to either the fire inspector, the on-duty deputy chief, the fire chief (even outside of normal business hours) or to a different City, state or federal agency. The results of the investigation and final disposition should then be noted and the report filed for future reference. All documents should be maintained in accordance with state freedom of information statutes.

Discipline is another area where any type of formal process has been lacking. Our interviews with the senior staff indicate that as a whole, disciplinary infractions are not a major problem within the Gloucester Fire Department. This information is consistent with what is found in many other fire departments. However, because there is really no formal disciplinary process in place it is difficult to gauge the overall level of true disciplinary issues within the department. Our interviews revealed that there has been a notable lack of consistency in discipline, or even an awareness of whether discipline was administered for various infractions. Chief Dench reported that when he was a deputy chief, on a number of occasions he referred disciplinary matters and/or recommendations to the fire chief and to this day he does not know what the disposition of those matters were. He reported that the only time personnel would usually know that punitive discipline had been handed out was if it involved a suspension since the absence needed to be documented and the vacancy filled with overtime.

The fire department's procedure manual contains only one very vague section on misconduct and the collective bargaining agreement simply states: "There shall be no discipline or discharge without just cause". The City policy manual does contain a Progressive Discipline Policy that is fairly detailed with regard to progressive discipline. The policy, which is undated and unsigned as to adoption and/or effective date states that it is applicable to all City employees which would include the fire department. However, Chief Dench reported that the City policy manual has never been available at the fire department, a situation that still exists.

The purpose of discipline is not solely punitive but should be used constructively to address and to correct performance, conduct and/or attendance problems. When appropriate, disciplinary actions should be progressive in nature and should be consistent with the seriousness of the infraction. Severe disciplinary action, including dismissal from the department, may be appropriate for some offenses and may be issued without progressive discipline. Each case should be handled on its own merit or seriousness with as much consistency as possible. A well-disciplined fire department should not have much need for its formal disciplinary policy or procedure, as its members will know what the rules are, will normally adhere to them, and will understand the consequences of failure to comply. Chief Dench fully supports the concept of constructive, progressive discipline.

Discipline is most effective when applied by the officer directly responsible for the individual's performance and conduct. Therefore, to the extent possible, disciplinary measures should be initiated by the member's immediate supervisor, often after consultation with a senior officer.

RECOMMENDATIONS

- 12.1 The Gloucester Fire Department should develop a formal procedure for handling citizen complaints. The procedure should include a provision that verbal

complaints should immediately be referred to the on-duty deputy chief for initial documentation and investigation, with the fire chief formally notified as soon as practical as determined by the severity of the complaint. The procedure should include a formal complaint form that could possibly be adapted from the police department's internal affairs complaint form. The procedure should include a provision that the fire chief will determine who will conduct the investigation, and if necessary, will refer the complaint to the police department, City human resources department, or City legal counsel, if appropriate. The complaint should be fully investigated, the investigation documented in writing, and the complainant (if known) and the personnel involved formally notified of the results. The disposition status of complaints should be recorded as: *Sustained*, *Not Sustained*, *Unfounded*, and *Exonerated*. If necessary, disciplinary action can be initiated. The procedure should specify that even anonymous complaints must be received and investigated, and it should specify how completed investigation reports are filed and maintained.

- 12.2 The Gloucester Fire Department should develop a procedure for the handling of formal commendations, thank yous, and other positive acknowledgements of the department, its services and/or personnel, whether they are made verbally or in writing. The procedure should include a recommendation that the fire chief respond in writing to the person delivering the compliment, commendation, thank you, or acknowledgement. The procedure should include a provision that all department personnel are notified of the positive feedback that was received along with an acknowledgement by the fire chief. Finally, a copy of the letter, or a memorandum from the department, if the feedback was verbal should be placed in the personnel file of all personnel involved.
- 12.3 The Gloucester Fire Department should give consideration to the implementation of a procedure to actively seek feedback from "customers" to whom the Department has provided service. It is recommended that this procedure involve a formal customer satisfaction survey instrument that can be sent to every customer, or at a minimum, is sent to some statistically valid and reliable sampling or percentage of those the department has served. In order to be effective, the feedback must be analyzed, and if necessary, corrective action taken on any identified deficiencies.
- 12.4 The Gloucester Fire Department should develop a procedure for the handling of complaints from the public on fire safety and/or fire code related issues. The procedure should include a designated form for receiving the complaint, and specify how it is processed depending upon the immediate availability of the fire inspector or fire prevention deputy chief to assess its severity and/or urgency. Off-hour complaints should be forwarded to the on-duty deputy chief for evaluation. The procedure should designate how complaint investigations are documented, and how the reports are filed and maintained for future reference.

- 12.5 In conjunction with the union, and the City human resources department, the Gloucester Fire Department should develop a formal internal disciplinary procedure that is consistent with the City's existing Progressive Discipline Policy. This will result in discipline being administered much more consistently throughout the department. The procedure should delineate various levels, or severity, of infractions and what the recommended progressive discipline steps are for each level, or severity, of infraction. The procedure should also reiterate and/or expand upon the Disciplinary Article that should be contained in the Department's Rules and Regulations discussed in Chapter 11.
- 12.6 The department should provide formal in-service training to all officers to ensure that all citizen complaints are handled properly and consistently.
- 12.7 The department should provide formal training to all supervisors on the Progressive Discipline Policy.

CHAPTER 13

MUNICIPAL AND DEPARTMENT PERSONNEL POLICIES, PRACTICES AND PERSONNEL EVALUATIONS

OVERVIEW

Personnel policies comprise an important set of documents for employees that outline the expectations of the employer regarding employee conduct. They establish obligations of the employer and the employee. They also clearly establish the position of the employer regarding issues that could result in liability for the employer, and they establish employer compliance with a wide range of federal and state statutes and regulations. Finally, when employees are properly trained, and policies are properly enforced, the consistency of the employers operation is significantly improved.

Personnel practices should be a reflection of the employer's personnel policies. Through consistent application of the established policies, the employer's operation will be efficient and effective. Periodic training and consistent application of real life personnel practices that adhere to the established policies provides the employer with a reasonable shield of immunity should they become embroiled in litigation. Conversely, practices that conflict with personnel policies, or inconsistent application thereof, can increase liability should litigation occur.

Personnel evaluations are a topic that evokes much spirited discussion and debate among managers, human resources personnel and within labor-management circles. Critics contend that they serve no purpose, are purely subjective and are easy to manipulate and abuse. Supporters argue that they provide an important personnel management tool when properly developed and administered, outlining a documented history of job performance and a set of expectations/goals for future attainment.

All supervisors and managers should provide periodic feedback on job performance to personnel under their supervision, whether or not there is a formal evaluation process in place. This is not always the case, however, and individual supervisors will use different criterion for providing their feedback. A formal personnel evaluation process that is well designed to insure objectivity, developed in conjunction with the union when applicable, can provide an important measure of formal feedback on performance to the employee. In order to be effective, the process must be non-threatening and non-punitive, allowing the employee to be involved in setting personal goals, provide constructive criticism, and if necessary provide a blueprint for necessary improvements. Ongoing training of supervisors performing the evaluations is also critical.

The MRI study team reviewed and evaluated City of Gloucester personnel policies that were applicable to fire department personnel. The team looked at similar fire department policies and how the two integrate with each other. The team also reviewed personnel evaluation and personnel file management in the fire department.

OBSERVATIONS

The Gloucester Fire Department's hiring and promotional practices and processes are governed by the Commonwealth of Massachusetts, Civil Service regulations. The Mayor has the final authority for all hiring and promotion decisions. Promotional eligibility lists are limited to internal candidates that have taken, and passed, the promotional examination for their respective rank. Under Civil Service regulations, while the City theoretically has the ability to choose any of the top three (3) personnel on the eligibility list, they are supposed to hire or promote in order, unless there is a valid reason to bypass a candidate.

Chief Dench reported that when he was appointed interim fire chief, that created a position for a deputy chief and a captain. There were two (2) and three (3) candidates respectively on the promotional lists. The mayor, fire chief and personnel director interviewed the candidates and agreed that the number one (1) candidate on each list should be promoted. While the process operated as designed this time, that has apparently not always been the case, and there is no guarantee that outcomes will be the same in the future.

On a recent new hire from the paramedic list, the fire chief recused himself from the interview and selection process because of a conflict of interest. The mayor, a deputy chief and the personnel director conducted the interviews with the mayor selecting the number one (1) candidate for hire. The study team was informed that while a basic background investigation is performed on new hires, the City does not require the completion of drug screening, psychological assessments, or credit checks prior to employment.

There are several positions within the fire department that would be considered special assignments that fall outside of the scope of civil service promotions and classifications. These positions are the EMS coordinator, fire inspector, and mechanic. Personnel selected to fill these positions are chosen by the fire chief, and there has been controversy, resulting in the filing of grievances, over appointments in the past. While there are job descriptions for each position, there are ambiguously worded and Chief Dench believes that this is what brews the controversy. He would like to see all of these positions filled, based upon qualifications, with seniority only used to break a tie between two (2) equally qualified candidates.

The City of Gloucester provided its personnel policies for evaluation as part of the fire department study. The policies that were provided were divided into four categories:

Employment, Standards of Conduct, Health and Safety, and Benefits. The study team noted a number of concerns with the overall City policy program. It appears that policies have been added over the years without regard for format or standardization. While the policies are broadly classified as described above, they are not numbered. None of the policies reviewed contained an approval or authorizing signature. This creates uncertainty as to who issued and/or authorized the policies. Was it the mayor, City council or personnel director? None of the policies contained a formal adoption, or effective, date. One policy, Employment of Relatives, was still marked "draft". Only one of the policies contained an indication of how many pages it was supposed to contain, and only one of seven pages was provided. This leads to a question of whether the other policies were able to be reviewed in full. Some of the documents provided as policy were memorandums and/or appeared to be guidelines, as opposed to policies, yet they were contained in the policy index.

While the study team members are not human resource or legal specialists, the existing policies do appear to be sound based on comparable common practices. We make the good faith assumption that prior to adoption, all policies are reviewed by the City's legal counsel to insure that they will pass muster and/or withstand any potential challenges. The absence of several policies that would seem to be vitally important today, if not mandatory, was prominently noted. These policies would include, but would not necessarily be limited to non-discrimination, equal employment opportunity, personnel files and records, Hepatitis B inoculations, and Americans with Disabilities Act (ADA) policies.

In order to receive any type of federal grant money, cities are required to develop, implement, and keep current, Affirmative Action, and Equal Employment Opportunity Plans. Although very outdated versions of these plans are reported to exist, they were not provided to the fire study team for review. Candidates for entry-level employment are recruited through the civil service system; however, the City does have an obligation to recruit candidates within their own community. This will help to insure, that to the extent practical, candidates for employment reflect the demographics of the community they serve. The lack of up-to-date Affirmative Action and Equal Employment Opportunity Plans may indicate that Gloucester is not up to current requirements regarding their recruitment and employment. The Gloucester Fire Department currently has an authorized strength of 72 personnel of whom three (3) are female. While the department does have a significant number of firefighters of Portuguese and Italian decent, the two largest ethnic groups in the City, it currently has no African American or Hispanic firefighters.

It was reported to the study team that the personnel department provides the City's sexual harassment policy to all department's on an annual basis, and that all employees are required to sign an acknowledgement form that they have received and read the policy. This signed form is then maintained in the personnel department. This practice was cited in the MRI Gloucester Police report as an excellent risk management strategy. However, Chief Dench reported that it has been at least five (5) years since

any sexual harassment training was conducted in the fire department, and he has not seen the policy, or, any review form in that time. This situation is obviously placing the City at significant risk of liability.

This study team concurs with the MRI police study team that annual training on the sexual harassment policy would be an excellent risk management strategy. It must be expanded to the fire department as soon as possible. We also concur that the policy can be enhanced by requiring officers to review the policy with each employee. Employees should be asked if they understand the policy, have any questions, know the name and title of the person they can report offending behavior to and if they have been the victim of, or know of, any offensive behavior that has occurred.

The Fire Department Operations Manual contains just two of the policies found in the City Policy Manual, Sexual Harassment and Smoking. The sexual harassment policies are identical, while the smoking policies are substantially identical. The fire department smoking policy does not include a few minor provisions found in the City policy. The Sick Leave Verification Policy section of the Line of Duty Injury or Illness and Sick Leave procedure (1-V-2) is essentially similar, although not identical. However, the wording in the fire department procedure is identical to the wording found in the collective bargaining agreement.

The Line of Duty Injury or Illness and Sick Leave procedure also details actions to be taken when a member is injured on-duty and makes several references to notifications to, and approvals by, the personnel department which appears to insure that the Worker's Comp. policy is adhered to. The City of Gloucester employs a company, Cook and Co., to monitor and track their workers compensation claims. Cook utilizes nurse practitioners to follow workers compensation claims and intercede on behalf of the City, as necessary. This practice is recognized as a successful means for returning injured employees to work and ultimately reducing workers compensation expenses.

It is widely acknowledged that light duty is an effective means of returning employees to work. The City has a Limited Duty policy that is applicable to the police department. The fire department's collective bargaining agreement contains a light duty clause, and appendix, which appears substantially similar, although not identical to the police policy. However, the police study team found that light duty for police officers injured on-duty is strictly voluntary (a police officer can return to light duty voluntarily at any time with physician approval); the fire department's policy allows personnel to be returned to light duty, with a City physician's approval, after four (4) weeks of incapacitation. However, the injured firefighter may appeal the decision of the City physician to a physician of his choosing, and if there is a difference of opinion between the physicians, there is an appeal process that is followed. This can effectively prolong return to duty for an extended time. The study team believes that the effectiveness of this policy could be increased significantly if it was revised to permit personnel to be returned to work at any time, including immediately, depending upon the nature and severity of the injury. There is no reason that a firefighter with a strained knee, or injured finger should sit at

home for at least four (4) weeks with all of the work that needs to be performed at the fire department.

Chief Dench reported that the members of the fire department utilize light duty on a regular basis, and most personnel who are incapacitated are eager to return to work. At the time this report was being compiled, there was one (1) firefighter on light duty, and another firefighter who was going to be returning within a few weeks. This is a positive sign. Personnel who are on light duty work on their normal tour of duty and assigned as the watchman for the full 24 hours. This is a grueling assignment requiring the firefighter to remain awake for nearly the entire 24 hours. While this process frees up an able-bodied firefighter to respond to emergencies, the study team feels that this procedure could be revised to make it more productive for the department, and less difficult on the injured/sick firefighter.

The City policy manual does contain a Progressive Discipline Policy that is fairly detailed with regard to progressive discipline. The policy, which is undated and unsigned as to adoption and/or effective date states that it is applicable to all City employees which would indicate that it includes the fire department. The fire department's procedure manual contains only one very vague section on misconduct, and the collective bargaining agreement simply states: "There shall be no discipline or discharge without just cause". In any organization, written policies, managerial training, and consistent practice are important features of any disciplinary process.

The fire department grievance procedure is contained in the collective bargaining agreement. The grievance process begins with the employee's immediate supervisor, followed by the fire chief. If they cannot be resolved at either of these levels, the third step in the process is the mayor. If the grievance is not resolved to the grievant/union's satisfaction at this level, the matter can be advanced to binding arbitration. Chief Dench reported that he had received a flurry of grievances soon after assuming command that he handled at his level. Since then he has received only one (1) recent grievance which has not yet been processed at the time of the drafting of this report.

Chief Dench noted that while City policies are applicable to all City employees (although not all policies are clear in this regard), the employees of the fire department have never received training on the policies, and the City policy manual was not currently, and had never been, available at the fire department. This situation creates significant problems of consistency of application, and accountability, as employees are responsible for compliance with policies they have no access to, have never been trained on, and may not even know exist.

The MRI study team was informed that all City policies are posted on its web site, a fact that we confirmed. However, not all policies provided to the team for review are on the web site. The fact that at least some policies are available on the web site is not a widely known fact, at least not in the fire department.

According to Chief Dench, there are no periodic personnel evaluations performed in the Fire Department, and during his tenure with the Department, they have never been done. The fire chief does not believe that personnel evaluations are performed anywhere in the City. However, there is a City policy, Management Performance Evaluation Program that requires all managers and supervisory personnel to be evaluated on an annual basis. The policy states that it, "...applies to all managerial employees classified under the "M" schedule in grades 9-14". However, the policy does not specify, or, contain an appendix, indicating who falls into grades 9-14 of the "M" schedule. It would appear, however, that since the policy requires that all managers and supervisors be evaluated on an annual basis that, at a minimum, performance evaluations should be conducted on the fire chief, deputy fire chiefs, captains, and EMS coordinator.

Another significant concern of the study team is the matter of personnel files and records. Once again, there is no formal policy or procedure on this issue and consistency is lacking. Although there is a limited personnel file on each member in the fire chief's office, the main personnel files and records are kept in the deputy chiefs' office. It is extremely unlikely that these files are identical. According to Chief Dench, the City personnel department may also have a file. This practice creates uncertainty as to which file is the "official" personnel file. In the unlikely event that something of a training nature needs to be added, it is placed in the file in the deputy chiefs' office. The collective bargaining agreement contains a section pertaining to employee/personnel files, however, it does not identify where the official file shall be maintained.

Security of the files is also a major concern, especially with the purported main file being kept in the deputy chiefs' office. This office, unlike the fire chief's office is not locked. It is open and accessible to department personnel 24 hours a day. The headquarters captain and EMS coordinator share the same office. The files are kept in a lockable file cabinet, which is supposed to be kept locked. The key to the filing cabinet is located in an unlocked key box in the same office. While speaking with several personnel in the office, team members noted the key was actually hanging in the lock on the file cabinet.

RECOMMENDATIONS

- 13.1 The City of Gloucester should undertake a review, revision, update and enhancement project on its policy manual as soon as possible. Although not within the scope of work for this study, this critical activity provides an important foundation for a number of additional recommendations. All existing policies should be reviewed, revised/updated as necessary, and formally reissued with an appropriate adoption and/or effective date and authorizing signature. All City policies should be standardized as to format, including, but not necessarily limited to, numbering, date of adoption/effective date, purpose, scope/applicability, number of pages, and authorizing signature.

- 13.2 A number of new policies, including, but not necessarily limited to, non-discrimination, equal employment opportunity, personnel files and records, Hepatitis B inoculations, and Americans with Disabilities Act (ADA), should be developed and adopted. The City should insure that all personnel receive policy training on a periodic basis, and that all policies are being utilized and enforced consistently throughout all departments.
- 13.3 The City of Gloucester should develop and implement a uniform and standardized policy for candidate selection, promotion, and special assignments. All employees should be fully aware of the requirements and/or qualifications necessary for special assignments, or, promotion.
- 13.4 The Gloucester Fire Department, in conjunction with the personnel department, should revise the job descriptions and required qualifications for the positions of EMS coordinator, fire inspector and mechanic to remove any ambiguity, clarify exactly what is required for these special assignments.
- 13.5 All available promotional and special assignment positions should be posted to insure that all personnel are aware of career opportunities. The fire department should have a written operational procedure that seeks input from senior officers for promotional decisions.
- 13.6 The City and fire department should develop a policy regarding pre-employment background investigations. Background investigations should include a criminal history check, drug screening, credit checks, reference checks, employment history verification, a medical examination, and a psychological assessment.
- 13.7 Since City policies to apply to all City employees, the Gloucester Fire Department should utilize the established City policies to address appropriate topics such as discrimination, sexual harassment, etc. The City policy manual should be made available in each station (or on line), and policy training should be conducted for all personnel.
- 13.8 The Gloucester Fire Department should engage in ongoing recruitment efforts, including efforts to enlist female and minority candidates who reside within the City. Brochures on how to apply to the department can be easily crafted, along with recruitment information that can be posted on the City, and fire department's web sites, placed on public access cable TV stations, and distributed to various community groups.
- 13.9 In order to comply with the Management Performance Evaluation Program policy that is already in place, the fire department should commence annual personnel performance evaluations on all personnel ranked captain and above, and including the EMS coordinator.

- 13.10 The City of Gloucester and Gloucester Fire Department should negotiate with Local 762 of the International Association of Firefighters for the purpose of implementing a reasonable, fair, and objective, annual performance evaluation program for all employees within the fire department. This performance evaluation would be separate and distinct from the routine skills proficiency evaluations recommended in Chapter 16, Training and Professional Development. However, the skills evaluations should be considered as one component of the overall performance evaluation.
- 13.11 All captains and deputy chiefs should receive training in performing both formal, and informal personnel evaluations, in order to provide personnel under their supervision with periodic, and timely, job performance feedback.
- 13.12 The City of Gloucester and the Gloucester Fire Department must make a formal determination where the "official" personnel file for each employee is located. A policy should then be developed that spells this out. The policy should also identify how files for former employees are maintained. If the "official" file is maintained in the personnel department at City Hall, it would make sense, for convenience sake, for a duplicate file to be maintained in the fire chief's office at the fire department. A sub-folder should be created for all employee health records and related documents. Health records should be maintained separately from general documents within the file.
- 13.13 The personnel files currently kept in the deputy chiefs' office should be immediately relocated to the secure fire chief's office. All of the basic personnel information that a captain and/or deputy chief would need to access, on short notice, regarding any person under his command should be entered into the personnel information section of the Firehouse fire department management program.
- 13.14 The City of Gloucester should continue to utilize the outside company that manages workers compensation cases. This company should provide training to Gloucester Fire Department captains and deputy chiefs on the services that they can provide to the City, as well as, on performing a thorough investigation of every on the job injury.
- 13.15 The City of Gloucester, and Gloucester Fire Department, should negotiate with Local 762 of the International Association of Firefighters for the purpose of revising the light duty provisions to permit injured personnel to be returned to light duty at any time, including immediately, depending upon the nature and severity of their injury. The policy should also be revised to put firefighters on light duty on an alternative work schedule of day work, where they can accomplish various administrative tasks for the department.

- 13.16 All officers in the fire department should be required to review the sexual harassment policy with all personnel under their command on an annual basis. Personnel should be required to sign that they have received the training and understand the policy.
- 13.17 It is our understanding that the City has initiated the process to remove the position of fire chief from civil service. We concur and believe that the City should have considerable flexibility and discretion in the recruitment selection of a future fire chief.

CHAPTER 14

STAFFING AND SCHEDULING

OVERVIEW

The issue of fire department staffing has, over the past three decades, become one of the most widely and frequently debated topics in fire service history. It is a topic that often finds fire chiefs and the firefighters union aligned in contentious debate with City administrators looking to stretch scarce financial resources. There is little debate that staffing costs account for the largest percentage of most career fire departments' operating budgets, nearly always in excess of 90%. The debate becomes intense when the discussion turns to how many firefighters are necessary to provide adequate levels of service and how those firefighters are deployed. This conflict has been ongoing in Gloucester with several court battles between the union and the City.

The fire service has experienced tremendous technological advances in equipment, procedures, and training over the past fifty years. Better personal protective equipment (PPE), the routine use of self contained breathing apparatus (SCBA), large diameter hose, better and lighter hand lines and nozzles and thermal imaging cameras are just a few of the numerous advances in equipment and procedures that have enabled firefighters to perform their duties more effectively, efficiently, safely and with fewer personnel. However, the fact still remains that an emergency scene is a dangerous, unpredictable and rapidly changing environment where conditions can deteriorate very quickly and place firefighters in extreme personal danger.

The operations necessary to successfully and safely extinguish a structure fire requires a carefully coordinated and controlled plan of action. Certain operations such as venting ahead of the advancing interior hose line(s) must be carried out with a high degree of precision and timing. Multiple operations must be conducted simultaneously. If there are not enough personnel on the incident initially to perform all of the critical tasks, some will, out of necessity, be delayed. This can result in an increased risk of serious injury or death to building occupants and firefighters and increased property damage.

National Fire Protection Association (NFPA) Standard 1710 – *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* (2004 Edition) is the nationally recognized consensus standard on staffing and deployment by career fire department. It is the benchmark standard that the United States Department of Homeland Security utilizes when evaluating applications for staffing grants under the Staffing for Adequate Fire and Emergency Response (SAFER) grant program.

Some of the key provisions of NFPA 1710 are as follows:

- Paragraphs 5.2.3.1.1 and 5.2.3.2.1 state that engine companies and truck companies respectively shall be staffed with a minimum of four on-duty personnel.
- Paragraph 4.1.2.1 states that the first arriving engine company shall arrive at the scene of a fire suppression incident within four minutes or less and/or the entire full first alarm response should arrive on scene within eight minutes. For EMS incidents, a unit with first responder or higher-level trained personnel should arrive within four minutes and an advanced life support (ALS) unit should arrive on scene within eight minutes. Paragraph 4.1.2.2 requires the establishment of a 90% performance objective for these response times.
- Paragraph 5.2.4.2.2 establishes the following minimum personnel requirements on the full first alarm assignment which should arrive within eight minutes:

TASK	# Personnel
Incident Commander	1
Attack engine driver/operator	1
Water supply engine driver/operator	1
Two hand lines with two personnel each	4
Support/back-up firefighter for each handling	2
Search & rescue team	2
Ventilation team	2
Ladder company driver/operator	1
Rapid intervention team (RIT)	2
TOTAL MINIMUM NUMBER OF PERSONNEL	16

It is important to understand that these numbers reflect personnel needs for a fire in a one-family residential occupancy. Personnel needs for fires involving large, more complex structures such as industrial facilities, or high-rise buildings will require a significantly greater commitment of personnel. It is also important to note that NFPA 1710 does permit fire departments to use established automatic aid and mutual aid agreements to comply with the staffing and response requirements.

***Note:** While the NFPA standards are nationally recognized consensus standards, it is still the responsibility of the local jurisdiction to determine the acceptable level of fire protection services. When applying any standard, including the NFPA standards, it is important to apply the document in its entirety. One should not selectively extract*

requirements to the exclusion of others or take a requirement out of context. For example, while NFPA 1710 establishes requirements for the minimum number of on-scene personnel, it also requires fire departments and firefighters to comply with NFPA 1500, Standard on Firefighter Occupational Health and Safety Program. Among other requirements, NFPA 1500 requires personnel to be medically evaluated and to be evaluated annually for their physical performance capabilities.

Beyond the NFPA standard, there has been much research done by various fire departments on the effects of various staffing levels. One constant that has emerged is that company efficiency and effectiveness decrease substantially while injuries increase when company staffing falls below four personnel. At the time this study was being performed in Gloucester, the National Institute of Standards and Technology (NIST) and Worcester Polytechnic Institute (WPI), in conjunction with the International Association of Fire Chiefs, the International Association of Fire Fighters and the Center for Public Safety Excellence are conducting a extensive scientifically based *Multi-phase Study on Firefighter Safety and the Deployment of Resources*. Once published, the results of this study will provide scientifically established, verified, and validated, statistics and recommendations regarding fire service staffing and deployment models.

The MRI study team examined and evaluated the current staffing practices and personnel scheduling procedures of the Gloucester Fire Department.

OBSERVATIONS

The Gloucester Fire Department currently works a schedule where each platoon is on-duty for 24 hours, followed by 72 hours off. This is an increasingly common work schedule for career firefighters operating on a four (4) platoon system. Although it still averages out to a 42 hour work week, this schedule is not what is specified in the current collective bargaining agreement (CBA) between the City Of Gloucester and Local 762 of the International Association of Firefighters, which calls for 10 hour day shifts and 14 hour night shifts.

The CBA states that subject to funding there shall be not less than 17 employees on-duty at the start of each shift. Currently, there are 17 personnel assigned to each platoon, which would require all assigned members to report for duty, something that rarely, if ever, occurs. With 17 personnel on-duty, Headquarters and all three sub-stations can be open.

The contract further specifies the following staffing requirements:

- Engine 1 at Fire Headquarters is to be staffed with one (1) officer and four (4) firefighters. One firefighter can be detailed from Engine 1 to allow a sub-station to be opened when platoon staffing is at 13, 15, or 17.

- Ladder 2 at Fire Headquarters is to have five (5) personnel assigned , although two (2) these are permanently detailed to staff Rescue 1, in essence making Ladder 2 a three (3) person unit. Two (2) of the other three (3) personnel are used to staff Rescue 2 on an as needed basis.

It should be noted that when Ladder 1 (the reserve ladder; scheduled for replacement) is in service, Rescue 2 is taken out of service as Ladder 1 requires a minimum of two (2) personnel since it is a tiller (rear-steering) ladder.

- Car 2 at Headquarters is staffed with one (1) deputy chief or acting deputy chief.
- There is one (1) mechanic/houseman at Fire Headquarters who is assigned to dispatch duties during an alarm.
- Sub-stations are required to be staffed with a minimum of two (2) personnel, which is their normal staffing. With 17 personnel on-duty, all three (3) sub-stations are open, something that rarely occurs. When staffing falls below 17 personnel on-duty, the Magnolia station is closed. When staffing falls below 15 personnel, the Bayview station is also closed. If staffing falls below 13 personnel, West Gloucester is also closed, leaving only Fire Headquarters open. When sub-stations close, the personnel from that station are reassigned to either Fire Headquarters or another open sub-station.

The contract further states that the Headquarters Task Force consisting of Engine 1, Ladder 2, Car 2 and the mechanic/houseman will not be taken out of service, indicating that minimum on-duty staffing would be 12. However, the study team was informed during several personnel interviews that one platoon operated for one or more shifts in April 2009 with only 10 personnel on-duty. The City and firefighters' union are currently engaged in litigation over the staffing provisions of the contract, and the funding being requested for same in the City budget.

It should be noted that there are discrepancies between the collective bargaining agreement language and diagrams provided by the City to illustrate station and unit staffing.

Each sub-station has one (1) captain assigned who works one (1) of the four (4) shifts. If that sub-station is open on other shifts, it is staffed with two (2) firefighters. There is no contract provision or operational procedure that spells out this process, or, addresses what happens if a sub-station captain is off on leave.

In the best case scenario, if all personnel are working there is one (1) deputy chief and two (2) captains on-duty to provide supervision for 14 personnel. If they are open, personnel in two (2) of the sub-stations are working without direct supervision. If a

captain is off, there may only be a deputy chief and one (1) captain on-duty for supervision. When a captain is on-duty at a sub-station, he is responsible for supervising only one (1) person, while the captain at Headquarters may be directly supervising up to 10 personnel if the deputy chief is not immediately available.

As previously identified, each sub-station is currently staffed with two (2) personnel, which is inadequate and can be dangerous for the personnel assigned. The department does have an operational procedure titled: *Two Member Company Operations* (3-III-4) that details permitted and prohibited activities by personnel in two (2) person companies. Among other purposes, this procedure provides OSHA two in – two out compliance guidance at these stations. The serious concern of the study team is that both the department's operational procedure and the OSHA two in – two out rule both permit an exception for life hazard or rescue situations. The reality is that in one of the most serious life hazard fire situations that can be encountered, trapped civilians, a firefighter may need to place himself in extreme danger by entering the structure alone. The final National Institute for Occupational Safety and Health (NIOSH) report on the death of a Kansas firefighter nearly 20 years ago cited a number of "preventable events" that contributed to the firefighters death not the least of which was an inadequate number of personnel on the initial response and the lack of additional adequate safety procedures. Among other things the report stated, "A two firefighter engine is, at minimum, 50% under-staffed and increases the work effort of the two firefighters by a factor of 3".

It is the opinion of the study team that the existing staffing deployment at Fire Headquarters could be adjusted to provide more effective use of the on-duty personnel. First, running Engine 1 with five (5) personnel while the sub-stations routinely operate with two (2) personnel and Ladder 2 frequently responds with one (1) member is difficult to justify. There is little hard evidence that five (5) person companies are significantly more effective, efficient, or safer, than companies staffed with four (4) personnel. The practice of having the mechanic/houseman stay back as a dispatcher also does not appear to be optimal use of an on-duty member. Reassigning the fifth firefighter on Engine 1 and the mechanic/houseman to Ladder 2 would permit Ladder 2 to always run with a minimum of three (3) personnel, and potentially up to five (5) firefighters if Rescue 2 was not out on a call. Being able to redeploy the mechanic/houseman would require Gloucester to join the regional dispatch center, an option currently being studied.

Beyond the Headquarters staffing redeployment, recommendations for staffing in the Gloucester Fire Department become more complex. However, attempting to gain compliance with NFPA 1710, by having a minimum of 16 personnel available to respond to a reported structure fire, and get them on scene in eight (8) minutes or less should remain the primary objective of any staffing analysis and plan. Many fire departments throughout the country operate with fewer personnel on-duty than NFPA 1710 requires, however, they achieve compliance with the necessary personnel through automatic aid agreements where one or more neighboring communities have

companies responding automatically on the initial response for a reported structure fire. Unfortunately, this is not really a viable option in Gloucester as the City is somewhat isolated due to its geographic location, and is surrounded primarily by call fire departments as opposed to career departments with available staffing on-duty around the clock. There have been recent incidents where mutual aid was requested in Gloucester for a fire, and the necessary assistance was significantly delayed in arriving when surrounding departments were unable to respond.

The lack of reliable response time and personnel data and statistics also complicates the analysis of staffing needs. How often does the Gloucester Fire Department currently achieve the four minute and eight minute response time objectives? Are there any sub-stations that if staffed on a consistent basis with a three (3) or four (4) person company could still achieve response time compliance to the area(s) of other stations, or, must there be a minimum of three stations staffed? Based upon the data available and the evaluation by the study team, it would appear that maintaining three stations, as currently configured, is the most viable option for achieving NFPA 1710 compliance, at least from a response time perspective. However, the City may want to further study whether consolidation of any existing stations, into one more centrally located station would still permit response time compliance, but do so at a lower cost.

The fact of a high volume of EMS responses that often commit limited fire resources to EMS duty is also of concern. The team learned that the number of simultaneous EMS calls is steadily increasing, requiring Rescue 2, and the engine companies, to spend more time committed on those responses. It also increases the number of times that Ladder 2 must respond with only one (1) person. Chief Dench reported that over the past 8 to 10 years there have been a number instances when, due to high EMS call volume, there were no units available to respond to a reported structure fire. It should be noted that the MRI study team has not been provided with any incident report documentation to validate the number of times that simultaneous EMS calls have stripped the community of fire protection capabilities.

Deputy Chief Schlichte, the new operations deputy chief reported to the team that he is working on revising the department's operational procedure on the use of engine companies on EMS responses. Engine company responses would be limited to more serious life threat emergencies, not any EMS request. This operational change, along with better screening of 9-1-1 calls to determine the potential severity of the incident should both help with keeping the engines more available for fire duty. A practice that some department's utilize, if their companies are properly staffed, is that if the patient is stable and fire personnel are merely standing by to hand the patient off to an EMS transport unit, if another response is received they leave one (1) firefighter with the patient and the remainder of the company responds short staffed to the other incident. This is an option that should be considered with Engine 1, particularly with its current staffing level.

There is a significant discrepancy between the workload of the captains assigned to Headquarters and the captains assigned to the sub-station. The headquarters captain has responsibility for supervising the bulk of the on-duty crew, prepares all fire incident reports, has additional staff responsibilities, and responds to more calls than a sub-station captain. The sub-station captain only supervises one firefighter and has limited staff responsibilities. We cannot find justification for assigning a supervisor at the level of captain to a sub-station under the current staffing arrangement.

Although the problems associated with the Lorraine Apartments fire has generated a lot of publicity, the City of Gloucester does not have a high number of working fires. The number of structure fire dispatches is much higher than the actual fires, but that is normal. However, even that number is not very high. A procedure that has worked well in some smaller fire departments such as Gloucester is to recall one (1) platoon of firefighters automatically at the time of dispatch for any reported structure fire. Even if only a small percentage of personnel return, say one-third, that still will quickly provide five (5) or (6) additional personnel should the incident be a working fire. The City may even be able to negotiate an agreement with the union that personnel who come in, but are quickly released if the incident is minor, will receive one hour of overtime pay, but will not be entitled to the full recall minimum pay.

The labor agreement allows two (2) personnel on each platoon to be off on vacation at any given time. This is reasonable and would provide the platoon with a minimum of 15 personnel on-duty. However, personnel on sick leave, injury leave, or other types of leave such as military, or funeral, leave are not factored into the two (2) members off. As the average age, and seniority, of the members of the department increases, not only do personnel earn additional leave, they also become more susceptible to injuries, or illnesses, that require them to be off from work. Each member on some other type of leave reduces the on-duty staffing further. While the City has procedures in place both by contract, and City policy, regarding monitoring sick leave, and it would seem logical, injury leave, there does not appear to be aggressive or consistent monitoring or enforcement.

Currently all staff scheduling is coordinated and maintained manually by the deputy chiefs and headquarters captains. The department has recently purchased the Firehouse scheduling module; however, it is not yet in use.

RECOMMENDATIONS

- 14.1 In order to accurately analyze incident response times and number of personnel responding/on scene, in an ongoing manner, and compare them to established benchmarks, the Gloucester Fire Department needs to insure that all information being entered into the Firehouse National Fire Incident Reporting System (NFIRS) database is complete and accurate. Additional data may need to be entered in order to develop the necessary statistics. This procedure should be contained in a written operational procedure.
- 14.2 The Gloucester Fire Department should take steps to achieve compliance with the response time and personnel benchmarks established by NFPA 1710 for a 90% compliance rate of the first arriving engine company at the scene of a fire suppression incident within four minutes or less and/or the entire full first alarm response, with a minimum of 16 personnel on scene within eight minutes. For EMS incidents, a unit with first responder or higher-level trained personnel should arrive within four minutes, and an advanced life support (ALS) unit should arrive on scene within eight minutes with the same 90% performance rate.
- 14.3 The City of Gloucester should negotiate with Local 762 of the International Association of Firefighters for the purpose of redeploying firefighters stationed at Headquarters as follows: Reassign the fifth firefighter from Engine 1 and the mechanic/houseman to Ladder 2 which would permit Ladder 2 to always respond with a minimum of three (3) personnel, and potentially up to five (5) firefighters if Rescue 2 was not out on a call.
- 14.4 The Gloucester Fire Department, in consultation with the City administration should analyze the short and long-term benefits, commitment, and any potential liabilities for the City of applying for a Staffing for Adequate Fire and Emergency Response (SAFER) Grant. Being awarded a SAFER grant could have a significant positive impact on the fire department's chronic staffing shortage which will result in improved public safety. With the matching fund requirement of this program currently suspended, the decision that the City would need to make is if they could continue to afford the additional personnel after the grant funding ends in five years.
- 14.5 Contingent upon the City's conclusions regarding recommendation #14-4, above, the City of Gloucester should apply for a Staffing for Adequate Fire and Emergency Response (SAFER) grant for 16 additional personnel. These personnel should be deployed to the West Gloucester and Bayview stations, permitting those engines to be staffed with four (4) personnel each to achieve compliance with NFPA 1710.

- 14.6 If the City of Gloucester successfully applies for and receives a SAFER grant, it should consider creation of the position of Lieutenant in the Gloucester Fire Department. Those officers should be assigned to the West Gloucester and Bayview stations to insure adequate supervision on each platoon (see Recommendation #14-7 below). Consideration should also be given to assigning a lieutenant to Ladder 2 to provide proper supervision, and provide a more manageable span of control at Fire Headquarters. The position of lieutenant will allow the necessary supervision to be provided in a more cost effective manner than if all of the officers were captains.
- 14.7 The position of captain assigned to sub-stations should be eliminated and replaced with a new position of lieutenant (see above). Sub-station officers, regardless of rank, should be assigned additional supervisory and staff functions. Alternatively, captains should be regularly re-assigned to headquarters on a rotational basis in order to more fairly balance their duties and to maintain their skill levels.
- 14.8 The Gloucester Fire Department should revise its engine company operational procedures to reduce the number of engine company responses to non-critical EMS calls.
- 14.9 Contingent upon adequate engine company staffing of four (4) personnel, the Gloucester Fire Department should give consideration to initiating a procedure that if the patient is stable and fire personnel are just standing by to hand the patient over to an EMS unit for what will be a routine BLS transport, and another serious incident is dispatched; i.e. a structure fire, or, serious life threat EMS call, that one (1) member be left with the original patient and the other three (3) personnel respond to the second call. The firefighter left can either go with the EMS unit to the hospital, or, if available, be returned by a police car to his company.
- 14.10 In order to provide additional initial staffing for any reported structure fire, the City of Gloucester should negotiate with the union on an operational procedure that would result in an automatic, but voluntary recall of one (1) platoon of firefighters at the time of dispatch. In order to maximize the cost –benefit of this procedure, the City should attempt to negotiate an agreement with the union that personnel who come in, but are quickly released if the incident is minor, will receive one hour of overtime pay, but will not be entitled to the full recall minimum pay.
- 14.11 As established by City policy and permitted by the collective bargaining agreement, the City of Gloucester and the Gloucester Fire Department should aggressively and consistently monitor and track use of sick leave and injury leave as ways to identify, and then take appropriate action to reduce, or even eliminate abuse.

- 14.12 In order for there to be reasonable prospects for the Gloucester Fire Department to be successful at achieving consistent compliance with NFPA 1710, the City of Gloucester must budget sufficient funds for higher minimum staffing levels to be maintained than there are currently. The City should analyze the most cost effective way to accomplish this goal.
- 14.13 The Gloucester Fire Department should implement use of the Firehouse staffing module as soon as possible for scheduling, managing and tracking all staffing, vacation, personal, sick, injury, funeral and military leave, and other related aspects of staffing, deployment and overall personnel management.
- 14.14 The Gloucester Fire Department should take the lead in strengthening the mutual aid system in the region with training, drills, increased sharing of resources, and a more in depth assessment of the actual capabilities of fire departments to provide more formal mutual aid or automatic aid. The volunteer/call fire departments that border Gloucester may have better availability during evening and night hours, which could be factored into Gloucester's response procedures. Although the national trend toward regionalization of fire protection services has not been promoted heavily in New England, the Gloucester Fire Department should actively consider the feasibility of sharing resources, capabilities and costs with neighboring jurisdictions, even if on a limited basis.
- 14.15 The Gloucester Fire Department should consider how the fire inspector and any other future staff positions could be assigned to duties under the incident command system during a major incident. For example, the fire inspector could perform the duties of a safety officer or could supervise the logistics or planning functions in support of the incident commander.

CHAPTER 15

FIRE & EMS OPERATIONS, ICS, SAFETY & MUTUAL AID

OVERVIEW

Firefighting, rescue, and emergency medical services operations, an incident command system and safety procedures are at the core of the mission of a municipal fire department. Because the greatest number of calls for service are predominantly for emergency medical incidents, in reality many fire departments have shifted from being fire service agencies that provide EMS and have become EMS agencies that provide fire protection services.

NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments*, 2004 edition (National Fire Protection Association, Quincy, MA) outlines organization and deployment of operations by career fire departments. It states, in part, "Emergency incidents can involve operations that vary considerably in their complexity and scale. The control of these incidents depends on the planned, systematic implementation of an effective fireground organization to accomplish identified objectives." NFPA 450 *Guidelines for Emergency Medical Services (EMS) and Systems*, 2009 edition (National Fire Protection Association, Quincy, MA) provides a template for local stakeholders to evaluate an EMS system and to make improvements based on that evaluation. The Commonwealth of Massachusetts regulates EMS agencies, and certain federal Medicare regulations are also applicable.

In addition to structural firefighting and emergency medical services, the fire department is tasked with responding to and managing a broad spectrum of other types of emergencies, including, but not limited to vehicle crashes, building collapse, water and ice rescue, mass casualty incidents, weather related emergencies, and natural and technological disasters. These types of incidents require specialized equipment and specialized training. In all types of emergency responses, an incident command system (ICS) should be utilized that conforms to the National Incident Management System (NIMS) guidelines that have been promulgated by the U.S. Department of Homeland Security. While safety is the primary focus throughout all operations, a formal component of the ICS program includes the consistent an on-scene safety officer when appropriate.

Fire department operations and service delivery can be dramatically improved in those departments that commit resources to goal setting, master planning, risk assessment, and performance measurement. A number of tools and resources are available to guide management in these efforts.

OBSERVATIONS

The Gloucester Fire Department is fortunate to have a well-educated membership that strives to provide the best possible range of services to the community. However, the MRI study team received numerous interview comments from fire department members relating to firefighting practical skills retention and readiness capabilities. Concerns include a lack of driver/operator training to provide proper scene placement and set up of apparatus, excessive smoke inhalation cases due to lack of self-contained breathing apparatus use (SCBA) use during overhaul operations (after a fire has been extinguished), lack of proper ICS, failure to attach exhaust systems of apparatus into exhaust removal systems upon return to stations and lack of police/fire interagency operations training³. A cultural shift has been occurring in recent years because of the predominant number of EMS incidents that are handled by the fire department. One member stated, "We are no longer a fire department that responds to EMS calls, we are now an EMS department that responds to fire calls."

Gloucester presents a number of significant tactical challenges to providing effective fire protection, rescue and EMS services, such as the following:

- high potential for a conflagration due to a densely populated downtown residential and business district, with wood frame and masonry/wood frame buildings and narrow, one-way streets
- multi-use waterfront area with numerous fire protection risks (large commercial buildings, aboveground storage of flammable and combustible liquids, marina boat storage yards, hazardous materials storage, places of assembly, and multi-family residential buildings)
- sixteen (16) anhydrous ammonia storage facilities (fishing industry, food storage, skating rink)
- fishery ships in port with anhydrous ammonia storage
- flammable and combustible gas storage facility
- liquefied natural gas (LNG) off-shore delivery pipeline
- acute care hospital, nursing homes and elderly housing facilities
- fire department response times and access affected by bridge crossings
- seasonal increase in population

³ Several fire department members commented that police cruisers that arrive before fire apparatus often park directly in front of the fire incident building, which can impede fire department tactical operations.

- seasonal special events, such as the Blessing of the Fleet

The MRI study team noted that there is a significant deficiency in the specialized operations capabilities of the department, primarily due to the lack of documented training, drills and exercises. Specialized operations can include but are not limited to:

- Rope rescue including high angle
- Water and ice rescue
- Trench/collapse rescue
- Confined space rescue
- Extrication rescue
- Air/sea rescue
- Urban search and rescue (building collapse)

Of added concern is the apparent lack of these capabilities from surrounding mutual aid communities. This situation results in fire department members being forced to improvise solutions to these types of incidents, often using improper equipment and without proper training. A dive team was disbanded several years ago due to lack of support. An enclosed trailer has remained parked, unused, outside of the West Gloucester station for several years, containing specialized rescue equipment.

Until recently, the department had not adopted a formal ICS system. In response to a recommendation in the Lorraine Apartment Building Fire After Action Report, the City appropriated funds to enable the fire department to train all personnel in ICS. The initial training has recently been completed. The implementation of ICS occurred after the site visits by MRI had been completed; therefore, we have not evaluated the performance of the fire department ICS system.

A critical component of ICS is the establishment of the role of safety officer to monitor conditions at an incident scene to ensure that appropriate safety procedures are being followed. The Gloucester Fire Department has not instituted a formal safety officer program as of the drafting of this report.

One of the outstanding capabilities of the Gloucester Fire Department is the delivery of emergency medical services. The department provides advanced life support (ALS) and basic life support (BLS) services and transports patients to area hospitals. The response is modeled on a service zone plan, with the goal of having one ALS

ambulance with two (2) paramedics available round-the-clock and one BLS ambulance with two basic or intermediate emergency medical technicians (EMT's) available round-the-clock. The department employs a full-time EMS coordinator who is responsible for overseeing the ALS program. In addition, a firefighter is paid a stipend to perform the duties of BLS coordinator. The BLS coordinator teaches an annual EMT re-certification program, cardiopulmonary resuscitation (CPR) re-certification, and automatic external defibrillator (AED) re-certification. In addition to an ambulance response, an engine company may be dispatched to a medical call when the engine company is closer or the seriousness of the call may require additional personnel for medical care, patient lifting or other reasons.

The Gloucester Fire Department receives medical control for its EMS service delivery from Addison Gilbert Hospital. The department's EMS coordinator serves as a representative to EMS Region 3 and also participates in the Essex County Fire Chiefs EMS Division. Procedures and protocols are in place to ensure that patients are transported to the appropriate critical care facility. Most patients are transported to the closest hospital, Addison Gilbert. Trauma patients are transported to the trauma center at Beverly Hospital, while cardiac patients are typically transported to North Shore Medical Center in Salem. Procedures and protocols are in place for determining when patients should be transported by helicopter.

According to the EMS coordinator, there have been no reported problems with inventory, theft or misuse of the ALS medications that are authorized for administration by paramedics.

As stated in the Chapter 8, *Communications*, there is no capability for emergency medical dispatch (EMD) services. With EMD, a dispatcher provides basic emergency medical instructions to a caller while emergency responders are en route. Nationally, there have been many documented instances of lives being saved with CPR, clearing of airway obstructions, controlling bleeding, and even the delivery of babies as the result of EMD instructions. If Gloucester participates in the proposed regional public safety dispatch center, this capability could be established.

The use of the electronic patient care reporting (PCR) system is discussed in Chapter 18, *Fire & EMS Reporting System*.

As discussed in Chapter 7, *Fire Department Equipment*, the department does not conduct daily equipment checks and inventory. Ambulances are typically restocked and cleaned after each call; however, a more robust and documented system should be implemented.

Because of its geographic location, Gloucester has limited access to mutual aid services. In addition, the communities immediately adjacent to Gloucester are primarily served by volunteer or on-call fire departments. These departments typically have limited daytime response availability and delayed nighttime response.

As discussed in Chapter 7, *Fire Department Equipment*, the fire department has limited response capability for water rescue and incidents in the harbor. The department has no fireboat, although there is a significant level of risk for structure fires, vessel fires, and hazardous materials incidents in the waterfront area.

As discussed in Chapter 9, *Fire Prevention, Inspection, Public Education and Fire Investigations*, the department has not established a formal fire pre-planning program.

RECOMMENDATIONS

- 15.1 Under Chief Dench's leadership, the Gloucester Fire Department has begun to address many of the operational deficiencies that have been identified in this study. In order for these efforts to be successful, effective and long-lasting, the fire chief should initiate a formal department-wide master planning and risk assessment process. This project could have several components, including re-evaluating and re-affirming the department vision and mission, setting goals and objectives, establishing a prioritized schedule of completion, and conducting a risk assessment of the community, including the harbor/waterfront area. The risk assessment will enable the department to identify its operational priorities, which in turn will be useful during the preparation of the budget. There are many resources available to guide the department in the development of a master plan and risk assessment. However, the department should consider engaging an outside facilitator to provide guidance and support during the initial phases of this effort.
- 15.2 During our interviews with FD staff, the MRI study team noted comments regarding wildland firefighting, possibly indicating a lack of forest fire related equipment, such as floater pumps. This matter should be reviewed.
- 15.3 Technical rescue capability is required to respond to confined space, below grade and heights scenarios. A rope history and maintenance program should be a key component. Potential scenarios range from urban search and rescue to quarry to construction and industrial accidents.
- 15.4 It is strongly recommended that a regional approach be taken toward developing core teams specializing in specific skills to provide the maximum cost effectiveness in delivering these diverse services. A well-balanced combination of training, SOP's and equipment is required as this capability is developed.
- 15.5 The current ICS training effort should be supplemented by a regular schedule of refresher training and certification, as well as the development, implementation and enforcement of standard operating procedures and guidelines. The ICS program should also be expanded to include all levels of City administration and

all departments with any emergency incident responsibilities (e.g. police, public works, public health, etc.).

- 15.6 The department should establish a fireground safety officer program. All department officers should receive safety officer training, and an operational procedure should be implemented that results in a guaranteed response of at least one additional chief officer (in addition to the on-duty deputy chief) on every working/all hands incident.
- 15.7 As recommended in Chapter 7, the department should implement a comprehensive, documented fire pre-planning program. Pre-planning will improve the firefighter knowledge of the specific tactics needed to handle a fire or other emergency at a facility and will alert them to on-site hazards and risks. A pre-planning program should also include on-site drills and exercises.
- 15.8 As discussed in Chapter 7, the department should implement a documented system of daily equipment checks and inventory. In addition, a standardized inventory for all ambulances should be developed.
- 15.9 As discussed in Chapter 7, the department should acquire a modern fireboat with the capability to handle firefighting, rescue, emergency medical and environmental spill response.
- 15.10 The Gloucester Fire Department should take the lead in efforts to improve the availability and capabilities of the regional mutual aid system. Actual capabilities of each department should be evaluated and formal mutual aid plans and agreements should be implemented. Regular, documented mutual aid drills and exercises should be completed on a regular basis.
- 15.11 The leadership of the fire department and the police department should meet regularly to identify and resolves issues of mutual concern. The goal of these meetings is to improve operational effectiveness and coordination. For example, the issue of police cruiser placement can be resolved easily with training and the development of a standard operating guideline. Without a doubt, the police department personnel have identified actions by the fire department that affect their operational effectiveness. Topics that should be addressed include, but are not limited to:
 - communications
 - training
 - operational tactics and response
 - incident command
 - crime scene and evidence control
 - scene safety and security

- emergency medical services
- vehicle operations
- disaster response
- dissemination of information to the public

15.12 In acknowledgement of the fact that they frequently operate in a minimal staffing mode, the Gloucester Fire Department should develop standardized tactical operations that will enable them to quickly develop, and place in service, high volume fire flows of 1200 to 1500 gallons per minute utilizing multiple lines and master stream devices. This flow should be able to be developed within three (3) to five (5) minutes after arrival of an engine staffed with four (4) personnel.

15.13 It is the understanding of MRI that the new aerial ladder scheduled for delivery will have significant rescue capabilities, in addition to, its ladder company equipment. It will in essence function as both a ladder and a rescue. If this is **NOT** the case, consideration should be given to the City purchasing a dedicated heavy rescue truck (not an EMS transport vehicle) for the fire department.

CHAPTER 16

TRAINING AND PROFESSIONAL DEVELOPMENT

OVERVIEW

Training is, without question, one of the two most important functions that a fire department should be performing on a regular basis; the other being response to emergency incidents. One could even make a credible argument that training is, in some respects, 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 on-going training program is absolutely critical to the fire department's level of success.

An effective fire department training program must encompass 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. Practical, standardized, hands-on training evolutions should be developed based upon the department's own standardized operations while incorporating widely accepted practices and standards that could be used as a benchmark to judge the department's operations. Failure to use widely accepted firefighting practices was a significant conclusion in the multiple investigations that were conducted after the Charleston, South Carolina, Super Sofa Store fire in June, 2007, that resulted in the deaths of nine (9) firefighters. As with all other fire department operations, there must be consistency in the delivery of the training.

Occupational Safety and Health Administration (OSHA) regulations mandate⁴ that certain 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.

⁴ Although Massachusetts is one of 26 states that does not have an OSHA plan for public sector employees, OSHA requirements or their equivalent are enforceable under Massachusetts law by the state Division of Occupational Safety.

ISO (formerly known as Insurance Services Office), whose fire department evaluation and rating system is discussed in more detail in Chapter 23, *Evaluation Methodologies* also takes the amount of training a department conducts into consideration. ISO evaluation criteria suggest that each member of the department has a minimum of 20 hours of training per month. Additional training credits are awarded for new and refresher driver operator training, hazardous materials training, officer training, recruit training and pre-fire planning activities.

There are a number of ways to evaluate the effectiveness of the fire department's training program. One increasingly common method 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 result in missed opportunities to demonstrate productivity and professionalism, the loss of points during an ISO evaluation, and expose the department and City 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 Gloucester, including the Massachusetts Firefighting Academy in Stow and the National Fire Academy in Emmitsburg, Maryland. Beyond the practical benefits to be gained from personnel participating in outside training, encouraging, or if possible, requiring, 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.

OBSERVATIONS

The MRI study team reviewed the department's training and professional development programs. Through staff interviews and an evaluation of the current training program, the team reached the conclusion that the Gloucester Fire Department training program has been greatly neglected for a number of years and with few exceptions, is inconsistent and not effective. There is no type of formal professional development program. However, under Chief Dench's leadership, there already has been improvement. 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 of prominence in the department's operations. There are numerous opportunities for firefighters to engage in training each day, and the Gloucester Fire Department should seek to maximize these opportunities.

Despite its size, the Gloucester Fire Department does not have an officer dedicated full-time to the all important training function. At the present time, a deputy fire chief who primarily serves as a platoon commander, is assigned the ancillary duty of training officer. At the time of this evaluation, the deputy chief who had been serving as the training officer had been reassigned by Chief Dench as the operations chief, and a newly promoted deputy chief was assigned to training. Although not uncommon, this is less than the optimal arrangement and the department's training usually suffers as a result.

While there was widespread agreement within the department on the need for an officer whose primary responsibility is training, opinions diverged on how to best accomplish this. One option that was proposed was to create a lieutenant's position on each platoon who would be the shift training officer, and who would be responsible for all the training on that platoon. The lieutenant could also function as the officer on the ladder truck. There are several problems with this option. First, since this officer would also serve as the ladder truck officer, the department would still be utilizing an officer who has primary response duties, although with a lower level of responsibility than the deputy chief. This lower level of rank and responsibility could itself make this option problematic if the lieutenant had a deputy chief and/or captain(s) who were not committed to training. As a lower ranking officer, he would not have the authority to force these officers, or their personnel, to train. Finally, although all of the department's officers will need to be involved in the delivery of training, especially at the company level, having four different officers serving as training officers would still not eliminate the major training inconsistencies that currently exist.

The second option that was presented, and the one favored by Chief Dench, would involve the creation of a full-time dedicated training officer. Although this officer could respond to major incidents just as the fire chief does, perhaps functioning as the incident safety officer or other major command function, his/her primary duty would be to develop, coordinate, and supervise, the department's overall training program. These duties could include, but not necessarily be limited to, development of lesson

plans, standardized evolutions and skills proficiency evaluations; direct delivery of important training bring consistency to the delivery across four platoons; administering annual proficiency evaluations; insuring that required certifications are maintained; coordinating and assisting other officers with training that they are going to deliver; and insuring that all training related records and reports are completed and maintained. In addition, if the training officer is a chief officer, it will not only clearly demonstrate the high level of importance that the department now places on training, it will also give him/her the authority to insure that all required training is being conducted on each platoon, regardless of the commitment of the platoon officers.

The MRI study team concurs that there should be a chief officer who is responsible for fire training. We also believe that the management structure is seriously deficient because the fire chief is the only position in the department that is not part of the firefighter collective bargaining unit. The fire chief has no advisor or senior level subordinate that can deal with confidential personnel matters and collective bargaining issues, and assist with policy development and implementation. In the absence of the fire chief, the City does not have a non-union administrator to manage the fire department. If a full-time training officer position is created, the position should be a non-union, senior management chief fire officer who serves as the department's second-in-command. The creation of a non-union, second-in-command assistant fire chief would also enable the City to establish a logical line-of-succession program to groom a potential successor to the incumbent fire chief.

Initial training for newly hired probationary firefighters consists of a three week, 120 hour basics of firefighting and department orientation program that is conducted in-house. However, the consistency of training and even the most basic task - signing off by an officer that specific training objectives have been met - has been so difficult to get accomplished that the onus has been placed on the recruit to insure that an officer signs off his report after the recruit feels that he has met the objective. The on-duty deputy chief and/or headquarters captain make decisions on response by the recruit on a case-by-case basis, once again with wide variations in consistency. This is simply not acceptable from a training, safety, or liability perspective.

For approximately the past five years, all probationary firefighters hired have been required to attend, and successfully complete, the career Firefighter I program at the Massachusetts Firefighting Academy. The problem with this program is that recruits cannot attend until they are officially employed. Once on the job it could be up to three years before there is an opening for them to attend. While this situation should not be acceptable, this is how the system operates in Massachusetts, and there is not a viable alternative at this time. Once a probationary firefighter graduates from the academy, no further training or certification is required. As one senior officer observed, "He's on his own".

EMS certifications required of members of the department, such as paramedic and EMT appeared to be up-to-date in compliance with state law and regulations. . Since EMS incidents make up a large percentage of the department's responses, maintaining EMS certifications should continue to be a significant component of the department's new training focus.

It was reported to the MRI study team that for a number of years, being an Emergency Medical Technician (EMT) was a contractually obligated job requirement for all members of the Gloucester Fire Department. However, several contracts ago, this contract provision was dropped and EMT certification is no longer required. While most current members continue to maintain their certification, some have spoken of allowing their certification to lapse and the department's newest member is not an EMT. There is requirement to force him to obtain this certification. This is troubling in a department where the majority of responses are EMS related. The mandatory EMT provision should be negotiated back into the contract or mandated in some other way.

Until recently, any training in addition to EMS training was conducted at the discretion of the deputy chiefs and captains on each platoon. It was reported that very little, if any, training was being conducted. It was interesting to note that some of the same officers who spoke of virtually no training being conducted also observed that as a whole, the department's basic firefighting skills are very deficient; "abysmal" was the term used by one senior officer. Chief Dench expressed concern over the number of personnel who continue to suffer from smoke inhalation injuries, especially during the overhaul stage of a fire incident. This serious firefighter safety issue, which is a totally preventable injury, should be addressed through training and the enforcement of a standard operating procedure.

No annual skills or proficiency evaluations, or reviews of any kind, are conducted by the Gloucester Fire Department.

A number of the department personnel expressed concern about the lack of time available to conduct on-duty training. Most personnel felt they were too busy to train while on their normal duty day. However, on the days of our field visits, the team did not observe unusually high levels of response activity. This observation, in conjunction with the department's total annual response statistics leads us to the conclusion that daily on-duty training is possible and would significantly improve the operations of the Gloucester Fire Department. Training time should not be limited to daytime "business hours". There is no reason that training cannot be conducted during evening hours and on weekends and holidays.

The department does not have a driver training program. This has led to frequent accidents, including a high number of backing accidents. Proper positioning of apparatus on the emergency scene is also a problem. The department provides no officer training for either permanent or acting officers and it has probably been ten years since any hazardous materials awareness or operations level training was conducted.

Despite the fact that both front line ambulances carry extrication equipment, extrication training is very limited.

Other than through personnel interviews, it was difficult to get an accurate picture of training that may have been completed because no training reports have been completed for at least the past three years. The department recently completed incident management system training for all personnel. During one of our field visits, the on-duty platoon conducted search and rescue training at the City public works facility. However, no reports exist for this training exercise. The lack of documentation is a significant problem. This practice could lead to serious perception and/or liability issues for the department and the City for a wide range of reasons. The Firehouse Fire Department Management program has a comprehensive training module that is currently not being utilized to document training activity.

A review of other training resources in the department revealed that there are only a very limited number of lesson plans available and these are primarily generic documents taken from various web sites. There is also a collection of Firefighter Close Calls/Near Miss reports. However, neither of these books appears to see much use. A monthly training outline is prepared by the deputy chief in charge of training. Whether is consistently completed could not be clearly determined; however based upon other evidence, it is probably rarely used or followed.

The department did purchase the Action Training Systems Firefighter I and Firefighter II training series of DVDs for use by the newest members as part of their basic training. Beyond that, the department's training resources are limited to older materials that may contain outdated or obsolete information.

There are a few training computers in use at Fire Headquarters that were bought either by the fire department or by individual members. Deputy Chief Schlichte reported that the department also purchased three Tough Book lap top computers to assist with facilitating training at the sub-stations. There are some recently purchased audiovisual training aids at fire headquarters including a new projector.

Other than the mandatory EMS certifications, the department does not require any other professional certifications. Although some personnel do possess various certifications, they obtained them on their own, not through the department. As a result, a record of this training does not exist, and the department probably does not even have a copy of the certificate.

The department has traditionally not encouraged or supported outside training endeavors by its personnel. Numerous excellent training opportunities such as the annual Firehouse Expo in Baltimore and the Fire Department Instructors Conference in Indianapolis have been ignored. Only one deputy Chief and the EMS coordinator have attended classes at the National Fire Academy. Despite the fact that several of them possess college degrees, none of the chief officers are currently enrolled in the

Executive Fire Officer Program at the National Fire Academy. The annual conferences of the International Association of Fire Chiefs and the National Fire Protection Association provide excellent professional development opportunities for command staff, but there has been no participation by Gloucester Fire Department personnel at these events. One exception has been the regular attendance by the fire inspector at the annual New England Arson Seminar at St. Anselm College, Manchester, NH.

On the positive side, under Chief Dench's leadership there has already been an increased emphasis on and commitment to training. All department personnel have recently completed incident management system training as mandated by the federal government. All of the chief level officers have completed I-400 (Advanced IMS) level training, and most captains now have I-300 (Intermediate IMS) level training. Intensive rapid intervention team (RIT) training for all department personnel was scheduled to be completed in late May 2009.

RECOMMENDATIONS

- 16.1 The City of Gloucester should provide funding as soon as possible to permit the Gloucester Fire Department to create a second-in-command chief officer who is also responsible for overseeing the department's training program. This position should carry the rank of assistant chief and should be responsible for managing the department in the absence of the fire chief. The position should be exempt from state civil service in order to provide the City with maximum flexibility on recruiting and selecting a qualified individual for this position.
- 16.2 The Gloucester Fire Department should conduct a comprehensive, and 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 skills proficiency of ALL Department personnel.
- 16.3 Based upon the results of the needs assessment, the Gloucester Fire Department should begin the development of a comprehensive training program that addresses, but is not limited to mandatory OSHA training, recommended NFPA training, every operational mission and responsibility of the department, and specialized training and personnel/officer development. The training should comply with accepted and/or recommended practices and standards, should include standardized evolutions and should be consistent with Gloucester Fire Department operations and procedures. The training program should target each member for a minimum of 20 hours of basic, in station training per month, supplemented by appropriate advanced and/or specialized training.
- 16.4 Formal training of some type, lasting a minimum of two hours, should be mandated to take place on every duty day on every platoon. Personnel can swap off response assignments for training purposes to insure, as much as

possible, that all personnel get to complete the training. Additional daily opportunities for training can be found during related activities such as daily/weekly apparatus and equipment inspections, building pre-planning activities, and short duration (10-15 minute) shift change and/or coffee break drills. Training should occur even on weekends and holidays and can also be conducted during evening hours.

- 16.5 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.
- 16.6 To the extent possible, training should be delivered using formal, standardized lesson plans that include objectives and performance criteria. However, when this is not possible or practical (a frequent occurrence in the fire service, particularly at the company level), a detailed description of the training should be included in the narrative section of the training report.
- 16.7 All training that is conducted, no matter how brief or inconsequential it may seem, MUST result in the completion of a formal training report. The Firehouse training module should be utilized for completion of training reports, and to assist with the development of a training database, keeping track of certifications and related lapse dates, etc.
- 16.8 A formal operational procedure on the completion of training reports should be developed. Training reports should, at a minimum, include the date, time training commenced and concluded, time duration of the training, the instructor, the officer in charge, names of all personnel trained, 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 the instructor should also sign the hard copy training report.
- 16.9 The Gloucester Fire Department should develop a training file for each member that is kept in the Training Division and serves as 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.
- 16.10 As part of the development of a new comprehensive training program, the Gloucester Fire Department should implement periodic skills proficiency evaluations for ALL uniformed department personnel. These proficiency evaluations should be based upon recognized standards and benchmarks that have been modified in accordance with Gloucester Fire Department operations and procedures.

- 16.11 The Gloucester Fire Department should significantly improve its pre-academy probationary firefighter training and evaluation program.
- 16.12 Since a large percentage of its emergency responses are EMS related, the contractual job requirement that all personnel obtain and maintain an EMT certification for the duration of their employment should be reinstated.
- 16.13 The Gloucester Fire Department should provide fire instructor training and certification for any members of the department who wish to take it. All captains should be formally certified at Fire Instructor Level I, and all deputy chiefs should be certified as Fire Instructor Level II. Should the Gloucester Fire Department create the position of lieutenant, they should be certified as Fire Instructor Level I, captains as Fire Instructor Level II, and deputy chiefs at Fire Instructor Level III. These certifications should be made a job requirement.
- 16.14 The Gloucester Fire Department should implement a formal officer training and development program, based at least in part on the NFPA fire officer standards. There are several excellent programs available including from the International Association of Fire Chiefs, and the Phoenix, Arizona Fire Department. This program can also include bringing well-known fire service experts and instructors to Gloucester to provide training for the officers and firefighters who may aspire to be officers.
- 16.15 The Gloucester Fire Department 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.
- 16.16 A training bulletin board should be placed in each station where upcoming training opportunities can be posted for all personnel to review.
- 16.17 The Gloucester Fire Department should send as many officers as possible to the National Fire Academy. Officers who meet the admissions criteria should be encouraged to enroll in the Academy's Executive Fire Officer Program. Training reports should be completed for any NFA training, and copies of certificates placed in the personnel and training files.
- 16.18 The Gloucester Fire Department should seek funding for a part time clerical assistant for the Training Division. Building the training data base, keeping track of certifications, insuring that hard copy training reports are properly filed and typing lesson plans are just a few of the duties this person could perform. This

person could be shared with the Fire Inspector and be assigned to the watch desk/station area during business hours to alleviate the need for a firefighter to be stationed in this area.

- 16.19 The Gloucester Fire Department should seek annual funding in the training budget to upgrade its training resources such as manuals, DVDs and subscriptions to other available training resources. To the extent possible, some of the most utilized resources should be available for reference at all of the stations, not just headquarters.
- 16.20 To facilitate training at the sub-stations, the Magnolia and Bayview stations should be connected to the City and fire department networks and provided with reliable internet access.
- 16.21 The Gloucester Fire Department 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.
- 16.22 At a minimum, the City should authorize the fire chief to attend the annual conference of the International Association of Fire Chiefs and one additional national or regional conference or professional development opportunity each year. Chief Dench has already been attending meetings of the Essex County Fire Chief's Association. This practice should continue, and he should be authorized and encouraged to participate in the activities of the Massachusetts Fire Chiefs Association.
- 16.23 The new deputy chief in charge of training does not have any certification or experience as a training officer. A professional development program should be developed for him that includes, but is not limited to, attendance at appropriate courses at the Massachusetts Firefighting Academy and the National Fire Academy.

CHAPTER 17

COMPENSATION

OVERVIEW

The recruitment, motivation and retention of a quality, well-trained, professional firefighter and firefighter-paramedic is vital to ensuring that residents receive the highest degree of safety that the community has to offer. Retaining good firefighters and paramedics builds community support and trust in the department, and allows the department to offer quality safety services for the community.

While recent studies have shown that money is not the only, or even the best motivating factor of employees, low salaries are often mentioned in exit interviews for firefighters and paramedics around the country as the reason for leaving one fire department for another. This chapter is intended to be a snapshot audit of the compensation package offered by the City of Gloucester to its firefighters and firefighter-paramedics. The City provided MRI with a list of communities which it considered comparable communities for the purposes of comparing a number of factors including benefits. MRI analyzed the provided list and chose Franklin, MA, Shrewsbury MA, and Northampton, MA to gather operational, administrative, and benefit information. MRI also added Portsmouth, NH to the list as it closely resembled the general character as Gloucester as a diverse seaport community with an influx of summer visitors.

This chapter is based on information voluntarily provided to MRI by the four comparable communities and does not purport to be a wage and salary classification report.

OBSERVATIONS

The loss of firefighters through transfers to other communities does not appear to be an issue in Gloucester as most current personnel have ties to the community. However, there has been a detectable trend in the loss of paramedics to other communities for a variety of reasons, including salary differential. All employees of the fire department, with the sole exception of the fire chief, are covered by the same collective bargaining agreement.

All union contracts with the City have expired; employees have been without a current contract for two years. The City has had several negotiating sessions with the fire union, but the effective dates of the most recent contract are July 1, 2004 through June 30, 2007. This fact must be remembered when viewing comparison salaries as some comparable departments may have more recently negotiated salary increases (note:

according to the Franklin, MA fire chief, fire department personnel have been working without a contract for three years).

The following is a review of the major elements of the fire union contract.

Stipends

EMT certification	\$1,900 per year
Defibrillator certification	\$ 735 per year

Longevity benefit

Upon reaching 5 years service	\$ 200 per year
Upon reaching 10 years service	\$ 800 per year
Upon reaching 15 years service	\$1,000 per year
Upon reaching 20 years service	\$1,300 per year
Upon reaching 25 years service	\$1,500 per year

Training overtime (guaranteed)

EMT's are paid for 20 hours of annual continuing education

EMT's are paid for 24 hours of bi-annual refresher training & recertification

EMT-Paramedics are paid for 16 hours of Advanced Cardiac Life Support (ACLS) biannual recertification

EMT-Paramedics are paid for 48 hours of bi-annual refresher training & recertification

Clothing allowance

None (uniforms and personal protective equipment are issued by the City)

Cleaning allowance

\$425/year paid by check

Sick days

18 per year with accumulation capped at 250 days total

Sick leave buy back

\$65/day upon retirement or for days accumulated above 250.

Personal days

3 days per year

Overtime

Paid at time and one-half rate with a three-hour minimum for call back.

Holidays

11 paid holidays paid at ¼ weekly salary
(5 of those holidays are paid at 1.5 x ¼ weekly salary)

Health insurance

City pays 75% of the insurance premium

Vacation days

one through five years service	10 shifts
six through ten years service	15 shifts
eleven and over years service	20 shifts

Pay scale

Firefighters can increase their salaries in steps every year for the first five years of employment. Step 5 is 21.32% higher than Step 1.

Light duty assignments

The contract defines the concept and purpose of light duty assignments and specifies the procedure for medical clearance. Light duty assignments are discussed further in Chapter 16, *Municipal and Department Personnel Policies, Practices and Personnel Evaluations*.



See the chart below for salary comparisons and averages across all ranks.

SALARY COMPARISONS FOR ALL RANKS, FY09

Department	Chief	Asst Chief	Deputy Chief	Captain	Lieutenant	FF-P	FF	Inspector	Mechanic
Gloucester	88,079.67		62,414.31	53,620.98		46,526.67	38,349.35	48,433.92	48,433.92
Franklin	110,828.00		95,069.00	58,102.20	53,453.92		39,135.72		
Northampton	110,000.00	84,000.00	67,000.00	53,000.00		49,000.00	42,000.00	53,289.00	40,680.00
Shrewsbury	97,658.00			60,421.00			51,087.00		
Portsmouth	97,050.00	85,165.00	84,610.00	66,069.00	57,239.00	47,786.00	45,220.00	65,707.00	
Average	100,723.13	84,582.50	77,273.33	58,242.64	55,346.46	47,770.89	43,158.41	55,809.97	44,556.96
Mass Average	101,641.42	N/A	74,827.77	56,286.05	N/A	47,763.34	42,643.02	50,861.46	44,556.96
Gloucester	88,079.67		62,414.31	53,620.98		46,526.67	38,349.35	48,433.92	48,433.92

NOTE: Base salaries do not include stipends, educational incentives, or any other additions to salary. Gloucester collective bargaining agreement expired 6/30/07. Franklin has not had a collective bargaining agreement for 3 years.
 FF-P: Firefighter-Paramedic; FF: Firefighter

The following observations are based on the salary comparison chart above.

The Gloucester fire chief salary is the lowest of the group and is significantly lower than the five-community average (12.5%) and the Massachusetts average (13.3%).

Care should be taken in evaluating the salaries listed for assistant fire chief and deputy fire chief. In some communities, the position of deputy chief is an administrative command position rather than a shift platoon commander.

Base salary for Gloucester fire captains is the second lowest of the comparison group and is lower than both the five-community average and the Massachusetts average. As with the assistant chief/deputy chief positions, a fire captain in some communities may perform the role of shift platoon commander with significantly more responsibility than a company officer.

Base salary for Gloucester firefighter-paramedics is the lowest of the comparison group, and is slightly lower than the five-community average (2.6%) and the Massachusetts average (2.5%).



Base salary for Gloucester firefighters is the lowest of the comparison group and is lower than the five-community average (11.1%) and the Massachusetts average (10.1%).

The base salary for Gloucester fire inspector is the lowest of the comparison group and is lower than the five-community average (13.2%) and the Massachusetts average (4.8%).

Only one other community could be compared with the base salary for mechanic.

RECOMMENDATIONS

- 17.1 The collective bargaining agreement should be reviewed and updated. The practice of adding pages that contain the most recent changes to the front of the previous contract should be stopped. The current practice leads to confusion with out-of-date language remaining indefinitely.
- 17.2 As noted in Chapter 7, *Fire Department Equipment*, the department should ensure that personal protective equipment (PPE) that is purchased by firefighters complies with departmental requirements and the appropriate NFPA and OSHA standards.
- 17.3 The City, the fire chief, and the fire union should ensure that contractually required meetings to discuss health and safety issues continue to be held in order to maintain a high level of open communication.
- 17.4 The salary level and salary range for the position of fire chief should be reviewed by the City Council for a possible realignment. Additional comparisons should be made to properly evaluate the entire compensation package for fire chief.

CHAPTER 18

FIRE & EMS REPORTING

OVERVIEW

Completion of the incident report is the final step in the emergency response process and concludes the fire department's involvement in the situation. Incident reports and the data and information that they generate serve a number of purposes. Most important among these purposes is the written and permanent documentation of facts regarding the incident including the nature, conditions, and situation, encountered upon arrival of the first emergency responders. The report also details the actions the department took to mitigate or resolve the situation or emergency. Any unusual circumstances or problems with incident control and/or mitigation are also memorialized. This documentation is extremely valuable to the fire department for incident critique or training purposes, and for the review and modification of operational procedures or practices. Should the department become involved in any litigation, incident reports are a critical element of the proceedings. Archived documentation of significant incidents provide a beneficial perspective of the department's history.

The incident report provides the basis for a wide range of information such as reaction/turnout, response, on location, under control and available/in-service times, apparatus and personnel information, property values and losses, information on mutual and/or automatic aid and extensive information on reasons for fire causes and spreads. The wealth of data that is collected from this information provides statistics that are utilized by fire departments and support agencies at the local, state and national levels.

The National Fire Incident Reporting System (NFIRS) is the clearinghouse for fire incident data from communities throughout the U.S. On a local level, these statistics can, and should be, used to paint a picture of the fire and EMS response problems, and needs, of that particular community. Justifications for staffing, funding for new or relocated stations, funding for new initiatives/missions and/or training programs, and funding for other capital purchases can all benefit from the ability to develop, and appropriately apply and present, statistics in support of the department's needs, generated from good, accurate incident report data.

The MRI study team examined and evaluated the fire and EMS incident reporting systems and procedures as they currently exist in the Gloucester Fire Department. This analysis, along with a concurrent analysis by Chief Dench as he was gathering documentation requested for this study, identified significant problems with the NFIRS reporting process utilized by the Department. These issues were significant enough to

call into question the accuracy and credibility of much of the data, particularly the all important response time data that the Department currently has. Fortunately, the problems identified can be corrected fairly easily with the development and implementation of new detailed procedures, and additional training of personnel, on completion of incident reports. With these changes, the Gloucester Fire Department will be able to gather much more accurate data in the future.

OBSERVATIONS

The Gloucester Fire Department utilizes the *Firehouse* fire department management software as its primary incident reporting software. Every incident response results in the generation of a paper incident report that is completed by the firefighter assigned to the alarm room as the dispatcher. The paper report is then forwarded to the on-duty captain at Fire Headquarters who creates an incident report in the *Firehouse* NFIRS data base and enters the pertinent information, including the incident narrative, even if he was not personally on the incident. This includes an NFIRS report for every EMS incident. The reason for this cumbersome procedure is that two of the three sub-stations do not have network access, so even when a captain is on-duty at any of those stations, he cannot access the Firehouse incident reporting system.

The study team noted a number of areas of concern with the sample reports that were provided as background for this study. Principal among these were:

None of the incident reports reviewed identified who the officer in charge of the incident was, or, who had completed the report. This is usually a standard entry on the NFIRS-1 Basic report. Several of the narratives were completed by Deputy Chief Stephen Aiello who did list his name and the date completed, although it does not appear that he used the time/date stamp function of the Firehouse software.

- At least one of the incident reports had additional supplemental information added to the narrative regarding the outcome of the investigation, however, the person who added the supplemental information did not identify himself. Deputy Chief Stephen Aiello did supplement one of his reports and noted the date in addition to his name.
- Deputy Chief Stephen Aiello completed very detailed incident narratives, as did several of the other unidentified report preparers or incident commanders. However, some of the other reports were lacking in detail, considering the seriousness of the incident that was involved (all of these incident reports were for incidents that involved civilian injuries or fatalities). The lack of detail could present serious problems in the future if there was litigation of any type and fire department personnel were required to provide depositions or testify.

- Although these were all significant incidents, none of the incident reports noted the time that the incident was placed under control. Noting incident control time, particularly for structure fires can provide the department with valuable information regarding how quickly, efficiently and effectively they are able to gain control of the incident. This information can be useful during post-incident critiques, when answering questions about a particular incident, when evaluating and analyzing various operational components, and when developing or updating operational procedures.
- None of the incident reports included any information in the estimated dollar loss and values section. Although there is debate within the fire service over entering this data due to the high probability of the estimates being grossly inaccurate, by working with the City tax office, and the insurance company, relatively accurate estimates should be able to be established. Fire loss and property saved data can provide important statistics regarding how well the fire department is performing one of its core missions, and to help justify the continued financial investment of tax dollars in department operations.
- As previously mentioned, all of the incident reports reviewed involved civilian injuries. A review of the NFIRS-4 Civilian Fire Casualty reports revealed that none of them had been completed 100%. Some did not even report the disposition of the patient/victim. Although obtaining this information may be difficult initially, obtaining all of the pertinent victim information, and insuring that it is accurately entered into the report should be part of the incident investigation.

The study team did not have the opportunity to review any of the other NFIRS report modules such as the structure fire, apparatus or personnel reports to determine how thoroughly and accurately they were being completed.

The department does report NFIRS statistics to the state fire marshal's office on a regular basis. The submittal of NFIRS data is a condition for receiving federal, and possibly state, fire grants or funding.

The department does not have any standardized procedure for completion of incident reports, and lacks any type of report review and/or quality control procedure. A review of the department's procedure manual indicates that Chapter VII in Book I covers Records and Reports, however, there are no documents or procedures in this chapter.

The lack of any type of procedure on the completion of incident reports inevitably leads to inconsistency as was evidenced by the small sample of reports that the study team reviewed. This situation creates significant concern about the completeness and accuracy of the information contained in the department's data base, the statistics that are reported to the state, and the statistics that the department and City are using to

evaluate and analyze operations, justify budget expenditures, and prepare grant narratives, etc. Inaccurate, incomplete, and/or inconsistent, reports, information, or data, can adversely affect the outcome of litigation and potentially increase the City's liability.

The concern over the fire report completion process is compounded by the fact that there is no review and/or quality control program in place for fire reports (note: EMS reports are extensively reviewed for quality assurance purposes). Once a fire incident report has been completed by the headquarters captain, there is no procedure in place for the report to be reviewed for completeness, correctness and accuracy. Even the most conscientious, detail oriented officer will occasionally make a mistake or accidentally omit important information during completion of an incident report. It takes only a few mistakes on response times to begin significantly skewing the data. Having an effective and consistent report review procedure in place will allow these mistakes to be identified and corrected, leading to increased accuracy and reliability in the statistics that are developed.

In a memo attached to the requested analysis of response times for 2008, Chief Dench shares the study team's concerns and identifies numerous significant discrepancies in the data. Chief Dench cites a number of very plausible explanations for these errors and discrepancies, including a lack of training and familiarity with the *Firehouse* program. He reaches the conclusion that average response times could be off as much as several minutes for each month. His conclusion is well supported by the observation that the monthly average response time for the year ranges from 3 minutes 33 seconds to 11 minutes 53 seconds. Regrettably, discrepancies of this magnitude make the accuracy, credibility, and ultimately the usefulness of these statistics dubious at best.

Chief Dench reported that a number of years ago he used to quality check the incident reports. As the number of incidents increased significantly, it became impossible for him to continue to conduct comprehensive report reviews and complete his other duties. The lack of clerical assistance in the fire department meant that report review and/or quality checking was simply not done. The fire chief feels that the problems with the reporting process will continue and as the number of incidents increase, so will the number and significance of the problems. The study team concurs.

The documentation requested by MRI included a request for fire loss data, by incident, for the previous 3 years. None was provided because it has not been collected by the department.

At this time, there is no reliable statistical evaluation or analysis of NFIRS data being performed at the local level in Gloucester. The overall fire and EMS delivery system in Gloucester will be much improved once this type of analysis is completed by the department. Only then will an accurate, factual picture emerge regarding how effectively, and efficiently, the department is providing these critical life safety services.

A significant part of the comprehensive and accurate completion of incident reports involves the hard statistical data that is gathered. Examples include response times, fire/EMS incident activity trends, number of personnel and apparatus on scene. While these can be evaluated and analyzed, the inclusion of a detailed incident narrative on each report is of critical importance. The incident narrative provides important details and information about the incident that is not found in other data, and may need to be recalled years after the incident for any number of reasons. As noted earlier, while there were some very good narratives in the reports that we reviewed, there were also some very weak ones.

Within EMS operations, the department's ambulance are equipped with Panasonic Tough Book laptop computers that allow for completion of the department's electronic patient care reports (PCRs). The department is to be commended for being the first fire department in the Cape Ann region to initiate electronic patient reports. Some technical difficulties were experienced at the inception of this program because the local hospital not ready to accept the reports electronically. That glitch in the system has been resolved and by all reports, the system now works very well.

The PCR's and other EMS records are maintained on a state-of-the-art software system. The EMS coordinator performs regular quality assurance evaluations of all reports in accordance with Commonwealth regulations and EMS best practices. PCR's are an essential component of overall patient care and are electronically transmitted to the hospital patient record before the Gloucester Fire EMS personnel leave the emergency department. The reports are also reviewed by the emergency department medical director and the state for quality assurance/quality improvement and statistical analysis. Eight communities in the region (Gloucester, Amesbury, Essex, Lynnfield, Manchester-by-the-Sea, Middleton, Rockport, and Topsfield) currently participate in the PCR system that is hosted by Northeast Health System on their server in Beverly. The system is an excellent example of a regional public-private partnership that is extremely beneficial to the City of Gloucester and its citizens. Fortunately, the EMS PCR system is not prone to the same problems and issues that have been identified in the fire incident reporting system.

At the present time, the Firehouse NFIRS and electronic PCRs do not integrate with each other, so in essence there are two separate reports created for each EMS incident. Chief Dench advised the study team that he believes that there is the potential for these reports to be integrated.

The fire department has not completed an annual report since 2005. The 2005 report, which was just three pages in length, contained some good information regarding department operations that year. However, it was single spaced with narrative only, making it difficult to extract the important information. The report would have been more informative and reader friendly had it been divided into sections that included photographs, charts, tables, and lists, of useful information. The fire department does

not currently provide a monthly report to the City administration regarding department activities.

RECOMMENDATIONS

- 18.1 The Gloucester Fire Department should develop a comprehensive operational procedure on the completion of fire incident reports. The procedure should include, but should not necessarily be limited to:
- a requirement that accurate dispatch, response, on location and in-service/available times be recorded for each unit that responded to the incident
 - a requirement that incident under control time be recorded for any working and/or significant fire or other incident
 - a requirement that the ranking officer/senior firefighter on the scene of the incident complete the primary incident report/narrative, and that other officers/senior firefighters complete additional supplemental reports/narratives, as appropriate
 - a requirement that all necessary additional reports pertinent to the incident be completed fully and accurately including appropriate supplemental narratives, including the fire, structure fire, apparatus, personnel, and civilian and fire service casualty reports
 - a requirement that estimated property values and losses be completed for any fire incident
 - a requirement that the officer in charge of the incident and the member completing the report be listed on the NFIRS-1 Basic report
- 18.2 In order to best memorialize the nature and conditions of the incident and the actions taken by the fire department with respect to incident mitigation, it is recommended that the Gloucester Fire Department require that a detailed narrative be completed for each significant incident report. While many incident narratives can consist of just a sentence or two of explanation, as the incident grows in complexity or significance, so should the detail of the narrative increase. For a significant incident, the narrative should begin with a report by the first arriving officer, followed by a narrative from the deputy chief, followed by narratives from any subsequent incident commander(s), such as the fire chief. All narratives should be time/date stamped. Any later addendums to the narratives should also be time/date stamped at the time of completion. Additionally, each company/unit officer, or senior firefighter, should complete a

brief narrative of their company/unit's actions in the narrative section of the individual apparatus report (NFIRS-9).

- 18.3 The Gloucester Fire Department should ensure that all fire stations are connected to the fire department computer network system as soon as possible, whether by fiber optic, CATV cable or wireless system. This recommendation which was previously made in Chapter 10 will allow all officers and senior firefighters access to the *Firehouse* database for the proper completion of NFIRS reports and for a multitude of additional administrative tasks.
- 18.4 The Gloucester Fire Department should upgrade software as necessary to meet current and future needs. This could include designating additional data fields as mandatory for completion of the NFIRS report, and the development of specialized studies and/or reports that the fire chief and his staff may require for various purposes. The ability to download data and plot incidents on a City map to identify response trends and patterns may assist with more effective deployment of resources.
- 18.5 The Gloucester Fire Department should implement a comprehensive report review process. This procedure should insure that every incident report is reviewed at least once by someone other than the preparer. This could be a daily duty of the on-duty deputy chief or could be assigned to the person who is responsible for maintaining the *Firehouse* database. If the duty is assigned to the deputy chief, consideration should be given to having each deputy chief review the previous platoon's reports rather than his own platoons.
- 18.6 The Gloucester Fire Department should investigate the feasibility of being able to integrate the *Firehouse* NFIRS database and the electronic patient care report databases. At a minimum, there should be a capability to attach the PCR onto the NFIRS report.
- 18.7 The Gloucester Fire Department should continue to monitor average response times on a monthly basis to provide timely comparison on frequency of compliance with recognized benchmark standards. In addition, the department should actively investigate the cause if an incident response time exceeds the benchmark standard.
- 18.8 The Gloucester Fire Department should, on a periodic basis, analyze incident response data to ensure that they are proving the most effective, and efficient, fire and EMS services possible with the resources allocated. Periodic analysis of data may point to the need for deployment and/or operational procedure adjustments and will greatly assist with both short and long term planning efforts.
- 18.9 The Gloucester Fire Department should prepare a monthly report that, at a minimum, provides a breakdown of incident response activity for the month,

provides a brief synopsis of all significant incidents, provides information on training, fire prevention and public education activities and provides a synopsis of significant special projects, accomplishments and any other information of note. In addition, the department should prepare an annual report that will be a more enhanced and polished compilation of the monthly reports. The annual report should provide a comprehensive overview of the department's activities during the previous year and the goals for the coming year.

CHAPTER 19

EMERGENCY MANAGEMENT

OVERVIEW

The preparation of an all hazard emergency management plan is crucial to the ability of local government to provide a responsible level of safety and security to its residents, particularly in times of severe emergency. The emergency management plan provides various government entities, from the Mayor and City Council, to the state, to the federal government, with a blueprint of key issues, concerns, capabilities and liabilities that may impact operations, including basic ones such as public safety, water, electricity, etc. in a community during a period of heightened emergency. The ability of the community to have continuity of operations, and recover effectively from the emergency will be, in large part, determined by the effectiveness of its emergency management plan. Having an effective plan is extremely important to Gloucester, as the City is geographically situated in a region susceptible to natural disasters such as earthquakes, hurricanes, flooding, wildland fires, and winter ice storms in combination with the potential for dam breaches. Other significant threats include, but are not limited to pandemics, hazardous materials incidents, conflagrations caused by the closely built downtown and harbor areas, and the ever-present terrorist threats.

Detailed planning and subsequent periodic table top and full scale exercises are required to test the provisions of the plan, and to insure a coordinated and effective response to these challenges.

A comprehensive review of the Gloucester Emergency Management Plan was not included within the scope of work for MRI and would be considered a separate and significant undertaking. However, as part of its review of the Gloucester Fire Department, MRI reviewed the department's overall emergency management capabilities and level of readiness.

OBSERVATIONS

The MRI study team interviewed numerous City staff, including department heads, all of whom responded that there is no up-to-date emergency management plan for the City of Gloucester. The MRI police study team was provided with a copy of a CD that contained the 827 page Emergency Management Plan for the City of Gloucester. It was originally written in 1994 and revised in July 2004. According to the plan, the fire chief is the emergency management director in Gloucester, which is typical in many communities.

The existing Emergency Management Plan for the City of Gloucester is five years old, which by emergency management standards is obsolete. Since 2004, the Mayor and all the listed department heads have changed. It is very possible that important buildings, inventories, and other resources have been added or deleted during this period. The plan itself calls for annual revisions, and without regular drills, exercises, training, and revisions based on "lessons learned", the plan is useless.

City Hall is currently listed as the primary emergency operations center (EOC). The plan points out that this location is not equipped with an emergency power generator, communications with major departments, or the basic necessities needed to sustain such a center over a prolonged period such as food, water, or medical supplies. The secondary EOC, Gloucester Fire Headquarters would be a better location than City Hall, but has numerous operational deficiencies as noted in Chapter 5, *Fire Department Facilities*.

The Public Works Department advised the MRI study team that Phase 2 dam assessments were being completed by a private contractor to determine stability and reliability.

The Gloucester Fire Department is one of several City agencies that are participating in a four community regional effort known as the Cape Ann Emergency Planning Team. The stated mission of this group is to "plan and work together within and between the four communities of Cape Ann to develop, locate, secure and deliver in a coordinated manner all necessary emergency responses and services in the face of any community emergency including but not limited to pandemic influenza." The Team is an interdisciplinary effort that includes fire, police, EMS, public works, school departments, hospitals, public health, the American Red Cross, U.S. Coast Guard, and other agencies that would play a role in responding to or mitigating a catastrophic incident in the region. The Team is in the process of being certified as the Regional Emergency Planning Committee (REPC) and is developing a regional mass casualty incident (MCI) plan. They also intend to develop a regional "all-hazards" emergency response plan.

A separate but parallel regional public health emergency preparedness effort is being coordinated under a grant from the Centers for Disease Control (CDC) and hosted by the Gloucester Health Department with a full-time emergency preparedness coordinator. Fifteen communities participate in the North Shore-Cape Ann Emergency Preparedness Coalition. The Coalition develops emergency preparedness plans for public health emergencies, including bio-terrorism, and also promotes public awareness.

RECOMMENDATIONS

- 19.1 The City of Gloucester should contact the Massachusetts Office of Emergency Management to request assistance in developing and executing an updated comprehensive emergency management plan. It is likely that federal grant money is available to support this effort, which would enable the City to retain a consultant to update the plan, conduct training, and facilitate tabletop exercises to test the plan. An effective plan should draw from a combination of all available public and private resources, including guidance from the Federal Emergency Management Agency and NFPA 1600, *Standard for Disaster/Emergency Management and Business Continuity Programs*, 2007 edition (National Fire Protection Association, Quincy, MA). Consideration should be given to developing the plan under the auspices of the Cape Ann Emergency Plan so that it includes all four communities in the immediate region.
- 19.2 The MRI study team believes that the position of emergency management director should be retained by the fire chief because of the department's overall responsibilities for response to and mitigation of natural and technological disasters.
- 19.3 As the City's emergency management director (EMD), the fire chief should ensure that the emergency management plan is kept up-to-date, is revised as necessary, that resources are maintained as appropriate, that key personnel including the local elected officials are aware of their duties and responsibilities during a time of emergency, and that appropriate exercises are conducted on a periodic basis. Many of the duties and responsibilities of the EMD can and should be delegated to command and staff officers within the Fire Department and other City departments.
- 19.4 The City should re-evaluate the designation of the primary and secondary emergency operations centers. Both the primary and secondary operations centers should be properly equipped and supplied.

CHAPTER 20

FUNDING BY THE MUNICIPALITY, UTILIZATION OF GRANT FUNDING AND FISCAL MANAGEMENT

OVERVIEW

The purpose of this chapter is to provide an overview of the financial issues that affect the fire department. This is not an in-depth analysis of the City of Gloucester's fire budgets. It is an analysis of the funding achieved locally and how it measures up to the comparative group. The comparative group analysis establishes the level of financial "effort" Gloucester residents pay to support fire and EMS services to other communities. For the purposes of this Chapter, the communities reviewed were Portsmouth, NH; Franklin, MA; Shrewsbury, MA; and Northampton, MA.

While a comparative study can evaluate the level of effort and ability of residents to pay, it cannot measure residents' willingness to pay over the long run. Caution should be used if looking for a hard and fast answer using statistical comparisons on their face value alone. Every fire department and every city has developed creative methods for service delivery and cost labeling based on specific needs. Additionally, the information that might be obtained from various municipalities could vary to some degree as to how they report expenses such as employee benefits or vehicle maintenance.

Throughout this report, the MRI study team has made several recommendations that could, if adopted, increase expenditures in the Gloucester Fire Department. We believe that these recommendations are essential for the effective, efficient and safe operation of the fire department. Other recommendations are intended to reduce overall financial risk and liability, or will have the effect of smoothing expenditure rates and minimizing one-time spikes in the budget. Ideally, fire department expenditures should result in programs that are well-justified and cost-effective, and that have measurable outcomes that result in an improved level of safety and protection for the citizens of Gloucester.

As with most fire departments, revenue from the delivery of emergency medical services is the most significant revenue generator for the Gloucester Fire Department. We have reviewed the EMS revenue collection system as part of this study.

The fire service, like every government entity from the federal government down to the smallest municipality is struggling with severe budgetary shortfalls brought on by the unprecedented severity of the economic collapse and subsequent recession. Already scarce financial resources are being stretched even further requiring virtually all non-essential spending and purchases to be deferred. Vital tools and equipment cannot be obtained, upgraded or replaced as departments struggle to maintain their frequently

already bare bones staffing. This situation can significantly impact the effectiveness, efficiency and safety of fire department operations in a negative way. Seeking funding through various grant programs and entering into public/private partnerships are methods through which fire departments can obtain money to replace equipment, maintain, improve or expand existing programs, or fund new initiatives, missions, operations and programs.

While the current economic crisis is having an impact on grants from private entities and foundations, the federal grant programs targeted to the fire service continue to be funded, although not anywhere near their authorized levels. The major federal fire grant programs are the Assistance to Fire Firefighters (AFG) Grants (for equipment), the Staffing for Adequate Fire and Emergency Response (SAFER) Grants (for personnel), and the Fire Prevention and Safety (FP&S) Grants (for fire prevention and public fire education programs).

Since 2001, AFG has helped firefighters and other first responders to obtain critically needed equipment, protective gear, emergency vehicles, training, and other resources needed to protect the public and emergency personnel from fire and related hazards. The Gloucester Fire Department has had some success at obtaining these grants, being awarded funding on two occasions.

The goal of the SAFER grants is to enhance the fire departments' ability to comply with staffing, response and operational standards established by NFPA and OSHA (NFPA 1710 and OSHA 1910.134). SAFER funds assist the fire department to increase their staffing and deployment capabilities in order to respond to emergencies. The SAFER program is expected to receive a major increase in funding this year. Matching fund requirements for the grant recipients are suspended and the eligibility requirements for utilization of the funding are being revised. Competition for this funding is expected to be extremely intense.

FP&S grants support projects that enhance the safety of the public and firefighters by reducing fire hazards and improving public awareness of fire safety practices. The grants target high-risk populations (elderly, children, disadvantaged individuals, etc) and communities with high incidences of fire death and injury.

One of the recently enacted federal economic stimulus packages contains approximately \$230 million for construction of new fire stations and modifications to existing stations. The Assistance to Firefighters Fire Station Construction (FSC) Grant program accepted applications for shovel ready projects between until early July, 2009. The City of Gloucester submitted an application for the replacement of the Central Fire Station. The possibility exists that funding may be made available again in future fiscal years.

There are a number of other grants available to fire departments for various purposes. Some grants that may be available to the Gloucester Fire Department are the Fireman's

Fund Heritage Grants, Factory Mutual grants for fire investigation, and Wal-Mart community grants. Other large chains such as Home Depot and Lowes are frequently willing to provide funding, and/or enter into partnerships for specific projects. The key to success at this level is finding grants for which the department may be eligible and ensuring that the application is tailored to the grant program's priorities.

The MRI study team evaluated the Gloucester Fire Department's history with applying for, receiving and administering various grants.

OBSERVATIONS

Community Comparisons

Of the five communities used in the analysis, Gloucester ranked slightly higher than the average 2007 population of the group (28,880) with an estimated population of 30,308. Gloucester ranked slightly lower than the average 2007 population of Massachusetts communities, which was 30,897. An issue particular to Gloucester and similar vacation destinations, is the influx of summer residents, summer renters, and day-trippers. MRI researched, but was unable to locate, any solid estimates on the rate of population increases during the summer months. Very informal estimates received from Gloucester officials ranged from 10% to 30% of the total population on any given summer day.

Factors contributing to the residents' ability to pay for municipal services include the overall valuation of the City as well as the per capita income within the community. Municipal valuation places Gloucester above both the 4 and 5 comparable community averages based on information derived from the Massachusetts Department of Revenue for FY2009. Valuation is an important consideration as it impacts how much the tax rate changes based on the total municipal expenditure.

While Gloucester had the highest assessed value of the five comparable communities, it also had one of the lowest tax rates. The 2009 tax rates in the other Massachusetts communities ranged from \$9.68 in Shrewsbury to \$11.48 in Northampton. The tax rate for Portsmouth, NH, was very dissimilar than the other four and should be discarded for the purposes of this analysis. Gloucester is the only community in this analysis with a split (residential and commercial) tax rate system.

City	2007 Population	2009 Total Assessed Value	2009 Tax Rate
Shrewsbury, MA	33,489	4,964,189,100	9.68
Franklin, MA	31,381	4,524,655,832	11.17
Gloucester, MA (Only split rate community)	30,308	5,674,893,000	Residential 9.10 Commercial 9.70
Northampton, MA	28,411	3,240,189,100	11.48
Portsmouth, NH	20,810	3,700,000,000	16.98
Average of 5 communities	28,880	4,420,805,406	11.91
Average of 4 MA communities	30,897	4,601,006,757	10.64
Gloucester	30,308	5,674,893,000	10.24

Although Gloucester has the highest assessed value of the comparable communities, its per capita income lags the averages for the five-community group and the Massachusetts-only subset. Based on the most recent federal data derived from the 2000 census, per capita income in Gloucester is \$25,595. This was the second lowest of the five communities surveyed, higher only than Northampton, MA. The average for the five communities was approximately \$2,000 higher than Gloucester's annual per capita income.

CITY/TOWN	PER CAPITA INCOME (2000)
Shrewsbury, MA	31,570.00
Franklin, MA	27,849.00
Gloucester, MA	25,595.00
Northampton, MA	24,002.00
Portsmouth, NH	27,540.00
5 Community Average	27,311.00
Mass Only Average	27,254.00

Of the five communities used in this comparison, an average 5.79% of the total community budgets was allocated for fire departments in FY08. In Gloucester, the percentage was 7.02%. The Massachusetts-only comparable average is 5.24%.

The average per capita expenditure for fire services for the five communities was \$161.63 for FY08. When using just the Massachusetts comparables (without Portsmouth NH), this figure drops to \$136.22. Gloucester's per capita expenditure for FY08 was \$183.00, making it higher than the group average and the highest of the Massachusetts comparable averages.

City	FY08 General Fund Budget	FY08 Fire Department Budget	FY08 Fire Budget as a Percentage of Total FY08 City Budget	Population	Per Capita Expenditure of Fire Department Budget in FY08
Shrewsbury, MA	\$ 83,435,429.00	\$ 2,719,681.00	3.26%	33489	\$ 81.21
Franklin, MA	\$ 88,880,100.00	\$ 4,372,000.00	4.92%	31381	\$ 139.32
Gloucester, MA	\$ 79,065,198.00	\$ 5,546,484.00	7.02%	30308	\$ 183.00
Northampton, MA	\$ 69,667,920.00	\$ 4,200,000.00	6.03%	28411	\$ 147.83
Portsmouth, NH	\$ 79,858,802.00	\$ 6,500,665.00	8.14%	20810	\$ 312.38
Average all	\$ 80,181,489.80	\$ 4,667,766.00	5.82%	28880	\$ 161.63
Average MA	\$ 80,262,161.75	\$ 4,209,541.25	5.24%	30897	\$ 136.24

* Budget information for the four Massachusetts communities provided by the Massachusetts Department of Revenue.

Funding and Fiscal Management

The overall fiscal management of the Gloucester Fire Department appears to be very good at the present time. The City Treasurer, Mr. Jeffrey Towne feels that Chief Dench is doing a very good job managing the budget, while simultaneously trying to master a steep learning curve on the budgetary process itself. Mr. Towne states that he and the Chief meet on a regular basis regarding the status of the budget and various related issues.

Unlike the fire department, the police department employs a civilian business manager who reports directly to the Police Chief. A similar position or a sharing of this position between the two departments might be an effective way to provide the fire chief with a skilled resource to manage the budget, purchasing, personnel management systems, and other administrative support duties.

The fire chief is normally responsible for the development of the annual fire department budget. During the recent transition to a new fire chief, then-Chief McKay was tasked with finishing development of the budget prior to his retirement, while Chief-designee Dench concentrated on implementing recommendations from the Lorraine Apartments

After Action Report. While implementing those recommendations was critical, the downside now is that as with most things that occurred during the previous administration, the budget was prepared in a vacuum, with no input from the other officers, and it is based heavily on the previous chief's priorities, as opposed to those of the current fire chief. Complicating the situation is the fact that the previous chief left no budget documentation, spreadsheets, databases, etc. that could have assisted with fiscal tracking, monitoring trends, and establishing budgetary needs and priorities. Chief Dench stated that he has basically had to start any tracking/monitoring programs from scratch.

A review of the Gloucester Fire Department's budget shows that it increased from \$4,983,574.00 in fiscal year 2006 to \$5,311,627.00 in fiscal year 2009, an increase of \$328,053.00 (6.6%). However, funding actually decreased 4.23% from FY08 to FY09 as the budget was reduced from its high point of \$5,546,484.00 to \$5,311,627.00, a decrease of \$234,857.00. In FY09, personnel expenses account for 93% (\$4,941,300.00) of the operating budget. All other expenses, including capital outlays totals just \$370,328.00 (7%), although this figure does not include the additional funding allocated for additional training and equipment or to implement the recommendations of the Lorraine Apartments After Action Report.

The budget is notable in that there are no specific line items for training or fire prevention activities. Chief Dench would like to reorganize the budget to better allocate funding to various functional areas and to allow better tracking of expenditures.

Mr. Towne stated that the fire department's line item projections are generally accurate, and with the exception of the overtime line item, they rarely over expend a line item. His opinion is that Chief Dench has a good handle on the needs of his department and does a very good job of prioritizing them. Payroll reporting is also done electronically to the Treasurer's office, and the fire department has no problems with that operation.

The area of the budget that seems to annually present the most challenges is the overtime line item. This is perhaps the most difficult area to forecast need, and ultimately strike a reasonable balance between public safety and fiscal responsibility. This issue is also confronted in virtually every other community that has career fire department personnel. The allocation of vacation time is established contractually, but it is impossible to forecast, and difficult to control, other types of leave such as sick, injury, military, and funeral leave. As the average age, and seniority, of the members of the department increases, not only do personnel earn additional leave, they also become more susceptible to injuries, or illnesses. Minimum staffing requirements obligate a certain level of commitment to paying overtime to fill daily vacancies due to authorized time off. Failure to provide sufficient funding to cover at least some vacancies will result in the level of fire and EMS services that is available.

Chief Dench stated that the department requested \$800,000 for overtime for the fiscal year that began on July 1, 2009. The City allocated \$200,000.00, a 50% decrease from

fiscal year 2008 when \$400,000.00 was allocated. Based upon previous year's experience, this funding will be totally expended by October. After the money is gone, overtime basically ceases and sub-stations are then closed. Chief Dench has established as one of his highest priorities a desire to keep the West Gloucester station open at all times in addition to Headquarters. Keeping the West Gloucester station open provides a number of very important operational benefits and the study team concurs that adequate funding should be allocated for this purpose.

Aggressive monitoring of sick and injury leave can minimize overtime expenditures. As previously noted in Chapter 17, *Staffing and Scheduling*, there does not appear to be aggressive or consistent monitoring or enforcement of existing City policies concerning sick and injury leave. Every injury should be investigated to determine how similar injuries can be prevented in the future. Chief Dench stated that he has developed spreadsheets to track overtime and leave use.

Every City department in Gloucester is required to maintain an up-to-date capital needs budget. The fire department complies with this requirement. The City is working on developing an overall capital needs plan, but is having difficulty accomplishing this objective. The City is encouraged to continue working toward achieving this goal. Over the past several years, funding has been allocated for the purchase of a new rescue (ambulance) and a new aerial ladder truck for the fire department. The rescue (ambulance) is already in service, while delivery of the aerial ladder is scheduled for late summer 2009.

As noted in Chapter 7, *Fire Department Equipment*, past practice has been to purchase new apparatus without new equipment, transferring old equipment from the replaced apparatus. This has resulted in a significant amount of dated equipment still in service on front line apparatus and less than complete equipping of reserve apparatus. The new aerial ladder that is to be delivered shortly was ordered fully equipped, with state of the art equipment, which will permit the existing aerial ladder to be placed into reserve fully equipped.

All City purchasing operations are performed electronically through the Unifund budget management program. Requisitions are prepared at the department level and submitted on line for approval and creation of a purchase order. Once the purchase order is generated, the purchase can be made. The documentation for goods and services delivered are also processed electronically. Account balances are automatically adjusted to encumber the funds as soon as the purchase order is created. The Unifund program allows up the minute tracking of line item account balances which is very beneficial for the chief as he monitors his budget.

The City has strict rules requiring a purchase order to be obtained prior to any purchase. Failure to do so requires an appearance before City Council by the department head to explain why this occurred. MRI was informed that this is an excellent deterrent, and City Council should be commended for their diligence in this

regard. The purchasing department reported that the fire department does a very good job with the purchasing process. They follow the rules, always get purchase orders and do a good job monitoring their line items and tracking their expenditures. The City does allow open purchase orders for items such as vehicle maintenance parts, a common practice in many communities. It is our belief that while these expenditures need to be monitored very closely, they are beneficial to streamlining certain department operations.

As discussed below, the Gloucester Fire Department has had limited success in obtaining grants. Previous grants have not been closed out in accordance with federal rules. These issues have now been resolved and the City has recently applied for \$5,300,000.00 in grant funds from the federal government for firefighting operations and safety equipment and to replace the Central Fire Station. Additional grant opportunities should be sought out and applied for in order to accomplish projects that would not otherwise be possible through the regular budget process. The City and fire department must remain vigilant to see that grants are administered as required.

The Gloucester Fire Department generates a significant amount of revenue for the City through third party billing for emergency medical services. Revenues for fire department emergency medical services are approximately \$924,000 per year. A rate schedule has been adopted that is consistent with allowable Medicare billing schedules for the region. The City contracts with a private third-party agency, Comstar, to perform billing and collection services. Funds are deposited in a BankNorth bank account, which enables the City to perform real-time tracking of revenues. The actual collection rate against billings is in the range of 80-85%, which is slightly down from 85-90%. This decrease could be a factor of the current economy, and is being reviewed by Comstar and the EMS coordinator. However, an 80-85% collection rate is an acceptable rate. There is a system in place to "write-off" uncollectible accounts, such as individuals without insurance or without an ability to pay. The department performs an annual rate review and submits rate increase requests to Medicare within allowable limits.

The fire department also generates revenue through fire prevention permit and inspection fees, although because the system is so lax, the exact amount could not be accurately determined. As noted in Chapter 9, checks and cash are accepted for permit and inspection fees, but no receipts are issued. There is no daily, weekly or monthly reconciliation of fees. Checks and cash that are received are placed in a slot in the top of a metal file cabinet in the fire alarm room and drop into the top drawer of the cabinet, which is locked. The money is removed and deposited in a bank account by the fire chief or his designee, but not on a designated schedule. This is a system that is ripe for fraud and/or misappropriation of funds, although the MRI study team did not find any evidence of malfeasance. The study team learned that after the recent change in fire department administration, checks totaling approximately \$700 from 2006 and 2007 were found. The department is contacting the originators of these checks in an attempt to obtain replacement checks. This situation vividly illustrates the problems with this system as currently configured. The treasurer's office stated that they were working

with all departments on a policy on weekly deposits of all funds collected. They would also like to eliminate cash transactions, but that would be very difficult at the present time.

A City ordinance allows for billing for repeat false alarm offenders. According to Chief Dench, although this ordinance could provide an effective incentive for people to properly maintain their alarm systems, the fire department has not issued a penalty in years. The result is an increasing false alarm problem caused by improperly maintained systems. The fire chief stated that the lack of administrative staff in the department makes it difficult to bill for false alarms.

The fire department has no overall inventory of equipment. This makes it extremely difficult to know what the department has (or should have), and what its short and long-term equipment needs may be. It also means that there is no documented accountability for millions of dollars of equipment purchased with public funds. Significant amounts of equipment, in various condition, was observed lying around in the fire stations. The basement of the Magnolia station was filled with large quantities of obsolete equipment that should have been disposed of many years ago.

Grant Funding

The Gloucester Fire Department has had some limited success at obtaining AFG grants; however, that success was tempered by problems with administration of the grant awards. The study team found that it was difficult to get a comprehensive overview of the department's grant application efforts because much of the expected documentation could not be located.

Several years ago, the department was successful in obtaining AFG grants to replace all turnout gear/personal protective equipment (PPE) and all self-contained breathing apparatus (SCBA). The grants enabled the department to replace some of the most mission critical equipment that firefighters require to perform their jobs. Firefighter safety was significantly improved. However, the grants were not properly closed out as required by the Department of Homeland Security (DHS). As a result, the Department has not applied for any grants for several years. According to Chief Dench, the grant close out issues have recently been resolved to the satisfaction of DHS.

At the time of the study team's visit to Gloucester in mid May 2009, the 2009 application period for AFG grants was open. The department was preparing a grant application requesting approximately \$300,000.00 in funding. The funding request was primarily for 70 new portable radios that will allow every member of the department to have their own portable, an important firefighter safety initiative. In addition, funding was being requested for additional radio antennas to provide better radio communication coverage throughout the City. Five (5) additional thermal imaging cameras were being requested for deployment on various apparatus, which will significantly improve operational

effectiveness and efficiency, as well as firefighter safety. The 10% matching funds requirement for a City with Gloucester's population will be money well invested in improved operations and firefighter and public safety.

Since it remains undetermined if the FSC grants are a one time part of the federal stimulus package or if they will be funded again in subsequent years, the City of Gloucester and the Gloucester Fire Department should be commended for their determined efforts to get a strong application for a fire station construction grant prepared and submitted within a short time frame for replacement of the existing fire headquarters facility. While the competition for these grants will be extremely fierce, we believe that the many significant problems with the existing fire headquarters facility, including serious life safety concerns, will give the City reasonable prospects of being successful at being awarded funding. The City is encouraged to contact their Congressional representatives to seek their active support for this important project.

The department could not locate any documentation or applications indicating that applications for SAFER or FP&S grants had been submitted in prior years.

Chief Dench would like to improve the department's relationship with the City's grant administrator. A state senator recently organized a grant-writing seminar that several members of the fire department attended, and these personnel are interested in getting involved in this endeavor. It is imperative that the City maximize their chances for success when applying for grants by effectively combining the technical expertise of the fire personnel with the grant preparation and writing support of the grants personnel.

The City of Gloucester recently received a small grant of \$2,500.00 from the Massachusetts Emergency Management Agency for emergency preparedness activities within the City.

RECOMMENDATIONS

Community Comparisons

- 20.1 The City should continue with efforts to compare municipal funding with communities of similar size and demographics. More detailed analyses might consider community differences such as use of call/volunteer firefighters, dispatch costs not part of fire department budget, EMS costs not part of fire department budget, etc.

Funding and Fiscal Management

- 20.2 The fire department should identify ways to provide the best possible use of the tax dollars provided and to keep operating expenses to a minimum. This will allow the residents and elected officials to focus on providing the necessary level of funding with confidence that the maximum effort has been exerted to conserve the resources made available for fire and EMS services.
- 20.3 Future fire department budgets should be the result of on-going dialogue between the Mayor, the City Council and the fire chief. Efforts on the part of the fire department to make budget submissions more transparent and to shift resources within the budget to meet current needs should be met with a positive response by the Council and the Mayor.
- 20.4 The fire department should attempt to make budget submissions complete, accurate, and easily understandable for the non-fire professional. The annual budget process is an opportunity to let the community and its leaders be aware of what the department is doing and where it is heading in the upcoming year. As such, the requested budget represents a vision projection for the next fiscal period and its contents should be heavily researched and solidly prepared.
- 20.5 The City should provide professional development opportunities for the fire chief and the fire department command staff in budget development, fiscal management, and grant writing and administration.
- 20.6 Billing and collection services for EMS should continue to be performed by a third-party contractor. The complexities of Medicare and private insurance billing warrant the use of a specialist to perform these services for the City.
- 20.7 As stated in detail in Chapter 9, the department should establish improved procedures for the collection of all fees and the handling of all permit revenue.

- 20.8 The City and the fire department should develop a fiscal management/operational procedure that describes the fire department's budget process and delineates the authority to approve requisitions and/or spend departmental funds.
- 20.9 As suggested by Chief Dench, the City and the fire department should reformat the fire department budget to better allocate funding to various functional areas such as training, and to allow better tracking of expenditures.
- 20.10 The fire department should continue to closely track and monitor overtime expenditures for the purposes of identifying trends, future needs, and justification for staffing levels. Leave use, by type, for each member of the department should also continue to be tracked for trends, patterns and potential abuse.
- 20.11 Every on-the-job injury should be thoroughly investigated for the purpose of determining cause, contributing factors, and measures that can be taken to prevent similar injuries.
- 20.12 All fire department property should be inventoried and tagged. The inventory should be entered into the Firehouse software database and linked to a specific apparatus, station or person. Records should be maintained on the disposition of any equipment that is removed from service, and surplus, damaged or obsolete equipment should be disposed of in accordance with City policy and state law. Consideration should be given to implementing a bar code and scanner system for inventory purposes.
- 20.13 The fire department should issue administrative penalties for false fire alarms. The penalty schedule should be amended, if necessary, to increase for each subsequent offense after the first. Additional administrative assistance may be necessary to complete this task.
- 20.14 The City should review all fees on an annual basis for possible increases in accordance with state law.
- 20.15 Due to its critical operational importance, the City should ensure that adequate funding is provided to keep the West Gloucester sub-station staffed at all times.
- 20.16 The fire department should maintain an up-to-date capital equipment plan.
- 20.17 The City should explore the feasibility of assigning the police department business manager with similar duties in the fire department. This action would in essence make him the public safety business manager and would provide Chief Dench with much need administrative assistance at an executive level.

Grant Funding

- 20.18 The fire department should identify and prioritize its most critical equipment, training and/or operational needs and continue to apply annually to the Assistance to Firefighters Grant (AFG) program.
- 20.19 The fire department should identify and prioritize its fire prevention and public fire education needs and apply annually to the Fire Prevention and Safety Grant (FP&S) program.
- 20.20 The fire department, in consultation with the City administration, should consider applying for a Staffing for Adequate Fire and Emergency Response (SAFER) Grant. A SAFER grant could improve the department's chronic staffing shortage and improve public safety in the community. The City's obligations for long-term funding after the five year grant period ends should be carefully evaluated.
- 20.21 The fire department and the City should actively search for other grant opportunities. Grants for fire protection, fire safety, fire prevention, domestic and emergency preparedness and homeland security may be available from federal, state, corporate and foundation sources.
- 20.22 The fire department should actively seek out businesses that may be interested in establishing public/private partnerships that could provide or assist with funding for various programs, projects or initiatives.
- 20.23 The City grants administrator should actively support the efforts of the fire department to obtain and administer grants.
- 20.24 The fire department should consider the establishment of an internal committee of personnel who are interested in assisting the department in grant writing efforts. These personnel should be encouraged and empowered to seek out potential grant opportunities, earmarks and even possible donations. Close coordination must be maintained between the City and fire department administrations and those writing the grants to ensure a coordinated process.

CHAPTER 21

SENSE OF COMMON VISION

OVERVIEW

Having a sense of common vision is important in any organization to ensure that the organization is moving together toward a common goal. Having a common vision is not only about making sure that all parties are aware that they are in the same boat and rowing, but even more importantly, that they are rowing in the same direction. The impact of not sharing a common vision will be very noticeable in the quality and quantity of work performed, but also with the spirit and passion that the work of the organization is accomplished.

As part of this organizational assessment process, MRI interviewed individuals from both inside and outside the agency. The consultants spent hours in the City and assessed the attitudes and performance of the members of the Gloucester Fire Department. Data of all sorts was gathered and analyzed in order to paint a picture of what motivates and directs the department.

OBSERVATIONS

The home page of the Gloucester Fire Department web site offers the following mission statement:

To provide fire suppression and emergency response capabilities with adequate manning, apparatus, equipment, and trained personnel, deployed on a 24-hour a day basis.

To provide pre-hospital emergency medical care, stabilization, and transportation for ill or injured persons, on a 24-hour per day basis, by two adequately manned and equipped ambulances and response by the closest available first responder units for immediate intervention and proper handling capabilities.

To provide fire prevention services including, but not limited to code Compliance inspections, permit issuance, complaint investigation, fire company inspections, plans review, public fire education, and fire and arson investigation.

To be the lead agency in an integrated emergency management system commonly referred to as the Incident Command System.

To provide initial response capabilities, assure public safety and perform remedial actions at hazardous materials and/or waste incidents. To maintain adequate records and documentation of all fire suppression, fire prevention, emergency medical services, and hazardous materials incidents or investigations, as a 24-hour a day emergency service organization.

To respond to requests for mutual aid to surrounding communities, on an as available basis.

When MRI began this study of the fire department, the department was transitioning from Chief Barry McKay, who was retiring after 36 years of service on the department, including 27 years as fire chief, to Chief Philip Dench, who was promoted from deputy fire chief. MRI had the opportunity to interview Chief McKay concerning his personal and professional comments, opinions and observations regarding the fire department. Chief McKay felt that the fire department was at its strongest point in the 1970's and 1980's, when it had a staffing level of 89 members. He is proud of numerous innovations that occurred during his watch including the introduction of 1 3/4 inch attack hose with automatic nozzles and the purchase of a "quint" aerial ladder truck that is configured for maximum flexibility. He has been frustrated by reductions in funding and staffing, and it is his opinion that the City totally ignored the recommendations cited in the previous fire department performance audit that was completed in 1992.

Chief Dench has adopted a different management style from the previous chief. He is delegating responsibility to subordinates, seeking input on change from members of the department, and is attempting to address many of the issues that have plagued the department for many years. The MRI study team has noted a significant improvement in the morale and attitudes of members of the department during the period that we have been visiting the department. An upswing in morale is to be expected during a change in administration; whether this can be sustained will be dependent on a number of factors, not the least of which is the willingness of the firefighters to embrace the changes and modernization efforts that will be required of the department in the coming months and years.

Interviews with the two chiefs and the members of the department revealed that while the department understands its role in the community, there is little sense of a common vision for the future. While some members are anxious to move forward rapidly, others are quite content to remain "status quo" and will resist any and all change. Some are suspicious of any efforts by management, and do not believe that the department will ever rise above its current status and operational capabilities. The team also observed a general feeling within the department that the department is significantly underfunded and that all the problems of the agency will be resolved if the City provides a major increase in the budget. Some members did recognize that many of the improvements that can and should be made are not dependent upon an increase in the budget. And some members expressed frustration that the department was being unfairly castigated on a regular basis in the local newspaper. The MRI study team was encouraged by the

complete cooperation and openness that was provided to us by Chief McKay, Chief Dench, fire officers, firefighters and the union leadership during the study.

During the period February 24 to April 22, MRI conducted a survey concerning attitudes within the department. Thirty-eight members participated in the survey. At that time, 74% of the respondents believed that the department was not well managed; 69% believed that there is not a high level of respect across all ranks; and 69% do not believe that they receive support and encouragement from the department that they need in order to be successful. It is the opinion of the MRI study team that if this survey were offered again today, that the results would indicate an improvement in department morale.

MRI's consultants observed that the fire union appears to have an inordinate amount of input regarding the operations of the fire department in Gloucester. The collective bargaining agreement contains numerous provisions concerning staffing levels and operational procedures, which significantly limit the flexibility and authority of the fire chief to make strategic and tactical changes that could optimize fire and EMS service delivery in the community.

The MRI study team received considerable input from the community concerning attitudes about the fire department. Firefighting is recognized as a dangerous occupation that requires considerable skill. Gloucester firefighters are perceived as doing a good job, and the department's EMS delivery received particularly high praise. However, there is a predominant feeling that the union "complains too much" and that this is inappropriate given the overall financial condition of the community and the difficult economy.

The MRI study team observed that the department has suffered from a lack of involvement in external professional development and training opportunities, as noted in Chapter 16, *Training and Professional Development*. As a result, the department has not had the opportunity to learn about and institute creative programs and solutions that may have been implemented by fire departments faced with fiscal and operational challenges similar to those in Gloucester.

RECOMMENDATIONS

- 21.1 Chief Dench should develop a formal process for developing a long-term vision for the fire department and to revise the department's mission statement. The current mission statement is more of a goals and objectives statement and should be updated. This effort could be included as part of the master planning process that has been recommended in Chapter 15, *Fire & EMS Operations, ICS, Safety and Mutual Aid*.

- 21.2 Elected officials of the City should take an active role in setting appropriate goals and a vision for the fire department. City officials should include residents and the department in an open and honest discussion within the goal setting process.
- 21.3 The Mayor and the City Council should establish an annual goal-setting workshop with the fire chief to develop the sense of common vision necessary to improve the department and the quality of fire and EMS services the City receives.
- 21.4 The department and the City should publicly recognize the achievements of the department in reaching the various established goals as they are accomplished.
- 21.5 The Mayor, City Council, fire union and the fire chief must come to agreement on the proper role of the union when it comes to the operation of the Gloucester Fire Department. Unions have a lawful and legitimate say on issues of benefits and working conditions. However, there must also be an acknowledgment of the rights of management in dealing with administrative and operational matters that do not fall within the purview of the union negotiation process. Once a working consensus is achieved, agreement to live within its bounds must be acknowledged and maintained.
- 21.6 Morale within the Gloucester Fire Department must continue to be improved. Efforts to develop a new sense of vision, maintain open lines of communication, delegate responsibility and authority, and institute training and professional development programs will help to instill a sense of pride in the organization.
- 21.7 An updated manual of department policies and procedures is the key to achieving a shared vision for department operations. All personnel must be trained on the contents of the manual and held accountable to accomplish department goals by established means. Captains must supervise, deputy chiefs must administer, and the chief and his entire command staff must provide leadership.

CHAPTER 22

RELATIONSHIP WITH ELECTED OFFICIALS

OVERVIEW

The relationship between the fire chief and elected officials is critical to the effective delivery of public safety services and to the success of the mission of the organization. It is vitally important that the fire chief have a positive relationship and good communications with the Mayor and City Council, particularly in cities that are not operating under a city manager form of government, as is the case in the City of Gloucester.

OBSERVATIONS

The MRI fire study team interviewed a majority of the City Council; some declined to be interviewed. At the time of these interviews, Chief Barry McKay had announced his retirement and Deputy Chief Philip Dench had been designated to replace him. Consequently, it is too early to evaluate the relationship that the current chief has with the Council, although all councilors interviewed indicated that they were looking forward to the anticipated change in leadership of the fire department.

The Council members believe that, in general, firefighters are doing a good job and their public perception is positive. They singled out EMS and paramedic services for particular praise. There is recognition that the job is dangerous and that the department has good people who are doing a tough job.

There is concern about the morale within the fire department, and some councilors expressed dismay about the way Chief McKay was treated by his subordinates. They expressed hope that the tension within the department would be alleviated with the change in leadership. One councilor stated that fire department morale was "disgusting".

Some councilors believe that the positive performance of the fire department has been overshadowed by the political activities of the firefighter's union. There is a general feeling that the fire department does "too much complaining" about funding when there is little sympathy for the fire department work schedule and the ability of firefighters to work a second job while off-duty. There is concern about the number of times that fire stations must be closed. Frustration was expressed about the closing of outlying stations during the 2009 Super Bowl because of the high number of firefighters who took vacation, personal and sick leave on that day. Some councilors want the fire chief

and the firefighters to understand that budget restrictions are not due to an “anti-public safety” attitude on the Council, and that budget cuts are not personal. There is also concern that City departments spend too much time complaining about each other.

At least one councilor believes that the union contract is unmanageable, and that the personnel costs (benefits) mandated by the contract has forced the City to cut other costs, including staffing levels.

When asked how the problems in the fire department might be resolved, City Councilors made a number of suggestions. The following list summarizes their ideas:

- The fire chief needs an assistant chief who is not in the firefighter collective bargaining unit
- Establish regional dispatch, using civilian dispatchers
- Increase paramedic response capabilities
- Keep outlying stations open with three personnel on-duty, but eliminate minimum manning requirements
- Institute an annual review of emergency management/disaster response capabilities
- Increase public awareness of disaster preparedness
- Establish a combined public safety facility to replace the existing fire and police headquarters facilities
- Remove the fire chief’s position from civil service
- Establish a public safety commissioner position as the administrative head of the fire and police departments
- Establish a public safety finance administrator position who reports directly to the auditor
- Establish a residency requirement for fire department personnel

RECOMMENDATIONS

- 22.1 The fire chief should provide regular briefings and reports to the City Council concerning the operations of the fire department. The chief should communicate regularly with the Council to receive feedback on the performance of the department.
- 22.2 As recommended in Chapter 21, *Sense of Common Vision*, elected officials should take an active role in setting appropriate goals and a vision for the fire department. City officials should include residents and the department in an open and honest discussion within the goal setting process. This process could provide the foundation for the formation of a long range strategic planning committee comprised of a cross section of community stakeholders.
- 22.3 Fire department successes should be openly recognized by elected officials.
- 22.4 The fire department should consider offering building tours and ride-alongs to elected officials and other department heads to further familiarize them with fire operations. Officials could also participate in or observe training activities.

CHAPTER 23

EVALUATION METHODOLOGIES

OVERVIEW

As with any type of business, agency, organization, or service provider, the modern day fire department should, at least periodically, conduct an evaluation and assessment of: the levels of service being provided; how well it is fulfilling its core mission; how well it is meeting its customer's expectations; how proficient its personnel are at performing the core competencies relevant to their duties and responsibilities; and how well it is complying with various statutes, regulations and recognized industry standards. Progressive fire departments conduct these evaluations in an ongoing and continuous manner. Some even attempt to measure their performance in relationship to other comparable fire departments at the local or regional level.

There are a number of ways to perform these evaluations. As discussed in Chapter 12, *Citizen Complaints and Internal Discipline*, one effective although somewhat subjective way to evaluate how well the department is meeting its customer's expectations is to survey some percentage of those who have requested the services of the department. If properly crafted and worded the feedback received from this type of survey can provide some excellent information at the local level. Chapter 16, *Training and Professional Development*, makes recommendations with regard to periodic skill proficiency evaluations for all personnel as one component of a comprehensive department training program.

A number of chapters in this report make reference to National Fire Protection Association (NFPA) standards, which are nationally recognized and accepted consensus standards that cover a wide range of relevant fire service operations. While NFPA standards must be formally adopted by a jurisdiction as a statute, ordinance or regulation in order to be enforced, they are an important benchmark upon which a department may be evaluated. Compliance or progress toward compliance with NFPA standards can provide the City with a defensible position when faced with potential litigation. NFPA standards address areas that include: apparatus specifications, firefighter personal protective equipment (PPE), self contained breathing apparatus (SCBA), station work uniforms, firefighter safety and medical standards and deployment standards and benchmarks. In addition, they provide professional development criteria and performance standards for Firefighter (2 levels), Driver/Operator, Fire Officer (4 levels), Fire Instructor (3 levels), Fire Inspector (3 levels), Fire Investigator, Fire Dispatcher and a number of others.

Two of the most widely recognized and comprehensive fire service evaluation systems are available from ISO, (formerly known as the Insurance Services Office) and the Commission on Fire Accreditation International (CFAI). The ISO fire department public protection classification (PPC) evaluations assess a wide range of fire department operations including, but not limited to, training, fire prevention inspections, vehicle and equipment maintenance and testing, communications and response times and travel distances. The ISO PPC evaluation also places a significant emphasis on the capabilities and maintenance of the municipal water supply system.

Once ISO completes its periodic evaluation, the fire department is assigned a PPC of Class 1 through Class 9. A Class 1 rating, possessed by only about 40 fire departments in the United States, is the highest PPC with Class 9 being the lowest rating. A Class 9 community usually has no municipal water supply system and probably has other significant problems with its fire department. Many but not all property insurance companies use the ISO rating to determine a customer's fire insurance rates. The ISO rating can have a significant impact on large commercial and industrial properties.

The fire department accreditation process from the Commission on Fire Accreditation International (CFAI) is a relatively new evaluation and assessment system. Although as of June 2009, there are only 128 accredited fire departments in the United States, the program is quickly gaining acceptance as the benchmark standard for fire departments seeking to demonstrate their excellence. The CPSE web site states:

"The CFAI program provides an excellent self- assessment process for fire and EMS agencies to evaluate themselves. The benefits of accreditation and self-assessment include: promoting excellence within the fire and EMS agencies; encouraging quality improvement through a continuous self-assessment process; assuring colleagues and the public that your organization has definite missions and objectives that are appropriate for the jurisdiction you serve; providing a detailed evaluation of a department, and detailing the services it provides to the community; identifying areas of strength and weakness within a department; creating methods or systems for addressing deficiencies while building organizational success; encouraging professional growth for your department in addition to its personnel involved in the self assessment process; providing a forum for the communication of organizational priorities; and creating a mechanism for developing concurrent documents to include strategic and program action plans".

The CPSE web site further states,

"The accreditation model assists agencies in setting goals, crafting strategic and action plans for the future, and providing a means to continuously evaluate and improve services provided to the public. The accreditation model was developed by a task force consisting of highly qualified and dedicated chief fire officers, trainers, city/county

administrators and academic professionals who worked together to create the self-assessment model – the basis for accreditation. The model includes a comprehensive research and information collection guide that includes checklists, exhibits, benchmarks, references and activities broken down by category. In addition, several appendices necessary for the accreditation process have been developed to address topics including defining the elements of response time, creating standards of response coverage, and developing master or strategic plans.”

It should be noted that while a lot of the process involves self assessment, one of the final steps prior to earning accreditation is a formal peer assessment to confirm that all benchmarks have been achieved. Departments must renew their accreditation every five years.

As part of the Gloucester Fire Department operational analysis, the MRI study team was requested to review evaluation methodologies that may currently be in use by the department and make recommendations for ones that may be appropriate as the department moves forward. This final study report on the Gloucester Fire Department provides the department and the City with a list of recommendations on how various facets of the department’s operations should be revised and enhanced. From that list, the department and the City should develop a long range strategic plan for the future that should incorporate implementation strategies. Part of that plan should include the use of various assessment instruments to measure the department’s achievement and progress toward identified goals and objectives. Improving the department’s ISO rating and eventually pursuing accreditation would provide a number of very achievable and measurable goals for the department to strive for.

OBSERVATIONS

The use of NFPA standards as a guide for developing departmental operational procedures is extremely limited. Although the requirements of various Massachusetts statutes were delineated with some frequency in the operational procedures manual, there were only a few references to the NFPA standards, and those referred to outdated versions of the standard. Until recently, the use of NFPA standards for training activities has been non-existent. The study team found a number of other areas, discussed in various chapters, where recommendations found in NFPA standards were not being adhered to. NFPA standards are being followed when purchasing apparatus and equipment, but only because the manufacturer or vendor has already complied with the applicable standard.

Despite several requests to review the Gloucester Fire Department’s current ISO rating, the requested information was never provided. None of the department’s senior staff knows what the rating is. No one was certain when the last ISO evaluation was performed, although possibly it may have occurred in the early 1990s. The study team did learn that the City has made a conscious decision at this time not to seek an

updated ISO evaluation as they feel that numerous circumstances currently found in the department would result in a significant reduction in the current ISO rating. The study team concurs. As a long range strategic plan is developed to implement recommendations from this report, the City should attempt to correct ISO deficiencies that have been allowed to develop over the years and when appropriate, seek a reevaluation. If the department is successful, the result may be lower fire insurance rates for a significant percentage of property owners, particularly large commercial and industrial properties.

While the Gloucester Fire Department is currently a long way from being operationally and administratively ready to seek accreditation, this should be a goal of any long range strategic plan for the department.

RECOMMENDATIONS

- 23.1 The Gloucester Fire Department should seek to increase day to day compliance with the appropriate National Fire Protection Association (NFPA) standards and guidelines. This should include, but not necessarily be limited to the development of operational procedures; training programs, lesson plans and performance evaluations; safety initiatives; equipment inspections and maintenance; and administrative operations.
- 23.2 The Gloucester Fire Department should identify and correct ISO rating deficiencies. When appropriate and beneficial, the City should request an ISO evaluation.
- 23.3 The Gloucester Fire Department should consider seeking national accreditation as part of its long range (5 years or more) strategic planning effort.
- 23.4 The Gloucester Fire Department should implement a procedure to actively seek feedback from “customers” to whom the department has provided service. It is recommended that this procedure involve a formal customer satisfaction survey instrument that can be sent to every customer or to a statistically valid percentage. In order to be effective, the feedback must be analyzed and corrective action taken on any identified deficiencies.
- 23.5 The Gloucester Fire Department should implement periodic skills proficiency evaluations for ALL uniformed department personnel.

CHAPTER 24

ABOUT MRI

Municipal Resources, Inc. was founded in 1989 by six former municipal and state government managers, with both public and private professional experience. Municipal Resources is dedicated to providing professional, technical, and management support services to municipalities, schools, and non-profit organizations throughout New England. Municipal Resources operates offices in two locations in Massachusetts, one in Maine, one in Massachusetts, and one in Pennsylvania.

Our dynamic management staff can tailor services to specific client needs. Our clients realize that we have been in their shoes; we have the experience, sensitivity, and desire that it takes to develop and deliver services that specifically meet their needs.

Municipal Resources is committed to providing innovative and creative solutions to the problems and issues facing local governments and the agencies that serve them. Combined staff experience in the operations of local government, coupled with the realities of today's economic, regulatory, and political environments gives Municipal Resources a unique capability which can be brought to bear for local government officials, many of whom are volunteers seeking to do what's right for their communities.

The depth of Municipal Resources' experience is reflected not only in the experiences of its associates, but in the scope of services it provides its clients, from professional recruitment to organizational and operational assessments of individual municipal departments and school districts or ongoing contracted services for various City government and school business support activities.

Among the areas of expertise available are department assessments, personnel recruitment, personnel administration, collective bargaining, public safety, community and economic development including land use control and regulations, assessment administration, budget and finance, public works and engineering, and general management.

The firm is also focused on school district assistance with specific services focusing on finance management, human resources, school safety and security, federal funds accounting, facilities management, management studies, interim personnel placements and other areas.

The purpose of Municipal Resources' approach is to supplement the efforts of municipal employees and to enable them to do their jobs well. Municipal Resources is supporting sustainable communities through better organization, operations, and communication.

TEAM PROFILES

Donald R. Jutton, founder and President of Municipal Resources, Inc., is a graduate of Bradford College with a BA in Urban Planning and Management. He has an MS in Community Economic Development from New Hampshire College and has also done graduate work in management and administration at Harvard University. Mr. Jutton has a broad government management and operations background, having served as Manager in Meredith, Littleton, Salem and Wakefield, New Hampshire. While maintaining a strong working knowledge of local government process and organizational planning, the primary emphasis of his work has been in the area of creative community development and pursuit of systemic change in management and delivery of core community services. Mr. Jutton's success in establishing collaborative efforts and managing very complex initiatives between public and private entities has effectively bridged frequently competing interests and has led to successful economic development activity valued at millions of dollars in many communities. He is noted for continually challenging client communities to rethink traditional approaches and explore innovative alternatives to community development and service delivery problems, emphasizing collaborations and partnerships that expand conventional thinking and extend to all corners of the community. His involvement and advocacy has led to many unique and noteworthy operational changes including a combined Town/School budgeting and annual meeting process in Littleton, NH; shared police services between Greenville and Temple, NH; a three community economic development initiative between Lisbon, Littleton and Bethlehem, NH; a municipal/public/private Mill redevelopment partnership in Troy, NH; and a first of its kind partnership agreement between NASA's Stennis Space Center, Plymouth State University, SAU 35, and the Town of Littleton, NH. The results of his creative activities with communities have been reported in USA TODAY, Heart of NH Magazine, the Boston Globe, and numerous regional and local newspapers and journals.

Alan S. Gould, Chief Operating Officer, is a graduate of Saint Anselm College with a BS degree in Criminal Justice. He is certified as a Public Manager by the American Academy of Certified Public Managers and has completed numerous management and leadership programs including the Babson Command Training Institute and the FBI's LEEDS program. He is recognized for his creativity in community policing and his leadership in promoting ethics in the law enforcement community. Mr. Gould began his public sector career with the Salem N.H Police Department where, during 21 years, he served in all ranks including Chief of Police. He served as Chief of Police in Rye New Hampshire, where, upon retirement from law enforcement, he was appointed and served as Town Administrator until joining MRI in 2008. Mr. Gould served as the Ethics Instructor at the New Hampshire Police Academy for 15 years and has been an instructor of college courses in Criminal Code, Criminal Investigation, Report Writing, Constitutional Law and Juvenile Delinquency. Among his many community

involvements, Alan served as an initial incorporator of the Greater Salem Council Against Family Violence; a founder of New Hampshire's second "visitation center" designed to protect children from abusive parents; an initiator of Rye Senior SERVE, a non-profit organization established to help seniors remain in their homes as they age; and he continues as the Emergency Management Director in his home town of Rye, New Hampshire.

Donald P. Bliss is the Director of the National Infrastructure Institute's Center for Infrastructure Expertise. The NI2 Center for Infrastructure Expertise is an independent not-for-profit applied research group dedicated to strengthening the security and resiliency of the nation's built critical infrastructure and key resources. Bliss served as the New Hampshire State Fire Marshal from August 1992 until November 2003. In the wake of the tragic events of September 11, 2001, Bliss took over responsibility for New Hampshire's emergency management and homeland security efforts and also served as homeland security advisor to both Governor Jeanne Shaheen and Governor Craig Benson. From 1983 to 1992, Bliss served as the fire chief in Salem, New Hampshire. From 1989 to 1992, he served as both fire chief and the town's emergency management director. In 1990, Bliss served as interim town manager for nine months. From 1980 to 1983, Bliss served as the director of the University of Connecticut Fire Department and as fire marshal for the University of Connecticut system. He began his career with the Durham-UNH Fire Department in 1970, rising from call firefighter to fire marshal/deputy chief. Bliss has served in leadership roles in numerous professional organizations, including National Association of State Fire Marshals, the National Fire Protection Association, and the New Hampshire Association of Fire Chiefs. He is a past president of the New Hampshire Association of Fire Chiefs and a former chair of the New Hampshire Emergency Medical Services Coordinating Board. He served as President of the National Association of State Fire Marshals and chair of the Association's Consumer Product Safety Task Force. Bliss chaired the National Fire Protection Association's (NFPA) *Uniform Fire Prevention Code* Technical Committee and currently serves on the NFPA board of directors. He chaired the National Electrical Code (NEC) panel on homeland security and mission critical facilities and currently chairs NEC Code Making Panel 13 (emergency systems). He also serves on the NFPA Technical Committee on Emergency Management and Business Continuity. He is an adjunct professor in the Master of Public Administration program at the University of New Hampshire and currently serves as the chair of the New Hampshire Building Code Review Board and as a member of the New Hampshire School Building Authority. Bliss received a Bachelor of Arts in political science from the University of New Hampshire in 1973 and he received a Master of Public Administration degree, also from the University of New Hampshire, in 1979. He has completed numerous courses at the National Fire Academy in Emmitsburg, Maryland.

Peter J. Finley, Jr. most recently served as Chief of the Winslow Township Fire Department in New Jersey, where he was responsible for the planning, establishment,

and initial deployment of the career component of the department. He previously served for 4 ½ years as the Chief of Department for the City of Vineland, New Jersey Fire Department where he initiated significant changes within the department including updating and modernizing equipment, providing the department's first ever formal officer training, and significantly increasing the capabilities of the regional hazardous materials response team. During his tenure the department received more than one million dollars in various grants. He formerly commanded the Vineland Rescue Squad gaining significant EMS operations and command experience, as well as completing an overhaul of that organization's operations. Chief Finley serves as an Adjunct Professor in the Fire Science Program at Camden County College. Chief Finley received his Associate in Applied Science degree from Atlantic Community College in New Jersey, and earned his Bachelor of Science degree in Fire Science/Administration from the University of Maryland. He is a graduate of the National Fire Academy's Executive Fire Officer Program, earning perfect scores on three of his four Applied Research Projects. He was awarded an Outstanding Research Award for his 2002 paper titled, "Residential Fire Alarm Systems: The Verification and Response Dilemma". Chief Finley holds nearly two dozen state and national certifications and is a member of a number of fire service organizations, including achieving the prestigious Chief Fire Officer designation from the Commission on Fire Accreditation International. He is a member of a number of fire service organizations and is currently serving as President of the New Jersey Career Fire Chiefs Association where he has been involved in the development and administration of fire service promotional examinations. From 2003–2005 he served on the Training and Education Committee of the Governor's Fire Service and Safety Task Force. He also previously served on the state committee that developed New Jersey's first Firefighter I Instructor Manual.

Robert P. Wood is a degree candidate for a BS Degree in Strategic Management from Granite State College. Wood served as the Fire Chief in Durham, New Hampshire, from 1985 until his retirement in 1998, culminating 28 years of emergency service to the joint Durham and University of New Hampshire community. In Durham, Wood managed the fire suppression, fire prevention, emergency medical, and emergency management services in a combined community of 20,000. He reorganized the command structure, implemented the Incident Command System, expanded a comprehensive fire and life safety program resulting in no fire fatalities throughout his tenure, initiated Advanced Life Support capability, and drafted the first community emergency management plan. He coordinated the administrative transition of the department from the University of New Hampshire to the Town of Durham, resulting in an evergreen joint memorandum of agreement for future combined funding. He served as chair of the Communication's Center Policy Committee for the regional dispatch center. Wood was involved with the formation of the Seacoast Technical Assistance Response Team providing hazardous materials response capability to the region. From 1968 to 1973, Wood served on the Wolfeboro, New Hampshire, Rescue Squad, the Wolfeboro Police Department, the Lakeside Ambulance Service, and the Hampton, New Hampshire, Fire Department. He is an Honorary Life Member of the Durham

Ambulance Corps, having served as Operations Vice-President. His prior activities include serving as New Hampshire Association of Fire Chiefs' representative on the New Hampshire Rural Fire Protection Task Force, the New Hampshire Fire Marshal's Office Life Safety Code Update/Review Committee, and the New Hampshire Legislative Review Committee for RSA 154. Wood is Past President of the New Hampshire Association of Fire Chiefs and the Durham-Great Bay Rotary Club. He served as State Director to the New England Association of Fire Chiefs and is a life member of the International Association of Fire Chiefs.

APPENDIX A



Survey: Gloucester, MA FD Employee Survey -- PLEASE COMPLETE IN PEN

Survey Status		Respondent Statistics		Points Summary:		
Status:	Closed	Total Responses:	38	Max Attainable:	0	100%
Deploy Date:	02/24/2009	Completes:	38	Highest:	0	0%
Closed Date:	04/22/2009	Partials:	0	Lowest:	0	0%
				Average:	0	0%
				Median:	0	0%

1. My position with the Department is:

	Responses	Percent
Full-time Sworn:	28	73.68%
Part-time Sworn:	0	0%
Full-time Civil:	10	26.32%
Part-time Civil:	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

2. The facility where I work provides a clean and safe environment in which to deliver a professional level of service.

	Responses	Percent
Strongly Agree:	0	0%
Agree:	3	8.11%
Neutral:	9	24.32%
Disagree:	16	43.24%
Strongly Disagree:	9	24.32%
Additional Comments:	0	0%
Total Responded to this question:	37	97.37%
Total who skipped this question:	1	2.63%
Total:	38	100%

3. My department is a well managed organization.

	Responses	Percent
Strongly Agree:	0	0%
Agree:	3	7.89%
Neutral:	7	18.42%
Disagree:	17	44.74%
Strongly Disagree:	11	28.95%
Additional Comments:	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%

Total: 38 100%

4. There is a high level of mutual respect across all ranks within the department.

	Responses	Percent
Strongly Agree:	2	5.26%
Agree:	4	10.53%
Neutral:	6	15.79%
Disagree:	15	39.47%
Strongly Disagree:	11	28.95%
Additional Comments:	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

5. I receive the support and encouragement from my department that I need to be successful.

	Responses	Percent
Strongly Agree:	3	7.89%
Agree:	7	18.42%
Neutral:	6	15.79%
Disagree:	16	42.11%
Strongly Disagree:	6	15.79%
Additional Comments:	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

6. All department employees share in a common understanding of current goals and a vision of the future.

	Responses	Percent
Strongly Agree:	0	0%
Agree:	8	21.05%
Neutral:	3	7.89%
Disagree:	22	57.89%
Strongly Disagree:	5	13.16%
Additional Comments:	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

7. Expectations for the performance of department members are made clear to all employees.

	Responses	Percent
Strongly Agree:	2	5.26%
Agree:	14	36.84%

Neutral:		3	7.89%
Disagree:		14	36.84%
Strongly Disagree:		5	13.16%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

8. The utilization of internal discipline for policy and rule violations are administered in a fair and consistent manner.

	Responses	Percent	
Strongly Agree:		0	0%
Agree:		6	15.79%
Neutral:		4	10.53%
Disagree:		17	44.74%
Strongly Disagree:		11	28.95%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

9. I receive adequate training to perform my duties as an employee of the department.

	Responses	Percent	
Strongly Agree:		1	2.63%
Agree:		6	15.79%
Neutral:		8	21.05%
Disagree:		12	31.58%
Strongly Disagree:		11	28.95%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

10. Training opportunities are distributed on a fair and equitable basis.

	Responses	Percent	
Strongly Agree:		1	2.63%
Agree:		13	34.21%
Neutral:		9	23.68%
Disagree:		5	13.16%
Strongly Disagree:		10	26.32%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%

Total: 38 100%

11. I receive personal and professional satisfaction from my job with the department.

	Responses	Percent
Strongly Agree: 	6	15.79%
Agree: 	18	47.37%
Neutral: 	7	18.42%
Disagree: 	5	13.16%
Strongly Disagree: 	2	5.26%
Additional Comments: 	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

12. I receive timely feedback from my supervisors.

	Responses	Percent
Strongly Agree: 	3	7.89%
Agree: 	15	39.47%
Neutral: 	10	26.32%
Disagree: 	9	23.68%
Strongly Disagree: 	1	2.63%
Additional Comments: 	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

13. I benefit professionally from the performance evaluations I receive.

	Responses	Percent
Strongly Agree: 	0	0%
Agree: 	3	8.57%
Neutral: 	9	25.71%
Disagree: 	7	20%
Strongly Disagree: 	16	45.71%
Additional Comments: 	0	0%
Total Responded to this question:	35	92.11%
Total who skipped this question:	3	7.89%
Total:	38	100%

14. Overtime and details are distributed in a fair and equitable manner at the department.

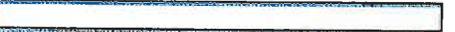
	Responses	Percent
Strongly Agree: 	1	2.63%
Agree: 	10	26.32%
		

Neutral:		7	18.42%
Disagree:		13	34.21%
Strongly Disagree:		7	18.42%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

15. Department employees are treated fairly and equitably when it comes to shift assignments and specialty positions.

	Responses	Percent	
Strongly Agree:		0	0%
Agree:		14	36.84%
Neutral:		12	31.58%
Disagree:		9	23.68%
Strongly Disagree:		3	7.89%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

16. I have witnessed acts of discrimination based upon race, sex, age, ethnic origins, or sexual orientation from department employees toward members of the public.

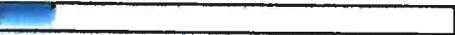
	Responses	Percent	
Strongly Agree:		1	2.63%
Agree:		4	10.53%
Neutral:		1	2.63%
Disagree:		16	42.11%
Strongly Disagree:		16	42.11%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

17. The vehicle fleet of the department is well maintained and provides safe transportation for employees.

	Responses	Percent	
Strongly Agree:		1	2.63%
Agree:		11	28.95%
Neutral:		9	23.68%
Disagree:		11	28.95%
Strongly Disagree:		6	15.79%
Additional Comments:		0	0%

Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

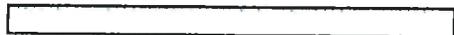
18. The Policies and Procedures as well as the Rules and Regulations of the department provide clear guidance for performance to all employees.

	Responses	Percent
Strongly Agree: 	1	2.63%
Agree: 	14	36.84%
Neutral: 	5	13.16%
Disagree: 	11	28.95%
Strongly Disagree: 	7	18.42%
Additional Comments: 	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

19. Promotions within the department are made fairly.

	Responses	Percent
Strongly Agree: 	4	10.53%
Agree: 	21	55.26%
Neutral: 	5	13.16%
Disagree: 	7	18.42%
Strongly Disagree: 	1	2.63%
Additional Comments: 	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

20. I have felt threatened or intimidated by co-workers or supervisors:

	Responses	Percent
Never (0 Points): 	19	50%
Occasionally (0 Points): 	17	44.74%
Often (0 Points): 	2	5.26%
Additional Comments: 	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

Points Summary:
 Highest: 0 Lowest: 0 Average: 0 Median: 0

21. I have witnessed or been the victim of harassment from members of my department based upon gender, race, age, ethnic origins, or sexual orientation.

Responses Percent

Strongly Agree:		3	7.89%
Agree:		4	10.53%
Neutral:		5	13.16%
Disagree:		15	39.47%
Strongly Disagree:		11	28.95%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

22. The radio communications system of the department is reliable.

		Responses	Percent
Strongly Agree:		0	0%
Agree:		0	0%
Neutral:		5	13.16%
Disagree:		8	21.05%
Strongly Disagree:		25	65.79%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

23. The salary and benefit package enjoyed by employees of the department is fair and adequate.

		Responses	Percent
Strongly Agree:		1	2.63%
Agree:		7	18.42%
Neutral:		16	42.11%
Disagree:		9	23.68%
Strongly Disagree:		5	13.16%
Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

24. The department is keeping up with the technological advances necessary to provide a modern professional level of service to the public.

		Responses	Percent
Strongly Agree:		1	2.63%
Agree:		1	2.63%
Neutral:		6	15.79%
Disagree:		14	36.84%
Strongly Disagree:		16	42.11%

Additional Comments:	<input type="text"/>	0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

25. The administration of the department provides fair and equal treatment to all employees.

	Responses	Percent
Strongly Agree:	<input type="text"/>	2 5.26%
Agree:	<input type="text"/>	10 26.32%
Neutral:	<input type="text"/>	14 36.84%
Disagree:	<input type="text"/>	6 15.79%
Strongly Disagree:	<input type="text"/>	6 15.79%
Additional Comments:	<input type="text"/>	0 0%
Total Responded to this question:		38 100%
Total who skipped this question:		0 0%
Total:		38 100%

26. The department has adequate equipment to complete its duties.

	Responses	Percent
Strongly Agree:	<input type="text"/>	2 5.26%
Agree:	<input type="text"/>	5 13.16%
Neutral:	<input type="text"/>	9 23.68%
Disagree:	<input type="text"/>	16 42.11%
Strongly Disagree:	<input type="text"/>	6 15.79%
Additional Comments:	<input type="text"/>	0 0%
Total Responded to this question:		38 100%
Total who skipped this question:		0 0%
Total:		38 100%

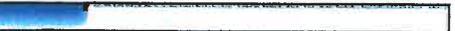
27. The City is a good employer.

	Responses	Percent
Strongly Agree:	<input type="text"/>	0 0%
Agree:	<input type="text"/>	11 28.95%
Neutral:	<input type="text"/>	11 28.95%
Disagree:	<input type="text"/>	9 23.68%
Strongly Disagree:	<input type="text"/>	7 18.42%
Additional Comments:	<input type="text"/>	0 0%
Total Responded to this question:		38 100%
Total who skipped this question:		0 0%
Total:		38 100%

28. The administration of the department welcomes suggestions and input.

	Responses	Percent
Strongly Agree: 	1	2.63%
Agree: 	11	28.95%
Neutral: 	7	18.42%
Disagree: 	11	28.95%
Strongly Disagree: 	8	21.05%
Additional Comments: 	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

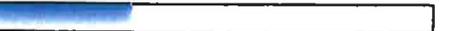
29. The administration of the department recognizes my service to the agency.

	Responses	Percent
Strongly Agree: 	1	2.63%
Agree: 	11	28.95%
Neutral: 	14	36.84%
Disagree: 	8	21.05%
Strongly Disagree: 	4	10.53%
Additional Comments: 	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

30. I am proud to be a member of the department.

	Responses	Percent
Strongly Agree: 	13	34.21%
Agree: 	12	31.58%
Neutral: 	7	18.42%
Disagree: 	6	15.79%
Strongly Disagree: 	0	0%
Additional Comments: 	0	0%
Total Responded to this question:	38	100%
Total who skipped this question:	0	0%
Total:	38	100%

31. The Mayor and City Council of the City support the Department.

	Responses	Percent
Strongly Agree: 	0	0%
Agree: 	0	0%
Neutral: 	8	21.05%
Disagree: 	13	34.21%
Strongly Disagree: 	17	44.74%
		

Additional Comments:		0	0%
Total Responded to this question:		38	100%
Total who skipped this question:		0	0%
Total:		38	100%

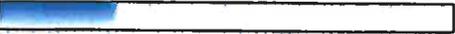
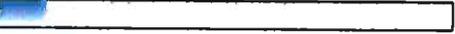
32. I believe the residents of the City value the services provided by the department.

	Responses	Percent	
Strongly Agree:	 4	10.53%	
Agree:	 17	44.74%	
Neutral:	 7	18.42%	
Disagree:	 7	18.42%	
Strongly Disagree:	 3	7.89%	
Additional Comments:		0	0%
Total Responded to this question:	38	100%	
Total who skipped this question:	0	0%	
Total:	38	100%	

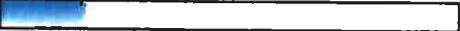
33. I believe that the department reaches out to residents and businesses to work together on issues of common interest.

	Responses	Percent	
Strongly Agree:	 0	0%	
Agree:	 18	47.37%	
Neutral:	 7	18.42%	
Disagree:	 11	28.95%	
Strongly Disagree:	 2	5.26%	
Additional Comments:		0	0%
Total Responded to this question:	38	100%	
Total who skipped this question:	0	0%	
Total:	38	100%	

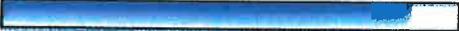
34. The supervisors of the department provide quality guidance and support to employees.

	Responses	Percent	
Strongly Agree:	 1	2.63%	
Agree:	 14	36.84%	
Neutral:	 9	23.68%	
Disagree:	 10	26.32%	
Strongly Disagree:	 4	10.53%	
Additional Comments:		0	0%
Total Responded to this question:	38	100%	
Total who skipped this question:	0	0%	
Total:	38	100%	

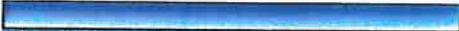
35. If I had an opportunity to take a similar job with a different employer with comparable pay and benefits, I would leave the department.

	Responses	Percent
Strongly Agree: 	7	18.92%
Agree: 	7	18.92%
Neutral: 	13	35.14%
Disagree: 	9	24.32%
Strongly Disagree: 	1	2.7%
Additional Comments: 	0	0%
Total Responded to this question:	37	97.37%
Total who skipped this question:	1	2.63%
Total:	38	100%

36. Please list the three things you like best about working for the department.

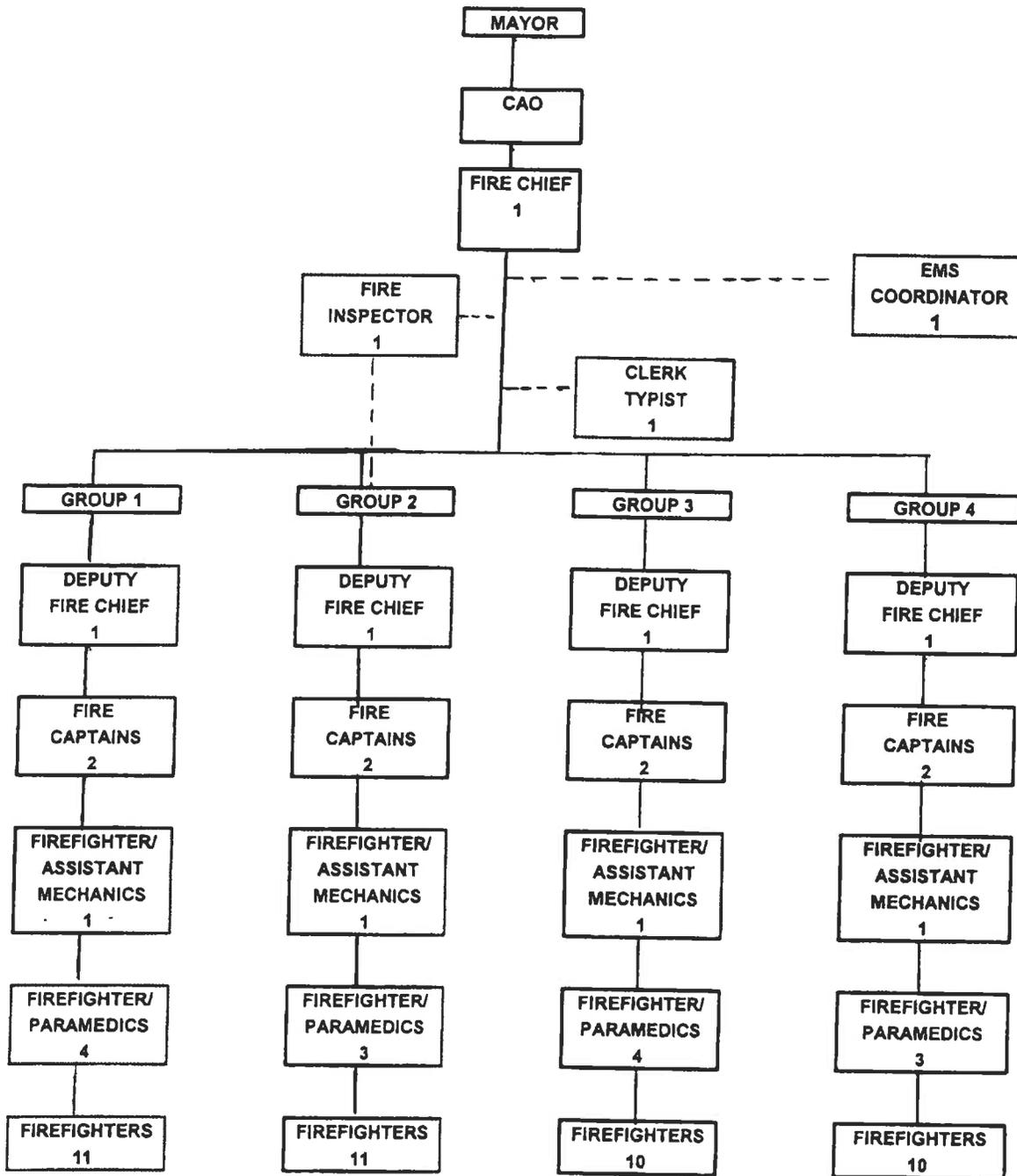
	Responses	Percent
1.: 	29	100%
2.: 	26	89.66%
3.: 	21	72.41%
Total Responded to this question:	29	76.32%
Total who skipped this question:	9	23.68%
Total:	38	100%

37. Please list the three things you dislike about working for the department.

	Responses	Percent
1.: 	31	100%
2.: 	29	93.55%
3.: 	19	61.29%
Total Responded to this question:	31	81.58%
Total who skipped this question:	7	18.42%
Total:	38	100%

APPENDIX B





The solid lines represent the routine and emergency chain of command. The dotted lines represent staff reporting responsibilities. The four groups work a rotating schedule of day and night shifts consisting of 10 hour day shifts and 14 hour night shifts which average 42 hours per week over a 56 day cycle (i.e., 8 weeks with 6 weeks having 48 hours worked and 2 weeks having 24 hours worked). The day and night shifts are worked back to back and personnel work 24 hour shifts as of 1/3/99. The shifts are worked with a day off (24 hours) in between two 24 hour shifts worked and then five days off to the next tour of duty (two 24 hour shifts worked).

The Fire Inspector reports to the Fire Chief for daily coordination and direction. He works with the Group 2 Deputy Chief who is responsible for the Fire Prevention Bureau Operations.

The Firefighter/Assistant Mechanics report directly to the Fire Chief for coordination and direction. They are responsible to keep their Group Officers informed of mechanical repair projects and as firefighters they report through the chain of command during emergencies.

Firefighter/ Paramedics and Firefighter/EMTs report to the full-time EMS Coordinator for all ambulance operations. The EMS Coordinator was a new position in FY99 and handles all medical, ambulance, and advanced life support operations. As of 6/30/08 we have seventeen firefighter/paramedics and as of this date we have 14 paramedics due to attrition of positions.

CAO = Mayor's Chief Administrative Officer

MANNING SCENARIO - 18 FIREFIGHTERS MINIMUM

02/09/2009

FIRE HEADQUARTERS MANNING

DISPATCH
1 FIREFIGHTER

ENGINE 4
3 FIREFIGHTERS
& 1 FIRE CAPTAIN

LADDER 1
UNMANNED

LADDER 2
4 FIREFIGHTERS

RESCUE 2
MANNED ONLY AS
NEEDED BY 2
FIREFIGHTERS OFF
LADDER 2

CAR 2 (OIG)
1 DEPUTY FIRE
CHIEF

RESCUE 1
2 FIREFIGHTER/EMTS
OR PARAMEDICS

HEADQUARTER'S MANNING TOTALS

- 10 FIREFIGHTERS
- 1 FIRE CAPTAIN
- 1 DEPUTY FIRE CHIEF
- 12 HEADQUARTER'S PERSONNEL TOTAL

OUTSKIRT STATION MANNING

**BAY VIEW
ENGINE 3**
2 FIREFIGHTERS
OR 1 FIREFIGHTERS
& 1 CAPTAIN

**WEST GLOUCESTER
ENGINE 6**
2 FIREFIGHTERS
OR 2 FIREFIGHTERS
& 1 CAPTAIN

**MAGNOLIA
ENGINE 1**
2 FIREFIGHTERS
OR 2 FIREFIGHTERS
& 1 CAPTAIN

OUTSKIRT STATION MANNING TOTALS

- 5 FIREFIGHTERS
- 1 FIRE CAPTAIN
- 6 OUTSHIRT STATION PERSONNEL TOTAL
- 12 HEADQUARTER'S PERSONNEL TOTAL
- 6 OUTSHIRT STATION PERSONNEL TOTAL
- 18 TOTAL MANNING ON DUTY

Four groups of personnel provide 24/7/365 scheduled manning.

MANNING.WK4 (Sheet D)

...ANNING SCENARIO - 17 FIREFIGHTERS MINIMUM

02/09/2009

F I R E H E A D Q U A R T E R S M A N N I N G

DISPATCH
1 FIREFIGHTER

ENGINE 4
3 FIREFIGHTERS
& 1 FIRE CAPTAIN

LADDER 1
UNMANNED

LADDER 2
3 FIREFIGHTERS

RESCUE 2
MANNED ONLY AS
NEEDED BY 2
FIREFIGHTERS OFF
LADDER 2

CAR 2 (OIC)
1 DEPUTY FIRE
CHIEF

RESCUE 1
2 FIREFIGHTER/EMTS
OR PARAMEDICS

HEADQUARTER'S MANNING TOTALS

- 9 FIREFIGHTERS
- 1 FIRE CAPTAIN
- 1 DEPUTY FIRE CHIEF
- 11 HEADQUARTER'S PERSONNEL TOTAL

O U T S K I R T S T A T I O N M A N N I N G

BAY VIEW
ENGINE 3
2 FIREFIGHTERS
OR 1 FIREFIGHTERS
& 1 CAPTAIN

WEST GLOUCESTER
ENGINE 6
2 FIREFIGHTERS
OR 1 FIREFIGHTERS
& 1 CAPTAIN

MAGNOLIA
ENGINE 1
2 FIREFIGHTERS
OR 1 FIREFIGHTERS
& 1 CAPTAIN

OUTSKIRT STATION MANNING TOTALS

- 5 FIREFIGHTERS
- 1 FIRE CAPTAIN
- 6 OUTSHIRT STATION PERSONNEL TOTAL
- 11 HEADQUARTER'S PERSONNEL TOTAL
- 6 OUTSHIRT STATION PERSONNEL TOTAL
- 17 TOTAL MANNING ON DUTY

Four groups of personnel provide 24/7/365 scheduled manning.

MANNING.WK4 (Sheet D)

MANNING SCENARIO - 16 FIREFIGHTERS MINIMUM

02/09/2009

F I R E H E A D Q U A R T E R S M A N N I N G

HEADQUARTER'S MANNING TOTALS

DISPATCH 1 FIREFIGHTER	ENGINE 4 4 FIREFIGHTERS & 1 FIRE CAPTAIN	LADDER 1 UNMANNED	LADDER 2 3 FIREFIGHTERS	RESCUE 1 2 FIREFIGHTERS/EMTS OR PARAMEDICS
CAR 2 (OIC) 1 DEPUTY FIRE CHIEF				RESCUE 2 MANNED ONLY AS NEEDED BY 2 FIREFIGHTERS OFF LADDER 2

- 10 FIREFIGHTERS
- 1 FIRE CAPTAIN
- 1 DEPUTY FIRE CHIEF
- 12 HEADQUARTER'S PERSONNEL TOTAL

O U T S K I R T S T A T I O N M A N N I N G

OUTSKIRT STATION MANNING TOTALS

BAY VIEW ENGINE 3 2 FIREFIGHTERS OR 1 FIREFIGHTERS & 1 CAPTAIN	WEST GLOUCESTER ENGINE 6 2 FIREFIGHTERS OR 1 FIREFIGHTERS & 1 CAPTAIN	MAGNOLIA ENGINE 1 STATION CLOSED
---	--	--

- 3 FIREFIGHTERS
- 1 FIRE CAPTAIN
- 4 OUTSHIRT STATION PERSONNEL TOTAL
- 12 HEADQUARTER'S PERSONNEL TOTAL
- 4 OUTSHIRT STATION PERSONNEL TOTAL
- 16 TOTAL MANNING ON DUTY

Four groups of personnel provide 24/7/365 scheduled manning.

MANNING SCENARIO - 15 FIREFIGHTERS MINIMUM

02/09/2009

FIRE HEADQUARTERS MANNING

DISPATCH
1 FIREFIGHTER

ENGINE 4
3 FIREFIGHTERS
& 1 FIRE CAPTAIN

LADDER 1
UNMANNED

LADDER 2
3 FIREFIGHTERS

RESCUE 1
2 FIREFIGHTER/EMTS
OR PARAMEDICS

CAR 2 (OIC)
1 DEPUTY FIRE
CHIEF

RESCUE 2
MANNED ONLY AS
NEEDED BY 2
FIREFIGHTERS OFF
LADDER 2

HEADQUARTER'S MANNING TOTALS

9 FIREFIGHTERS
1 FIRE CAPTAIN
1 DEPUTY FIRE CHIEF
11 HEADQUARTER'S PERSONNEL TOTAL

OUTSKIRT STATION MANNING

BAY VIEW
ENGINE 3
2 FIREFIGHTERS
OR 1 FIREFIGHTERS
& 1 CAPTAIN

WEST GLOUCESTER
ENGINE 6
2 FIREFIGHTERS
OR 1 FIREFIGHTERS
& 1 CAPTAIN

MAGNOLIA
ENGINE 1
STATION
CLOSED

OUTSKIRT STATION MANNING TOTALS

3 FIREFIGHTERS
1 FIRE CAPTAIN
4 OUTSKIRT STATION PERSONNEL TOTAL
11 HEADQUARTER'S PERSONNEL TOTAL
4 OUTSKIRT STATION PERSONNEL TOTAL
15 TOTAL MANNING ON DUTY

Four groups of personnel provide 24/7/365 scheduled manning.

MANNING.WK4 (Sheet D)

MANNING SCENARIO - 14 FIREFIGHTERS MINIMUM

02/09/2009

FIRE HEADQUARTERS MANNING

DISPATCH
1 FIREFIGHTER

ENGINE 4
4 FIREFIGHTERS
& 1 FIRE CAPTAIN

LADDER 1
UNMANNED

LADDER 2
3 FIREFIGHTERS

RESCUE 1
2 FIREFIGHTER/EMTS
OR PARAMEDICS

CAR 2 (OIC)
1 DEPUTY FIRE
CHIEF

RESCUE 2
MANNED ONLY AS
NEEDED BY 2
FIREFIGHTERS OFF
LADDER 2

HEADQUARTER'S MANNING TOTALS

10 FIREFIGHTERS
1 FIRE CAPTAIN
1 DEPUTY FIRE CHIEF
12 HEADQUARTER'S PERSONNEL TOTAL

OUTSKIRT STATION MANNING

BAY VIEW
ENGINE 3
STATION
CLOSED

WEST GLOUCESTER
ENGINE 6
2 FIREFIGHTERS
OR 1 FIREFIGHTERS
& 1 CAPTAIN

MAGNOLIA
ENGINE 1
STATION
CLOSED

OUTSKIRT STATION MANNING TOTALS

1 FIREFIGHTERS
1 FIRE CAPTAIN
2 OUTSKIRT STATION PERSONNEL TOTAL
12 HEADQUARTER'S PERSONNEL TOTAL
2 OUTSKIRT STATION PERSONNEL TOTAL
14 TOTAL MANNING ON DUTY

Four groups of personnel provide 24/7/365 scheduled manning.

MANNING.WK4 (Sheet D)

MANNING SCENARIO - 13 FIREFIGHTERS MINIMUM

02/09/2009

FIRE HEADQUARTERS MANNING

DISPATCH
1 FIREFIGHTER

ENGINE 4
3 FIREFIGHTERS
& 1 FIRE CAPTAIN

LADDER 1
UNMANNED

LADDER 2
3 FIREFIGHTERS

RESCUE 1
2 FIREFIGHTER/EMTS
OR PARAMEDICS

CAR 2 (OIC)
1 DEPUTY FIRE
CHIEF

RESCUE 2
MANNED ONLY AS
NEEDED BY 2
FIREFIGHTERS OFF
LADDER 2

HEADQUARTER'S MANNING TOTALS

- 9 FIREFIGHTERS
- 1 FIRE CAPTAIN
- 1 DEPUTY FIRE CHIEF
- 11 HEADQUARTER'S PERSONNEL TOTAL

OUTSKIRT STATION MANNING

BAY VIEW
ENGINE 3
STATION
CLOSED

WEST GLOUCESTER
ENGINE 6
2 FIREFIGHTERS
OR 1 FIREFIGHTERS
& 1 CAPTAIN

MAGNOLIA
ENGINE 1
STATION
CLOSED

OUTSKIRT STATION MANNING TOTALS

- 1 FIREFIGHTERS
- 1 FIRE CAPTAIN
- 2 OUTSHIRT STATION PERSONNEL TOTAL
- 11 HEADQUARTER'S PERSONNEL TOTAL
- 2 OUTSHIRT STATION PERSONNEL TOTAL
- 13 TOTAL MANNING ON DUTY

Four groups of personnel provide 24/7/365 scheduled manning.

MANNING.WK4 (Sheet D)

FIRE DEPARTMENT

STAFF BREAKDOWN AS OF 2/9/08

FILE = MROSTER.WK4

SHEET = Staff breakdown

SWORN FIRE FIGHTER POSITIONS

- 1 Fire Chief
- 4 Deputy Fire Chiefs (4 EMTs)
- 8 Fire Captains (8 EMTs)
- 60 Fire fighters (41 EMTs & 14 paramedics)

STAFF POSITIONS

- Fire Chief
- 1 Fire Inspector (Fire fighter rank & EMT)
- 1 EMS Coordinator (Fire fighter rank & Paramedic)
- 1 TOTAL SWORN FIRE FIGHTER POSITIONS

- 1 Senior Clerk Typist
- Part Time Clerk Typist (Currently vacant and unfunded)
- 77 TOTAL PERSONNEL COMPLEMENT FUNDED

PERSONNEL ASSIGNED TO FIRE SUPPRESSION & AMBULANCE DUTY

- 4 Deputy Fire Chiefs (4 EMTs)
- 8 Fire Captains (8 EMTs)
- 4 Firefighter/Mechanics (3 EMTs)
- 42 Firefighters (38 EMTs)
- 14 Firefighter/Paramedics
- 72 TOTAL SWORN FIRE FIREFIGHTERS ASSIGNED TO ROTATING SHIFTS

APPENDIX C



SALARY COMPARISONS FOR ALL RANKS, FY09

Department	Chief	Asst Chief	Depty Chief	Captain	Lieutenant	FF-P	FF	Inspector	Mechanic
Gloucester	88,079.67		62,414.31	53,620.98		46,526.67	38,349.35	48,433.92	48,433.92
Franklin	110,828.00		95,069.00	58,102.20	53,453.92		39,135.72		
Northampton	110,000.00	84,000.00	67,000.00	53,000.00		49,000.00	42,000.00	53,289.00	40,680.00
Shrewsbury	97,658.00			60,421.00			51,087.00		
Portsmouth	97,050.00	85,165.00	84,610.00	66,069.00	57,239.00	47,786.00	45,220.00	65,707.00	
Average	100,723.13	84,582.50	77,273.33	58,242.64	55,346.46	47,770.89	43,158.41	55,809.97	44,556.96
Mass Average	101,641.42	N/A	74,827.77	56,286.05	N/A	47,763.34	42,643.02	50,861.46	44,556.96
Gloucester	88,079.67		62,414.31	53,620.98		46,526.67	38,349.35	48,433.92	48,433.92

BASE SALARIES DO NOT INCLUDE STIPENDS, EDUCATIONAL INCENTIVES, OR ANY OTHER ADDITIONS TO SALARY

FF-P: Firefighter-Paramedic; FF: Paramedic



BUDGET INFORMATION

	FY08 GF	FY08 FD	FD %	Population	Per Capita
Shrewsbury	\$ 83,435,429.00	\$ 2,719,681.00	3.26%	33489	\$ 81.21
Franklin	\$ 88,880,100.00	\$ 4,372,000.00	4.92%	31381	\$ 139.32
Gloucester	\$ 79,065,198.00	\$ 5,546,484.00	7.02%	30308	\$ 183.00
Northampton	\$ 69,667,920.00	\$ 4,200,000.00	6.03%	28411	\$ 147.83
Portsmouth	\$ 79,858,802.00	\$ 6,500,665.00	8.14%	20810	\$ 312.38
Average all	\$ 80,181,489.80	\$ 4,667,766.00	5.82%	28880	\$ 161.63
Average Mass	\$ 80,262,161.75	\$ 4,209,541.25	5.24%	30897	\$ 136.24