# Fire Services Evaluation and Master Plan

forgency Services
Education & Consulting Group
Newtown Square
Fire Company
Newtown Square, PA

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# **Preface**

During the period of September, 2007 through January, 2008, a consulting team from Emergency Services Education and Consulting Group (ESECG, a subsidiary of VFIS, Inc.) conducted a documentation review and site analysis of the Newtown Square Fire Company, Delaware County, Pennsylvania. This work effort was consistent with the scope of work described in the proposal agreed upon between the Newtown Square Fire Company and ESECG and detailed later in this report.

The Newtown Square Fire Company is to be congratulated for its proactive initiative to evaluate its fire department services and in developing a plan for the future.

It must be noted that the interests expressed by the Newtown Square Fire Company, the members and staff and the community were focused upon providing quality service to the residents, workers, and visitors to Newtown Township. There were many positive efforts and programs found to be in place within the Company. While much of this report centers upon action to be taken to enhance long term performance, everyone recognized the fire company performs the work that needs to be conducted at the time of an emergency.

There were seven (7) primary activities involved in this project.

- 1. An introductory meeting was held with the fire company officers to establish an understanding of project involvement and expectation as well as a timeline to complete the project. At this meeting, the department was provided with self-assessment tools and a series of questions to complete to establish baselines of performance and dates for submission were established. A list of necessary documents needed for review and people to contact was also submitted.
- 2. "Self Assessments" and "Statements of Issues and Concerns" were obtained, and a compilation and analysis of the data provided, was completed.
- 3. A site visit to the fire station was made to confirm self assessment information, review commentaries submitted, and establish a structure for possible solutions to identified issues. The department officers were open and provided applicable documentation to the teams and provided "tours" of facilities and apparatus.
- 4. A number of documents were reviewed as submitted by the township, including, but not limited to:
  - Insurance Services Office Report
  - Prior strategic plans
  - Various fire company response summaries and documents
  - Existing Standard Operating Procedures/Guidelines
  - Budget information
- 5. Specific meetings were conducted and surveys of member perceptions were completed and analyzed. In addition, meetings were conducted with business owners from the community to assess their perceptions and comments. These were compiled and will be found in either this document or the accompanying strategic plan.
- 6. Follow-up activities with the chief and the administrative staff were conducted as necessary.

7. This document is the result of the completed and consolidated efforts of the six aforementioned activities.

We wish to thank the members and officers of the Newtown Square Fire Company for their willing and active participation in the process of completing the evaluation.



# **STATEMENT OF WORK**

This project is intended to assist the Newtown Square Fire Company in key areas of service delivery.

# **SCOPE OF WORK**

The scope of proposal and statement of work plan and product will reflect a fire and rescue service to meet the needs of Newtown Township.

# PROJECT APPROACH

In order to accomplish the "Scope of Work," the project activities will be composed of five (5) phases.

\*\*Emergency Services\*\*

# Approach to Project Objectives Education & Consulting Group

The proposed methods, procedures and anticipated deliverable items of this project have been organized into objectives. Each objective is described below.

Phase I: Initiate Project

#### **Task No. 1:** Development of Project Action Plan

**Activity:** A comprehensive action plan shall be developed identifying:

- 1. Primary tasks to be performed
- 2. Person(s) responsible for each task
- 3. Timetable for each task to be complete
- 4. Method of evaluating results
- 5. Resource to be utilized
- 6. Possible obstacles of problem areas associated with the accomplishment of each task. This plan shall be developed in cooperation with the members of the Newtown Square Fire Company, membership and staff. This plan will be completed within 15 days of the awarding of the project to the project team. This plan will list actions of proposed interviewees.

#### Task No. 2:

#### **Stakeholders Input**

**Activity:** Conduct interviews with and gather information from key personnel—Including:

The project team will interview key stakeholders of any organization associated with this study. At a minimum, members of the project team will interview township officials, community leaders (business and residential) and fire company officials.

From these interviews, the project team will obtain additional perspective on operational, economics, and policy issues facing the Fire and Rescue Services. In addition, the project team will learn more about availability of data necessary to meet projected goals.

#### Phase II: Emergency Services Information Review

#### Task No. 3:

#### **Emergency Services Information Review**

REMEY DETUICES

<u>Activity</u>: The project team will conduct a general review of the current status of Emergency Services, including, but not limited to:

- Organization Overview
- Management Overview
  - Policies, procedures, rules and regulations
- Risk Assessment Process
  - Risk Analysis by response area
  - Target Hazard Identification
  - Hazardous Materials
  - Pre-Incident Planning
  - Inspection/Pre-Planning Coordination
  - Water Supply Assessment
  - Planning for Fire Protection and Other Emergency Services
  - ISO recommendations
  - Community Development
  - Impact on Development to East End
- Delivery Systems—Suppression/Rescue
  - Service Delivery comparison to National Fire Protection Association (NFPA) Standard 1720
  - 3-year review of response performance

- Standard of Response Cover
- Personnel Management
  - Staffing
  - Response personnel current versus desired versus necessary
  - Inspection personnel current versus desired versus necessary
  - Administrative Staff current versus desired versus necessary
  - Recruitment and retention
- Facilities
- Apparatus and Equipment
- Capital Improvement Plan
- Training and Qualifications



- **Emergency Services**
- Review of Training Program to meet requirements and demands
- Officer Qualifications
- Officer Training
- Officer Selection Process
- Mutual Aid Companies
- Relief Association
- Closest Company Response
- Running Schedule

At the completion of each activity defined above, a status and "gap" statement will be prepared which will indicate the current status of that activity, any gaps between that activity and expected performance (as defined by standards or organizational policy), and activities that need to be undertaken to close the "gaps". Where possible, tools to assist in the development of these activities will be provided. The initiatives will be integrated into a comprehensive schedule of priorities and costs to be developed in Phase IV of the project.

### Phase III: Strategic Plan

#### **Task No. 4:** Strategic Planning Process

<u>Activity:</u> <u>Vision, Mission, and Guiding Principles</u> - Validate the development of meaningful vision,

mission, and guiding principles:

- A. Develop/Revise Vision statements that describe the way the Fire Company views itself in the future
- B. Develop/Revise Mission statement that describes the purpose for which the Fire Company exists
- C. Develop/Revise Guiding principles that will enumerate the values or ideas that are important to the Members

<u>Activity:</u> External Customer Needs and Expectations – Identification of external customers and their critical needs/issues, as deemed needed.

- A. How customers prioritize the services provided by the Fire Company
- B. Areas of customer concern about the Fire Company
- C. Customer expectations of the Fire Company
- D. Customers' positive attributes of the Fire Company

<u>Activity</u>: <u>Internal Assessment</u> – Identification of internal customer needs and issues (SWOT Analysis).

- A. Strengths of the organization
- B. Weaknesses of the organization
- C. Opportunities for the organization
- D. Threats to the organization

<u>Activity</u>: <u>Citizens' and Community Leaders' Involvement</u> – As deemed appropriate, facilitate discussions with interested citizens and community leaders to develop consensus on:

- A. Service expectations and priorities
- B. Selection of a service delivery model
  - 1. "Geographic-based" coverage

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- 2. "Demand-based" coverage
- C. Selection of key community emergency services performance objectives and targets

<u>Activity</u>: Goals and Objectives – The establishment of goals and objectives (as well as the tasks and performance statements) that are imperative to the organization and individual members.

- A. Establishment of organizational goals that address the identified concerns of the external and internal customers
- B. For each goal, the development of one or more measurable objectives that are written in such a manner as to describe the criteria by which an outcome is judged complete or successful and the time frame in which to expect the desired outcome
- C. Development of associated tasks for each goal and objective utilizing the format of identified measurable criteria
- D. Development of performance measures for ongoing assessment of Fire Company performance.

The project team will complete a review of the strategic plan and related goals and objectives. In addition, the project team will review and make recommendations on the goals and objectives of the plan as related to the study findings.

## Phase IV: Prepare Draft Report

## Task No. 5: Prepare Draft of the Strategic Plan

<u>Activity:</u> Prepare Draft Report - Upon completion of Phase III, the board of supervisors will receive a report of findings and recommendations.

The draft report undergoes a process of accuracy review by the project team in preparation for the production of the final product. The editorial and critical comments obtained from the Fire Company shall be considered as essential information in the final report.

## Phase V: Prepare Final Report

**Task No. 6:** Final Evaluation and Strategic Plan Report

<u>Activity:</u> Prepare and Present Final Report - Prepare and present final Evaluation, Strategic Plan Report and Master Plan for Fire and Rescue Services..

Adhering to the parameters as established by the Newtown Square Fire Company and agreed to by ESECG; the project team will then prepare the final report. The report will detail the data and information acquired during the engagement and the project team's analysis and recommendations. All objective areas explored during the process will be addressed in the final report.

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# **Introduction**

As noted in the Strategic Plan developed in conjunction with this report, the nation's volunteer fire service is changing. Given the extent of these changes and at times the lack of awareness or even unwillingness to accept these external forces on the volunteer system, it is important to help drive change before it drives your organization.

Longtime volunteers often look back on the "way it used to be." They recall a time when training was much less demanding and time consuming and the local fire department had fewer responsibilities. Fires and accidents were pretty much the game. Attendance and training standards were achievable. There were fewer calls but each was an event that required the assistance of neighbors, who took great pride in their membership in the local department. The community appreciated their neighbors' help, local businesses supported the volunteer fire department, and the call volume was small enough so as not to interfere with the requirements of the members' jobs. The system was manageable, the emergencies were mitigated, and it was fun to be a member.

The reality today is that in many communities, to be a contributing, effective firefighter, a person has to meet significantly higher standards physically, in terms of training, and in terms of time "on the job" gaining experience. Not everyone has the luxury of time or in some cases the inclination, to meet those requirements in today's hectic environment. Anymore, the fire department is not just a group of people trained to suppress fire and render first aid. It has become the premiere provider of choice for different levels of emergency medical services and in many cases transportation, as well as the provider of just about every other service that is not provided by the police department—hazardous materials response, high-rise and below-grade rescue, inspections, prevention and education, and community emergency planning and management, to name a few.

This is not to say that volunteers can't handle the job, for their abilities and successes are demonstrated daily in many places from coast to coast and border to border. But where they cannot, community and fire leaders are challenged to meet their community's needs. In some cases, they will find ways to reinvigorate the volunteer members of their departments and improve their performance. In others, they will recognize the need for another type of change, moving to some form of partial or fully paid department, and they will set out to make it happen.

The Newtown Square Fire Company has a rich and proud tradition, dating back to 1916. From then until now, citizens of Newtown Township have responded when the call for help was sounded. Whether a gong hit by a hammer in 1916, or an alert pager of today to communicate that there is an emergency, the spirit of helping neighbors in time of need has not changed. What is significantly different since those early days is the dimensions of the emergencies being faced. As contrasted with the barn fires of the past, today's firefighter must deal with vehicle entrapment, hazardous materials, high angle rescue and many other situations that were never even thought about by our founders. To deal with these emergencies and provide for the safety of the firefighters, requires a high level of training, sophisticated equipment, personal protective gear and modern fire vehicles.

Located near the center of town, the fire station (built in 1965) sits on the exact site of the original station. From this location, the fire company provides fire, rescue, fire police and emergency medical services support to Newtown Township and a select part of Willistown Township. At the time of this report, Newtown Township is approximately 14.2 square miles and has a resident population of 11,500. This coverage population expands greatly during the workday. Fire and other responses average 550 calls per year. A typical response for firefighters can range from an automatic fire alarm, to a vehicle accident, to an elevator rescue, to a fully involved structure fire. The fire company must be ready to deal effectively with these types of emergencies and more.

People are the most important resource of any fire company. Firefighter safety, training and retention are a top priority. Part of the formula to help make our personnel as effective as possible in performing their duties are the vehicles used by the firefighters. In addition to delivering the firefighters to the scene of the emergency, a modern fire truck not only pumps water or foam on the flames at a high volume, but also carries a wide array of tools and equipment. Newtown Square Fire Company has a fleet which includes a fire police vehicle, command unit, two engines/pumpers, a rescue-pumper and a ladder truck which are configured to handle multiple types of emergencies.

To this day, the Newtown Square Fire Company has remained an all-volunteer organization, serving the community with state-of-the-art equipment. The Newtown Square Fire Company has come a long way since the original pumper. Today the company possesses two "Class A" pumpers, a rescue/pumper, a ladder truck, support vehicles and additional technological equipment to assist with the daily operations. The company's fire prevention and public safety education programs have also grown in time. Children, as well as adults, are learning on a continuous basis about the dangers of fire and how best to avoid and prevent the devastation that fire can cause.

#### Mission Statement, Core Values, and Responsibilities

Any planning process must evaluate the key beliefs and operating philosophies of the organization. To that end, the Newtown Square Fire Company has developed "Vision 21", an operational concept with PowerPoint presentation, which discusses the intent to provide a full spectrum of emergency services to their stakeholders. This encompasses a seamless range of fire prevention, firefighters, search and rescue, medical support and fire police. To ensure this complete solution, members are organized, equipped and trained to fulfill our mandate of an on-time, every time delivery of emergency service. "Vision 21" is designed to serve as a beacon for the direction of the fire company.

#### **Mission Statement**

Two critical steps in the development of strategic and operational processes were completed by the development of a mission statement for fire and rescue services. Newtown Square Fire Company's mission statement reads:

# NEWTOWN SQUARE FIRE COMPANY MISSION STATEMENT

"Provide prompt and effective fire, rescue, and emergency medical services to the residents of Newtown Township and Willistown Township on a continuous basis by a highly qualified group of trained individuals."

This statement covers the purpose and capability of the organization as defined in fire company documents. For the purpose of communicating the fire company's mission and vision to the general public and its members, these are considered to be good and useful items.

This mission/vision can be restated as "Vision 21":

"The Newtown Square Fire Company will provide a full spectrum of emergency services to our stakeholders. This encompasses a seamless range of fire prevention, firefighting, search and rescue, medical support and fire police. To ensure this complete solution, members are organized, equipped, and trained to fulfill our mandate of an on-time, every time delivery of emergency service."

This mission statement provides the organization's purpose, business and value and is intended to provide a concise statement of the what, how, and why of an organization.

#### **Standard of Response Cover**

A major component of the delivery system of Newtown Square Fire Company is to provide an assurance to the public that it is organized and capable of responding to emergencies with qualified personnel, in an appropriate time frame, with the proper equipment. To accomplish this, the Newtown Square Fire Company has developed the following operational philosophy, known in the industry as a "Standard of Response Cover". It reads:

"The Newtown Square Fire Company will respond with four (4) qualified staff, within ten (10) minutes of dispatch, 80% of the time.

The application of this standard of response cover is to assure the services (directed by the charter of the fire company as approved by the Township) are achieved in a fashion to comply with the mission statement and the needs of the community. The Newtown Square Fire Company officers are responsible for the annual review of measurements related to these standards of response cover.

It should be stated that Newtown Township enjoys a relatively low fire rate and has a well respected emergency service provider. The standard of response cover is met, but should be revisited regularly to assure it is being achieved. The failure to achieve the standard of response cover will be the first indicator to revisit the true applicability of the standard and staffing models.

As a group, the company members identified the most important functions and service it provides and offers. It is important to identify these functions in order to assure they are consistent with the critical needs of its customers. The core services and supporting programs provided by the fire company are defined as follows:

#### FIRE-RESCUE OPERATIONS

- Fire Suppression
- Rescue (light)
- Hazardous Materials (R&I Level)
- Fire Police
- Storm Management
- Community Care Calls

#### **EMERGENCY MEDICAL SERVICES**

- First Responder
- Basic Life Support

#### FIRE & INJURY PREVENTION

- Public Education
- Community First Aid & CPR Courses
- Community Culture Support

<sup>\*</sup> Note, these are further defined in Appendix 1.

Basic management practices apply to the volunteer fire service and provide for efficient long-term focus and help facilitate result orientation. Upon establishment of specific actions to maintain and achieve these key organizational deliverables, the leaders of the organization can periodically solicit appropriate input and guidance from key service stakeholders and plan for change in a future-oriented fashion.



# **Project Findings**

The project findings were compiled as a result of document review, self assessment reviews, comparisons of observations to information, and input on concerns, issues, and problems.

The team was quick to observe that the fire company has the safety of the public as a prime concern. The interest in providing a quality service to the people who live, work and visit Newtown Township was quite obvious. The relatively low fire experience in the township is also a testament to the overall performance of the fire company team.

Personnel and officers were afforded the opportunity to identify concerns and issues of current operational practices. These items were part of the analytical process and were validated by the assessment team and have all been reflected in this report. The company is to be commended regarding their competence, candor and interest in performance improvement by raising the issues for discussion and recognizing that the issues raised will result in recommendations to change current methods of operation.

As the project team analyzed and observed operations, it quickly became clear that the department had long-standing values, philosophies and operational success; apparatus was current and in good repair; and the station was adequate for current needs. It was also apparent that change in the community and community expectations will drive operational demands in the future

There were no documents which legally detailed the statutory authority and general powers of the fire company. There were no prior fire or emergency medical service assessments referenced, provided or known about by company officers.

The Insurance Services Office (ISO) report, completed in May 1997, was reviewed. ISO is the leading supplier of statistical, underwriting, and actuarial information for the property/casualty insurance industry. Most insurers use the Public Protection Classification (PPC) survey for underwriting and calculating premiums for residential, commercial and industrial properties. The report detailed the analysis conducted of the structure fire suppression delivery system provided in Newtown Township. The resulting classification of Class 5/9 represents a lack of water supply in a portion of the township, resulting in a low grading. The report provided a number of "Improvement Statements". With respect to the fire department, the ISO report indicated deficiencies due to

- Insufficient equipment on Engine 41-1 (lacking minimum hose and pump/hose testing)
- Insufficient equipment of Engine 41-2 (lacking minimum hose and pump/hose testing)
- An insufficient response of fire department members to emergency calls (typical of a volunteer system)
- A lack of pre-fire planning inspections of each commercial, industrial, institution and other similar type building twice annually, with records of notes and sketches
- Insufficient training record keeping
- Insufficient dispatch circuitry (this is a Delaware County 911 issue which may or may not have been corrected since 1997)

As is typical with volunteer fire companies in the ISO reporting system, volunteer companies are found deficient in company personnel (number responding to incidents) and a lack of training

records.<sup>1</sup> While some improvement was noted during the visits, the basic issue of staffing was found to still exist. Given that the ISO report is over ten years old and that much has changed with regard to prior improvement recommendations, consideration should be given to pursuing a re-evaluation by ISO and that should be pursued as changes over the last ten years should result in a positive improvement, at least in "9" segment of the rating. Further details are indicated in Appendix 5 of this report and specifically illustrate water supply deficiencies in the area of

- Media Line Road & Lovell Avenue
- West Chester Pike between Bryn Mawr & Rhoads Avenues
- Goshen Road West of Butler Road
- West Chester Pike & Clyde Lane
- Dudie Drive West of Newtown Street Road (Rt. 252)
- Bishop Hollow Road East of Campus Road

The fire department was requested to complete a self-assessment using National Fire Protection Association (NFPA) Standard 1720 as a baseline. NFPA 1720, entitled the "Standard for the Organization and Deployment of Fire Suppression, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments", the standard was developed as a national consensus document to identify minimum requirements related to the organization and deployment of volunteer fire service agencies. While there is no mandate to use this document, it is the closest definition of expected service delivery by volunteer fire agencies. This document replaces many items of arbitrary definition in the Eckman report. Areas of positive and deficient performance were identified by this assessment. The assessment indicates that there is a belief that the organization is performing in compliance with the standard in a number of key areas, including:

- attaining needed staffing to handle incidents
- understanding the risks involved
- establishing adequate response teams
- ability to provide an initial attack within two (2) minutes of arrival, 90% of the time
- a training program is available to support all services provided by the companies

Each of the 58 assessment components were evaluated with companies assigning an Attains (A), Partially Attains (PA), or Fails to Attain (FA) rating. The following areas were self-determined to require action, based up the indication of a deficiency (failing to attain expectations). These included

- development of a risk management plan (Section 4.2)
- conducting annual evaluations (Section 4.4.2.1)
- intercommunity organization training and guidelines (Section 4.7)
- implementation of RIC (4.9.5)
- standard radio procedures and language (Section 5.4.3 and 5.4.4)
- pre-emergency plans (Section 5.5)

Recommendations related to these issues are found in subsequent sections of the report. Details of this effort are provided in Appendix 3.

Similarly, a review of existing Standard Operating Procedures/Guidelines (SOPs/SOGs) was conducted based on information provided by the Chief. Based upon the NFPA 1720 self-assessment and the results of the interviews conducted by the assessment team, a recommended outline for development of revised/additional SOPs/SOGs is provided later in this report. There is an excellent opportunity to use existing SOPs/SOGs and those of other agencies as the basis for the development of updated/expanded SOPs/SOGs, by providing existing programs that work and eliminate extensive

<sup>&</sup>lt;sup>1</sup> "Public Protection Classification Results, Newtown Township, Delaware County, PA, ISO, Marlton N.J., May, 1997.

research time. This should help expedite the time it would take to develop and implement a SOP/SOG.

In addition, an overview document such as a strategic approach to incident management is not in place. This Strategic Guideline identifies and outlines some basic rules and principles that relate to the major areas of fire fighting strategy and subsequent fireground activity. The uniform application of this guideline will produce favorable fireground outcomes. This guideline is designed to offer a basis and simple framework for Newtown Square Fire Company operations and command; it also represents many existing practices, and a defining of how this department is expected to perform during certain emergencies. A draft copy is provided in Appendix 4.

The observations, analyses, and subsequent recommendations are provided in the following categories.

- Management Issues
- Operational Issues
- Personnel
- **Apparatus**
- Standard Operating Procedures ation & Consulting Group

**Emergency Services** 

- Mutual/Automatic Aid
- Miscellaneous Items

# **Assumptions and Current Trends**

Any conceptual project begins with a set of assumptions and analysis of current trends within the industry. This project is no exception. There were three (3) basic assumptions established prior to the assessment and development of a report for Newtown Square Fire Company. The assumptions included:

- The desire is to maintain a volunteer system to deliver fire and rescue services as long as possible
- Nationally recognized standards would be used as the baselines for any recommended changes in operations
- Programs, best practices policies, guidelines, etc. recommended for use, should be recognized successful programs, best practices policies, guidelines, etc. in other volunteer fire and rescue service agencies

Time was taken to compare Newtown Square Fire Company to fire services in similar sized communities around the Unites States. A national study was conducted by the National Fire Protection Association entitled "U.S. Fire Department Profile through 2005" which was printed in 2006, measured service provision in several key areas. These are compared in the following chart.<sup>2</sup>

Nationwide Area of Comparison	National Result*	Newtown Square VFC
Percentage of communities between 10,000 and		
24,999 population with all volunteer fire	See below	All volunteer service
services		
Number of volunteers per 1,000 population	1.7 (median)	3.5
	2.67 in Northeast	est. 64 volunteers
Number of stations per 1,000 population	.127	.098
Number of pumpers per 1,000 population	.186	.26
Number of aerial trucks per 1,000 population	.033	.130
% Departments in communities between 10,000	49.5%	3 pumpers
and 24,999 population with 3-4 Pumpers		
% Departments in communities between 10,000	25.4%	1 aerial truck
and 24,999 population with 1 Aerial		
% Departments in communities between 10,000	30.2%	1 station
and 24,999 population with 2 Stations		
% Departments in communities between 10,000	NO EMS – 30%	BLS non-FD
and 24,999 population where fire department	BLS – 41%	
provides EMS Service.	ALS - 29%	

<sup>\*</sup>Comparison was against communities with populations between 10,000 and 25,000.

<sup>&</sup>lt;sup>2</sup> Michael J. Karter, "U.S. Fire Department Profile Through 2006", NFPA, Quincy, MA, 2007, 25 pages.

In the 10,000 to 24,999 population category there are 3,560 fire departments:

- 15.2% of the departments are all career
- 21.2% of the departments are mostly career
- 41.9% of the departments are mostly volunteer
- 21.7% of the departments are all volunteer

Throughout the United States, in communities of 10,000 to 24,999 populations, the % of membership by age range is as follows:

Age 16-19 = 3.9%

Age 20-29 = 21.1%

Age 30-39 = 28.7%

Age 40-49 = 26.4%

Age 50-59 = 14.9%

Age 60+ = 5.0%

The comparison of Newtown Square Fire Company to communities of similar size demonstrates Newtown Square Fire Company to be consistent with, or to have more than the equipment, facilities and staffing provided in similar sized communities throughout the United States.

Fire Company activity over the last few years can be summarized as follows:

	2003	2004	2005	2006	2007
Fire Calls	500	428	529	514	547
EMS Calls	1099	1107	1194	1251	452*
Average Responders			12	10	10
Day			5	10	10
Night			12	12	12

<sup>\*</sup> The provision of emergency medical services ceased in May of 2007.

EMS Calls	2003	2004	2005	2006	2007*
Melmark Home	32	27	27	28	24
Newtown	50	61	50	38	25
Towers					
Dunwoody	100	119	119	115	36
Sun Rise		41	55	89	26
Hollybrook	22	20	22	15	6
Woodbrook	14	14	14	7	3

This increase in activity is considered a normal situation in a busy, growing community typical of the exposures and types of facilities within that community.

# **Management Issues**

Fire company personnel do their best to provide emergency response services to the community. The lack of significant major loss events is a tribute to the performance of the organization.

The fire company, as directed by various statutes and guidelines, is required to establish a series of programs, maintain specific records, and manage the organization in a professional manner. This is evident in the extensive amount of documentation readily available for the project team upon their arrival and made available during the time on site and afterward.

Annual budget documents, a strategic plan, and basic reports are compiled and distributed. An annual report sheds light on the operations and inner-workings of the fire companies and allows for more citizen acceptance and review. While completed, it is clear from discussions with residents and business owners that more of the information about the "happenings of the fire company" needs to be disseminated. Similar to this is the need to establish long-term capital expense planning and funding through a 20-year capital planning model.

As noted earlier, while basic mission and vision statements can be interpreted from statutory documents, it is worthwhile to formalize this information in order that members and the public understand the services provided by the fire company so that their expectations as recipients of the service can be met.

#### **VISION STATEMENT**

(proposed draft for review, agreement and revision)

The Newtown Square Fire Company provides a full spectrum of emergency services to our stakeholders. This encompasses a seamless range of fire prevention, firefighting, search and rescue, medical support and fire police. To ensure this complete solution, members are organized, equipped, and trained to fulfill our mandate of an on-time, every time delivery of emergency service.

#### **MISSION STATEMENT**

(proposed draft for review, agreement, and revision)

The mission of the Newtown Square Fire Company is to provide prompt and effective fire and rescue services to the residents of Newtown Township and Willistown Township on a continuous basis by a highly qualified group of trained individuals.

Integral to these operations are defined procedures for:

- officer qualifications and incident command
- apparatus response procedures
- firefighter and officer training

Management information is maintained at the discretion of the president and the chief, and while computers are prevalent in the facilities, an overall approach to Information Management is not clear.

The department and its members indicated training as a hallmark of their performance, individual staff development, and value to the community. The consistent record of performance would validate that the company integrated training within their operational activities. While standard operating guidelines are in place and others are being developed, an over-riding guideline for strategically operating at incidents should be developed to provide both a risk management and over-riding philosophical approach to the management of emergencies. This is provided as Appendix 4.

Several management practices considered common in the business world have appropriate expansion into emergency services and should be applied in the Newtown Square Fire Company. These specifically include the expansion of current risk management initiatives into a comprehensive risk management plan, and the expansion of the current disaster preparedness initiatives into a comprehensive disaster planning/business recovery program for the fire company. Additional details on the Risk Management Plan can be found in Appendix 16. Information on the further development of a disaster/business recovery plan for the organization will be provided under separate cover.

#### RECOMMENDATIONS

- 08-01 Develop a service delivery statement which would indicate the types of services to be provided, consistent with PENNFIRES reporting, the area to be covered, and the delegation of authority to perform those services. This will also serve as the basis for development and implementation of a mission statement, vision statement, and development of annual goals and objectives.
  - This will result in the development of a Newtown Township service delivery system as a method to define a service expectation the community will accept. This will also serve as a benchmark to determine when and if career staff would ever be needed for firefighting services.
- 08-02 Establish a process to assure a risk assessment is conducted for the community, which provides input and a basis for the development and implementation of the community's standard of response cover.
- 08-03 Develop an approach to strategically manage operations which clearly defines a comprehensive approach.
- 08-04 Expand the current risk Management plan to address the control and financing of risk, outside the purchase of insurance. A model format to use in the development of this process is provided outside the contents of this document.

# **Administrative Issues**

The fire company's policy is established by the by-laws and standard operating procedures with implementation by the officers. The company's officer's roles and responsibilities are detailed in the by-laws and standard operating procedures. The administrative officers have backgrounds which serve well for the organization.

The documents have served well as guiding documents over the years. For a volunteer agency, they meet the intent and needs of the organization, at this time.

With the advent of computerization, both in apparatus for operations and in the station for administrative uses, a comprehensive approach to Information Technology and Information Management needs to be addressed.

#### **RECOMMENDATION**

- **Emergency Services**
- 08-05 The information technology (IT) function for the organization should be consolidated in the administrative function of the organization as a process that provides data to all facets of the fire company. The overall IT function should be the responsibility of the fire company administrator and support all aspects of the organization, including:
  - fire inspection management and record keeping
  - pre-emergency planning
  - permit issuance
  - accounts payable and receivable
  - personnel information
  - apparatus maintenance
  - building maintenance
  - incident reporting
  - training information
  - training programs
  - miscellaneous use by members (including games and web access), and should include a security component to prevent both unauthorized use and inappropriate use of the IT system

## **Operational Issues**

As noted earlier, the fire company operates under long-standing procedures, using mutual aid, automatic aid, and standard operating practices. This culture and tradition has built an organization that has performed as needed for the community for decades. However, the changing demands and expectations on emergency services, particularly in communities such as Newtown Square, create conflicts in performance and develop potential operational and liability issues. To that end the chief, president, and officers have worked diligently with the Newtown Square Fire Company personnel to enhance operations.

In looking at the delivery of service as compared to communities of similar size and complexity, firefighting, rescue, hazardous materials, terrorism, and emergency medical services were all evaluated.

To determine the operational needs of the fire company, there must first be an understanding of the hazards being faced. There is no community risk analysis at this time, so it becomes important to gain as much an understanding of the hazards posed as possible. This can be done by analyzing response data, defining and inventorying what are considered major or target hazards, and developing plans to deal with these hazards individually and comprehensively.

Since a comprehensive risk analysis has not been completed for the community, it is recommended that one be completed by either the fire marshal's office or a vendor. There have been some individual assessments of properties completed and pre-plans developed. In addition, there SARA TITLE III sites are known, but limited planning information is available. Key target hazards such as large area structures, high density/personal care/nursing homes, and other similar challenges exist and require pre-planning. Also to be noted in detail, is the lack of coordinated communication between the fire marshal and the fire chief on routine findings during inspections and integrating inspection information into the pre-planning process. Recommendations will be made to change the organizational and operational practices of the fire marshal to be more involved in comprehensive fire protection of the community instead of just code enforcement and public education. Various tools were provided to the fire chief to consider for modification and use in the risk analysis and preplanning process. These pre-emergency action plans, are recognized methods to predefine the risk posed, the necessary water supply, apparatus, personnel, support resources, etc. to manage an incident at a particular location. While some pre-plans have been completed, there was no comprehensive pre-plan approach in place (which can also be the fire marshal's responsibility).

The primary mission of the organization since its inception was fire suppression and the primary tool to suppress fire was and remains water. Therefore, once target and routine hazards are analyzed, water supply becomes the first point of consideration. Water supply, in general, is considered inadequate for fire protection, based on the information presented and tests conducted by independent third parties.

The ISO report indicated that "water supply was deficient (less water available from the municipal water supply system than the needed fire flow) in several of the locations tested, therefore an understanding of water flow capability is necessary.

As part of this project, the chief was asked to complete an assessment of operations, consistent with NFPA 1720 "The Standard for Providing Emergency Services by Volunteer Fire Departments." The details of this assessment can be found in Appendix 3. There were several items within this assessment that require action and are identified and detailed throughout the report.

#### **RECOMMENDATION**

08-06 Develop a process for the development, implementation and distribution, & training of preemergency plans for target locations as identified in the risk assessment process. This should include water supply information, as well as a hydrant out-of-service notification process. The fire marshal's office should serve as an integral part of this process.

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## **Personnel**

The fire company indicated approximately 64 individuals who were active members of Newtown Square Fire Company's organization. In this day and age when it is more and more difficult to recruit and retain volunteers for any activity, Newtown Square Fire Company is finding a way to sustain its members. However, it has become more and more challenging to recruit and retain members.

Personnel represent the most significant resource of Newtown Square's Fire Services. Without trained people who are willing to respond to emergencies, raise funds, perform maintenance work, and train, there would be a mammoth challenge to assuring the safety of the people and properties of the township. Unfortunately, like many similar communities, less time to volunteer, more calls, more required training, and expanded fund raising needs are all reported to be situations challenging the staffing of the companies.

Personnel capabilities were indicated as follows (note some firefighters also hold EMT skill sets):

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- Firefighters
  - o Senior firefighters, 36
  - o Junior/Probationary firefighters, 4
  - o Drivers, 17
- EMS
  - o EMT's, 21
  - o Drivers, 34
- Fire Police
  - o Fire Police Officers, 12

Using the basic data of 64 volunteers, three pumpers and one aerial, a cost savings calculation can be made to determine the savings to the taxpayers of Newtown Township, by having a volunteer system. The National Volunteer Fire Council's (NVFC), Volunteer Fire Service Cost Savings Calculator, computes this savings (for salaries and benefits of firefighter/EMTs) to be approximately \$3,950,000 or \$750 per household to Newtown Township. The NVFC Cost Savings Calculator was created by St. Joseph's University Graduate Program in Public Safety and Environmental Protection with the following objectives:

- develop a model to calculate the cost savings of an emergency service organization
- develop a model power-point slide presentation for an emergency service, organization to use with elected officials and public groups to promote their service and the value created by the service
- develop a projection of annualized savings of volunteer Emergency Service Organizations within the United States

The study found the savings, nationwide, to be \$37 billion. The program and additional information can be found at www.nvfc.com.

The question was asked how recruitment and retention activities are conducted. There was no structure to the process, individually or collectively. The company indicated they conduct a variety of activities, but gave no baseline for goals, expectations, or consolidated approach to the process of

recruitment and retention. Without a comprehensive approach to recruiting and retaining members, that is local in design and is responsive to members' needs, the continuation of an all volunteer system is questionable.

The maintenance of human resource related data is standardized similar to other volunteer agencies of similar size. A common set of information components should be established, and then maintained by the fire chief, including what should be maintained electronically, and what should be maintained in paper fashion. For example, there are no standards for minimum documents, such as:

- application
- driver license copy
- annual Motor Vehicle Record report
- training records, etc.

As part of this analysis, an assessment of the Newtown Square Fire Company's culture and perspective on management, operations and safety by requesting member to complete questionnaires and participate in a group (and as requested individual) meeting. Thirteen (13) members provided responses to the questionnaire. However, the data and comments provided several items of interest, note, and necessary action.

Included in the responses were all age ranges within the department, as well as a diverse group representing new members to over 30 years experience. The fundamental responses revealed an organization that is open to change, is very cognizant of the impact of safety on operational effectiveness. The changes being implemented are recognized as behavior oriented. However, only a little more than half of the respondents indicated they believe the changes are working.

Of particular note though are the following overwhelmingly positive responses:

- Officers have an accurate understanding of reality
- Officers act more like coaches than bosses
- Members are valued
- Member overwhelmingly like being a member of the organization
- Training is considered to be effective

There were several other items of note in the survey results:

- Approximately 20% believe the members are not involved in decision making
- Approximately 20% believe the organization is not consistent in following standard operating guidelines, particularly officers wearing personal protective equipment and nob being vigil in their safety efforts
- Approximately 25% believe members are not involved at all stages of the development of a program, implementation of a program, that officers and members are not in constant communication with each other, that members do not have input on safety decisions, that officers do not follow up on suggestions and requests made by members, and that officers only take note when something goes wrong
- Approximately 25% believe that housekeeping is less than desirable which validates a more overall member and officer lack of interest
- Approximately 20% do not believe gains from member suggestions are shared with all members

- Approximately 20% indicated they do not believe operations are done in a method to improve operations

These key points of the perception survey indicate the organization has some communication and performance challenges, but none that cannot be managed.

Members indicated they volunteer for two primary reasons, to serve the community and because of the people with whom they volunteer. Three methods of communication received comment, one to one communication, one to group communication and email as preferred communication methods.

With regard to training, members are primarily interested in basic training and furthering current training. Comments were also made regarding the reduction of training requirements for new members to join the company and begin responding.

Recruitment and retention was felt to require additional focus by the members, particularly regarding recruiting new members and adopting a plan that includes advertising, public program involvement, and using word of mouth to attract people. Members felt that once they joined, the expectations of them were to run calls and do a good job. They seek from leadership technical knowledge, communication, respect, fairness, consistency and to listen. There were several comments that lead to a need to be more considerate of communication techniques (to and from the members). Regarding potential benefits, the members indicated interest in just a few initiatives which included a thank you, to a Length of Service Award Program (LOSAP)/401K/retirement program, health insurance programs, tax breaks, a gym and a "nice station to hang out in", but no response had wide appeal.

Based on the member's responses, the overwhelming majority believe they are there to serve the community. Approximately one-third believe the fire company should serve them first. This philosophy clearly can create conflicts for leaders when developing and implementing programs and changes that are geared to enhance the organization's mission and necessitates an effort to change this minority perspective. Similarly, there were some concerns expressed about the organization's need to move to career staffing. This information seemed to reflect an emotional reaction and is not supported by data (either statistical information or citizen/elected official complaint) These too appear to be minority comments and possibly a failure to fully understand the mission and needed change to the fire service in current and future times. There were also comments both positive and negative regarding the officers listening to members. Negative responses can sometimes be generated by an unpopular, but technically correct decision and could not be further evaluated.

Members made specific statements which should be considered by the officers as they develop plans for the future. These statements included work on morale, follow the suggestions of the assessment, and develop a more cooperative environment. Much of this can be achieved through more involvement of members in the decision making process for activities involving the fire company.

Members suggest that the standard of cover model include the following components

- respond within 4 minutes of dispatch
- with six firefighters
- arriving at the scene in 4 minutes

This would result in an 8 minute total reflex time which is generally considered too fast for a community such as Newtown Square where members are not in station at all times and traffic congestion can be excessively challenging at times and not consistent with current service delivery performance. A more realistic service delivery statement is provided earlier in this report.

The data suggests that additional focus be placed on involving members more in decisions, particularly regarding safety and operations. This is not to suggest a democratic process when operating on the fireground but rather include members in discussions and decision making relative to safety and operational methods, such as hose packing, equipment storage, etc. Officers have an opportunity to expand involvement and interaction with members to enhance morale and performance.

#### **RECOMMENDATIONS**

- 08-07 Develop and implement a comprehensive approach to the recruitment and retention of an adequate force of competent fire and rescue service personnel. Coupled with this should be minimal criteria for membership.
- 08-08 Develop a standardized set of data and documents to be maintained for each member, by each company. This should include, as a minimum, an application, physician's release to perform firefighter duties, training information, driver license, working papers, etc., as deemed appropriate. Sample information and forms is provided in VFIS safety and management forms which are forwarded under separate cover.

# **Apparatus**

The apparatus of the fire company was found to be in good overall condition. Thought has obviously been given to the types of apparatus needed within the fire company and the purchasing plan was useful in reaching today's level of serviceable apparatus. Based on physical observation and discussion with officers and members, as well as the review of records management, the project team evaluated the apparatus as follows:

Engine 411	2001 Pierce 2000gpm engine	Good
Engine 413	1992 Pierce 2000gpm engine	Fair
Ladder 41	2003 Pierce 105' aerial/2000gpm pump	Good
Rescue 41	1996 KME Rescue Pumper 1500 gpm pump	Good
Command 41	2001 4WD SUV	Good
Traffic 41	1999 Dodge Ram w/utility body	Good
Ambulance 41-7	2001 Horton Type II	Good

A "Long-Term Apparatus Purchasing Plan" was developed and is now "complete." While the assessment team could develop a new 20 year plan, that would need to be based on a risk assessment finding which would develop a definition of how many apparatus, and of what type, would be needed. This assessment does not exist today. That plan in turn would assist in determining what apparatus could be staffed and dispatched to calls. Among consideration in the plan should be the available personnel to respond, response history, value and use of vehicles pumping under 1,000 GPM, and service territories.

This plan should be developed and documented in accordance with allocated tax dollars each year, in order to provide a full understanding of what apparatus will be purchased, when it will be purchased and what the tax impact will be.

Critical to the longevity, service ability, functional ability, and reliability is the maintenance of the apparatus. The apparatus in service today is in good repair with a few pieces of equipment considered nearing its replacement cycle. There are a couple of fundamental decisions that have to be made with regard to replacing fire apparatus. These decisions include:

- 1. What warrants replacement:
  - Age alone
  - Age coupled with level of performance
  - Performance only

The apparatus was found to be on a service/maintenance program by a "Certified Emergency Vehicle Technician" from Halo Fire Apparatus Maintenance. File information found that the maintenance is conducted and appropriate records are maintained in a paper file. The fire company is to be commended on this process. It is a current state of the art technique in managing costs associated with fire apparatus, managing the performance of the vehicles which are becoming more and more complicated to service, and providing a method to determine longevity of a vehicle to better define its replacement period. We do recommend however, that a computer database be established, as well as a single form (Appendix 7) to provide a "single snapshot" of when

maintenance is due, what repairs are recommended or conducted and what is expended. This will assist in the determination if apparatus is deteriorating or costing the district more than necessary in expense. Maintenance of the apparatus is the responsibility of the senior fire apparatus mechanic.

While conducting our assessment, we observed the annual fire pump, aerial ladder, hose line and ground ladder testing being conducted. Again, you are to be commended for using qualified vendors to conduct these tests in a timely fashion thus assuring optimum performance of the apparatus. In reviewing the apparatus equipment, the equipment was found to meet the actual needs of the department in fighting fires in the community.

With regard to apparatus replacement, your apparatus plan, with costs modified to projections by ESECG, was revised and is provided in Appendix 6. Discussions need to be held with Newtown Township regarding capital spending requirements for township protection and should be developed into a financial planning model.

#### **RECOMMENDATIONS**

# **Emergency Services**

- 08-09 Create and document a policy for replacement of fire apparatus and develop a theoretical 20year apparatus replacement and funding plan. The plan should be coordinated to determine available tax dollars to determine impacts upon the tax and budgeting process for the district.
- 08-10 A computer database should be developed to manage vehicle maintenance information for apparatus to provide an easy method of identifying expense by unit and purpose to assist in budgeting and replacement processes.

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# **Facilities**

The fire station was evaluated considering suitability and growth opportunities within the response district. The fire station conditions were rated subjectively, based on housekeeping, size of apparatus bays, existence of detection and suppression equipment ramp size, building maintenance and interior traffic conditions. Facilities are rated as being in GOOD overall condition.

The fire station, which houses the fire apparatus, offices, meeting hall and support facilities, was found to be typical for its age and use, suited for the type of operations occurring within the structure and generally, still state of the art in design.

A review of structures was also conducted for critical areas such as basic construction, maintenance and safety. As noted above, the facility was found to be well maintained and companies were operating safely within their stations despite the potential for crowdedness.

First, maintenance agreements were found to be in place for HVAC systems. The company should evaluate and obtain a service maintenance agreement for the back-up generators as well minimum. These systems are critical to sustaining operational use of the stations. Consistent with this, there should be routine assessments conducted of electrical, plumbing and roofing systems.

Secondly, a vehicle exhaust removal system is in place but not connected and thus, provides unknown value. Diesel and gasoline engine exhaust poses major long-term health problems and short-term acute illness problems. The installation of vehicle exhaust systems which capture the products at the vehicle exhaust duct, will reduce the level of risk to firefighters and reduce the build-up of exhaust on firefighter clothing, building components and other exposed items. Monthly evaluations of carbon monoxide production should be conducted by the officers, when apparatus is running in the station, to determine if the units in place are adequately protecting members from these harmful products of combustion. Appropriate recommendations follow.

#### **RECOMMENDATIONS**

- 08-11 Service maintenance agreements should be obtained for the back-up generator. Qualified contractors should be retained to evaluate electrical, plumbing and roofing systems every 3 years.
- 08-12 Vehicle exhaust removal systems should be evaluated monthly to determine a baseline of successful performance of the current exhaust units.

# **Standard Operating Procedures**

The project team found that the officers have a process in place to develop, implement and monitor the organization's standard operating guidelines. The format now being used is considered to be effective, including the indication of the date adopted, date reviewed, and date posted. The components of the standard operating procedure, including

- purpose
- scope
- responsibility
- safety
- definitions
- references and attachments, and
- guideline

Are comprehensive and consistent with the various training, implementation, performance, and monitoring components that standard operating guidelines should include.

The standard operating guidelines developed illustrate state of the art approaches to many issues. However, they exist in two different formats and exist in multiple manuals. The officers acknowledge that there are an extensive number and various types of standard operating guidelines to revise, develop and implement. The read and sign approach by all members is excellent approach to assuring members are aware of the updates and new guidelines implemented. The project team discussed several options (manual process, electronic applications, etc.) to accomplish this with the chief. These options should be considered and the most effective implementation process applied.

A master Table of Contents for Standard Operating Guidelines is developed and was made available to the project team. Where there may be over-riding guidelines in place (e.g. County accountability, rehabilitation, mayday and evacuation protocols), they should be simply adopted and inserted with a NSFC SOG cover sheet which references application of the County or other SOG. There was no specific developmental plan provided to the project team for review.

Standard Operating Guidelines serve several functions in today's emergency services. Not only do they provide an understanding of how certain activities are to be accomplished, but they establish basic training criteria. A more realistic plan, using member and officer involvement, needs to be established to review the existing Standard Operating Guidelines and begin the development of a set of standard operating guidelines.

In today's society it is essential that all emergency service organizations develop, adopt, and implement standard operating procedures and guidelines. The principal of public kindness is no longer acceptable practice. Concepts, such as sovereign immunity (individual vs. government) have been significantly limited and narrowed by the courts.

Many of the federal, state, and provincial laws allow for suits against individual leaders of emergency service organizations. Terms such as "duty of care," "breach of omission or commission," and "joint and several liability" are entering the vocabulary of emergency service personnel.

One important way to prepare for this challenge is to develop, adopt, and implement a comprehensive set of Standard Operating Procedures/Standard Operating Guidelines (SOP/SOGs.)<sup>3</sup>. Standard Operating Procedures/Standard Operating Guidelines are a fundamental safety practice, not only for emergency services, but business and industry as well.

During the process of compiling SOP/SOGs, the difference between these varied documents may become blurred. For instance, often the distinction between policy and procedure do not seem so clear. Policy is different from a SOP/SOG. All procedures and guidelines are based on an overriding policy. Policy should be viewed as the attitude, philosophy and intent of top management to the organization's personnel. It provides a framework and guidance to organization personnel in making decisions. To aid in the development of SOP/SOGs, understanding specific definitions of terms is essential.<sup>4</sup>

It is understood that the Authority Having Jurisdiction (AHJ), in this case the Newtown Square Fire Company, is responsible for granting approval or designating that responsibility for Standard Operating Procedures/Guidelines. As the organization grows, and when full-time staff would be in place, this level of oversight may not be necessary. There should be a process implemented to grant authority and responsibility for routine operational procedures and tasks to the career staff, following a process that requires member input, career staff development and finalization. Policy issues and administrative issues shall remain under the clear control, authority and responsibility of the fire company.

The breakdown of major sections of the SOG Manual is appropriate and should be modified as follows:

Section 1	Department Mission and Organization
Section 2	Administration
Section 3	Training and Education
Section 4	Risk Management and Personnel Safety
	(including Health, Wellness, infectious disease, & hazmat exposure control)
Section 5	Building Intelligence and Pre-plans
Section 6	Command, Control and Communications
Section 7	Incident Operations
Section 8	Hazardous Materials Operations
Section 9	Technical Rescue Operations
Section 10	Special Operations
Section 11	Fire Police Operations
Section 12	Fire Investigation
Section 13	Fire Prevention
Section 14	Apparatus Operations and Maintenance
Section 15	Equipment Operations and Maintenance
Section 16	Department Forms and Documents

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<sup>&</sup>lt;sup>3</sup> <u>Developing and Implementing SOP and SOG for Emergency Service Organizations</u>, VFIS, York, PA 2001, Page 2.

<sup>&</sup>lt;sup>4</sup> Ibid, Page 9

As a starting point, we suggest that four procedures be developed each month and reviewed. The following priority listing is provided for consideration in reviewing existing SOPs/SOGs and developing a related township-wide SOP/SOG.

Priority 1 – Policy Level Issues

Priority 2 – Operational Level Issues

Priority 3 – Administrative Level Issues

Priority 4 – Maintenance Level Issues (use manufacturer recommended documents)

Finally, as noted earlier there is no one document that establishes a strategic guideline that identifies and outlines some basic rules and principles that relate to the major areas of fire fighting strategy and subsequent fireground activity. The uniform application of this guideline will produce favorable fireground outcomes. This guideline is designed to offer a basis and simple framework for Newtown Square Fire Company fireground operations and command; it also represents many existing practices, and a defining of how this department is expected to perform during certain emergencies. A model guideline is provided in Appendix 4.

#### RECOMMENDATIONS

08-13 Continue the development of Standard Operating Procedures/Guidelines, using the existing procedure format and develop a prioritization for development and revision, using the information provided in this section as a guideline. It was discussed at several different levels in the organization, that the SOG's must be approved by the Newtown Square Fire Company.

## **Mutual/Automatic Aid**

The fire company uses a mix of mutual and automatic aid. The philosophies for the number and types of apparatus being deployed to calls and the related use of mutual and automatic aid is established by response grid. However, the mutual/automatic aid company may not respond or may respond with minimum personnel.

Mutual Aid agreements are in place through verbal agreements and the development of "run cards."

These types of agreements are considered to be challenging to understand what will be provided, when it will be provided and how it will be provided when assistance is requested or needed.

#### **RECOMMENDATION**

08-14 Newtown Square Fire Company should take the lead in advocating a more structured county-wide approach to mutual aid including the definition of responsibilities and liabilities for mutual aid involvement. A guiding document is provided under separate cover to assist in the enhancement of mutual aid agreement creation.

# **Response Times and Station Locations**

One of the analytical models which was part of this process involves an evaluation of station location in proximity to the location and types of calls for assistance. A study such as this can determine where additional stations can be located to meet service delivery demands. Using a standard model advanced by the Insurance Services Office for basic station location analysis, Newtown Square Fire Company was found to have a unique location for its station. While somewhat centered in the community, it is also landlocked to a great degree.

The Insurance Services Office process uses the approach for response time that road distance criteria for engines (1.5 miles), ladders (2.5 miles) and in Pennsylvania a maximum distance (5 miles) translates into response time. The distances are based on a formula developed years ago by the RAND institute, and uses the equation:

T = 0.65 + 1.7D

T = travel time in minutes

D = distance in miles

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The formula is based on an average 35 mph road speed, which is quite realistic for most areas considering road conditions and type, weather, intersections, traffic, etc. Mathematically, this converts to engines 3.2 minutes, ladders 4.9 minutes, and a maximum response distance of 9.15 minutes. It is easy to see that times much greater than these are pushing the limits of the fire department's ability to successfully control a fire (especially considering that these are only travel times, not dispatch and turnout time etc). It is very easy to see why for most states the Insurance Services Office has a maximum 5 road mile distance for which a protected class (class 1 through 9) will apply; and anything over 5 road miles is almost a known higher loss and insurance industry data supports that.

In analyzing the Insurance Services Office map, it is clear that the current station location is ideal from a pure response pattern approach, with the overwhelming majority of the community within 1.5 road miles. However, access to the station by volunteers, coupled with traffic congestion challenges, can make the time frames established by the ISO difficult to achieve.

Utilizing the Standard of Response Cover established within this document provides not only a more realistic consideration of what might be achievable, but it also is consistent with what can be provided in today's system.

Considering the Standard of Response Covers proposed, the entire Township of Newtown would be accessible within a reasonable period of time from the current location.

### **Miscellaneous**

The Newtown Square Fire Company has developed both an operating plan for 2007-2010 and a long range plan for the period 2006-2016. These represent exceptional foresight from the senior leadership team. The International Association of Fire Chiefs recently reported that over two-thirds of the fire departments in this country do not have a plan. Newtown Square is clearly ahead of the curve.

The operating plan not only provides a solid vision and mission for the organization, but illustrates a current need to balance the reduced level of volunteers with an increased demand for service due to demographic changes in the community.

However, before an immediate shift to career staffing occurs, the lack of response capability needs to be better documented, and the planning should be at least "two years out" to determine financial planning and operational impacts. For example, if tax rates need to change, if hiring must occur, if funding models or purchases have to occur, these all require time to analyze and integrate into the overall municipal system.

Secondly, if paid staffing ultimately comes from the current volunteer ranks, where will new volunteers come from and what must be done to avoid Fair Labor Standards Act conflicts? The cost estimates to operate a combination fire and rescue services are considered slightly lower than similar type communities, and the immediate expansion to eight, paid, full-time personnel may generate supervisory and operational challenges, which again, must be planned.

However, the approach of "Partnership for Change" is the ideal approach to take as Newtown Square Fire Company re-establishes a long-term partnership with Newtown Township to meet the "new Newtown Township of tomorrow."

These issues are of such importance that they are prioritized higher than other recommendations in this report.

## **Points of Discussion with Newtown Township Officials**

There are several service demand issues that will arise in the next three to seven years, based on the projected growth of the township. Assuming a growth of 23% in population (from 11,700 to 14,400) this would mean a potential increase of fire company responses of some 650 events per year. These increased responses would involve the following scenarios:

- Rescue demand will increase at a higher rate than population growth due to the age of customers and traffic congestion
- EMS demands will increase significantly due to the population growth and the age of the customer base
- Fire police services will increase to support overall demand for emergency services
- Firefighting demand (frequency of incidents requiring response) will increase with additional development

The company believes it is currently below critical mass in terms of trained personnel to respond to increasing numbers of incidents. Coupled with this is the difficulty in attracting volunteers, which will become more difficult due to demographic changes in the community. Finally, the continued increase in mandatory training will diminish volunteer availability.

The current station, built in the early 1960's is still serviceable, however it is landlocked with a limited footprint restricting vehicle parking by members during meetings, training, and emergency calls. Refurbishment in some fashion will be necessary during the next decade to meet expanding demands of the fire company.

There are five points for discussion that are used in other areas of southeastern Pennsylvania with success. The ultimate success may be a mix-and-match of full or partial integration of these methods, or some alternative. While being used as original talking points, the fact remains a partnership between the fire company and the township is the most attractive solution to the current challenge.

The five points for discussion are:

- resolve the current process of providing emergency medical services and conduct aggressive EMS billing to ensure steady cash flow to support services
- Determine a budgeting process that the township and fire company can effectively use to identify NEEDED funds for operational and capital spending plans that can be agreed to
- If necessary, work in conjunction with the Township to create a Capital Expenditure Tax (Fire Tax) that will support capital expenses
- Determine a process (Standard of Response Cover) to establish a monitoring tool to identify when career staffing (full or part-time) may be necessary
- Monitor community growth and continue to define new needs of the fire company and township to adequately protect the community, using annual planning sessions to accomplish this

A meeting was held with the principal consultant, fire chief, the township manager and two members of the board of supervisors to develop a strategic partnership between Newtown Township and the Newtown Square Fire Company to establish a jointly created plan for the provision of public safety.

As a result of this meeting it was advanced that:

- 1. the fire company would send a representative to monthly township board of supervisors meetings to report on fire company activities
- 2. a quarterly meeting will be held involving the fire chief, township manager and township supervisor(s)
- 3. a review of options for the provision of a QRS (quick response unit) for EMS within the township
- 4. development of an annual planning process for emergency service delivery with consideration to long term financing needs

Given the changes in the delivery of the services by the fire company in 2007 (no longer providing emergency medical services), a Public Relations plans is necessary to:

- manage conflicting information provided to the community
- illustrate the joint working relationship of fire company, township and advanced life support provider
- illustrate the value of the Newtown Square Fire Company
- recruit members

A first draft of that plan is provided as Appendix 8.

# **Recommendation Action Plan**

Based upon the input, findings and assessments conducted as part of this project, the assessment team provides the following recommendations. Each recommendation is provided with a problem statement and reason that it is a problem, and a solution. Where possible, a priority level is assigned, a projected completion time is provided, and if costs are foreseen, an estimate of that cost is provided.

The recommendations are submitted with the following considerations; the findings and improvement recommendations of the Insurance Services Office; state of the art best practices in risk assessment, standard of response cover, strategic planning; and practices and protocols defined within the reference documents for this project which are detailed in the references section of this report.

It must be recognized that the purpose of this process is to facilitate discussion and action on the problem. In reality, you may find alternative solutions which are more (or less) efficient, more (or less) costly, more (or less) politically expedient, take more (or less) time, and have more (or less) success. However, the fact that elected municipal officials, municipal administrative staff, and municipal fire and rescue service provider officers develop a consensus approach to managing the risks posed is the ultimate goal. The use of these recommendations as discussion and action points should assist you in achieving local progress in the management of fire and rescue services.

#### **ISSUE/PROBLEM**

Currently, there is no documented statement of what services and service levels are to be provided by the companies, as related to the needs and wants of the community. Understanding the parameters of the service to be provided and the related expectations from elected officials and members of the general public is critical to effective performance and the delivery of emergency services.

Without clarity regarding what services will be provided by whom, and when, will allow for multiple levels of standard of care and delivery, all of which could actually present both operational and risk management challenges for the municipality. The current approach has multiple mission and vision approaches for a single municipality, which may create service delivery conflict.

No standard of response cover exists for the community's fire protection system.

Without a standard of response cover defined, there is no true understanding and definition via "policy, procedure or guideline that determines the distribution, concentration and reliability of fixed and mobile response forces to fire, emergency medical service, hazardous materials, and other forces of technical response". Therefore decisions on level of service become arbitrary decision points, instead of being based on empirical evidence and rational discussion.

#### **SUGGESTED ACTION**

It is recommended to develop a statement of services which would indicate the types of services to be provided, the area to be covered, and the delegation of authority to perform those services. A model to accomplish this is provided in Appendix 1.

Develop a standard of response cover for use in Newtown Township as a method to define a service expectation the community will accept. Not only does the standard of response cover establish expectations of performance of the fire companies, it is a tool for evaluating and defining the agencies goals and objectives, determines the levels of service for all, or portions of a community, and measures an agency's performance over different budget or operational years. This process can further serve as a benchmarking "trigger point" for the decision making purposes of staff changes or additions.

#### PRIORITY - 1

TIME FRAME – 6 MONTHS

**COST – NONE ANTICIPATED** 

JUSTIFICATION/SUPPORT - NFPA STANDARD 1201, STANDARD FOR PROVIDING EMERGENCY SERVICES TO THE PUBLIC COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS, PA SENATE RESOLUTION 60 REPORT.

#### **ISSUE/PROBLEM**

A comprehensive community risk assessment identifying the needed services to Newtown Township does not exist.

The lack of a community risk assessment for fire and non-fire risks is critical to the development of needed resources to combat a fire or other emergency. These tools not only enable the community to determine its needs, but also to develop a comprehensive long term plan to manage both the activities and the costs.

# **Emergency Services**

#### SUGGESTED ACTION

Establish a process to assure a risk assessment and master plan is conducted for the community, which provides input and a basis for the development and implementation of the community's standard of response cover. The development process is best achieved by using the Commission on Fire Accreditation model for developing a Standard of Response Cover, which includes the risk assessment process.

#### PRIORITY - 2

#### TIME FRAME - 1 YEAR

<u>COST - \$10,000 POTENTIAL COSTS MAY BE PLANNED FOR, IN THE EVENT FIRE COMPANY AND FIRE MARSHAL STAFF CANNOT ACCOMPLISH THIS TASK.</u>

JUSTIFICATION/SUPPORT – NFPA 1201 STANDARD FOR PROVIDING EMERGENCY SERVICES TO THE PUBLIC and COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS.

#### **ISSUE/PROBLEM**

The fire company has an extensive array of standard operating guidelines, however, a strategic guideline which offers a framework for combating fire and dealing with emergencies both offensively and defensively, should be used as a foundation document in their approach to managing emergencies.

#### **SUGGESTED ACTION**

An operational strategic guideline should be developed that outlines some basic rules and principles that relate to the major areas of fire fighting strategy and subsequent fireground activity. The uniform application of this guideline will produce favorable fireground outcomes. A draft copy is provided in Appendix 4.

All Standard Operating Guidelines should be web-based to allow for easy staff reference.

#### PRIORITY – 1

TIME FRAME – 3 MONTHS

**COST - NONE ANTICIPATED** 

JUSTIFICATION/SUPPORT – NFPA STANDARD 1720 STANDARD FOR THE ORGANIZATION AND DEPLOYMENT OF FIRE SUPPRESSION EMERGENCY MEDICAL OPERATIONS, AND SPECIAL OPERATIONS TO THE PUBLIC BY VOLUNTEER FIRE DEPARTMENTS.

#### **ISSUE/PROBLEM**

Outside of the procurement of insurance, a comprehensive risk management plan does not exist. This provides an inability to fully understand the personal and organizational risks to which the organization and members are exposed.

A compilation was made of current known risk issues where insurance or some similar financial protection was provided.

#### **SUGGESTED ACTION**

Expand the current Risk Management Plan to address the control and financing of risk; outside the purchase of insurance. A model format to use in the development of this process will be provided outside the contents of this document.

#### PRIORITY - 2

TIME FRAME – 9 MONTHS

COST - TO BE DEVELOPED, BASED ON THE RISK IDENTIFIED

JUSTIFICATION/SUPPORT - NFPA 1201 STANDARD ON PROVIDING EMERGENCY SERVICES TO THE PUBLIC, NFPA 1250 EMERGENCY SERVICE ADMINISTRATIVE RISK MANAGEMENT, and THE COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS.

#### **ISSUE/PROBLEM**

There is no definition of, and no one is responsible for overall information technology, which should be coordinated in the chief's office.

#### SUGGESTED ACTION

The information technology (IT) function for the organization should be consolidated in the administrative function of the organization as a process that provides data to all facets of the fire company. The overall IT function should be controlled by the President and support all aspects of the organization, including:

- Fire inspection management and record keeping Education & Consulting Group
- Pre-emergency planning
- Permit issuance
- Accounts payable and receivable
- Personnel information
- Apparatus maintenance
- Building maintenance
- Incident reporting
- Training information
- Training programs
- Miscellaneous use by members (including training, games & web access), and should include a security component prevent both unauthorized use and inappropriate use of the IT system.

#### <u>PRIORITY – 2</u>

#### TIME FRAME – 6 TO 9 MONTHS

COST – NONE ANTICIPATED, HOWEVER, LONG TERM THERE IS THE POTENTIAL FOR THIS TO BECOME EITHER A PART-TIME POSITION FOR A CAREER PERSON, OR A NEW CAREER POSITION

JUSTIFICATION/SUPPORT – NFPA 1201 STANDARD ON PROVIDING EMERGENCY SERVICES TO THE PUBLIC, NFPA 1250 EMERGENCY SERVICE ADMINISTRATIVE RISK MANAGEMENT, VFIS TEXT "MANAGING VOLUNTEER AND COMBINATION EMERGENCY SERVICE ORGANIZATIONS", and THE COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS.

#### **ISSUE**

Pre-emergency plans have not been conducted for all major facilities and target hazards.

#### **PROBLEM**

Without a predefined plan to handle emergencies, hazards and resource needs cannot be planned for, offering the potential for greater than expected losses. While some preplanning is conducted and some plans are available, a more consistent feeding of information from the fire marshal's office to the fire chief, including the development of appropriate plans, photos, data sources, etc. will enhance this planning effort and ultimately improve efficiency and performance at emergencies.

# Emergency Services Education & Consulting Group

#### **SUGGESTED ACTION**

Develop a process for the development, distribution, and training of pre-emergency plans for target locations as identified in the risk assessment process. This should include water supply information, as well as a hydrant out-of-service notification process. The fire marshal's office should serve as an integral part of this process.

#### PRIORITY - 3

#### TIME FRAME – 18 MONTHS

<u>COST - \$10,000 PER YEAR FOR OUTSIDE CONSULTING SERVICES OR TO INCREASE STAFF CAPABILITY.</u>

JUSTIFICATION/SUPPORT - COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS, AND NFPA STANDARD 1720 STANDARD FOR THE ORGANIZATION AND DEPLOYMENT OF FIRE SUPPRESSION EMERGENCY MEDICAL OPERATIONS, AND SPECIAL OPERATIONS TO THE PUBLIC BY VOLUNTEER FIRE DEPARTMENTS.

#### **ISSUE/PROBLEM**

There is no structured approach to recruitment and retention of fire company members.

People are the most valuable resource to any emergency agency, volunteer or career. Without people, apparatus cannot respond and incidents cannot be handled. The program must be developed based on what members want as benefits or incentives, what members value in the organization and effective leadership.

#### **SUGGESTED ACTION**

Develop and implement a comprehensive approach to the recruitment and retention of an adequate force of competent fire and rescue service personnel. Coupled with this should be minimal criteria for membership.

#### PRIORITY – 2

<u>TIME FRAME - 12 MONTHS FOR DEVELOPMENT AND 24-36 MONTHS FOR IMPLEMENTATION.</u>

COST - \$0 IN YEAR 1. \$30,000 PER YEAR IN 2<sup>ND</sup> AND 3<sup>RD</sup> YEARS, \$0 IN FIRST YEAR

JUSTIFICATION/SUPPORT - USFA REPORT "RECRUITMENT AND RETENTION PRACTICES FOR VOLUNTEER EMERGENCY SERVICE ORGANIZATIONS, COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS, AND US FIRE ADMINISTRATION AND NATIONAL VOLUNTEER FIRE COUNCIL PROGRAMS WHICH HAVE DEMONSTRATED SUCCESS..

#### **ISSUE/PROBLEM**

Personnel, training, health, and operational data are all critical to effective performance of a fire company. The lack of consistent data and its accessibility creates challenges and conflicts to efficient operation of companies.

#### **SUGGESTED ACTION**

Develop a standardized set of data and documents to be maintained for each member, by each company. This should include, as a minimum, an application, physician's release to perform firefighter duties, training information, driver license, working papers, etc., as deemed appropriate. Sample information and forms are provided in VFIS safety and management forms which are forwarded under separate cover.

#### PRIORITY - 2

TIME FRAME – 12 MONTHS

**COST - NONE ANTICIPATED** 

JUSTIFICATION/SUPPORT – COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS. **NFPA** 1720 **STANDARD FOR** THE **STANDARD** ORGANIZATION AND DEPLOYMENT **FIRE EMERGENCY** OF SUPPRESSION MEDICAL OPERATIONS, AND SPECIAL OPERATIONS TO THE PUBLIC VOLUNTEER FIRE DEPARTMENTS, NFPA STANDARD 1201 STANDARD FOR PROVIDING EMERGENCY SERVICES TO THE PUBLIC, AND USFA/NVFC **PROGRAMS** 

#### **ISSUE/PROBLEM**

Create and document a policy for replacement of fire apparatus and develop a theoretical 20-year apparatus replacement and funding plan. The plan should be coordinated to determine available tax dollars to determine impacts upon the tax and budgeting process for the district.

Without such a plan, the potential costs for replacing equipment, coupled with the income stream to meet the financial need, are not available for implementation. Attached with this document is a long-term capital planning chart which illustrates an approach to a 20-year apparatus replacement plan.

#### SUGGESTED ACTION

Create a philosophy for replacement of fire apparatus and major equipment, and develop a theoretical 20-year apparatus replacement plan. The plan should be coordinated with the Township Finance Official to determine available tax dollars that may be used and to determine impacts upon the tax and budgeting process for the township. Criteria including age, use and maintenance are just some of the elements to a capital replacement program.

#### PRIORITY - 2

TIME FRAME - 12 MONTHS TO DEVELOP, 20 YEARS TO COMPLETE

#### **COST – \$0 TO DEVELOP THE PLAN**

JUSTIFICATION/SUPPORT – PENNSYLVANIA SENATE RESOLUTION 60 COMMISSION REPORT, COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS, AND NFPA STANDARD 1201, STANDARD FOR PROVIDING EMERGENCY SERVICES TO THE PUBLIC.

#### **ISSUE/PROBLEM**

While there are structured preventative maintenance plans for apparatus the data is maintained in hard paper copy in files in the district office. While the recordkeeping needs are being met, the efficiency could be improved.

#### SUGGESTED ACTION

A computer data base should be developed to manage vehicle maintenance information for apparatus to provide an easy method of identifying expense by unit and purpose to assist in budgeting and replacement processes.

#### PRIORITY - 1

<u>TIME FRAME - DEVELOP USING AN EXCEL TYPE SPREADSHEET AND BEGIN</u> WITH NEXT REPAIR

#### **COST - \$0**

JUSTIFICATION/SUPPORT – COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS, AND NFPA STANDARD 1901 STANDARD FOR MOTORIZED FIRE APPARATUS.

#### **ISSUE/PROBLEM**

There are no reported structured maintenance plans for major fire station infrastructure items, such as HVAC units, back-up generators etc.

Failure to maintain major fire station infrastructure equipment will result in poor performance and mechanical failure.

Emergency Services
Education & Consulting Group

#### **SUGGESTED ACTION**

Service maintenance agreements should be obtained for HVAC units and back-up generators. Qualified contractors should be retained to evaluate electrical, plumbing and roofing systems every three (3) years.

#### PRIORITY - 2

TIME FRAME – 9 to 12 MONTHS FOR 2009 BUDGET

COST - \$7,500

JUSTIFICATION/SUPPORT - NFPA STANDARD FOR COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS AND NFPA STANDARD 1201 STANDARD FOR PROVIDING EMERGENCY SERVICES TO THE PUBLIC.

#### **ISSUE/PROBLEM**

When vehicles are started, there is an exhaust system in place, but it does not capture contaminants at the source, to quickly and efficiently remove the vehicle exhaust from the area. Individuals then breathe this contaminated air while accessing their protective equipment and vehicles.

Diesel and gasoline exhaust produce known carcinogenic products and carbon monoxide which can contaminate firefighter clothing and personally harm them.

#### **SUGGESTED ACTION**

Vehicle exhaust removal systems should be evaluated monthly (by taking carbon monoxide readings when engines are started) to determine a baseline of successful performance of the current exhaust units.

Vehicle exhaust removal systems should be installed to discharge toxic exhaust from the buildings. It is recommended that the three companies collectively submit a grant for funding of this equipment through the Assistance to Firefighters Grants program.

#### PRIORITY - 3

TIME FRAME – 36 MONTHS to 72 MONTHS

COST – APPROXIMATELY \$130,000

<u>JUSTIFICATION/SUPPORT - NFPA STANDARD 1500, STANDARD FOR FIREFIGHTER OCCUPATIONAL SAFETY AND HEALTH.</u>

#### **ISSUE/PROBLEM**

Is an extensive plan to develop and implement Standard Operating Guidelines, however, the plan may be inconsistent with the ability of the members to absorb and apply the information.

#### SUGGESTED ACTION

Continue the development of Standard Operating Procedures/Guidelines, using the existing procedure format and develop a prioritization for development and revision, using the information provided in this section as a guideline.

#### PRIORITY – 1

TIME FRAME – 6 MONTHS

**COST – NONE ANTICIPATED** 

JUSTIFICATION/SUPPORT - COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS, AND NFPA STANDARD 1720 STANDARD FOR THE ORGANIZATION AND DEPLOYMENT OF FIRE SUPPRESSION EMERGENCY MEDICAL OPERATIONS, AND SPECIAL OPERATIONS TO THE PUBLIC BY VOLUNTEER FIRE DEPARTMENTS.

#### **ISSUE/PROBLEM**

Mutual aid plans are in place, but are not formalized.

#### SUGGESTED ACTION

Newtown Square Fire Company should take the lead in advocating a more structured county-wide approach to mutual aid including the definition of responsibilities and liabilities for mutual aid involvement. A guiding document is provided under separate cover to assist in the enhancement of mutual aid agreement creation.

Emergency Services
Education & Consulting Group

#### PRIORITY - 3

TIME FRAME - 36 MONTHS

**COST – NONE ANTICIPATED** 

JUSTIFICATION/SUPPORT - COMMISSION ON FIRE ACCREDITATION SELF-ASSESSMENT PROCESS, AND NFPA STANDARD 1720 STANDARD FOR THE ORGANIZATION AND DEPLOYMENT OF FIRE SUPPRESSION EMERGENCY MEDICAL OPERATIONS, AND SPECIAL OPERATIONS TO THE PUBLIC BY VOLUNTEER FIRE DEPARTMENTS.

# **APPENDICES**

- APPENDIX 1 Municipal Fire and EMS Service Delivery Model
- APPENDIX 2 Training Requirements and Officer Qualifications by Position
- APPENDIX 3 NFPA Standard 1720 Self Assessment / SWIMMS Grown
- APPENDIX 4 Strategic Guidelines for Emergency Operations
- APPENDIX 5 Insurance Service Office Evaluation Summary
- APPENDIX 6 Apparatus and Major Equipment Replacement Chart
- APPENDIX 7 Vehicle Assessment Form
- APPENDIX 8 Newtown Square Fire Company Public Relations Plan
- APPENDIX 9 Sample Pre-Emergency Planning Form
- APPENDIX 10 Risk Assessment by Planning Zone Sample Report
- APPENDIX 11 Newtown Square Fire Company Recruitment & Retention Program
- APPENDIX 12 Risk Management Plan
- APPENDIX 13 Fire Station Inspection Form
- APPENDIX 14 Consulting Team
- APPENDIX 15 References



# MUNICIPAL FIRE AND EMERGENCY MEDICAL SERVICE DELIVERY MODEL

#### MUNICIPAL FIRE/EMS SERVICE DELIVERY CHART

Based upon a meeting of the undersigned, this summary chart identifies the primary provider of services to the community.

Fire Suppression\*

NEWTOWN SQUARE FIRE COMPANY

Hazardous Materials – Awareness Level NEWTOWN SQUARE FIRE COMPANY

Hazardous Materials – Operations Level NEWTOWN SQUARE FIRE COMPANY

Fire Police NEWTOWN SQUARE FIRE COMPANY

Rescue (vehicle, elevator, light entrapment) NEWTOWN SQUARE FIRE COMPANY

Confined Space Rescue

LENNI HEIGHTS FIRE COMPANY

Trench Rescue <u>LENNI HEIGHTS FIRE COMPANY</u>

Technical (structural collapse) Rescue <u>LENNI HEIGHTS FIRE COMPANY</u>

Water Rescue MEDIA & CHESTER HEIGHTS FIRE COS

Wilderness Rescue NOT APPLICABLE

High Angle Rescue <u>LENNI HEIGHTS FIRE COMPANY</u>

Basic Life Support – EMS <u>MARPLE EMS</u>

Advanced Life Support – EMS MARPLE EMS

Terrorism Response DELAWARE CO. HAZMAT TEAM &

**SHERIFF'S DEPARTMENT** 



# TRAINING REQUIREMENTS BY POSITION AND OFFICER QUALIFICATIONS

# Newtown Square Fire Company Training Requirements by Position (Recommended)

	HM Awareness	HM Operations	Infection Control	Firefighting I	Firefighting II	CPR/AED	SMIN	Fire Officer I (or equivalent)	EVOC	Annual MVR Check	Vehicle Extrication**	Confined Space Awareness	Trench Rescue Awareness		Fire Police Vehicle Training	EMT-B	Pump Operation	Aerial Operations	Qualified App. Operator	Basic Fire Police
Chief	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	-	-	Χ	Χ	Χ	Χ	-
Assistant Chief	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	X	X	X	_	_	X	X	Х	Х	-
Battalion Chief	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	_	_	_	Х	Х	Х	_
Captain	Х	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Х	Χ	Χ	Χ	-	-	-	Х	Χ	Χ	-
Lieutenant	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	-	-	-	Χ	Χ	Χ	-
Senior Firefighter	Х	Х	Х	Х	Х	Х	Х	-	Х	Х	Х	Х	Х	_	-	-	-	-	-	_
Firefighter	Χ	Χ	Χ	Χ	-	Χ	Χ	-	Χ	Χ	Χ	Χ	Χ	-	-	-	-	-	-	-
Probation Firefighter*	Х	-	Х	_	-	-	-	-	Х	Х	-	Х	Х	-	-	_	_		-	-
Apparatus Operator	Х	-	Х	-	-	Х	Х	-	Х	Х	_	-	-	-	-	-	Х	Х	Х	-
Fire Police	Χ	Χ	Χ	-	-	Χ	Χ	-	Χ	Χ	-	-	-	-	Χ	-	-	-	-	Χ

<sup>\*</sup> Recruit orientation program

NOTE: Anyone may be responsible for a task that may be within the ICS and should be understanding of the system. ICS is required by NIMS (IC 100, IC 200, IC 700).

NOTE: Physical exams required as denoted by age.

NOTE: Fire Officer I Equivalent includes: Tactics and Strategy, INSTRUCTOR Supervision classes

<sup>\*\*</sup> If member responds to these type calls, they must have this training

# **Newtown Square Fire Company Officer Requirements by Position**

Emergency  Education & Con	Fire Service Experience (YRS)	Twp. Company Experience (YRS)	Newtown Township Resident**	Minimum Age
Chief**	7	5	Χ	25
Assistant Chief**	5	3	Χ	24
Battalion Chief**	3	3	Χ	23
Captain	2	2	Χ	22
Lieutenant	2	2	Χ	21
Senior Firefighter	1	2	-	21
Firefighter	1	1	-	18
Probation Firefighter	0	0	-	18***
Apparatus Operator (cease driving at age 70)	1	1	-	21*
Fire Police	0	0	Χ	18

<sup>\* 18</sup> Years of Age for vehicles under 10,000GVW

<sup>\*\*</sup> A chief officer must serve one year as a lieutenant, and residency requirement is within 2.5 miles of Newtown Township.

<sup>\*\*\*</sup> Junior firefighters may be younger than 18 but, must meet PA child labor law requirements



NFPA 1720 SELF-ASSESSMENT
STANDARD FOR THE ORGANIZATION AND
DEPLOYMENT OF FIRE SUPPRESSION,
EMERGENCY MEDICAL OPERATIONS, AND
SPECIAL OPERATIONS
TO THE PUBLIC,
BY VOLUNTEER FIRE DEPARTMENTS

#### NFPA 1720

# STANDARD FOR THE ORGANIZATION AND DEPLOYMENT OF FIRE SUPPRESSION, EMERGENCY MEDICAL OPERATIONS, AND SPECIAL OPERATIONS TO THE PUBLIC BY VOLUNTEER FIRE DEPARTMENTS.

This standard was developed to identify minimum requirements relating to the organization and deployment of fire suppression operations, emergency medical operations, and volunteer fire departments. Approximately three of every four fire departments in the United States is volunteer, therefore this standard as well as related practices (accreditation, certification, etc.) have a profound effect on the direction of the volunteer fire service.

The standard does NOT include Fire Prevention, Community Education, Fire Investigations, Support Services, Personnel Management, and Budgeting.

This standard may, in the minds of some, create a benchmark to aspire and plan to, to others, it represents a minimum baseline. To others it will serve as an expectation that contracted services must meet or plan to meet. In reality the standard will mean different things to different entities because a key section indicates, "The Authority Having Jurisdiction determines if this standard is applicable to their fire department".

Therefore, the first question to ask and resolve is whether or not the Authority Having Jurisdiction (AHJ) will use/apply the standard. The AHJ will vary by municipality/district/etc. applying this standard.

The next step is to determine how the organization meets the "substantially volunteer" definition. There is no defined calculation method or model; thus, you may establish your criteria based on:

- Number of volunteers versus number of paid staff.
- Hours contributed by volunteers versus number of hours worked by paid staff.
- Average response (number of persons) by volunteer staff versus paid staff, or any similar calculations process.

It should also be recognized that this standard recommends a predefined approach in some cases, where an "equivalency" may occur locally. If there is an equivalency, documentation of how that is achieved is warranted. There is an intent in this standard to enhance effectiveness and efficiency, even though they may not be compatible at all times. The intent of this guide and your evaluation and assessment should be to determine gaps and establish a plan to close those gaps over time.

As you review the NFPA 1720 document and this implementation guide you will quickly notice that there are enhanced expectations for volunteer units in organization, communication, planning documentation and scheduling; in some ways being modeled after career services. These can be narrowed to six key critical criteria, in addition to defining the level and type of services to be provided; as well as assuring a training program is in place to achieve performance competency.

Completing this self review is simple and straight forward. In order to help ensure accuracy, it is advisable to utilize the actual NFPA 1720 document in conjunction with the self review. This document is designed to assist departments in understanding and initiating the review process to determine key areas requiring action by the fire department. Many of these components can be achieved in a variety of ways. It is up to each agency to determine how achievement is measured. Simply indicating compliance with this document does not validate compliance. Appropriate support detail must be collected and maintained, and assurance made that any related references within the standard are complied with.

This matrix is not intended to replace or assure compliance with NFPA 1720, The Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2001 Edition).

#### Additional NFPA Standards Referenced:

- ✓ NFPA 1500 Standard on Fire Department Occupational Health and Safety Program
- ✓ NFPA 472 Standard for Professional Competence of Responders to Hazardous Materials Incidents
- ✓ NFPA 1561 Standard on Emergency Services Incident Management Systems
- ✓ NFPA 1221 Standard for the Installation, Maintenance, and Use of Emergency Service Communications Systems
- ✓ NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs
- ✓ NFPA 1620 Recommended Practice for Pre-Incident Planning

Emergency Services
Education & Consulting Group

A copy of the entire document can be obtained from:

National Fire Protection Association

1 Batterymarch Park
P.O. Box 9101
Quincy, MA 02269-9101

#### **Instructions for the Assessment Process**

This assessment process has ten (10) components:

- 1. Thoroughly read and review this document, and preferably NFPA 1720 as well, prior to taking any action or making any assessment. Obtain appropriate advice or counsel before beginning the assessment.
- 2. Complete the "Definition Assessment" and the NFPA 1720 "Critical Criteria Assessment" sections. Note any deficiencies or items of concern in the "Summary Statement" section.
- 3. Read each survey component item.
- 4. Review the appropriate fire department document, procedure, operation, practice, etc. which applies to the survey component item. (suggested review items are indicated in the notes section)
- 5. In the notes section of the evaluation guide, indicate any applicable documents, processes, etc.; that demonstrates achievement of the component item.
- 6. Attempt to both document (D) and observe (O) achievement/compliance. This process completion should be noted by your marking by a check (✓ or X or circle) the D (documented), and O (observed) portions of each survey component item.
- 7. Use your best judgment to determine if the fire department
  - A Achieved PA Partially Achieved FA Failed to Achieve The intent of each component. Indicate your grading on the appropriate survey component section <u>and</u> the summary page. Indicate any action required in the appropriate page of the summary.
- 8. Based upon your assessments, provide an overall assessment of how you believe the organization has achieved, partially achieved, or failed to achieve the intent of NFPA 1720. Provide substantiation statements to support your rating.
- 9. Transfer any "actions required" from the summary page to the "Action Plan" page, assigning the responsibility for completion to an appropriate person, and prioritize the action required.
- 10. Monitor the action plan on a monthly basis and incorporate, as needed, items into the annual and strategic plan; monitoring and modifying them on an annual basis.

The process should be done with all officers present and involved. Completion should take approximately 12 hours.

# **NFPA 1720 Definition Assessment**

• • • • • • • • • • • • • • • • • • • •
Authority Having Jurisdiction has indicated whether or not the standard applies to the first department Yes _X_ No
Authority Having Jurisdiction Township of Newtown
(if Fire Chief is AHJ what higher level authority has concurred)
Person  Emergency Services  Education & Consulting Group
Education & Consuming Group
Organization has indicated and documented why it is classified under NFPA 1720. (Predominately volunteer) X YesNo
The Newtown Square Fire Company is staffed by volunteers 100%. (24 Hours a day, 365 days a
year)

# NFPA 1720 - Critical Criteria Assessment

Minimum critical criteria
Department's organizational, operational and deployment procedures must be in writing and issued to members.
X Yes Partial No Demonstrated via Standard Operational Guidelines in use.
The department is involved in developing a community risk management plan. Such a plan requires coordination with law enforcement, emergency management, EMS, Hazmat, and related agencies. YesX_No
The department identified minimum staffing levels to ensure that a sufficient number of members are available to operate safely and efficiently.  _X_YesNo
The response to an incident shall be based on risk analysis and pre-fire planning based on specific location or incident.  _X_Yes PartialNo

The department has defined that personnel responding to fires and other emergencies be organized into company units or response teams and shall have appropriate apparatus and equipment.

X Yes		No					1	_	
the unit.	device.	when	responding on e	emergen	cies, all r	nembers (	operate un	ider the cla	assification of

The fire department is classified as: (4.3.2\*)

<b>Demand Zone</b>	Demographics	Staffing & Response Time	Percentage	
Special Risks	АНЈ	АНЈ	90%	
Urban	>1000 population /mi <sup>2</sup>	15/9	90%	
Suburban	500-1000 people/mi <sup>2</sup>	10/10	80%	
Rural	<500 people/mi <sup>2</sup>	6/14	80%	
Remote	Travel dist. ≥ 8 mi	4	90%	

The department has the capability, upon assembling the necessary resources, to safely initiate an initial attack within 2 minutes, 90 percent of the time.

X Yes \_\_\_No Demonstrated via: Building response orders ensure sufficient

manpower is on scene within the first ten (10) minutes of the fire.

The department has a training program to cover each component of operations. Indicate for each the programmatic requirement:

Firefighting	X	
EMS (levelBLS)	X	1
HazMat (level – R&I)	X	
Rope Rescue		N/A
Water Rescue		N/A
Trench/Collapse Rescue		N/A
Confined Space Rescue		N/A
Extrication Rescue	X	
Air/Sea Rescue Emergency Service	S	N/A
USAR-Light Education & Consulting	G	N/A
SWAT		N/A
Fire Police	X	
Public Service/Assistance	X	
Fire Prevention	X	

	NFPA 1720 E	NFPA 1720 Evaluation Checklist	
	Survey Component	Notes	
	Organization, Operation & Deployment	Chapter 4	
	Fire Suppression Organization (4.1* <sup>5</sup> )		
	Are fire suppression operations (ops) organized to ensure the fire department's (FD)	SOP (dispatch/response/ manning/aid-automatic/mutual)  Mission statement	Attains
	resources to efficiently, effectively & safely deploy fire suppression resources? (4.1*)		Documented
	Has authority having jurisdiction (authority) promulgated <sup>6</sup> the FD's organizational, operational,	<ul><li>✓ Municipal operating statement/statute</li><li>✓ SOP manual</li></ul>	Fails to Attain
71	& deployment procedures with written regulations, orders and standard operating procedures (SOP's)? (4.1.1*)	AHJ (board) adopts each by resolution	Not Documented
m	Do FD SOP's clearly state succession of command responsibility? (4.1.1.1*)	<ul><li>✓ Organization chart</li><li>✓ Job description</li><li>✓ ICS SOP</li></ul>	Attains
			Documented

 $^{5}$  \* - An asterisk denotes that there is additional explanatory information in "Annex A" which follows the text of NFPA 1720  $^{6}$  Promulgate – defined as to put into operation by formal proclamation

	Community Risk Management (4.2*)		
	The fire department shall participate in a process that develops a community fire and emergency medical services risk management plan (4.2*)	Plan SOP(s) Standard of response cover document	
	The enecific role of the fire denartment and other	Relation to code enforcement	Fails To
4	responding agencies shall be defined by the community risk management plan (4.2.1)		Attain
	The number and type of units assigned to respond		
	to a reported incident shall be determined by risk analysis and/or pre-fire planning (4.2.2*)		
	Has FD participated in development of a	Plan	
	regarding associated risks with storage, use, & transportation of hazardous materials (hazmat)?	Hazmat SOP (handled by outside service)  Technical rescue SOP	Fails to Attain
w	(4.2.3.1) Eaucation &	LEPC relation (1000)	
	Does plan define role of FD and other agencies for hazmat ops mgmt as well as including other special ops? (4.2.3.2)		

	Survey Component	Notes	
	Fire Suppression Organization		
9	Has FD Identified minimum staffing requirements that ensure sufficient number of members are available to operate safely and efficiently? (4.3.1)	SOP – response/safety/RIT Standard of response cover	Partially Attains
7	Table 4.3.2 indicated in Critical Criteria Assessment 11 completed by AHJ to determine staffing and response time capabilities, and the federal accomplishment for reporting purpose (4.3.2*)	Table completed in Critical Criteria Assessment Community risk profile Standard of response cover	Partially Attains
	After assembling necessary resources at emergency scene, does FD have the capability to safely initiate the initial attack within 2 minutes 90 percent of the time? (4.2.2.1)	Sop    Sop   Sopration   Sopra	Documented
<b>∞</b>	Are FD personnel responding to emergencies:  1. Organized into company units or response teams?  2. Equipped with appropriate apparatus & equipment? (4.3.3*)	<ul> <li>X Organizational chart</li> <li>X SOP - response/POV</li> <li>X Inventory records</li> </ul>	Attains  Documented  Observed
6	Do standard response assignments (including mutual aid response & mutual aid agreements) predetermined by location, & nature of reported emergency regulate the dispatch of companies, response groups and command officers to emergency incidents? (4.1.7*)	☐SOP – response  Run cards/dispatch guidelines  Any written agreements  Needs updating	Partially Attains Documented
10	Does FD maintain standard reports for each response that contains: 1. Nature? 2. Location? 3. Description of ops performed? 4. Identification of members responding? (4.4.1*, 4.4.1.1, 4.4.1.2))	✓ Incident report	Attains

	Fails to Attain	Fails to Attain		
	Summary report Comparison report to SORC Report by demand zone SOP – response Run cards/dispatch guidelines Any written agreements	Quadrennial Reports Demand Zone charts/reports Strategic Plan (reference/concept) SOP - response Run card/dispatch guidelines Any written agreements		
Annual Evaluation (4.4.2)	Does the fire department evaluate its level of service and deployment delivery and response time objective on an annual basis? (4.4.2.1)  Annual evaluation shall be based on data relating to level of service, deployment, and the achievement of each response time objective in each demand zone within the jurisdiction of the fire department. (4.4.2.2)	Does the fire department provide the AHJ with a written report, quadrennially, that shall be based on annual evaluations required by (4.4.3.1)?  Does the report explain the predictable consequences of identified differences and address steps within a fire department strategic plan necessary to achieve compliance? (4.4.3.2)	Standard response assignments and procedures, including mutual aid response and mutual aid agreements predetermined by location and nature of reported incident, shall regulate dispatch of companies, response groups, and command officers to fires and other emergency incidents.	

12

11

	Survey Component	Notes	
	Fire Suppression Operations (4.5)		
13	Do SOP's require one individual assigned as the incident commander (IC)? (4.5.1*)	⊠ SOP – ICS	Attains
	~		Documented
14	Do SOP's require the assumption of command to be communicated to all units involved in the incident? (4.5.1.1*)	⊠ SOP – ICS	Attains
15	Do SOP's require the IC to be responsible for overall coordination & direction of all activities for the duration of incident? (4.5.1.2)	)I – I	Attains
	Emerg	incy Services	Documented
16	Do SOP's require the IC to ensure an accountability system is immediately established to ensure rapid accounting of all on-scene personnel? (4.5.1.3)		Attains
17	Do SOP's require the company officer/crew leader to be aware of the identity, location, & activity of each member assigned to the company at all times? (4.5.2)	<ul><li></li></ul>	Attains
18	Do SOP's require the company members to be aware of the identity of the company officer/crew leader? (4.5.2.1)	SOP  Accountability system  Training records	Attains

	Survey Component	Notes	
	Initial Attack (4.6)		
19	Are orders to crewmembers, particularly verbal & those at emergency scenes transmitted through the company officer? (4.5.2.2)	⊠ SOP Attains	
		Observed	
20			
	(4.9.1.7)	Documented	
21	Do two members work as a team while in Emerge hazardous area? (4.6.2)	SOP Attains    X Incident reports   Consulting Group	
		Documented	_

	Survey Component	Notes	
	Do SOP's provide for the assignment of two members outside of hazardous area to assist or rescue team operating within the hazardous area?	⊠ sop	Partially Attains
52	<ol> <li>One of these rescue team members is permitted to engage in other activities (4.6.3)</li> <li>Members performing critical tasks that if abandoned to perform rescue, would endanger any firefighter operating at the</li> </ol>	SOP	
	incident are prohibited from assignment to the two-person rescue team (4.6.4)		Documented
23	Where immediate action could prevent loss of life or serious injury, are initial attack ops organized to ensure that first arriving attack personnel who find an imminent life-threatening situation take appropriate action (even with less than 4 personnel on-scene) in accordance with NFPA 1500 <sup>7</sup> ? (4.6.5)	SOP Incident reports for accidents	Attains

 $<sup>^{7}\,\</sup>mathrm{NFPA}$  1500 – Standard on Fire Department Health and Safety Program

	Survey Component	Notes	
24	Beyond the capability of the initial attack, can FD provide for sustained ops including:  1. Fire suppression? 2. Search & rescue? 3. Forcible entry? 4. Ventilation? 5. Preservation of Property? 6. Accountability of personnel? 7. Dedicated rapid intervention crew (RIC)? 8. Support activities beyond capabilities of initial attack? (A.6.6)	<ul> <li>SOP – response</li> <li>Automatic aid agreement</li> <li>(Run cards – no written agreement)</li> <li>Documented</li> </ul>	uins nented
	Intercommunity Organization (4.7)		
25	Are mutual aid, automatic aid and other fire protection agreements in writing and complete and include issues such as:  1. Liability for deaths and injuries? 2. Disability retirements? 3. Cost of services? 4. Authorization to respond? 5. Staffing and equipment? 6. Resources made available? 7. Designation of incident commander (IC)? (4.7.1*)	SOP Fails to  Dispatch center procedure  Agreements written  Training records  Documented	ain ain nented
26	Are procedures and training of personnel for all FD's involved in agreements sufficiently comprehensive to produce an effective fire force and insure uniform operations? (4.7.2)	SOP Fails to Training records Attain	ls to ain

	Survey Component	Notes	
	Are units responding to mutual aid incidents equipped with communications equipment to	<ul><li></li></ul>	tains
27	permit communications with IC, division, group	Inventory of radios	
	and/or sector officers? (4.7.3)	Documented	nted
H	<b>Emergency Medical Services (EMS)</b> (4.8*)		
	Are EMS services organized to ensure FD's EMS	□ SOP FD	FA.
	capability includes sufficient resources to deploy	SOP EMS (or mutual aid agreement)	
	initial arriving company & additional alarm	Mission Statement	
28	assignments? (4.8.1.1)	NOT APPLICABLE	
1			
	Automatic and mutual aid agreements are permitted	Dispatch center procedures	
	to satisfy this requirement. (4.8.1.2)		
	Finnero	D O	D 0
	The provisions of this chapter apply to FD's that	Municipal operating statement/statute A PA FA	FA
20	provide EMS services. (4.8.2*) Lancon Communication (4.8.2)	Organizational chart	
7		EMS guidelines NOT APPLICABLE	
		☐ Training records D 0	D 0
	Has FD clearly documented its role,	ıτ	· FA
30	responsibilities, functions & objectives for EMS delivery? (4.8.3*)	Organization chart NOT APPLICABLE SOP's	
		00	D 0

	Survey Component	Notes	
	System Components (4.8.4)		
	Basic EMS system treatment levels as used in this standard are categorized as:	SOP (dispatch, medical protocols) Dept. of Health license	A PA FA
31	2. Basic Life support (BLS) 3. Advanced life support (ALS) (4.8.4.1)	Training records	
	Specific treatment capabilities associated with each level are determined by authority for approval & licensing of EMS providers in each state &	NOT APPLICABLE	6
	EMS System Functions (4.2.5*)		
32	Determine FD's level of EMS service delivery.  The five basic functions within an EMS system include:  1. First responder.  2. BLS response.  3. ALS response.  4. Patient transport with uninterrupted patient care at ALS or BLS levels while enroute to medical facility.  5. EMS quality assurance program.  (4.8.5.1)	Level Organization chart NOT APPLICABLE	A PA FA
33	Is FD involved in providing any or all of the functions identified in 4.4.3.1(1) thru 4.4.3.1 (5)? (4.8.5.2)	SOP-Organization chart  NOT APPLICABLE	A PA FA NA

	Survey Component	Notes	
	Quality Management (4.8.6)		
	Does FD have a quality mgmt program? (4.8.6.1)	□ SOP A PA FA	N/A
		Policy statement	
		Manager/assigned	
34	4	U bb description	
		Records maintained	
		NOT APPLICABLE	
			D 0
	Is first responder and BLS care provided by FD documented & reviewed by FD medical nersonnel?	Copies of run reports  A PA FA  Management review process	N/A
	(4.8.6.2)		
35			
	Emerg	Emergency Servicage Applicable	
	Education &	Consulting Group	D 0
	If ALS is provided, does FD have a named medical director who oversees and assures quality medical	SOP/medical director A PA FA	N/A
76	care in accordance with state or provincial regulations?		
20	Is process documented? (4.8.6.3)	SOP NOT APPLICABLE	
			N/A D 0
	If ALS is provided, does FD provide mechanism for immediate communications with EMS	SOPs  Medical communication channel	N/A
37	supervision & medical oversignt? (4.8.0.4)	NOT APPLICABLE	
			D 0

	Survey Component	Notes	
	Special Operations Response (4.9*)		
	IF PROVIDED, are FD's special operations (special ops) organized to insure special ops capability	SOP's  Mutual aid agreement	Fails to Attain
	1. Personnel		
	2. Equipinent 3. Resources		
38	to deploy the initial arriving company and additional alarm assignments providing such special ops services? (4 9 1 1)		
	Established automatic and mutual aid agreements are permitted to comply with these requirements. (4 9 1 1)		
	Has FD adopted a special ops response plan and	SOP Fail	Fails to Attain
	specify:		
39	1. Role and responsibilities of the FD in special		
	2. Authorized functions of members responding to HazMat incidents? (4.9.3)		
	Are FD members expected to respond to HazMat	⊠ <b>x</b> SOP	Attains
	incidents beyond first responder operations level trained to applicable requirements of NFPA $472^{8}$ ?	$\mathbf{X}\mathbf{X}$ Mission statement	
41	(4.9.4)	<b>▼X</b> Training records/certification	
		Yes support function only D <sub>0</sub>	Documented

 $^8$  NFPA 472-Standard for Professional Competence of Responders to Hazardous Materials Incidents

	Survey Component	Notes	
42	Does FD have capacity to implement RIC during special operations incidents that would subject firefighters to immediate danger of injury, or in the event of equipment failure or other sudden events per NFPA 1500 <sup>9</sup> ? (4.9.5)		1s nted
43	If a higher level of response is needed beyond the capability of the FD for special ops, does the FD have procedures to determine:  1. Availability of outside resources to deploy these capabilities  2. Method of contact and response 3. Integration with local resources?  (4.9.6.1)  Do procedures limit FD to performing only those specific special ops functions for which their personnel are trained and equipped? (4.9.6.2)	SOP Contact list/agreements Dispatch procedures SOP Mission statement Mission statement	ns rtain

 $^{9}\,\mathrm{NFPA}$  1500-Standard on Fire Department Occupational Safety and Health Program

	Survey Component		Notes	
	SYSTEMS	Chapter 5		
	Safety and Health System (5.1*)			
4	Does FD provide occupational safety and health program in accordance with NFPA 1500 <sup>10</sup> that forms the basic structure of protecting the health & safety of firefighters, regardless of the scale of the dept. or	SOP Safety officer Program Contact for CISD	OSHA requirements  Physical fitness equip.  Safety posters	Partially Attains
-				Observed
<b>-</b>	Incident Management System (5.2*)  Does FD provide an incident mgmt system in	⊠ SOP		Attains
45	basic cale of	icy Services		Documented
46	Is incident mgmt system designed to manage incidents of all different types, including (5.2.2*)  - structure fires - wildland fires - hazmat incidents - emergency medical operations - others	⊠ SOP		Attains
47	Does FD have a training program and policy to ensure that personnel are trained and their competency is maintained to execute their responsibilities consistent with FD's organization and deployment addressed in Chapter 4? (5.3)	$\square$ SOP $\boxtimes$ Training program – $B_L$ $\boxtimes$ Training records	SOP  X Training program − Bucks County Fire Training  Training records	Partially Attains
				Documented

 $^{10}$  NFPA 1500-Standard on Fire Department Occupational Safety and Health Program  $^{11}$  NFPA 1561-Standard on Emergency Services Incident Management System

	System Component	Notes	
	Communication Systems (5.4*)		
48	Does FD have a reliable communication system to facilitate prompt delivery of fire suppression, EMS and special operations? (5.4.1*)	<ul><li>X SOP</li><li>X License</li><li>X Test</li></ul>	Attains
			Documented
49	Do FD's communications facilities, equipment, staffing and operation procedures comply with NFPA 1221 <sup>12</sup> ? (5.4.2)	★ Certification statement/license	Attains
50	Do operating procedures for radio communications provide for standard protocols and terminology at all types of incidents? (5.4.3)	dos⊠	Attains
	Finomon	Commission	Documented
	In compliance with NFPA 1561, is standard terminology established to transmit information including:	Soprating Group	Attains
51	<ol> <li>Strategic modes of operation?</li> <li>Situation reports?</li> <li>Emergency notifications of imminent</li> </ol>		,
	hazards? (5.4.4) <b>Pre-Incident Planning</b> (5.5*)		Documented
52	Does FD have operational requirements to conduct pre-incident planning, with particular attention to target hazards? (5.5*)	SOP PEP's/run book Risk assessment survey	Fails to Attain

<sup>12</sup> NFPA 1221-Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems

### Summary

		Status	7.0	
	4	PA	FA	Action Required
1	×	5		None
2		Ā	×	Work with Twp to satisfy this requirement
3	×			Emersency Services
4			X	Work with the Twp and local amb organization to satisfy this requirement
S			X	Work with twp emergency management to satisfy this requirement
9		×		dated cover assignments to meet this
7		×		wp representatives to satisfy parts of this
<b>%</b>	×			None
6		×		Establish written mutual aid agreements with neighboring fire companies
10	×			

1		×	Conduct quality assurance program to rate services	
•			provided	☐ None
12		X	Provide the Twp with monthly operations reports	□ None
13	×			□ None
14	×			□ None
15	×			□ None
16	×			□ None
17	×			□ None
18	×		Emergency Services	□ None
19	×		Education & Consulting Group	□ None
20	×			□ None
21	×			None
22	X			□ None
23	×			□ None
24	×			□ None
25		×	Establish written agreements with mutual aid companies	unies None
26		×	Work on establishing more comprehensive training for the membership	for the

27	×				□ None
28					□ None
29					□ None
30					None
31	7				□ None
32		5			□ None
33	_				None
34				Fimondono Comincos	None
35				Education & Consulting Group	□ None
98					□ None
28					□ None
38					□ None
68			X	Establish and adopt a special ops plan for the twp	□ None
40				No question	None None
41	X				□ None
42	X				□ None
43			×	Determine needs outside the scope of the organization and establish a working plan to activate as needed	on and $\square$ None

# **NEWTOWN SQUARE FIRE COMPANY MASTER PLAN - 2008**

important function of the fire service			70
x   Establish a prefire planning committee to address this			52
Finontional Somitos		*	
None	7		
		X	20
		×	49
anout —		4	1
		X	48
		×	4
		×	40
		×	45
	×		44

## **Summary Statement**

☐ Fails to Achieve		
☐ Partially Achieves	A 1720	
☐ Achieves	The intent of NFPA 1720	

### **Substantiation:**



#### STRATEGIC GUIDELINE FOR EMERGENCY OPERATIONS