Fire Services Assessment & Plan

Amity Township Berks County, Pennsylvania

June 2021

Conducted by:



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Executive Summary

VFIS Education, Training and Consulting Group (VFIS ETC) was contracted to conduct a strategic fire services plan for Amity Township, Berks County, Pennsylvania. The Fire Companies completed significant research and data development from November 2020 through March 2021 and submitted the information to VFIS ETC for review. In April 2021, a project team from VFIS-ETC completed the field work related to this project and subsequently completed this report. VFIS-ETC is pleased to submit this document to Amity Township for use in its public safety planning.

Project Purpose

This report is intended to provide guidance and support to work with the Fire Companies' staff as they develop a Standard of Response Cover (SORC) and strategic plan for fire and emergency medical services within the township. VFIS ETC assisted in the development of key information and review of the self-assessments, and interpretations made by the Fire Companies in developing the ultimate final products.

The process can be considered a tool to accomplish several objectives including:

- Evaluating and defining an agency's baseline of operations
- Identifying benchmarks for achieving an agency's goals and objectives
- Determining levels of service for all portions of a community
- Measuring an agency's performance over different budget operational years

Experience in such activities has demonstrated specific work tasks which are required to meet the objectives of developing an effective strategic plan, which are part of this project.

Community Background

Amity Township is a township in Berks County, Pennsylvania, United States. The population was 13,169 in the 2018¹. Amity Township, especially in the Douglassville area, is seeing growth in development. The township was so named for the cordial relationship, or amity, between Swedish settlers and the local Native Americans.

History

The boundaries of Amity Township are almost identical to the boundaries of the original area known as Swedes' tract. The George Douglass House, Griesemer-Brown Mill Complex, Old St. Gabriel's Episcopal Church, Old Swede's House, Rhoads-Lorah House and Barn, Weidner Mill, and White Horse Tavern are listed on the National Register of Historic Places.

Geography

According to the United States Census Bureau, the township has a total area of 18.4 square miles, of which, 18.3 square miles of it is land and 0.1 square miles of it is water. The census-designated place of Amity Gardens and the unincorporated community of Douglassville are both located in Amity Township, along the Schuylkill River.

 $https://www.google.com/search?q=amity+township+pa+population\&rlz=1C1CAFA_enUS847US849\&oq=amity+township+pa+population\&aqs=chrome..69i57.12238j0j7\&sourceid=chrome\&ie=UTF-8$





Demographics

At the 2000 census the population density was 484.5 people per square mile. This has grown to over 700 people per square mile today, <u>making the community a suburban versus rural designated</u> <u>community.</u> The racial makeup of the township was 95.68% White, 2.04% African American, 0.19% Native American, 0.67% Asian, 0.01% Pacific Islander, 0.38% from other races, and 1.03% from two or more races. Hispanic or Latino of any race were 1.00%.

Historically the population (per US Census Bureau) has risen each decade, since 1980.

| Census Year | Population |
|----------------|------------|
| 1980 | 5,883 |
| 1990 | 6,434 |
| 2000 | 8,867 |
| 2010 | 12,583 |
| 2018 estimated | 13,169 |

The age distribution was

27.7% under the age of 18,

5.6% from 18 to 24,

32.8% from 25 to 44,

24.1% from 45 to 64, and

9.8% 65 or older.

The median age was 36 years. This is reflected in the township fire companies' demographics as well.

The median household income was \$59,595 and the median family income was \$67,069. About 2.5% of families and 4.8% of the population were below the poverty line, including 3.8% of those under age 18 and 9.8% of those age 65 or over.





Amity Fire Company

The Amity Fire Company was first organized on June 7, 1961. The original fire house was located at the corner of Weavertown Road and Old Airport Road, the building is still standing but used as storage. The first meetings were held in Boyer's Hall behind the store in Amityville. The first piece of equipment was a 1948 Buffalo with a 400 gallon booster tank. This truck was housed in the newly-remolded building at the rear of the Amity House on March 13, 1963.

The first fire response was a grass fire on the Flippins property off of Weavertown Road on May 26, 1963 which 24 men responded to. The first social event was a B-B shoot held on November 15, 1964 inside the firehouse. On February 18, 1965 a base station and two two-way radios were installed to dispatch our trucks. The call sign was KFF-225. On July 31, 1967 five and a half acres of land was purchased for building a new fire station.

Plans for a new fire station were drawn up on August 1, 1968 and ground breaking ceremonies were held on August 23, 1970 On July 23, 1970 final settlement papers affixing the loan of the new Amity Fire Company were made. The new construction began on September 22, 1970. On May 28, 1971, the fire company moved into its current facility at 47 Pine Forge Rd. In 1979 the fire company received the "Jaws of Life" from the Lions club and an "O" cutter the following year. In late 2004, the company also decided the 1993 International rear mount no longer met the company's needs and replaced it with a 2005 Pierce Dash CAFS pumper with some assistance from a FEMA grant.

In 2006 the fire company again used a grant to obtain a 2007 Ford F-350 4x4 4-door diesel pickup for training, low priority calls, medical calls and company errands. The years have brought about many changes in the Amity Fire Company, but one thing has remained the same, a dedication to provide the community with best service possible.

Monarch Fire Company

Monarch Volunteer Fire company was established in 1936.

No further information was available or provided by the fire company.

General Comment and Concern Summation

The fire companies and the township expressed concerns regarding

- 1- Increasing operational costs
- 2- Aging fire company apparatus and facilities
- 3- Lack of coordination of activities/services by the two fire companies
- 4- Ability to cover all calls
- 5- Staffing at calls
- 6- Lack of long-term planning between fire companies and township
- 7- Lack of fire inspections, enforcement of knox box program, and no lock-out, tag-out program in place
- 8- Consideration of single fire station/ambulance location

These are addressed within the report.



The Township is at a crossroads, having moved from a rural community to one that is considered suburban by definition of 500 to 1,000 residents per square mile and closing in on an urban definition of 1,000 people per square mile. The current population estimate is 13169 within 18.4 square miles for a population density of approximately 716 people per square mile. These new residents are not original Amity Township residents and will have different (and probably greater) expectations for fire and emergency medical services than currently being provided.

RECOMMENDATIONS

The following recommendations have been submitted within the contents of this report.

- 21-01 A resolution or ordinance officially naming the fire and emergency medical providers to the township should be adopted.
- 21-02 Mission and vision statements should be established to help members understand and work toward what services are expected from them, and for the public to understand what services are available to them, for the funding they provide.
- 21-03 The Fire Companies have not established a "Standard of Response Cover" which is benchmarked and then manage to it. A benchmark using current performance data is provided within this report and should be monitored for sustained performance going forward on a semi-annual basis.

 Actions should be developed based upon the ability to perform or not perform to the benchmark.
- 21-04 The individual fire company relief associations should be consolidated into a single township-Wide relief association for operational and administrative efficiencies.
- 21-05 Legal counsel should be consulted to review and update the by-laws given changes in personnel and organizational law including a review of compliance with the Fair Labor Standards Act.
- 21-06 Voting on individuals to grant membership as firefighters should be discontinued and replaced with a system that conducts a background investigation followed by a structured series of expected performance activities, after satisfactory completion of which, membership is granted. A reference document to provide guidance is provided under separate cover.
- 21-07 The requirement of annual dues should be discontinued. It serves no practical purpose.
- 21-08 The dissolution clause of each fire company should be created and adopted to be consistent with the language recommended by the Office of the State Fire Commissioner, VLAP program.

In the event of a dissolution of the Corporation or the winding up of its affairs, or other liquidation of its assets, the Corporation's property shall not be conveyed to any organization created or operated for profit or to any individual for less than the fair market value of such property, all assets remaining after all debts and expenses of the corporation have been paid or provided for, shall be conveyed or distributed by the Board of Trustees to one or more organizations qualifying for the exemption afforded by Section 501 (c) (3) of the Code. Any assets not so distributed shall be disposed of by a Court of Common Pleas of competent jurisdiction exclusively for such purposes or to such organization or organizations, as stated, or shall determine which are organized and operated exclusively for such purposes.



No part of the net earnings of the Corporation shall inure to the benefit of any Trustee of the Corporation, Officer of the Corporation or any private individual (except that reasonable compensation may be paid for services rendered to or for the Corporation affecting one or more of its purposes), and no Trustee or Officer of the Corporation shall be entitled to share in the distribution of any of the Corporate assets upon dissolution of the Corporation. No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, (including the publication or distribution of statements), any political campaign on behalf of any candidate of public office.

- 21-09 Leaders of the Amity Fire Company Relief Association indicated that outstanding recommendations have been resolved, however, no documentation was provided. Documentation is necessary to assure compliance. To not achieve compliance risks the continued receipt of these funds.
- 21-10 There are ISO Telecommunicator and Emergency Reporting related recommendations made by ISO that are controlled by the County 911 Center. This information on Alarm Processing and Emergency Dispatch Protocols, Voice Over Internet Protocol and Geographic Information System should be passed on to the County Public Safety Director and if applicable, ISO should be contacted to upgrade the findings in all fire departments in the county.
- 21-11 Upon implementation of key recommendation of this assessment and plan, it is recommended that the township request a re-survey by ISO that includes Monarch Fire Company. Failure of participation in the next ISO survey should result in actions to restructure municipality invested assets.
- 21-12 The identified policies for "Whistleblower", Conflict of Interest and Records Retention should be implemented.
- 21-13 Emergency Generators are critical equipment in the event of power outages. Each company should file for FEMA-AFG (Assistance to Firefighter Grants) for emergency generators.
- 21-14 Carbon Monoxide detectors should be placed in living spaces in each fire station.
- 21-15 Contracts should be established for annual preventive maintenance of the HVAC, and diesel exhaust equipment as a minimum.
- 21-16 Long term plans need to be initiated for construction of a new single station for the township, or replacement of both fire stations with modern facilities.
- 21-17 A long term apparatus deployment and purchasing plan, and related funding source, needs to be identified for the confined system. A hypothetical plan is provided as part of this project.
- 21-18 Specialized Training should be provided to prevent potential rollover accidents involving large vehicles.
- 21-19 A backing training program (copy provided under separate cover) should be conducted with all vehicle operators.



- 21-20 For response planning and maximum credit in the ISO Schedule, pre-fire planning inspections of each commercial, industrial, institutional and other similar-type building should be made twice a year by company members. Records of the inspections should include complete and up-to-date notes and sketches.
- 21-21 Investigate applying for a FEMA-SAFER (Staffing for Adequate Fire and Emergency Response) grant should be initiated to determine viability to filing, obtain and implement a more structured staffing program either with paid personnel or a volunteer stipend system.
- 21-22 Training programs should be enhanced with a plan developed to work toward achieving training expectations per the ISO report recommendations, including additional training for officers.
- 21-23 Safety officers are assigned at the time of an incident. To assure that all those potentially assigned the role of Incident Safety Officer are knowledgeable in the performance requirements of that function, it is recommended ALL officers complete the National Fire Academy class on Incident Safety Officer. This can be conducted as part of in-station training.
- 21-24 There is no official Department Health and Safety Officer. The role of Health and Safety Officer for the Fire Departments needs to be established. It should be the responsibility of the Fire Administrator position. The role should be consistent with the tasks and functions defined by NFPA 1500 Standard for a Fire Department Safety and Health Program and the Fire Department Safety Officer Association certification program for Health and Safety Officer.
- 21-25 Physicals are reportedly conducted only upon entry into the fire departments. A physicals program should be implemented.
- 21-26 A recruitment program within the regional high school should be established to the regional area and involve both departments.
- 21-27 A recruitment and retention program should be established by the fire companies, with the idea of jointly recruiting from the community in various ways and developing retention programs to meet the needs and wants of the members.
- 21-28 A comprehensive list of SOGs in place in departments throughout the Mid-Atlantic is provided for review. A team should be appointed to consider adding additional SOGs for use by the merged organization's fire service responders, as well as redesigning the "packaging" of SOG's. In addition, SOGs should be communicated to all automatic and mutual aid companies for integration, so that when operating together a single system of operations are performed to enhance training, proficiency and safety.
- 21-29 A strategic guideline for operations to define and communicate the concepts used by officers to manage an incident is not provided for. A "Strategic Guideline" using the sample provided in this document and create a document and training
- 21-30 A review of the deployment and aid received/given by the Fire Departments versus the risks protected should be conducted every twenty-four months to assure the response (particularly personnel responding) matches the risk and to properties in the response area. The deployment should assure a minimum first alarm response to achieve 14 qualified firefighters are responding.



- 21-31 Regionalization is ongoing in County where fire departments can benefit from coordinating services in the future. Automatic Aid is a long-term option for provision of fire services in the area, for efficiency, safety and insurance rating purposes. The concept of regionalization should be moved forward determining the pros and cons, viability, responsibility, and options.
- The delivery model and funding structure need to be discussed with the EMS provider. The reason for fire company simultaneous dispatch needs to be defined and related staffing, equipping, and cost must be discussed in providing out-of-hospital emergency medical care.
- 21-33 Adoption of the fire code, formal assignment of fire inspection and fire prevention duties should occur with direct responsibility for the development and implementation of a comprehensive year-round fire inspection and fire safety education program.
- 21-34 The emergency access key system needs to be revised to have a single master key capability for all users





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 four (4) basic assumptions established prior to the assessment and development of a report for Amity Township. The assumptions included:

- The assessment of various operational aspects that may be impacted by the fire departments facilities and staff, thus more considerations.
- 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 as successful programs, best practices policies, guidelines, etc. in other fire and rescue service agencies.
- Volunteerism should be a continued operational system into the future.

In addition, time was taken to compare Amity Township to fire and EMS 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 2018", printed in 2020, measured service provision in several key areas. These are compared in the chart below.²

COMPARISON OF AMITY TOWNSHIP TO NATIONAL AVERAGES

| Nationwide Area of Comparison 10,000-24,999 POPULATION | National Result* | Amity Township |
|---|--|--------------------|
| Percentage of communities between 10,000-24,999 population with all volunteer fire services | See chart | Combination |
| Number of stations per 1,000 population | 0.13 | 0.14 |
| Number of pumpers per 1,000 population | 0.18 | 0.21 |
| Number of aerial trucks per 1,000 population | 0.03 | 0.07 |
| Number of other vehicles per 1,000 population | 0.14 | 0.29 |
| % Departments in communities between 10,000-24,999 population with 2 Stations | 30% | 2 stations |
| % Departments in communities between 10,000-24,999 population with 3 Pumpers | 47% | 3 pumpers |
| % Departments in communities between 10,000-24,999 population with 1 Aerials | 475 | 1 aerial |
| % Departments in communities between 10,000-24,999 population with 4 other suppression vehicles | 21% | 4 vehicles |
| % Departments in communities between 10,000-24,999 population where fire department provides EMS Service. | NO EMS – 27% BLS – 42% ALS – 32% | BLS Level Services |

This data does not take square miles into account, only population. Given the high density of population, some distortion of % may occur.

In communities of 10,000-24,999 population the percentage of volunteer by age bracket is as follows:

| 50+ | 27% |
|----------|-----|
| 40-49 | 30% |
| 30-39 | 24% |
| Under 30 | 20% |

² Ben Evarts and Gary P. Stein, "U.S. Fire Department Profile Through 2018", NFPA, Quincy, MA, 2020, 26 pages.

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The average tenure of membership in volunteer departments nationwide is:

In 10,000-24,999 population communities

| Less than 1 year | 10% | 12% |
|--------------------|-----|-----|
| 1 to 5 years | 27% | 30% |
| 6 to 10 years | 22% | 21% |
| More than 10 years | 41% | 37% |

*2018 NFPA data indicates 3,511 fire departments protect populations of 10,000-24,999

26% all career,

25% mostly career,

36% mostly volunteer,

13% all volunteer

The median number of career firefighters in the US in communities between 10,000-24,999 is 0.96 per 1,000 population in the US; and 1.27 per 1,000 population in the Northeast.

THIS ANALYSIS ILLUSTRATES THAT
THE APPARATUS AND STATIONS IN SERVICE TODAY
IS SLIGHTLY GREATER THAN DEPARTMENTS
PROTECTING SIMILAR SIZE COMMUNITIES THROUGHOUT THE U.S.



Management & Governance

Amity Township is provided fire protection by the Amity Volunteer Fire Company and the Monarch Volunteer Fire Company. There is no formal documentation (resolution or ordinance) that defines this. This should be resolved via ordinance or resolution and be consistent with the Second Class Township Code of the Commonwealth of Pennsylvania. The code requirements are as follows:

Act of March 17, 2008 P.L. 47, No 7 Session of 2008 No. 2008-7

Establishment of Fire and Emergency Medical Services

Section 1. The act of May 1, 1933 (P.L. 103, No. 69), known as the Second Class Township Code, reenacted and amended November 9, 1995 (P.L. 350, No. 60), is amended by adding a section to read:

Section 1553. Emergency Services, --

- (a) The township shall be responsible for ensuring that fire and emergency medical services are provided within the township by the means and to the extent determined by the Township, including the appropriate financial and administrative assistance for these services.
- (b) The township shall consult with fire and emergency medical services providers to discuss the emergency services needs of the township.
- (c) The township shall require any emergency services organizations receiving township funds to provide to the township an annual itemized listing of all expenditures of these funds before the township may consider budgeting additional funding to the organization.

Section 2. This act shall take effect in 60 days.

APPROVED - The 17th day of March, A.D. 2008

The authority to provide these services is informally granted by the township. A resolution or ordinance officially naming the fire and emergency medical providers to the township should be adopted.

The individual agencies do not have published formal mission and vision statements. Mission and vision statements help members understand and work toward what services are expected from them, and for the public to understand what services are available to them, for the funding they provide.

What can be interpreted from provided documents follows:



AMITY FIRE COMPANY PURPOSE

(per Fire Company By-Laws)

The object of this corporation shall be at all times to establish a well governed Fire Company for the protection of the lives and property of our fellow citizens from fire, and to relieve our fellow citizens from suffering and distress in any emergency or catastrophe.

MONARCH FIRE COMPANY PURPOSE (per Fire Company By-Laws)

The object of this Company shall be for the purpose of extinguishing fires and saving of lives and property

The Township and the Fire Companies should establish a statement to serve as the basis of support to the community by service providers authorized to do.

AMITY TOWNSHIP FIRE AND RESCUE SERVICES PROPOSED SERVICE DELIVERY STATEMENT

It shall be the mission of the Amity Township Fire and EMS Services to assure the citizens and property owners of the district are provided a competent, professional fire, emergency medical and hazardous situation response, of proactive and reactive fire, rescue, hazard management and emergency medical services that will provide the highest degree of protection from the dangers of modern day emergencies while insuring the safety, education and well-being of all residents and visitors to the district.

The statement should be made available within any agreements for service and on the the township and fire companies' websites.

The issue of Service Delivery is best quantified via a "Service Delivery Statement or Standard of Response Cover". Based upon an analysis of the information and data presented to the project team and subsequently discussed with the Chief Officers of the fire companies, the following Service Delivery Statement is the current service delivery statement/standard of response cover for the region.



PROPOSED SERVICE DELIVERY STATEMENT STANDARD OF RESPONSE COVER

Fire department response to an emergency call for service in Amity Township will be provided within five (5) minutes of dispatch and be en route with one piece of fire apparatus in five (5) minutes, with a crew of four (4) qualified members, 90 percent of the time.

A full complement of 14 firefighters will be on scene within (twenty) 20 minutes of dispatch, 90 percent of the time.

During consultant interviews with the local government officials and the fire companies, it became clearly apparent that a long-term coordinated operational plan is needed.

The Fire Department By-laws were reviewed with the following items of note:

- There has not been comprehensive by-law re-write in recent years, since 2005 in Amity and since 1984 in Monarch. Legal counsel should be consulted to review and update the by-laws given changes in personnel and organizational law in recent years.
- There are references to voting on individuals to grant membership. This should be discontinued and replaced with a system that conducts a background investigation followed by a structured series of expected performance activities, after satisfactory completion of which, membership is granted automatically. Voting on firefighter members is not an acceptable method of qualifying members. Reference material regarding this was provided to each fire company under separate cover.
- Consideration should be given to removing the requirement of annual dues for active firefighters. It serves no practical purpose.
- The dissolution clause within the by-laws should be included/expanded to be consistent with that recommended by the Office of the State Fire Commissioner, VLAP program. This is detailed in the recommendations section.
- There was no mention of, nor were standard operating guidelines found regarding key 21st century volunteer organization concerns, including
 - o harassment and discrimination prevention
 - o separation of by-law membership, voting, and participation duties and voting rights
 - o personnel manual and related "paid member" guidelines
 - o reference to/compliance with Fair Labor Standards Act (paid staff also volunteering) which requires legal review.

Management information is maintained at the direction of the fire department's leadership.

The fire department has experienced increasing cost of operations and capital equipment, decreasing volunteers, increased service requests and increasing call volume.

Management information is maintained at the direction of each fire department's leadership. It is maintained by each fire agency.



The fire companies have experienced increasing cost of operations and capital equipment, decreasing volunteers, increased service requests and increasing call volume.

The Project Team recommend an administrative organization be established by the local governments and used to address current and future emergency services issues. The local government delegates their current fire and emergency medical services responsibility to the administrative organization. The organization would work to ensure a sustainable system. The system should be one which uses both fire companies in the service delivery model, however, the two agencies do most activities independently and must work closer together for the benefit of the community. This is reflected throughout the report. This needs confirmation via resolution or ordinance, as previously mentioned. The long-term objective is for one single delivery system to the community.

A review was conducted of the most recent compliance audits of the Monarch Fire Company Relief Association (2018) and the Amity Fire Company Relief Association (2019), by the Commonwealth of Pennsylvania, Department of the Auditor General. There were no recommendations within the Monarch report and there were three findings/recommendations in the Amity report. They were:

- Finding No. 1 Undocumented Expenditures
- Finding No. 2 Failure to Maintain a Complete and Accurate Equipment Roster
- Finding No. 3 Failure to Maintain a Complete and Accurate Membership Roster

Leaders of the Amity Fire Company Relief Association indicated these had been resolved, however no documentation was provided. Documentation is necessary to assure compliance. To not achieve compliance risks the continued receipt of these funds.

The two relief associations are extremely small in size and it begs the question why they are not a single consolidated Amity Township Volunteer Firemen's Relief Association. The consolidation of the two groups would result in a less labor intensive and more efficient township wide planning and operation of relief association duties and activities. A copy of the VFIS document <u>Tips to Complying with</u> <u>Pennsylvania Volunteer Firefighter Relief Association Requirements</u> was provided to each company under separate cover.

During consultant interviews with the local government officials and the fire departments, it became clearly apparent that a long-term plan is needed. This includes a planning effort regarding long term funding, apparatus and fire station planning and purchasing, staffing, and regionalization of service delivery with other communities.

RECOMMENDATIONS

- 21-01 A resolution or ordinance officially naming the fire and emergency medical providers to the township should be adopted.
- 21-02 Mission and vision statements should be established to help members understand and work toward what services are expected from them, and for the public to understand what services are available to them, for the funding they provide.
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 Actions should be developed based upon the ability to perform or not perform to the benchmark.



- 21-04 The individual fire company relief associations should be consolidated into a single township-wide relief association for operational and administrative efficiencies.
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No part of the net earnings of the Corporation shall inure to the benefit of any Trustee of the Corporation, Officer of the Corporation or any private individual (except that reasonable compensation may be paid for services rendered to or for the Corporation affecting one or more of its purposes), and no Trustee or Officer of the Corporation shall be entitled to share in the distribution of any of the Corporate assets upon dissolution of the Corporation. No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, (including the publication or distribution of statements), any political campaign on behalf of any candidate of public office.

21-09 Leaders of the Amity Fire Company Relief Association indicated that outstanding recommendations have been resolved, However, no documentation was provided. Documentation is necessary to assure compliance. To not achieve compliance risks the continued receipt of these funds.



Insurance Services Office (ISO) Rating

Amity Township has a rating as of November 2018, for the Amity Fire Protection Service Area survey by the ISO Public Protection Department of:

04/4Y

Based upon the initial review by the Project Team, it was believed that data was missing. While conducting the assessment, it was learned that Monarch Fire Company data and information was not included in the report, due to non-participation. The resulting rating from the ISO process applies to the entire community. By not including resources paid for by tax dollars and public contributions, provides an inaccurate picture of the true cost of protection and actual level of protection. In addition, it is conceivable that inclusion of the Monarch data and clarity on other issues, could actually result in grading improvement, which could mean a reduction in homeowner and business property insurance coverage.

The Insurance Services Office collects and evaluates information from communities regarding their structure fire suppression capabilities. The data is analyzed using our Fire Suppression Rating Schedule (FSRS) and then a Public Protection Classification (PPCTM) grade is assigned to the community. The surveys are conducted whenever it appears that there is a possibility of a PPC change. As such, the PPC program provides important, up-to-date information about fire protection services throughout the country.

The FSRS recognizes fire protection features only as they relate to suppression of first alarm structure fires. In many communities, fire suppression may be only a small part of the fire department's overall responsibility. ISO recognizes the dynamic and comprehensive duties of a community's fire service, and understands the complex decisions a community must make in planning and delivering emergency services. However, in developing a community's PPC grade, only features related to reducing property losses from structural fires are evaluated. Multiple alarms, simultaneous incidents and life safety are not considered in this evaluation. The PPC program evaluates the fire protection for small to average size buildings. Specific properties with a Needed Fire Flow more than 3,500 gpm are evaluated separately and assigned an individual PPC grade.

A community's investment in fire mitigation is a proven and reliable predictor of future fire losses. Statistical data on insurance losses bears out the relationship between excellent fire protection – as measured by the PPC program- and low fire losses. So, insurance departments use PPC information for marketing, underwriting, and to help establish fair premiums for homeowners and commercial fire insurance. In general, the price of fire insurance in a community with a good PPC grade is substantially lower than in a community with a poor PPC grade, assuming all other factors are equal.

ISO's expert staff collects information about the fire suppression efforts in the community. In each of those communities, ISO analyzes the relevant data and assigns a PPC grade- a number from 1 to 1 0. Class 1 represents an exemplary fire suppression program, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria.

ISO's PPC program evaluates communities per a uniform set of criteria, incorporating nationally recognized standards developed by the National Fire Protection Association and the American Water Works Association. A community's PPC grade depends on:

• Needed Fire Flows, which are representative building locations used to determine the theoretical amount of water necessary for fire suppression purposes.



- Emergency Communications, including emergency reporting, Telecommunicators, and dispatching systems.
- Fire Department, including equipment, staffing, training, geographic distribution of fire departments, operational considerations, and community risk reduction.
- Water Supply, including inspection and flow testing of hydrants, alternative water supply operations, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires up to 3,500 gpm.
- Community Risk Reduction, community efforts to reduce the risk of fire, including fire prevention codes and enforcement, public fire safety education, and fire investigation programs.

Fire Departments may also seek to provide additional fire insurance rate reductions by requiring a Response Rating Survey through ISO. This voluntary process surveys the fire department, the water supply and the emergency communication system applying the survey results to a nationally recognized grading schedule. The result is a Response Rating Classification ranging from Class 8 to Class 1 being assigned to the fire department serving the recognized and identified fire district(s).

In this process, fire departments may be assigned a split classification rating for various factors as opposed to a straight classification rating. With split classification ratings, protected properties in the recognizes fire district within 1,000 feet of a fire hydrant by which route fire hose can be laid and within 5 road miles of the fire station qualify for a lower rating. The protected properties in the fire district over 1,000 feet from a fire hydrant and within 5 road miles of the fire station qualify for higher (less desirable) rating, or with work, a reduced rating.

It is not uncommon for the same fire department to serve a municipal district (town) and a rural district (county) with a straight rating in the municipality and a split rating in the rural district mostly due to the lack of fire hydrants. Such is the case in Amity Township.

THE RESPONSE RATING OR PUBLIC PROTECTION CLASS RATING ASSIGNED TO A FIRE INSURANCE POLICY IS THE RESPONSIBILITY OF THE INSURANCE AGENT/CARRIER AND NOT THE FIRE DEPARTMENT. THE INFORMATION PROVIDED HERE IS INTENDED TO PROVIDE BACKGROUND INFORMATION ON THE FIRE PROTECTION IN THE VARIOUS FIRE DEPARTMENT RESPONSE AREAS COMPARED TO INSURANCE CRITERIA.



The Department is currently rated by the ISO criteria as follows:

RECEIVING & HANDLING FIRE ALARMS

| Evaluated Item | Amity Township Actual Credit | Maximum Credit |
|--------------------------------|---------------------------------|-------------------|
| Credit for Emergency reporting | 2.10 | 3.00 |
| Credit for Telecommunications | 2.77 | 4.00 |
| Credit for Dispatch Circuits | 3.00 | 3.00 |
| TOTAL FOR RECEIVING/HANDLING | 7.87 | 10.00 |
| ALARMS | | |

FIRE DEPARTMENT

| Evaluated Item | Amity Township Actual Credit | Maximum Credit |
|---|---------------------------------|-------------------|
| Credit for Engine Departments | 5.50 | 6.00 |
| Credit for Reserve Pumpers | 0.00 | 0.50 |
| Credit for Pump Capacity 1500 gpm required, 3,00+ available | 3.00 | 3.00 |
| Credit for Ladder-Service Departments | 3.67 | 4.00 |
| Credit for Reserve Ladder-Service Departments | 0.00 | 0.50 |
| Credit for Deployment Analysis (% built-upon area with engine response within 1.5 miles and ladder response within 2.5 miles) | 5.16 | 10.00 |
| Credit for Department Personnel (average number of equivalent firefighters and company officers on duty with existing departments) | 8.50 | 15.00 |
| Credit for Training | 3.82 | 9.00 |
| Credit for Operational Consideration | 2.00 | 2.00 |
| TOTAL FOR FIRE DEPARTMENT 25 | 31.65 | 50.00 |

WATER SUPPLY

| Evaluated Item | Amity Township | Maximum |
|---|----------------|---------|
| | Actual Credit | Credit |
| Credit for the Water Systems | 21.57 | 30.00 |
| Credit for Hydrants | 3.00 | 3.00 |
| Credit for Inspection & Condition of Hydrants | 2.40 | 7.00 |
| TOTAL FOR WATER SUPPLY | 26.97 | 40.00 |

COMMUNITY RISK REDUCTION

| Evaluated Item | Amity Township Actual Credit | Maximum Credit |
|--------------------------|---------------------------------|-------------------|
| Community Risk Reduction | 2.59 | 5.5 |

| | Amity Township |
|----------------------------|----------------|
| RATING SUMMARY | 68.26 |
| FIRE FLOW REQUIRED/ENGINES | 1,500 GPM |
| REQUIRED | |



The distribution (% built-upon area with engine response within 1.5 miles and ladder response within 2.5 miles) is noted above and maps are provided showing areas that lie outside those parameters. The area outside the 1.5 mile and 2.5 mile areas support the ISO grading for "Deployment Analysis".

The evaluation of the 911 dispatch center reflects a lack of earned credit on Alarm Processing and Emergency Dispatch Protocols. It further identified a lack of earned credit in the Voice Over Internet Protocol and Geographic Information System evaluation components.

Automatic aid is in use today. This is discussed in the Mutual/Automatic Aid section of this report.

RECOMMENDATIONS

- 21-10 There are ISO Telecommunicator and Emergency Reporting related recommendations made by ISO that are controlled by the County 911 Center. This information on Alarm Processing and Emergency Dispatch Protocols, Voice Over Internet Protocol and Geographic Information System should be passed on to the County Public Safety Director and if applicable, ISO should be contacted to upgrade the findings in all fire departments in the county.
- 21-11 Upon implementation of key recommendation of this assessment and plan, it is recommended that the township request a re-survey by ISO that includes Monarch Fire Company. Failure of participation in the next ISO survey should result in actions to restructure municipality invested assets.



Standard of Response Cover (SORC) Response Times, & 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, the region was found to have unique locations, for several reasons.

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 a maximum distance (5 miles) translates into response time with drive extensions to six (6) road miles. 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

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.

Based upon population density per square mile, the region would be considered a rural area. The National Fire Protection Association (NFPA) Standard 1720 – The Standard for the Organization and Deployment of Fire Suppression, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments suggests for urban areas and career departments that you should measure response times at the 90th percentile, the analysis determined that calls for service in the region receive a response in less than 15 minutes, 90% of the time."

Unfortunately, the data provided was limited in analysis.

Basic response data, as self-reported by each organization are:

| | 2019 | 2019 | 2020 | 2020 |
|-----------------------------|-------------|--------------|--------------|--------------|
| | Amity | Monarch | Amity | Monarch |
| Average Daytime Response | 2 | 3 | 2 | 3 |
| | 1 paid | 1 paid | 1 paid | 1 paid |
| | 1 volunteer | 2 volunteers | 1 volunteer | 2 volunteers |
| Average Nighttime Response | 3 | 6 | 3 | 6 |
| First Unit on Scene Average | 16 minutes | 15 minutes | 12.5 minutes | 15 minutes |



Basic demand for service and utilization time are illustrated below and typify a suburban fire service.

Agency Response Summary

| | 2019 | | 2020 | |
|------------------------------------|-------------------|------------------------------|-------------------|------------------------------|
| | Amity Township | Outside Amity Township | Amity Township | Outside Amity Township |
| Total Calls | 367 | 166* | 417 | 164* |
| Fire Calls | 288 | | 294 | |
| EMS Calls | 79 | | 123 | |
| Average Response Time (minutes) | Not Provided | Not Provided | Not Provided | Not Provided |

*75 in Douglass Township

This basic data indicates the following

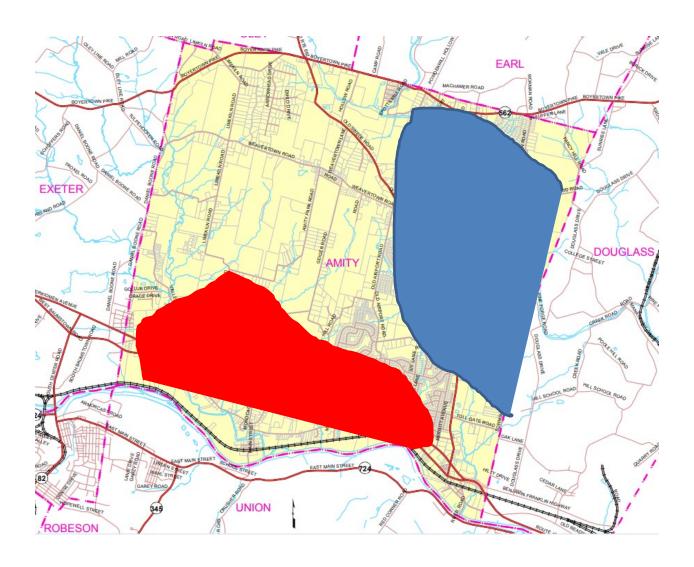
- 1. That the companies individually can each be relied upon to respond with one staffed vehicle to a call.
- 2. Calls increased from 2019 to 2020, primarily due to an increase in EMS responses. It begs the question if you have an Advanced Life Support ambulance responding to EMS calls, is a fire engine really needed, and if so, why?
- 3. 500 calls per year equates to almost 1.5 calls per day. A call, on average, typically takes 1 hour of time from dispatch to respond and provide service to return to where you were when the call was dispatched.

This means that a person responding to 25% of the calls spends 125 hours per year (or almost 3 hours per week) responding to calls. Many people, in today's world don't have the luxury to drop everything and respond three times a week, let alone train for three hours a week, fundraise an hour or so a week (on average) and attend meetings. The bottom line, at 500 calls per year, the time availability of volunteers is reaching a maximum amount of availability. In addition, the fewer the number of responders, the increase in level of stress on the organization.

^{**83} in Douglass Township



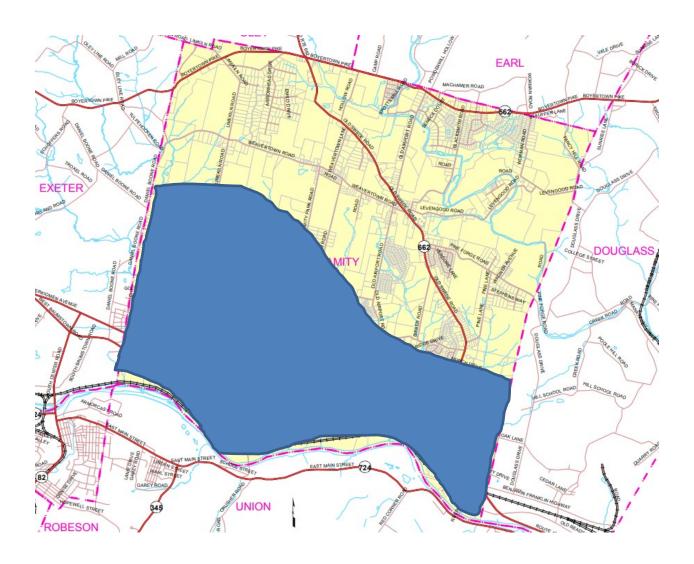
1.5 Mile Engine Response Map



This map illustrates the area of the township (yellow outside of blue and red outlined sections) not within 1.5 <u>road miles</u> of a fire station with a pumper and thus rated differently for insurance purposed



2.5 Mile Ladder Response Map



This map illustrates the area of the township (yellow) not within 2.5 <u>road miles</u> of a fire station with an aerial ladder device and thus rated differently for insurance purposed



Finances

Typical of small to mid-size communities in Pennsylvania, the Fire Companies are funded primarily through the following revenue streams:

Township Fire Tax

Township General Fund Allocation

State Fire Commissioner Grant

FEMA Assistance to Firefighter Grants (not guaranteed, not annual)

Community Fund Drive – solicitation

Cell Tower

Social Club contributions

Miscellaneous Fundraising – carnival, raffles, pound cake sale, etc..

The fire companies MUST rely on fundraising to sustain their operations, including carnival, barbeque, and related labor intensive activities.





Even though funding has stabilized, there is still concern on the part of the fire department regarding staffing to support fundraising, which takes away from training, maintenance and response time.

Typical operational expenditures are for personnel, firefighting equipment, vehicle and structure maintenance, fuel and utilities, communication equipment, personal protective equipment, training, fire prevention, administration, etc. The proposed operating budgets submitted to the project team appear appropriate for organization the size and complexity of similar size suburban fire departments. The reserving practices of the fire company are not necessarily consistent with current best practices. Reserves are maintained but should be reserved for

- Six month operational expenses
- Capital purchasing (see apparatus and facilities section for recommended reserving)
 - o Apparatus
 - Facilities
 - o Equipment (bunker gear, self-contained breathing apparatus, hose, etc.)

Discussions were held regarding operating budgets. Following these discussions and review of budget information, it appears the budgets are appropriate for departments of the type, size and complexity of the fire service in the region. Fire department leadership indicated the current funding streams are adequate for current operational needs. However, as expanded services are anticipated, then more funding would be necessary.



A review of by-laws, policies and procedures and related documents found a number of departments did not have the following policies in place, consistent with Federal requirements:

- Whistleblower policy
- Conflict of Interest Policy (The ethics policy in place does not meet this requirement)
- Records Retention

Sample documents are provided in the appendix section of this report.

A dissolution clause was not found to exist or be limited in text in the by-laws, meeting the need for any future loans or grants.

FEMA Assistance to Firefighter Grants (AFG) and Staffing for Adequate Fire Emergency Response (SAFER) grants appear to be regularly applied for. There lies great opportunity to potentially attain these funds for needed resources in the county but for some reason no collective approach to determine collective need and thus submit appropriate grant requests. This should become a priority to establish a regional team to determine need for the "next system" and submit a grant for needed resources to meet those needs, as regional grants are more successful than individual company requests.

The departments are not buying equipment together nor using a group purchasing system which would better manage costs and expenditures.

The fire department provides an annual statement of expenses to account for township provided funding.

RECOMMENDATIONS

21-12 The identified policies for "Whistleblower", Conflict of Interest and Records Retention should be implemented.



Facilities

The facilities were evaluated to consider suitability and growth opportunities within the response district. The fire station conditions were rated subjectively, based on housekeeping, size of apparatus bays, operational and support area, existence of detection and suppression equipment, ramp size, building maintenance and interior traffic conditions. A review of structures was also conducted for critical areas such as basic construction, maintenance and safety. Facilities are rated as follows:

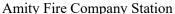
Amity Fire Company - Fair

| Year Built | Vehicle Exhaust | Emergency Generator | Inspection* | Fire Sprinklers | Fire Detection | CO Detection | Condition |
|---------------|--------------------|------------------------|------------------------------|--------------------|-------------------|-----------------|---|
| 1971 | Yes | No | Recently See Condition | No | Yes Monitored | No | The station is 50 years old and reaching the end of its life expectancy No service agreements are reportedly in place for infrastructure equipment. |

Monarch Fire Company - Fair

| Year Built | Vehicle Exhaust | Emergency Generator | Inspection* | Fire Sprinklers | Fire Detection | CO Detection | Condition |
|----------------------|--------------------|------------------------|------------------------------|--------------------|----------------------|-----------------|--|
| 1950 1972 2010 | Yes | No | See comments in report | No | Partial Monitored | No | The station is adequate as a garage for vehicles. At 70 years old, it is reaching the end of life expectancy. No service agreements are reportedly in place for infrastructure equipment. |







Monarch Fire Company Station

*The ratings are based on project team assessment as observed during visit

Excellent = relatively new & above average in construction, maintenance, functionality

Very Good = in excellent condition with more than 10 years of service

Good = useful and meets needs, is well maintained and functional

Fair = meets need, but has deficiencies

Poor = old, needs maintenance, not useful as Fire/EMS station



The fire stations were basically constructed as garages to keep fire engines within, and a social club to support the fire company. These concepts of fire station design are not compatible with 21st Century fire station needs. The sites and structures have a number of issues. Collectively they include:

- No sleeping and no/limited shower facilities available and mens/womens restrooms.
- No emergency generators to sustain power during emergencies
- Limited storage space
- Lack of adequate training facilities.
- Lounge area in apparatus bay area (contaminants from fires/vehicle exhaust potential)
- No carbon monoxide detectors present
- Location within the township

Fire Stations in use were clearly built as buildings to house fire engines.

The fire stations were found to be of average construction and maintenance, for the era of construction, not as 21st century fire stations. Adequate space does not exist for current and future use. Long term plans need to be initiated for construction of a new single station for the township, or replacement of both fire stations with modern facilities. There exist two options, both of which will require township investment and commitment, either construct a single station more centralized in the township, or construct new quarters at both existing stations. The single centralized location may be more effective, however, response times of personnel will need to be evaluated for this option. Both social clubs can be maintained and function where they are, as long as they continue to contribute to the fire company operations. Even with a single station, the companies can maintain their independent status.

There were reported to be individuals (trustees) who conduct an annual inspection of stations. Their report coupled with direct reports from personnel in the stations prompts repairs and maintenance, for each company as needed. However, neither fire company reported that infrastructure systems (HVAC, diesel exhaust, etc.) were on annual inspection programs with a vendor. Planned maintenance and upgrades should be a routine function.

Carbon Monoxide detectors were NOT found in either station areas where personnel may relax or even sleep during weather events. Given the nature and use of these structures, carbon monoxide detectors should be present in each station living areas.

21st Century Fire/EMS Stations

Fire stations should be built to meet the needs of the organization and delivery system. This requires:

- Adequate space for vehicles, today and into the foreseeable future
- Compliance with all nationally recognized standards as well as standards for fire/EMS station design and operation
- Modern training facilities and equipment
- Adequate and secure office space
- Adequate and secure storage areas for equipment and records
- Safe and secure living quarters for duty crew personnel
- Safe and secure sleeping areas (as appropriate) for duty crew personnel
- Dedicated physical fitness area
- Adequate living and meeting space
- Adequate space for outdoor training



- Handicapped accessibility as appropriate
- Apparatus exhaust system (point of capture)
- Automatic fire/smoke detection and alarm system
- Automatic fire sprinkler system (NFPA 13 Compliant)
- Carbon monoxide detection and alarm equipment
- Energy efficient design and construction (LEED Certified)
- Decontamination and cleaning area for firefighter protective clothing and equipment
- Adequate parking for all personnel vehicles
- Sustainable construction of the facility (use of design and construction techniques that will reduce or eliminate any negative impact of the building upon environment and occupants)
- Building integrity and capability for continuity of operations during disasters (including emergency power, redundant water supply, sewage, communication, and related systems; protection from high water/flood, high winds, and seismic events; food storage, emergency supplies)

RECOMMENDATION

- 21-13 Emergency Generators are critical equipment in the event of power outages. Each company should file for FEMA-AFG (Assistance to Firefighter Grants) for emergency generators.
- 21-14 Carbon Monoxide detectors should be placed in living spaces in each fire station.
- 21-15 Contracts should be established for annual preventive maintenance of the HVAC, and diesel exhaust equipment as a minimum.
- 21-16 Long term plans need to be initiated for construction of a new single station for the township, or replacement of both fire stations with modern facilities.



Apparatus

The purpose of the apparatus assessment is to assure that the minimum apparatus needs of the fire response district, as defined by risk evaluations conducted to date, are provided for and in adequate functioning and reliable condition. The Township and Fire Companies have provided the equipment to meet the actual demands being placed upon the departments, with secondary needs (threat/hazard based). Based on physical observation and discussion with officers and members, as well as a review of the records management system, the project team evaluated the major apparatus of the department as follows:

Amity Fire Company

| Vehicle | Date | Manufacturer | Pump Size | Tank Size | Condition |
|----------------|------|--------------|-----------|-----------|-----------|
| Engine 49 | 2005 | Pierce | 1500 | 750 | Good |
| Engine49-1 | 2003 | Pierce | 1250 | 1500 | Good |
| Rescue 49 | 2017 | Pierce | 500 | 300 | Excellent |
| Utility 49 | 2012 | GMC/Reading | | | Excellent |
| Car 49 | 2018 | Chevy | | | Average |
| Traffic 49 | 2006 | Ford | | | Poor |
| Safety Trailer | 2010 | Scotty | | | |

Monarch Fire Company

| Vehicle Date | | Manufacturer | Pump Size | Tank Size | Condition |
|-----------------|------|------------------|------------------------|-----------|-----------|
| Rescue Engine 6 | 2000 | New Lexington | 1000 | 500 | Fair |
| Quint 6 | 2005 | E-One | 75 foot aerial 2000 | 500 | Good |
| Tanker 6 | 2016 | Peterbilt/4-Guys | 1000 | 3000 | Excellent |
| ATV6 | 2015 | Kobuto | 15 | 150 | Excellent |
| Brush | 1985 | Chevy/DCNR | 15 | 150 | Poor |
| Tac 6 | 1993 | Ford | 500 | 250 | Fair |
| Traffic 6 | 2015 | Ford | | | Excellent |

The fire pumps are tested every other year as are aerial devices. Fire hose is tested annually, and ground ladders are tested every two years. Records are well maintained. Qualified vendors are used for these services.

The apparatus serving the township were found to be on a basic inspection-service/maintenance program with maintenance and testing managed by Maintenance Staff and qualified vendors as appropriate. File information was reportedly maintained accordingly.



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 thus contributing to the longevity of the vehicles. There are several fundamental decisions that have to be made with regard to replacing fire apparatus. These decisions include "what defines replacement":

- age alone,
- age coupled with level of performance, or
- performance reliability only

There currently is no comprehensive apparatus replacement plan. One has been developed and included with this report, for consideration.

As noted earlier, there is more apparatus within the Fire Companies than is necessary and would be expected. We suggest the following apparatus per station, and **considering the limited staffing capability**, even this may be excessive. A more reasonable apparatus complement may be:

| STATION | RESCUE PUMPER | QUINT (AERIAL) | PUMPER TANKER | BRUSH UNIT | TRAFFIC | UTILITY |
|-------------------------|------------------|-------------------|------------------|---------------|---------|---------|
| Amity Fire Company | 1 | 1 | | 1 | 1 | 1 |
| Monarch Fire Company | 1 | | 1 | 1 | 1 | 1 |

Replacement considerations (for financial planning purposes) going forward are as follows:

| Year | Unit | Cost |
|------|---------------|-------------|
| 2021 | Rescue Engine | \$650,000 |
| 2022 | | |
| 2023 | Brush Engine | \$300,000 |
| 2024 | | |
| 2025 | | |
| 2026 | | |
| 2027 | Rescue Engine | \$715,000 |
| 2028 | Brush Engine | \$375,000 |
| 2029 | | |
| 2030 | Quint | \$1,400,000 |
| 2031 | | |

This conservative replacement schedule suggests a need for \$3,440,000 to replace the recommended full-size vehicle reduced fleet, over the next 10 years, or more realistically presented as needing to reserve/obtain \$344,000 each year for apparatus replacement.

The roadways in and around the region present stability challenges for large vehicles, such as fire apparatus. It is recommended that all drivers/operators be required to complete a "Vehicle Rollover Prevention" program. A copy of this video-based program is provided under separate cover for implementation.

Similarly, large vehicles, particularly tankers and aerial devices have backing sight line difficulty. A backing training program (copy provided under separate cover) should be conducted with all vehicle operators.

As can be seen below, the apparatus complement is consistent with the requirements for the region and is more apparatus than can be adequately staffed by the companies.







RECOMMENDATION

- 21-17 A long term apparatus deployment and purchasing plan, and related funding source, needs to be identified for the confined system. A hypothetical plan is provided as part of this project.
- 21-18 Specialized Training should be provided to prevent potential rollover accidents involving large vehicles.
- 21-19 A backing training program (copy provided under separate cover) should be conducted with all vehicle operators.



Risk Analysis - Target Hazards

Amity Township was found to be no different than most other communities in America, when it comes to a discussion of its nature – meaning the communities are constantly changing. Buildings are constantly being built, traffic is constantly moving, commerce continues to occur, and people are born and die. As a result, risk changes and the approach to managing those risks must change with them.

Emergency Service Organizations (ESOs) must expand their use of fundamental assessment and planning efforts to assure they can meet future demands. This is defined as the process used to identify the community's fire protection and other emergency service needs in order to identify potential goals and objectives. The Departments have a basic source of data and information in order to logically and rationally define the organization's mission. The end result of the process is to establish a long-range general strategy of the operation of the system. You achieve this goal by:

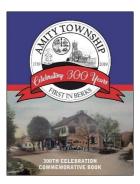
- 1. Documenting characterized by collecting historical data and instituting a process by which risks are defined and potential organizational goals and objectives are established.
- 2. The organization can then assess the nature and magnitude of the hazards within its jurisdiction, with each significant event categorized and listed, to permit future analysis and study in determining standards of coverage and related services.
- 3. The organization next assesses the nature and magnitude of other hazards and risks within its jurisdiction and identifies appropriate strategies, methods of operation, and resource allocation required to mitigate potential emergencies.
- 4. Finally, the result is a "strategic" or other form of long-term (typically three to five years into the future) planning process that, along with a budget, is guiding the activities of the organization.
- 5. The plan is then submitted to the appropriate authority having jurisdiction for review and implementation.

The coordination of these actions creates a plan.

A basic informal risk analysis has been conducted by the fire departments. Typically, an area is evaluated based on the following factors:

- Exposures/occupancy (e.g. manufacturing, residential)
- Fire response experience
- Water Supply deficiency
- High Life Hazards (e.g. nursing homes, schools, conflagration potential, high population density).

In general, the risks are considered to be routine involving single and multi-family dwellings, businesses, light industrial, farms, and educational facilities.



Township-wide, there are several key points identified as a result of this portion of the analysis:



- 1. While hazards are not considered "unique", they are hazards and risks that require appropriate types of response, equipment and performance capability in order to adequately manage the risk posed. This means, that staffing, fire apparatus, specialized equipment in some cases, and water supply are all necessary and must be provided in a timely fashion if there is an expectation of minimal damage to the risk.
- 2. There is a limited level of built-in fire protection in older structures fire detection, fire alarm, fire suppression which the lack of results in fires of greater size before human detection, which then results in greater damage and more reliance upon manual fire suppression actions (fire department) which requires more water supply.
- 3. Given some areas of the region with less than adequate water supply (per ISO data), this creates a greater emphasis on the need for provision of water at fire scenes by alternative water sources in those areas. These operations require time to establish, which is in direct relation to fire growth; that is the longer it takes to get water onto the fire in the proper fashion, the greater the size of the fire.

In summary, when a fire occurs, there must be a sufficient amount of water applied with the right type of equipment and staff to actually suppress the fire. If there is no early warning (e.g. smoke detectors) or early suppression efforts (e.g. automatic fire sprinklers), the application of water by the fire department is critical in quick fashion to manage any loss. Without early detection, most fires will achieve flashover (actual fire involvement) of the structure and the efforts of the fire department, while admirable, typically result in partial saving of the structure at best.

For response planning and maximum credit in the ISO Schedule, pre-fire planning inspections of each commercial, industrial, institutional and other similar-type building should be made twice a year by company members. Records of the inspections should include complete and up-to-date notes and sketches.

A specific approach to dealing with target risks is provided under separate cover.

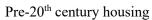
RECOMMENDATIONS

21-20 For response planning and maximum credit in the ISO Schedule, pre-fire planning inspections of each commercial, industrial, institutional and other similar-type building should be made twice a year by company members. Records of the inspections should include complete and up-to-date notes and sketches.



Typical Amity Township Risks







Mid-20th century housing



21st century housing



21st century multi-family housing



Multi-family rental units



Keystone Villa Assisted Living



Amity Place Senior Living



Open fields



Spacious Recreation Areas









Manufactured Home Parks

Schools

Busy commercial section along Route 422 including significant vehicle traffic and related incidents











Water Supply

Water supply, for purposes of this project is defined in three components:

- 1. <u>Fire Flow Required</u> is the first, water supply component, and is as the amount of water necessary to suppress a fire in a building and is measured in gallons per minute (gpm).
- 2. <u>Available Water Supply</u> is the second component and refers to the amount of water available to suppress fire from a fire hydrant, at a "dry hydrant/static water source site", or water available from water tender units (tank trucks). This too, is measured in gallons per minute (gpm).
- 3. <u>Water Supply Deficiency</u> is the third component, and is the difference in the water required to suppress the fire and the water available to suppress the fire. This is to be measured in gallons per minute (gpm).

What is important to understand is that water is THE primary tool used to suppress fires and there must be a sufficient amount of water applied with the right type of equipment and staff to actually suppress the fire. If there is no early warning (e.g. smoke detectors) or early suppression efforts (e.g. automatic fire sprinklers), the guide application of water by the fire department is critical to manage any loss. Without early detection, most fires will achieve flashover (actual fire involvement) of the structure and the efforts of the fire department, while admirable, typically result in a partial saving of the structure at best.

Water supply for the region was evaluated in the following fashion.

- First a review was conducted of all available Insurance Rating Reports.
- Next, a review of water supply information provided by the fire departments was provided.
- A discussion was held with the fire chiefs regarding:
 - o Target Hazards in first due response area
 - Water supply necessary to manage a fire incident
 - o Ability to provide the defined needed water supply
 - o Methods to provide for water supply needed but not readily available
 - o Review of water supply methods used by each fire department

When comparing the risks identified by the fire departments, the related water supply demand for those risks, the water available for fire protection, and the mobile water supply capability, it was determined that many areas of the region lack sufficient water supply to adequately control fires which might be anticipated based on the construction, occupancy, fixed fire protection, and exposure of the risk.

The fire companies were found to have a good understanding of the water supply systems available to them for firefighting purposes, the implementation of new water lines for growth in the community and the need for supplemental water. All of these are considered in the long-term planning of the fire departments.

Based upon the information within the ISO report, the fireflow requirement is 1,500 gpm, for fire department planning. For non-hydranted areas, the County Tanker Force is available. As development continues, water mains and thus hydrant coverage will be expanded.

RECOMMENDATION

None



Personnel & Training

The fire companies report the total members as follows:

| | Total | Active | Junior | EMR | EMT=B | EMT=I | Paramedic | Part- Time |
|----------------------|----------|--------|--------|-----|-------|-------|-----------|---------------|
| Amity Fire Company | 25 | 10 | 1 | - | 4 | - | - | 7 |
| Monarch Fire Company | Not | 20 | 2 | | | | | 7 |
| | provided | | | | | | | |

Part-time paid staffing (Driver) is provided at each station as follows:

Amity - 7 am through 7 pm Monday through Friday

Monarch - 7 am thru 8 pm Monday through Friday

The paid personnel report to the company fire chief. A job description does exist for the position, however, based on hiring and need, all aspects may not be completed prior to hiring.

Given the staffing assessment and funding considerations, investigation into applying for a FEMA-SAFER (Staffing for Adequate Fire And Emergency Response) grant should be initiated to determine viability to file, obtain and implement a more structured staffing program either with paid personnel or a volunteer stipend system. https://www.fema.gov/grants/preparedness/firefighters/safer

Training requirements for the paid staff include the following

| Component | Amity Fire Company | Monarch Fire | Part-time |
|---------------------|---------------------|---------------------|---------------------|
| | | Company | Paid Staff* |
| Firefighting | Firefighter I | Firefighter I | Firefighter I |
| | Hazardous Materials | Hazardous Materials | Hazardous Materials |
| | Awareness | Awareness | Awareness |
| | Hazardous Materials | Hazardous Materials | |
| | Ops | Ops | |
| | Equipment | Equipment | |
| | Familiarization | Familiarization | |
| | Bloodborne Pathogen | Bloodborne Pathogen | |
| Rescue | VRT | VRT | |
| Incident Management | NIMS 100, 200, 700, | NIMS 100, 200, 700, | |
| | 800 | 800 | |
| Driving | EVOC | EVOC | |
| Emergency Medical | CPR/AED/First Aid | CPR/AED/First Aid | CPR/AED/First Aid |
| Officers | Same as firefighter | Same as firefighter | |
| Frequency | Weekly | Weekly | |

^{*}per job description provided

The ISO report indicated improvements could occur in the training of members by

- Work toward a goal that each firefighter receives 16 hours per year in structure fire related subjects as outlined in NFPA 1001
- Work toward a goal that each officer will receive 12 hours of continuing education annually
- Arrange for 18 hours of hands-on fire training annually at fire training centers.
- Assure 12 hours of driver/operator training per year in accordance with NFPA 1002 and NFPA 1451.



Physicals are not consistently completed on new or long-term members.

Background checks are completed upon joining the organization. The check is conducted through the use of the justice portal, child abuse records system, and Pennsylvania State Police background check system.

The ISO Study indicated recognition of 0.27 on-duty personnel and an average of 10.00 on call personnel responding to first alarm structure fires. This is significantly less than the ISO statement that the "creditable response of on-duty and on-call firefighters is 12, including company officers". This supports the low rating on "credit for company personnel" in the ISO evaluation.

There is a fire officer assigned Incident Safety Officer as necessary, their skill and knowledge as a true safety officer may not meet the needs at the scene. There is no formal Health and Safety Officer in place to manager overall personnel, facility and apparatus safety.

RECOMMENDATIONS

- 21-21 Investigate applying for a FEMA-SAFER (Staffing for Adequate Fire and Emergency Response) grant should be initiated to determine viability to file, obtain, and implement a more structured staffing program either with paid personnel or a volunteer stipend system.
- 21-22 Training programs should be enhanced with a plan developed to work toward achieving training expectations per the ISO report recommendations, including additional training for officers.
- 21-23 Safety officers are assigned at the time of an incident. To assure that all those potentially assigned the role of Incident Safety Officer are knowledgeable in the performance requirements of that function, it is recommended ALL officers complete the National Fire Academy class on Incident Safety Officer. This can be conducted as part of in-station training.
- 21-24 There is no official Department Health and Safety Officer. The role of Health and Safety Officer for the Fire Departments needs to be established. It should be the responsibility of the Fire Administrator position. The role should be consistent with the tasks and functions defined by NFPA 1500 Standard for a Fire Department Safety and Health Program and the Fire Department Safety Officer Association certification program for Health and Safety Officer.
- 21-25 Physicals are reportedly conducted only upon entry into the fire departments. A physicals program should be implemented.



Recruitment and Retention

There is no structured approach to Recruitment and Retention. One is clearly needed for sustainability.

No high-school student-oriented programs are in place to recruit high school students.

Amity Fire Company attempts to recruit new members at public events. The fire company website is placed on apparatus, but there is no website landing page for recruitment.

Monarch fire company has a sign outside its station, but has no website for recruitment and retention (or even company history).

Facebook pages are established by both companies. A review of "posts" shows minimal reference to recruitment or needing members.

The lack of recruitment activity on facebook pages and the lack of website presence and related recruitment information are lost opportunities to gain new members.

The Recruitment and Retention offerings of the Firemen's Association of the State of Pennsylvania were provided to both fire companies.

In an effort to establish a sustainable organization, Recruitment and Retention efforts should be established within the regional high school and a recruitment and retention program should be established by the fire companies, with the idea of jointly recruiting from the community in various ways and developing retention programs to meet the needs and wants of the members.







RECOMMENDATIONS

- 21-26 A recruitment program within the regional high school should be established to the regional area and involve both departments.
- 21-27 A recruitment and retention program should be established by the fire companies, with the idea of jointly recruiting from the community in various ways and developing retention programs to meet the needs and wants of the members.



AMITY TOWNSHIP VOLUNTEER FIRE COMPANIES

CONSOLIDATED RECRUITMENT AND RETENTION PLAN

| Action Item | Start Date | Completi on Date | Responsible Party | Comment |
|--|---------------|----------------------------|---------------------------|---|
| Recruit/Advertise/Solicit in community for retired/senior former Human Resource or Marketing person to take on R&R role | 10/1/21 | 1/1/22 | Presidents and Chiefs | Also advertise through township media sources |
| Establish R&R Committee | 10/1/21 | Ongoing | Presidents | 6 member committee with Chair to be recruited from public |
| Conduct Membership meeting to discuss: - Why people leave and how to keep them - What makes people join and how to expand | 10/1/10 | 10/31/21 | Presidents, and Chiefs | |
| Identify what members seek to continue service and incent response and develop incentive program | 11/1/21 | Ongoing | Committee TBD | Ideas included at www.becomeapafirefighter.com |
| Conduct an Everyone Get One Campaign | 10/1/21 | 3/30/22 | Presidents and Chiefs | Include an incentive for member recruiter for each person recruited |
| Begin coordination/use of FASP program components | 10/1/21 | Ongoing | Committee TBD | |
| Recognition event for retention of members | 12/1/21 | 12/31/22 | R&R Committee | Conduct event to recognize performance (emergency responses) with awards |
| Develop and implement advertising campaign for new residents | 12/1/21 | Ongoing | R&R Committee | Include in Township new resident packet |
| Develop and implement advertising campaign for new members outside township | 1/1/22 | Ongoing & Modify as needed | R&R Committee | Evaluate and implement potential use of banners, lawn signs, social media, township media, etc. |
| Work with VO-TECH & high school on junior program | 1/1/22 | Ongoing | R&R Committee | |
| Local Item TBD from discussions/research/meetings | | | | |
| Begin Regionalization discussions with neighboring communities | 6/1/22 | | Chiefs | |



Operations

To assist in the evaluation of operational practices, the project team conducted a basic review of operations, involving 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 as the baseline. The assessment tool was developed by VFIS. This assessment tool is nationally recognized as a tool to determine achievement of various recognized fire service benchmarks.

The standard does NOT include Fire Prevention, Community Education, Fire Investigations, Support Services, Personnel Management, and Budgeting and is not considered all encompassing.

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 (AHJ) determines if this standard is applicable to their fire department". Therefore, the first question to ask and resolve is whether or not the AHJ will use/apply the standard. The AHJ will vary by municipality/district/etc. in applying this standard.

A summary document follows, illustrating how each fire department has achieved the various criteria. The categories are rated as "Attains, Partly Attains, or Fails to Attain", based on the review of various best practice implementation in each criteria.

Section Criteria from NFPA 1720 follow. Each Section has questions provided from that section that were reviewed via documentation and questioning. No significant gaps were identified through this process. Note the intent of this process was related to Station Locations. The review of SOGs and facilities/operations suggests a preliminary rating of credible operations as compared to the NFPA 1720 expectations. NOTE SHADED AREAS ARE SUMMARY/SUGGESTION COMMENTS.

Fire Suppression Organization – Fails to Attain

- Are fire suppression operations organized to ensure the fire department's suppression capability includes sufficient resources to efficiently, effectively and safely deploy fire suppression resources?
- Has authority having jurisdiction promulgated the Fire Department's organizational, operational, and deployment procedures with written regulations, orders, and standard operating procedures/guidelines?
- Do Fire Department SOP's clearly state Transfer of Command responsibility?

There is no annual review of station response times and related performance. Completing such an assessment and taking related improvement actions will enhance the overall performance of the Fire/EMS service.



<u>Community Risk Management – Partly Attains</u>

The fire department shall participate in a process that develops a community fire and emergency medical services risk management plan. The specific role of the fire department and other responding agencies shall be defined by the community risk management plan.

The number and type of units assigned to respond to a reported incident shall be determined by risk analysis and/or pre-fire planning.

Has the fire department participated in development of a community risk management plan regarding associated risks with storage, use and transportation of hazardous materials? (County LEPC)

Does the plan define the role of the fire department and other agencies for hazardous materials operations management as well as including other special operations?

No annual reports are completed. LEPC information is entered with pre-plan information in databases for use by fire department personnel.

Fire Suppression Organization – Partly Attains

Has the fire department identified minimum staffing requirements that ensure sufficient numbers of members are available to operate safely and efficiently?

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

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?

Are FD personnel responding to emergencies:

- 1. Organized into company units or response teams?
- 2. Equipped with appropriate apparatus & equipment?

Do standard response assignments (including mutual aid response & mutual aid agreements) predetermined by location, & nature of reported emergency regulate the dispatch of departments, response groups and command officers to emergency incidents?

Does FD maintain standard reports for each response that contains:

- 1. Nature?
- 2. Location?
- 3. Description of operations performed?
- 4. Identification of members responding?

Specifically regarding NFPA 1720 Standard for response:

- 1. The fire department's fire suppression resources are deployed to provide for the arrival of an engine company within a 240 second travel time, to 90 percent of the incidents.
- 2. Personnel assigned to the initial arriving company shall have the capability to implement an initial rapid intervention crew.
- 3. The fire department shall have the capability to deploy an initial full alarm assignment within 480 second travel time to 90 percent of the incidents.



4. Fire departments that respond to fires in high-, medium-, or low-hazard occupancies that present hazards greater than those found in the low-hazard occupancy shall deploy additional resources on their initial alarm (achieved through mutual aid and general alarm activation).

Through paid drivers and automatic aid (run-cards) there is a response plan, however a standard of response cover document needs to be developed and monitored.

Annual Evaluation – Fails to Attain

Does the fire department evaluate its level of service and deployment delivery and response time objective on an annual basis?

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?

No annual report is provided to the elected officials, members and the citizens.

Quadrennial Report – Fails to Attain

Does the fire department provide the AHJ with a written report, quadrennially (every four years), that shall be based on annual evaluations required by any AHJ?

Does the report explain the predictable consequences of identified differences and address steps within a fire department strategic plan necessary to achieve compliance?

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 departments, response groups, and command officers to fires and other emergency incidents.

This Strategic Plan will help with such a report, which does not exist today.

Fire Suppression Operations – Partly Attains

Do SOP's require one individual assigned as the incident commander (IC)?

Do SOP's require the assumption of command to be communicated to all units involved in the incident?

Do SOP's require the IC to be responsible for overall coordination & direction of all activities for the duration of incident?

Do SOP's require the IC to ensure an accountability system is immediately established to ensure rapid accounting of all on-scene personnel?

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?

Do SOP's require the company members to be aware of the identity of the company officer/crew leader?

There is a need for expanded SOG development, training, and regional implementation regarding fire suppression operations to assure effective and safe performance.



Initial Attack – Partly Attains

Are orders to crew members, particularly verbal, and those at emergency scenes transmitted through the company officer?

Are initial attack operations organized to ensure that at least four members are assembled before initiating interior fire attack at a working structure fire?

Do two members work as a team while in hazardous area?

Do SOG's provide for the assignment of two members outside of hazardous area to assist or rescue team operating within the hazardous area?

- 1. One of these rescue team members is permitted to engage in other activities
- 2. Members performing critical tasks that if abandoned to perform rescue, would endanger any firefighter operating at the incident are prohibited from assignment to the two-person rescue team

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 1500³?

Beyond the capability of the initial attack, can FD provide for sustained operations 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)?

Support activities beyond capabilities of initial attack?

There is no guarantee for minimal staffing and thus effective deployment. Only a response is somewhat guaranteed.

Intercommunity Organization – Partly Attains

Are mutual aid, automatic aid and other fire protection agreements <u>in writing</u> 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?

Designation of incident commander (IC)?

Are procedures and training of personnel for all FD's involved in agreements sufficiently comprehensive to produce an effective fire force and ensure uniform operations?

³ NFPA 1500 – Standard on Fire Department Health and Safety Program



Are units responding to mutual aid incidents equipped with communications equipment to permit communications with IC, division, group and/or sector officers?

Automatic Aid is used. Agreements are documented county wide via the run-card deployment program.

Special Operations Response – Partly Attains

IF PROVIDED, are FD's special operations organized to insure the capability includes sufficient:

- 1. Personnel
- 2. Equipment
- 3. Resources

To deploy the initial arriving company and additional alarm assignments providing such services?

Established automatic and mutual aid agreements are permitted to comply with these requirements.

Has FD adopted a special operations response plan and related standard operations procedures (SOP's) that specify:

- 1. Role and responsibilities of the FD in special operations?
- 2. Authorized functions of members responding to HazMat incidents?

Are FD members expected to respond to HazMat incidents beyond first responder operations level trained to applicable requirements of NFPA 472⁴?

Does FD have capacity to implement RIC (Rapid Intervention Crew) 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 1500⁵?

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?

Do procedures limit FD to performing only those specific special ops functions for which their personnel are trained and equipped?

Awareness programs are made available to fire personnel with operations and technical expertise provided by either regional or county assets.

-

⁴ NFPA 472-Standard for Professional Competence of Responders to Hazardous Materials Incidents

⁵ NFPA 1500-Standard on Fire Department Occupational Safety and Health Program



Safety & Health Systems - Partly Attains

Does FD provide occupational safety and health program in accordance with NFPA 1500⁶ that forms the basic structure of protecting the health & safety of firefighters, regardless of the scale of the department or emergency?

Incident safety officers are assigned at an incident and there are no Safety and Health Officers established.

Incident Management System – Attains

Does FD provide an incident management system in accordance with NFPA 1561⁷ that forms the basic structure of all emergency ops regardless of scale of department or emergency?

Is incident management system designed to manage incidents of all different types, including structure fires, wildland fires, haz-mat incidents, emergency medical operations and others?

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?

NIMS is integrated into operations and training is a requirement..

Communication Systems – Attains

Does FD have a reliable communication system to facilitate prompt delivery of fire suppression, EMS, and special operations?

Do FD's communications facilities, equipment, staffing and operation procedures comply with NFPA 12218?

Do operating procedures for radio communications provide for standard protocols and terminology at all types of incidents?

In compliance with NFPA 1561, is standard terminology established to transmit information including:

- 1. Strategic modes of operation?
- 2. Situation reports?

Emergency notifications of imminent hazards?

Radio equipment and performance is considered acceptable at this time.

Pre-Incident Planning – Partly Attains

Does FD have operational requirements to conduct pre-incident planning, with particular attention to target hazards?

The current pre-planning process is useful and recognized by ISO but needs to be expanded.

⁶ NFPA 1500-Standard on Fire Department Occupational Safety and Health Program

⁷ NFPA 1561 – Standard for Incident Management Systems

⁸ NFPA 1221-Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems



In summary several items were identified in the review of operations, comparing programs to those identified in 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. These gaps should be prioritized and actions taken to implement effective programs over the term of the strategic planning tasks identified in this report.

RECOMMENDATIONS

Included in appropriate sections of the report.





Standard Operating Guidelines

As noted earlier, a set of Standard Operating Guidelines (SOGs) have been implemented independently by the fire companies. It is recommended they be consolidated into a manual similar to the categories presented later in this section. In addition, all SOG's should follow a constant format e.g. Mission Statement. Given the use of extensive automatic and mutual aid, it is important to realize that if departments "run together" they need to operate together. Thus, the need to make sure mutual aid departments are aware of and can interface with these SOGs becomes extremely important and should be analyzed by each company's leadership. Even though departments respond to all structure fires as a "team", they MUST operate under the same SOGs for purposes of operational efficiency and safety.

Minimal SOGs are in place and only three county-wide SOGs appear coordinated. Significant safety and risk management policies, e.g. mayday, harassment, strategic guideline, etc. are not in place. Many SOGs are a statement only. There should also be a strategic guideline which can be used to define and communicate the concepts used by officers to manage an incident. A sample "Strategic Guideline" is provided in the Appendix and can be used as a draft to create a document and training for the Amity Township Fire Companies.

The Fire Companies should implement a practice of reviewing SOGs on a regular basis to assure staff understands the intent, content, and application of the SOG in daily practice. Personnel should be encouraged to provide input on the need to modify the SOG or create additional SOGs. A comprehensive list of SOGs in place in departments throughout the Mid-Atlantic is provided as a review by a team the Company Chiefs should appoint, to consider additional SOGs for use.

RECOMMENDATION

- 21-28 A comprehensive list of SOGs in place in departments throughout the Mid-Atlantic is provided for review. A team should be appointed to consider adding additional SOGs for use by the merged organization's fire service responders, as well as redesigning the "packaging" of SOG's. In addition, SOGs should be communicated to all automatic and mutual aid companies for integration, so that when operating together a single system of operations are performed to enhance training, proficiency and safety. These should be coordinated into a single townshipwide SOG manual.
- 21-29 A strategic guideline for operations to define and communicate the concepts used by officers to manage an incident is not provided for. A "Strategic Guideline" using the sample provided in this document and create a document and training



Significant events such as this fire necessitate a singular approach to safe and efficient operations through the use of one set of standard operating guidelines for all responder and agencies providing service.



STANDARD OPERATING GUIDELINE SUMMARY

The following list of typical standard operating guidelines/procedures have some highlighted which reflect the ones already in place in Amity Township

ORGANIZATIONAL STATEMENTS

| Topic | Amity FC | Monarch FC |
|---|----------|------------|
| Introduction/Orientation | X | |
| Goals & Objectives | | |
| Mission Statement | | |
| Organizational Design | | |
| Standard of Cover | | |
| Response Time Standard | | |
| Service Delivery Statement | | |
| Strategic Operational Guideline | | |
| Terminology, Definitions, Abbreviations | | |
| Vision Statement | | |

ADMINISTRATIVE GUIDELINES

| Торіс | Amity FC | Monarch FC |
|--|----------|------------|
| Accident/Incident Reporting | | |
| Vehicle /Personal Injury/Civilian | X | |
| Accident/ Incident Investigation Procedure | X | |
| Administration Communications | | |
| Annual Planning Calendar | | |
| Billing Services | | |
| Campaign Presentation to Membership | | |
| Chain of Command/Officer in Charge | X | |
| Claim Filing Process | | |
| Code of Ethics | | |
| Complaints | | |
| Conflict of Interest | | |
| Contacting Officers | | |
| Credit Card Policy | | |
| Daily/Shift Duties | | |
| Department Representation | | |
| Duty Chief | | |
| Emergency Action Plan | | |
| Inventory List | | |
| Line of Duty Death | | |
| Live In Program | | |
| Oath of Office | | |
| Post Incident Analysis | | |
| Probationary Process/Orientation | | |
| Social Media Policy (email, Facebook, website, etc.) | X | |
| Solicitation of Funds | | |
| Volunteer Standards & Requirements | | |



VEHICLE OPERATION GUIDELINES

| Торіс | Amity FC | Monarch FC |
|---------------------------------------|----------|------------|
| Apparatus Inspection & Maintenance | | |
| Apparatus Standards | | |
| Backing Safety | | |
| Driver Apprenticeship | | |
| Driver Requirements | X | X |
| Driver Rules & Responsibilities | X | X |
| Driver Training (EVOC) – Basic | X | X |
| Driver Training - Refresher | | |
| Emergency Response | X | X |
| Personal Vehicle Operations | X | X |
| Personal Vehicle Warning Devices | X | |
| Pre-emption Equipment Use | | |
| Ride Along Program | | |
| Seating/Riding Requirements | | |
| Use of Agency Vehicles | | |
| Vehicle Fueling | X | |
| Vehicle Operation Rules & Regulations | | |

FACILITIES, EQUIPMENT AND GROUNDS

| Topic | Amity FC | Monarch FC |
|--|----------|------------|
| Antique/Memorabilia Display | | |
| Bunk Room/Duty Crew | | |
| Computer Use | | |
| Emergency Power | | |
| Equipment Lost/Damaged /out of service | | |
| Facility & Grounds Rules/Regs | | |
| Facility & Grounds Security | | |
| Fire Alarm System | | |
| Fire Suppression System | | |
| Flag Pole & Flag Display | | |
| Fuel Storage Tanks | | |
| Gear Cleaning | | |
| Gear Racks | | |
| Housekeeping | | |
| Maintenance Records | | |
| Memorial Display | | |
| Mobile Data Terminal Use | | |
| Personal Use of Tools/Equipment | | |
| Security Alarm System | | |
| Sewage System | | |
| Smoking Policy | X | |
| Social Hall Rental | | |
| Station Curfew | | |
| Use of Organization Equipment | | |
| Waste Water Discharge | | |



FIRE & INJURY PREVENTION

| Topic | Amity FC | Monarch FC |
|--------------------------------|----------|------------|
| Inspections | | |
| Investigations | | |
| Code Enforcement | | |
| Fireworks | | |
| Fire Watch | | |
| Juvenile Firesetters | | |
| Maximum Occupancy/Overcrowding | | |
| MSDS/Hazmat Disclosure | | |
| Public Education | | |

EMERGENCY MEDICAL SERVICES

| Topic | Amity FC | Monarch FC |
|-------------------------------------|----------|------------|
| Advance Health Care Directive | | |
| Controlled Substance Accountability | | |
| Latex Sensitivity | | |
| Pre-Hospital Care Reports (PCD) | | |
| Patient Refusal of Care | | |
| Supplies | | |
| Universal Precautions | | |

HUMAN RESOURCES/PERSONNEL

| Торіс | Amity FC | Monarch FC |
|-------------------------------------|----------|------------------------|
| Background Checks | | |
| Badges & Insignias (Awards) | | |
| Benefits | | |
| Billing for Services | | |
| Child Labor Law | | |
| Commendations | | |
| Communicable Disease/ BBP/Infection | | |
| Control | | |
| Communications & Notifications | | |
| Complaints Procedure | | |
| Conduct & Behavior | X | X |
| Conflict of Interest | | |
| Critical Incident Stress Debriefing | | |
| Disciplinary Process | X | X |
| Driver License | | |
| Drug & Alcohol Testing | | X Alcohol policy |
| Duty Crew/On-Call Crew | | |
| Employee Assistance Program | _ | |
| Facial Hair & Grooming | | |
| Family Leave | | |
| Funeral Procedures | | |
| Grievance Procedure | _ | |
| Harassment & Discrimination | | |



| Topic | Amity FC | Monarch FC |
|---|----------|------------|
| HIPAA-Protected Information Maintenance | | |
| and Release | | |
| Identification Tags/Cards | | |
| Incentive Program | | |
| Injuries – On Duty | | |
| Injuries – Off Duty | | |
| Job Descriptions | | |
| Junior Firefighter | X | X |
| Language Use | | |
| Leave of Absence | | |
| Light Duty | | |
| Line of Duty Death | | |
| Medical Leave | X | |
| Medical Records | | |
| Membership Categories | | |
| Military Leave | | |
| Officer Qualifications | | |
| Overtime | | |
| Performance Evaluations | | |
| Personal Appearance Standards | | |
| Personal Projects While on Duty | | |
| Personnel Records | | |
| Physical Fitness | | |
| Pregnancy Leave | | |
| Press/Media Relations | | |
| Probationary/Orientation Process | | |
| Promotion Process | | |
| Recall to Duty | | |
| Recruitment & Retention | | |
| Reporting for Duty | | |
| Return to Work | X | |
| Secondary/Outside Employment | | |
| Smoking & Tobacco Products | | |
| Social Media | | |
| Stipend/Pay-Per-Call | | |
| Temporary Duty | | |
| Tuition Reimbursement | | |
| Uniform Standards | X | |
| Weapons & Firearms | | |
| Wellness/Fitness Program & Exercise | | |
| Equipment | | |
| Whistleblower Policy | | |
| Workers Compensation | | |
| Workplace Violence | | |



SAFETY & HEALTH

| Торіс | Amity FC | Monarch FC |
|---|----------|------------|
| Automatic External Defibrillator | | |
| Facility Safety | | |
| Climate Safety Practices (Heat/Cold) | | |
| Communicable Disease/Infection Control | | |
| Ergonomics/Repetitive Motion | | |
| Exhaust System Use | | |
| Hazard Communication | | |
| Health Insurance Portability & | | |
| Accountability Act (HIPAA) | | |
| Health & Safety Officer | | |
| Hearing Conservation & Noise Protection | | |
| Helmets | | |
| Helmet Markings | | |
| Illness & Incident Prevention | | |
| Incident Safety Officer | | |
| OSHA | | |
| Applicability | | |
| Compliance | | |
| Investigation | | |
| Notification | | |
| Personal Alert Devices | | |
| Personal Protective Equipment (PPE) | X | X |
| Personal Protective Equipment (PPE) | | |
| Cleaning | | |
| Rehabilitation | | |
| Respiratory Protection Program | | |
| Safety Vest | | |
| Self-Contained Breathing Apparatus | v | V |
| (SCBA) | X | X |
| Seat Belt | | |
| Solar Power Safety | | |
| Staffing Requirements | | |
| Station Safety Officer | | |
| Testing & Maintenance | | |
| Aerial | | |
| • Pump | | |
| • Hose | | |
| Ground Ladder | | |
| Two-In, Two-Out | | |
| Use of Body Armor | | |
| Water Rescue Vests | | |



TRAINING

| Topic | Amity FC | Monarch FC |
|---------------------------------|----------|------------|
| Training Policy | X | |
| Training Records Management | | |
| BBP | | |
| Career Track/Promotion Planning | | |
| Continuing Education | | |
| CPR/AED | | |
| EAP Review | | |
| EVOC | | |
| Hazard Communication | | |
| HazMat – Initial | | |
| HazMat – Refresher | | |
| Live Burns | | |
| NIMS | | |

INCIDENT GUIDELINES/OPERATIONS

| Topic | Amity FC | Monarch FC |
|--------------------------------------|----------|------------|
| Abuse Situations | | |
| Accountability | X | |
| Aircraft Incident | | |
| Air Monitoring | | |
| Ambulance Maintenance | | |
| Apparatus Response Procedure | | |
| Automobile Alarms | X | |
| Auxiliary Fire Equipment | | |
| Bomb Scare/Threat | | |
| Brush Fires | X | |
| Camera Use (photographs) | | |
| Carbon Monoxide (CO) Incidents | X | |
| Child Abuse Reporting | | |
| Citizen Evacuations/Notifications | | |
| Collapse Zones | | |
| Communications | X | |
| Confined Space Rescue | | |
| Crime Scene Procedures | | |
| Disposition of Valuables | | |
| Evacuations of Residents | | |
| Engine Company Operations at Vehicle | | |
| Accidents | | |
| Electrical Equipment | | |
| Elevator Entrapment | | |
| Elevator Use During Incidents | | |
| Elevator Entrapment | | |
| Elevator Use During Incidents | | |
| Elevator Entrapment | | |
| Fire Extinguisher Use | | |
| Fire Hydrants | | |
| Fire Marshal Contact/Guidelines | | |



| Торіс | Amity FC | Monarch FC |
|--------------------------------------|----------|------------|
| Fire Police | • | |
| Flood Operations | | |
| Hazardous Materials | X | |
| Helicopter Incident | | |
| Helicopter Landing Assistance | X | |
| High Angle/Rescue | | |
| High Rise Buildings | | |
| Highway Safety | | |
| Incident Management/Incident | | |
| Command System (ICS) | | |
| Investigations | | |
| Knox Box System | | |
| Lockout/Tagout | | |
| Lockout – Vehicle | | |
| LPG Incidents | | |
| Mass Casualty Response Levels | | |
| Mayday | | |
| Medical Assist | | |
| Minimum Staffing Levels | | |
| Missing Person | X | |
| Motor Vehicle Fires | X | |
| Multi-Unit Dwelling | 11 | |
| Natural Gas Incidents | X | |
| News Media Relations | 11 | |
| Non-emergency Response | X | |
| Portable Radios | | |
| Power Saw Use | | |
| Pump Details | X | |
| Pre-Plans | | |
| Radio Communications & Use | | |
| Rapid Intervention Crew/Team | | |
| Repairs to Equipment | | |
| Rescue (trapped person) | X | |
| Response Procedure (Apparatus) | X | X |
| Return to Service | X | X |
| QRS Procedures | 11 | 2% |
| Scene Preservation | | |
| Spill Control | | |
| Sprinkler Systems | | |
| Staging Staging | | |
| Stand-by for Another Agency/Transfer | | |
| Assignment | | |
| Structure Fire | X | |
| Surrendered Baby | Λ | |
| Swiftwater Rescue | | |
| Tactical Withdrawal | | |
| Thermal Imaging Cameras | | |
| Trash/Refuse/Vehicle Fire | | |
| Trench Rescue | | |
| TICHOH RESCUE | | 1 |



| Topic | Amity FC | Monarch FC |
|------------------------------|----------|------------|
| Truck Company Operations | | |
| Unknown Type Fire | | |
| Urban Search & Rescue (USAR) | | |
| Utility Incidents | | |
| Vehicle Accident | X | |
| Water Rescue | | |
| Weapons Policy | | |
| Weapons of Mass Destruction | | |
| Wildland Fires | | |

RECORDS MANAGEMENT

| Topic | Amity FC | Monarch FC |
|--------------------------------------|----------|------------|
| National Fire Incident Reporting | | |
| System (NFIRS) | | |
| Credit for Calls | | |
| Patient Medical Record | | |
| Privacy/Security | | |
| Record Retention | | |
| Records Management | | |
| Release of Records | | |
| Subpoena | | |
| Tier II Chemical Inventory Reporting | | |
| Instructions | | |

SPECIAL

| Topic | Amity FC | Monarch FC |
|--------------------------------------|----------|------------|
| South Ease Berks Tanker Task Force | X | X |
| Berks County Brush Task Force | X | X |
| Berks County Rapid Intervention Team | X | X |







Mutual/Automatic Aid

The fire companies have developed a joint dispatch protocol and use mutual/automatic aid (a/k/a "run cards"). 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 each response grid and/or target hazard, by the respective company chief. This includes automatic aid and mutual aid is requested as needed. There are inconsistencies noted in the number and types of apparatus called for, and unknown as to the actual number of responders who would arrive on scene.

It does appear that a system of the closest station to an incident regardless of municipality is reportedly constantly being worked toward. The response deployment appears somewhat standardized but can always be reviewed and updated. Automatic Aid agreements, written agreements are reportedly NOT in place. Automatic Aid is accomplished via the county 911 Center dispatch procedures as guided by local fire chiefs.

Automatic Aid is considered in the Insurance Services Office review as assistance dispatched automatically by agreement between two communities or fire departments. That differs from mutual aid or assistance arranged case by case. ISO will generally recognize an Automatic Aid plan under the following conditions:

- It must be prearranged for first alarm response according to a definite plan. It is preferable to have a written agreement, but ISO may recognize demonstrated performance.
- The aid must be dispatched to all reported structure fires on the initial alarm.
- The aid must be provided 24 hours a day, 365 days a year.

FSRS Item 512.D "Automatic Aid Engine Companies" responding on first alarm and meeting the needs of the city for basic fire flow and/or distribution of departments are factored based upon the value of the Automatic Aid plan (up to 1.00 can be used as the factor). The Automatic Aid factor is determined by a review of the Automatic Aid provider's communication facilities, how they receive alarms from the graded area, inter-department training between fire departments, and the fire ground communications capability between departments.

For each engine company, the credited Pump Capacity (PC), the Hose Carried (HC), the Equipment Carried (EC) all contribute to the calculation for the percent of credit the FSRS provides to that engine company.

When reviewing the automatic aid dispatch/response plan, Berks County Emergency Management representatives should be part of the discussion, particularly regarding the ISO expectations for granting credit, and assuring same can be provided.

RECOMMENDATIONS

- 21-30 A review of the deployment and aid received/given by the Fire Departments versus the risks protected should be conducted every twenty-four months to assure the response (particularly personnel responding) matches the risk and to properties in the response area. The deployment should assure a minimum first alarm response to achieve 14 qualified firefighters are responding.
- 21-31 Regionalization is ongoing in County where fire departments can benefit from coordinating services in the future. Automatic Aid is a long-term option for provision of fire services in the area, for efficiency, safety and insurance rating purposes. The concept of regionalization should be moved forward determining the pros and cons, viability, responsibility, and options.



Emergency Medical Services

As of January 6, 2021, Emergency Medical Services are provided by Western Berks Emergency Medical Services, Inc.⁹



Western Berks Ambulance Association provides both BLS and ALS emergency services to a 150+ square mile area in Western Berks County, Pennsylvania, including Amity Township. The service area, call volume, staff, and the types of service we offer make us the largest non-profit ambulance service in Berks County. The service area consists of a diverse rural/suburban area with both high and low populations.

The population increases drastically during the work week due to large office and industrial work forces that commute into the area daily, along with a busy holiday season with outlet shoppers commuting in from out of state by mass transit. They also provide non-emergency BLS and ALS transports to the residents of Berks County. With the wheelchair units they offer transportation to and from prescheduled Doctor appointments and have a PUC license to provide other transportation.

Western Berks Regional EMS provides both emergency and non-emergency services including: These include:

- Basic Life Support Services (BLS)
- Advanced Life Support Services (ALS)
- Wheelchair transportation
- PUC transportation
- Community Events
- Demonstrations
- Stand-by services

Western Berks Ambulance Association has provided EMS services since 1961 to the western part of Berks County with mutual aid provided to neighboring municipalities. Western Berks Ambulance Association currently has 42 experienced Paramedics and 54 emergency medical technicians on staff and last year responded to more than 15,000 calls with their current fleet of 15 ambulances and 9 wheelchair vans all outfitted with the most advanced lifesaving technology.

⁹ https://wbems.org/





Of note, is that the fire companies respond to many EMS calls. This includes all highway related incidents, as well as heart, respiratory, and related life-threatening calls. This creates a significant additional resource demand on the fire companies in terms of staffing.

Percentage of Emergency Medical Calls of All Calls Responded To

| Year | 2019 | 2014 |
|------------|------|------|
| EMS assist | 22 | 29 |

The reality is that the fire department is an integral part to the emergency response out-of-hospital emergency medical system and to function properly needs to be staffed, equipped and funded to provide this service. Without this service demand on the fire department, costs and wear and tear on the firefighters can be reduced. However, this is not reality given the system design. Therefore, the delivery model and the expense need to be included in a sustainable funding model.

The fire companies were found to have adequate equipment and materials and training to provide the services required in the current system.



RECOMMENDATIONS

21-32 The delivery model and funding structure need to be discussed with the EMS provider. The reason for fire company simultaneous dispatch needs to be defined and related staffing, equipping, and cost must be discussed in providing out-of-hospital emergency medical care.



Fire Marshal/Fire Safety Education



The Fire Marshal's is appointed by the Amity Township Supervisors to provide Amity Township fire prevention services. The Fire Marshal has several responsibilities:

Fire Safety Inspections and Code Equipment

The Fire Marshal will perform fire safety inspections on local businesses, schools, daycare facilities and other properties throughout the Township. Inspections will ensure compliance with the International Fire Codes (IFC) 2006 and the National Fire Protection Agency (NFPA) and answer any questions relating to fire codes. It was learned the township has NOT adopted the appropriate fire code and does NOT conduct related fire inspections. To best protect the community from fire, the fire code should be adopted and inspections conducted per the code. Fire company paid drivers can be (some already are) certified to perform such inspections. This practice would enhance the safety of the community and defer the cost of the paid firefighters (Drivers). The inspection information should be shared with the fire companies for pre-planning purposes.

Investigations

The office investigates the origin and causes of fires. The methodology used includes: the recognition of evidence, photographs, interviews, identification and preservation of evidence, reports and assistance from the State Fire Marshal's office and Amity Police Department as required.

Fire Prevention & Education

Fire Prevention and Education is conducted by the two fire companies. This is generally conducted via school programs, public events, and on the township website.

Engineering and Plan Review

The Fire Marshal will assist the Code Enforcement office with plan reviews, site plan review and final inspections and testing of systems. <u>Building plans are reportedly not shared with the fire companies.</u>

Multiple fire prevention publications are provided on the township website.

Reviews conducted by ISO show the following summary:

Credit for Fire Prevention Code Adoption and Enforcement (2.2 Points)

| | Credit Available | Amity Township |
|--|------------------|----------------|
| Fire Prevention Code Regulations | 10 | 0.00 |
| Fire Prevention Staffing | 8 | 0.00 |
| Fire Prevention Certification and Training | 6 | 0.00 |
| Fire Prevention Programs | 16 | 11.40 |
| Summary | 40 | 11.40 |



Credit for Public Fire Safety Education (2.2 Points)

| | Credit Available | Amity Township |
|---|------------------|----------------|
| Public Fire Safety Educator Qualifications & Training | 10 | 5.00 |
| Public Fire Safety Education Programs | 30 | 17.00 |
| Summary | 40 | 22.00 |

Credit for Fire Investigation Programs (1.1 Points)

| | Credit Available | Amity Township |
|--|------------------|-----------------------|
| Fire Investigation Organization & Staffing | 8 | 4.00 |
| Fire Investigator Certification & Training | 6 | 3.60 |
| Use of national Fire Incident Reporting System | 6 | 6.00 |
| Summary | 20 | 13.60 |

The highlighted areas represent opportunities that can be enhanced through assignment of fire prevention duties to an individual or team that will work on developing and implementing fire safety education programs.





The project team was advised the township has only adopted the Property Maintenance Code and have yet to adopt the International Fire Code. As a result, no fire inspections of commercial buildings or inspections of rental properties are conducted, even though the paid fire staff has two certified fire inspectors and all could be trained to do the inspections, thus reducing operational costs while enhancing public safety.

The project team was advised that the knox-box (property access key system) within the township does not provide for a single method (key) for all agencies to use. This can delay operations at the scene of an emergency. The system should be upgraded to enable single master key use by all agencies (fire, EMS, emergency management, and police) and a single operational procedure for use by all.

RECOMMENDATIONS

- 21-33 Adoption of the fire code, formal assignment of fire prevention duties should occur with direct responsibility for the development and implementation of a comprehensive year-round fire inspection and fire safety education program.
- 21-34 The emergency access key system needs to be revised to have a single master key capability for all users.



Risk Management & Insurance

The Fire Companies provide protection for its assets. Emergency service organizations typically use a combination of self-insurance and insurance as their method of financial risk management. A variety of safety initiatives are typically undertaken to control risk.

Risk Control

The Fire Companies were found to use a variety of risk control techniques as a matter of routine, including:

- Avoidance
- Prevention
- Protection
- Segregation/Separation
- Transfer of Risk

Risk Financing

Primarily insured for vehicles, property, general liability and management liability, they do have workers compensation insurance available to the personnel.

Whether a large city or a small town, an emergency service organization should consider the following coverage's/coverage levels.

Property-Casualty Coverage:

- Buildings Guaranteed replacement cost is suggested, which provides adequate coverage limits and guaranteeing replacement of the building with like kind and quality.
- Contents This is up to the ESO and should be reviewed every 2 years at a Minimum. A simple check on furniture/office cost can help determine where you need to be initially, and then make changes from there.
- Vehicles Guarantees replacement cost insurance or a reserve is suggested.
- Portable equipment This may be provided as replacement cost without a limit. It is based on the ESO vehicle schedule of apparatus or itemized, depending on the insurer.
- General Liability \$1,000,000 minimum should be considered.

Management Liability Coverage:

• \$1,000,000 minimum is suggested. However, a bond should be carried for all financial transactions and to protect the ESO's monies and securities, for a limit that meets or exceeds their highest limit of funds in their accounts in any 12 month period. There should be strict guidelines in place on check signing and criminal background checks done on all members, especially those who have check cashing ability. It should be confirmed with your agent that this coverage provides protection for financial mismanagement, wrongful termination, harassment, hostile work environment, and discrimination. Defense costs should be included.

Protection of Personnel Coverage's:

- Accident and Sickness coverage Insurance Provided
- Life Insurance –Relief Association
- Workers Compensation State mandated.
- Pension programs Not in place



All coverages were found to meet minimum expectations. However, a review of risk management practices should be conducted periodically, in consultation with your insurance professional.

The Amity Fire Company Risk Management review provided by the insurance carrier was provided to the Project Team for review. There were a number of recommendations made which can be applied to both organizations involving standard operating guidelines, physicals for firefighters and financial management. These are reinforced as appropriate in this report.

RECOMMENDATIONS

None



SUGGESTED STRATEGIC PLANNING ACTIONS (by Year)



Amity Township Volunteer Fire Services Strategic Planning Actions – 2021

| Report Recommendation | Responsibility | Status/Comment |
|----------------------------------|--|---|
| 21-01 | Township | |
| 21-02 | Township and | |
| 21-03 | Fire Companies | |
| 21-10 | Township | |
| 21-08 21-12 21-12 21-12 | Fire Companies | |
| 21-05 | Fire Companies | |
| 21-06 | Fire Companies | |
| 21-07 | Fire Companies | |
| 21-18 | Fire Companies | |
| 21-19 | Fire Companies | |
| 21-32 | Township, Fire Companies and EMS Provider | |
| 21-34 | Township and Fire companies | |
| 21-09 | Amity Fire Company | |
| 21-14 | Fire Companies | |
| | Recommendation 21-01 21-02 21-03 21-10 21-10 21-12 21-12 21-12 21-05 21-06 21-07 21-18 21-19 21-32 21-34 21-09 | RecommendationResponsibility21-01Township21-02Township and Fire Companies21-03Fire Companies21-10Township21-10Fire Companies21-1221-1221-1221-1221-05Fire Companies21-06Fire Companies21-18Fire Companies21-19Fire Companies21-32Township, Fire Companies and EMS Provider21-34Township and Fire companies21-09Amity Fire Company |



Amity Township Volunteer Fire Services Strategic Planning Actions – 2022

| Task | Report Recommendation | Responsibility | Status/Comment |
|--|--------------------------|--------------------------------|----------------|
| Adopt Standard of Cover | 21-03 | Township and EVFC | |
| Implement Operational Strategic Guideline | 21-29 | Fire Companies | |
| Implement high school recruitment program with regional fire companies | 22-26 | Fire Companies | |
| Implement Recruitment Plan | 21-27 | Fire Companies | |
| SOG Revisions | 21-28 | Fire Companies | |
| Establish long term plan and funding model for fire station upgrade and construction and fire apparatus purchasing | 21-16 21-17 | Township and Fire Companies | |
| Adopt fire code, initiate coordination of code enforcement and fire marshal efforts with fire company Driver/inspectors and facilitate preemergency planning and risk analysis program | 21-33 | Township and Fire Companies | |
| Obtain maintenance contracts for HVAC and diesel exhaust systems | 21-15 | Fire Companies | |
| Implement program for - Incident Safety Officer - Health and Safety Officer | 21-23 21-24 | Fire Companies | |
| Consolidate into a single township-wide relief association | 21-04 | Township and Fire Companies | |
| Apply for AFG for emergency generators for the fire stations | 21-13 | Fire Companies | |
| Apply for SAFER Grant for staffing fire stations | 21-13 | Township and Fire Companies | |
| Revise firefighter and officer training programs per ISO report | 21-22 | Fire Companies | |
| Initiate Regional Fire Protection model and related discussions | 21-31 | Township and Fire Companies | |
| | | | |



Amity Township Volunteer Fire Services Strategic Planning Actions – 2023

| Task | Report Recommendation | Responsibility | Status/Comment |
|--|--------------------------|----------------|----------------|
| Adopt capital funding plan | 21-16 | Township and | |
| | 21-17 | EVFC | |
| SOG Revisions | 21-28 | Fire Companies | |
| Review SOC, deployment and | 21-03 | Township and | |
| aid necessary for emergency | 21-30 | Fire Companies | |
| response | | | |
| Upon resolution of ISO report inconsistencies, request re-survey by ISO. | 21-11 | Township | |
| Implement Physicals program for firefighters | 21-25 | Fire Companies | |
| | | | |

Amity Township Volunteer Fire Services Strategic Planning Actions – 2024

| Task | Report Recommendation | Responsibility | Status/Comment |
|---------------|--------------------------|----------------|----------------|
| SOG Revisions | 21-28 | Fire Companies | |
| | | | |
| | | | |

Amity Township Volunteer Fire Services Strategic Planning Actions – 2025

| Task | Report Recommendation | Responsibility | Status/Comment |
|--------------------------------------|--------------------------|----------------|----------------|
| SOG Revisions | 21-28 | Fire Companies | |
| Review SOC, deployment and | 21-03 | Township and | |
| aid necessary for emergency response | 21-30 | Fire Companies | |
| | | | |
| | | | |



APPENDICES



APPENDIX 1 SOG EXAMPLES



Standard Operating Guidelines

| SOG NO: | ADM – 01 |
|---------------|----------------------|
| SOG TITLE | Whistleblower Policy |
| ADOPTION DATE | 6/20 |
| REVISION DATE | |
| NO. OF PAGES | 2 |

Purpose:

To assure the Organization's officer, members, and employees observe high standards of business and personal ethics in the conduct of their duties and responsibilities. As employees and representatives of the Organization, we must practice honestly and integrity in fulfilling our representatives and comply with all applicable laws and regulations.

Guideline:

Reporting Responsibility

It is the responsibility of all officers, members, and employees to comply with the Code and to report violations or suspected violations in accordance with the Whistleblower Policy.

No Retaliation

No officer, member or employee who in good faith reports a violation of the Code shall suffer harassment, retaliation or adverse employment consequence. An employee who retaliates against someone who has reported a violation in good faith is subject to discipline up to and including termination of employment. This Whistleblower Policy is intended to encourage and enable members, employees and others to raise serious concerns within the Organization prior to seeking resolution outside the Organization.

Reporting Violations

The Code addresses the organization's open door policy and suggests that employees share their questions, concerns, suggestions or complaints with someone who can address them properly. In most cases, the President, Vice President, or the Secretary is in the best position to address an area of concern. However, if you are not comfortable speaking with an officer or you are not satisfied with their response, you are encouraged to speak with any officer you are comfortable in approaching. Supervisors and managers are required to report suspected violations of the Code of Conduct to the Organization's Compliance Officer (Organization Secretary), who as specific and exclusive responsibility to investigate all reported violations. For suspected fraud, individuals should contact the Organization Compliance Officer directly.

Compliance Officer

The Organization's Compliance Officer is responsible for investigating and resolving all reported complaints and allegations concerning violations of the Code and at his discretion, shall advise the



Secretary and/or to audit committee. The Compliance Officer has direct access to the audit committee of the board of directors and is required to report to the audit committee at least annually on compliance activity. The Organization's Compliance Officer is the chair of the audit committee.

Accounting and Auditing Matters

The audit committee shall address all reported concerns or complaints regarding corporate accounting practices, internal controls or auditing. The Compliance Officer shall immediately notify the audit committee and auditing firm of any such complaint and work with the committee until the matter is resolved.

Acting in Good Faith

Anyone filing a complaint concerning a violation or suspected violation of the Code must be acting in good faith and have reasonable grounds for believing the information disclosed indicates a violation of the Code. Any allegations that prove not to be substantiated and which prove to have been made maliciously or knowingly to be false will be viewed as a serious disciplinary offense.

Confidentiality

Violations or suspected violations may be submitted on the confidential basis by the complainant or may be submitted anonymously. Reports of violations or suspected violations will be kept confidential to the extent possible, consistent with the need to conduct an adequate investigation.

Handling of Reported Violations

The Compliance Officer will notify the sender and acknowledge receipt of the reported violation or suspected violation within five business days. All reports will be promptly investigated and appropriate corrective action will be taken if warranted by the investigation.



Standard Operating Guidelines

| SOG NO: | ADM – 01 |
|---------------|-----------------------------|
| SOG TITLE | Conflict of Interest |
| ADOPTION DATE | 6/20 |
| REVISION DATE | |
| NO. OF PAGES | 7 |

Purpose – Article 1

The purpose of the conflict of interest policy is to protect this tax-exempt organization's (Organization) interest when it is contemplating entering into a transaction or arrangement that might benefit the private interest of an officer or director of the Organization or might result in a possible excess benefit transaction. This policy is intended to supplement but not replace any applicable state and federal laws governing conflict of interest applicable to nonprofit and charitable organizations.

Article II – Definitions

1. Interested Person

Any director, principal officer, or member of a committee with governing board delegated powers (or a relative of the director, principal officer, or member of a committee with governing board delegated powers), who has a direct or indirect financial interest, as defined below, is an interested person.

2. Financial Interest

A person has a financial interest if the person has, directly or indirectly, through business, investment, or family:

- **a.** An ownership or investment interest in any entity with which the Organization has a transaction or arrangement,
- **b.** A compensation arrangement with the Organization or with any entity or individual with which the Organization has a transaction or arrangement, or
- **c.** A potential ownership or investment interest in, or compensation arrangement with, any entity or individual with which the Organization is negotiating a transaction or arrangement.

Compensation includes direct and indirect remuneration as well as gifts or favors that are not insubstantial.

A financial interest is not necessarily a conflict of interest. Under Article III, Section 2, a person who has a financial interest may have a conflict of interest only if the appropriate governing board or committee decides that a conflict of interest exists.

<u>Article III – Procedures</u>

1. Duty to Disclose

In connection with any actual or possible conflict of interest, an interested person must disclose the existence of the financial interest and be given the opportunity to disclose all material facts to the directors and members of committees with governing board delegated powers considering the proposed transaction or arrangement.



2. Determining Whether a Conflict of Interest Exists

After disclosure of the financial interest and all material facts, and after any discussion with the interested person, he/she shall leave the governing board or committee meeting while the determination of a conflict of interest is discussed and voted upon. The remaining board or committee members shall decide if a conflict of interest exists.

3. Procedures for Addressing the Conflict of Interest

- **a.** An interested person may make a presentation at the governing board or committee meeting, but after the presentation, he/she shall leave the meeting during the discussion of, and the vote on, the transaction or arrangement involving the possible conflict of interest.
- **b.** The chairperson of the governing board or committee shall, if appropriate, appoint a disinterested person or committee to investigate alternatives to the proposed transaction or arrangement.
- **c.** After exercising due diligence, the governing board or committee shall determine whether the Organization can obtain with reasonable efforts a more advantageous transaction or arrangement from a person or entity that would not give rise to a conflict of interest.
- **d.** If a more advantageous transaction or arrangement is not reasonably possible under circumstances not producing a conflict of interest, the governing board or committee shall determine by a majority vote of the disinterested directors whether the transaction or arrangement is in the Organization's best interest, for its own benefit, and whether it is fair and reasonable. In conformity with the above determination it shall make its decision as to whether to enter into the transaction or arrangement.

4. Violations of the Conflicts of Interest Policy

- **a.** If the governing board or committee has reasonable cause to believe a member has failed to disclose actual or possible conflicts of interest, it shall inform the member of the basis for such belief and afford the member an opportunity to explain the alleged failure to disclose.
- **b.** If, after hearing the member's response and after making further investigation as warranted by the circumstances, the governing board or committee determines the member has failed to disclose an actual or possible conflict of interest, it shall take appropriate disciplinary and corrective action.

Article IV - Records of Proceedings

The minutes of the governing board and all committees with board delegated powers shall contain:

- **a.** The names of the persons who disclosed or otherwise were found to have a financial interest in connection with an actual or possible conflict of interest, the nature of the financial interest, any action taken to determine whether a conflict of interest was present, and the governing board's or committee's decision as to whether a conflict of interest in fact existed.
- **b.** The names of the persons who were present for discussions and votes relating to the transaction or arrangement, the content of the discussion, including any alternatives to the proposed transaction or arrangement, and a record of any votes taken in connection with the proceedings.

Article V - Compensation

- **a.** A voting member of the governing board who receives compensation, directly or indirectly, from the Organization for services is precluded from voting on matters pertaining to that member's compensation.
- **b.** A voting member of any committee whose jurisdiction includes compensation matters and who receives compensation, directly or indirectly, from the Organization for services is precluded from voting on matters pertaining to that member's compensation.



c. No voting member of the governing board or any committee whose jurisdiction includes compensation matters and who receives compensation, directly or indirectly, from the Organization, either individually or collectively, is prohibited from providing information to any committee regarding compensation.

[Hospital Insert - for hospitals that complete Schedule C

d. Physicians who receive compensation from the Organization, whether directly or indirectly or as employees or independent contractors, are precluded from membership on any committee whose jurisdiction includes compensation matters. No physician, either individually or collectively, is prohibited from providing information to any committee regarding physician compensation.]

Article VI – Annual Statements

Each director, principal officer and member of a committee with governing board delegated powers shall annually sign a statement which affirms such person:

- a. Has received a copy of the conflicts of interest policy,
- **b.** Has read and understands the policy,
- c. Has agreed to comply with the policy, and
- **d.** Understands the Organization is charitable and in order to maintain its federal tax exemption it must engage primarily in activities which accomplish one or more of its tax-exempt purposes.

Article VII - Periodic Reviews

To ensure the Organization operates in a manner consistent with charitable purposes and does not engage in activities that could jeopardize its tax-exempt status, periodic reviews shall be conducted. The periodic reviews shall, at a minimum, include the following subjects:

- **a.** Whether compensation arrangements and benefits are reasonable, based on competent survey information, and the result of arm's length bargaining.
- **b.** Whether partnerships, joint ventures, and arrangements with management organizations conform to the Organization's written policies, are properly recorded, reflect reasonable investment or payments for goods and services, further charitable purposes and do not result in inurement, impermissible private benefit or in an excess benefit transaction.

Article VIII – Use of Outside Experts

When conducting the periodic reviews as provided for in Article VII, the Organization may, but need not, use outside advisors. If outside experts are used, their use shall not relieve the governing board of its responsibility for ensuring periodic reviews are conducted



Conflict of Interest Policy Annual Affirmation of Compliance and Disclosure Statement

I have received and carefully read the Conflict of Interest Policy for board members, staff and volunteers of ABC Nonprofit, Inc. and have considered not only the literal expression of the policy, but also its intent. By signing this affirmation of compliance, I hereby affirm that I understand and agree to comply with the Conflict of Interest Policy. I further understand that ABC Nonprofit Inc. is a charitable organization and that in order to maintain its federal tax exemption it must engage primarily in activities which accomplish one or more of its tax-exempt purposes.

Except as otherwise indicated in the Disclosure Statement and attachments, if any, below, I hereby state that I do not, to the best of my knowledge, have any conflict of interest that may be seen as competing with the interests of ABC Nonprofit Inc., nor does any relative or business associate have such an actual or potential conflict of interest.

If any situation should arise in the future which I think may involve me in a conflict of interest, I will promptly and fully disclose the circumstances to the President (Chairman) of the Board of Directors of ABC Nonprofit, Inc. or to the Chief Executive Officer, as applicable.

I further certify that the information set forth in the Disclosure Statement and attachments, if any, is true and correct to the best of my knowledge, information and belief.

| Name (Please print) | |
|---------------------|------|
| | |
| | |
| | |
| Signature | Date |



Disclosure Statement

Please complete the questionnaire, below, indicating any actual or potential conflicts of interest. If you answer "yes" to any of the questions, please provide a written description of the details of the specific action or transaction in the space allowed. Attach additional sheets as needed.

<u>Financial Interests</u> - A conflict may exist where an interested party, or a relative or business associate of an interested party, directly or indirectly benefits or profits as a result of a decision made or transaction entered into by the organization.

| Please indicate, during the past 12 months: | |
|---|-------|
| Has the organization contracted to purchase or lease goods, services, or property from or otherwise had a direct business | ☐ Yes |
| relationship with you, or from any of your relatives or business associates? | ☐ No |
| If yes, please describe: | |
| Has the organization purchased an ownership interest in or invested in a business entity owned by you, or owned by any of your relatives or business associates? | ☐ Yes |
| If yes, please describe: | |
| Has the organization offered employment to you, or to any of your relatives or business associates, other than a person who was already employed by the organization? | ☐ Yes |
| If yes, please describe: | |
| Have you, or have any of your relatives or business associates, been provided with a gift, gratuity or favor, of a substantial nature, from a person or entity which does business, or seeks to do business, with the organization? | ☐ Yes |
| If yes, please describe: | |
| Have you, or any of your relatives or business associates, been gratuitously provided use of the facilities, property, or services of the organization or received a grant, loan or other financial assistance from the organization? | ☐ Yes |
| If yes, please describe: | |



| Has a relative had a direct or indirect business relationship with the organization? | Yes |
|---|-----------------------------------|
| If yes, please describe: | |
| Have you served as an officer, director, trustee, key employee, partner or member/shareholder of an entity doing business with the organization? | Yes |
| If yes, please describe: | |
| -[add additional examples, if any] | |
| Other Interests - A conflict may also exist where an interested party, or a relative or an interested party, obtains a non-financial benefit or advantage that he/she would no absent his/her relationship with the organization, or where his/her duty or responsibility organization conflicts with a duty or responsibility owed to some other organization. | ot have obtained lity owed to the |
| Please respond to the following questions indicating if you had this activity anytime twelve months: | during the past |
| Did you obtain preferential treatment by the organization for yourself, or for any of your relatives or business associates? | Yes |
| If yes, please describe: | |
| Did you make use of confidential information obtained from the organization for your own benefit, or for the benefit of a relative, business associate, or other organization? | Yes |
| If yes, please describe: | |
| Did you take advantage of an opportunity, or enable a relative, business associate or other organization to take advantage of an opportunity, which you had reason to believe would be of interest to the organization? | Yes |
| If yes, please describe: | |



Standard Operating Guidelines

| SOG NO: | ADM – 02 |
|---------------|-------------------|
| SOG TITLE | Records Retention |
| ADOPTION DATE | 6/20 |
| REVISION DATE | |
| NO. OF PAGES | 1 |

Purpose:

To establish Standard Operating Guidelines for maintaining various records of the corporation

The (fire company/department) will adhere to the following basic record retention guidelines:

- Incident reports indefinite
- Personnel files indefinite
- Financial records 7 years
- Meeting records 10 years
- General correspondence 2 years
- Contracts 5 years after termination

And as state law requires.



APPENDIX 2 STRATEGIC GUIDELINE



DEPARTMENT NAME

DRAFT- Standard Operational Guideline- DRAFT

S.O.P Title: Strategic Guidelines Page 1 of 9

Original Issue Date:

Latest Revision:

This Strategic Guideline identifies and outlines some basic rules and principles that relate to the major areas of firefighting strategy and subsequent fireground activity at structure fires. The uniform application of this guideline will produce favorable fireground outcomes. This guideline is designed to offer a basis and simple framework for fire-rescue fireground operations and command; it also represents many existing practices, and a defining of how this department is expected to perform during certain emergencies. This guideline is structured to integrate with the Fire Department Communications Manual, Water Supply Manual and other appropriate SOP's.

Supplemental reading to support this guideline may be found in the ISFSI publications <u>Initial Fire Attack</u>, On Scene Fire Coordination, First Due, and <u>Managing Fireground Operations</u>.

STRATEGIC PRIORITIES

There are four separate strategic priorities that must be considered in order to stabilize fireground situations - these priorities also establish the order that other basic fireground functions must be performed. These strategic priorities should be regarded as separate, yet interrelated, activities that must be <u>considered</u> in order. The Incident Commander cannot proceed on to the next priority until the objective of the current function has been completed.

The Basic Strategic Priorities are as follows:

Life Safety (Rescue) - The activities required to protect occupants, and to treat the injured.

- a) Removing victims from threat
- b) Removing threat from victims
- c) Defending in place, to buy time

Exposure Protection - Keep things (persons or property) that are threatened by fire from being damaged by fire.

Fire Control/Extinguishment - The activities required to stop the forward progress of the fire and to bring the fire under control, and complete extinguishment.



Property Conservation - The activities required to stop or reduce additional loss to property. This includes but is not limited to salvage.

All five strategic priorities require a somewhat different tactical approach from both a command and an operational standpoint. While the Incident Commander should consider the objectives of each function in its priority order, he must, in many cases, overlap and "mix" the activities of each to achieve completion. Notable examples of this are the need many times to achieve interior tenability with active/extensive fire control efforts before getting on with primary search, or the need to initiate salvage operations while active fire control efforts are being extended.

1. LIFE SAFETY

It shall be a standard DEPARTMENT NAME procedure to extend a primary and secondary search in ALL involved and dangerously exposed areas that can be entered in accordance with the Occupational Safety & Health Administration (OSHA) 2 in 2 out rule, as outlined in SOP SFT 13. The Incident Commander and operating departments cannot depend upon reports from spectators to determine status of victims. Fire Department personnel should utilize such civilian reports as to the location, number and condition of victims as information that "supports" routine primary search efforts. Positive information from spectators about victims inside shall be considered sufficient for the OSHA rescue exception. Other probabilities as well may indicate a situation where the OSHA exception applies (refer to SOP SFT # 13). Such activity must only be carried out with the knowledge and consent of the Incident Commander in order to insure the safety of the rescuers.

The Incident Commander must structure initial operations around the completion of the **primary search**. Primary search means departments have quickly gone through ALL occupiable area(s) and verify the removal and/or safety of all occupants. Asking spectators or one time occupants "is everybody out?", or the status of the fire, is not enough. Time is the critical factor in the primary search process and successful primary search operations must be extended quickly and during initial fire stages to be regarded as being primary. The completion of the primary search shall be reported to the Incident Commander using plain language by those who were assigned the task. It is the responsibility the Incident Commander to coordinate primary search assignments, secure completion reports from interior departments and to communicate the search accomplishment to all units operating on the scene. The Incident Commander must make specific primary search assignments to departments to cover specific areas of large complex occupancies and maintain on-going control of such departments until the entire area is searched. Once the primary search has been completed and communicated to all units, the Incident Commander must take steps to maintain control of access to the fire area; beware of occupants (and others) re-entering the building.

The life safety functions that follow lengthy fire control activities are regarded as representing a **secondary search**. A secondary search means that fire departments thoroughly search the interior of the fire area after initial fire control and ventilation activities have been completed. Different departments should preferably complete a secondary search than those involved in the primary search activities. Thoroughness (rather than time) is the critical factor in a secondary search.



The *stage of the fire* becomes a critical factor that affects the life safety approach developed by the Incident Commander. The following items outline the basic approach of the Incident Commander regarding standard fire stages:

Nothing Showing - In nothing showing situations or in very minor fire cases that clearly pose no life hazard, the officer in charge must organize and direct a rapid interior search and those carrying out that task must promptly report their findings. In such cases, the interior search for victims will also verify no fire.

Smoke Showing - In smoke showing and working fire situations, fire control efforts must be extended simultaneously with rescue operations to gain entry and to control interior access to complete the primary search. In such cases, the Incident Commander and all operating departments must be aware that the operation is in a rescue mode until primary search is complete, regardless of the fire control required. In working fire situations, primary search must be followed by a secondary search.

Fully Involved - In cases of fully involved buildings or sections of buildings, immediate entry (and primary search activities) become impossible and survival of the occupants improbable, the incident commander must initially report fully involved conditions and that a primary search is not possible. As quickly as fire control is achieved, Command must then structure what is in effect a secondary search for victims.

The Incident Commander must consider the following factors in developing a basic life safety size-up:

Number, location and condition of victims.

Effect the fire has on the victims.

Capability of the fire-rescue forces to enter the building, remove and protect the victims, and control the fire.

The most urgent reason for the special calling of additional units is for the purpose of covering life safety. It is the responsibility of the Incident Commander to develop a realistic (and pessimistic) rescue size up as early as possible.

The Incident Commander must make one of these three basic life safety decisions.

Do we remove victims from the threat?

Do we remove the threat from the victims?

Do we buy time until more resources are available?

In some cases, occupants may be safer in their rooms than moving through contaminated hall-ways and interior areas (known as defending in place). Also, such movement may impede interior firefighting. In still other cases the firefighting personnel may have no choice in the matter; some occupants will insist in evacuation while others will refuse to leave the relative safety of their rooms.

Life Safety efforts should be extended in the following order:

Most severely threatened.



The largest number (groups).

People in the remainder of the fire area.

People in the exposed areas.

All initial attack forces must be directed toward supporting life safety efforts, and hose lines must be placed in a manner to control interior access, confine the fire, and protect avenues of escape. Hose line placement becomes a critical factor in these cases and all operating departments must realize that the operation is in a Life Safety (rescue) Mode and if necessary operate in a manner that writes off the structure in order to buy rescue time.

Normal means of interior access (stairs, halls, interior public areas, etc.) should be utilized to remove victims whenever possible. Secondary means of rescue (ladders, fire escapes, and the like), should be utilized only in their order of effectiveness.

It shall be the responsibility of the incident commander to structure the treatment of victims after removal. Multiple victims should be removed to the same location for more effective treatment. The incident commander should direct and coordinate the "EMS" structure whenever possible. Implementation of the "Mass Casualty" might be in order depending upon circumstances and the number of victims.

2. EXPOSURE PROTECTION

Exposures are things that are not on fire or being impacted by the fire, but are at risk from fire, and firefighting efforts. Exposures may be inside or outside, life or property. It isn't the most severely exposed exposure that is most important; it is the most sever exposure exposed!

For years, removal of valuables was a predominant way of protecting non-life exposures; this is no longer a much used option.

Quickly determining the correct fire location, coupled with nozzle discipline (judicial water use), and the placement of barriers between the fire and yet to be threatened items is now performed by closing doors or covering things with tarpaulins. Nothing works as well as locating the fire and applying extinguishing agent quickly.

3 FIRE CONTROL/EXTINGUISHMENT

It shall be the standard NAME OF DEPARTMENT operating procedure to attempt to stabilize fire conditions by extending wherever possible an **aggressive**¹⁰ well-placed and adequate interior fire attack effort and to support that attack with whatever resource and action is required to reduce fire extension and to bring the fire under control. Incident commanders must develop a fire control plan of attack that first stops the forward progress of the fire and then brings the fire under control. In most cases, the first arriving company will not *immediately* have adequate resources to accomplish all of the attack needs that may be faced. The initial Incident Commander must prioritize attack efforts, act as a resource allocator and deter-

¹⁰ A well- thought out, staffed, equipped, and supplied (GPM) fire fighting\life safety effort.



mine the resources the fire will eventually require. Accurate forecasting of conditions by the Incident Commander becomes critical during this initial evaluation process.

There will be cases where the entire first arriving engine company (as a whole, fully geared unit!) may be required to enter a structure to locate, search, and operate an attack line from a standpipe system. This situation will most likely occur in buildings such as college dormitories, high rise, and modern low-rise buildings. When this "total engine company" enters the structure, the second arriving engine <u>must</u> function as the water supply company feeding the various fixed fire protection systems being used. Radio communication becomes critical during this process. Other arriving units must know what the first arriving unit is doing. The *Total Engine Company Concept* is an option, and mentioned here for individual officer consideration.

Fires should be fought from the unburned side. Attack from the burned side generally will drive the fire, smoke and heat into uninvolved portions of the building and the interior control forces out of the building.

Fires should be fought from the interior. The fastest place to put water on the fire is generally from the outside at the point where the fire is burning out of the building – most of the time this is the very worst application point.

The Incident Commander must consider the most dangerous path of travel and avenue of fire extension, particularly as it affects rescue activities, confinement efforts, and exposure protection. Resources must then be allocated based upon this fire growth prediction.

Initial attack efforts must be directed toward supporting primary search. The first attack line must go between the victims and the fire and protect avenues of escape.

First arriving units must determine fire location and extent before starting fire operations (as far as possible). All such beginning operations must be communicated.

Put water on fire: The life safety, exposure protection, confinement, extinguishment, overhaul, ventilation & salvage problem may be solved in the majority of cases by a fast, strong, well-planned & placed attack.

The Incident Commander must consider seven (7) sides (or sectors) of the fire: front, back, sides, top, bottom and interior.

The Incident Commander must develop a conscious time decision with regard to both the size of the attack and the position of the attack. The bigger the attack, the longer it takes to get it going; the more the interior attack is repositioned, the longer it will take to complete the task. "Where the fire is going to be?" after set up is completed, is an important question that must be answered.

Lacking direction, when fire is showing, departments will many times lay hose and put water on the fire utilizing the fastest, shortest, most direct route. This process has been identified in some fire service texts as the "candle-moth syndrome"; everyone wants to go to the flames. It is the responsibility of the Incident Commander to insure that all operations are "directed" activities.



When the fire is coming out of a burning building and not affecting exposures, **let it vent**. Launch an interior attack from the unburned side. It is generally venting in the proper direction. Placing a hose stream in the ventilation opening is dangerous, careless and reckless. It requires discipline on the part of the fire fighters and fire officers not to do so, and not submit to "candle-moth" temptations.

The Incident Commander must develop critical decisions that relate to cut-off points and must approach fire spread determinations with pessimism. It takes a certain amount of time to "get water" and the fire continues to burn while the attack gets set up. The Incident Commander must consider where the fire will be when attack efforts are ready to actually go into operation; if the Incident Commander misjudges, the fire may burn past the planned attack/cut-off position.

Don't put water into burned-out property, particularly where there is unburned property elsewhere left to burn. It is generally improper to operate fire streams into property that is already lost, many times such activity is done at the expense of exposed unburned property, and wastes valuable extinguishment efforts. Write-Off property that is already lost and go on to protect exposed property based on the most dangerous direction of spread. Do not continue to operate in positions that are essentially lost.

4 PROPERTY CONSERVATION

It shall be standard NAME OF DEPARTMENT Fire-Rescue operating procedure to commit whatever fireground resource is required to reduce property loss to an absolute minimum. It must be stressed that; the age old practice of taking chances with fire fighter lives for vacant and derelict buildings is no longer acceptable! The Incident Commander must weigh the risk versus the benefit, at all operations. The activities that relate to effective property conservation require the same early and on-going command functions and aggressive action as both rescue and fire control. All members are expected to perform in a manner that continually reduces loss during fire operations.

When the fire is out - shut down fire streams. Early recognition that the forward progress of the fire has been stopped is an important element in reducing loss. The earlier the salvage operations begin, the smaller the loss.

When basic fire control has been achieved, the Incident Commander must commit and direct departments into "stop loss" activities; such activities generally include:

Evaluating damage to overall fire area.

Evaluating the salvage value of various areas.

Evaluate resources that will be required.

Committing the necessary departments to salvage functions.

Reducing hose lines from fire control functions to salvage functions.

Additional rotation of personnel due to fatigue.



In cases where there is an overlapping need for both fire control and salvage to be performed simultaneously and where initial arriving departments are involved in firefighting and salvage remains undone, it shall be considered reasonable to special call additional resources to perform salvage functions.

Be aware that personnel involved in rescue and fire control operations are generally fatigued and have reached a state of reduced efficiency by the time property conservation functions must be completed - this can result in a high potential for injury. The incident commander must evaluate personnel conditions and replace with fresh departments if needed.

5. VENTILATION

While listed last, sometimes ventilation may have to be handled. Likewise, these five steps are **considered** in this order, but may be handled in the order that is dictated by the situation.

Ventilation is removing the hot air and combustion gasses and replacing them with cool fresh air.

Ventilating over the fire is the best choice if your fire attack is coordinated. The closer to the seat of the fire, the more efficient the venting will be in removing heat and smoke, If the fire is in a room that is connected to the rest of the house by a doorway, ventilating to the outside of that room could allow for smoke to be cleared from the rest of the structure, however the doorway must be under control of the interior fire fighters!

Ventilation may be vertical or horizontal, mechanical or natural, or any combination in between. Mechanical includes positive pressure, hydraulic, smoke ejection; and natural is opening up vents, windows and doors. Providing ventilation at a working fire will make things worse, unless hose lines are in place to control the ventilated fire as it grown rapidly.

Ventilation decisions must consider drawing the fire away from any occupants, as well as other exposures.

ASSUMPTION OF COMMAND

First Arriving Unit: The first arriving unit or officer is responsible for initially assuming command. This individual (officer or member in charge of the unit) retains command responsibilities until command is transferred to a higher-ranking officer or until the incident is terminated. This assumption of command by the first unit is **mandatory**.

As the identity of the incident commander changes through the formal *command transfer process*, the responsibility for command functions also changes. (Note: The Incident Commander is responsible for all Command functions, all of the time during the incident) The term INCIDENT COMMANDER refers jointly to the person, the functions, and the location of whoever is in charge, and provides a standard identification tag for the **single** person in charge. With this system, it should be all but impossible for more than one officer to act as an Incident Commander at any one time on any one incident scene.

Incident Commander Modes - When the first unit arrives, quick decisions must be made as to which of the following commitments the unit will make:



<u>NOTHING SHOWING MODE</u> - Generally requires investigation by the first arriving unit while others remain in a stand-by position. Usually, the officer on the first unit will go with the investigating company while **using the portable radio to continue the command function**. In effect, this creates a "mobile command"; a condition that is otherwise undesirable.

<u>FAST ATTACK MODE</u> - Requires immediate action to stabilize (e.g., a working, interior fire in a residence, apartment or small commercial occupancy). For an offensive fast attack, the choice may be to lead the attack while utilizing the portable radio to continue command. This fast attack mode should be concluded rapidly with one of the following outcomes:

Situation stabilized by the offensive attack.

Command transferred to the Platoon Captain (or other Officer).

Situation not stabilized; member in charge of the first arriving unit moves to an exterior (stationary) command position.

The Fast Attack Mode will most likely be the mode most officers will utilize in the beginning, at the majority of our fires.

<u>COMMAND MODE</u> - Because of the size of the fire, complexity of the occupancy, or the possibility of extension, some situations will demand strong direct command from the outset. In these cases, the first arriving unit will maintain at an exterior command position and remain there until relieved of command.

Chief Officers arriving upon the scene of an incident not yet declared under control may "take" Command by a formal process. The actual command transfer is regulated by a very simple, straightforward procedure that includes: Contacting the Incident Commander directly. (Face to face is always preferable), however, transfer of command by radio can be accomplished during fairly simple incidents when the responding officer has "copied' all Command activity made before arrival. Standard communications must be followed.

The officer being relieved will provide a briefing that includes:

- Initial Situation "What was it like when you arrived?"
- Deployment & Assignment "What you are doing?"
- Strategic and Tactical Plan "What would you do if I wasn't here?"
- Safety Considerations- "Are there any unusual safety problems that you know of?"

This briefing concludes with a confirmation of command transfer. It should be a short, straight to the point exchange!

The County Dispatch Center shall be advised what unit identifies the Incident Commander.

Transfer of Command takes place on the scene only.

Only the Incident Commander shall perform radio communications from the scene to the dispatch center.



APPENDIX 3

FIRE STATION DESIGN CONCEPT REFERENCE INFORMATION



Facility concept and cost estimate.

Based on review and analysis conducted, a facility concept and cost estimate is provided for consideration when stations need to be replaced, which can be used for planning purposes. This will include estimates for site preparation, and building construction based on prevailing costs within the local area. VFIS-ETC is not, however, an architectural or engineering firm. Prior to proceeding with acquisition of project funding, it is recommended that the services of a firm qualified in such costing be employed. Note, since you have indicated that land is already available or identified, land acquisition costs will not be included in this estimate.

A basic set of needs for a new facility is provided based on current facility usage. A conceptual facility needs compilation was created by the project team and cost projections were developed for review. This information was taken into consideration.

With regard to the potential costs defined on the attached pages, there are two estimates developed for each type structure. It should be noted that a structure of less sturdy construction is feasible. That would reduce cost by as much as 50%, but would necessitate a discussion to the pros and cons of that type of construction as well as facility longevity.

Funding Options

This proposed project will be built using county district funding.

Typical in these projects is the offering of how other agencies nationwide have funded fire station construction. It is offered as a thought provoking method to the City of Lancaster for potential optional or supplemental funding. Based on the cost estimates developed earlier in this report, and nationally used funding tools, there are seven funding options regularly used. These might include:

- 1. General obligation bond could be sponsored by one or more of the local governments
- 2. Special levy/tax not considered an option at this time
- 3. As a portion of the current funding from the Township over a long-term period
- 4. Fund raising by the companies—not considered an option at this time for the structure, however all contents of the structure may be donated by local businesses
- 5. Property sale by one or more of the local governments
- 6. Commercial loan(s)
- 7. Public-Private Partnership

The actual method used will depend on a financial analysis at the time construction begins. A typical fire station construction timetable is attached for reference. Additional reference documents related to fire station construction are included for your information.



Concept consideration for Construction of an Emergency Services (Fire & EMS) Building Five Apparatus-bay Spec-Type Structure

Basic Structure Elements:

| 5 apparatus bays 14' x 80' | = | 5,500 sq. ft. |
|---|---|---------------|
| Duty/watch/radio area 12' x 24' | = | 268 sq. ft. |
| Utility Room (laundry, maintenance) 10' x 12' | = | 120 sq. ft. |
| Office/work space 9' x 12' | = | 108 sq. ft. |
| Utility closet 6' x 8' | = | 48 sq. ft. |
| Kitchen 9' x 12' | = | 108 sq. ft. |
| Shower/Locker/Rest Room – male 10' x 12' | = | 120 sq. ft. |
| Shower/Locker/Rest Room – female 10' x 12' | = | 120 sq. ft. |
| EMS Utility Room (laundry, maintenance) 10'x12' | = | 120 sq. ft. |
| EMS Office/Work space 9' x 12' | = | 108 sq. ft. |
| EMS Kitchen 9' x 12' | = | 108 sq. ft. |
| EMS Shower/Locker/Rest Room – male 10' x 12' | = | 120 sq. ft. |
| EMS Shower/Locker/Rest Room – female 10' x 12' | = | 120 sq. ft. |
| Dead storage area 20' x 30' | = | 600 sq. ft. |
| Engineering area 9' x 12' | = | 108 sq. ft. |
| EMS area 9' x 12' | = | 108 sq. ft. |
| Common Day area lounge 20' x 24' | = | 480 sq. ft. |
| Meeting/Training room 50' x 60' | = | 3,000 sq. ft. |
| Exercise Area 12' x 20' | = | 240 sq. ft. |
| Estimated 10% common area | = | 612 sq. ft. |

TOTAL SQUARE FOOTAGE - MINIMUM

12,116 sq. ft.

Type 1 Construction

Face brick, stone, architectural concrete, good entrance, fully equipped includes classroom, kitchen, drywall, acoustic tile, good lighting, good plumbing, forced air heat and bathrooms. \$234.91 /sq.ft. @ 12,116 sq.ft. = \$2,846,170 + land, architectural and engineering costs

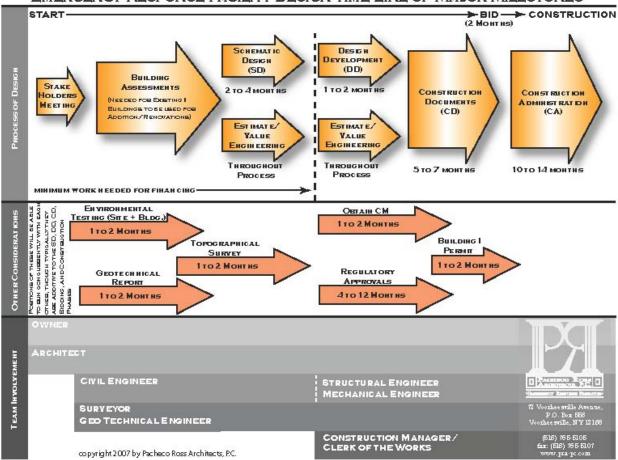
Type 2 Construction

Face brick or stone, good entrance, office, classroom, kitchenette, drywall and acoustical tile, good lighting, good plumbing and rest rooms and forced air heat or heat pump systems. \$193.43 /sq.ft. @ 12,116 sq.ft. = \$2,343,598 + land, architectural and engineering costs

<u>NOTE</u>: This cost estimate is a projection of costs, based on data provided and readily available information on the design and construction of a fire station. It is a conceptual design, not approved by the client. This should not be considered the actual amount or design, but a projected minimum cost of such a project.



EMERGENCY RESPONSE FACILITY DESIGN TIME LINE OF MAJOR MILESTONES





APPENDIX 4 PROJECT TEAM



Project Team

William F. Jenaway, Ph.D., CFO, CTO, CFPS, Principal Consultant, Project Manager

Dr. William F. Jenaway, CFO, CFPS will serve as Project Manager for this engagement. Dr. Jenaway is the CEO of VFIS-ETC responsible for training, education and consulting services provided to client of VFIS and VFIS-ETC. His organization provides training to over 20,000 fire/EMS personnel annually and provides technical guidance and consultation to over 200 agencies annually. He has served as Chief and Fire Marshal of the East Bethlehem Township, Pennsylvania Volunteer Fire Department; and as Chief and President of the King of Prussia, Pennsylvania; Volunteer Fire Company, as well as being Chairman of the municipality's Fire and Rescue Services Board. Under Chief Jenaway's leadership, the department became the first all-volunteer Accredited Fire Service Agency in the US. Fire Chief Magazine named him the "Volunteer Fire Chief of the Year" in 2001. Bill's background includes 50-plus years of volunteer fire and EMS experience. In 2004 he was named to Chair the Pennsylvania Senate Resolution 60 Commission to evaluate and provide recommendations to the Pennsylvania legislature and fire service on strategic approaches to the state's fire and EMS delivery system. In 20016 he was appointed to serve on the Pennsylvania Senate Resolution 6 Commission to update the 2004 report.

Over the years, Bill has authored over 400 articles, seven texts and provided over 300 speeches and presentations on fire and life safety issues. He holds Certified Fire Protection Specialist, Certified Training Officer and Certified Fire Officer designations as well. In 1999 he was named to the Presidential/Congressional Commission known as the "Advisory Panel to Assess preparedness for Terroristic Acts Involving Weapons of Mass Destruction" (a/k/a Gilmore Commission). Dr. Jenaway also serves as President of the Congressional Fire Services Institute and is Past President of the Pennsylvania Fire Services Institute. He serves on the National Fire Protection Association Committees of Emergency Services Risk Management; Providing Emergency Services to the Public; Fire Department Apparatus, and Fire Service Training. Dr. Jenaway also served as Vice Chair and Commissioner on the Commission on Fire Department Accreditation. Bill serves as an adjunct faculty member in the Graduate School of Public Safety at St. Joseph's University in Philadelphia (Risk Analysis, Strategic Planning & Disaster Preparedness) and the Graduate School of Legal Studies at California University of Pennsylvania (Terrorism Threat Assessment). Bill is in his second six-year term as an elected official – Township Supervisor – in Upper Merion Township, Montgomery County, Pennsylvania.

Dave Michaels, MS EFO

David Michaels currently is the Vice President of Education, Training and Consulting with VFIS. He has over 34 years of fire service experience including volunteer and career. Prior to joining VFIS, David spent 28 years with the York City Fire Department in York, PA retiring in 2019 as the Fire Chief. David obtained a Bachelor's degree from York College of Pennsylvania and his Master's degree from Grand Canyon University. David is also a graduate of the National Fire Academy's Executive Fire Officer Program.

David holds numerous nationally recognized certifications including Fire Inspector, Fire Instructor, and Fire Officer. He is also a certified EMT and Building Code Official. He is associated with professional organizations including the Pennsylvania Career Fire Chiefs Association, IAFC, the NVFC, Pennsylvania Association of Fire Code Officials, and NFPA. David is a former Executive Board member of the Pennsylvania Career Fire Chiefs Association and currently serves on the board of the Pennsylvania Fire and Emergency Services Institute He also is a member of the Congressional Fire Services Institute's National Advisory Committee.



APPENDIX 5

REFERENCES



References

In addition to the documents provided by representatives of the Amity Fire Company and Monarch Fire Company, the following documents were used in the analysis of information regarding the in the preparation of this report.

Buckman, John, ed., Chief Fire Officers Handbook, Jones and Bartlett, Sudbury, VT, 2005

Commission on Fire Accreditation International, <u>Fire and Emergency Service Self-Assessment Manual</u>, CFAI, Chantilly, Virginia, 2020.

Insurance Services Office, "Fire Suppression Rating Schedule", ISO, Jersey City, New Jersey, 2009.

Gardiner, Daniel B.C., and Jenaway, William F., <u>Fire Protection in the 21st Century</u>, ISFSI, Ashland, MA, 1996.

Ben Evarts and Gary P. Stein, "U.S. Fire Department Profile Through 2018", NFPA, Quincy, MA, 2020, 26 pages.

ISO, "Public Protection Classification Results, for Amity Township, PA 2018.

Jenaway, William F. Pre-Emergency Planning, ISFSI, Ashland, MA, 1984.

National Fire Protection Association, <u>NFPA 1201 Standard for Providing Emergency Services to the Public</u>, NFPA, Quincy, Massachusetts, 2004.

National Fire Protection Association, NFPA 1720 Standard for the Organization and Deployment of Fire Suppression, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments, NFPA, Quincy, Massachusetts, 2007.

VFIS, <u>Developing and Implementing SOP and SOG for Emergency Service Organizations</u>, VFIS, York, PA, 2001

VFIS, Managing Volunteer and Combination Emergency Service Organizations, VFIS, York, PA, 2008

Documents provided by the fire departments included:

- Response data as requested by the project team
- ISO Report (2018)
- Maps and related documents
- Standard Operating Guidelines
- Bv-Laws
- Financial Information

https://amityfirerescue.com/

https://wbems.org/

https://en.wikipedia.org/wiki/Amity Township, Berks County, Pennsylvania