FIRE OPERATIONAL ANALYSIS
BRISTOL TOWNSHIP, BUCKS COUNTY
NOVEMBER 2020

Governor’s Center for
Local Government Services
Robert Hedden, MS, CFO, CFPS, MIFireE
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Executive Summary

In 2019, the Pennsylvania Department of Community & Economic Development (DCED) began a project to assess the fire services, along with an EMS Overview for Bristol Twp., Bucks County. This report is an analysis of operations, organizational management, equipment and facilities of the Bristol Twp. Fire Companies and an overview of the EMS Providers.

Bristol Twp. Fire Companies have a history of cooperation using automatic aid for fire and rescue responses.

As of the compilation of this document, the fire companies have a symbiotic relationship regarding Fire Services. To continue to operate the current model in terms of Administrative and Operational issues does not reflect the reality of the situation.

1. Purpose

Municipalities should periodically review the emergency services that they are responsible to deliver under the municipal laws of the Commonwealth. The purpose should be to make sure that they are being delivered in a competent, prompt, professional manner with the needed resources, operational efficiencies, and management and that citizens expectations are met.

This assessment is intended to provide the Bristol Twp. with an overview of fire protection to ensure that they can evaluate these findings to effectively and efficiently provide services to the residents of Bristol Twp.

2. Methodology Used in the Study

To understand and evaluate these issues, DCED undertook an assessment of the finances and operations of Bristol Twp. and the Fire Companies. The principal approaches utilized in this study included the following:

- Meetings with the Municipal Officials of Bristol Township
- Road tours of the area
- Site visits to the Fire Stations and interactions with available members
- Interaction via email and phone to conduct follow ups.
- Data Collection of external and internal data documenting administrative and operational management policies and practices.
3. Overview

The Twp. has several in depth issues that need to be addressed:

- Daytime Staffing.
- Recruitment and Retention of members.
- Lack of Strategic Planning in all areas.
- Facilities
- Duplication of common fire protection services and equipment.
- Finances
- Overview of Emergency Medical Services.
Emergency Medical Services:
The goal of any Emergency Medical Service (EMS) system is to provide optimal, pre-hospital emergency medical care to all residents and visitors to their service area and mutual aid communities. This evaluation found both the Bucks County Rescue Squad and the Levittown-Fairless Hills Rescue Squad are meeting, and in most cases, exceeding the needs of residents and visitors.

During the evaluation it was noted that both rescue squads appropriately utilize daily and hourly call volume statistics to determine staffing needs. The Levittown-Fairless Hills Rescue Squad which operates 2 stations, one in Bristol Township and one in Falls Township, also utilizes system status management techniques whereas a solely remaining ambulance will relocate to a center point of their coverage area to provide optimal response times. In addition, both rescue squads have an adequate number of ambulances to support their staffing needs, however some of the ambulances are aging and in need of replacement in the near future.

Despite their operational strengths, both rescue squads face challenges as the healthcare environment is changing dramatically and will continue to undergo many profound changes in the next decade. Some of the main factors leading to these challenges are an increase in call volume coupled with dwindling reimbursements from patients and their insurance companies. Both rescue squads noted in their survey response the need for additional funding as one of their top 3 needs. Their survey responses also pointed out one of the ways to achieve increased funding would require state law maker intervention regarding insurance disbursements. Presently, when an insurance company is invoiced for services provided by a rescue squad in Pennsylvania, insurance companies send the payment to the patient who is then expected to forward the payment to the rescue squad. Unfortunately, there are many patients who fail to forward their insurance reimbursements to the rescue squad. This of course leads to a loss of revenue.

Strengths regarding the EMS service within the township include:
- Professional, high quality EMS providers & progressive Medical Command Physicians
- Frequent continuing education opportunities
- Professional and fiscally responsible community-based Board of Directors
- Active Quality Improvement/Assurance programs
- Adequate station facilities

Potential areas of improvement:
- Consider expanding the system status management to involve Bucks County Rescue Squad coverage area
- Consider a cooperative effort to share and ensure Command Staff availability at all times for response to major incidents
- Consider reviewing coverage areas to ensure the closest rescue squad provides primary coverage.
## Major Recommendations
Throughout this report DCED provides evaluation and analysis. Major Recommendations are listed below. This is not all inclusive and other recommendations are in the body of the document.

<table>
<thead>
<tr>
<th>Major Recommendations</th>
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<tbody>
<tr>
<td>Bristol Twp. should require a uniform method of recording and collating of all data of the various operational, response time, mutual aid, staffing and training components. All Data should be managed through a common reporting program and analyzed monthly by the Twp. and the Fire Companies. This should be codified in Bristol Twp. Code § 106-8</td>
</tr>
<tr>
<td>Bristol Twp. should facilitate an Association of the Station 10 &amp; Station 13 , in a cooperative manner, with the ultimate goal of operating as a single entity to provide Fire Protection in the 4th &amp; 5th Fire Districts of Bristol Twp. This should be codified in Bristol Twp. Code § 106-1 &amp; § 106-2</td>
</tr>
<tr>
<td>Bristol Twp. should facilitate an Association of the Station 12/82 and Station 14 , in a cooperative manner, with the ultimate goal of operating as a single entity to provide Fire Protection in the 2nd &amp; 3rd Fire Districts of Bristol Twp. This should be codified in Bristol Twp. Code § 106-1 &amp; § 106-2</td>
</tr>
<tr>
<td>Bristol Twp. should facilitate consolidation of operations of Station 10 &amp; Station 13 into a single location in the area of Mill Creek Parkway and Edgely Avenue. Bristol Twp. should finance &amp; construct a new, contemporary Fire Station to facilitate this.</td>
</tr>
<tr>
<td>Bristol Twp. should facilitate consolidation of operations of Station 12/82, Station 14 and Station 225 into a single location, within the footprint of the Township Municipal Complex. Bristol Twp. should finance &amp; construct a new, contemporary Fire Station to facilitate this.</td>
</tr>
<tr>
<td>Bristol Twp. should review the recommendations in this document and the potential investment needed to provide Fire Protection in the future. Accordingly, the Twp. should consider implementing the full 3 Mills Fire Protection Tax as permitted by Pennsylvania Fire Class Twp. Code.</td>
</tr>
<tr>
<td>Bristol Twp. should Revamp and codify the Bristol Twp. Fire Board as a means to determine, with the Fire Companies, what the Twp. and the citizens need in regard to Community Fire Protection, and what the Fire Companies need to achieve success in these areas. This should be codified in Bristol Twp. Code § 106</td>
</tr>
<tr>
<td>Bristol Twp. should hire a Civilian Fire Administrator at a Department Head level to administer and oversee the day to day administrative support operations for the Bristol Twp. Fire Companies</td>
</tr>
<tr>
<td>Bristol Twp. should create a mid-level supervisory position in the Fire Marshal’s Office. This should be promotional, and the position of the promoted should be filled upon said promotion</td>
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<tr>
<td>Bristol Twp. should establish a Stipend Program that emphasizes In Station Duty Crew coverage and encourage the Twp. Fire Companies to evaluate Active Fire Fighter status on Duty Hours rather than Call Percentage.</td>
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<td>Bristol Township, through the Fire Board, should develop and implement Uniform Training &amp; Qualifications Policies on a Township Wide level.</td>
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Municipal Overview

Bristol Township, Bucks County, PA

Bristol Township is a First-Class Township in Bucks County in Suburban Philadelphia. It is governed by a Township Council who are elected at large for a four-year term. A President and Vice President of the Council is elected by these Councilman to serve as the head of the government. Bristol's population density ranges from over 3,169 per square mile. It is the most densely populated township in Bucks County. The population was 55,421 at the 2010 U.S. Census, making it the second most populous township in Bucks County and the 13th most populous municipality in Pennsylvania. The township has a total area of 17.2 square miles (45 km2), of which, 16.1 square miles (42 km2) of it is land and 1.1 square miles (2.8 km2) of it (6.33%) is water.

Before Bristol Township was settled, it was populated by Delaware Indians. It was formed as Buckingham Township in 1692 and was renamed Bristol Township in 1702. The springs at Bath, in Bristol Township, were popular among wealthy Philadelphians for a while, but lost popularity to the ones in Saratoga, New York. The Delaware Canal was built in 1831 and connected Bristol to Easton, 60 miles to the north. Still, until the 1950s Bristol Township was largely agricultural. In 1952 William Levitt began construction of his Levittown, which is located partly in Bristol Township. Bristol Township is located at a crossroads of U.S. Route 13, Pennsylvania Route 413, the Pennsylvania Turnpike (Interstate 276), Interstate 95, and Interstate 295. Some of these roads mentioned originated as Lenni Lenape river trails along the Delaware River. This has made Bristol Township an ideal location.

Residents in Bristol Township live in several communities known as Bristol, Bristol Terrace, Croydon, Fergusonville, Edgely, Emilie, part of Fairless Hills, part of Levittown, Newportville, and Winder Village.

Natural features include Mill Creek, Neshaminy Creek, and Queen Anne Creek and Silver Lake.

Adjacent Municipalities

Bristol Township adjacent Municipalities are: Bensalem Township to the West. Falls Township to the East. Middletown Twp. to the North. Bristol Borough to the South. Tullytown Borough to the Southeast.
## Demographics

<table>
<thead>
<tr>
<th>Geography</th>
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<tbody>
<tr>
<td>Population per square mile, 2010</td>
<td>3,423.8</td>
</tr>
<tr>
<td>Land area in square miles, 2010</td>
<td>15.94</td>
</tr>
<tr>
<td>FIPS Code</td>
<td>4201708768</td>
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</table>

<table>
<thead>
<tr>
<th>Population</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Population estimates, July 1, 2019, (V2019)</td>
<td>53,473</td>
</tr>
<tr>
<td>Population estimates base, April 1, 2010, (V2019)</td>
<td>54,558</td>
</tr>
<tr>
<td>Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Population, Census, April 1, 2010</td>
<td>54,582</td>
</tr>
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<thead>
<tr>
<th>Age and Sex</th>
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<tbody>
<tr>
<td>Persons under 5 years, percent</td>
<td>5.4%</td>
</tr>
<tr>
<td>Persons under 18 years, percent</td>
<td>21.8%</td>
</tr>
<tr>
<td>Persons 65 years and over, percent</td>
<td>14.0%</td>
</tr>
<tr>
<td>Female persons, percent</td>
<td>51.2%</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Race and Hispanic Origin</th>
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</thead>
<tbody>
<tr>
<td>White alone, percent</td>
<td>82.5%</td>
</tr>
<tr>
<td>Black or African American alone, percent (a)</td>
<td>9.3%</td>
</tr>
<tr>
<td>American Indian and Alaska Native alone, percent (a)</td>
<td>0.2%</td>
</tr>
<tr>
<td>Asian alone, percent (a)</td>
<td>3.0%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander alone, percent (a)</td>
<td>0.0%</td>
</tr>
<tr>
<td>Two or More Races, percent</td>
<td>2.5%</td>
</tr>
<tr>
<td>Hispanic or Latino, percent (b)</td>
<td>9.8%</td>
</tr>
<tr>
<td>White alone, not Hispanic or Latino, percent</td>
<td>76.3%</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Population Characteristics</th>
<th></th>
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<tbody>
<tr>
<td>Veterans, 2014-2018</td>
<td>3.329</td>
</tr>
<tr>
<td>Foreign born persons, percent, 2014-2018</td>
<td>7.7%</td>
</tr>
</tbody>
</table>
### Housing
- Housing units, July 1, 2019, (Y2019): X
- Owner-occupied housing unit rate, 2014-2018: 72.1%
- Median value of owner-occupied housing units, 2014-2018: $203,800
- Median selected monthly owner costs - with a mortgage, 2014-2018: $1,727
- Median selected monthly owner costs - without a mortgage, 2014-2018: $662
- Median gross rent, 2014-2018: $1,025
- Building permits, 2019: X

### Families & Living Arrangements
- Households, 2014-2018: 19,682
- Persons per household, 2014-2018: 2.71
- Living in same house 1 year ago, percent of persons age 1 year+: 90.6%
- Language other than English spoken at home, percent of persons age 5 years+, 2014-2018: 11.9%

### Computer and Internet Use
- Households with a computer, percent, 2014-2018: 89.8%
- Households with a broadband Internet subscription, percent, 2014-2018: 83.0%

### Education
- High school graduate or higher, percent of persons age 25 years+: 88.8%
- Bachelor's degree or higher, percent of persons age 25 years+: 17.1%

### Health
- With a disability, under age 65 years, percent, 2014-2018: 11.5%
- Persons without health insurance, under age 65 years, percent: 8.1%

### Economy
- In civilian labor force, total, percent of population age 16 years+: 69.2%
- In civilian labor force, female, percent of population age 16 years+: 65.5%
- Total accommodation and food services sales, 2012 ($1,000): 59,798
- Total health care and social assistance receipts/revenue, 2012 ($1,000): 140,296
- Total manufacturers shipments, 2012 ($1,000): 1,540,059
- Total merchant wholesaler sales, 2012 ($1,000): 2,525,051
- Total retail sales, 2012 ($1,000): 462,854
- Total retail sales per capita, 2012 ($): 34,495

### Transportation
- Mean travel time to work (minutes), workers age 16 years+: 26.5

### Income & Poverty
- Median household income (in 2018 dollars), 2014-2018: $63,335
- Per capita income in past 12 months (in 2018 dollars), 2014-2018: $28,592
- Persons in poverty, percent: 10.2%
Article XV
Corporate Powers

XVI. Fire Regulations. To make regulations within the township or within such limits, as may be deemed proper, relative to the cause and management of fires and the prevention thereof; to purchase or contribute to the purchase of fire engines and fire apparatus for the use of the township, and to appropriate money to fire companies for the operation and maintenance thereof and for the construction, repair and maintenance of fire company houses; to ordain rules and regulations for the government of such fire companies and their officers, and to regulate the method to be followed in the extinguishment of fires.

XVII. Fire Houses. To provide and maintain suitable places for the housing of engines, hose carts, and other apparatus for the extinguishment of fire. (XVII amended May 18, 2004, P.L.229, No.34)

Bristol Twp. Fire Organizational Structure

The Bristol Township Fire Service is constituted under authorization of the Bristol Twp. Board of Commissioners via Chapter 106 of the Bristol Twp. Code

- The Fire Companies are recognized & authorized by the Twp. via: § 106-2. Assignment of fire companies to districts.
- It operates ostensibly as a Department via the Bristol Twp. Fire Board, comprised of the 5 Fire Chiefs and the 2 EMS Chiefs, which is an informal group that meets quarterly. The Fire Marshal represents the Twp.
- Each Fire Company operates independently with its own set of Company By-Laws, Administrative and Operational Procedures.
- Each Company elects its Administrative and Operational Officers through a vote of the Company Membership.
- Incident Command is codified through the Bristol Twp. Code: § 106-6. Supervision of personnel and equipment at fires.
  - In assigned districts, the Chief or other ranking officer in charge of the fire company or rescue squad assigned to the district in which the incident occurs shall be in full charge of all the personnel and equipment with respect to the situation and companies in operation at the incident.
Beyond responses, there are many administrative issues, operational and non-operational, that are critical to the success of the Volunteer Fire Service, including, but not limited to: Training, Recruitment/Retention, Inventory, Record Keeping, Heath & Wellness, Personnel Issues, Strategic Planning & Financial Planning. These responsibilities are evolving and increasing. It is not reasonable for the Twp. to expect the 5 Fire Companies to handle these individually without administrative assistance, guidance and oversight.

There are several tools that could be used by Bristol Twp. to improve in this area.

1.) Hire a Civilian Fire Administrator to assist and facilitate the Fire Companies ability to address and succeed in the areas noted above. Abington Twp., Montgomery County has instituted a successful program wherein the Fire Administrator facilitates with each of the 5 Fire Companies in Abington Twp. to address and coordinate the issues noted above.

The Fire Services Administrator (FSA) is a Department Head. It is separate from the Fire Marshal and operates directly under the Twp. Manager. That is the key to the success of the Abington approach, as the FSA has the ability to concentrate solely on administering to the defined needs of the Volunteer Fire Service. This lightens the burden on the Volunteer Administrative and Operational Officers and forms a partnership with the Twp.
2.) Revamp and codify the Bristol Twp. Fire Board through Chapter 106. Abington Twp. and Cheltenham Twp., both Suburban Philadelphia First Class Township’s, similar to Bristol Twp., have a formal recognition of the Fire Board.

Township of Abington, PA / Part I: Administrative Legislation

Chapter 12 Fire Department

☐ § 12-3 Duties of Fire Board.
The Fire Board shall maintain such minimum standards of operation of the Fire Department as the Township Commissioners may prescribe and shall develop plans and make suggestions for improving such standards and shall report such plans and suggestions to the Board of Township Commissioners.

☐ § 12-4 Organization of Fire Board.
[Amended 3-11-1976 by Ord. No. 1420; 3-14-1996 by Ord. No. 1758]
The officers of the Fire Department of the Township of Abington shall be known as the “Fire Board” and shall consist of the Chairperson of the Township of Abington Department of Public Safety or his designee as presiding officer and the Fire Chief, designated herein as District Chief, of each company forming the Fire Department. Each fire company shall elect or appoint its District Chief for the period of at least one year. All district officers shall be active members, of at least 25 years of age, resident within the Township of Abington. The District Chiefs shall give their services gratuitously and shall take and subscribe to the oath required of township officials. The meetings of the Fire Board shall be held quarterly.

Township of Cheltenham, PA / The Code / Part I, Administrative Legislation

Chapter 22 Fire Department

☐ § 22-3 Fire Board established; membership; meetings.
A. There shall be a Fire Board consisting of nine members; five members shall be the Fire Chiefs of the individual fire companies, one member shall be the Chairman of the Public Safety Committee of the Board of Commissioners, and three members shall be members of the Board of Commissioners.
[Added 11-21-1995 by Ord. No. 1846-95]

B. Meetings. The Fire Board shall meet monthly, in the Township Building on the third Wednesday of the month. If the regular time or place of meeting is to be changed, it must be done at a prior meeting, and all members shall receive at least two weeks' written notice thereof prior to said meeting. Special meetings may be called by the Chairman or by request of three Fire Chiefs to the Chairman, and written notice thereof shall be given all members and alternatives at least five days prior to said special meeting.

C. A majority of the Board shall constitute a quorum necessary to conduct any meeting. No action taken by the Board shall be effective unless such action has received the approval of 2/3 of the members present and also 2/3 of the five elected Fire Chiefs or their alternates. If a three-fifths vote occurs, any company can request a vote be taken by the entire Board.

D. The Township Manager, the Chief of Police and the Fire Marshal or their alternates shall attend all meetings upon request, but they shall not have any voting power.
Both of these Municipalities structure the Fire Board as a comprehensive & collaborative method with the Fire Companies to determine what the Twp. and the citizens need in regards to Community Fire Protection, and what the Fire Companies need to achieve success in these areas.

**Recommendation:** The Twp. should hire a Civilian Fire Administrator at a Department Head Level to assist and facilitate the defined needs of the Fire Companies administratively as noted. This should be codified in Bristol Twp. Code § 106

**Recommendation:** The Twp. should Revamp and codify the Bristol Twp. Fire Board as a means to determine, with the Fire Companies, what the Twp. and the citizens need in regard to Community Fire Protection; and what the Fire Companies need to achieve success in these areas. This should be codified in Bristol Twp. Code § 106
**Bristol Twp. Fire Companies**

Fire Protection in Bristol Twp. is provided by an all-volunteer fire department that is made up of five fire individual fire companies located strategically throughout the Township. The volunteer system is supplemented Monday through Friday, 6 AM to 4:30 PM, by staff from the Township Fire Marshal's Office:

- Station 10 – Edgely Fire Company
- Station 11 – Croydon Fire Company
- Station 12 – Newportville Fire Company
- Station 13 – Levittown Fire Company No. 2
- Station 14 – Third District Fire Company
- Station 225 – Fire Marshal’s Office

Approximately 150 volunteer firefighters serve the township 24 hours a day, 7 days a week, 365 days a year. The Township Fire Marshal’s Office has 6 Fire Inspectors that respond as noted above.

The Fire Companies provides a range of public safety and emergency safety services which include the following:

- Structural fire suppression
- Vehicle rescue/extrication
- Water Rescue
- Technical Rescue
- Hazardous Materials response
- Emergency medical services assistance

Bristol Twp. responded to 7,347 Calls for the Time Period of this study.

Bristol Twp. ISO Rating is 3

Edgely Fire Company was established in 1908. It is located at 1200 Edgely Ave., Levittown, PA

Membership Station 10:

- Active Firefighter- 8
- Active Fireperson- Administrative – 10
- Life Members - 25

Croydon Fire Company was formed in 1918. It is located at 911 State Rd., Croydon, PA

Membership Station 11:

- Active Firefighters - 20
- Probationary Firefighters - 3
- Life Members - 40
Newportville Fire Company was founded in 1927. It operates out of Two Stations:

Station 12 at 2425 New Falls Road Newportville, PA/Station 82 at 3025 Bath Road, Bristol, PA

Membership Station 12:

- Permanent members- Any member that has completed FF1 at a minimum- 17
- Fire Police- Any member that completes Basic Fire Police Course- 7
- Life Member- Any member that has maintained an active status for no less than 20 years- 33
- Life Exempt- Any member that is over the age of 70- 3
- Probationary Member- Any new applicant that is on a 6 month to 1-year probation and will need to complete the basic FF1 course- 4
- Associate member- Any member that is unable to complete the FF1 timetable and wants to assist the department-1

Levittown Fire Company. No. 2 was Chartered in 1956. It is located at 6 County Way, Levittown, PA

Membership Station 13:

- Active Firefighters - 49
- Life Members - 27

Third District Fire Company was formed 1955. It is located at 1411 Harrison St., Bristol, PA

Membership Station 14:

- Fire Active: 14
- Administrative Active: 22
- Life Members – 40
- Both Admin & Fire Active: 12 (of the 22 administrative active personnel, 12 are also fire active)

Bristol Twp. Fire Marshal’s Office was instituted in 1982, it began supplementing Fire Responses in 2005

- Fire Marshal: 1
- Deputy Fire Marshal: 1
- Fire Inspectors : 5
Station 10 Box Response Area
Station 11 Box Response Area
Station 12/82 Box Response Area
Station 13 Box Response Area
Station 14 Box Response Area
Fire Protection Funding:

Bristol Twp. funds Fire Protection with Tax Millage Rates under the Pennsylvania First Class Township Code. The Fire Companies are funded by annual allocations from the Township’s Fire Tax Millage, the Pennsylvania Fireman’s’ Relief Fund, Act 205 and occasional state and federal grants, various fundraising efforts, and facility rental activities. The Fire Marshal’s Office is funded through the General Fund Millage.

"FIRST CLASS TOWNSHIP CODE, THE"

Act of Jun. 24, 1931, P.L. 1206, No. 331
Cl. 73
(Reenacted and amended May 27, 1949, P.L.1955, No.569)

ARTICLE XV
CORPORATE POWERS

Section 1709. Tax Levies.--(a) The board of township commissioners may levy taxes upon all property and upon all occupations within the township made taxable for township purposes, as ascertained by the valuation for county purposes made by the assessors of the several counties of this Commonwealth for the year for which the township taxes are levied, for the purposes and at the rate hereinafter specified: provided, however, That such valuation shall be subject to correction by the county commissioners of the several counties, and to appeal by the taxable persons in accordance with existing laws.

Two. (i) An annual tax not exceeding three mills for the purpose of:
(A) building and maintaining suitable places for the housing
of fire apparatus;
(B) purchasing, maintaining and operating fire apparatus;
(C) making of appropriations to fire companies within or
without the township;
(D) contracting with adjacent municipalities or volunteer fire
companies therein for fire protection;
(E) the training of fire personnel and payments to fire
training schools and centers;
(F) the purchase of land upon which to erect a fire house; and
(G) the erection and maintenance of a fire house or fire
training school and center.

(ii) The township may appropriate up to one-half, but not to
exceed one mill, of the revenue generated from a tax under this
clause for the purpose of paying salaries, benefits or other
compensation of fire suppression employes of the township or a
fire company serving the township.

(iii) If an annual tax for the purposes specified in this
clause is proposed to be set at a level higher than three mills
the question shall be submitted to the voters of the township, and
the county board of elections shall frame the question in
accordance with the election laws of the Commonwealth for
submission to the voters of the township.

(Two amended Nov. 23, 2004, P.L.912, No.123)
Seven. (i) An annual tax not exceeding one-half mill for the purpose of supporting ambulance, rescue and other emergency services serving the township, except as provided in subsection (2).

(ii) The township may appropriate up to one-half of the revenue generated from a tax under this clause for the purpose of paying salaries, benefits or other compensation of employees of an ambulance, rescue or other emergency service serving the township.

(Seven amended Nov. 23, 2004, P.L.912, No.123)
Recommendation: Bristol Township should review the recommendations in this document and the potential investment needed to provide Fire Protection in the future. Accordingly, Bristol Township should consider raising revenue through Fire Tax at the maximum millage as permitted by the Pennsylvania First Class Township Code.
Evaluation of Fire Services

Local governments and emergency services organizations have used cooperative partnerships to improve service delivery by better coordinating resources. Bristol Twp. Fire Companies have a history of cooperation using automatic aid for fire and rescue responses in Bucks County.

A. Problem Statement

As demands for service and costs continue to increase, and staffing decreases, innovative strategies should be explored to ensure a sustainable quality service.

B. Purpose Statement

The purpose of this report is to outline the current fire rescue system in Bristol Township in Bucks County Pennsylvania and provide suggestions to help create a new cooperative partnership.

C. Introduction to Cooperation

Why should organizations cooperate?

It is important to understand interdependence in today’s fire and emergency services. Our communities blend together across defined municipal boundaries. Every day, mutual aid is provided and received for fires, vehicle crashes, medical emergencies, and a variety of other calls for citizens in need of a rapid, caring response. According to the Intergovernmental Cooperation Handbook published by the Pennsylvania Department of Economic and Community Development, municipalities are not walls or barricades. They are interdependent because of economic factors, physical features, and social groupings. It has been proven that cooperation will lead to better efficiency and effectiveness in the provision of services. As communities grow, so does the need for new and expanded services. Citizens will expect more from their government and fire department. Cooperation is the future; the question is whether it is in your department’s future.
How to make cooperation work?
The intergovernmental cooperation handbook recommends that the process be as inclusive as possible from the start. The process should involve members and leaders of the fire departments, elected officials, community members, and municipal staff. It is essential to communicate effectively. If members of the process are not kept informed, decisions will be made on assumptions rather than facts. To maintain a cooperative spirit, it is important to be proactive, flexible, patient, and to think regionally.

D. The Setting – Bristol Twp.
Bristol Twp. is classified as, and operates under the Commonwealth of Pennsylvania First Class Township Code. The Governing Body is the Board of Commissioners. The Board is comprised of seven members elected at large in the Township. The Board of Commissioners are responsible for policy decisions, goals and objectives for the Executive, Administrative, and Advisory functions, and the annual budget. As the governing body for all municipal matters, the Board is the principal taxing body, directs the maintenance of law and order, and is responsible for the general health, safety and welfare of township residents. The township manager is the chief administrative officer.
Internal Analysis.
Internal Analysis by the Fire Companies has identified needs, strengths and weaknesses. A review of the issues identified by each company indicates that each has similar or common issues as noted in italics.

Station 10 – Edgely

The top three needs facing the department include:

1. **Membership recruitment and retention along with improving response time and training participation**

2. **Increase in funding (cost of apparatus replacement and maintenance, equipment cost and maintenance, increase in all facets of administrative cost due to no increase of income in 15 + years)**

3. **Capital building improvements**

The top three strengths include:

1. **Strong senior leadership with progressive ideology, overall pride and department camaraderie**

2. **Dedication of small core group that meets or exceeds basic training certificates**

3. **Updated equipment**

The top three weaknesses include:

1. **Even though the current department financial outlook is “ok”, increased funding is needed for Cost of Living Adjustments (COLA) for all facets involved in running the department.**

2. **Programs to retain active and qualified members (pay per call, tax incentives etc...)**

3. **Lack of future leadership personnel: both administrative and line officer**
Station 11 – Croydon

The top three needs facing the department include:

1. **THE ABILITY TO ATTRACT NEW MEMBERS INTO THE FIRE SERVICE.**

2. Retaining the current membership.

3. Getting the new membership interested in becoming leaders.

The top three strengths include:

1. ABILITY TO RESPOND TO 99% OF CALLS.

2. ABILITY TO ADAPT TO THE NEEDS AND EXPECTATIONS OF THE JOB.

3. WE WORK ON THE PRINCIPLE OF NEEDS AND NOT WANTS TO OPERATE.

The top three weaknesses include:

1. Not fully changing with the times.

2. DOCUMENTATION

3. Recordkeeping
Station 12/82 – Newportville

The top three needs facing the department include:

1. Recruitment/Retention
2. Finances
3. Member responses

The top three strengths include:

1. Enhancing training
2. Apparatus
3. PPE

The top three weaknesses include:

1. Response times
2. Enhancing knowledge of future members
3. Basics of operations
Station 13– Levittown No.2

The top three needs facing the department include:
1. Funding
2. Manpower
3. Equipment

The top three strengths include:
1. Training
2. Leadership
3. Fiscally sound

The top three weaknesses include:
1. Manpower/ Day time
2. Recruitment
3. Retention
Station 14– Third District

The top three needs facing the department include:

1. Additional qualified manpower and supplemental coverage between 05:00 and 1800

2. We need to replace our current building. The building is structurally sound; however, it is no longer providing adequate office or storage space. Numerous additions have been added and the sewer, plumbing and electrical system can’t support additional expansion without a complete overhaul.

3. Adequate funding to support operations and expenses to minimize fund raising. No one wants to go out on a street intersection and ask people for money so they can continue to provide a service for free. When the police need a new car, they aren’t out asking for money.

The top three strengths include:

1. Well specified apparatus for our local. We set the apparatus up specifically for Bristol Township and the needs of our neighborhoods and buildings.

2. Modern and efficient board of directors. We have one board of directors for both the fire company and relief association. We eliminated the trustee’s positions and operate with a checks and balances system. Because of this system we are able to get business accomplished much faster and more efficiently than many other departments.

3. Recognizing problems early and taking corrective action. We aren’t always able to correct some of the more widespread problems such as manpower shortages, but we recognized problems and work to address the issues.

The top three weaknesses include:

1. Manpower: We have adequate manpower most of the time for calls between 1800 and 0500 but 0500 and even 0400 through 1800 is not as reliable as it should be.

2. Finances: We operate under the current tax rate by buying less items and replacing items later than recommended or required. Ideally you would want a rotating system of replacement before failure or expiration and we are not always able to accomplish this due to funding.

3. Recruiting new personnel: The geographical area that we cover and the over saturation of fire departments in the Bristol Township area makes it challenging to recruit new personnel. 5 departments generally recruit from some common areas and this divides up available recruits among the departments. Less stations would equal more available manpower and more efficient operations
STATION 225 – Bristol Twp. FMO

The top three needs facing the department:
1. Additional staff to put on E225
2. Facilities improvements / expansion
3. Funding for capital equipment replacement plan

The top three strengths of the department:
1. Highly certified and experienced staff in multiple disciplines
2. Professionalism & dedication towards all aspects of their duties
3. Working relationship with businesses and fellow first responders from all agencies

The top three weaknesses of the department:
1. Low salaries as compared to other nearby municipalities, minimal time off for new employees, and significant work load makes it hard to recruit employees.
2. Understaffed Engine
3. Lack of capital equipment replacement plan
As part of the process of engagement of the fire companies, they were presented with a list of DCED options from SR-60/HR-148 and asked to see which option they favored.

Each Company was asked to review the above and provide their thoughts on the prospects of the above.

**Station 10 Edgely:**

*Regionalization:* As with any change in the fire service, let alone a pride driven department, all options *MUST* be included in a decision. Such things as a joint purchase, joint trainings, standard operating guidelines, resource management, and apparatus structure will only improve the service that we provide to the residents and visitors.

**Station 11 Croydon:**

Station 11 would be in favor of *Merging* of Twp. companies. Two different companies being dispatched on all responses together from different stations isn’t cost effective, and with manpower issues isn’t time conservative. Also funding split 3 ways as opposed to 5 ways would better serve the Twp. as a whole.
Station 12/82 Newportville:

At this time in the township fire service, my feelings are that **Consolidation** or **Association** of departments would allow better fire protection to the residents. This would also allow for more volunteers to contribute to each department, as well as response times, coverage of departments throughout the day, and utilization of skill sets. Some departments are very leery on combining assets, but I feel if we do not at a minimum associate then we will be letting down the people we are supposed to protect. A **Merger** may benefit down the road, but I also feel this term is not used correctly. I believe within 5 years departments in the township will have no choice but to become one if volunteers continue to diminish.

Station 13 Levittown No. 2:

**NO RESPONSE**

Station 14 Third District:

**Association** for a short term with the goal of **Consolidation**.

We have just started meeting with Bucks County Rescue Squad and Newportville Fire Company to discuss an association of three organizations. We also would like to see the township career personnel in the building with adequate space for their needs. Currently we have an agreement with Newportville Fire Company for use of E-12 as a reserve truck.

Our goal is to not try and force a consolidation but to allow it to happen naturally. We want to operate under one roof and believe by sharing expenses and group purchasing we can improve efficiency and better utilize our equipment. By offering access to a Tower Ladder, Rescue, Pumpers, boat, field truck and Ambulances at one location and with the increased call volume we are hoping to attract personnel. This will also bring the membership of the different organizations together.
The Five companies were also asked: **Please list what your fire company believes are the pros and cons of consolidating, merging or sharing services?**

**Station 10 Edgely:**

**Pros:**
- **INCREASE IN RESOURCE MANAGEMENT BOTH ON “FIRE SIDE” AND “ADMINISTRATIVE SIDE” DECREASING THE CROSS WORK PROVIDED BY MEMBERS HANDLING DUAL ROLES**
- **INCREASE TRAINING AND RESPONSE TIMES**
- **DECREASE APPARATUS/BUILDING DUPLICATIONS, INCREASING FINANCIAL STABILITY**
- **STANDIZATION OF EQUIPMENT PURCHASE, RUN CARDS, TRAINING REQUIREMENTS**
- **IMMEDIATE ADDITION OF QUALIFIED INTERIOR FIREFIGHTERS**

**Cons:**
- **SENSE OF LOST PRIDE IN AN INDIVIDUAL ORGANIZATION**
- **PUBLICS PERSPECTIVE OF LOSS OF COVERAGE AREA TO THEIR HOMES (STATION MOVING LOCATION FURTHER AWAY)**
- **LOGISTICAL NIGHTMARE BETWEEN ANY TWO ORGANIZATIONS, MAINLY RULES, REGULATIONS AND ADMINISTRATIVE ROLES**
- **HAVING EACH ORGANIZATION “BUYING ALL IN” TO REACH THE SAME GOAL**
- **INCREASED CALL VOLUME POSSIBLY “BURNING OUT” MEMBERS FASTER**
- **MUNICIPALITIES USING THIS AS A TOOL TO DECREASE OVERALL FUNDING TO THE VOLUNTEER DEPARTMENTS**
- **POTENTIALLY TAKING ON OTHER DEPARTMENTS LACK OF FINANCIAL PLANNING**

**Station 11 Croydon:**

**Pros:**
- **The pros of merging enable more personnel to respond to a single location producing a better outcome of response with less resources required.**

**Cons:**
- **Where we are situated this wouldn’t be feasible for our station. Response time for personnel to the station would be timely and actually delay response.**
Station 12/82 Newportville: 
Pros/Cons:

We have established a committee to discuss the future of the department, we have discussed some of the pros and cons with some being:
- Assets- Owned by either department
- Finances- Within each department
- Training- Having 2 departments operate as one, this will allow stronger service of both departments
- Facility- Are either of the facilities able to allow for growth, or are they at a maximum

Station 13 Levittown Fire Co No. 2:

Pros:

- Manpower
- Apparatus

Cons:

- Hard to get everyone on board
- Loss of identity

Station 14 Third District:

- We are actively working on an association with Bucks County Rescue Squad and Newportville Fire Company with a long-term goal of consolidation.
Training: Fire Fighters/Officer Requirements:

Each company was asked to provide their Fire Fighter/Fire Officer requirements

**STATION 10:**

ACTIVE FIREFIGHTERS – 25% FIRE CALLS  50% TRAINING NIGHTS  FIREFIGHTER 1, Haz Mat Ops

JUNIOR OFFICERS – FIREFIGHTER 1, HAZ MAT OPERATIONS, CPR/FIRST AID, VRT, ENGINE CO, TRUCK CO, 3 YEARS INTERIOR, ICS 100 – 800

COMMAND OFFICERS – SAME AS ABOVE, 5 YEARS INTERIOR, DRIVE ALL APPARATUS

**STATION 11:**

Minimum firefighter requirements are current FF1, NIMS 100,200,700,800.
Minimum officer requirements are – Qualified apparatus driver, arson awareness, Haz mat ops and firefighter 1.

**STATION 12:**

Active firefighter- Must have completed FF1, Haz Mat Operations, First Aid, AED, CPR, and the member has to enroll in the following after completion, Vehicle Rescue Technician. All courses after that are voluntary for the member.

Fire Officers- Must have FF1, FF2, Haz Mat Operations (current), First Aid, AED, CPR, Vehicle Rescue Technician, Boaters Safety Course, Pump 1, EVOC as well as individual specifics for each rank below:

Chief- 3 Officers Training Courses, Be qualified Operator on all apparatus

Deputy and Battalion- 2 Officers Courses, Be qualified Operator on all apparatus

Captain and Lieutenant- 1 Officers Training Course, Be qualified operator on Engines
STATION 13:

Firefighter 1

STATION 14:

A) FIRE FIGHTER
Any member brought in after 2014 must have IFSAC or PRO BOARD FF-1 and Hazmat Operations for interior firefighting. Members in FF-1 class or waiting for a class may ride and stay with the driver and only participate in support roles not involving fire attack or operating within an IDLH atmosphere

B) CAPTAIN
Must have minimum of three (3) years active service in this organization
Must be qualified to drive one fire company owned Class A pumper (EVOC & Pump 1 is required to drive)
Haz-Mat Operations
NIMS 100
Approved Engine Company Operations class
Approved Truck Co Operations class

C) BATTALION CHIEF
Must have held a line officers’ position in this organization for minimum of three (3) years.
Must meet prerequisites for the position of Captain.
Qualified to drive all fire company owned apparatus.
Approved Strategy & Tactics class
NIMS 200
NIMS ICS for the Fire Service or an Approved Incident Command class
Approved Basic Vehicle rescue class

D) DEPUTY CHIEF
Must have held a line officers’ position within this organization for a minimum of four (4) years.
Must meet the prerequisites of Captain and Battalion Chief.
MMS 800
Leadership I
Safety Officers class
Arson detection

E) CHIEF
Must have held a line officers’ position within this organization for a minimum of five (5) years.
Must meet the prerequisites of Battalion Chief and Deputy Chief.
NIMS 300 & 400
Leadership 2
Arson investigation
Anyone previously holding a line officer position in this organization will be grandfathered in, up to including the highest held position, so long as that person has been fire active for two years 1 prior to being nominated for said position.
STATION 225:
Level 1 Fire Inspector
1. Valid Pa UCC Fire Inspector 1 Certification
2. 5 years interior firefighting experience
3. IFSAC or Pro Board Firefighter 1
4. Engine Company Operations
5. Pump 1
7. Valid Pa. Dept. of Health First Responder
8. Haz-Mat Operations Level
9. Basic Vehicle Rescue Technician
10. NIMS 100, 200, 700 & 800
11. Must meet the requirements of N.F.P.A. 1500: Standard on Fire Department Occupational Safety and Health (pre-employment physical)
12. Valid Pennsylvania driver's license

Level 2 Fire Inspector
1. Valid Pa UCC Fire Inspector 1 Certification
2. 5 years interior firefighting experience
3. IFSAC or Pro Board Firefighter 1
4. Engine Company Operations
5. Ladder Company Operations
6. Pump 1
7. Emergency Vehicle Operator Course (E.V.O.C.)
8. Valid Pa. Dept. of Health First Responder
9. Haz-Mat Operations Level
10. Basic Vehicle Rescue Technician
11. NIMS 100, 200, 700 & 800
12. Must meet the requirements of N.F.P.A. 1500: Standard on Fire Department Occupational Safety and Health (pre-employment physical)
13. Valid Pennsylvania commercial driver’s license w/air brake endorsement
14. RIT Basic certificate
15. Firefighter Survival certificate
16. Initial Company Operations series (Prep, Decision Making, Strategies & Tactics)
Level 3 Fire Inspector

1. Valid Pa UCC Fire Inspector 1 Certification
2. 5 years interior firefighting experience
3. IFSAC or Pro Board Firefighter 1
4. Engine Company Operations
5. Ladder Company Operations
6. Pump 1
7. Emergency Vehicle Operator Course (E.V.O.C.)
8. Valid Pa. Dept. of Health First Responder
9. Haz-Mat Operations Level
10. Basic Vehicle Rescue Technician
11. NIMS 100, 200, 700 & 800
12. Must meet the requirements of N.F.P.A. 1500: Standard on Fire Department Occupational Safety and Health (pre-employment physical)
13. Valid Pennsylvania commercial driver's license w/air brake endorsement
14. RIT Basic certificate
15. Firefighter Survival certificate
16. Initial Company Operations series (Prep, Decision Making, Strategies & Tactics)
17. Certified Fire & Explosion Investigator – National Association of Fire Investigators

A review of all of the above shows a wide, disparate approach to training and operational qualification requirements by each individual station. Attached below, is a model Fire Fighter/Fire Officer Requirement. Such a uniform training/qualification policy should be reviewed and implemented.

Recommendation: Bristol Township, through the Fire Board, should develop and implement Uniform Training & Qualifications Policies on a Township Wide level.
Upper Providence Township
Department of Fire & Emergency Services

Training Requirements
Guideline #2008-01 (Rev. 7.2.08)
Effective Date: July 2, 2008

Purpose
To ensure all firefighters and officers within the Department meet the minimum standard for training.

Scope
ALL departmental personnel who participate in firefighting and rescue activities shall be required to conform to this policy. All participating companies must have 75% of its active member’s meet the firefighter requirements and ALL Fire Officers must meet 100% of the required training for the position in which they elected or appointed 1 year of the effective date of this policy. Nothing in this document shall prevent or prohibit any fire company within the department from implementing training standards or qualifications that are in excess of the minimum requirements listed in this document.

Training Requirements

Junior Firefighters
Junior firefighters are members who are sixteen (16) and seventeen (17) years of age. Junior firefighters shall be restricted to exterior operations only.
- Introduction to the Fire Service
- Fire ground Support
- Exterior Firefighter OR equivalent.
- Hazardous Materials Awareness OR equivalent (NFPA 472). If the date of completion is over one year, a current Hazardous Materials Awareness Refresher Course is needed.
- Current First Aid and CPR certification.
- Junior firefighters shall be limited to those duties allowed by the Pennsylvania State child labor laws.
- Junior firefighters shall be identified by one or more of the following helmet markings:
  1. Red helmet
  2. Fire Company helmet with red stripping and "Junior Firefighter" rockers
  3. Traditional style Fire Company helmet with red stripes and a red front shield.

Firefighters
Firefighters are members eighteen (18) years of age and older who meet the following minimum training qualifications. Any firefighter who does not meet these minimum standards will be restricted to exterior operations only and will be designated a probationary firefighter.
- Pennsylvania State Firefighter I certification (NFPA 1001).
Recommended Operating Procedures

- 2 -

- Hazardous Materials Operations for First Responders OR equivalent (NFPA 472). If the date of completion is over one year, a current Hazardous Materials Operations Refresher Course is required.
- NIMS 100, 700
- Vehicle Rescue Technician (If Company provides vehicle rescue service).
- Water Rescue Awareness
- Current First Aid, CPR, AED Certification
- Infection Control/Bloodborne Pathogens class
- Emergency Vehicle Operators Course if a Firefighter uses warning lights.
- Valid Pennsylvania Drivers License.

Exterior Firefighter

Exterior firefighters are members who are of eighteen (18) years of age or older and do not meet the minimum training requirements for firefighters listed above.

Exterior firefighters will be restricted to exterior operations that do not require the use of a Self Contained Breathing Apparatus.

Apparatus Operators

Apparatus operators shall be a minimum of eighteen (18) years of age or older for vehicles under 15,000# GVW and a minimum of twenty-one (21) years of age or older for vehicles greater than 15,000# GVW. Apparatus operators shall have a minimum of one (1) year of fire service experience.

Must meet the requirements for Firefighter and:
- Pump Operations
- Emergency Vehicle Operators Course

Lieutenant

Must be at least 22 years of age and have been a member, in good standing, for at least 2 years in one of the Township Fire Companies.

Must meet the requirements for Firefighter and Apparatus Operator and:
- Pennsylvania State Firefighter II certification (NFPA 1001) (Pennsylvania State Fire Officer I certification (NFPA 1021) is encouraged).
- Truck Company 1 (for companies that have an aerial)

Captain

Must be at least 22 years of age and have been a member, in good standing, for at least 2 years in one of the Township Fire Companies.

Must meet the requirements for Lieutenant and:
- Pennsylvania State Fire Officer I certification. (NFPA 1021) (Fire Officer II is encouraged)
Recommended Operating Procedures

- 3 -

- Water Rescue Phase 1 - Pennsylvania Fish & Game Commission (If Company provides water rescue services)

Assistant and Battalion Chief

Must be 23 years of age and have been a member, in good standing, for at least 3 years in one of the Township Fire Companies.

Must meet the requirements of Captain and:

- Pennsylvania State Fire Officer II certification (NFPA 1021)
- Aerial Apparatus Practices (If Company has an aerial apparatus)
- NIMS 100, 200, 700, 800 (NIMS 300 & 400 are encouraged)
- Rescue 1 (If Company provides rescue services)

Deputy Chief

Must be at least 24 years of age and have been a member, in good standing, for at least 5 years in one of the Township Fire Companies. Firefighters who are eligible for this position shall have at least 1 year experience as an Assistant or Battalion Chief.

Must meet the requirements for Assistant and Battalion Chief.

Fire Chief

The following shall be required to have been completed as minimum training for the position of Fire Chief

In addition to the minimum training qualifications listed below, the Fire Chief shall be at least twenty-five (25) years of age and have a minimum of five (5) years experience in the fire service AND a minimum of five (5) years of township company experience AND at least one (1) year experience as an Assistant or Battalion Chief or Deputy.

Must meet the requirements for Deputy Chief and:

- NIMS 100, 200, 300, 700, 800 (400 encouraged)
- The Fire Chief shall be required to live in the Company’s first response district.

Training Records

Training records for each departmental firefighter shall be recorded in the Department’s Firehouse Software. These training records will be used to determine if a firefighter or officer meets the minimum standards for training.

The Director of the Department shall oversee handling of the training records. Only the Chief(s) or person(s) designated by the Director or Emergency Service Board will have access to the records. The training records will be handled with the same sensitivity that any employee information would be handled.
Recommended Operating Procedures

Determination of Equivalence

Certified FF I = ALL of the following: PA State Basic Firefighting, PA State Advanced Firefighting, PA State Firefighting III, CPR/AED, Hazardous Materials Operations.

All courses can be completed at accredited facilities.

Supersede Policy

This general order supersedes all previously published policies, procedures or orders related to minimum training standards or requirements.

Rev. 7.2.2008
Bristol Twp. Fire Response Data

This is reviewed on a Township Wide basis, with the data source being the various Reporting Systems Software used by the Bristol Twp. Fire Companies. The compilation and review of this data illustrates the Demand for Services and the use and deployment of Fire Protection Assets. This is critical to understand peak demand parameters and the ability to meet them. It is also a tool to detect emerging and/or evolving trends in the community relative to fire protection.

Two of the Fire Companies, Station 11 and Station 13 provided data for review and inclusion that was unable to be formatted due to a switch in reporting systems, where the legacy reporting provider would not provide the technical assistance to reformat the data.

This is structured by individual companies and aggregated on a Township Wide evaluation. The Fire Marshal’s Office is included in the data where appropriate.

The Fire Companies provided data for specific years within the reporting formats they were using. As stated above, the legacy data of Station 11 and Station 13 was unable to be formatted due to a lack of cooperation by the legacy reporting provider.

The Data will indicate to the Twp., when, where and how the Fire Protection Assets in the Twp. are able, or not, to meet the demands for service and where they are being deployed.

The initial breakdown is analyzed by Year, Month, Day and Hour of Day, where these were provided. In the Hour of Day data, it is further analyzed by Runs occurring between 06:00 to 18:00, which is the time of day when volunteer staffing is challenging, and Runs occurring between 18:00 to 06:00, when staffing is of a more stable nature.

There is also a review of Automatic/Mutual Aid, internally and externally.
Station 10

2014-2019 Total Runs

Total Runs 2014-2019

2014-2019 RUNS BY %

Busiest Year: 2017 530 Runs
Busiest Month: October 55 Runs
Busiest Month: March 52 Runs
Busiest Month: January 53 Runs
Busiest Month: April 57 Runs
Busiest Month: March 62 Runs
Busiest Month: January 53 Runs
Busiest Month: March 284 Runs
Busiest Day: Tuesday – 101 Runs
Busiest Day: Tuesday – 82 Runs
Busiest Day: Tuesday – 82 Runs
Busiest Day: Wednesday – 99 Runs
Busiest Day: Friday – 86 Runs
Busiest Day: Tuesday – 79 Runs
Busiest Day: Tuesday - 494 Runs
Busiest Hour: 13:00 – 38 Runs
Busiest Hour: 12:00 – 37 Runs
Busiest Hour: 11:00/12:00/13:00 – 102 Runs
Busiest Hour: 17:00 – 45 Runs
Busiest Hour: 17:00 – 38 Runs
Busiest Hour: 11:00 – 37 Runs
Busiest Hour: 11:00 – 195 Runs
Station 11:

Data provided unable to be formatted due to changeover in reporting system.
STATION 12

2014-2018 TOTAL RUNS

2014-2018 TOTAL RUNS %

TOTAL RUNS: 2787
Busiest Year: 2018 598 Runs
Busiest Month: September 58 Runs
Busiest Month: May 61 Runs
Busiest Month: October 65 Runs
Busiest Month: August 160 Runs
Busiest Day: Tuesday 88 Runs
Busiest Day: Tuesday 93 Runs
Busiest Day: Friday 99 Runs
Busiest Day: Tuesday 264 Runs
Busiest Hour: 19:00 40 Runs
Busiest Hour: 17:00 44 Runs
Busiest Hour: 16:00 44 Runs
Busiest Hour: 19:00 116 Runs
STATION 13

Data provided unable to be formatted due to change over in reporting system.
STATION 14

**2014-2019 TOTAL RUNS**

![Bar chart showing total runs from 2014 to 2019.]

**2014-2019 TOTAL RUNS %**

![Pie chart showing percentage distribution of runs by year.]

Total Runs: 2420  
Busiest Year 2019: 502 Runs
BUSIEST MONTH: October 46 Runs
BUSIEST MONTH: March 40 Runs
BUSIEST MONTH: March 45 Runs
BUSIEST MONTH: June 38 Runs
BUSIEST MONTH: January 41 Runs
BUSIEST MONTH: July 71 Runs
BUSIEST MONTH: July 247 Runs
BUSIEST DAY: Thursday 67 Runs
BUSIEST DAY: Wednesday 69 Runs
BUSIEST DAY: Monday 66 Runs
BUSIEST DAY: Monday 66 Runs
BUSIEST DAY: Monday 69 Runs
BUSIEST DAY: Monday 102 Runs
BUSIEST DAY: Monday 416 Runs
BUSIEST HOUR: 15:00 30 Runs
BUSIEST HOUR: 10:00/17:00 28 Runs
BUSIEST HOUR: 13:00 33 Runs
2017 RUNS BY HOUR

2017 RUNS BY HOUR %

BUSIEST HOUR: 16:00 25 Runs
2018 RUNS BY HOUR

2018 RUNS BY HOUR %

BUSIEST HOUR: 08:00 67 Runs
BUSIEST HOUR: 16:00 35 Runs
BUSIEST HOUR: 13:00 167 Runs
Station 225

**2015-2019 RUNS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fire Runs</th>
<th>EMS Runs</th>
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<tbody>
<tr>
<td>2015</td>
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<td>2018</td>
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<tr>
<td>2019</td>
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**Busiest Year: Fire 2018 314 Runs/EMS 2017 124 Runs**

**2015-2019 Total Runs by Type**

<table>
<thead>
<tr>
<th>Type</th>
<th>2015-2019 Runs</th>
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<tr>
<td>EMS</td>
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<tr>
<td>Fire</td>
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</tbody>
</table>
RUNS BY % 2015-2019

- Fire: 77%
- EMS: 23%

2015-2019 FIRE RUNS

- Number of fire runs: 1600
TOWNSHIP WIDE

TOTAL DISPATCHED FIRE RUNS
STA 10/STA 14 2014-2019
STA 12 2016-2019

Total Runs 7,627

TOTAL DISPATCHED FIRE RUNS
STA 10/STA 14 2014-2019
STA 12 2016-2019

- Sta 10: 38%
- Sta 12 (2016-2019): 30%
- Sta 14: 32%
BUSIEST YEAR: 2018 1,691 RUNS
BUSIEST STATION: STATION 10 2,943 RUNS
BUSIEST MONTH: JANUARY 657 RUNS
TOTAL RUNS BY DAY
2014-2019 STA 10/STA 14
2016-2018 STA 12

BUSIEST DAY: TUESDAY 1,159 RUNS
BUSIEST HOUR: 13:00 461 RUNS
Bristol Twp. Automatic/Mutual Aid

STATION 10

2014 BRISTOL TWP. AUTO/MUTUAL AID GIVEN

2014 BRISTOL TWP AUTO/MUTUAL AID GIVEN %
2016 OUTSIDE AUTO/MUTUAL AID GIVEN

2016 OUTSIDE AUTO/MUTUAL AID GIVEN %

- Falls Twp: 53%
- Tullytown Boro: 13%
- Bensalem Twp: 17%
- Bristol Boro: 11%
- Morrisville Boro: 6%
2018 OUTSIDE AUTO/MUTUAL AID GIVEN

2018 OUTSIDE AUTO/MUTUAL AID GIVEN %
2019 OUTSIDE AUTO/MUTUAL AID GIVEN

2019 OUTSIDE AUTO/MUTUAL AID GIVEN %

- Falls Twp: 47%
- Tullytown Boro: 23%
- Bensalem Twp: 13%
- Bristol Boro: 11%
- Morrisville Boro: 6%
2019 OUTSIDE AUTO/MUTUAL AID RECEIVED

2019 OUTSIDE AUTO/MUTUAL AID RECEIVED %

Falls Twp 14%
Tullytown Boro 18%
Bensalem Twp 21%
Bristol Boro 11%
Morrisville Boro 36%
### 2014-2019 Bristol Twp. Auto/Mutual Aid Given

- Sta 11: 100
- Sta 12: 200
- Sta 13: 500
- Sta 14: 150

### 2014-2019 Bristol Twp. Mutual Aid Given %

- Sta 11: 52%
- Sta 12: 16%
- Sta 13: 12%
- Sta 14: 20%
Analysis of Station 10 Auto/Mutual Aid:
Given in BT 2014-2019: Station 13 – 52%/569 Runs
Received in BT only available for 2019: Station 13 – 68%/73 Runs
Received Outside only available for 2019: Tullytown Borough – 36%/10 Runs
STATION 11

Data provided unable to be formatted due to changeover in reporting system.
2018 OUTSIDE AUTO/MUTUAL AID GIVEN

2018 OUTSIDE AUTO/MUTUAL AID GIVEN %

- Bristol Boro: 5%
- Bensalem Twp.: 13%
- Middletown Twp.: 82%
2016-2018 OUTSIDE AUTO/MUTUAL AID GIVEN

2016-2018 OUTSIDE AUTO/MUTUAL AID GIVEN %
Analysis of Station 12 Auto/Mutual Aid:
Given in BT 2016-2018: Station 14 – 47%/156 Runs
Received in BT 2016-2018: Station 14 – 71%/165 Runs
Given Outside: 2016-2018: Middletown Twp. – 68%/83 Runs
Received Outside 2016-2018: Middletown Twp. – 53%/19 Runs
STATION 13

Data provided unable to be formatted due to changeover in reporting system.
STATION 14

2014 OUTSIDE AUTO/MUTUAL AID GIVEN

2014 OUTSIDE AUTO/MUTUAL AID GIVEN %

- Bristol Boro: 49%
- Bensalem Twp: 36%
- Falls Twp: 6%
- Middletown Twp: 9%
2015 OUTSIDE AUTO/MUTUAL AID GIVEN

2015 OUTSIDE AUTO/MUTUAL GIVEN %

- Bristol Boro: 58%
- Bensalem Twp: 28%
- Falls Twp: 2%
- Middletown Twp: 2%
- Tullytown Boro: 7%
- Burlington County: 23%
2017 OUTSIDE AUTO/MUTUAL AID GIVEN

2017 AUTO/MUTUAL AID GIVEN BY %
Analysis of available Station 14 Auto/Mutual Aid:

**Recommendation:** The Twp. should require a uniform method of recording and collating of all data of the various operational, response time, mutual aid, staffing and training components. All Data should be managed through a common reporting program and analyzed monthly by the Twp. and the Fire Companies. This should be codified in Bristol Twp. Code § 106-8.
Staffing & Response Times
Staffing:

* Volunteers Fire Fighters: respond from their homes and/or places of employment after receiving notification via dispatch from the Bucks County 911 Center.

*Fire Marshal’s Office: respond as Engine 225, and in FM Vehicles as dispatched from the Bucks County 911 Center.

Membership Station 10:
- Active Firefighters - 8

Membership Station 11:
- Active Firefighters – 12

Membership Station 12:
- Active Firefighters – 17

Membership Station 13:
- Active Firefighters - 49

Membership Station 14:
- Active Firefighters: 14

Station 225
- Fire Marshal: 1
- Deputy Fire Marshal: 1
- Fire Inspector: 5

*Staffing numbers provided by each volunteer fire company & Bristol Twp. FMO
Response Staffing

STATION 10

2018

<table>
<thead>
<tr>
<th></th>
<th>On Apparatus</th>
<th>Not on Apparatus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of People</td>
<td>3.9</td>
<td>2.6</td>
<td>6.5</td>
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2019

<table>
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<th>Total</th>
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<tr>
<td>Number of People</td>
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<td>3.0</td>
<td>7.0</td>
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STATION 11
Data provided unable to be formatted due to changeover in reporting system.

STATION 12

2016

<table>
<thead>
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<tr>
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</table>

2017

<table>
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<tbody>
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</table>

2018

<table>
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<th>On Apparatus</th>
<th>Not on Apparatus</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Number of People</td>
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<td>7</td>
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STATION 13
Data provided unable to be formatted due to changeover in reporting system.

STATION 14

<table>
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<th></th>
<th>2019</th>
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<tbody>
<tr>
<td><strong>NUMBER OF PEOPLE</strong></td>
<td></td>
<td><strong>NUMBER OF PEOPLE</strong></td>
<td></td>
</tr>
<tr>
<td>ON APPARATUS</td>
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<td>NOT ON APPARATUS</td>
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<td>0.0</td>
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<tr>
<td>TOTAL</td>
<td>5.8</td>
<td>TOTAL</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Volunteer Staffing Analysis: Traditionally, the volunteer fire service at large has used the metric of responding to a certain % of fire calls, training, meetings and other activities to delineate if a member was considered active. This has caused members with prioritized personal interests, to be removed from the rolls, have their gear removed, and/or be considered inactive.

This needs to be reconsidered. The adjusted paradigm should shift to encouraging members to staff the station when available. Active status can be determined by a structured, regulated Duty Crew Stipend staffing schedule. Trevose Fire Co., Bucks County Station 4, has used a 5-year Federal SAFER Grant to provide 24/7 volunteer staffing Montgomery Twp., PA uses this program to entice volunteers to staff the station overnight from 22:00-06:00. The benefits of a staffed station to the public is an immediate response. The Fire Station would be better maintained, and prescribed training would occur regularly. The volunteers receive the stipend as a benefit. This program should be considered for implementation

Recommendation: Bristol Twp. should establish a Stipend Program that emphasizes In Station Duty Crew coverage and encourage the Twp. Fire Companies to evaluate Active Fire Fighter status on Duty Hours rather than Call Percentage.

<table>
<thead>
<tr>
<th>Demand Zone*</th>
<th>Demographics</th>
<th>Minimum Staff to Respondb</th>
<th>Response Time (minutes)c</th>
<th>Meets Objective (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban area</td>
<td>&gt;1000 people/mi²</td>
<td>15</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>Suburban area</td>
<td>500–1000 people/mi²</td>
<td>10</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>Rural area</td>
<td>&lt;500 people/mi²</td>
<td>6</td>
<td>14</td>
<td>80</td>
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<tr>
<td>Remote area</td>
<td>Travel distance ≥ 8 mi</td>
<td>4</td>
<td>Directly dependent on travel distance</td>
<td>90</td>
</tr>
<tr>
<td>Special risks</td>
<td>Determined by AHJ</td>
<td>Determined by AHJ based on risk</td>
<td>Determined by AHJ</td>
<td>90</td>
</tr>
</tbody>
</table>

* A jurisdiction can have more than one demand zone.
* Minimum staffing includes members responding from the AHJs department and automatic aid.
* Response time begins upon completion of the dispatch notification and ends at the time interval shown in the table.

Bristol Twp. has 17.2 Square Miles and a population of 54,521 for a population density of 3,169 / Sq. Mile that places it in the Urban Zone.
CASCADE OF EVENTS

State of Normalcy

Event Initiation

Discovery of Event

Alarm Transfer Time

Alarm Answering Time

Alarm Processing Time

Dispatch Notification

Turnout Time

Travel Time

Initiate Action/Intervention Time

Control/Mitigate Event

Recovery

State of Normalcy

Alarm Handling

Per NFPA 1221

Impacted by Fire Department

NFPA 1221 TIME
Response Times

STATION 10

2014-2019 AVERAGE RESPONSE TIME

STATION 11
Data provided unable to be formatted due to changeover in reporting system

STATION 12

2016-2018 AVERAGE RESPONSE TIME
STATION 13
Data provided unable to be formatted due to changeover in reporting system

STATION 14
No reporting information available during the requested time frame.
STATION 225

2015-2019 AVERAGE RESPONSE TIME

<table>
<thead>
<tr>
<th>Year</th>
<th>Response Time</th>
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<tbody>
<tr>
<td>2015</td>
<td>5:45</td>
</tr>
<tr>
<td>2016</td>
<td>5:31</td>
</tr>
<tr>
<td>2017</td>
<td>5:16</td>
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<td>2018</td>
<td>5:02</td>
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<tr>
<td>2019</td>
<td>4:33</td>
</tr>
<tr>
<td>Average</td>
<td>4:22</td>
</tr>
</tbody>
</table>
TOTAL SCRATCH AND DELAYED RESPONSE

Scratch is defined as the lack of response from the First Due Company within the prescribed time parameters of SOP # 6-621 of the Bucks County 911 Dispatch Center.

Delayed Response is defined as the inability of the First Due Company to respond within the prescribed time parameters of SOP # 6-621 of the Bucks County 911 Dispatch Center.

This information was compiled by the Bristol Twp. Fire Marshal. It is a useful tool to evaluate the contemporary difficulties of the volunteer fire service. It could be symptomatic of several common problems, among them, volunteers family/work/social schedules, difficulties in responding from home to the fire station due to traffic patterns, and/or decreasing membership resulting in staffing issues.

This metric should be monitored, but it should include time of day and individual station tracking. Both of these are critical to understand when and where this is occurring.
FMO Staffing:

Bristol Twp. employs 1 Fire Marshal, 1 Deputy Fire Marshal and 5 Fire Inspectors, who are supervised by the Fire Marshal. In addition to Fire Marshal Office tasks, duties include responding to Fire Calls during the assigned work hours.

The Fire Marshal works 08:00-16:30, Monday through Friday. The FMO Staff works the hours of 06:00-14:30 Monday through Friday. The daily staffing level is 5, with one Fire Inspector off each day. They are required to take an unpaid half hour lunch yet are still required to respond to fire calls within that period. This is a probable violation of several existing State and Federal Labor Laws and should be addressed quickly by the Township.

The supervision of the staff is done by the Fire Marshal, who is also the Emergency Manager. The Deputy Fire Marshal, which is an administrative position, which acts, in accordance with the Bristol Twp. Code: F-103.3 Deputy. The Fire Marshal is authorized to designate a Fire Inspector as Deputy Fire Marshal, who shall assist the Fire Marshal as necessary. For all intents and purposes, there is no mid-level supervision. This causes the Fire Marshal to deal with issues that a Department Head would assign to a subordinate. In a traditional setting, this would be a Fire Captain, who would have supervision responsibilities of the staff for daily routine duties and would be the Officer in Charge of the Engine Company. The Twp. should implement mid-level supervision, akin to a Fire Captain, to oversee the daily tasks and Company Level Supervisors of the Fire Inspectors when responding as Engine 225. The position of the individual promoted should be filled after the promotion occurs.

Currently, the daily staffing of Engine 225 is three. This causes the Engine Officer to act as an integral part of the crew to accomplish initial tactical tasks. It does not allow proficiency of the critical duties of initial size up, and crew supervision. The daily staffing of Engine 225 should be 4.

Bristol Twp. should review the included Data. Additional FMO staffing by the Twp. may have to be added in the future. The evaluation of NFPA 1720 illustrates that the minimum staffing is not currently being met as currently recorded by the various reporting systems.
NFPA 1720 9 Minute Drivetime Benchmark

Station 10
Station 11
Station 12 – BROWNED OUT SINCE 2016
Station 82
Station 13
Station 14
Mill Creek Parkway and Edgely Avenue
The criteria used in developing the maps was a 9 Minute Drive time from each station on Friday at 17:00.

**Recommendation:** *Bristol Twp. should establish Fire response and staffing benchmark performance objectives as per NFPA 1720 for the Urban area. This should be recorded and tracked through whatever data reporting system is used in the future, to evaluate if NFPA 1720 is being met.*
Fire Response Assignments

It is critical that the closest fire companies, regardless of internal fire district boundaries and/or any municipal boundaries are assigned and dispatched.

In order to ensure that this review is approached and handled in an objective manner, the Bucks County Department of 911 Emergency Services should be contacted to see if that type of assistance is available. This should be codified in any Fire Services agreement between the Township and its Fire Service Provider.

Any request for Box Changes, should be reviewed and approved by the Twp., through the Bristol Twp. Fire Board.
**SR/60 HR 148 Options for Bristol Township**

**Association:** Agreement of two or more companies to combine and administer similar activities through an umbrella organization. This does not normally involve transfers or combination of assets, as most costs of operations or programs are shared. In some instances, associations may be a prelude to a merger or consolidation. **Recommended**

**Recommendation:**
- *Bristol Twp. should facilitate an Association of the Station 10 and Station 13, in a cooperative manner, with the ultimate goal of operating as a single entity to provide Fire Protection in the 4th and 5th Fire Districts of Bristol Twp. This should be codified in Bristol Twp. Code § 106-1 & § 106-2*

- *Bristol Twp. should facilitate an association of Station 12/82 and Station 14 in a cooperative manner, with the ultimate goal of operating as a single entity to provide Fire Protection in the 2nd and 3rd Fire Districts of Bristol Twp. This should be codified in Bristol Twp. Code § 106-1 & § 106-2*

**Consolidation:** The combination of two or more companies which results in the termination of all companies and the creation of a new company with a new name. All assets and liabilities of the former company are transferred to the new company. **Not recommended at this time**

**Merger:** The combination of two or more companies which results in all but one relinquishing its name. All assets and liabilities of joining company are transferred to the surviving company. **Not recommended at this time**

**Regionalization:** Although the term “regionalization” can and is used to generically refer to almost any type of regional partnership or joint venture, DCED uses the term in a specific sense in its Shared Municipal Services Program. As used by DCED, regionalization is the combination of specific assets of two or more organizations, groups, or municipalities to accomplish specific objectives and tasks. Each participating company retains its identity. **Not recommended**
Listed below are successful mergers, consolidations and/or regional fire delivery services situated in the Commonwealth. These represent both Boroughs and Townships of the First and Second Class.*

- Morrisville Borough – Bucks County
  2 fire companies

- Clearfield Borough – Clearfield County
  4 fire companies

- Marcus Hook Borough – Bucks County
  2 fire companies

- Springettsbury Township and Spring Garden Township – York County
  3 fire companies, 1 ambulance, 2 career divisions

- Huntingdon Borough – Huntingdon County
  2 fire companies
  Note: This group has now consolidated with additional 2 fire companies in 2 different townships.

* Data provided by the Governor’s Center for Local Government Services
Fire Station Facilities:
<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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<tbody>
<tr>
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<tr>
<td>Other Bldg. Debt</td>
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<td>Parking Lot Capacity</td>
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<td>4 Bays</td>
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<tr>
<td>Station Exhaust</td>
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</tr>
<tr>
<td>Sprinkler/FA</td>
<td>N/Y</td>
</tr>
<tr>
<td>Day Room</td>
<td>N</td>
</tr>
<tr>
<td>Bunk Room</td>
<td>Y</td>
</tr>
<tr>
<td>Locker Room/Showers</td>
<td>Y</td>
</tr>
<tr>
<td># of Restrooms</td>
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<tr>
<td>Kitchen</td>
<td>Y</td>
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<tr>
<td>Administrative Office</td>
<td>Y</td>
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<tr>
<td>Command Office</td>
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</tr>
<tr>
<td>Meeting/Training Room</td>
<td>Y</td>
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<tr>
<td>Gym/Workout Space</td>
<td>N</td>
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<tr>
<td>SCBA Compressor</td>
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<tr>
<td>Turnout Gear Storage</td>
<td>Y</td>
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<tr>
<td>Turnout Gear Washer/Dryer</td>
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<tr>
<td>Engineers Room</td>
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<tr>
<td>Emergency Generator</td>
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<tr>
<td>Storage</td>
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<tr>
<td>Wireless/Cable</td>
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<td>Social Hall</td>
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<td>Total Square Footage</td>
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<tr>
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<td>Cost per Sq Ft</td>
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</tbody>
</table>

**STATION 10**
1200 Edgely Ave. Levitown, PA 19056
Owner Edgely Fire Co.
Year Built/Renovation 1969
**STATION 11**
911 State Road, Croydon, PA 19021  
Owner: Croydon Fire Co. No. 1  

<table>
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<td>4 Bays</td>
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<tr>
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<tr>
<td>Sprinkler/FA</td>
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<tr>
<td>Day Room</td>
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<td>Bunk Room</td>
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<td># of Restrooms</td>
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<td>SCBA Compressor</td>
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<tr>
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<td>Engineers Room</td>
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<td>Total Square Footage</td>
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<td>Cost per Sq Ft</td>
<td>$2.73</td>
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STATION 12
2425 New Falls Rd. Newportville, PA 19056
Owner Newportville Fire Co. No. 1
Year Built/Renovations 1973/1977

Outstanding Mortgage  None
Other Bldg. Debt  None
Parking Lot Capacity  77
Apparatus Bay Capacity  2 Bays
Station Exhaust  Y - OOS
Sprinkler/FA  N/Y
Day Room  N
Bunk Room  Y
Locker Room/Showers  N
# of Restrooms  2
Kitchen  Y
Administrative Office  N
Command Office  N
Meeting/Training Room  Y
Gym/Workout Space  N
SCBA Compressor  N
Turnout Gear Storage  N
Turnout Gear Washer/Dryer  N
Engineers Room  N
Emergency Generator  Y
Storage  Y
Wireless/Cable  Y
Social Hall  N
Total Square Footage  19,550
Annual Operating Costs  75,877
Cost per Sq Ft  $3.88
### STATION 82

3025 Bath Rd Bristol, PA 19007  
**Owner**  Newportville Fire Co. No. 1  
**Year Built/Renovation**  2012

<table>
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<tr>
<th>Feature</th>
<th>Status</th>
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<tr>
<td>Station Exhaust</td>
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<tr>
<td>Sprinkler/FA</td>
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</tr>
<tr>
<td>Day Room</td>
<td>Yes</td>
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<tr>
<td>Bunk Room</td>
<td>Yes</td>
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<tr>
<td># of Restrooms</td>
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<td>Kitchen</td>
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<tr>
<td>Administrative Office</td>
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<tr>
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<td>Turnout Gear Washer/Dryer</td>
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<tr>
<td>Engineers Room</td>
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<td>Emergency Generator</td>
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<td>Wireless/Cable</td>
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<tr>
<td>Annual Operating Costs</td>
<td>Not Provided</td>
</tr>
<tr>
<td>Cost per Sq Ft</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

**STATION 13**

6 County Way Levittown, PA 19055
Owner: Levittown Fire Co. #2
Year Built/Renovation: 1999
<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding Mortgage</td>
<td>None</td>
</tr>
<tr>
<td>Other Bldg. Debt</td>
<td>0</td>
</tr>
<tr>
<td>Parking Lot Capacity</td>
<td>3 Prkg Lots</td>
</tr>
<tr>
<td>Apparatus Bay Capacity</td>
<td>5 Bays</td>
</tr>
<tr>
<td>Station Exhaust</td>
<td>Yes</td>
</tr>
<tr>
<td>Sprinkler/FA</td>
<td>N/Y</td>
</tr>
<tr>
<td>Day Room</td>
<td>Y</td>
</tr>
<tr>
<td>Bunk Room</td>
<td>Y</td>
</tr>
<tr>
<td>Locker Room/Showers</td>
<td>N</td>
</tr>
<tr>
<td># of Restrooms</td>
<td>2</td>
</tr>
<tr>
<td>Kitchen</td>
<td>Y</td>
</tr>
<tr>
<td>Administrative Office</td>
<td>Y</td>
</tr>
<tr>
<td>Command Office</td>
<td>Y</td>
</tr>
<tr>
<td>Meeting/Training Room</td>
<td>Y</td>
</tr>
<tr>
<td>Gym/Workout Space</td>
<td>N</td>
</tr>
<tr>
<td>SCBA Compressor</td>
<td>Y</td>
</tr>
<tr>
<td>Turnout Gear Storage</td>
<td>N</td>
</tr>
<tr>
<td>Turnout Gear Washer/Dryer</td>
<td>Y</td>
</tr>
<tr>
<td>Engineers Room</td>
<td>Y</td>
</tr>
<tr>
<td>Emergency Generator</td>
<td>Y</td>
</tr>
<tr>
<td>Storage</td>
<td>Y</td>
</tr>
<tr>
<td>Wireless/Cable</td>
<td>Y</td>
</tr>
<tr>
<td>Social Hall</td>
<td>Y</td>
</tr>
<tr>
<td>Total Square Footage</td>
<td>2,660</td>
</tr>
<tr>
<td>Annual Operating Costs</td>
<td>9,520</td>
</tr>
<tr>
<td>Cost per Sq Ft</td>
<td>$3.57</td>
</tr>
</tbody>
</table>

**STATION 14**
1141 Harrison Street  Bristol, PA 19007
Owner  Third District Fire Co.
Year Built/Renovation 1964/1972
<table>
<thead>
<tr>
<th>Feature</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding Mortgage</td>
<td>0</td>
</tr>
<tr>
<td>Other Bldg. Debt</td>
<td>0</td>
</tr>
<tr>
<td>Parking Lot Capacity</td>
<td>25</td>
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<tr>
<td>Apparatus Bay Capacity</td>
<td>1</td>
</tr>
<tr>
<td>Station Exhaust</td>
<td>N</td>
</tr>
<tr>
<td>Sprinkler/FA</td>
<td>N/N</td>
</tr>
<tr>
<td>Day Room</td>
<td>N</td>
</tr>
<tr>
<td>Bunk Room</td>
<td>N</td>
</tr>
<tr>
<td>Locker Room/Showerers</td>
<td>N/Y</td>
</tr>
<tr>
<td># of Restrooms</td>
<td>1</td>
</tr>
<tr>
<td>Kitchen</td>
<td>Y</td>
</tr>
<tr>
<td>Administrative Office</td>
<td>Y</td>
</tr>
<tr>
<td>Command Office</td>
<td>Y</td>
</tr>
<tr>
<td>Meeting/Training Room</td>
<td>N</td>
</tr>
<tr>
<td>Gym/Workout Space</td>
<td>N</td>
</tr>
<tr>
<td>SCBA Compressor</td>
<td>N</td>
</tr>
<tr>
<td>Turnout Gear Storage</td>
<td>N</td>
</tr>
<tr>
<td>Turnout Gear Washer/Dryer</td>
<td>N</td>
</tr>
<tr>
<td>Engineers Room</td>
<td>N</td>
</tr>
<tr>
<td>Emergency Generator</td>
<td>Y</td>
</tr>
<tr>
<td>Storage</td>
<td>Y</td>
</tr>
<tr>
<td>Wireless/Cable</td>
<td>Y</td>
</tr>
<tr>
<td>Social Hall</td>
<td>N</td>
</tr>
<tr>
<td>Total Square Footage</td>
<td>2,660</td>
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<tr>
<td>Annual Operating Costs</td>
<td>$21,500</td>
</tr>
<tr>
<td>Cost per Sq Ft</td>
<td>$8.08</td>
</tr>
</tbody>
</table>

Bristol Twp. Fire Marshal  
2501 Bath Road Bristol, PA 19007  
Owner: Bristol Twp  
Year Built/Renovations: 1996
Fire Station Details

In person observations of the five volunteer stations serving the Township is that they generally appear to be well-maintained considering the ages of specific facilities. In addition to the station visits, each company was given a Facility Questionnaires to fill out. Both reveal that the facilities, while not originally designed for modern fire station amenities, the companies have attempted to integrate them to the best of their abilities.

The fire volunteer stations utilized to serve Bristol Township are between 64 and 8 years old, with an average age of 40. Several have had renovations. All of the volunteer stations have sleeping facilities to allow the departments to utilize “duty crews” during overnight hours. The usage of the duty crew concept allows for volunteer to improve turnout times and total response times as the initial response crews are located at the station when the call for service is dispatched.

The location of the fire volunteer stations reveal that Station 10, Station 11 and Station 12 were located in the long-established Villages of Edgely, Croydon and Newportville, as residents saw the need for community fire protection in the early 20th Century. Station 13 and Station 14 were organized and placed in the Suburban Developments of the Township for the same reason in the mid-20th Century. Station 82 was constructed in 1968 as a satellite Station for Station 12 and a new Fire Station built on the site in 2012. It must be noted that Since 2016, Station 12 has not been an active fire station and has no response capabilities, due to no membership residing in this area.

As these Stations were located, there was no consideration of response times. The response to the fire calls in the volunteer fire service also has to account for the response from the individual homes of the volunteers to the fire station.

Bristol Twp. operates Station 225, which houses the Fire Inspectors employed by the Twp. Fire Marshal’s Office, who respond to fire calls during work hours. The Location is at the Twp. Building. This facility started as a Pole Barn in 1996, it now consists of 2 buildings, an administrative area and a single bay station. Both areas are cramped, outdated and insufficient for optimum operations of the FMO as currently constituted.
**Recommendation:** Based upon an analysis of the Run and Mutual Aid Data, Staffing Levels and Current Fire Station Locations:

- Bristol Twp. should facilitate, within a reasonable timeframe, consolidation of operations of Station 12/82, Station 14 and Station 225 into a single location, within the footprint of the Township Municipal Complex. Bristol Twp. should fund & construct a new, contemporary Fire Station to facilitate this.
- Bristol Twp. should facilitate, within a reasonable timeframe, consolidation of operations of Station 10 and Station 13 in the area of Mill Creek Parkway and Edgely Avenue. Bristol Twp. should fund & construct a new, contemporary Fire Station to facilitate this.
- Station 11 should continue to operate at its current location.
- The Township and the Fire Companies should make sure that any renovations to accommodate this design includes the desired components based upon NFPA 1500 the Standard on Fire Department Occupational Safety, Health, and Wellness Program and it impacts fire station design in areas including cancer prevention, firefighter fitness and creating spaces where firefighters can unwind from the stresses of the job. Station 11 should be upgraded by Bristol Twp. as needed to meet this standard.
- In addition, NFPA 185, the Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting should be referenced in the planning and design. Station 11 should be upgraded by Bristol Twp. as needed to meet this standard.
**Strategic Planning**

Strategic and Long-Term Planning in the volunteer system, is an area of neglect, by and large. It should be noted however, that Station 14 did submit a 15 Year Long Range Plan.

Bristol Township and the 5 Fire Companies, through the Fire Board, should embark upon the task developing the following:

- **5 Year Strategic Plan**
- **NFPA 1300 Community Risk Analysis**
- **Standards of Cover Analysis.**

These will assist with, among other items:

- Define the common interest among the individual Fire Companies.
- Authority to implement policies township wide
- Codify Township oversight and involvement through the Fire Board
- Define the Twp.'s Financial Responsibilities

These are additional items that are recommended as part of the Planning Process.

- Review the following:
  - Pennsylvania Senate Resolution 60 report.
  - Pennsylvania House Resolution 148 report.

- Review reports from the International Association of Fire Chiefs:
  - Red Ribbon Report, "Lighting the Path of Evolution, Leading the Transition in Volunteer and Combination Fire Department."
  - Blue Ribbon Report, "Preserving and Improving the Future of the Volunteer Fire Service."
  - White Ribbon Report, “Keeping the lights on, and the trucks running and the volunteers responding"
Bristol Borough/Bristol Township

Bristol Borough and Bristol Twp. share a common municipal border, and Bristol Borough is surrounded on 3 sides by Bristol Twp. Mutual Aid analysis from each municipality shows a symbiotic relationship of the Fire Services on a daily basis. To that end, there are several methods in which Bristol Twp. could have the fire services cooperate.

- Recruitment and Retention
- Joint Municipal Training
- Joint Municipal Strategic Planning
- Pre-Planning/Disaster Planning
- Bulk Purchasing where appropriate

Fire Apparatus Fleet

If Bristol Twp. implements the core recommendations of this study, a follow up Fire Apparatus Fleet survey should be conducted to reflect those changes.
Conclusion
The Bristol Twp. Fire Companies are community assets. The Township sees the intrinsic value of the services they provide. The analysis, conclusions and recommendations contained in this report, offers the Bristol Twp. Community an opportunity to build upon the legacy of the fire protection, while striving to improve it for the future.