
Strategic Plan

2010 - 2025



Teamwork – Service - Respect

Approved 08/10/2009
Resolution 2009-38

Table of Contents

EXECUTIVE SUMMARY	8
ACKNOWLEDGEMENTS	10
MISSION / VISION / VALUES	13
I. INTRODUCTION	14
Purpose of the Strategic Plan	14
Implementation of the Strategic Plan.....	14
Dr Bryan Study.....	15
Current Fire Rescue System	16
II. RISK ASSESSMENT	20
Characteristics of Service Area	20
Topography of Service Area.....	20
Transportation Network.....	21
Climatic Impact.....	22
Disaster Exposure	22
Physical Assets Protected.....	22
Development and Population Growth.....	23
Service Demand.....	24
Personnel Resources.....	28
III. ADMINISTRATION, ORGANIZATION, MANAGEMENT.....	30
Ordinances / Fire Rescue Contract.....	30
Fire Rescue General Fund Budgets.....	31
Fund Drives and Fund Raising.....	32
Fire Tax.....	33
PILOT Program	35
Foreign Fire Insurance Tax	36
Grants	37
IV. FIRE RESCUE STAFFING.....	41
Volunteer Staffing.....	44
Volunteer Recruitment & Retention	46
Recruitment and Retention Programs	47

Cost Savings	52
Career Staffing	53
Deputy Chief / Safety Office Position	55
Part Time Firefighters.....	57
Captain / Training Officer Position.....	60
Internship Program.....	63
V. FIRE STATION FACILITIES AND APPARATUS FLEET DEPLOYMENT.....	65
Geographic / Demand Based Coverage's	65
Fire Station Facilities – Additional Facilities	66
Fire Station Facilities – Renovations	69
Fire Station Facilities – Relocations	69
Fire Apparatus Fleet.....	71
Fire Apparatus Fleet Models	72
Fire Apparatus Fleet Standardization	76
VI. OPERATIONAL NEEDS	78
Public Education.....	78
Health and Safety.....	83
Training	84
ISO Rating.....	90
Accreditation	97
VII. EMERGENCY MANAGEMENT	99
Emergency Management Personnel	99
National Incident Management System.....	100
Emergency Operations Center.....	101
VIII. EMS SERVICE	103
Quick Response Service	103
Joint Training.....	104
Technology.....	104
Bulk Purchase	105
Municipal Contract.....	105
Joint Facility	106
Staffing / Deployment.....	107

STRATEGIC PLAN OVERSIGHT	108
APPENDIX A: List of Recommendations	109
APPENDIX B: Implications of Federal Stimulus Package.....	115
APPENDIX C: Strategic Plan Score Card	116

List of Maps

Map 1: Existing Volunteer Station Coverage Areas	17
Map 2: Distribution of Existing MTFR Fleet.....	19
Map 3: 1.5 Mile Engine Coverage Area – Proposed	68
Map 4: 1.5 Mile Engine & 2.5 Mile Truck Coverage Areas – Fruitville Pike.....	70
Map 5: Existing 1.5 Mile Engine Coverage Area – MTFR Units	93
Map 6: Existing 2.5 Mile Truck Coverage Area – MTFR Units	94
Map 7: Mutual Aid 1.5 Mile Engine and 2.5 Mile Truck Coverage Areas	95

List of Tables and Charts

Table 1: Strategic Plan Implementation Schedule	15
Chart 2: Current Command Structure for MTFR.....	18
Table 3: Manheim Township Population Growth	23
Table 4: Fire Incidents by Station.....	25
Table 5: QRS Incidents by Station.....	25
Table 6: 2008 Incident Responses by Month.....	26
Table 7: 2008 Incident Responses by Day of Week	26
Table 8: 2008 Incident Responses by Hour of Day.....	27
Chart 9: Incident Type Summary – 2008 – All Incidents.....	27
Chart 10: Incident Type Summary – 2008 – Fire Incidents Only	28
Table 11: Volunteer Combined Budget Overview - Expenses vs. Fund Drive	31
Table 12: MT Volunteer Fire Companies Fund Drive Revenue – 2008.....	32
Table 13: Property Owners Cost for 0.55 Millage Rate Tax Assessments.....	34
Table 14: Foreign Fire Insurance Tax Revenue.....	36
Table 15: NFPA 1720 Staffing & Response Time Guidelines	42
Table 16: Minimum Staffing Level – MTFR SOG 401.04.....	42
Table 17: NFPA Recommended Staffing Level	43
Chart 18: Command Structure for MTFR Deputy Chief Position	56
Chart 19: Command Structure for MTFR P/T Firefighters – Non-Emergency.....	59
Chart 20: Command Structure for MTFR P/T Firefighters – Emergency	59
Chart 21: Command Structure for MTFR Captain Position – Non-Emergency	61
Chart 22: Command Structure for MTFR Captain Position – Emergency.....	62
Table 23: Existing Manheim Township Fire Rescue Fleet	71
Table 24: Fire Apparatus Model Based on Population.....	72
Table 25: Fire Apparatus Model Based on ISO Recommendations.....	72
Table 26: Engine Company Usage Statistics – 2008.....	74
Table 27: Truck Company Usage Statistics – 2008.....	74
Table 28: Rescue Company Usage Statistics – 2008.....	75
Table 29: Tanker Company Usage Statistics – 2008.....	75
Table 30: Projected Front-Line Capital Vehicle Acquisition Costs	76
Table 31: Pennsylvania Distribution of Communities by PPC.....	90

Table 32: Lancaster County Distribution of Communities by PPC	90
Table 33: Manheim Township Public Protection Rating.....	91
Table 34: 1990 PPC Rating – Fire Department Classification Details.....	92
Table 35: Protection Class Multipliers – The Hartford Group.....	96
Chart 36: Proposed Command Structure for MTFR Deputy EMA Positions	100

Executive Summary

In 1989 the Manheim Township Board of Commissioners authorized a study of the volunteer fire service. This was a ground breaking action at the time, as the existing volunteer fire companies operated independently of one another and the municipality at the time. A study was conducted that produced 36 recommendations, with many of the recommendations not being implemented or followed. Although some changes did occur, such as the creation of the Fire Council to assist in providing financial oversight and some increased funding, the fire service *operationally* remained virtually unchanged for the next 20 years. During this time the Township experienced explosive growth that created serious gaps in the service being provided by the volunteer fire companies. As a result of this, the fire rescue service itself determined that a plan needed to be developed to evaluate the current level of service being provided and the current needs of Manheim Township, as well as to rectify deficiencies in numerous areas of concern. This plan addresses the needs of the fire rescue service today and has been developed for the municipality to use as a roadmap to lead into the future.

The plan itself addresses issues and provides specific recommendations which are broken into three (3) time period recommendations for implementation: Phase One issues which are recommended for implementation within the first 3 years after plan approval; Phase Two issues which are recommended for implementation within 4 to 8 years from plan approval; and Phase Three issues which are recommended for implementation within 9 to 15 years of plan approval. Issues addressed in the Strategic Plan are divided into the following categories: Administration, Organization, and Management; Demand For Services; Fire Rescue Staffing; Response Time, Station Locations, and Apparatus Fleet Deployment; Operational Needs; Emergency Management, and Emergency Medical Services.

An initial recommendation is to update all Manheim Township Ordinances that pertain to Fire Rescue services. The present set of Manheim Township Ordinances does not recognize the organizational structure or mission of the combined Manheim Township Fire Rescue system as it has been operating with the agreement of the three independent volunteer organizations, or how it is perceived for the future.

Other recommendations relevant to Administration, Organization, and Management include revising of the contract between the municipality and the volunteer organizations to better define the level of service to be provided. A review of funding led to several recommendations relative to budgets, grants, and revenue streams including institution of a tax levy.

Demand for services and evaluation of the risks faced in the municipality are discussed and presented. The risks faced by the Manheim Township Fire Rescue system are consistent with risks found in other jurisdictions across the region; however some of the risks are compounded by the size and population of the municipality. Call volume is projected to continue to increase as the population and development within the municipality continues.

Volunteer and career personnel will be vital to the success of the combined fire rescue system. A true 100% volunteer firefighting force is no longer feasible, and it will need to be supported by municipal employees. With that being said, however, the existing structure of how the volunteer force works operationally should not change, but merely be supported by the municipality and career staffing. The strategic plan outlines a proposal for increased volunteer recruitment, volunteer retention incentives to keep the existing force of volunteers, and the projected addition of career positions.

When evaluating response times, station locations, and apparatus fleet deployment it becomes apparent that the framework may be in place to provide fire rescue services. However, years of simply following the status-quo and not adjusting to the growing municipality has left serious deficiencies that will be difficult to correct. Response times are hampered in some areas of the municipality due to fire station locations and their distance from populated areas. Relocating all three existing fire rescue facilities is not feasible and alternatives will need to be explored. Relocation of one facility (Southern Manheim Township) may be possible, if it is not, a renovation of the existing facility will be needed. Establishment of a fourth fire rescue facility to service a growing area of the municipality is also addressed.

The apparatus fleet is adequate to meet the demand provided the fleet is maintained and obsolete units are upgraded or replaced with more functional units. Fleet standardization is recommended in Phase I of the strategic plan as well as a recommendation to pursue a sole vendor to furnish and maintain the fleet.

The Emergency Management Agency for the municipality is a responsibility of the fire rescue system. Recommendations are included to increase the staffing in Emergency Management through new volunteer positions that can complete specific tasks and assignments. Coordination of the emergency operations plan and the readiness of the emergency operations center are addressed.

The provision of Emergency Medical Services is the contracted responsibility of the Manheim Township Ambulance Association (MTAA). While they provide primary EMS service, the fire rescue system provides support services and Quick Response Services to MTAA. Programs to increase the efficiency and cooperation between the services in the areas of training, bulk purchasing, and future shared resources are recommended.

The priority of this strategic planning document is to insure the safe, efficient, and effective delivery of fire rescue services within Manheim Township. The recommendations presented for implementation in Phase I, II, and III may be considered ambitious, however, they are attainable. This municipality is extremely fortunate to have the services of dedicated personnel who can take this roadmap and turn it into reality in order to provide the best possible service to this community.

ACKNOWLEDGEMENTS

This Strategic Planning document would not have been possible without the commitment of the dedicated stakeholders listed below who comprise the Strategic Plan Steering Committee:

Mike Elliott (Co-Chair)	Fire Chief	Neffsville Fire Company
Mike Roten (Co-Chair)	Deputy Fire Chief	Eden Fire Company
Dave Howey	Fire Chief	Eden Fire Company
Troy Neville	Firefighter	Eden Fire Company
Mike Templeton	Captain	Neffsville Fire Company
Barry Leibowitz	Administrative Member	Neffsville Fire Company
John Tshudy	Fire Chief	Southern Manheim Township Fire Co.
Anthony Shoffstall	President	Southern Manheim Township Fire Co.
Bill Gross	Firefighter	Southern Manheim Township Fire Co.
Don Schoenberger	Board of Director	East Petersburg Fire Company
Glenn Garber	Board of Director	East Petersburg Fire Company
Dave Smith	Operations Director	Manheim Township Ambulance
Tim Brown	Assistant Ops. Director	Manheim Township Ambulance
Steve Kadushin	Board of Director	Manheim Township Ambulance
Mike Fecik	President	B.R. Kreider Excavating
Frank Dogger	Partner	Lancaster Financial Services
Sean Molchany	Asst. Township Manager	Manheim Township
Rick Kane	Fire Chief	Manheim Township

In addition, the following sub-committees were formed from the Strategic Plan Steering Committee or the Manheim Township Fire Council. The volunteers on these subcommittees performed invaluable service during this process by completing necessary topic research and issuing recommendations:

Finance Sub-Committee		
Don Mellott (Chair)	President	Neffsville Fire Company
Larry Marshall	Administrative Member	Neffsville Fire Company
Joe Banzhof	Vice President	Eden Fire Company
Troy Neville	Firefighter	Eden Fire Company
Shawn Ressel	Firefighter	Southern Manheim Township Fire Co.
Ron Martin	Administrative Member	Southern Manheim Township Fire Co.
Mike Fecik	President	B.R. Kreider Excavating

Public Education Sub-Committee		
Kim Herskowitz (Chair)	Firefighter	Neffsville Fire Company
Barry Leibowitz	Administrative Member	Neffsville Fire Company
Christian Brooks	Firefighter	Neffsville Fire Company
Mike Roten	Deputy Fire Chief	Eden Fire Company
Chris Minnier	Firefighter	Eden Fire Company
Jared Miller	Firefighter	Southern Manheim Township Fire Co.
Jessica Hartman	Firefighter	Southern Manheim Township Fire Co.

EMS Sub-Committee		
Jeff Ober (Chair)	Firefighter	Neffsville Fire Company
John Osborne	Captain	Eden Fire Company
Kyle Peters	Firefighter	Southern Manheim Township Fire Co.
Chuck Daisy	ALS Supervisor	Manheim Township Ambulance
Brent Ruhl	BLS Supervisor	Manheim Township Ambulance
Dennis Penny	Owner	Lancaster Urgent Care Center

Training Sub-Committee		
Troy Slaymaker (Chair)	Assistant Fire Chief	Neffsville Fire Company
Mike Elliott	Fire Chief	Neffsville Fire Company
Josh Hummel	Lieutenant	Eden Fire Company
Mark Shenk	Sergeant	Eden Fire Company
Kenny McCardell	Captain	Southern Manheim Township Fire Co.
Nate Whatmore	Sergeant	Southern Manheim Township Fire Co.

Standard Apparatus Task Force		
Rick Kane (Chair)	Fire Chief	Manheim Township
Dave Howey	Fire Chief	Eden Fire Company
Mike Roten	Deputy Fire Chief	Eden Fire Company
Brett Hamm	Firefighter	Eden Fire Company
Mike Elliott	Fire Chief	Neffsville Fire Company
Scott Weiser	Chief Engineer	Neffsville Fire Company
Chris Oberle	Firefighter	Neffsville Fire Company
John Tshudy	Fire Chief	Southern Manheim Township Fire Co.
Kenny McCardell	Captain	Southern Manheim Township Fire Co.
Shawn Ressel	Firefighter	Southern Manheim Township Fire Co.
Rich Denlinger	Engineer	Manheim Township
Jamie Rohrer	Fire Chief	East Petersburg Fire Company
Don Schoenberger	Deputy Fire Chief	East Petersburg Fire Company
Dusty Dommel	Fire Chief	Rohrerstown Fire Company
Nick Schoenberger	Captain	Rohrerstown Fire Company

Standard Operating Guideline Committee (Fire Council)		
Jim Damm (Chair)	Sergeant	Eden Fire Company
John Osborne	Captain	Eden Fire Company
Eric Bachman	Firefighter	Eden Fire Company
Troy Slaymaker	Assistant Fire Chief	Neffsville Fire Company
Jenn Templeton	Lieutenant	Neffsville Fire Company
Dan Hughes	Fire Police Lieutenant	Neffsville Fire Company
Rafael Uhle	Firefighter	Southern Manheim Township Fire Co.
Jason Smith	Firefighter	Southern Manheim Township Fire Co.

Bulk Purchase Committee (Fire Council)		
Steve Leayman (Chair)	Firefighter	Eden Fire Company
Matt Adams	Firefighter	Eden Fire Company
Mike Templeton	Captain	Neffsville Fire Company
Ben Herskowitz	Firefighter	Neffsville Fire Company
Kenny McCardell	Captain	Southern Manheim Township Fire Co.
Nathan Whatmore	Sergeant	Southern Manheim Township Fire Co.

Finally, the Manheim Township Fire Council must be recognized for the 17 years of service it has provided to the fire service in Manheim Township. Through many membership changes, the Fire Council has always strived to provide fair and accountable oversight for the volunteer fire service. They have also provided input into the strategic planning process.

Manheim Township Fire Council		
Mike Elliott (President)	Fire Chief	Neffsville Fire Company
John Tshudy (Vice Pres)	Fire Chief	Southern Manheim Township Fire Co.
Dave Howey	Fire Chief	Eden Fire Company
Joe Ghergo	Citizen-At-Large	MT Fire Council
George Vekios	Citizen-At-Large	MT Fire Council
Curvin Hurst	Citizen-At-Large	MT Fire Council
Mike Rimer	Township Manager	Manheim Township
J. Michael Flanagan	Commissioner	Manheim Township
Rick Kane	Fire Chief	Manheim Township

Mission Statement of the Manheim Township Fire Rescue System:

The Manheim Township Fire Rescue system will provide the highest level of emergency services, which include fire protection; rescue services; emergency medical services; emergency management; and public education and fire prevention to protect the lives and property of the residents, businesses, and guests of our communities.

Vision Statement of the Manheim Township Fire Rescue System:

*We will work together as a team to serve the public
We will treat the public and each other in a respectful and professional manner
We will perform our duties for the betterment of the community and the department
We will strive to provide our services as safely, efficiently, and fairly as possible.*

Values of the Manheim Township Fire Rescue System:

Teamwork – *We strive to support each member of our team in our various roles as part of the larger organization. We strive to insure an atmosphere of inclusion for all team members where each is made a valuable part of our organization. We strive to support each team member in their effort to achieve their highest potential*

Service – *We strive to provide excellent community service by being responsive to the needs of those around us. We strive to exceed expectations and seek solutions to the problems of those in need. We value relationships with other municipal and mutual aid agencies that can assist us in providing service to our community*

Respect – *We recognize that our success depends upon our members and the support of our community. We will respect each member of our team, our partners, the citizens that we serve, and all persons we interact with by recognizing the diversity in each individual and their individual talents, skills, and contributions to our success*

Introduction

Purpose of the Strategic Plan

The Manheim Township Fire Rescue Strategic Plan is intended to be a guideline for the future of the Manheim Township Fire Rescue system. The document has been created so that the Manheim Township Board of Commissioners, other Manheim Township agencies and departments, and the stakeholders, those that we serve, can better understand the needs of Fire Rescue relevant to providing services to the municipality and the community at large.

Throughout this plan you will see Manheim Township Fire Rescue referred to as a “system”. As this organization moves into the future, it will be necessary to recognize two distinct entities that will be vital to the delivery of these services. These entities will be the volunteer component and the municipal component. It should be noted that neither of these entities are being envisioned as stand-alone organizations that could provide these services individually. But rather that they must stand together, side-by-side while providing these services to our stakeholders.

Implementation Time Table

The Strategic Planning document must withstand approvals at several levels prior to final adoption and Phase I implementation. The Strategic Planning Committee will forward a draft document to all three volunteer fire rescue stations for initial approval. This will be followed by draft review by the Manheim Township Board of Commissioners and the Manheim Township Fire Council. Following draft approval, the stakeholders themselves, the citizens of the municipality, will be provided with a review of the document and solicited for input. Upon all reviews being completed and input evaluated, a final document will be presented to the three volunteer fire rescue stations for final approval. This will follow with a presentation to the Fire Council for final approval. The final step will be a presentation to the Board of Commissioners seeking final approval of the Strategic Planning document and the listed recommendations. Table 1 reflects the established time line, including Phased implementation of the listed recommendations.

Upon final approval by the Board of Commissioners, the Strategic Planning document will become the guide for future actions of the Fire Rescue service. The Fire Council will become the responsible entity to establish a committee to oversee the implementation of the listed recommendations in each phase. The document will guide operational aspects of the combined service until future modifications are approved by the volunteer fire rescue stations, the Fire Council, and the Board of Commissioners.

Table 1: Strategic Plan Implementation Schedule

Planning Committee Appointed	January 2008
Plan Research and Preparation	February 2008 – May 2009
Draft Presentation – Board of Commissioners and Fire Council	June 2009
Draft Presentation – Public Review	June 2009
Final Presentation – Volunteer Fire Companies	June – July 2009
Final Presentation – Board of Commissioners	July 2009
Final Approval for Implementation	July/August 2009
Phase I Priorities Implementation	January 2010 - December 2012
Phase II Priorities Implementation	January 2013 - December 2017
Phase III Priorities Implementation	January 2017 - December 2025

Dr. John Bryan Survey

In 1989, the Manheim Township Board of Commissioners authorized a consultant to conduct a study of the volunteer fire service in the municipality. Dr. John L. Bryan, Program Chair of the Fire Protection Engineering Department of the University of Maryland was selected to conduct this study. As directed by the Board of Commissioners, three specific task areas were to be evaluated:

1. An analysis to determine the adequacy of the level of fire protection being provided at that time
2. An evaluation of the operational efficiency and administrative structure of the fire service
3. A vehicle replacement and acquisition survey to determine the number of fire units appropriate for the Township

On June 14, 1989 Dr. Bryan presented his study to the Board. This study included thirty six (36) specific recommendations. Several key recommendations presented to the Board of Commissioners at that time included the following:

- Provide for a more equitable basis for support of the fire protection and rescue services provided by the fire companies by initiating a tax basis for these services (fire tax)
- Initiation of volunteer firefighter incentive and retirement programs
- Compliance with NFPA 1500, *Standard for Fire Department Occupational Safety and Health*
- Options for station relocations or additional stations with recommendation for land acquisition
- Adoption of an apparatus model with specific recommendations
- Fulltime career staff studied by the year 2000

The Strategic Planning Committee has addressed many of the same issues in this report as were addressed by Dr. Bryan almost 20 years ago. While the Township's demand for emergency services continues to grow since Dr. Bryan's survey, the fire service has not. The six recommendations listed above received the most attention by the Strategic Planning Committee during the course of this project. These specific recommendations provide the blue print for the future, while other recommendations both of Dr. Bryan and this Committee fill in the blue print and define even further the role the Manheim Township Fire Rescue system will play within the municipality.

It should be noted that while unable to accurately determine what the outcomes would have been if these recommendations were implemented when first recommended by Dr. Bryan, one could reason that the Fire Rescue system in Manheim Township would today have a vastly different profile. By delaying these recommendations for almost 20 years, it has forced the Fire Rescue service to remain virtually unchanged while the municipality and the demand for services have outpaced the available resources.

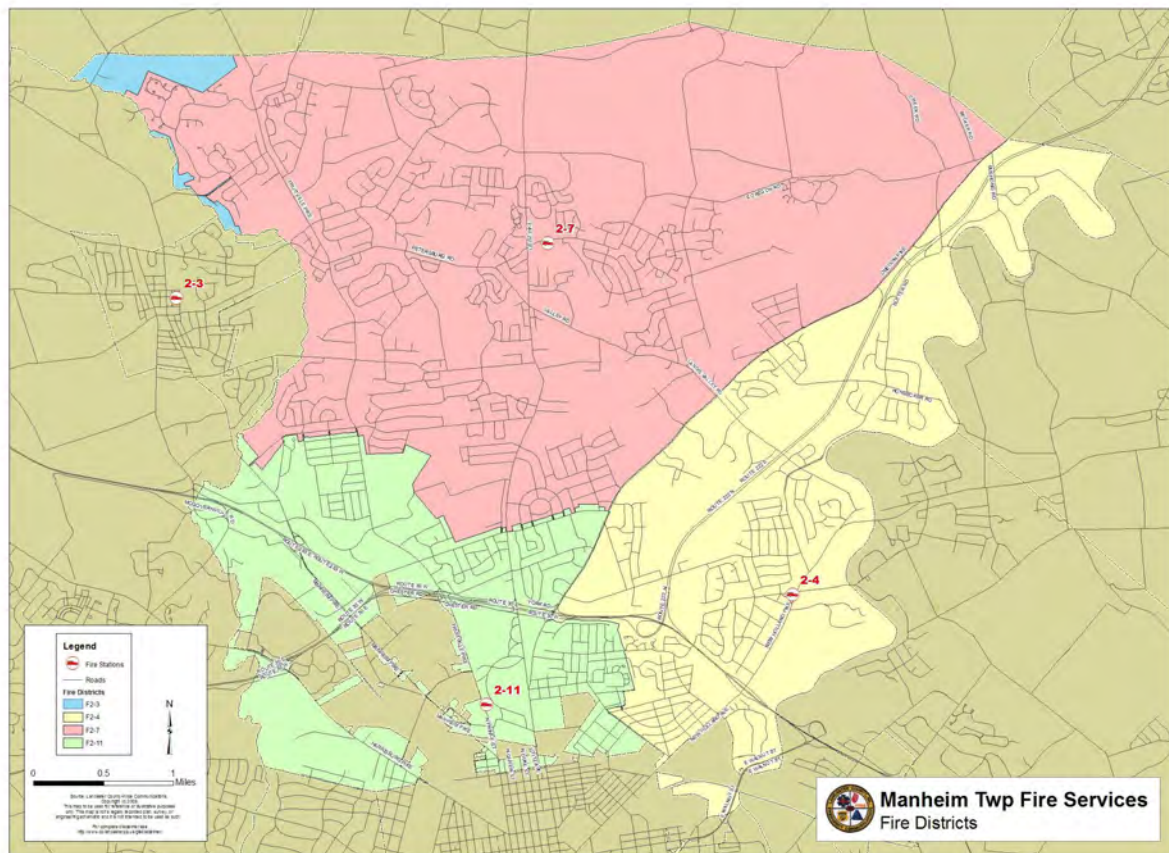
Any further delay in implementation of these recommendations will only serve to hamper the provision of adequate Fire Rescue services to the community and stunt any needed growth in the Fire Rescue system in order to meet the current and projected future demands.

Current Fire Rescue System

The current Fire Rescue system in Manheim Township is composed of three (3) individual volunteer stations, Eden Fire Company, Neffsville Community Fire Company, and Southern Manheim Township Fire Company; and a municipal component. The existing volunteer stations along with the municipal chief comprise what is being referred to as the "Fire Rescue system" – that of a combination of volunteer and career personnel and independent volunteer organizations and a municipal agency all working in concert with one another to provide all-hazard emergency response to the community.

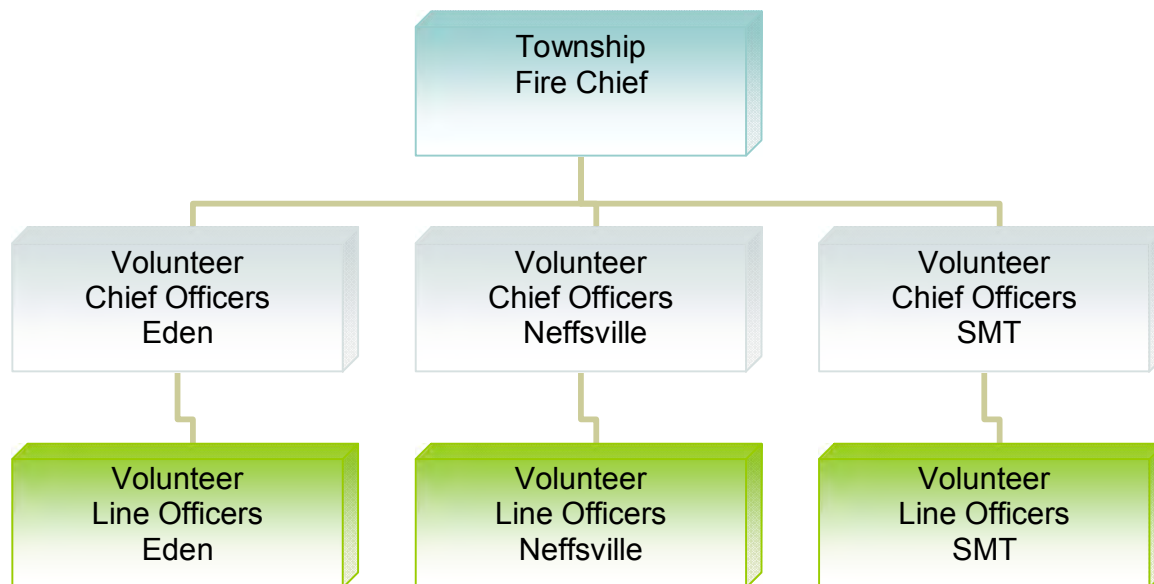
The map below shows the locations of the three volunteer stations and their respective coverage area within the municipal border. It should also be noted that two of the volunteer stations provide first-due coverage area outside of Manheim Township. The Eden Fire Company provides first due coverage to an area of East Lampeter Township while Neffsville Fire Company provides first due coverage to an area in Penn Township.

Map 1: Existing Volunteer Station Coverage Areas



Prior to the creation of a career Fire Chief's position, the three independent volunteer organizations acted individually from a leadership perspective. Each station elected their own volunteer chief and they continue to do so today. All aspects of this strategic plan intend to leave in place the autonomy of each station in regards to command and organizational structure within their respective stations. The change that has occurred is that the independent volunteer chiefs now fall into a command structure that reflects the career Chief's position within the structure. The existing command structure is reflected on Chart 2.

Chart 2: Current Command Structure for MTFR



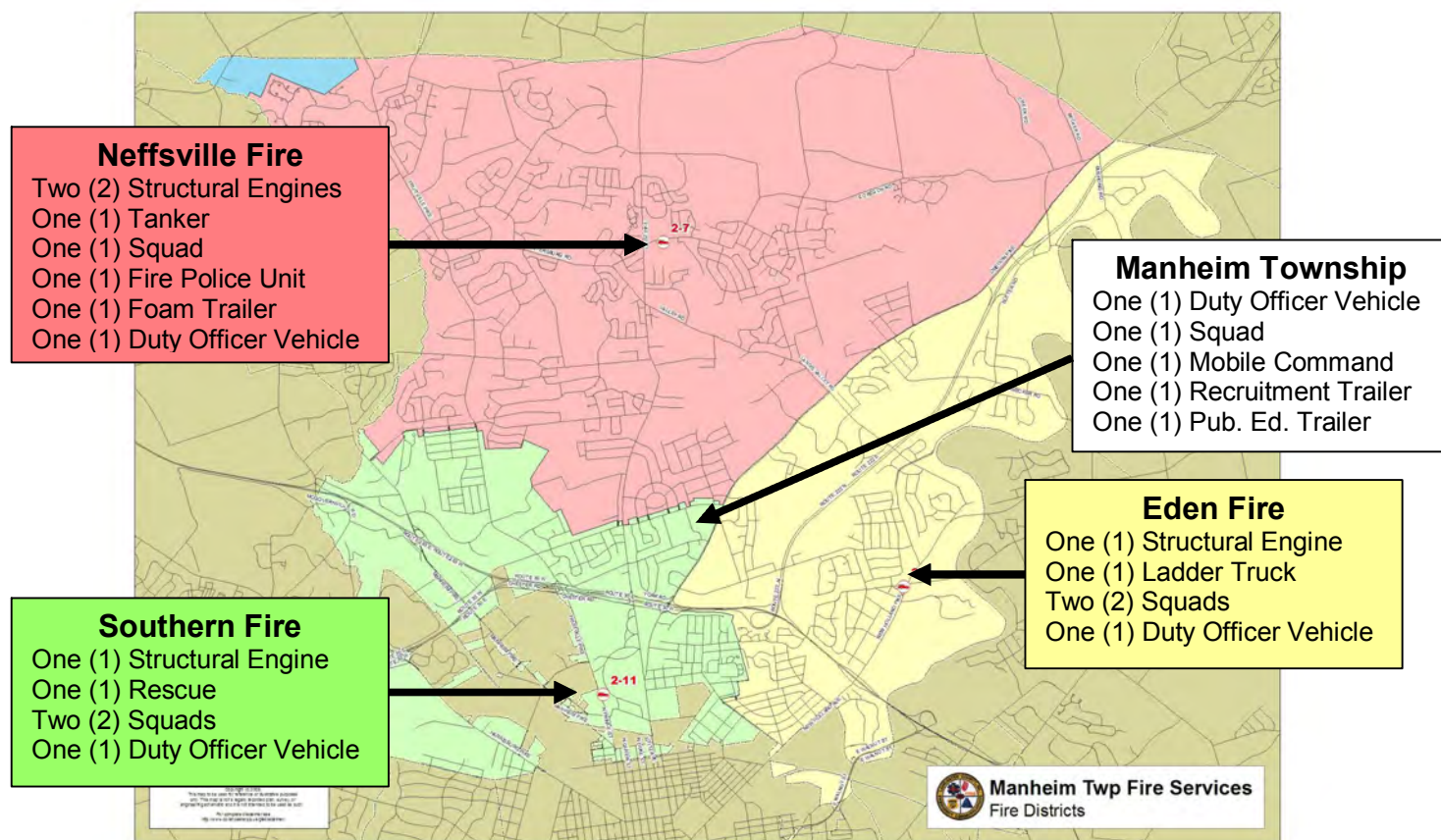
The job description of the career Chief's position does give that position the operational authority over the volunteer positions. However, the position is monitored with checks-and-balances such as the Fire Council so that the career Chief's position does not become a dictatorial position which would certainly strain the intended relationship with the volunteer component and make the balance of a combination fire rescue system difficult at best.

The current Fire rescue system provides service to the community using a fleet of twenty two (22) vehicles of different types, including front-line fire suppression and rescue vehicles, squad and duty officer vehicles, and trailers that serve various emergency and non-emergency applications. The fleet consists of:

- Four (4) Structural Engines
- One (1) Aerial Truck
- One (1) Rescue
- One (1) Tanker
- One (1) Fire Police Unit
- Six (6) Squads
- Four (4) Duty Officer Vehicles
- One (1) Mobile Command Unit
- Three (3) Trailers (Foam, Volunteer Recruitment, and Public Education).

Map 2 illustrates the distribution of the existing fleet.

Map 2: Distribution of Existing MTFR Fleet



Some administrative oversight of the Fire Rescue system exists today through the Manheim Township Fire Council. The Fire Council was created out of a specific recommendation of the Dr. Bryan survey in 1992¹. The Fire Council consists today of the three (3) volunteer chiefs, three (3) citizens-at-large, the municipal Manager, the Commissioner for Public Safety, and as a non-voting member of the Fire Council the career Fire Chief. The Fire Council is appointed by the Board of Commissioners and exists as a sworn municipal committee. These nine members meet monthly (except July and August) to review mostly administrative and financial items pertaining to the fire rescue service.

¹ Bryan, J.L. (1989). An Examination and Analysis of the Public Fire Protection and Rescue Service for Manheim Township

RISK ASSESSMENT

The Manheim Township Fire Rescue system finds itself in a unique geographic area of Lancaster County that exposes it to a myriad of possible fire rescue responses that many other fire rescue organizations may not face on the same level. When evaluating physical risk factors, nine (9) separate factors should be evaluated, some of which have a greater impact than others depending upon the geographic area being evaluated. Consequently, when evaluating the risk in Manheim Township, several of these factors are much more relevant to the potential risk than others. The nine factors are:

- Characteristics of Service Area
- Topography of Service Area
- Transportation Network
- Climatic Impact
- Disaster Exposure
- Physical Assets Protected
- Development and Population Growth
- Service Demand
- Personnel Resources

These nine risk factors are evaluated in order to determine if they may cause an increase in the demand for services, if they could adversely affect the capability of the fire rescue service to respond to an incident, if the factors may increase the probability of an emergency, or if the factors could negatively impact the life safety of the community served. The following information is relevant to the risk associated with each of the nine factors.

Characteristics of Service Area

The characteristics of the service area (Manheim Township) do not provide a significant risk. Things such as political boundaries, construction limitations, or infrastructure limitations are all controlled by appropriate agencies or appointed boards and commissions and do not pose a significant risk to the community or the fire rescue service.

Topography of Service Area

When considering the topographic features of Manheim Township and analyzing items such as response barriers, elevation changes, or open space/interface issues, there is again no significant risk associated with these factors. The only item worth noting is the large open space in the northeast agriculture preserve area that slightly elevates the risk from a response perspective. Currently there are no firefighting vehicles equipped with fire suppression capabilities that can provide adequate off-road response. This item is addressed in the strategic planning document under the Apparatus Fleet section.

Transportation Network

When evaluating the risk generated from the transportation network, the risk can be broken down into four (4) separate categories under transportation: Roads, Rail Lines, Airports, and Waterways. Manheim Township is home to three (3) of these sub-categories of the transportation network, with Waterways serving only recreational purposes and not transportation needs.

- Roads – 24% of emergency incidents in Manheim Township² are a result of incidents that occur on the highway system. This demand for service comes in the form of vehicle accidents, vehicle fires, medical assists, and other miscellaneous incidents on and along the roadways. A conclusion can be made that the higher the traffic counts, the higher the demand for services.

All three major limited access highways in Lancaster County converge in Manheim Township (not inclusive of the Pennsylvania Turnpike). Route 30 and Route 222 form an interchange in the east-central portion of the municipality while Route 30 and Route 283 form an interchange in the west-central portion of the municipality.

- Rail Lines - Manheim Township is home to both freight and passenger rail traffic. The level of risk is determined by the usage and nature of the rail lines.

Freight – Freight service in the municipality will be directly impacted by the Dillerville Yard Consolidation Project. This project involves constructing a switching yard for Norfolk Southern on an approximately 12 acre site along the Harrisburg Pike corridor, to the rear of the Lancaster Post Office.

Passenger – Passenger rail service operated by Amtrak passes through and adjacent to Manheim Township. In the western portion of the municipality, from approximately the 1400 block of Harrisburg Pike west to the municipal border with East Hempfield Township, the Manheim Township Fire Rescue system would respond as the primary agency in the event of a passenger rail incident. From the same location east to the Lancaster Amtrak station and continuing on to the East Lampeter Township border, the Amtrak line operates immediately adjacent to the municipal boundary and the Manheim Township Fire Rescue system would respond as a mutual aid provider in the event of a passenger rail.

- Airports – The highest risk for airport facilities is the area immediately adjacent and off-site of the airport property. The highest percentage of aircraft incidents occur during the takeoff and landing phase of air travel. Manheim Township is home to the Lancaster Airport complex. The Lancaster Airport operates on 184 acres in the northern portion of the municipality and is the 5th busiest airport in Pennsylvania averaging over 250 take-offs and landings per

² 2008 Manheim Township Fire Rescue year end report

day³. As with rail facilities, the higher the usage of the facility the higher the demand for service.

- Waterways – As noted, the waterway system in and adjacent to Manheim Township does not provide transportation opportunities but rather recreational opportunities only. The Conestoga River provides the eastern boundary of the municipality for a distance of 9 miles. The recreational opportunities on the Conestoga are served in the municipality by a boat launch at Perlman Park, part of the Manheim Township Parks and Recreation system.

Climatic Impact

While climatic factors in our region traditionally do not pose a higher risk, a risk does exist during extraordinary events for delayed responses. Typically these events are snow and/or ice related events. These events have the possibility to hamper response due to volunteers not being able to reach the fire rescue stations in addition to slowing or impeding the response of emergency vehicles. The Manheim Township Emergency Operations Plan does anticipate severe winter weather situations, but no clear remedy is in place to substitute for a front-line fire suppression unit should one be needed.

Disaster Exposure

The potential risks in this category include major weather events such as earthquakes or tornados, flooding events, or exposure to critical infrastructure. The major element of concern in this category is flooding. Manheim Township is prone to small stream flooding and flash flooding in poor drainage areas. Usual responses and locations to these types of events include:

- North Plum Street railroad underpass – vehicles/people stranded
- Harrisburg Pike at Mennonite Home – vehicles/people stranded
- East Oregon Road at Landis Homes - vehicles/people stranded

The current Manheim Township Fire Rescue system is trained and equipped for basic water rescue emergencies only. Other potential risks, particularly weather-related events such as earthquakes, tornados, etc., in this category are low frequency events and are dealt with through the Manheim Township Emergency Operations Plan.

Physical Assets Protected

Physical assets protected relates to the overall community or jurisdiction and individual buildings or properties within that community. The profile of Manheim Township as a community or jurisdiction does provide for a unique mix of individual properties that collectively elevate the risk and demand for fire rescue services.

³ Federal Aviation Administration. (2009). *Airport Data (5010) and Contact Information*. Retrieved May 22, 2009, from http://www.faa.gov/airports_airtraffic/airports/airport_safety/airportdata_5010/

While not a comprehensive list, some of the assets protected by the Manheim Township Fire Rescue system that other local municipalities and fire rescue organizations may not encounter include:

- Large industrial facilities
- Large concentration of retail centers
- Numerous high occupancy retirement complexes
- Pipelines
- Regional Fuel Storage Facility
- Roadway Infrastructure – (Limited access highways, including those used as primary emergency evacuation routes)
- Railway System (Passenger and Freight)

In addition, individual building analyses include factors such as:

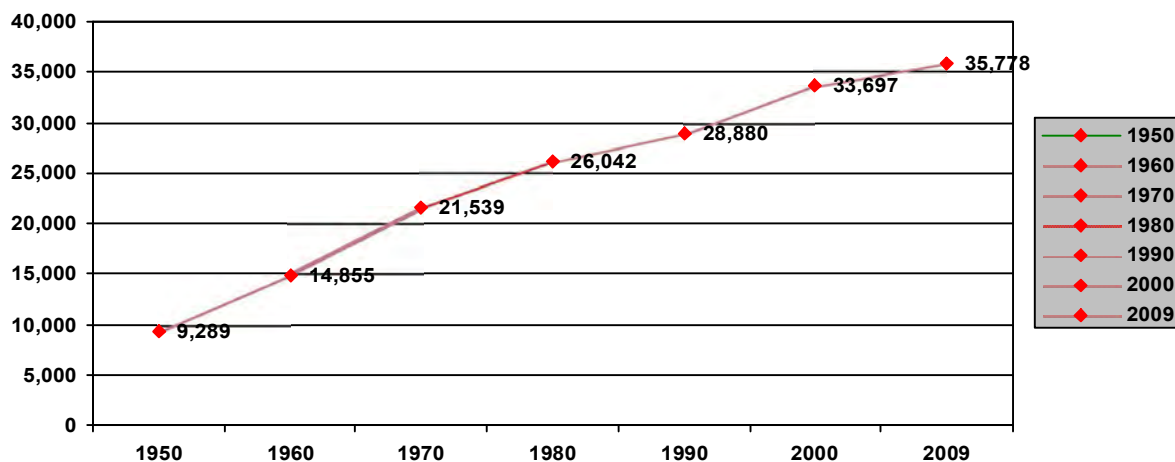
- Age of building / construction type / area and height
- Building separation from adjoining structures
- Built-in fire protection systems
- Fire flow requirements
- Use of building (Industrial, commercial, residential, etc.)
- Access issues
- Life safety considerations

Development and Population Growth

The gross population and the population density of the municipality is one of the major drivers of the demand for service. The current population, projected population, and population centers or locations can assist in analyzing the associated risk.

The population in the municipality has grown substantially since the 1989 survey conducted by Dr. Bryan. The population growth to current day is shown on Table 3.

Table 3: Manheim Township Population Growth



Increased population requires housing. Housing density defines the number of housing units permitted to be built per acre of available land. In Manheim Township there are five (5) different categories of residential units that are defined along with their respective per-acre allowable use in the Comprehensive Plan⁴. They are:

- Single Family Detached 2.11 units per acre
- Townhouses 6.98 units per acre
- Apartments 4.75 units per acre
- Mixed-Use Development 3.79 units per acre
- Retirement Community 4.75 units per acre

The allowable density of future development will impact the risk. Higher density allows for higher population, increasing the demand for services. The current number of housing units, according to the 2000 US Census, was listed as 13,339 units. According to the Comprehensive Plan⁵, 2,300 additional housing units are projected to be constructed to meet the anticipated population of 42,430 people by the year 2020. The increase in housing units and population will continue to increase the service demand.

An additional risk factor when reviewing population is the demographics of the population. Again referencing the Comprehensive Plan⁶, it is estimated that 21% of the population in Manheim Township is over age 65. The elderly or senior citizens represent a higher volume user of emergency services, including fire rescue and EMS services.

Service Demand

Response data for this report was gathered from two (2) independent sources; reports submitted by the volunteer stations into the National Fire Incident Reporting System (NFIRS) and from Lancaster County-Wide Communications (LCWC). Each source illustrates similar trends in call volumes while each is slightly different due to reporting or tracking differences.

Data from Lancaster County-Wide Communications is more generic in nature and can provide us with total number of incidents by station and by specific apparatus. This data will illustrate the high call volume found in this municipality for Fire Rescue services. Tables 4 and 5 below illustrate the number of emergency dispatches per station over the past 5 year period, separated by fire incidents for all three volunteer stations and for first responder medical calls (QRS) for the Eden and Southern Manheim Township stations.

⁴ Manheim Township Comprehensive Plan – Draft November 12, 2008, page 27

⁵ Manheim Township Comprehensive Plan – Draft November 12, 2008, page 27

⁶ Manheim Township Comprehensive Plan – Draft November 12, 2008, page 28

Table 4: Fire Incidents by Station – LCWC Statistics

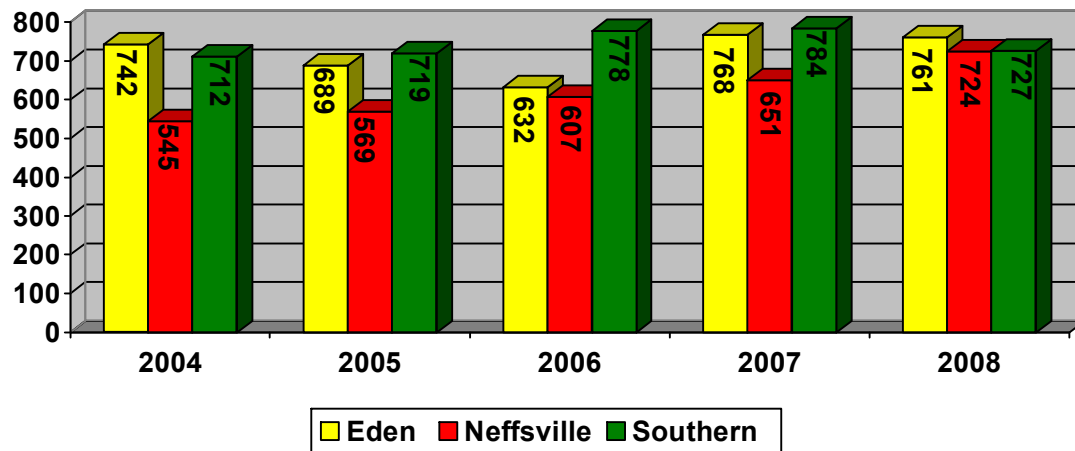
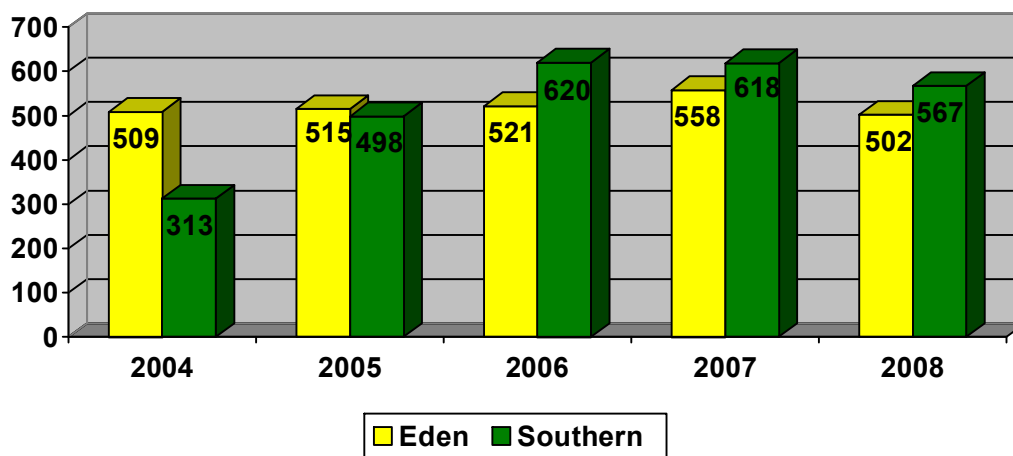


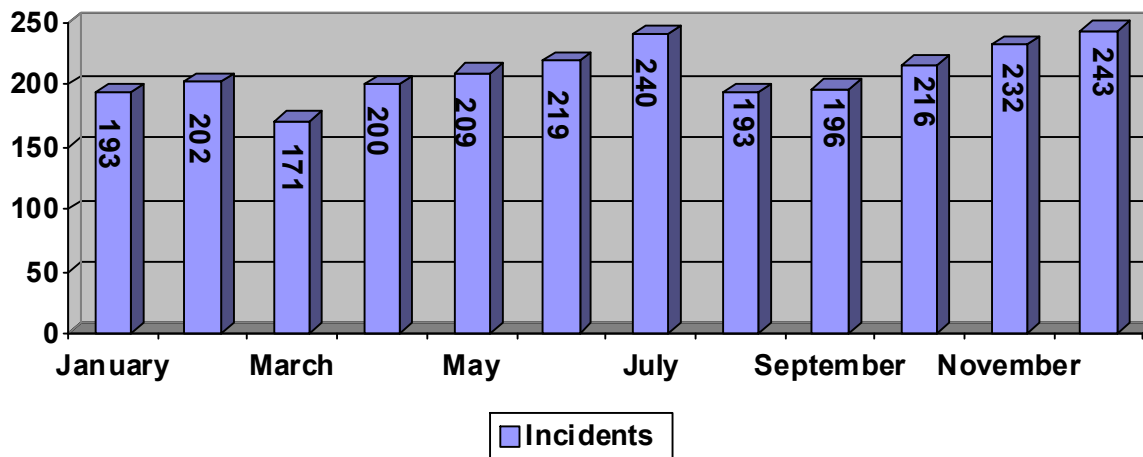
Table 5: QRS Incidents by Station – LCWC Statistics



Incident response by month illustrates which months require the highest demand for service. Using the available data from the NFIRS program in 2008, Table 6 illustrates that while several months provide higher demand for service, overall no one particular month creates an excessive demand on the system. While March averages as the lowest demand month for service and December the highest, the incident responses are fairly consistent from month to month.

The difficulty for the Fire Rescue system in Manheim Township when analyzing this data set is that it indicates a consistent need for staffing each month of the year with no peak months where alternate staffing or special staffing considerations would need to be addressed.

Table 6: Incident Response by Month - 2008



Incident response by day of week illustrates which days require the highest demand for service. This data set presents an identical challenge to the incident response by month evaluation in that no particular day shows a particularly higher demand for service. While Sunday averages as the lowest demand day for services and Thursday the highest, the incident responses are fairly consistent from day to day.

The difficulty for the Fire Rescue system in Manheim Township when analyzing this data set is, again similar to responses by month, it indicates a consistent need for staffing each day of the week with no peak days where extra staffing or special staffing considerations would need to be addressed.

Table 7: Incident Responses by Day of Week - 2008

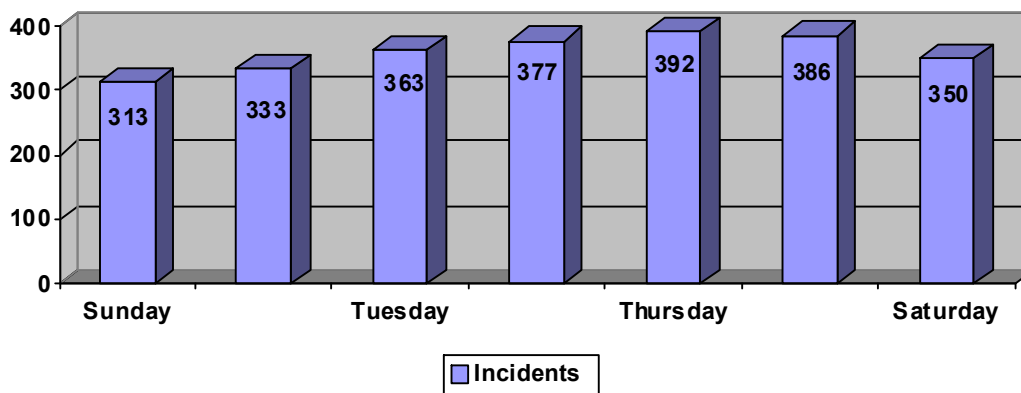
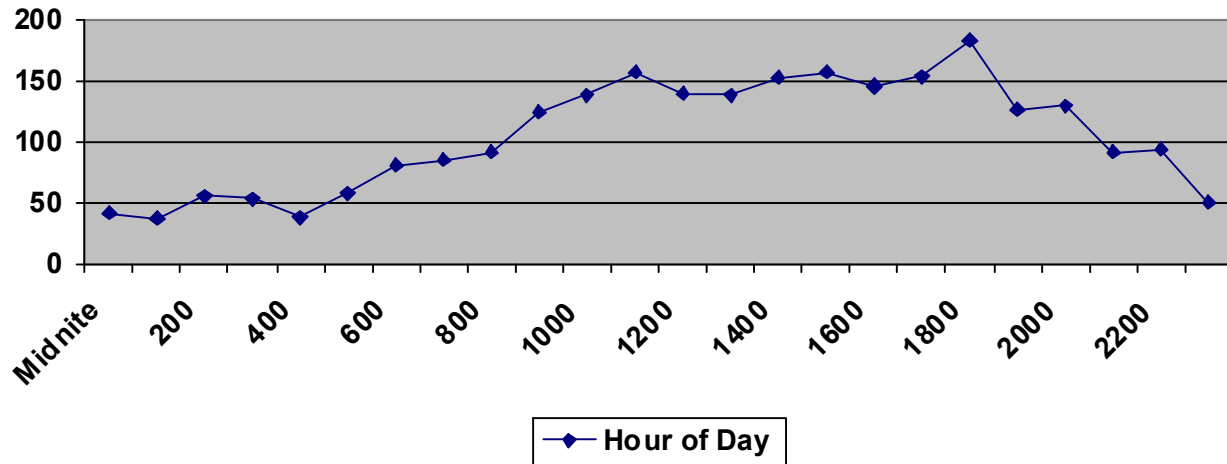


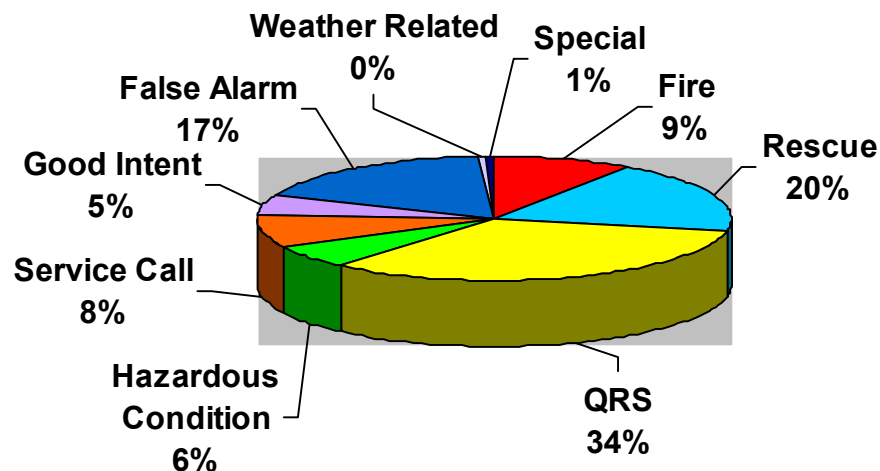
Table 8 illustrates incident responses by hour of day. This data set clearly shows the peak demand period in the municipality is the daytime hours from 9:00 am until 8:00 pm, during which every hour in that period experienced over 100 calls per hour on average. The time period of 6:00 pm to 7:00 pm is the highest call volume period, approaching 200 calls on average in that time period.

Table 8: Incident Response by Hour of Day - 2008



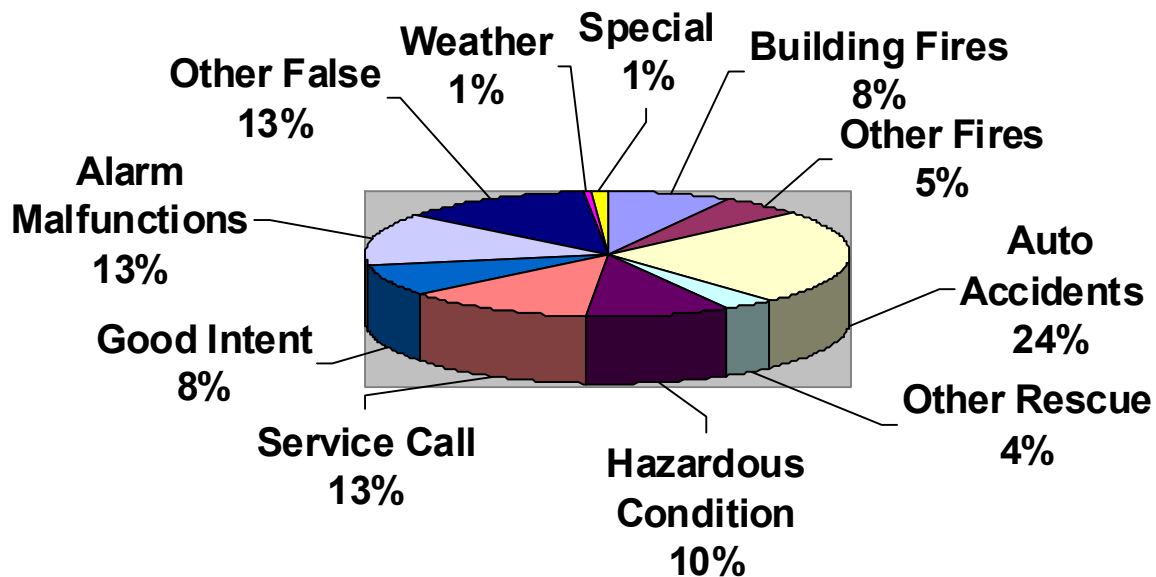
In addition to analyzing data on number of responses, type of response is also considered when evaluating the risk. Chart 9 illustrates types of incidents as defined by the NFIRS system. These broad categories are inclusive of all incidents entered into the NFRIS system, including auto accidents and first response medical (QRS) incidents.

Chart 9: Incident Type Summary – 2008 – All Incidents



When subtracting the first response medical (QRS) incidents, which are provided as mutual aid to the Manheim Township Ambulance Association or other responding EMS organizations, a more accurate breakdown of fire and rescue incidents is achieved, as reflected on Chart 10.

Chart 10: Incident Type Summary – 2008 – Fire Incidents Only



Personnel Resources

Available personnel resources relate to proper staffing of fire rescue units. The level of staffing and the capabilities of that staffing must be assessed as part of the risk assessment process. It is imperative to have the required number of personnel with the proper equipment arriving with the desired time frame in order to achieve a favorable outcome.

Today the Manheim Township Fire Rescue system is solely dependant upon volunteer staffing. Volunteer staffing will remain the number one focus and priority in the Strategic Planning document with recommendations for supplemental career staffing support. Volunteerism in the fire service nationwide has experienced a decline over the past 20 years, and Manheim Township has not been immune from this. Additional time commitments placed on existing or perspective volunteers now include increased family obligations, other social groups or clubs competing for the volunteer's time, necessity for volunteers to take second or additional jobs for additional income, and other factors. These factors make it more difficult today to retain existing volunteers and efforts must be focused on making the volunteer fire service competitive with these other obligations. Recruitment of new volunteers also must have re-focused efforts on providing incentives to entice these people into wanting to be a part of the organization. Recruitment and retention incentives no longer are reserved only for departments with expendable revenue; rather they must be acknowledged as necessary programs for all departments and must be funded accordingly in order for volunteerism to survive.

Another reason for a decline in active volunteers within Manheim Township may be the escalation of home prices in the municipality. According to the draft Manheim Township Comprehensive Plan⁷ *"Manheim Township home prices are some of the highest in Lancaster County. Rents are rising and vacancy rates are moderately low. These factors make affordable housing hard to find for young people, working and larger families."* According to this document, the median home sale price has increased in the time period 2000 to 2005 by \$55,400 bringing the median price to \$195,000. Not only has this factor possibly contributed to the decline in existing volunteers, but future recruitment efforts may be hampered by this same factor.



⁷ Manheim Township Comprehensive Plan – Draft November 12, 2008, page 26

ADMINISTRATION, ORGANIZATION, MANAGEMENT

Ordinances

Specific permission for fire services within the municipality are given through municipal ordinance. Part 10 of the Manheim Township Ordinances⁸ deals with Public Safety and subsequent chapters in Part 10 define the roles and powers of specific emergency service organizations, including the fire service. Numerous sections of Articles B and C may need to be revised in order to recognize various components of the joint Fire Rescue system. Specific sections include:

- Part 10, Chapter 1, Article B, Section 10-1011 recognizes the three individual volunteer fire companies in the municipality and this section grants them the power to provide fire protection within the municipality. The municipal component should be recognized
- Part 10, Chapter 1, Article B, Section 10-1017 and 1018 authorizes the activities of the volunteer fire companies. Clarification of and added duties for the volunteers should be included
- Part 10, Chapter 1, Article C, Section 10-1052 pertains to authority of Fire Chiefs. Should reflect municipal fire officers

In addition, various Resolutions and Ordinances authorizing the above and other related matters are in existence. All Resolutions and Ordinances should be evaluated for the applicability in relation to the Manheim Township Fire Rescue system as proposed. This project should be undertaken with the assistance and guidance of the Township Solicitor.

Recommendation #1: The Manheim Township Board of Commissioners should amend all ordinances relevant to the provision of fire rescue services within Manheim Township

Fire Rescue Contract

Currently the three volunteer organizations are providing fire rescue services to the municipality based upon a written contract between each individual organization and the Board of Commissioners. The current contract, dated 1 November 1998, outlines five (5) specific sections:

1. The volunteer fire company is designated to provide services
2. The volunteer fire company agrees to provide service
3. Clarification of employee status of the volunteers
4. Clarification of debt obligations
5. Term of contract and automatic renewal

⁸ Code of Ordinances of the Township of Manheim, August 9, 1999, Revised and supplemented through March 9, 2009

The current contract is vague in nature and does not place specific requirements as to the level of service to be provided by the volunteer fire companies or the obligations of the municipality as they are presently agreed upon.

Recommendation #2: The Manheim Township Board of Commissioners should revise the municipal contracts with the volunteer fire companies to better clarify the service requirements and municipal obligations

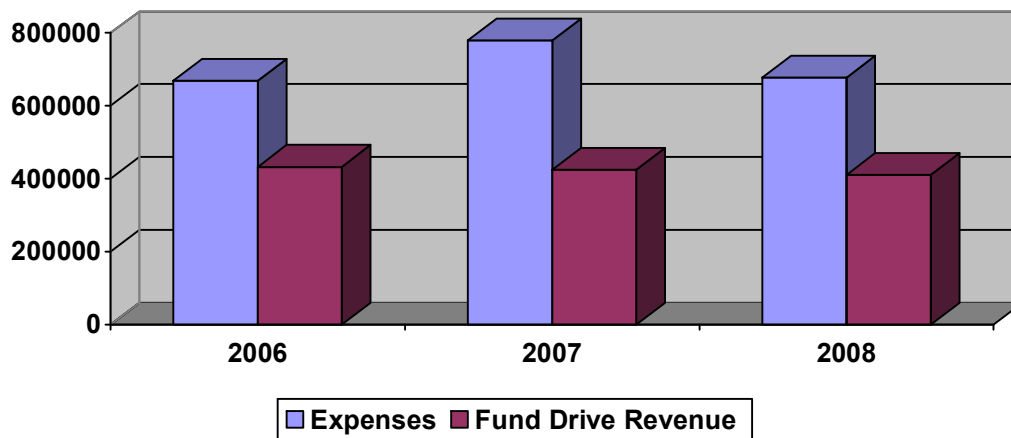
Fire Rescue General Fund Budgets

The Manheim Township Fire Rescue system operates with four (4) separate and independent general fund budgets, those of the three independent volunteer stations and that of the municipality. These budgets are funded by various revenue sources, including volunteer fund raising and direct mail solicitation, tax revenue allotted from the municipal General Fund, use of savings and investments, and grant allocations.

Table 11 below illustrates the expenses to operate the three volunteer Fire Rescue stations over the past 5 years. The table shows actual operating expenses for each volunteer station, which includes loan payments. Loan payments for the volunteer stations are a combination of payments on vehicle loans and mortgage payments on building renovation projects. This chart does not take into account or show any capital expenses.

Next to the operating expenses is reflected the fund drive revenue for that respective year. Table 11 clearly shows that the three volunteer Fire Rescue stations are unable to survive on the existing Fund Drive mechanism. The negative balance for each volunteer station is funded by municipal subsidy and use of savings or investment funds of the respective volunteer station.

Table 11: Manheim Township Fire Rescue System – Volunteer Combined Budget Overview⁹ - Expenses versus Fund Drive



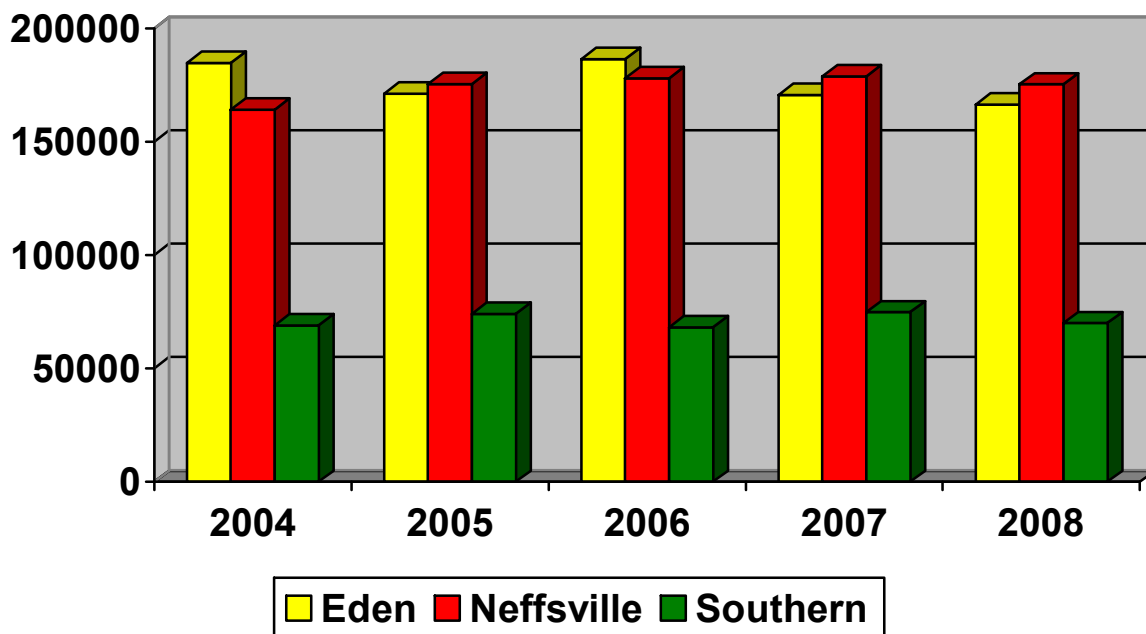
⁹ All budget numbers reflect actual expenses based on supplied financial documents

Fund Drives and Fund Raising

The main source of income for the volunteer fire companies is direct mail fund raising. All three volunteer stations operate a similar approach, with two or three mailings per year being sent to all residential and commercial addresses within their assigned response district. The fund drive cycle typically starts in April or May with a first mailing, followed by a reminder mailing in the late summer months, and some stations follow that with a third and final mailing at the end of the calendar year. Currently two of the volunteer stations contract with an outside agency to provide this direct mail program, while the third continues to produce and mail internally.

While the three volunteer stations do receive financial support from the municipality for some expenses, the direct mail fund raising campaign is again the primary source of revenue generation. Fund drive revenues drive the budget process for the volunteers. The existing revenue derived from this method of fund raising has remained almost level over the past five years with only a minor gain in overall revenue.

Table 12: Manheim Township Volunteer Fire Companies Fund Drive Revenue 2004-2008



** Table 12 reflects Fund Drive results in Manheim Township only*

Future direct mail fund raising projections can be computed based on the projected increase of residential housing units. According to the Manheim Township Comprehensive Plan draft, 2,300 additional housing units will be required by the year 2020 to meet the need of the projected population of 42,430 citizens. As previously stated, the average percentage of residential housing units that contribute a donation in the fund drive process is 30%. Using these statistics we can assume the following increase in the fund drive process over the next 11 years:

- 2,300 new housing units total multiplied by 30% who will donate = 690 new contributors total in the next 11 years
- 690 new contributors multiplied by the average donation of \$89.00 = \$61,410 additional revenue in year 2020
- Divide the total additional revenue (\$61,410) over the next 11 years and you can calculate an average of \$5,117 per year increase TOWNSHIP WIDE in fund drive dollars
- Divide this Township-wide average by three volunteer stations and you can calculate an approximate increase of \$1,705 on average per-station each year

The cost to operate the Manheim Township Fire Rescue system, in order for it to meet the demands placed upon it will not be able to be supported by the existing direct mail fund drive mechanism. The projected increase in fund drive revenue is far out-paced by projected operating costs and capital replacements. The direct mail fund drive mechanism also does not take into account needed revenue for the municipal component of the fire rescue system.

Recommendation #3: The direct mail fund raising activities within Manheim Township should be replaced with a dedicated fire tax assessment

Fire Tax

A stable source of revenue is needed in order to insure the continued provision of fire rescue services. While direct mail fund raising may have been a sufficient source of revenue in the past, it can be documented that this source has grown stagnant and is unable to keep pace with the cost of providing these services. Operating expenses have out paced revenue growth and capital expenses can no longer be afforded by the volunteer organizations. Levy of a fire tax was recommended by Dr. Bryan in his 1989 survey and is also referenced in the draft Manheim Township Comprehensive Plan under Facilities and Service Enhancements, which states “... *consider overall costs of the fire service and stable funding bases such as a fire tax*”¹⁰.

Finance and taxation in Manheim Township is governed by the Commonwealth of Pennsylvania First Class Township Code¹¹. Section 1709 – Tax Levies, specifically dictates what taxes are allowable to be levied and collected. Section 1709 gives specific permission for the municipality to levy and collect a Fire Tax. Section 1709, Two (i) provides the explanation for the allowable millage rate that can be assessed and what the Fire Tax revenue can be allocated for. Permissible uses for fire tax funds include:

¹⁰ Manheim Township Comprehensive Plan – Draft November 12, 2008, Page 98 #2

¹¹ Commonwealth of Pennsylvania First Class Township Code, Act of June 24, 1931 (P.L. 1206, No 331) Reenacted and amended May 27, 1949 (P.L. 1955, No. 569) Cumulative Supplement #3 Containing all amendments enacted through 2008

- Purchasing, maintaining, and operating fire apparatus
- Building and maintaining fire stations
- Appropriations to volunteer fire companies
- Salaries, benefits, and other compensation for firefighters

The most current taxable assessment of Manheim Township as provided by the Manheim Township Tax Collectors Office¹² shows 13,658 taxable parcels within the municipality. The taxable assessment of these parcels equals \$3,007,848,500. This assessment value does not take into account the 267 tax-exempt parcels that have an assessed value of \$314,029,700.

Through the strategic planning process an estimated budget was created. This budget includes all operational and capital expenses in order to fully operate the Manheim Township Fire Rescue system, including all recommendations contained within this document. In order to fully fund this projected budget, a final determination was made that a tax assessment of 0.55 mills would be required in order to not experience a budget deficient for a projected range of 15 years.

Table 13: Property Owner Cost for 0.55 Millage Rate Fire Tax Assessments

Homeowners Cost for 0.55 Millage Rate Fire Tax Assessment Based on ASSESSED VALUE	
Assessed Value of Home	Cost For 0.55 Fire Tax
\$100,000	\$55.00
\$125,000	\$68.75
\$150,000	\$82.50
\$175,000	\$96.25
\$195,000*	\$107.25
\$200,000	\$110.00
\$225,000	\$123.75
\$250,000	\$137.50
\$275,000	\$151.25
\$300,000	\$165.00
\$325,000	\$178.75
\$350,000	\$192.50
\$375,000	\$206.25
\$400,000	\$220.00

* Median home price in Manheim Township

Recommendation #4: The Manheim Township Board of Commissioners should institute a .55 millage rate fire tax assessment to fund the operations and capitol improvements of the combined fire rescue system

¹² Manheim Township Tax Collectors Office – Taxable Assessment as of May 27, 2009

PILOT Program

While the assessment of a fire tax will serve to support the operations and capital expenditures of the Fire Rescue system, not all properties within Manheim Township will be obligated to pay this tax. Tax-exempt properties will remain outside the reach of the fire tax while still being a user of the service for emergency responses, public education activities, etc.

A *Payment-In-Lieu-Of-Taxes* (PILOT) program should be formulated to address the properties that are tax-exempt in order to receive some monetary benefit from these organizations that will continue to use the services. Through previous fund raising efforts, it has been proven that a request for a monetary donation with no established program or gain to show for that donation is an in-effective approach. Should a PILOT program be established, it should attempt to match requested donations from tax-exempt properties to a specific goal or program.

The majority of tax-exempt properties are community-oriented institutions such as churches, schools, etc. These community-oriented institutions should be targeted for specific public education program donations that relate to the needs of their surrounding neighborhoods. Examples such as smoke detector campaigns, home fire safety for at-risk population programs, etc. should be matched between specific neighborhoods and community oriented institutions. This will allow for positive relations to be established in various neighborhoods throughout the Township between these institutions, their immediate neighbors, and the Fire Rescue system.

Recommendation #5: The Manheim Township Board of Commissioners should permit the establishment of a PILOT program to solicit funds for dedicated public education programs and projects from tax-exempt properties

Foreign Fire Insurance Taxes (Firefighters Relief Association)

The Foreign Fire Insurance Tax Distribution Law was passed as part of Act 205 of 1984, the Municipal Pension Plan Funding Standard and Recovery Act (commonly referred to as "Act 205", 53 P.S. 895.101 et. seq.). Specifically, Chapter 7 of Act 205 sets forth the provisions of the Foreign Fire Insurance Tax Distribution Law (53 P.S. 895-701-895.706). The source of the monies is a 2% tax on foreign fire insurance premiums. (The term "foreign fire insurance" means fire insurance written by an insurance company which is not incorporated in the Commonwealth of Pennsylvania.)

The allocation of money to Manheim Township and subsequently to the three incorporated Relief Associations (Eden Fire Company Relief Association, Neffsville Fire Company Relief Association, and Southern Manheim Township Fire Company Relief Association), is determined by a formula based on the population and the market value of real estate within the municipality. The formula remains a constant and is calculated in the following manner:

1. Fifty percent (50%) of the allocation is based on the population of the Township in comparison to the entire population of the Commonwealth as reported in the latest national census; and
2. Fifty percent (50%) of the allocation is based on the market value of real estate in the Township in proportion to the market value of real estate for the entire Commonwealth based upon the most recent statistics from the State Tax Equalization Board

The amount of the Foreign Fire Insurance Tax (or “Relief Funds”) has continued to increase each year as the variables calculated in the formula have continued to increase within the municipality. Table 14 below shows the amount of Relief Funds that have been allotted to Manheim Township:

Table 14: Foreign Fire Insurance Tax Revenue

Fiscal Year	Amount Received
2005	\$ 279,480
2006	\$ 280,734
2007	\$ 298,485
2008	\$ 306,572

Act 205 is specific in what Relief Funds can be allocated for. These areas of disbursement are broad categories and include:

- Investment Purchases
- Insurance Premiums
- Equipment Purchases
- Equipment Maintenance
- Death Benefits
- Relief Benefits
- Training Expenses
- Tokens of Sympathy and Goodwill
- Fire Prevention Materials
- Administrative Expenses
- Principal Payments on Relief Association Loans
- Interest Payments on Relief Association Loans

The vast majority of relief expenses from each of the three individual Relief Associations fall into the categories of equipment purchases, insurance premiums, and training expenses.

In order to more uniformly use Relief Association funds, a single joint Relief Association could be formed that would administer the funds to all three volunteer organizations from one single fund. This is common practice and this type of single Association structure is already in use in other municipalities in Lancaster County and the Commonwealth that have multiple volunteer fire company's. A single Association

system allows for better oversight of monies and a more fair use of the money to all volunteers in the municipality. Where one Relief Association today may focus more on equipment purchases and less on training of their members, a single Association could ensure that all volunteers are treated equally.

Recommendation #6: The volunteer fire companies comprising Manheim Township Fire Rescue should create a joint Manheim Township Fire Rescue Volunteer Fireman's Relief Association

Federal Grant Programs

Several federal grant programs are available for application to the Fire Rescue service through the Department of Homeland Security and the Federal Emergency Management Agency. While each volunteer agency remains its own privately chartered organization it is eligible to apply for federal grants. The municipal Fire Rescue entity is also eligible to apply. This will provide for four (4) grant opportunities for each grant within the municipality.

While previous grant requests on behalf of the volunteer organizations have simply required notification to the Fire Council of the intended request, it will become critical that all grants be thoroughly researched for compatibility and need township-wide as this plan moves forward. In addition, should the funding source change from direct mail fund drive to the recommended fire tax levy, all grants requiring a percentage match will have to be balanced against the available funding stream to insure the percentage match is available.

It should be noted that all Federal grant programs are contingent upon funding from Congress. If appropriations are not made in any fiscal year, any or all of these programs may cease to exist. The Manheim Township Fire Rescue system should attempt to take full advantage of all available grant programs contingent upon their funding each year.

Assistance to Firefighters Grant (AFG)

The Assistance to Firefighters Grant (AFG) program provides funding for various types of projects for the purpose of enhancing the capabilities of the organization to respond to emergency incidents. Project areas available for grant funding include:

- Fire Operations and Firefighter Safety
 - Training
 - Equipment
 - Personal Protective Equipment
 - Wellness and Fitness
 - Modifications to Facilities
- Firefighting Vehicle Acquisition

AFG grants have been previously awarded within the municipality for projects including replacement of Self Contained Breathing Apparatus, Chemical protective equipment, and rescue equipment. Additional projects should be targeted for grant application, including a vehicle exhaust system for the remaining facility without this system, additional training programs, and future equipment needs.

Recommendation #7: The Manheim Township Fire Rescue system should continue to pursue AFG grants through the municipal entity and the volunteer organizations to include the following:

- ***Municipal – AFG grant for Township-Wide training programs***
- ***Municipal – AFG grant for vehicle acquisition***
- ***Municipal – AFG grant for Wellness and Fitness initiatives***
- ***Volunteer – AFG grants for needed equipment and/or station modification projects***

Staffing for Adequate Fire and Emergency Response (SAFER) Grant

The Staffing for Adequate Fire and Emergency Response (SAFER) grant program provides funding for two (2) separate grant programs; Hiring of Firefighters and Volunteer Recruitment and Retention. An organization is eligible to apply for both programs in the same grant application. It should be noted that to apply for Hiring of Firefighters that the municipality must agree to the funding commitment, which makes this grant activity most likely only applicable to the municipal entity.

Currently there are three (3) active SAFER grants already awarded within the municipality. Two volunteer organizations (Eden and Southern) are engaged in SAFER grant activities including college reimbursement to volunteer members, entry level physicals, and Live-In program advertising. These two grants are in various years of award and are being administered by the individual station with assistance from the career Fire Chiefs office. The third SAFER grant was awarded in 2009 to the municipality itself for recruitment of volunteer personnel (details of this grant award are discussed under Fire Rescue Staffing).

Recommendation #8: The Manheim Township Fire Rescue system should continue to pursue SAFER grants through the municipal entity and the volunteer organizations to include the following:

- ***Municipal – SAFER grant hiring activity for part time personnel***
- ***Municipal – SAFER grant recruitment activity for township-wide recruitment programs***
- ***Volunteer – SAFER grant retention activity at each of the three (3) individual stations for retention activities targeted towards existing volunteers***

Fire Prevention and Safety Grant

Fire Prevention and Safety grants can be submitted for two specific projects: Fire Prevention and Safety projects and Firefighter Safety Research and Development. The second activity is reserved for predominately research-type institutions or facilities such as colleges and universities or training facilities. The primary activity of Fire Prevention and Safety projects would include those projects the Manheim Township Fire Rescue system would deem relevant to our municipality.

The appropriation for this grant program is the lowest of the three federal grant programs and this grant is also open to more eligible applicants due to the nature of the research and development portion of the grant. This makes the Fire Prevention and Safety the grant the most difficult grant to be awarded.

The Manheim Township Fire Rescue system has identified needs for current and proposed public education programs. As with other federal grants, the Fire Rescue system has the potential to apply for four (4) separate grants, so multiple projects could be applied for separately each year.

Recommendation #9: The Manheim Township Fire Rescue system should continue to pursue Fire Prevention grants through the municipal entity and the volunteer organizations to include the following:

- ***Municipal – Fire Safety Trailer and Township-wide public education programs***
- ***Volunteer – Fire Prevention and Safety supplies for each of the three (3) individual stations to supplement existing or proposed programs***

Office of the State Fire Commissioner Grant Program

The Office of the State Fire Commissioner administers a yearly grant program titled as the Volunteer Fire Company and Volunteer Ambulance Service Grant Program. The program is a yearly grant opportunity for each volunteer fire company. The grant program is contingent upon receiving an appropriation each year, which has been set at \$25,000,000.

The maximum grant request from each volunteer fire company is capped at \$15,000. There are several available program areas that can be funded including:

- Construction/Renovation of a facility
- Purchase of equipment
- Debt Reduction
- Training

The yearly appropriation is divided among the number of grant applications received. All volunteer fire companies in the Commonwealth are eligible for the grant program,

and most all apply. The average grant award over the life of the program has been approximately \$11,300 per year for each volunteer fire company. Equipment purchase and debt reduction have been the two primary areas of funding requested by the three volunteer companies in the municipality.

It is recommended that each volunteer company continue making application each year, and that the applications are coordinated through the Fire Council to insure appropriate equipment is being purchased with the grant funds.

Recommendation #10: The volunteer fire companies of the Manheim Township Fire Rescue system should continue to pursue grants through the OSFC Grant Program



FIRE RESCUE STAFFING

The delivery of Fire Rescue services is directly dependant upon the available level of staffing. Staffing levels provide a direct link to response times and response goals. Having immediately available staffing, by whatever means are necessary to provide that staffing, will significantly reduce turnout times, which in turn will reduce the overall response times in the municipality.

Turnout Time, Travel Time, and Response Time are defined as:

- Turnout Time – The time from the point when a fire station is dispatched to an incident by a communications center, to the point that appropriate apparatus initiate a response. This includes the time necessary for volunteer personnel to travel to and assemble at the fire station
- Travel Time – The time from the point when the apparatus makes the response and the time it arrives at the incident scene.
- Response Time – The total time from dispatch to arrival of the first firefighting unit. This is a combination of Turnout Time plus Travel Time

These times are all directly affected by available staffing and staffing deployment models. Several models of staffing deployment are used in conjunction with one another in Manheim Township. These models include Come-From-Home responders, Live-In programs, and Duty Crew programs. Each can operate as a stand-alone but each compliments one another in an attempt to provide the highest level of volunteer staffing possible, which in turn provides a lower response time.

Currently Manheim Township does not have a formally adopted or recommended response time objective; therefore there is no target against which to compare the current performance of Fire Rescue response times. The NFPA Standard 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments*¹³, does provide a recommended number of firefighters that should respond within a recommended time frame. This information is shown on Table 15, where the recommendations are based on what demand zone the department serves which is determined by population.

¹³ NFPA 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments* 2004 Edition

Table 15: NFPA 1720 Staffing and Response Time Guidelines for Volunteer Departments

Demand Zone	Criteria	Staffing/Response Time	Percentile
Special Risks	Set by AHJ	Set by AHJ	90
Urban	>1000 persons per square mile	15/00:09:00	90
Suburban	500 to 1000 persons per square mile	10/00:10:00	80
Rural	<500 persons per square mile	6/00:14:00	80
Remote	Travel distance 8 miles or greater	4	90

The number of available or required personnel is referred to as “staffing”. Currently within Manheim Township the staffing levels are determined by MTFR SOG 401.04 (revised/adopted October 14, 2008) and are as follows:

Table 16: Minimum Staffing Level – MTFR SOG 401.04

Apparatus Designation	Required Minimum Staffing Level
Engine Company	3
Ladder Company	3
Rescue Company	3

These staffing levels are designed to place a minimum number of personnel on a responding unit regardless of the nature of the emergency incident. The staffing model in NFPA 1720 is seeking to place fifteen (15) personnel on the scene of an incident in the Urban Demand Zone. There is no indication here of minimum staffing per unit or how many units may be needed to achieve 15 personnel. In Table 17 NFPA recommends a minimum number of apparatus and a minimum number of personnel based upon the type of occupancy and the associated hazards and assuming an interior fire attack is going to take place.

Table 17: NFPA Recommended Staffing Level

Initial Attack Response Capability Assuming Interior Attack and Operations Response Capability
<p><u>High Hazard Occupancies</u> (Schools, hospitals, nursing homes, high rise buildings, and other high life hazard or large fire potential occupancies) At least four (4) pumpers, two (2) ladder trucks (or combination apparatus with equivalent capabilities), two (2) chief officers, and other specialized apparatus as may be needed to cope with the combustible involved, not less than twenty four (24) fire fighters and two (2) chief officers.</p>
<p><u>Medium Hazard Occupancies</u> (Apartments, office buildings, mercantile and industrial occupancies not normally requiring extensive rescue or fire fighting forces) At least three (3) pumpers, one (1) ladder truck (or combination apparatus with equivalent capabilities), one (1) chief officer, and other specialized apparatus as may be needed or available; not less than sixteen (16) fire fighters and one (1) chief officer.</p>
<p><u>Low Hazard Occupancies</u> (One, two or three family dwellings and scattered small business and industrial occupancies) At least two (2) pumpers, one (1) ladder truck (or combination apparatus with equivalent capabilities), one (1) chief officer, and other specialized apparatus as may be needed or available; not less than twelve (12) fire fighters and one (1) chief officer.</p>
<p><u>Rural Operations</u> (Scattered dwellings, small businesses, and farm buildings) At least one (1) pumper with a large water tank (500 gallon or more), one (1) mobile water supply apparatus (1000 gallons or larger) and other specialized apparatus as may be necessary to perform effective initial fire fighting operations; not less than twelve (12) fire fighters and one (1) chief officer.</p>
<p><u>Additional Alarms</u> At least the equivalent of that required for Rural Operations for second alarms; equipment as may be needed according to the type of emergency and capabilities of the fire department. This may involve the immediate use of mutual aid companies until local forces can be supplemented with additional off-duty personnel. In some communities, single units are “special called” when needed, without always reporting to a multiple alarm fire. Additional units may also be needed to fill at least some empty fire stations.</p>

Currently, when considering the minimum staffing per unit required by MTFR SOG 401.04 and the number of resources responding to a structural fire, in most instances MTFR is responding with the minimum number of personnel required. That response, however, is contingent upon all dispatched resources responding to the call and responding with the minimum required staffing. This is not occurring on 100% of the response in the municipality.

A “No Response”, an emergency incident that a volunteer station was unable to respond to due to a lack of volunteers, is a serious concern any time it occurs. In Manheim Township this situation has begun to occur with more frequency than in past years. The availability of the volunteer personnel directly effects this situation, and the causes for the lack of volunteer availability have been noted in other sections of this document. When a unit is unable to respond or responds under-staffed, this

immediately becomes a concern from a firefighter safety perspective. If the minimum number of firefighters is not available to safely mount an interior attack, one of two options must be considered: proceed with an interior fire attack which will increase the chances of firefighter injuries or fatalities due to lack of staffing to perform all necessary fire ground functions, or secondly abandon the interior fire attack which will eliminate survivability for any trapped occupants. Neither option provides for a favorable outcome. To eliminate these options minimum staffing must be provided.

Volunteer Staffing

Volunteer staffing has continued to decline not only in Manheim Township but across the Commonwealth and the Country. In order for Manheim Township to maintain an adequate firefighting force, aggressive recruitment and retention programs for volunteers along with the implementation of supplemental career staffing for the volunteers will be needed in order to provide an acceptable level of fire rescue services to the municipality and its citizens.

Volunteer staffing and its continuation remains the number one priority when discussing staffing needs. The municipality does not have the financial resources to provide a fulltime career fire rescue organization should the volunteer firefighting force continue to decline or disappear. Volunteer recruitment and retention is paramount to the future success of the Manheim Township Fire Rescue system.

Several different types of volunteer membership exist within the Manheim Township Fire Rescue system. Each type of membership provides a needed base of volunteers and each type of membership compliments another. The membership types that exist today are: Come-From-Home responders, the traditional personnel who leave their home or place of employment to respond to emergency calls; Live-In Firefighters, personnel who live in dormitory-style housing provided at the fire rescue station who must respond to a certain percentage of emergency incidents and provide immediate response to incidents; Duty-Crew personnel, those who are active firefighters at fire rescue stations outside of the municipality but give a minimum required hour commitment to the MTFR system; and Junior Firefighters, those personnel age 14-18 who participate in response and training under the regulations of the Pennsylvania Child Labor Laws. Each of these four types of membership is critical to the success of the Manheim Township Fire Rescue system as it moves into the future.

Come-From-Home Responders

Come-From-Home Responders are the traditional type of responders most related to in the volunteer fire rescue service. In Manheim Township this type of responder is unfortunately no longer the norm. The Neffsville fire rescue station operates predominately with this type of responder; they do not have Live-In personnel or Duty Crew personnel (as outlined below). The Eden and Southern Manheim Township stations no longer have a high percentage of this type of responder, due to various reasons including the demographics of their specific areas of the municipality, and must now rely on other types of responders.

Typically Come-From-Home Responders are vested in the community and take a special interest in helping the community they live in. The Strategic Planning Committee agrees that recruitment efforts focused on this type of responder will be paramount to the success of the fire rescue system. Recruitment efforts aimed at this target audience must be pursued. Part of this recruitment effort should also be focused at the business community. It appears that very few businesses are educated to the need for volunteer personnel to be available to respond to daytime emergency incidents. Some recruitment effort should be focused in this direction.

Live-In Personnel

The first Live-In program was instituted in Manheim Township in 1997 at the Eden station. The second program began in 2001 at the Southern Manheim Township station. These two programs have become vital to the response needs of these two stations. Live-In firefighters are provided free accommodations in the dormitories in exchange for responding to a certain percentage of emergency incidents and related station duties depending upon the individual program requirements.

The uniqueness of these programs are evident in the fact that in Lancaster County only four (4) true Live-In programs exist out of eighty one (81) individual fire stations within the County. Certain conditions typically must exist for a Live-In Program to be successful. The most attractive incentive for a potential Live-In is ironically what causes the need for Live-In firefighters in the first place, a higher than average call volume. A typical Live-In firefighter is attracted to busy fire rescue stations that respond to a high number of emergency calls. This high response rate is typically what has caused a decrease in Come-From-Home Responders and moved a fire rescue station into a position to need Live-In personnel.

The two existing Live-In programs must be maintained and if possible expanded. The program at the Eden station is at the physical limit of the building, the goal should be to maximize the available number of beds in the program and try to insure they are full. The program at the Southern Manheim Township station has the capability to expand into under-utilized portions of the existing station. This option to expand the Live-In program at this facility should be explored in order to bring more Live-Ins into the Manheim Township Fire Rescue system.

Duty Crew Program

The first Duty Crew program was instituted in Manheim Township in 2004 at the Eden station. The second program began in 2006 at the Southern Manheim Township station. These two programs, similar to the Live-In programs, have become vital to the response needs of these two stations. Duty Crew personnel are provided the same benefits as other active members of the organization in exchange for providing a predetermined amount of in-station time as opposed to percentage of emergency incidents responded to.

The Duty Crew program has proven successful at being able to fill gaps in volunteer coverage when Come-From-Home or Live-In personnel may not be available. The Duty Crew program should be expanded to all three volunteer stations.

Junior Firefighter Program

The Manheim Township Fire Rescue system recognizes that the future of the volunteer component within the municipality is important and believes the Junior Firefighter Program is an essential part of this plan. Currently the Junior Firefighter Program operates under the direction of a Junior Advisor who is appointed by the Manheim Township Fire Council. The regulations for the program are set out in Manheim Township Fire Rescue Standard Operating Guideline 102.01 and the Commonwealth of Pennsylvania Child Labor Laws Act of 1915, P.L. 286, No. 177 Sec. 7.3.

The Junior Firefighter Program allows membership to persons 14-17 years of age. Junior members are given the same insurance coverage as senior members. They may take part in the Capital Appreciation Program (outlined below) and their years of junior membership count toward total membership years. These members are provided the opportunity to take part in weekly station trainings, state training courses and regularly scheduled junior training. They are permitted to ride the apparatus to calls under certain conditions. They provide exterior support at the scene of fire incidents and they also provide support at accident scenes.

It is the Strategic Planning Committees belief that this program will continue to be an important part of the MTFR system. Continued support of this group will come from both the individual stations and the municipality. The Junior Advisor and the staff are continuing to research the option of an Explorer Post of the Boy Scouts of America. This program may be instituted at some point in the future. The program will continue its membership in the National Volunteer Fire Council (NVFC). It will also register each Junior Firefighter as an individual member of this program. This program allows the Junior Firefighter to be eligible for tuition scholarship programs.

Volunteer Recruitment and Retention

Recruitment and retention of volunteer personnel continues to pose a significant challenge to all three volunteer fire rescue stations and subsequently to the municipality. Increased time requirements on the volunteer for job requirements, family commitments, or other social activities, in addition to increased training requirements and higher call volumes have resulted with a negative impact on volunteer recruitment and retention.

An aggressive volunteer recruitment and retention program must be created in order to slow the decline of the volunteer personnel. While some programs are in place in each individual fire rescue station, a unified recruitment and retention committee staffed by volunteers and supported by MTFR staff must continue to develop programs that are beneficial to both recruitment of new volunteers and retention of existing volunteers.

Recruitment Programs

On February 12, 2009 Manheim Township Fire Rescue was awarded a grant for \$104,444 for the sole purpose of a volunteer recruitment program. This grant was awarded through the Staffing for Adequate Fire and Emergency Response (SAFER) grant program, administered by the Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA). This particular grant will provide funds over a four year period in the following project areas:

- Recruitment Booth
 - The purchase and design of a trade-show style booth specifically focused on volunteer recruitment. Includes costs for production of a recruitment video and associated items
- Attendance Fees
 - Costs associated with attending various local and regional events where the recruitment booth will be displayed and staffed
- Recruitment Newsletter
 - Two (2) Township-wide editions each year of a specific recruitment newsletter to all residential addresses. The newsletter will mirror the current format of the Manheim Township community newsletter
- Recruitment Brochures
 - Specific brochures targeting come-from-home responders, Live-In firefighters, Duty Crew personnel, and Junior firefighters
- Application Packets
 - Standardize application packets with tracking information

Organizations are eligible each year for SAFER grants regardless of previous awards. Additional volunteer recruitment programs should be pursued

Retention Programs

While volunteer recruitment is paramount in order to continue with the proposed fire rescue system, retention of existing volunteers should be considered equally important. Existing volunteers already possess the required training, have established roles within the fire rescue system, and are actively participating. These volunteers are crucial to the day-to-day success of the fire rescue system today. While some programs are in place in the individual volunteer stations to try and retain volunteers, the need exists for expanded programs and programs that are applied township-wide to provide equality for all volunteers regardless of what station they hold membership in.

Some retention programs already exist from outside the municipality that our volunteers are eligible to participate in. These programs may require administrative support of the volunteers by the municipal component of the fire rescue system, which must be provided. Other programs targeted towards volunteer retention will have to be created and/or supported internally within the municipality. Retention programs must be designed to focus on the benefit to the volunteer. All volunteer organizations are engaged in active competition for volunteer time, this includes the fire service. If we are to be successful in retaining volunteers in our system we must take an attitude that we are competing against other community organizations, so our incentives to our personnel must outweigh incentives from other organizations.

Retention programs and suggestions are also reflected in the Manheim Township Comprehensive Plan draft document. Under the Facilities and service enhancement recommendations¹⁴ the draft states “*Consider incentives for fire fighting volunteerism such as awards, administrative and fund-raising support, tax breaks, inclusion in Manheim Township employee’s pension plan, reimbursement for training time, and others identified by the Governors Center for Local Government Services*”.

Volunteer Responder Tax Credit – Commonwealth of Pennsylvania

On July 9, 2008 The Governor signed into law Act 66, which amended the Tax Reform Code of 1971 (Code). The amendment added Article XVIII-D to the Code. This Article provides for a volunteer responder retention tax credit against the responders State income tax liability.

Recommendation #11: Manheim Township Fire Rescue staff shall track the required point system to insure compliance and complete and distribute the required tax form to all eligible volunteers

¹⁴ Manheim Township Comprehensive Plan – Draft November 12, 2008, page 98

Capital Appreciation Program

Currently two of the volunteer stations reward their volunteers for their service with participation in a Capital Appreciation Program (CAP). A CAP functions much like the popular Length of Service Award Program (LOSAP). LOSAP was previously in place in Manheim Township, however after an unexpected death of a member it was discovered that this program was under-funded and was abandoned. The CAP was brought in to replace the LOSAP.

The CAP is designed to reward years of service with a monetary contribution at the “retirement” age of the volunteer from service in the organization, currently, that age is set at 60. Every year the participating organization places a pre-determined dollar amount into a group account for each active member. The group account is audited by an independent agency each year, the member themselves may not direct the activity of this account. Members may not draw from this account until retirement age, or until they leave the organization prior to the retirement age. The CAP is essentially serving as a pension for volunteer service.

Recommendation #12: Manheim Township Board of Commissioners should provide approval of funding for CAP Program and expansion to cover volunteers from all three volunteer fire rescue stations within Manheim Township

Volunteer Incentive Reward Program

A Volunteer Incentive Reward Program (VIRP) is designed to reward current volunteer personnel for their service to the fire rescue system. The VIRP can also be used as a recruitment tool to entice new personnel to join the fire rescue system. As previously stated, volunteer incentives should no longer be considered above-and-beyond what is expected, they should be seen as a necessity in order to retain and recruit volunteers. The changing demographics of volunteer personnel have made this type of program a necessity.

During the strategic planning process the concept of a VIRP was created. This program is based on points, and mirrors the system that was created for the Volunteer Responder Tax Credit program administered by the Commonwealth of Pennsylvania. The concept was to use the same type of point system so that these two programs could be tracked together, allowing for easier calculation and to make it less time consuming. The VIRP is based on quarterly points and rewards which can then be calculated to determine if the volunteer has met the requirements for the Tax Credit program.

The VIRP will provide awards quarterly to those volunteers who have achieved points in multiple categories. The categories that have been established include:

- Response Rate
- Training
- Drills
- Meetings and Attendance
- Related Activities
- Duty Crew

In addition, yearly bonus points can be achieved by the volunteer if they:

- Are an elected or appointed officer of the company
- Maintain some level of national certification
- Achieve a new level of national certification
- Maintain membership in their organization and become a Life Member

The rewards will be distributed in the form of gift cards to various local businesses. The volunteer may choose which establishment they wish to receive their gift card to. The cost of the VIRP rewards would be covered in the yearly allotment to each volunteer station.

It should again be noted that this type of program is becoming the norm, not the exception. The time commitment the volunteer provides to the fire rescue system is enormous, and differs from those of other volunteers and volunteer organizations. The level of commitment, required training, and physical job requirements of a volunteer firefighter can not be underscored enough.

Recommendation #13: Manheim Township Board of Commissioners should provide approval of concept and funding for Volunteer Incentive Reward Program

Pay-Per-Call Program

A Pay-Per-Call program is designed to pay an hourly or per-call stipend to a volunteer. These stipends are typically paid for response to emergency calls and in some cases training events. The pay rate is generally not as high as a second job or overtime from the volunteer's fulltime employer, but the rate is designed to help defray expenses of the volunteer for their participation such as fuel costs, cellular phone usage in receiving emergency dispatches via text message, etc.

A Pay-Per-Call program would generate enough revenue for a volunteer that the municipality would be required to provide the volunteer with an IRS 1099 form and the Pay-Per-Call stipend would be considered as taxable income. While Pay-Per-Call programs have been instituted in other municipalities in the Commonwealth, there are no clear rules or guidance outside of the IRS reporting requirements on how this type of program should be administered.

Recommendation #14: A Pay-Per-Call program should be considered only as an alternative retention program in Phase II if volunteer staffing declines in Phase I

Explorer Post Program – Junior Firefighters

The Junior Firefighter Program remains a successful program in the Manheim Township Fire Rescue system. Additional measures should be implemented that will provide the juniors age 14-18 with additional opportunities that may result in additional members within the program. Expanded opportunities that do not exist under the current structure may include scholarship and educational grant opportunities for post-secondary education, and other opportunities through the Boy Scouts of America organization.

Recommendation #15: Manheim Township Fire Rescue should research and implement if appropriate an Explorer Post Program to benefit the Junior Firefighter Program in Phase I

Access to Higher Education

Higher education in the field of fire science is growing at a rapid pace. Many community colleges that have public safety facilities have expanded into college level degrees in this field. Four year degrees have also become offered at more colleges and universities, and master's degree programs are now becoming more prevalent.

A proliferation of on-line programs offering both Associate and Bachelor degrees has become accredited and available over the last several years. The majority of these programs offer prospective students with the opportunity to transfer in credits from other colleges or universities as well as awarding credit for previous training and national certifications. Courses in the core program of fire science as well as general education requirements can all be obtained on-line.

The Manheim Township Fire Rescue system has registered with Columbia Southern University in Orange Beach, Alabama as a Learning Partner. Columbia Southern University is accredited by the Distance Education and Training Council which is listed by the U.S. Department of Education as a nationally recognized accrediting agency and is a recognized member of the Council for Higher Education Accreditation. Columbia Southern is also licensed by the Department of Postsecondary Education in the State of Alabama. Being registered as a Learning Partner allows for all accepted students who are members of the Manheim Township Fire Rescue system to receive tuition discounts for all courses.

Recommendation #16: Manheim Township Fire Rescue should provide supplemental funding for higher education for volunteer personnel should federal grant monies not be awarded

Cost Savings

A substantial cost savings to the municipality will be realized well into the future by providing continued support to the volunteer force initially through part time staffing as opposed to full time staffing. In addition, supplemental part time staffing along with aggressive recruitment and retention programs, as outlined in section XXX of this strategic planning document, will continue to negate any need for discussion of a full time career firefighting force for the foreseeable future.

There are several available sources of information and statistics that can be used to calculate the cost savings of a volunteer or combination firefighting force. One of the most widely accepted sources is the National Volunteer Fire Council (NVFC). The NVFC has created a Cost Savings Calculator which can be based on local conditions in order to determine the approximate cost savings to the municipality of having a volunteer force. The Cost Savings Calculator analyzes several criteria including:

- Square miles of municipality/population/housing inventory
- Number of active volunteers engaged in firefighting/fund raising/administration
- Number of fire rescue stations/apparatus fleet
- Starting salaries of similar positions in the local vicinity

When entering the required data into the NVFC Cost Savings Calculator, information such as the number of career positions needed to replace the existing volunteer force and the costs to replace the existing volunteer force is calculated. These costs include salary and benefits, administrative costs, equipment and apparatus costs, and capital equipment expenses. All of these costs would need to be absorbed 100% by the municipality if a volunteer force did not exist.

When entering data based on Manheim Township and the other requested local conditions such as salary for similar positions, the following costs and savings are projected for Manheim Township based on the NVFC Cost Savings Calculator:

Cost to implement fully career force in Manheim Township using NVFC model:

- Cost for salary/benefits to replace volunteer force - \$ 4,592,000 per year
- Cost for administration of fully career department - \$ 233,310 per year
- Costs for Personal Protective Clothing - \$ 310,000
- Costs for Apparatus Fleet - \$ 2,821,000
- Capital Equipment Expenses Replacement - \$ 3,131,000

Savings to Manheim Township by retaining volunteer/combination force:

- Annual Savings to Manheim Township - **\$ 5,675,310**

Career Staffing

There is a consensus among all three volunteer fire rescue stations that while additional volunteers will help to provide staffing within the Fire Rescue system, there is no guarantee that a sufficient number of additional volunteers can be recruited or that existing volunteers can be retained. While recommendations are contained within this document for both recruitment and retention, the addition of career staffing to supplement the cadre of available volunteer personnel is the only guarantee that staffing will be available to respond to emergency incidents.

Again referencing the Manheim Township Comprehensive Plan draft document, a section relevant to fire rescue staffing and the need for “paid fire staffing” is reflected¹⁵ under the Infrastructure section and states *“By the year 2020, the combination of the number of active volunteers, paid fire staff, and other staffing arrangements adequately meets the demands of the increased population”*. Also under Facilities and service enhancements it is noted to *“Consider incorporation of paid firefighting personnel to support volunteers, especially during the work day...”*

While an all-volunteer organization is the most desirable from a financial perspective for the municipality as shown in the previous information, the transition to a combination-style organization is inevitable. The call volume, size, and service demand in the municipality has pushed the all-volunteer system to the limits. The current system now experiences lapses in coverage of emergency calls and volunteer personnel are facing increasing commitments outside of the fire service that are making other functions such as training and administration more difficult for the volunteers to achieve. Some provision for career personnel will be essential to support the volunteer force.

Transitioning to a posture where the municipality will supply needed personnel at key times to assist and supplement the volunteer force of firefighters will be the most prudent use of personnel and financial resources. Through effective planning and scheduling, the need for fulltime career firefighting-only positions can continue to be delayed. The use of part time firefighters and fulltime operational/administrative positions will satisfy the need for municipal support.

While integrating career personnel into the all-volunteer system will present some obstacles, these obstacles can be lessened through the creation of an atmosphere of equality between volunteer and career personnel. This shall be accomplished through clear conveyance of expectations to both volunteer and career personnel; through effective use of Standards of Performance for both volunteer and career personnel; and through use of clearly defined job descriptions. It will become imperative that through the hiring process for any career positions that only persons committed to working in a system that respects the service of volunteer personnel and embraces a combination volunteer/career system should be accepted.

All recommended positions will be placed into the Manheim Township Broadband program for the establishment of a salary range. The existing broadband program has

¹⁵ Manheim Township Comprehensive Plan – Draft November 12, 2008, Page 96

five (5) pre-established bands (Leader, Manager, Administrative Support, Technical, and Maintenance) that are available for placement of new positions. In addition each band with the exception of the Maintenance band has three (3) zones that further define salary ranges. This strategic plan does not make any recommendations on salary range for any full or part time positions. The final determination will be decided by the Board of Commissioners and the Manheim Township Finance Director.

It must be noted that the initial request for career positions originated with volunteer personnel. The majority of the volunteer personnel in the municipality have recognized that service to the community, in the form of emergency response and required staffing, is more important than a quest to maintain 100% volunteer staffing which may result in failed response. The proposed career positions discussed in this chapter would be direct employees of the municipality, not employees of the volunteer stations. This therefore has no impact on their status as individual 100% volunteer organizations.



Deputy Fire Chief / Safety Officer Position

The position of Deputy Fire Chief / Safety Officer has been identified as the next necessary position to be filled in the Manheim Township Fire Rescue system. The proposed functions of this position will hope to add first and foremost to the safety of our volunteer and career personnel. Second, this position will increase the administrative and operational oversight within the Manheim Township Fire Rescue system. Expansion of on-duty coverage time with career officers will be accomplished, which will provide the volunteer component with increased assistance both operationally and administratively. Coverage time will be expanded to evenings hours, which has been identified as a high call volume time of day, and a weekend program for either on-duty or on-call will be able to be established.

The proposed functions that would be primary to this position may include the following safety-related responsibilities:

- Coordination with volunteer fire companies regarding health and safety related issues to include:
 - Personal Protective Equipment
 - Breathing Apparatus Maintenance and Fit Testing
 - Entry Level and Follow-up physical examinations
 - Vaccination Program
 - Personal Accountability System
 - Coordination of Employee Assistance Program
- Develop policies, plans, and procedures to minimize risk to volunteer and career personnel
- Administration of Workers Compensation program to include paperwork, follow-up, and related items associated with employee injury, care, treatment, and return to work
- Conduct or provide for safety training on programs and policies not covered under fire suppression or EMS training programs
- Inspection of Fire Rescue facilities for safety-related deficiencies
- Municipal representative on Manheim Township Fire Rescue Accident Review Panel
- Act as Safety Officer during emergency incidents or large scale non-emergency events within the municipality

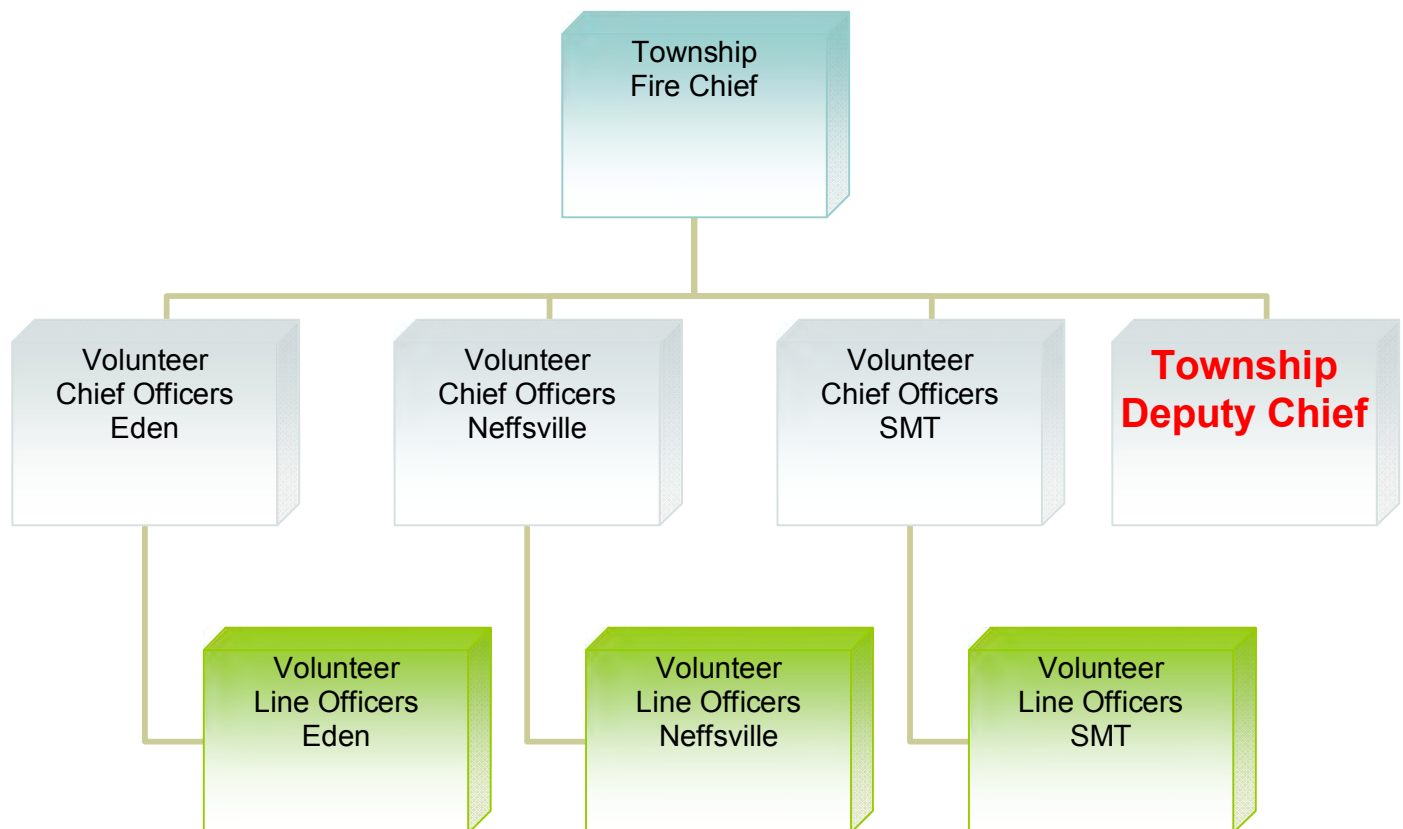
In addition, as the Deputy Fire Chief this position would have the responsibility to fill the following roles in the absence of the Fire Chief:

- Plan, coordinate, and supervise the overall activities of the Fire Service in coordination with volunteer officers and members of the three Manheim Township volunteer fire companies
- Plan, coordinate, and supervise the overall activities of the Emergency Management Office in coordination with representatives of the fire service, police department, and EMS organization.

- Act as the Manheim Township representative and Public Information Officer on issues concerning the Fire Service or Emergency Management
- Have the ability to observe and report fire safety complaints and deficiencies in accordance with approved codes; ability to take corrective action to correct or eliminate the deficiency; ability to coordinate with Code Compliance office for enforcement actions

The Deputy Chief position would need to be assigned in the command structure in two different roles, one for non-emergency functions where the position would report directly to the municipal Fire Chief, and one for the position's role during emergency response, in which case the role of Deputy Chief would report in the chain-of-command as the existing Fire Chiefs position does. The chain-of-command is reflected below:

Chart 18: Proposed Command Structure for MTR – Deputy Chief Position



Recommendation #17: Manheim Township Board of Commissioners should allow for creation of and approval to hire a career Deputy Chief / Safety Officer position in Phase I with a start date of April 1, 2010

Part Time Firefighter Pool Positions

As previously noted, supplemental career staffing has become a necessity in order to provide staffing assistance to the volunteer personnel. While it has been noted that an all-volunteer force is ideal from a cost perspective, this is simply no longer feasible in this municipality.

The concept of creating a pool of available part time personnel versus dedicated fulltime personnel or dedicated shifts for part time personnel has been discussed at some length. It has been determined that through accurate tracking of available volunteer personnel, part time personnel could be deployed at any needed times to fill gaps in volunteer coverage. The uniqueness of volunteer staffing in this municipality, when considering Come-From-Home responders, Live-In members, and Duty Crew personnel creates abnormal gaps in coverage. Whereas volunteer stations that only have come-from-home responders can predict with some degree of certainty their gap times based on normal work hours and days of their members. Utilizing the programs of Live-Ins and Duty Crew make predicting the gap times much more difficult as these two programs provide for members with very fluid schedules.

To overcome the scheduling challenges these programs create, the volunteers have recently begun using a system known as “I Am Responding”. This system was designed to allow come-from-home responders to send via their cell phones a message to the fire station that they are responding to a dispatch. This allows for the volunteer station to know who is responding to provide staffing, and the volunteer stations can now plan accordingly with their manpower. This software system also allows for pre-scheduling of volunteer time. This portion of the system will allow for the Live-In and Duty Crew personnel to enter their work days and times or other scheduled commitments into the system. From a central point the system can be accessed to see what the level of staffing will be on a certain day, not counting come-from-home responders. Through this scheduling system it would allow for the municipality to make a reasonable determination as to what days volunteer staffing would be minimal and need supplemental coverage from part time career personnel.

Training levels for any career staffing, whether part time or full time must be in compliance with the requirements of the Manheim Township Fire Rescue Standard Operating Guidelines for their respective positions. It is imperative that in order to create equality between volunteer positions and career positions that each is treated equally.

Several criteria have been established in consultation with the Manheim Township Finance Department that will be in place to provide financial oversight of the Part Time Pool program. These criteria will dictate the financial parameters of the program in order to keep the program within budget limitations and employee status as Part Time. These parameters include:

- Part Time Pool Firefighters may not exceed 1,560 hours worked in a calendar year
- Part Time Pool Firefighters may not *regularly* be scheduled for over 30 hours per week (The target will be 24 hours or less per week as a maximum)
- Part Time Pool Firefighters would receive overtime pay for any work week over 40 hours

In addition, Workers Compensation and FICA must be paid on these employees. These figures have been calculated into the projected budget amount for the Part Time Pool program (Currently these figures are 6% of salary for workers compensation and 7.65% for FICA).

The Commonwealth of Pennsylvania First Class Township Code, Article VI, Section 626 requires that *fulltime* firefighters must follow the provisions of the civil service commission. However there is no mention of part time firefighters as they relate to civil service. It is a recommendation of the Labor Counsel retained by Manheim Township that in order to avoid any future issues with civil service that all part time firefighters should also fall within the provisions of the civil service commission.

Part time firefighters will fall under the command of the municipal Fire Chief and Deputy Chief. These positions will be municipal employees and must therefore report to a municipal authority. However, on the fire ground these positions must follow the established chain of command for operational incidents and they would be responsible to report to volunteer officers.

The proposed functions that would be primary to this position include:

- Supplemental staffing to the volunteer stations for response to emergency incidents
- Assist with public education duties
- Assist with pre-planning of commercial and residential properties
- Assist on special projects as required
- Provide other needed support functions to the volunteer personnel as needed or requested

Chart 19: Proposed Command Structure for MTR Part Time Firefighter Positions During Non-Emergency Activities

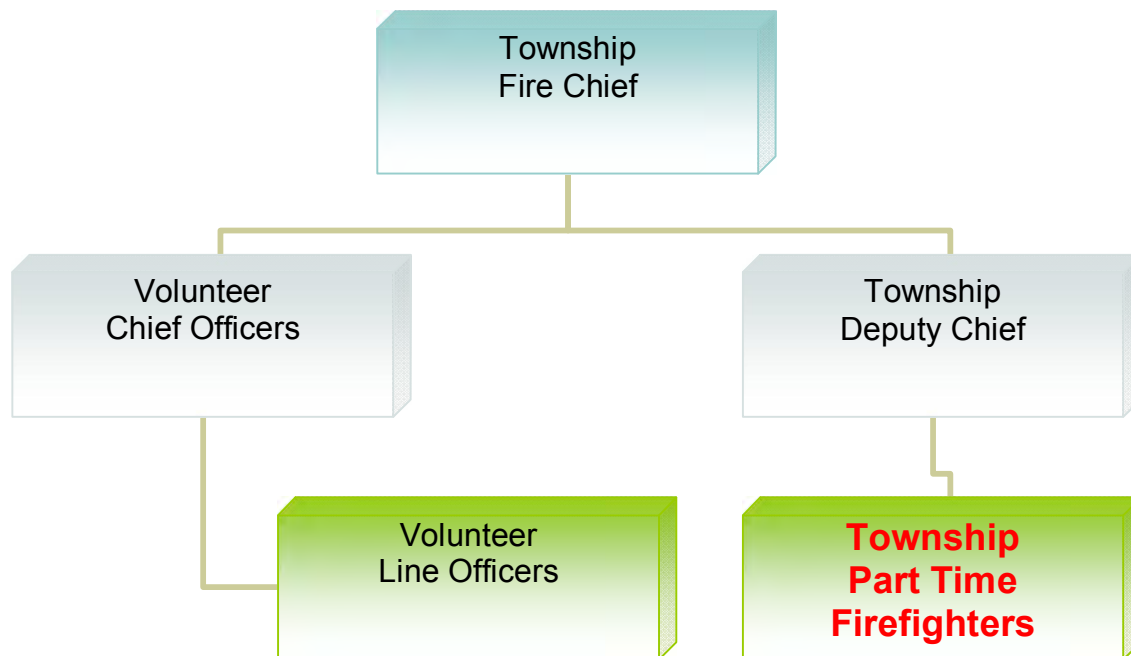
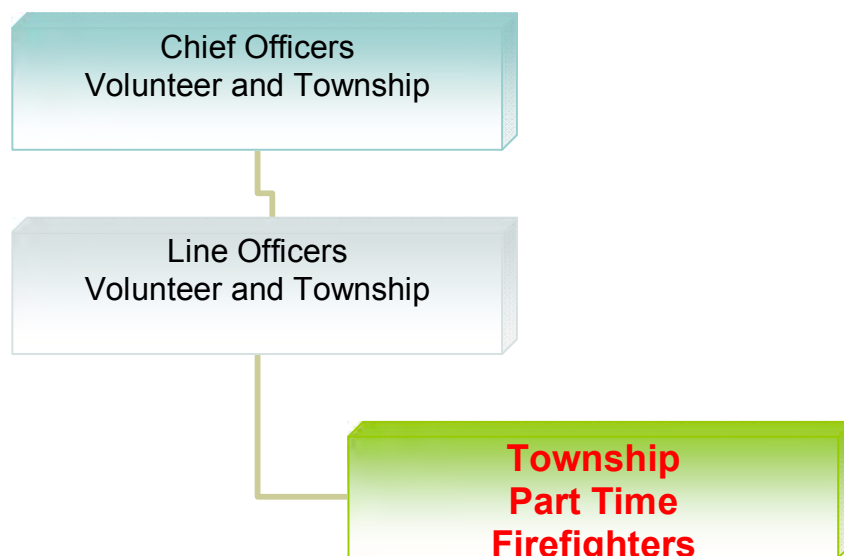


Chart 20: Proposed Command Structure for MTR Part time Firefighter Positions During Emergency Responses



Recommendation #18: Manheim Township Board of Commissioners should allow for creation of and implementation of a Part Time Pool Firefighter staffing program in Phase I to supplement the volunteer firefighter staffing with a start date of July 1, 2010

Captain / Training Officer Position

The position of Captain / Training Officer has also been identified as a necessary position to be filled in the Manheim Township Fire Rescue system. The proposed functions of this position will attempt to alleviate the time burden on volunteer officers who are responsible to conduct, monitor, and oversee training within the municipality. Second, this position will again increase the administrative and operational oversight within the Manheim Township Fire Rescue system. Expansion of on-duty coverage time with career officers will be accomplished, which will provide the volunteer component with increased assistance both operationally and administratively. Coverage time for this position is envisioned to be evening and weekend hours predominately, in order to assist the volunteer component with their training needs. Most training is conducted by the volunteers on a pre-established evening schedule, with expanded training events occurring on weekend hours.

The proposed functions that would be primary to this position include:

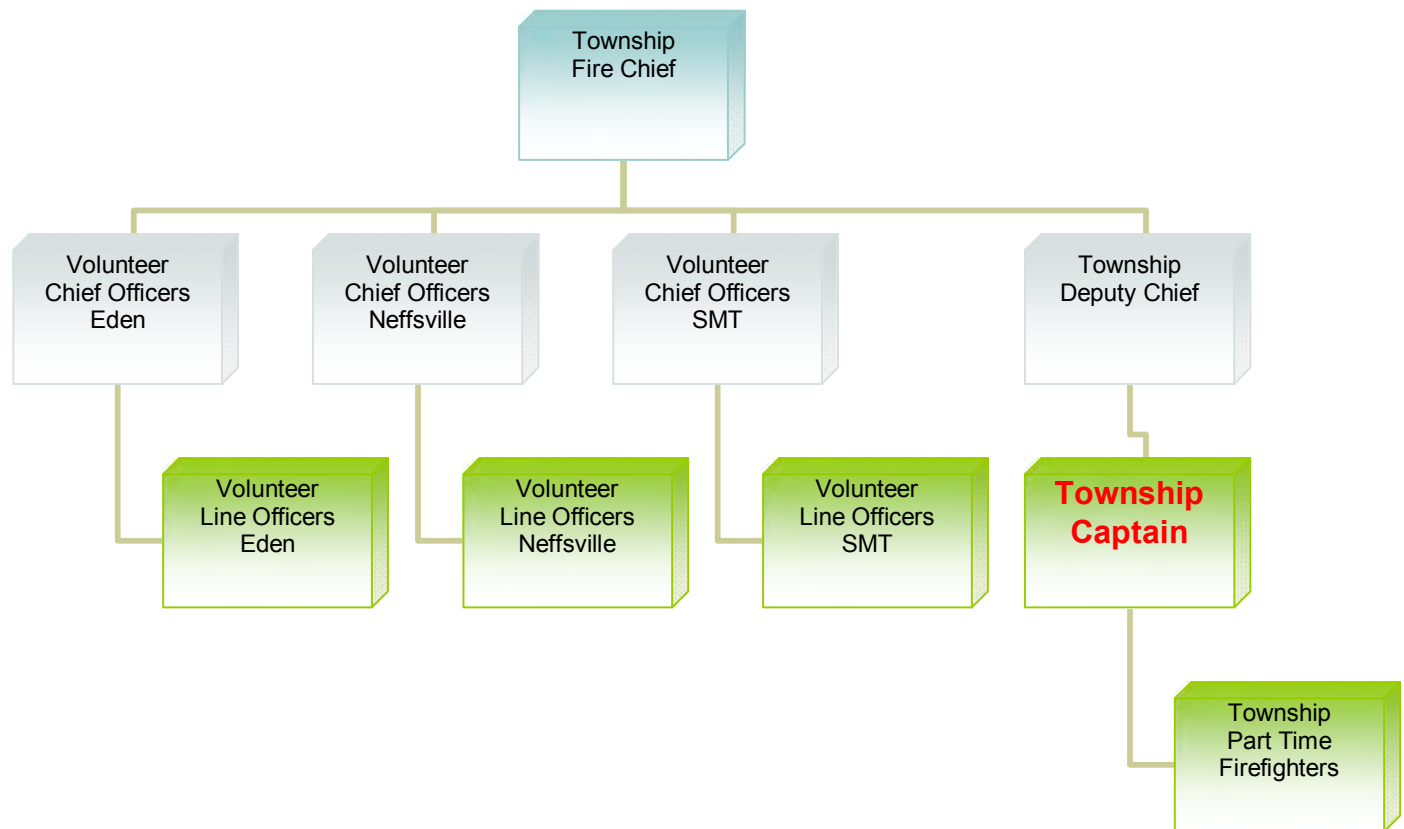
- Performing administrative and technical work assisting the Manheim Township Fire Rescue Training Committee
- Assist with developing, implementing, and conducting fire rescue or EMS training courses for volunteer and career personnel
- Serve as liaison between the Manheim Township Fire Rescue system and local, state, and federal training agencies
- Respond to emergency incidents during assigned shift to supplement volunteer staffing

In addition, as the municipal Captain this position would have the responsibility to fill the following roles in the absence of the Fire Chief and/or Deputy Fire Chief:

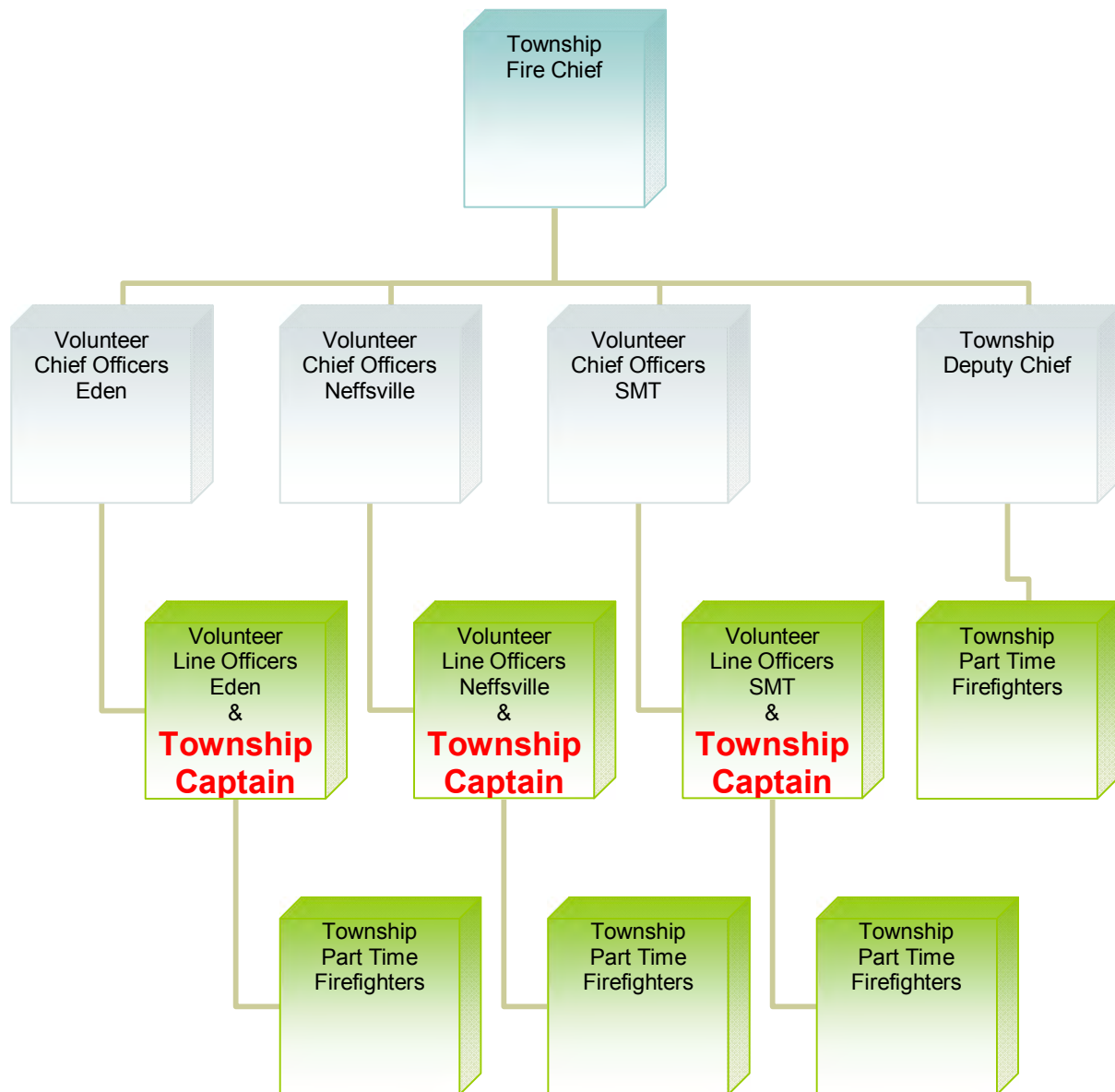
- Act as the Manheim Township representative and Public Information Officer on issues concerning the Fire Service or Emergency Management
- Have the ability to observe and report fire safety complaints and deficiencies in accordance with approved codes; ability to take corrective action to correct or eliminate the deficiency; ability to coordinate with Code Compliance office for enforcement actions

The Captain's position would need to be assigned in the command structure in two different roles, one for non-emergency functions where the position would report directly to municipal officers, and one for the position's role during emergency response, in which case the role of a Captain's position would report in the chain-of-command to any municipal or volunteer officer above their rank. The chain-of-command for both roles is reflected below:

**Chart 21: Proposed Command Structure for MTFR Captain Position
During Non-Emergency Activities**



**Chart 22: Proposed Command Structure for MTR Captain Position
During Emergency Responses**



Recommendation #19: Manheim Township Board of Commissioners should allow for creation of and approval to hire a career Captain / Training Officer position in Phase I with a start date of January 1, 2012

Internship

Utilizing available man hours from the Part Time Pool positions, the possibility exists for the creation of an internship program in cooperation with the Lancaster County Career and Technology Centers Protective Services Academy (LCCTC- PSA). The LCCTC-PSA program educates and trains high school seniors from across Lancaster County in the fields of Fire Rescue, EMS, and Law Enforcement. These students attend the program fulltime at the Lancaster County Public Safety Training Center, which includes time for their general education requirements in addition to their studies in the protective services.

Internship opportunities currently exist to other students enrolled in LCCTC programs, including the EMS program through the Protective Services Academy. Known as “Cooperative Education”, these internship programs are uniquely structured for each discipline. This internship would be the first for the fire program, allowing Manheim Township the opportunity to help tailor the program to our needs. The internship programs are covered under the provisions of the Protective Services Academy, which is governed and accredited by the Council on Occupational Education, the Pennsylvania Department of Education, and the Pennsylvania Department of Health.

The parameters that Manheim Township should seek from the LCCTC may include:

- Age – Over 18
- Academics – In top percentage of class
- Availability – Able to work required hours and have transportation
- Selection – Ability to interview and subject intern to MTFR guidelines including background check and entry level physical

The Manheim Township Fire Rescue system may seek to employ the intern through their third and fourth quarter of the Protective Services Academy. This would make the intern available to MTFR from approximately early January to early June. The intern would be hired as a part time employee utilizing available funds from the part time pool program. The pay rate for the intern would be determined by the Manheim Township Finance Department based on the Manheim Township Employee Banding System which establishes rates of compensation. It would be envisioned however that as an intern the pay rate would be substantially less than permanent part time employees, while still meeting all applicable wage requirements.

The assigned duties of the intern would vary per shift. The designated hours of employment may range from early or mid afternoon to late afternoon or early evening. The suggested total hours per week shall be 20 hours maximum. These suggested hours would allow for the intern to report after school hours and would cause no disruption to their academic studies. The intern would be exposed to all aspects of the fire rescue service and assigned duties may include:

- Assigned as staffing on fire rescue equipment
- Assigned as staffing on Quick Response Unit
- Assist with equipment maintenance and inventory
- Assist with preparation of training activities
- Assist with public education events
- Assist with pre-incident intelligence activities
- Assist on special projects as assigned

Recommendation #20: Manheim Township Board of Commissioners should allow for creation and recognition of an Internship program in conjunction with the Lancaster County Career and Technology Center Protective Services Academy and funding the position from the part time pool program



FIRE STATION FACILITIES AND APPARATUS FLEET DEPLOYMENT

The existing geographic locations of the three volunteer fire rescue stations, while not conducive to meeting time-distance models or being strategically located throughout the municipality, are unable to be relocated without great expense. All three fire rescue locations have performed anywhere from limited to extensive renovations over the last 11 years, with the resulting financial investment in these three locations making it unjustifiable to relocate them.

The building of new fire rescue facilities within the municipality to meet time-distance models and demand for services will prove challenging. Most areas of the municipality that are directly affected by increased time-distance factors are lacking available land for additional development, thereby negating any possibility of properly zoned land for fire rescue stations. In addition, even if land were to become available in these areas of the municipality the cost for commercial land places it out of reach for reasonably acquiring the parcel and developing it into a fire rescue facility within the financial means of the fire rescue system.

When analyzing the need for fire station facilities two separate standards can be viewed – one based on geographic coverage and the second based on demand coverage.

Geographic-Based Coverage

Geographic-based response coverage is based on the principle of responding fire apparatus being able to cover a certain distance from the facility in a certain amount of time. This is regardless of the frequency of response in that geographic area. A benefit to geographic-based coverage is the appearance of fairness in the distribution of fire rescue resources. It can be said that every occupied home or business may be within a set mileage distance or response time from an established fire rescue facility, thus all stakeholders are provided the same protection.

The disadvantage to geographic based coverage is the inefficient use of resources and the inability to function in this type of coverage with limited resources. Geographic-based coverage will mandate that each facility is staffed with an available unit. Areas of this municipality with lower population counts would make it extremely difficult to staff some facilities that may be recommended under this type of coverage model. In addition, this model breeds inefficiency as units may be committed to areas with low call volumes while areas of the municipality with higher call volumes may be experiencing a lack of resources.

Demand-Based Coverage

When providing demand-based coverage, call volume and workload become the determining factors for resource placement. The primary benefit to this type of coverage model is that the highest percentages of emergency calls are being answered in the shortest amount of time. This concept translates into providing the greatest number of favorable outcomes for the stakeholder.

The disadvantage to this type of coverage model is two-fold. First, you will identify on the front-end those areas with lower call volume and immediately recognize that these areas will face longer response times. Also, demand-based coverage must be able to move with the areas of higher demand. This requires this type of coverage to have the flexibility to move or relocate resources. This is highly impractical in Manheim Township as it has already been identified that very few if any locations exist in the already built-upon areas to build or relocate fire rescue facilities.

It should be noted that no one specific type of coverage model can be fully implement within Manheim Township. A combination of time-distance response coverage, geographic-based response coverage based on existing facilities, and demand-based response coverage based on future growth in available zoned areas will dictate the final approved model for this municipality.

Fire Station Facilities – Additional Facilities

The area identified as the most challenging from a time-distance response perspective is the northeast area of the municipality, centered on the village of Oregon. While other areas exist within the municipality that are not serviced within a 1.5 mile engine response zone, future development and available land for a fire rescue facility greatly impact the ability to construct a facility in those areas. The northeast area has several options for development of a future fire rescue facility to meet the needs of future residential and commercial development in that area.

The Oregon area currently has several large parcels zoned and available for residential development and additional parcels in this area zoned for commercial development. At such a time that this development would occur, the response of fire rescue services would undoubtedly see an increase to this area of the municipality.

Through the course of the strategic planning process, several options have been identified as possible locations for a fire rescue facility. These options all present unique challenges in different areas. Regarding the physical building itself, a phased approach is being taken with this proposed new facility. Initially, several immediate needs have been identified that can be incorporated into one facility. While some of these needs are operational, none are required from a response perspective and could be located at any facility at any geographic location. However, in identifying these needs there is no available space in any of the existing fire rescue facilities, or municipally owned facilities, to properly accommodate these uses. These uses include:

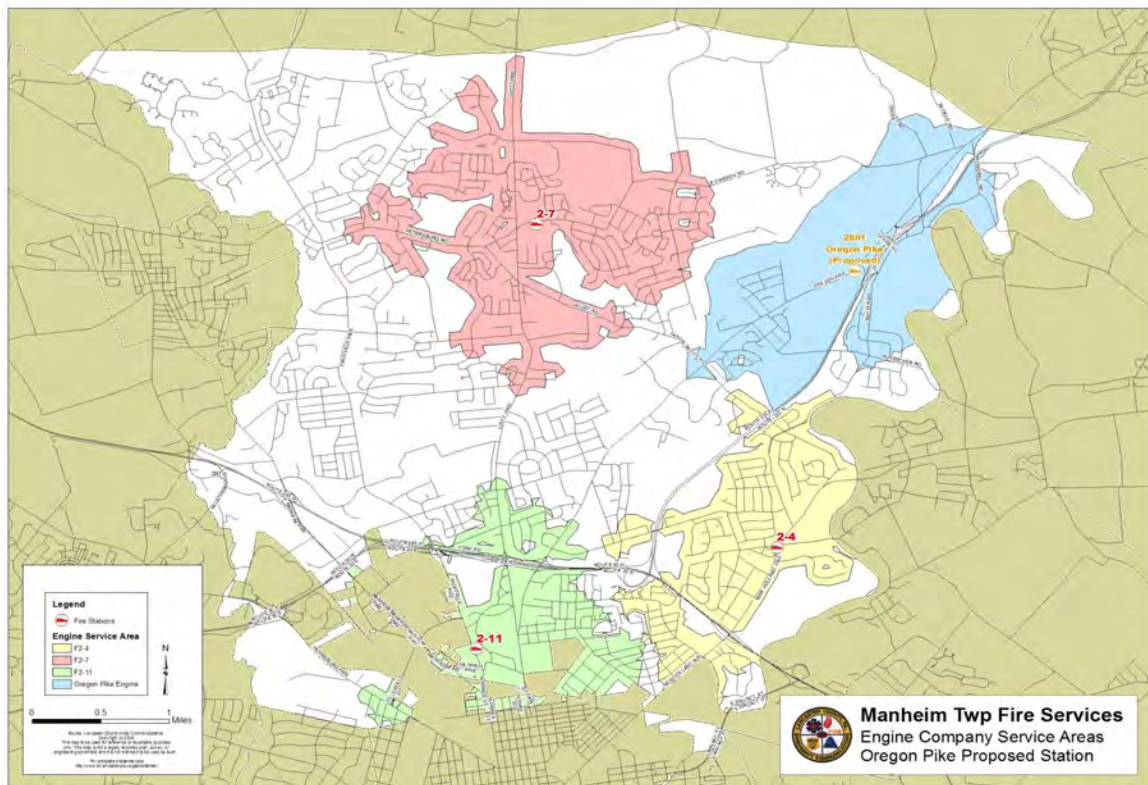
- Administrative Space
 - Office Space
 - Training Division
 - Public Education Division
 - Joint Relief

- Equipment / Apparatus Storage
 - Portable Equipment – Storage
 - Joint Relief Association – Storage/Maintenance/Repair
 - Fire Apparatus – Storage for Reserve Apparatus
- Emergency Management
 - Command Bus - Storage
 - Emergency Operations Center
- Operational (Future Use)
 - Front-Line Fire Rescue station
 - Accommodations for Staffing – Live-Ins
 - EMS Unit – MTAA shared use of facility

As anticipated development occurs in this area the facility would be transitioned in Phase II to an active fire rescue facility with front-line fire apparatus responding from the facility. No additional fire apparatus would need to be purchased; rather apparatus would be moved from other facilities to accommodate the response needs of the new station. The most likely scenario may be a move of the pumper-tanker from the Neffsville station to the proposed new facility. This would move the vehicle with the largest amount of water carried into the most rural area. In addition, the existing pumper-tanker also has foam capabilities and this move would place it closer to the limited-access highway system than its current location.

This pumper-tanker relocation would also allow this unit to respond as a primary engine company. Using the ISO required 1.5 mile drive distance; map 3 illustrates a likely service area from a proposed location in the Northeast. It should be noted that Map 3 is being used for illustration purposes only.

Map 3: 1.5 Mile Engine Coverage Area - Proposed



Recommendation #21: Manheim Township Fire Rescue should construct a northeast Fire Rescue facility at a time warranted by increased population in the proposed coverage area

Fire Station Facilities - Renovations

The three existing volunteer Fire Rescue facilities have all undergone a renovation project within the last 11 years. Two (2) of the facilities (Eden and Southern Manheim Township) have maximized the available space on their property and are unable to further expand the footprint of their facilities. The Southern Manheim Township facility may have the future potential for an additional interior renovation based on under-utilized space currently being used for fund raising efforts. The Neffsville facility has not maximized its footprint and still has available space for future expansion.

Recommendation #22: Manheim Township Fire Rescue should pursue renovations to the existing Orchard Street facility to better accommodate and allow for expansion of the Live-In program

**** This recommendation is contingent upon a decision that relocation is not possible in Phase I or Phase II of the Strategic Plan***

Fire Station Facilities - Relocation

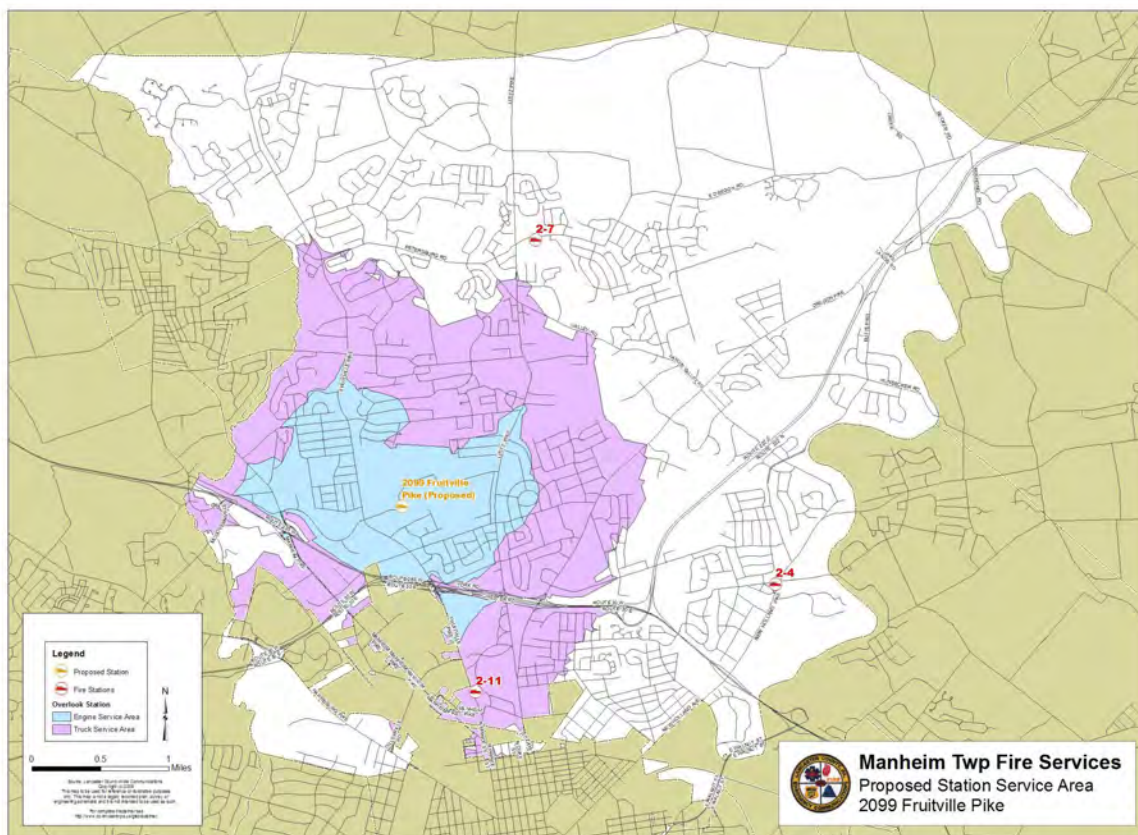
Fire station relocation is typically a daunting challenge. In Manheim Township all three existing fire station facilities could be interpreted to be in less-than-ideal locations to meet today's population centers and service demands, as evidenced in previous service area maps. However, due to circumstances such as lack of available land, lack of financial resources, and size of first-response territory among others, relocation is not an option for most of the facilities. One facility, the Orchard Street facility owned by Southern Manheim Township Fire Company, may present a future opportunity for relocation. This assumption is being made purely from the standpoint of the possibility of available land within their fire district that would allow for a more reasonable location for a fire rescue facility from the perspective of time-distance response.

As identified above, this particular facility is being reviewed for a possible renovation project. A renovation at this facility is justified in order to correct deficiencies in and allow for expansion of programs aimed at volunteer staffing, specifically the Live-In and Duty Crew programs. While the renovation would accomplish the goal of serving these programs, it would not address or correct response time issues. The only correction for response time issues would be to relocate the facility, most likely further north in the response district. *(Note – the strategic planning committee did not fully research the option of relocation – this section of the strategic plan is meant for future discussion purposes only)*

While several locations do exist north of the Orchard Street facility, none have been thoroughly researched in order to provide an accurate recommendation. When reviewing possible locations in relation to time-distance response, the address of 2099

was used for research purposes. This address is the Overlook Campus property. It should be understood that this property is not being recommended, it was simply used to create a scenario. When using this address, a considerable difference is noted as to what area of the municipality would be capable of receiving 1.5 mile engine company service and 2.5 mile truck service, as noted on Map 4 below.

Map 4: 1.5 Mile Engine and 2.5 Mile Truck Coverage Area - Fruitville Pike



Recommendation #23: Manheim Township Fire Rescue and the Manheim Township Board of Commissioners should evaluate the feasibility of obtaining land north of the existing Orchard Street facility.

Fire Apparatus Fleet

The primary mechanism for the delivery of fire rescue services is the fire apparatus fleet. The demand for service and the time/distance to travel to an emergency incident as it relates to established response goals are the primary driving forces when determining the make up and deployment locations of the fire apparatus fleet.

Table 23: Existing Manheim Township Fire Rescue Fleet

Apparatus Type	Year & Make
Engines	
Engine – 241	1997 Pierce
Engine – 271	2008 Sutphen
Engine – 272	1990 E-One
Engine – 2113	1997 E-One
Reserve Engines	
None	
Aerials	
Truck – 24	2006 Pierce
Rescues	
Rescue – 211	2007 American LaFrance
Tankers	
Tanker – 27	2003 American LaFrance
Specialty / Utility Vehicles	
Squad - 241	2000 Ford Pickup
Squad - 242	2004 Ford Expedition
Squad - 27	2007 Ford / Swab Utility
Squad – 211-1	2008 Ford Pickup
Squad – 211-2	1999 Chevrolet Suburban
Squad – 20	1999 Dodge Durango
Duty Vehicle - 24	2009 Ford Expedition
Duty Vehicle - 27	2007 Ford Expedition
Duty Vehicle - 211	2009 Ford Expedition
Duty Vehicle - 20	2008 Ford Expedition
Traffic Unit - 27	1991 Ford Pickup
Command Bus - 20	2005 Ford Turtle Top
Foam Trailer – 27 ¹⁶	2006 MGS Trailer
Recruitment Trailer - 20	2005 Keystone Trailer
Fire Safety Trailer/Inflatable House	2009 United Trailer

¹⁶ The Foam Trailer 27 unit is not owned or maintained by the Neffsville Fire Company as part of the MTRF Fleet. This unit is owned and maintained by the Lancaster County Emergency Management Agency and is assigned to Neffsville for use as part of the Lancaster County Foam Task Force.

The current apparatus fleet that serves the municipality was not assembled to comply with any accepted model, but rather is a carry-over from several decades of simply replacing existing vehicles. The only major changes to the fleet since the Dr. Bryan survey, neither of which was recommended in the survey, was a consolidation of a heavy rescue and aerial tower into a single vehicle at the Eden station and replacement of a rescue-pumper vehicle with a fully certified rescue vehicle at the Southern Manheim Township station.

Fire Apparatus Fleet Models

While there is no set standard that has been approved across the fire service, several models do exist that are widely recognized and accepted. When comparing these models, most do provide a high percentage of agreement with one another regardless of whether the model is based on population, response time, or response distance. Below are two separate apparatus models that are shown for comparison purposes:

Table 24: Fire Apparatus Model Based on Population¹⁷

Apparatus Type	Population Factor	Units Needed for MT
1500 gpm Engine	1:10,000 population	4
Aerial Truck	1:25,000 population	2
Heavy Rescue	1:50,000 population	1
Tanker	1:10,000 population (Rural/Non-Hydrant)	1

Table 25: Fire Apparatus Model Based on ISO Recommendation¹⁸

Apparatus Type	ISO Recommendation
Engine Company	6
Reserve Engine Company	1
Ladder Company	3
Reserve Ladder Company	1

The ISO recommended fire apparatus model as shown on Table x is difficult to achieve in this municipality. Currently there are three (3) existing fire rescue facilities. In order to achieve the recommended number of fire apparatus according to ISO, it is estimated that three (3) additional facilities would need to be constructed throughout the Township. This is not a viable option as determined by the strategic planning committee. There is simply not enough available funding to construct three new facilities, in addition to the lack of available manpower to staff three facilities. The committee does not recommend this apparatus fleet model.

The fire apparatus fleet model based upon population most closely resembles the current fleet composition in Manheim Township today. This model can be housed in

¹⁷ Fire Apparatus Model Based on Population - based on Capital Intensity Factor Criteria

¹⁸ ISO Grading – Manheim Township – December 1990

less than six fire rescue facilities, thereby reducing the overall cost of the proposal. In addition, less fire apparatus would need to be added to the existing fleet to meet this suggested model. One difference in this model as compared to the ISO recommended model is that it does not take into account reserve apparatus. With less front line fire apparatus the need for reserve apparatus is more prevalent in order to insure all stations are adequately provided with fire rescue resources. Reserve apparatus is addressed in this plan and also is incorporated into the proposed budget. Also, the ISO model does not take into account units for rural areas (Tankers). This would add additional units to the ISO model over and above what is reflected on Table 29. The apparatus versus population model is recommended for endorsement.

In addition to front line fire apparatus as reflected on these models, other apparatus exists in the fleet (as reflected on Table 27) that must be accounted for in the strategic planning process. These units along with recommendations and justifications are:

Mini-Squads – A “mini-squad” vehicle may be defined as a vehicle larger, with more capabilities than a standard pickup truck type vehicle, but smaller and more maneuverable than a full size fire suppression vehicle such as an engine or rescue truck. Currently, one mini-squad is in service in Manheim Township. This unit does not carry water but does carry vehicle extrication equipment and miscellaneous other equipment. It also allows for a station to respond when staffing is below that required for front line suppression vehicles. Other variations of mini-squads are being explored to replace the existing two (2) additional pickup truck style vehicles. The addition of mini-squads in the other two volunteer stations will allow for increased capability while addressing alternatives during staffing short falls. Mini-squads should become a recognized part of the apparatus fleet and be included in the replacement schedule.

Utility Vehicles – As stated above, mini-squads should be implemented in place of pickup truck style vehicles. Of the two existing pickup truck style vehicles remaining in the fleet, only one of those vehicles should be maintained by the Manheim Township Fire Rescue system. This vehicle would be assigned directly to the municipality who would maintain the vehicle for use by all three volunteer stations. The vehicle would be housed at a central location and would be available for equipment transport, training, or other approved functions for any of the three volunteer stations. No additional pickup truck style vehicles should be maintained in the fleet.

Duty Officer Vehicles – Duty Officer Vehicles are currently maintained by each respective volunteer station. These vehicles are used by Chief Officers in each station on a rotating basis to respond directly to the scene of an emergency incident. Each station has traditionally purchased their own vehicle and paid all maintenance costs, including fuel. These vehicles are not included in the municipally supplied fuel program and have never received any municipal funds for their purchase. These vehicles are “take-home” or “assigned” to the Chief Officers during their weekly rotation, and for this reason it is felt these vehicles should remain the responsibility

of the volunteer stations. There is no recommendation for purchase or maintenance of these vehicles.

Recommendation #24: Endorsement of the Apparatus versus Population Fleet Model to also include additional fleet units not reflected as front line and funding of units in the capital budget.

Fire Apparatus Replacement Schedule

The following tables illustrate that the fire apparatus fleet in Manheim Township is being utilized on an above-average number of response when comparing it to all other fire apparatus within Lancaster County. These statistics reflect the number of emergency incidents that each unit responded on in 2008. These statistics *do not* reflect additional usage of the fleet for non-emergency responses, training, public education, etc. With the exception of one physical unit (Engine 27-2), all front line vehicles in the Manheim Township Fire Rescue apparatus fleet are subjected to an above average usage.

Table 26: Engine Company Usage Statistics - 2008

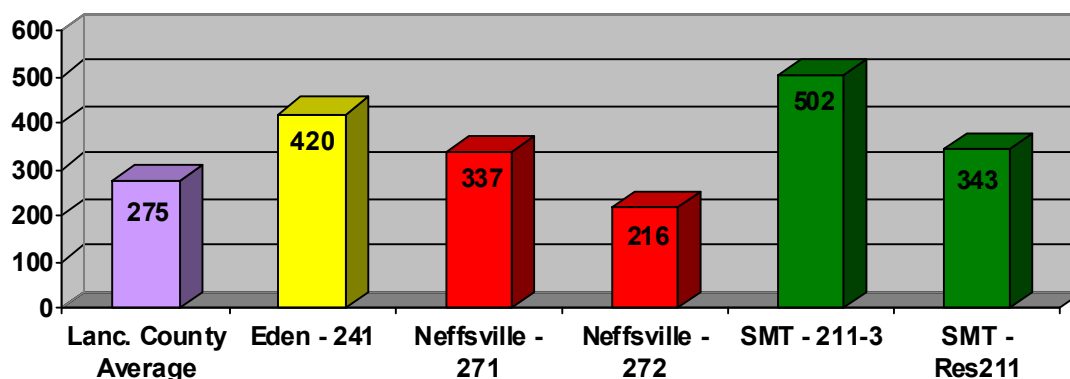


Table 27: Truck Company Usage Statistics – 2008

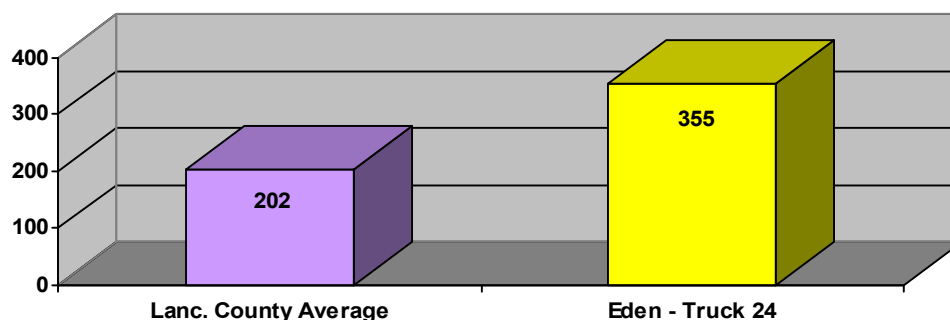


Table 28: Rescue Company Usage Statistics - 2008

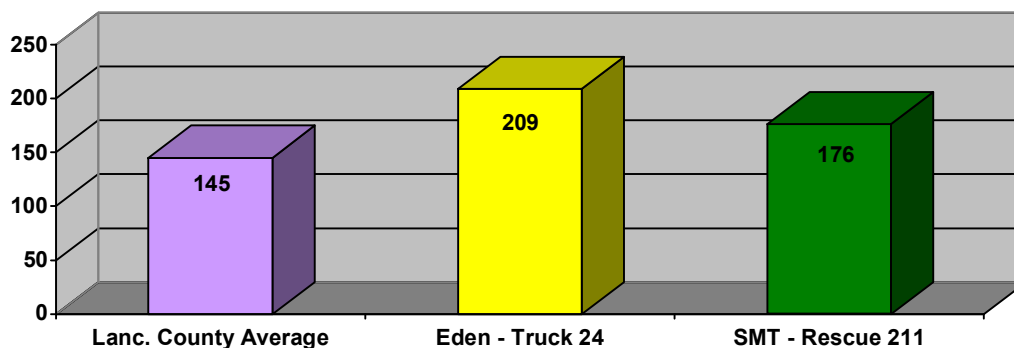
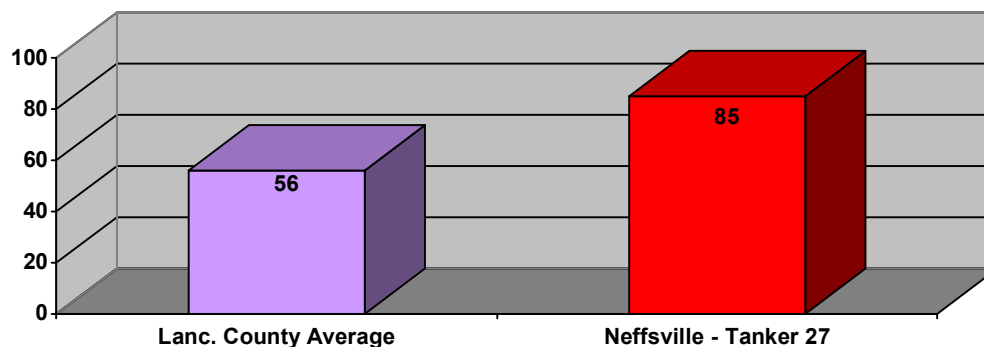


Table 29: Tanker Company Usage Statistics - 2008



The assumptions that can be made when reviewing the fire apparatus usage statistics would indicate a shorter service life for most vehicles in the MTFR fleet due to their high response rates, and again this does not factor in non-emergency usage. The front-line apparatus in the MTFR fleet (pumpers, aerial, rescue) already are scheduled for replacement on a set 15-year schedule. The 15-year replacement schedule was approved by the Manheim Township Fire Council and the Board of Commissioners in the fall of 1996, with a revision approved in May of 2005. It should be noted that when this schedule was initially approved, call volumes were substantially lower than today and the schedule only included front-line vehicles, the schedule did not address utility or support vehicles.

The National Fire Protection Standard (NFPA) 1901 *Standard for Automotive Fire Apparatus, 2009 Edition*, provides guidance on design criteria for fire apparatus. The 2009 standard of NFPA 1901 has increased requirements for new fire apparatus that directly relate to improved firefighter health and safety. All future replacement apparatus for the Manheim Township Fire Rescue fleet will be NFPA 1901 compliant. Some of the 2009 standard requirements include:

- New requirements for vehicle stability and maximum top speed for heavier fire apparatus
- New defined length of seatbelts, requirements for how to measure them, and a new required warning device for seatbelt use
- Requirement that vehicle data recorders capture vehicle speed, acceleration/deceleration, engine speed, engine throttle position, ABS event, seat occupied and seat belt status, master warning device switch position, and date/time
- Rule that cabs on apparatus with GVWR over 26,000 lb. must meet one of two sets of standards on occupant protection during crashes

In addition, the NFPA 1901 standard provides guidance on fire apparatus fleet replacement. Annex D of NFPA 1901 states “It is recommended that apparatus greater than 15 years old that have been properly maintained and that are still in serviceable condition be placed in reserve status¹⁹”. The Manheim Township Fire Rescue Strategic Plan makes provisions for a dedicated reserve engine company; therefore no additional engine companies will need to be placed in reserve status and the units shall be disposed of as surplus at the end of their 15 year service life. Other units such as the aerial device and rescue unit should be evaluated for reserve status at the time of their replacement.

Table 30: Projected Front Line Capital Vehicle Acquisition Costs

Apparatus Type	Acquisition Year	Station Placement	Proposed Cost
Mini-Pumper	2010	Southern	150,000
Mini-Squad	2010	Eden	150,000
Structural Engine	2012	Eden	450,000
Structural Engine	2012	Neffsville	450,000
Structural Engine	2012	Southern	450,000
Structural Engine	2012	Reserve	450,000
Ladder Truck	2016	Eden	1,000,000
Rescue	2018	Southern	750,000
Mini-Squad	2018	Neffsville	150,000
Structural Engine	2023	Neffsville	600,000
Pumper-Tanker	2023	Oregon	600,000

Fire Apparatus Fleet Standardization

A need to standardize the apparatus fleet within the municipality was quickly recognized during this process. Standardizing of the apparatus fleet, as has been proven elsewhere, will improve the efficiency of our personnel. The fire rescue system will also benefit from standardized apparatus by allowing for ease of training with less types of vehicles for driver operators and firefighters to learn, and will allow for easier movement of volunteer or career staff from one station to another without retraining

¹⁹ NFPA 1901, *Standard for Automotive Fire Apparatus*, 2009 Edition, page 176

being needed on equipment. Standardization will also reduce costs of fleet replacement by mandating equal apparatus for each station as opposed to individual design and purchase by each individual station.

During the course of the strategic planning process a task force was created to research standardizing of the apparatus fleet. This task force expanded to include two additional fire rescue organizations from outside Manheim Township, East Petersburg Fire Company and Rohrerstown Fire Company, now allowing for an agreement between all involved organizations to standardize the fire apparatus fleet regionally.

As reflected on Table 33, fire apparatus purchases are a costly investment for the municipality. In order to maximize available capital funds and streamline the purchasing process, it is recommended that fire apparatus be purchased from the Commonwealth of Pennsylvania Department of General Services (DGS) COSTARS program. The COSTARS program is a Cooperative Purchasing Program between local government entities and the Commonwealth. The DGS solicits for contracts for various products and services, and allows local government entities who register for the COSTARS program to purchase from these contracts with competitive pricing. The COSTARS program does meet the requirements for bidding, and has been used many times by the municipality for products and services, including vehicles. COSTARS Contract #13 applies specifically to mobile fire apparatus and the municipality is eligible to buy from this contract.

Recommendation #25: Manheim Township Fire Rescue should standardize the fire apparatus fleet and implement COSTARS purchasing for fire apparatus

OPERATIONAL NEEDS

Public Education

The enhancement and expansion of public education programs shall be a high priority within the Manheim Township Fire Rescue system. Public education and awareness programs specifically targeted to high risk populations is of paramount importance in reducing injury and death to our stakeholders, reducing direct property loss within the municipality, and reducing the likelihood of injury or death to our personnel.

During the course of the strategic planning process, a unified township-wide public education committee was established to coordinate the activities of public education programs across the municipality. Prior to creation of this township-wide committee, each individual volunteer station attempted to provide their own programs utilizing their base of volunteers and available equipment. Since the creation of this committee, the bulk of the public education programs have been completed by combined crews from all three volunteer stations, thus allowing for better staffing and coordination of not only the public education program but allowing for available crews to remain in-service to respond to emergency incidents.

Currently the Public Education Committee focuses on established programs. These programs include elementary age programs in public and private schools, daycare programs, and adult programs primarily targeted at staff-training to extended care occupancies who must meet state regulations. Some occasion programs to community clubs also take place but not on a consistent basis. These programs being focused on today require a minimum number of personnel and incur relatively low costs to provide.

There are tangible economic and public relations benefits to public education programs. Economic benefits include the savings by both the insurance and health care industries by preventing injuries and fires within the municipality. Programs such as smoke detector giveaways have been proven to be a cost effective measure.

The public relations aspect of providing public education programs also should not be over looked. As previously mentioned in this document, a recommendation for tax-based funding is being sought. A perceived return-on-investment should be provided to the citizens who are now funding the operations of the Fire Rescue system. Public education programs provide that return by placing the Fire Rescue system into the community during non-emergency events and providing the citizens with a tangible product or service. Placing a smoke detector into a home, or providing a home safety check, or teaching children how to design and practice a home escape plan are all benefits the citizens will see for their tax-supported investment in the Fire Rescue system.

Through evaluation of the target hazards present within Manheim Township, several high-profile programs have been identified that will be focused on to provide this return-on-investment. These programs will include:

Fire Safety Smoke House / Inflatable Fire Safety House

Educational programs designed for school age children are dependant upon hands-on-activities. Two props have or will become the primary pieces of equipment for use in the elementary and daycare programs; a mobile Fire Safety Smoke House and an Inflatable Fire Safety House.

The Fire Safety Smoke House that our programs currently use is owned by the Lancaster County Fireman's Association. This unit is available to all fire companies located within Lancaster County and is scheduled on a first-come first-serve basis. This has proven logistically to be an area of concern as the existing Fire Safety Smoke House is not always available when public education programs are scheduled within the municipality. The result is some programs being cancelled or being run without the appropriate props. It is being recommended that a standardized written program be created for the Fire Safety Smoke House and an accurate tracking takes place regarding the use of the existing Fire Safety Smoke House to see if a justification exists for Manheim Township to pursue its own unit.

Manheim Township Fire Rescue has recently acquired through corporate donations and sponsorships an Inflatable Fire Safety House. This unit is not capable of replicating smoke and heat conditions and is intended for a younger audience. The Inflatable Fire Safety House provides fire education lessons throughout the unit and encourages active participation from the audience. This unit will also require a standardized written program so the message being delivered is unified. While secured with corporate donations, funding should be allocated for maintenance of the unit.

Recommendation #26: Manheim Township Fire Rescue should create a written program for currently owned fire safety props; research, justify, and provide funding sources for additional props

High School “Fire Club” Program

In order to increase the visibility and presence of Manheim Township Fire Rescue in the public school system and increase recruitment opportunities for junior firefighters, the concept of a high school club was formed. Other clubs already exist within the high school and club activities are a recognized activity by the school district. No specific club exists relative to fire rescue services. The proposed “Manheim Township Fire Rescue Club” would be the first club focused on local level emergency services.

Club programs are allotted a class time approximately ten (10) times per year during the school day. Additionally, clubs may meet before or after school as well. It would be anticipated that due to the nature of this specific club and the length of time required for hands-on skills that the proposed club would meet after school in addition to the school day period.

Manheim Township Fire Rescue personnel who participate as advisors or assistants in the club program would be required to adhere to the requirements as established by the Manheim Township School District (MTSD). These requirements include:

- Pennsylvania State Police background check
- Federal Bureau of Investigation background check
- Pennsylvania Child Abuse History check

All of the referenced checks would be provided at no cost to our personnel either through MTFR or MTSD resources.

The “Manheim Township Fire Rescue Club” would be required to have a lesson plan and/or activities pre-scheduled for each allotted time period. The intention will be to use the school day period to provide a classroom lesson, followed by hands-on activities at the conclusion of the school day to reinforce the lesson. Typical activities associated with the Junior Firefighter program would be carried over to the “Manheim Township Fire Rescue Club” program.

This club program should be a joint effort between the MTFR public education group and the MTFR Junior Firefighter advisors. Both of these groups will play a central role in creation and presentation of the program as well as focusing on recruitment efforts.

Recommendation #27: Manheim Township Fire Rescue should coordinate with the Manheim Township School District for creation of a high school club-level program for Fire Rescue

Citizens Fire Academy

A Citizens Fire Academy program is designed to increase the understanding and awareness of fire rescue and emergency services with the citizens of the municipality. The program will promote citizen interaction with Fire Rescue personnel and will enhance the relationship between the Fire Rescue system and the citizens. The program will be designed to enhance the awareness of the organizations capabilities and limitations; provide realistic expectations of what the Fire Rescue system can accomplish; and foster a cooperative atmosphere between the organization and the public.

Intentions for the program would be to create a ten to twelve week program that would provide participants with an overview of all major areas of the Manheim Township Fire Rescue system as well as an overview of fire rescue services in general. Experienced personnel from the system would instruct and lecture, allowing for citizen interaction with personnel they will encounter in the community. Minimum qualifications for participation in the program by citizens will be established, with some requirements mirroring those for actual volunteer personnel. Some of these may include:

- 21 years of age and older
- Ability to pass Pennsylvania State Police background check
- Live or work within Manheim Township

A ten to twelve week program, meeting once a week for three to four hours per session, may facilitate a curriculum to include:

- Fire Rescue system history and organization
- Protective Equipment
- Fire Apparatus and Equipment
- Fire Prevention
- Fire Extinguisher Training
- First Aid and CPR
- Fire Ground Operations
- Rescue Operations
- Hazardous Materials
- Ride-Along / Duty Time

A final graduation ceremony may be included at the conclusion of the program. This gives the opportunity for the Fire rescue system to recognize and thank the citizen participants and continue to foster a positive relationship. The opportunity may exist under volunteer recruitment to then transition these “graduates” into the Fire rescue system as new recruits.

Recommendation #28: Manheim Township Fire Rescue should create a Citizens Fire Academy program in Phase I

Residential Smoke Detector Program

Residential smoke detectors have proven to be a successful tool in early notification of a home fire, allowing residents to escape a home fire thereby reducing residential fire deaths. In Manheim Township, Administrative Order 2004-1 requires the installation of residential smoke detectors in certain types of occupancies, including one and two family dwellings, multi-single family dwellings (townhouses) and Group-R dwelling units. The administrative order also provides guidelines for the installation of smoke detectors as part of the “Existing Residential Dwelling Unit Fire Safety Inspection Checklist” which is administered by the Code Compliance Department.

A key to the success of residential smoke detectors is keeping the detectors in working condition. Changing batteries and testing of the smoke detectors is vital to their successful operation. The Manheim Township Fire Rescue system in conjunction with the Manheim Township Code Compliance Department should become an active participant in the community to insure that residential smoke detectors are installed, tested, and maintained properly.

The Manheim Township Fire Rescue system has participated in the *Change Your Clock Change Your Battery*²⁰ program sponsored by Energizer Battery and the International Association of Fire Chiefs over the past several years. This participation however has been limited to distribution of literature, press releases, and very limited distribution of detectors. The need for an aggressive program that includes the ability to provide, install, and educate the residents of Manheim Township should be undertaken. This program may include the following:

- Providing smoke detectors / batteries for single requests
 - Obtain detectors and batteries through grant programs including Home Depot, Lowes, ABC Channel 27, etc
- Smoke detector checks / maintenance on-scene
 - Available resources on front-line fire units to provide this service
- Annual neighborhood campaigns
 - Door-to-door campaign partnering with neighborhood and/or corporate partners
- Public safety messages
 - Use of Change Your Clock change Your Battery promotional items

Recommendation #29: Manheim Township Fire Rescue should implement a residential smoke detector program encompassing all portions as recommended in Phase I

²⁰ Energizer. (2009). Retrieved May 18, 2009, from <http://www.energizer.com/learning-center/Pages/keepsafekeepgoing.aspx>

Health and Safety of Personnel

The health and safety of all personnel is paramount to the success of the Manheim Township Fire Rescue system. A previous recommendation from the Dr. Bryan survey, that of compliance with NFPA standard 1500, *Standard for Fire Department Occupational Safety and Health*, has gone almost totally unfulfilled. Numerous administrative-specific areas can be considered under the umbrella of Health and Safety that the Manheim Township Fire Rescue system struggles with today. In most cases, these areas are not being 100% completed in any of the three volunteer stations. These include:

- Personnel Accountability Tags
- Entry Level Physical Exams
- Vaccinations

In addition, there is Health and Safety related areas that pertain to the on-scene operational aspect of the Manheim Township Fire Rescue system. These specific areas require personnel to fill these roles in order to insure that the Health and Safety needs of all personnel are met. Again, Manheim Township Fire Rescue struggles to fill these positions with volunteer staffing. These areas include:

- Safety Officer
- Accountability On-Scene

The areas listed above only reflect those in the Health and Safety arena that Manheim Township Fire Rescue attempts to fulfill to today. This does not take into account other areas of NFPA 1500 that would be required to be completed if Manheim Township Fire Rescue were to be in compliance with this standard. These include items in the following areas:

- Fire Department Administration
- Training, Education, and Professional Development
- Fire Apparatus, Equipment, and Driver/Operators
- Protective Clothing and Protective Equipment
- Emergency Operations
- Facility Safety
- Medical and Physical Requirements
- Member Assistance and Wellness Programs

Recommendation #30: Manheim Township Fire Rescue should institute policies and procedures to bring the Manheim Township Fire Rescue system into compliance with NFPA 1500, beginning in Phase I with completion in Phase II

Training

Training of fire rescue personnel is vital to the current and future success of the organization. Personnel responding to emergency incidents of all types within the municipality, including fire, rescue, hazardous materials, and emergency medical or other types of emergencies must be properly trained to perform their role.

Currently minimum training requirements do exist within the municipality that dictates the minimum level of training for a volunteer firefighter to have before they can be considered as “staffing”, a firefighter that is not probationary or entry level. These minimum training requirements are contained in the Manheim Township Fire Rescue Standard Operating Guidelines under section 302.01 through section 302.04. Training above the minimum levels continues to be voluntary.

Several initiatives have been started that must be continued and expanded. Several more have been identified as the future needs for the training program for the Manheim Township Fire Rescue system.

Cross Training

In order to produce more volunteers who meet minimum training requirements on specialty equipment throughout the municipality, the concept of cross training personnel from different stations was created. Currently specialized apparatus exists in all three volunteer stations (Aerial and Rescue services at Eden, Foam Operations at Neffsville, and Rescue services at Southern Manheim Township) that require specialized training that historically was only being provided to volunteers who held membership in each of the respective stations. In addition, fire apparatus drivers have traditionally been trained to operate only the fire apparatus assigned to their stations.

A program has been designed to begin training volunteer firefighters on the specialized equipment and operations housed at the other volunteer stations. In addition to a program to train fire apparatus operators to drive and operate fire equipment in the fleet that is housed at the other volunteer stations.

The Training Committee of the Manheim Township Fire Rescue system is continuing to refine this program and is actively seeking volunteer personnel willing to be trained on the other specialized equipment. The same applies to fire apparatus operators who are seeing a similar program in order to qualify them on all units in the MTFR fleet.

Recommendation #31: Manheim Township Fire Rescue should continue and expand the Township wide cross training program with the formation of a written training plan in Phase I

Manheim Township Recruit Academy

Currently, entry level training for new personnel is conducted at a variety of locations and facilities. New personnel are sent to classes individually based on where and what courses are available at any given time. The same course taught at different locations has typically provided a different outcome for the new personnel dependant upon who the lead instructor was at which location. While the curriculums are the same at each location, different instructors provide their own flavor to a course which provides for the different outcomes.

In order to more uniformly provide new personnel with the minimum training requirements and to provide the opportunity for the new personnel to be taught by state certified instructors from this municipality using equipment and apparatus from this municipality, the concept of a Manheim Township Recruit Academy was born. By providing all entry level training here with instructors and equipment from the MTRF system, this provides the opportunity for new personnel to become better acclimated to our system, people, and equipment during their initial training, versus receiving their entry level training elsewhere and still facing the prospect of having to being indoctrinated into our system upon their completion.

The MTRF Recruit Academy should include courses required to satisfy the requirements of the MTRF Standard Operating Guidelines. In addition, in order to continue to achieve higher percentage in the Participating Department Program, certification to Firefighter I and/or Firefighter II should also be considered. Courses that may be included are:

- Essentials of Firefighting
- Vehicle Rescue Technician
- Hazardous Materials
- First Aid / CPR / AED
- Aircraft Firefighting
- NFPA 1001 Standard for Firefighter Professional Qualifications (2008 Edition)

The Manheim Township Fire Rescue System does have numerous state-certified fire instructors in its system that could be used to operate this Recruit Academy. With oversight from the MTRF Training Committee, the Recruit Academy could be operated within the municipality, with the exception of courses that require live-fire or other technical training that would require travel to an approved training site. Equipment and apparatus could be provided from the fire rescue stations within the municipality.

Recommendation #32: Manheim Township Fire Rescue should create a Manheim Township Recruit Academy by Phase II

Participating Department Program

Firefighter certification in the Commonwealth of Pennsylvania is a legislatively mandated system promulgated by Act 1989-112 passed by the State Legislature. The program falls under the authority of the Pennsylvania State Fire Commissioners office. The program allows for voluntary certification of personnel in accordance with nationally recognized standards.

The purpose of the Participating Department Program is to recognize departments that support, promote, and encourage their fire rescue personnel to voluntarily certify within the Commonwealth of Pennsylvania's Certification program. The program recognizes departments who achieve various percentages of certified personnel within their stations. Stations are recognized for having 10%, 50%, 75% or 100% of their members certified to a nationally recognized standard.

All three stations in the Manheim Township Fire Rescue system are currently enrolled in the participating department program. Two of the stations (Neffsville and Southern) are recognized at the 50% level while Eden is recognized at the 75% level. Recognition is given for a three year term and reapplication must be made at the end of the term. In 2009 all three stations in the fire rescue system must under take the reapplication process. It has been indicated that all three stations will maintain or increase their current levels.

Recommendation #33: Manheim Township Fire Rescue will maintain current percentage levels in the Participating Department Program in 2009 and Phase I, and re-evaluate in Phase II for 100% participation

Driver Operator Certification - NFPA 1002

Apparatus accidents are a leading cause of firefighter injuries and death. Fire apparatus operators in the Manheim Township Fire Rescue system are faced with higher than average call volumes in this region and driving to more incidents as the demand for services continue to increase, with some fire apparatus operators in the municipality driving on an almost daily basis to emergency incidents. A higher priority should be given to emergency vehicle driving.

NFPA Standard 1002, *Standard for Apparatus Driver / Operator Professional Qualifications* (2009 Edition), is a mechanism with which to train and certify our driver operators to a higher standard. While the MTRF system today requires a 16 hour course through the Pennsylvania State Fire Academy for all fire apparatus operators, this course is attendance based and does not require skill testing. The Driver / Operator program will require the prospective driver to complete both written and skill testing prior to certification. In addition, there are separate skill-based certification courses for different types of fire apparatus, all of which are contained within the MTRF fleet. These various courses include:

- Driver / Operator Pumper
- Driver / Operator Aerial
- Driver / Operator Tiller
- Driver / Operator Mobile Water Supply (Tanker)

It should be recommended that pursuit of NFPA 1002 certification remain voluntary at least through Phase I due to student requirements that may not be met by current fire apparatus operators. The Manheim Township Fire Rescue system currently allows for driver-only status for fire apparatus operators who have not been or will not become firefighters. Driver-only personnel are governed by Manheim Township Fire Rescue Standard Operating Guideline 102.02. NFPA 1001 Firefighter I certification is required in order to certify to the NFPA 1002 Driver Operator standard, which driver-only personnel will not possess.

Recommendation #34: Manheim Township Fire Rescue will pursue NFPA 1002 certification on a voluntary basis through Phase I with re-evaluation of voluntary versus required in Phase II

Rescue Technician Certification - NFPA 1006

Accidents involving all types of vehicles are a leading incident response for the Manheim Township Fire Rescue system. These incidents have the potential to be involving passenger cars, heavy trucks carrying various commodities, and buses on the roadway system and passenger or freight trains on the railway system, all of which traverse the municipality. In addition, other incidents defined as a technical rescue have the potential to occur in the municipality. These may include trench rescue incidents, building collapse incidents, confined space incidents, and water-related incidents.

NFPA Standard 1006, *Standard for Technical Rescuer Professional Qualifications* (2008 Edition), is a mechanism with which to train and certify our personnel to a higher standard. While the MTRF system today requires a 48 hour course through the Pennsylvania Department of Health for vehicle rescue, this course does not address the other technical rescue possibilities. The rescue Technician program will require the prospective firefighter to complete a general requirements course prior to completing any discipline-specific course. After completion of the general requirements course, there are separate skill-based certification courses for different types of technical rescue situations. The firefighter could choose any or all of these disciplines should they choose to complete each on a voluntary basis:

- General Requirements for Rescue Technician
- Rope Rescue Technician
- Vehicle and machinery Rescue Technician
- Confined Space Rescue Technician
- Structural collapse Rescue Technician
- Trench Rescue Technician
- Surface Water Rescue Technician

It should be recommended that pursuit of NFPA 1006 certification remain voluntary at least through Phase I. Current requirements set forth in the Manheim Township Fire Rescue Standard Operating Guidelines address minimum requirements in the area of vehicle rescue. A re-evaluation of NFPA 1006 certification versus the current requirements should be conducted in Phase II to address any need for updating of the Standard Operating Guidelines.

Recommendation #35: Manheim Township Fire Rescue will pursue NFPA 1006 certification on a voluntary basis through Phase I with re-evaluation of voluntary versus required in Phase II

Aircraft Rescue and Firefighter Certification – NFPA 1003

Crash Fire Rescue services are currently provided at the Lancaster Airport by employees of the Airport Authority. These employees meet the Federal Aviation Administration (FAA) minimum requirements for the level of service provide at their facility. The Manheim Township Fire Rescue system does require a 16 hour course in Aircraft Firefighting for its own personnel should an aircraft incident occur either outside the airport property in the municipality, or should MTRF be called for mutual aid assistance on the airport property itself.

As the Lancaster Airport continues to expand and add services and flights, a logical need will be that of increased demand for Crash Fire Rescue services. While the Airport Authority may handle this need internally for its own employees, the Training Committee for the MTFR system is of the opinion a higher level of training should be made available to our own MTFR personnel, initially on a voluntary basis.

NFPA Standard 1003, *Standard for Airport Rescue and Firefighter Qualifications* (2005 Edition), is designed to provide the prospective firefighter with the proper knowledge and manipulative skills to respond to an aircraft incident. This certification can be achieved by using a certified Community College to teach the course and provide certification testing here in the Commonwealth. This certification would require travel to approved testing location outside of Lancaster County, as our local training facility is not equipped for testing of the practical skills for this certification level.

It would be the goal to offer this level of certification to the MTFR personnel who wish to voluntarily achieve it. In addition, this level of training should be offered to the Lancaster Airport Authority employees who are responsible for Crash Fire Rescue services. Both MTFR and Authority employees must meet minimum requirements in order to pursue this certification which includes:

- Minimum age of 18
- NFPA 1001 Firefighter II certified
- NFPA 472 Hazardous materials Operations Level or higher certified

Recommendation #36: Manheim Township Fire Rescue will pursue NFPA 1003 certification on a voluntary basis through Phase I in coordination with the Lancaster Airport Authority

ISO Rating

The Insurance Services Office (ISO), based in Jersey City, New Jersey, is the responsible agency in the insurance industry for “classifying” cities, villages, townships, and other municipalities within the United States for the purposes of identifying that communities fire defense capabilities.

The purpose of the ISO Public Protection Classification (PPC) survey is to gather information needed to determine a fire insurance classification which may be used to develop property insurance premium calculations²¹. The PPC classifications are listed on a scale 1 through 10, with a PPC of 1 being the most fire protection and a PPC of 10 being the least amount of fire protection. Currently Manheim Township maintains a PPC rating (or ISO rating as some refer to it) of 5/9. PPC rated communities of 5 accounts for approximately 12% of all rated communities. Table 35 below shows the number of communities in Pennsylvania that are rated and the total number of ratings in each PPC class.

Table 31: Pennsylvania Distribution of Communities by PPC Class



A more local representation of community PPC Classes is shown on Table 36.

Table 32: Lancaster County Distribution of Communities by PPC Class

Community	PPC Class	Community	PPC Class
East Hempfield Township	4	East Lampeter Township	5/9
Warwick Township	6/9	Lancaster Township	4/9
Lancaster City	3	West Lampeter Township	5/9
West Hempfield Township	5/9	Ephrata Township	6/9
East Cocalico Township	6/9	Mount Joy Township	5/9

²¹ Hickey, Ph.D., Harry E. (2002). *Fire Suppression Rating Schedule Handbook*. Louisville, Kentucky: Chicago Spectrum Press

The Insurance Services Office grading of a fire department is based on the following broad criteria:

- Dispatching and receiving of alarms
- Distribution of fire companies in the protected area
- Equipment available to firefighters
- Training
- Number of available firefighters and response rates
- Record keeping
- Water supply in the municipality
- Hydrant maintenance

These criteria are then put into three (3) general categories where total credit awarded is reflected; Receiving and Dispatching of Alarms, Fire Department, and Water Supply. Each of these three categories is further broken down in order to calculate a final percentage or score for each one. A final figure calculated into the equation is known as divergence. This is where a reduction in credit is taken to reflect a difference in the relative credits for Fire Department and Water Supply.

As mentioned, the current PPC rating for Manheim Township is 5. The credit awarded to Manheim Township in the three major categories is shown on Table 36.

Table 33: Manheim Township Public Protection Rating

<i>Manheim Township Public Protection Classification Rating</i>		
Category	Credit Awarded	Maximum Credit
Receiving & Dispatching Alarms	9.70 %	10.00 %
Fire Department	22.30 %	50.00 %
Water Supply	27.35 %	40.00 %
Divergence	- 4.76 %	
Total Points	54.59 %	100.00 %

The current PPC rating of 5 for Manheim Township dates back to December of 1990. No re-grading has taken place since that time. The re-grading process can be requested by the municipality to occur at any time. A procedure is in place that should the rating actually go up that the municipality will have a predetermined time frame to correct the deficiencies in order to maintain their current rating.

It is the opinion of the Strategic Planning Committee and the chief officers of the Manheim Township Fire Rescue system that a re-grading, with no changes to any current policies or equipment, may result in a lower rating of one class. This opinion is based on the 1990 grading that showed only 22.30 % out of a possible 50.00% for the actual fire department itself. There have been many changes since 1990 that simply by the virtue of the changes should award Manheim Township more points. Only 5.41

points are needed based on the 1990 grading to achieve a PPC rating of 4. The fire department areas graded and their scores from 1990 are shown on Table 37.

Table 34: 1990 PPC Rating – Fire Department Classification Details

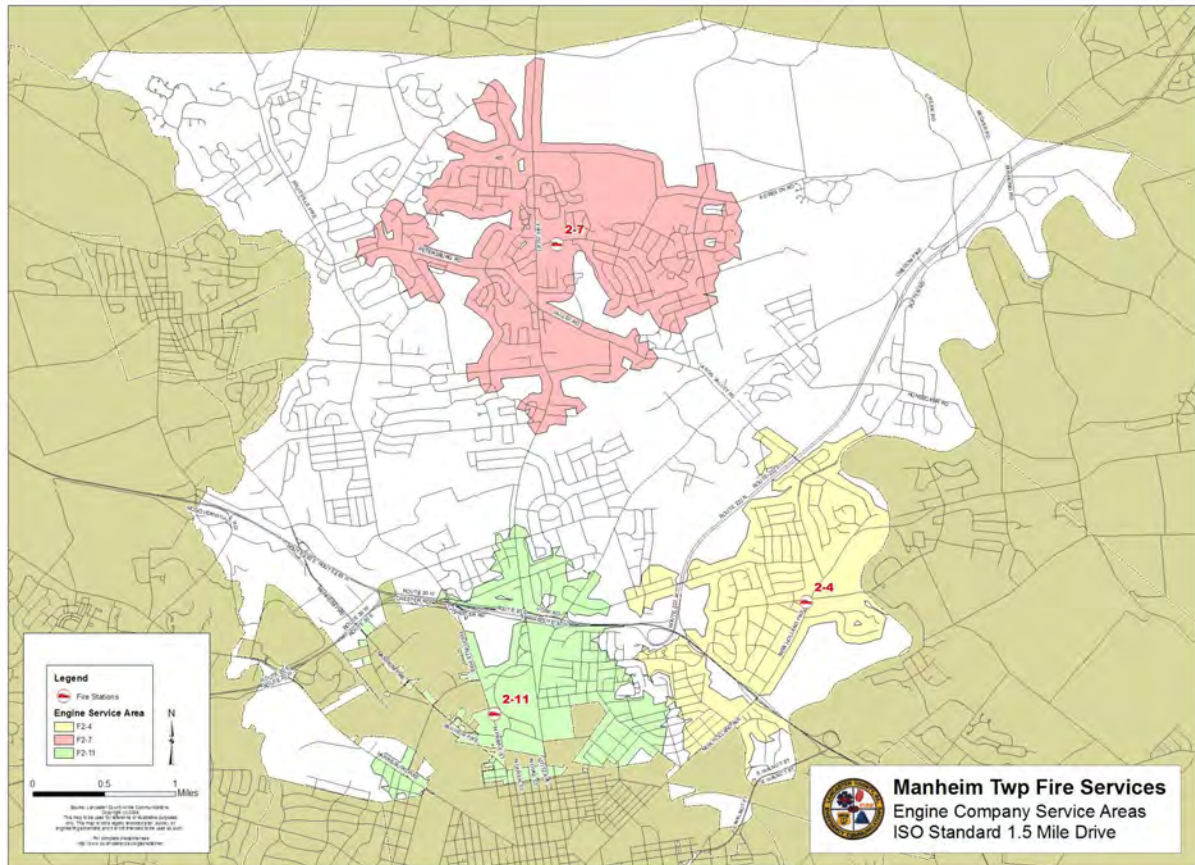
1990 PPC Rating – Fire Department Classification Details			
		Actual	Maximum
1	<u>Credit for Engine Companies</u> This item reviews the number of engine companies and the hose equipment carried	6.02	10.00
2	<u>Credit for Reserve Pumpers</u> This item reviews the number of reserve pumpers, their pump capacity and the hose equipment carried one each	0.49	1.00
3	<u>Credit for Pump Capacity</u> This item reviews the total available pump capacity	5.00	5.00
4	<u>Credit for Ladder-Service Companies</u> This item reviews the number of ladder and service companies and the equipment carried	2.69	5.00
5	<u>Credit for Reserve Ladder-Service Companies</u> This item reviews the number of reserve ladder and service companies and the equipment carried	0.24	1.00
6	<u>Credit for Distribution</u> This item reviews the percent of built-upon area of the municipality which has an adequately-equipped, responding first-due engine company within 1.5 miles and an adequately-equipped, responding ladder-service company within 2.5 miles	1.53	4.00
7	<u>Credit for Company Personnel</u> This item reviews the average number of equivalent fire fighters and company officers on duty with existing companies	3.63	15.00+
8	<u>Credit for Training</u> This item reviews the training facilities and their use	2.70	9.00
9	Total Credit for Fire Department	22.30	50.00+

The following numbered categories corresponding to Table X are believed to be available for a percentage point increase:

- #1 – 6 engines (By ISO definition) remain today and are better equipped and carry more water than during the 1990 rating
- #4 – Ladder and Service companies are better equipped today than during the 1990 rating
- #7 – Introduction of the Live-In program and Duty Crew program may generate additional personnel numbers as compared to the 1990 rating
- #8 – Training programs have increased, better documentation, minimum training requirements, and established training facility within 5 miles of the municipal border – all items not present during the 1990 rating

Item #6 in Table 37, Credit for Distribution, is an area that has had no changes since the 1990 grading. Credit for distribution is reviewing drive distance of fire apparatus to the built-upon areas of the municipality. For engine company coverage, ISO requires a drive distance maximum of 1.5 miles from a fire station to the built-upon area. As can be seen on Map 5, this is unable to be achieved with the current three fire rescue facilities.

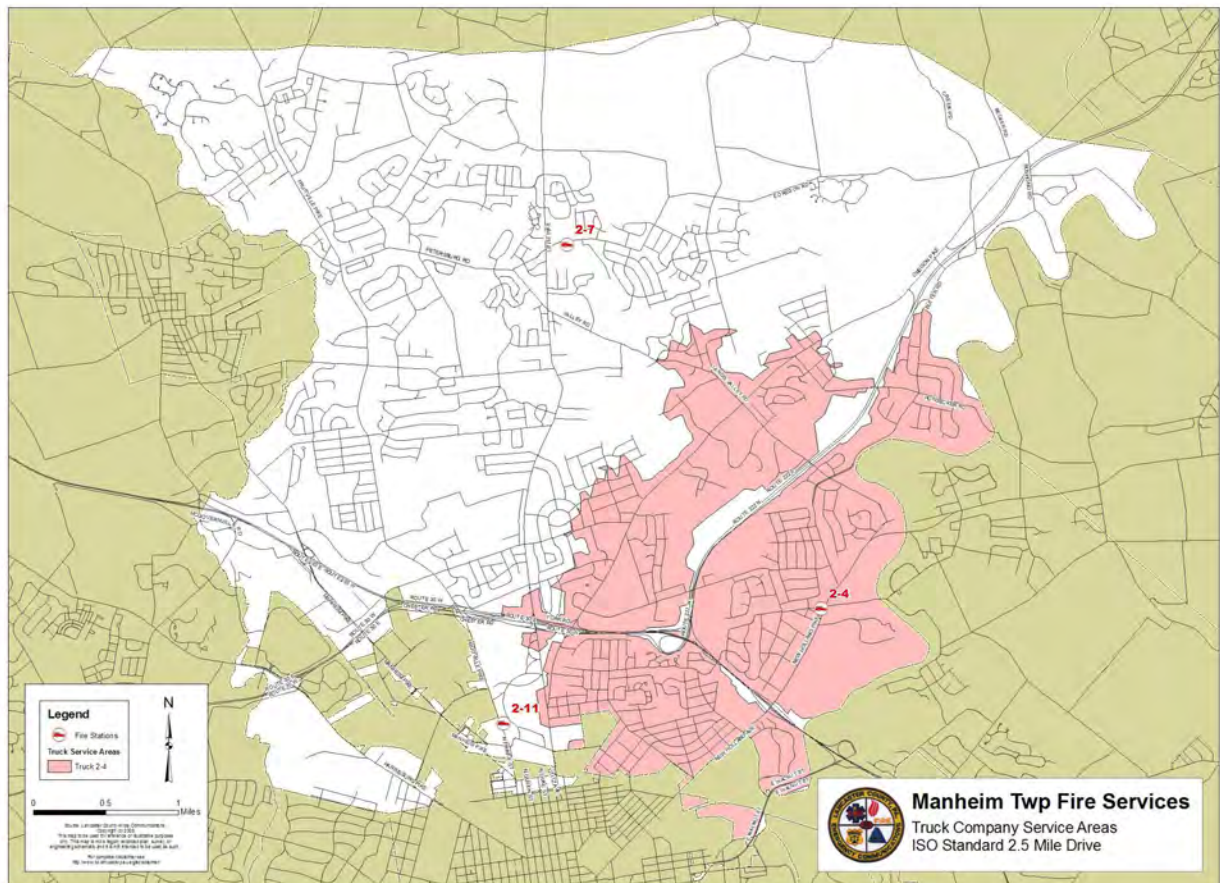
Map 5: Existing 1.5 Mile Engine Coverage Area – MTFR Units



While the addition of a proposed fourth facility in the northeast area of the municipality will decrease the built-upon area not currently reached in the 1.5 mile distance, a large area of the municipality will remain out of reach of this ISO standard.

For truck company coverage, ISO requires a drive distance maximum of 2.5 miles from a fire station to the built-upon area. As can be seen on Map 6, this is unable to be achieved as only one fire rescue facility (Eden) operates a truck company.

Map 6: Existing 2.5 Mile Truck Coverage Area –MTFR Units

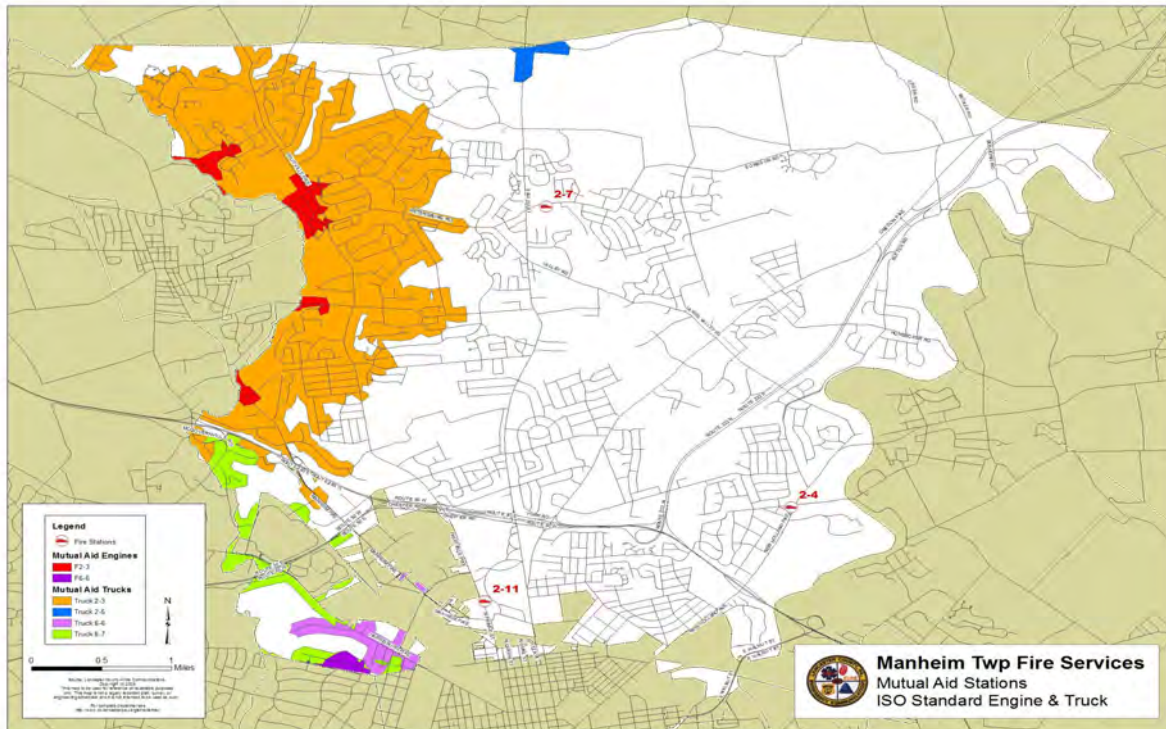


Mutual aid, defined as a response that supports local and regional efforts involving local emergency response agencies from other jurisdictions that cross municipal boundaries, is available and utilized by Manheim Township Fire Rescue. Several neighboring fire rescue organizations provide automatic mutual aid to Manheim Township. The following units fall within the accepted ISO coverage distances of either 1.5 mile drive distance for Engine Company or 2.5 mile drive distance for Truck Company:

- East Petersburg – Engine Company (Shown in red on Map 7)
- Lancaster Township – Engine Company (Shown in dark purple on Map 7)
- East Petersburg – Truck Company (Shown in orange on Map 7)
- Lititz – Truck Company (Shown in blue on Map 7)
- Rohrerstown – Truck Company (Shown in green on Map 7)
- Lancaster Township – Truck Company (Shown in light purple on Map 7)

As illustrated on Map 7, with only one exception, mutual aid units provide very little coverage in Manheim Township relevant to ISO coverage.

Map 7: Mutual Aid 1.5 Mile Engine and 2.5 Mile Truck Coverage Areas



In addition to a simple re-grading based on the changes since the 1990 grading report, ISO is also currently involved in a review process of their Fire Suppression Rating Schedule (FSRS). Several key items that are being discussed and proposed for revision will provide a direct benefit to the Manheim Township Fire Rescue system should a re-grading of the municipality be pursued. These key items and their benefit to Manheim Township include:

- Increased reference to National Fire Protection Association (NFPA) standards
 - Eliminating current ISO equipment inventory requirement and utilization of NFPA 1901 requirements (Manheim Township is compliant)
 - Recognition of Rapid Intervention per NFPA 1500 (Manheim Township is or will be compliant)
 - Recognition of NIMS and NFPA 1021 officer training (Manheim Township is compliant)
 - Recognition for NFPA 1002 Driver Operator training (Manheim Township has pursued and will continue to certify to this standard)
 - Expanded recognition of automatic aid
 - Recognition of Standard Operating Guidelines (Manheim Township meets this requirement)

- Reference to implementation of master or strategic planning
 - Will coincide with pursuit of Accreditation if approved to do so
- Reference to community risk-reduction programs
 - Recognition for adoption and enforcement of model building codes (Manheim Township is compliant)
 - Recognition for public fire-safety education programs (Manheim Township would meet this requirement)

Reduction in the ISO rating for Manheim Township will generate a cost savings for most property owners. While residential property owners may see only a minimal reduction in their fire insurance premiums dependant upon their fire insurance carrier and the final ISO rating for the municipality, commercial property owners are expected to see a noticeable reduction in their premiums. Table 39 below shows the multiplier schedule used by the Hartford Group. As illustrated on the table, a reduction in the ISO rating of the municipality will result in a cost savings for each class the municipality would drop.

Table 35: Protection Class Multipliers – The Hartford Group

ISO Protection Class	Multiplier
ISO Class 1	.83
ISO Class 2	.85
ISO Class 3	.87
ISO Class 4	.96
ISO Class 5	1.00
ISO Class 6	1.03
ISO Class 7	1.20
ISO Class 8	1.31
ISO Class 9	1.41
ISO Class 10	2.08

Recommendation #37: Manheim Township Fire Rescue should apply to ISO for re-grading of Manheim Township's PPC classification in Phase I with no modifications to the existing Manheim Township Fire Rescue system

Recommendation #38: Manheim Township Fire Rescue should undertake a project to correct deficiencies identified in the ISO re-grading and lower Manheim Township's PPC by one (1) class in Phase II

Recommendation #39: Manheim Township Fire Rescue should undertake a project to correct deficiencies and/or expand services as identified in the ISO re-grading and lower Manheim Township's PPC by one (1) or more classes in Phase III

Accreditation

As has been identified throughout this document, there are many standards available to the fire rescue service while no one standard has been adopted as the “industry standard”. While National Fire Protection Association (NFPA) and Insurance Services Office (ISO) standards dominate the industry when looking at operations, the need remains for a community to be able to assess itself to see if they have achieved an appropriate level of professional performance as an organization.

In 1988 the International Association of Fire Chiefs (IAFC) and the International City Managers Association (ICMA) signed a memorandum of understanding that led to the joint creation of a voluntary national accreditation system. This national accreditation process for fire rescue is very similar to the process completed in 2008 by the Manheim Township Police Department when they obtained state accreditation through the Pennsylvania Chiefs of Police Association.

The actual accreditation process involves self-assessment, on-site validation by a group of peers, and final review and acceptance by the Commission on Fire Accreditation International. Today there remains only one accredited fire rescue organization in Pennsylvania. The all-volunteer King of Prussia Fire Company in Montgomery County holds this distinction. Nationwide there are XXXX fire rescue organizations who have met the rigorous standards to become accredited.

When pursuing accreditation there are four main objectives for the accreditation process:

- To create organizational motivation and self improvement
- To provide voluntary activity focused on evaluation and education as a viable means to improve service delivery
- To provide a means to recognize quality performance
- To protect the interests of the general public and assist users to identify methods for organizational improvement

From these four main objectives, the accreditation process then reviews ten (10) major categories, containing 45 criteria and 240 performance indicators. These ten category areas will review the following:

- Governance and Administration
- Assessment and Planning
- Goals and Objectives
- Financial Resources
- Programs
- Physical Resources
- Human Resources
- Training and Competency
- Essential Resources
- External Systems Relationships

One of the benefits to this process is the requirement to develop long-range strategic plans and short-range action plans. The accreditation process and subsequent planning documents will provide the Manheim Township Fire Rescue system with valuable tools when considering budgeting and justification of department programs and services. This process will be a benefit not only to the fire rescue system but to the community and municipality as well.

Recommendation #40: Manheim Township Fire Rescue should apply to become a “Registered Agency” in Phase I; elevate to “Applicant Agency” and full pursuit of Accreditation in Phase II



EMERGENCY MANAGEMENT

The Manheim Township Emergency Management Office is obligated under the Pennsylvania Emergency Management Services Code, 35 Pa. C. S. Section 7101 et seq., to provide certain services and programs related to emergency management to our community. These services and programs are designed to enhance our community's preparedness and response capabilities to disasters and other emergencies.

Emergency Management Personnel

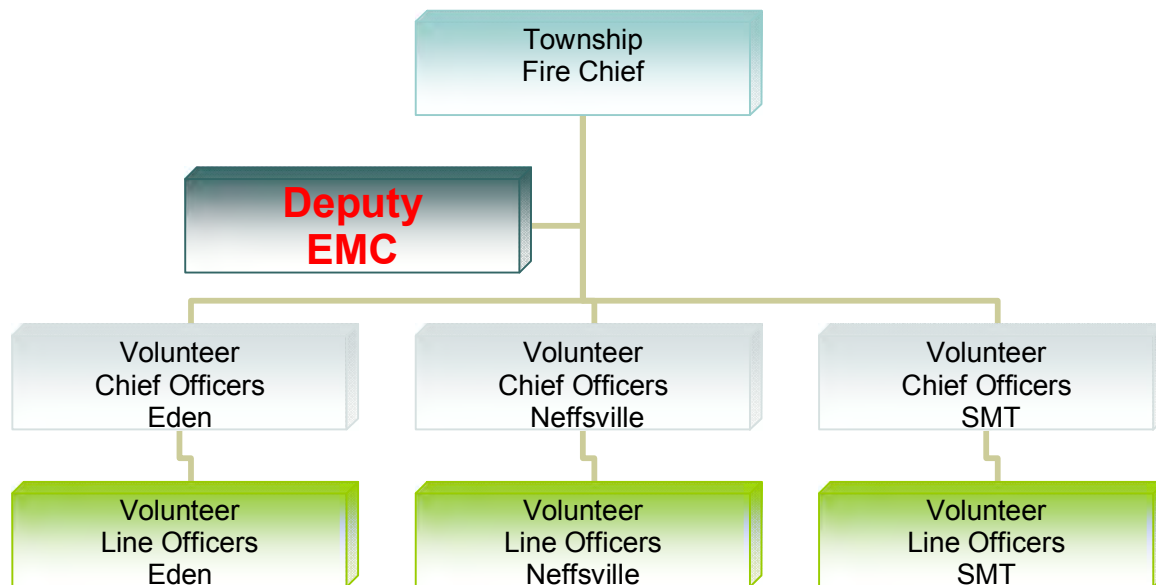
Title 35 of the Pennsylvania Emergency Management Code requires a Coordinator be recommended for appointment to the Governors office. The Governors office certifies and appoints a Coordinator for each municipality in the Commonwealth. In Manheim Township this responsibility is assigned to the municipal Fire Chiefs position. Title 35 does not however have any provisions for Deputy Emergency Management Coordinators (EMC) or requirements for additional staff.

While there is no dispute that Emergency Management should fall within the realm of the Manheim Township Fire Rescue system, recognized staffing to accomplish the required tasks are lacking. The size of the municipality and the corresponding Emergency Operations Plan (EOP) alone make it difficult at best to provide the required services and updates. In addition, as reflected below, other added functions and responsibilities are taxing the single position.

It is being recommended that Deputy Emergency Management Coordinators be recognized by the municipality in order to assist with specific Emergency Management functions. Title 35 again does not have a requirement for Deputy EMC's and there is not a requirement for recognition of these positions, however there is also not a prohibition to the municipality appointing these positions.

Two major functions exist that could be assigned to Deputy EMC's; maintenance of the Emergency Operations Plan (EOP) and maintenance and readiness of the Emergency Operations Center (currently assigned to the mobile Command 2 vehicle). These two specific functions have a time commitment associated with them that can justify a dedicated volunteer position with the authority to occupy the position provided by the Board of Commissioners with oversight of the positions by the municipal Fire Chief / Emergency Management Coordinator position. These positions would be assigned in the Chain of Command as follows:

Chart 36: Proposed Command Structure for MTFR – Deputy EMC Positions



Recommendation #41: Manheim Township Board of Commissioners should designate two (2) volunteer Deputy Emergency Management Coordinators to assist with administering the duties of the Manheim Township Fire Rescue - Office of Emergency Management

National Incident Management System (NIMS) Compliance Reporting

The *National Incident Management System (NIMS)* provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment²².

²² FEMA. (2009). Retrieved April 23, 2009, from <http://www.fema.gov/emergency/nims/AboutNIMS.shtm>

Homeland Security Presidential Directive 5 mandates that municipalities report their level of NIMS training for all personnel who may potentially respond to an emergency incident, referred to as NIMS Compliance. NIMS compliance is a requirement to receive Federal preparedness awards, in the forms of grants, cooperative agreements, and direct contracts. Currently NIMS compliance is reported to the Lancaster County Emergency Management Agency (LEMA) who compiles NIMS compliance for all agencies within Lancaster County and insures all reporting requirements are met.

Currently all emergency response agencies within Manheim Township are surveyed for their NIMS compliance information quarterly by the MTFR Office of Emergency Management. This also extends to non-emergency response agencies including elected officials and Manheim Township Code Compliance and Department of Public Works. An expansion of the reporting matrix is intended to include non-municipal partners that provide emergency response personnel or capabilities to fixed facilities within the municipality such as the Manheim Township School District, Lancaster Airport Authority, Lancaster Bible College, and other agencies required to participate in the NIMS system.

Recommendation #42: Manheim Township Fire Rescue – Office of Emergency Management will insure the continuation of a quarterly reporting program for NIMS compliance for all municipal agencies with the addition of non-municipal agency reporting for other agencies located within the municipality

Emergency Operations Center

Manheim Township is currently operating its Emergency Operations Center (EOC) from a mobile command unit. No fixed facility exists within the municipality to meet the needs of an Emergency Operations Center. The previous fixed facility was deactivated in 2008 due to insufficient space in its location and lack of current technology and equipment.

A fixed Emergency Operations Center is critical to the successful outcome should a large scale emergency or natural disaster strike the municipality. While the mobile command unit may be sufficient to function as an alternate location should the primary EOC become damaged or inoperable, it is not suited to function as a primary EOC. A primary EOC should be capable of providing the following:

- Facility space large enough to accommodate needs of all involved stakeholders including municipal government, emergency management, police, fire-rescue, and emergency medical services.
- Technology needs including radio communications capable of communicating with all relevant agencies within the municipality; computer and data capabilities; data and record storage area.
- Suitable location large enough for multi-agency coordination activities. Should include conference room and secure area for meetings.
- Suitable location for media relations activities.
- Location for storage and maintenance of mobile command unit.

Other recommendations contained within this document, particularly the establishment of a new Fire Rescue facility, may have an impact this recommendation. There is no specific funding for this recommendation included in the projected operating or capital costs.

Recommendation #43: Manheim Township Fire Rescue - Office of Emergency Management will research the feasibility of a new fixed EOC to include needs assessment, site selection and funding sources



EMERGENCY MEDICAL SERVICES

Primary Emergency Medical Services (EMS) is provided by contract within the municipality by the Manheim Township Ambulance Association (MTAA). The MTAA provides Basic Life Support (BLS) services, Advanced Life Support (ALS) services and community outreach functions. The role of the Manheim Township Fire Rescue system is to provide support to MTAA on the scene of an incident. Two (2) of the MTRF stations (Eden and Southern Manheim Township) do operate Quick response Services (QRS) which provides emergency first response EMS services in their respective fire districts, however this is not intended to be a replacement for the services of MTAA but rather support to MTAA.

The following recommendations pertaining to the delivery of emergency medical services are joint recommendations approved in concept by both organizations. The intended outcome of these recommendations is to maintain and/or increase the level of EMS care being provided to the citizens of the municipality.

Quick Response Service

Both the Eden and Southern Manheim Township fire rescue stations operate a Quick Response Service (QRS). The purpose of a QRS unit is to provide an immediate response to a medical emergency in support of a basic life support (BLS) or advanced life support (ALS) unit. QRS units are licensed by the Pennsylvania Department of Health and must meet specific criteria for staffing and equipment. They are subject to re-inspection every three years to insure compliance with all required regulations.

The call volumes of the two QRS units, coupled with the decline in volunteer staffing and difficulty in providing volunteer staffing during daytime hours, has led to an increase in the number of failed response for the QRS units. On average, each QRS unit is being dispatched to approximately 400 responses per year. This number of responses is in addition to the regular call volume of fire rescue related dispatches.

QRS units are dispatched to both Class 1 (ALS emergency) and Class 2 (BLS emergency) incidents. In coordination with regulatory agencies and with the primary EMS provider, Manheim Township Ambulance Association, a determination should be made as to whether additional fire rescue personnel are needed at the scene of a BLS emergency. By reducing QRS dispatches to ALS incidents only, the call volume of the QRS units may be expected to see an approximate 50% reduction in dispatches. This reduction should translate into a positive effect on staffing levels for fire rescue incidents by reducing the time fire rescue personnel are committed to QRS incidents.

Recommendation #44: Manheim Township Fire Rescue will research with the Pennsylvania Department of Health and/or Emergency Health Services Federation approval to reduce QRS responses Township-wide to Class 1 emergencies only due to staffing considerations

Joint Training

Training of personnel is an essential function that occurs routinely in both organizations, MTAA and MTFR. A natural progression as the two organizations enhance their operations together is to train our personnel together. Fire Rescue personnel who are medically trained must achieve Continuing Education credits through the Pennsylvania Department of Health. Conversely, MTAA personnel should have a minimum level of knowledge of basic fire and rescue procedures. Each organization is capable of providing this training to the other organization.

Through the Strategic Planning process, it has been identified that six (6) yearly joint trainings will be the initial target number. MTAA will coordinate and schedule three (3) training sessions to be held at an MTFR facility that will provide Fire Rescue personnel with the opportunity to earn medical/trauma Continuing Education credits. MTFR will coordinate and schedule three (3) trainings that will provide MTAA personnel with the opportunity for hands-on practice in basic fire and rescue training, which may include fire extinguisher usage, vehicle stabilization, etc.

It is believed that through these joint training exercises the operational relationship between the organizations will continue to grow and expand. It will also allow personnel from each organization more ready access to the required training that they need in their respective positions.

Recommendation #45: MTAA Training Officer and the MTFR Training Officer will coordinate for six (6) yearly joint trainings to be split evenly between the organizations

Technology

As the Manheim Township Fire Rescue system and the Manheim Township Ambulance Association continue to work more cohesively, sharing of available technology becomes important. Currently the MTFR system is utilizing technology in its fleet for mapping, data storage and transmission, and radio communication that MTAA has not deployed in its fleet. MTAA has not been able to deploy this technology for a variety of reasons, however the MTFR system feels it is important for MTAA to be able to share in this technology in order to make both systems more compatible with each other.

The MTFR fleet today employs laptop computers in all front-line apparatus for mapping and preplan information access. This information may prove to be valuable to the MTAA fleet on the scene of an emergency incident. Low-band radio system with vehicle mounted repeaters and now employed throughout the MTFR fleet in order to increase communication capabilities and provide a higher level of personnel safety. This capability should be shared by both organizations. Additional future technology may include hand-held devices for reporting which would be beneficial to both organizations.

While funding will drive the goals and objectives of this recommendation, it is recommended that the technology being used by MTFR in its fleet should be researched for the benefits and available applications for the MTAA fleet.

Recommendation #46: Manheim Township Ambulance Association should research placing of available technology to include laptop computers, mapping software and preplans, and radio technology including repeaters into the MTAA fleet in order to be compatible with the MTFR fleet

Bulk Purchase

All front line units in the MTFR fleet are equipped with some type of trauma or first aid bag, oxygen bag, and most units, Automatic External Defibrillators (AED). Units certified by the Pennsylvania Department of Health (DOH) as Quick Response Service (QRS) units also carry additional medical equipment as required by DOH regulations.

Currently each fire rescue station purchases supplies to restock individually from various vendors. The equipment and supplies in most cases are identical or similar to supplies being purchased by MTAA. A logical step to decrease the cost of medical equipment and supplies required for both organizations would be to consolidate purchasing.

MTAA has an assigned employee to control their inventory. This employee may be able to assist the Manheim Township Fire Rescue system with inventory control of dated supplies, purchase, repair, or replacement of equipment, and inventory and purchase of day-to-day operational supplies. MTAA already has procedures in place for bulk ordering and the MTFR system should benefit from a joint venture.

Recommendation #47: Manheim Township Ambulance Association and Manheim Township Fire Rescue will create an inventory control program that allows MTFR to replace/purchase EMS supplies directly from MTAA

Municipal Contract

Currently the Manheim Township Ambulance Association is providing emergency medical services to the municipality based upon a written contract between the organization and the Board of Commissioners. The current contract, dated 7 October 1999, outlines six (6) specific sections:

1. Recognition and authorization to provide service
2. Agreement to provide service
3. Reporting requirements
4. Independent relationship
5. Authorization to solicit funds
6. Contract termination clause

The current contract is vague in nature and does not place specific requirements as to the level of service to be provided by the ambulance association or the obligations of the municipality as they are presently agreed upon.

Recommendation #48: Manheim Township Board of Commissioners should revise the municipal contract between MTAA and the MT Board of Commissioners with measurable and achievable outcomes

Joint Facility - NE

As previously discussed, the Manheim Township Fire Rescue system has recommended the creation of a fire rescue facility in the north east area of the municipality. An assumption can be made that should the need for fire rescue services be realized due to population expansion in that area of the municipality that the need for EMS services will also be realized.

MTAA faces similar response time challenges that the Manheim Township Fire Rescue system faces. In order for MTAA to adequately serve this area of the municipality, it may be prudent to move a front-line unit into this area. The final decision will rest with MTAA to research the need for expanded service in this area. Should MTAA determine a need, it should be in the best interest of both MTAA and the fire rescue system to co-locate in the same facility. This would allow for the best use of available land in this area of the municipality without duplicating efforts through two separate facilities.

Recommendation #49: Manheim Township Fire Rescue should provide operational space for provision of EMS service by MTAA in the North East Fire Rescue facility

Staffing / Deployment

Future staffing for both the Manheim Township Fire Rescue system and the Manheim Township Ambulance Association may prove challenging. Limited revenue and decreased or stagnant volunteerism may hinder MTFR staffing, while decreased health care reimbursement and increased demand for service may impact future staffing for MTAA.

Current or future personnel from both organizations may possess or be required to possess training that would qualify them to staff either organization. Future needs of Advanced Life Support versus Basic Life Support services may need to be re-evaluated by MTAA and may require assistance from MTFR in order to have EMS service continue to be a township-based service. While all needs are being met today, and no specific recommendation is being made as to staffing, an acknowledgement must be made that in Phase II or Phase III of the strategic plan staffing will need to be re-evaluated for the potential of cross-staffing which would prove mutually beneficial to both organizations.

Recommendation #50: Manheim Township Fire Rescue should be prepared to research supplemental and/or cross staffing between MTAA and MTFR in Phase II if required, no action at this time

STRATEGIC PLAN OVERSIGHT

The Strategic Planning document is meant to serve as a roadmap for the future of the Manheim Township Fire Rescue system. This document is not meant to be static but rather a dynamic document that provides the framework from which to build.

In order to insure that each recommendation is matched to appropriate goals and objectives, some type of oversight must be provided. It will be the recommendation of the Strategic Planning Committee that the following process be implemented in order to insure proper oversight and accountability of the Strategic Plan:

- The Board of Commissioners shall assign oversight responsibility for the Strategic Plan to the Manheim Township Fire Council
- The Manheim Township Fire Council shall amend their bylaws to include this responsibility
- The Manheim Township Fire Council shall appoint a Strategic Plan Oversight Committee that will provide timely updates and review of the planning document to insure that goals and objectives have been established by those responsible for implementation of specific recommendations and that those goals and objectives are being met

Recommendation #51: Manheim Township Board of Commissioners should approve the oversight process, to include a recommendation from the Strategic Planning Committee to the Fire Council on Oversight Committee representation