CITY OF WESTFIELD, MASSACHUSETTS

FIRE DEPARTMENT
ORGANIZATIONAL AND OPERATIONAL ANALYSIS

DECEMBER 2024

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CHAPTER I
PROJECT OVERVIEW, SCOPE, AND METHODOLOGY

Municipal Resources, Inc. (MRI) was engaged by the City of Westfield, Massachusetts, to undertake an organizational and operational assessment including an analysis of the effectiveness, and overall efficiency study of the City's fire, rescue, and emergency medical services (EMS) delivery systems, to identify any gaps or deficiencies, and to make recommendations for improvement. Projected growth in area services due to increases in population and increased service levels were also included to provide recommendations on the Department's long-range planning needs. The primary intent and goal of this project was to determine whether the existing organizational structure and operations of the WFD including levels of staffing, facilities, equipment, funding, management practices, and deployment of resources are adequate to provide a level of service within Westfield, that is in line with generally accepted standards and benchmarks utilized by comparable fire departments in similar communities; and based on standards and best practices for modern-day fire services currently in practice in Massachusetts and the United States.

To these ends, MRI looked to provide information relative to:

1. Short term opportunities for improvement of the Department's service delivery capabilities.

2. Identify future needs for facilities and equipment.

3. Present short- and long-term organizational and operational adjustments that seek to improve service delivery to the City.

These activities are part of the City of Westfield's ongoing fire and emergency services oversight and planning responsibilities. They are focused on identifying the risks that residents, visitors and firefighters are currently exposed to, as well as the potential future risks. Through the strategic planning aspect, the project team makes recommendations for long-term success, viability, and stability, together with improved efficiency, operations, and safety for firefighters and citizens today, as well as projecting future needs for the provision of fire and emergency medical services throughout the community. The MRI project team has attempted to produce a report containing recommendations, focused primarily on long-range strategic planning, that will assist the WFD, and the City of Westfield, to set a clear course of action for future service improvements and delivery.

About MRI

MRI was founded in 1989 by six former municipal and state government managers, with both public and private, professional experience. MRI provides professional, technical, and management support services to municipalities, schools, and non-profit organizations throughout the Northeast. MRI provides technical knowledge and practical experience that others cannot offer because it hires the best in the municipal consulting industry. This is evidenced by a high level of implementation of MRI's recommendations by its clients. MRI's clients have come to expect the organization to provide for whatever they need, and it fulfills their expectations.

MRI's dynamic management staff adapts services to specific client needs. Clients realize that MRI has been in their shoes and has the experience, sensitivity, and desire that it takes to develop and deliver services that specifically meets their needs. The depth of MRI's experience is reflected not only in the experiences of its associates, but in the scope of services it provides its clients, from professional recruitment to organizational and operational assessments of individual municipal departments and school districts, or ongoing contracted services for various municipal government and school business support activities. Municipal Resources has a particularly strong public safety group with nationally recognized expertise in fire and emergency medical services.

MRI's professional staff is always focused on helping its clients solve problems and provide solutions for their future success. We simply work to gain an understanding of past events to build a framework for future success. We do not put forth idealistic, unachievable, or narrowly focused solutions.

MRI'S Philosophy

Municipal Resources, Inc. is committed to providing innovative and creative solutions to the problems and issues facing local governments and the agencies that serve them.
The purpose of MRI's approach is to supplement the efforts of municipal employees and other personnel and enable them to do their jobs well. MRI is committed to supporting and enhancing positive, sustainable communities through better organization, operations, and communication. This is achieved by:

- Supporting cities, counties, school districts and other community service agencies with management and technical services to facilitate constructive change within client organizations.
- Conducting studies and analyses designed to assist clients in achieving organizational improvement.

- Advocating and advancing cooperation, coordination, and collaboration between government organizations and related community support agencies.
- Maintaining a staff of highly qualified professional, experienced and open-minded life-long learners to serve as consultants and advisors to clients.
- Maintaining awareness and understanding of advances in "best practices" for delivery of all levels of core community services and related professional management.
- Developing and refining techniques for effective community engagement, information dissemination, and constructive change.

Objectives

1. To help municipalities and agencies obtain maximum value for limited tax dollars.

2. To identify and help communities manage the risks associated with public safety functions.

3. To raise public awareness of the value and professionalism of their municipal resources.

4. To help local leaders develop and execute plans that best meet their community's needs, given available resources.

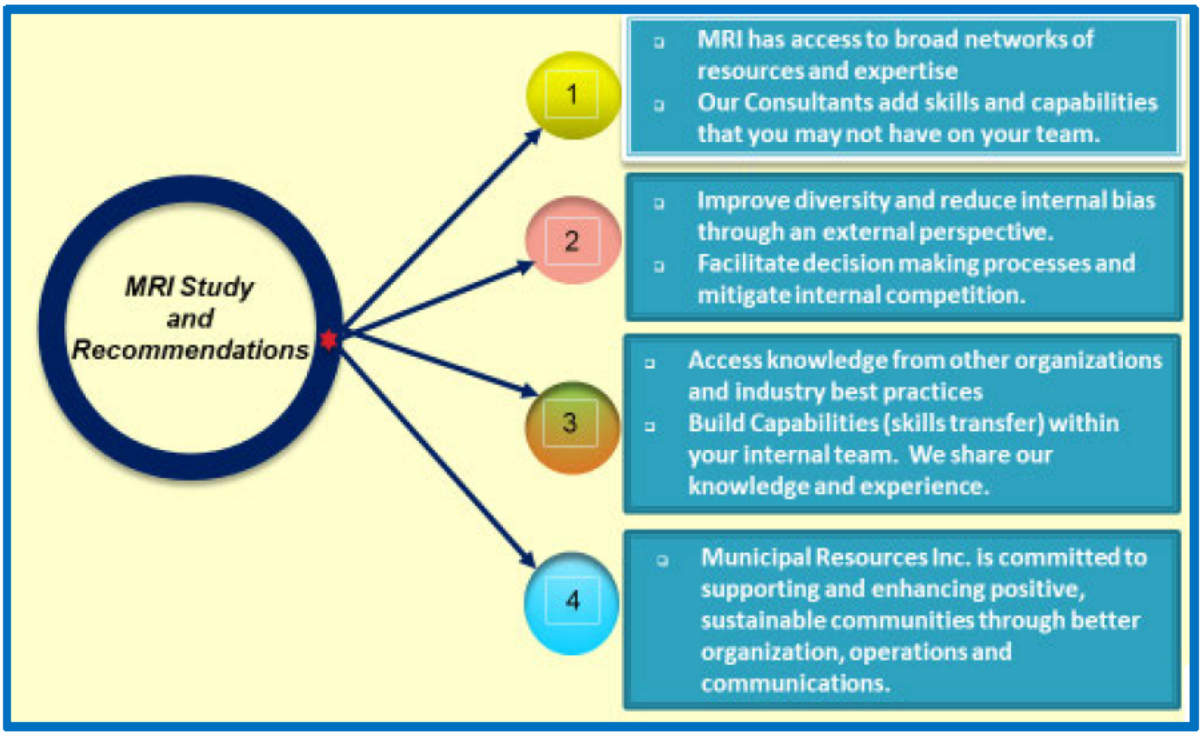

FIGURE I-1: MRI PROJECT IMPLEMENTATION PLAN

Scope of Work

The project requires a comprehensive operational assessment to determine whether existing staffing, policy direction, and resources are adequate to provide a level of service in the City of Westfield that is in line with generally accepted standards and benchmarks for a community of like size and character. The goal of this study is to review and analyze the current resources and staffing, forecast future demand for service, and make recommendations regarding the future need of resources, staffing, and the organizational and rank structure needed to fulfill the Department's mission and vision. Our team will conduct a comprehensive analysis of the operation of the Westfield Fire Department with emphasis on providing a perspective on the level of service provided to the community. This study will also consider the growth and impact of new development and land use projects including those that have already been completed, projects that are currently ongoing, and projected build-out of community infrastructure to ensure that the Westfield Fire Department is meeting the current and future fire service-related needs of the community.

This study shall include a review of all services provided including but not limited to; fire prevention/code enforcement, fire suppression, and other all-hazard response services; resources allocated to each service area, organizational structure, proper staffing levels, and the managerial structure of the organization. Our team will also consider any impact to the organization's ability to provide services to the community and region relative to the benefit of regional initiatives through Hampden County and the balance of mutual aid given and received.

Most importantly, the study shall be an objective and unbiased assessment that is driven by data, national industry standards (e.g. NFPA, ISO, NIST, etc.), regional best practices related to staffing and automatic and mutual aid standards, and best practices of the organization as it is currently managed with an emphasis on the Department's future needs.

The desired outcomes from the completion of this assessment include:

1. Establish a baseline of the Westfield Fire Department's current performance including, but not limited to; fire suppression and response, personnel, training, fire prevention/code enforcement, and daily supervision of fire services.

2. Determine if and at what level of increased volume the Department will experience based on the current and forecasted housing, land use developments, and future community infrastructure projects, taking into consideration future demographic trends in the City of Westfield.

3. Make realistic and practical recommendations for increasing organizational effectiveness and efficiency related to staffing, training, organizational supervision, fire prevention/code enforcement, and fire suppression response. Recommendations must be supported by applicable data and recognized industry standards.

4. Produce a draft report that will be sent to the City or appointed designee.

5. The draft will then be developed into a final report and a presentation will be provided.

Our efforts will focus on developing a comprehensive analysis of the organization to review and understand the current and future staffing needs required to adequately protect the lives and property of the City, residents, and visitors while minimizing the risk of injuries and other harm to firefighters. The Westfield Fire Department shall be evaluated against applicable industry standards, best practices, and comparisons of similar regional and national fire and EMS agencies of similar demographic and size. Recommendations shall not only be classified by topic area but also by speed and priority of implementation (specifically identifying easily attainable improvements).

TASKS:

The specific tasks within the Scope of Services are:

- Review and analyze the current operation of the Westfield Fire Department (Community Risk Analysis)
- Review and analyze a minimum of two (2) years of Fire and EMS call data
- Forecast future demands for service
- Analyze unit call volume
- Analyze unit response times
- Review and analyze any applicable Westfield Fire Department strategic goals and\or plans and consider this information as it relates to this project.
- Analyze internal and external training programs and provide recommendations to increase efficiency and effectiveness.
- Perform interviews with internal and external stakeholders and fire Department staff.
- Recommend changes to current resources/staffing levels, and first-line supervisory positions within the Department.
- Recommend changes to the organizational structure of the fire Department including fire prevention/code enforcement and daily supervision of services.
- Recommend best practices for staffing allocation, deployment of staff considering the personal health and wellness and safety of personnel and identify measurable dollar savings or increased costs resulting from the implementation of the recommendations.
- Propose changes to the Department to improve overall efficiency and effectiveness.
- Provide recommendations to maintain, improve, or obtain the following:

- Insurance Services Office (ISO) rating
- Compliance with NFPA 1710
- Compliance with Massachusetts Occupational Safety and Health Administration (OSHA)
- Accreditation through the Center for Public Safety Excellence
- Other State and Nationally recognized standards for deployment and response

Project Approach and Plan of Service

The goal of this project is to provide the City with a perspective on comparative fire service practices and resources. This goal will be accomplished through the development of a draft that provides the City of Westfield with a strategic picture of the current and future resource needs of the Westfield Fire Department.

As we approach this project, we will conduct interviews with the mayor, members of the Fire Commission, other key staff members, and members of the Westfield Fire Department. In addition, we will evaluate any fire service data and information that the City can provide. Through this data and with the assistance of City staff and the Westfield Fire Department Command Staff we will develop a foundational knowledge of the organization. The development of five GIS maps that provide an overview of response metrics has been incorporated into this project.

Most importantly, this management letter and report produced shall be an objective, unbiased assessment of the staffing, deployment pattern, policy guidance, resource needs, and collective bargaining agreements. The content of this project will be informed by data, national industry standards (e.g. NFPA, ISO, NIST, etc.), and best practices of the organization as it is currently, coupled with a future vision based on expected community development.

MRI structures our proposals as a partnership with our client and will need the client to provide us with requested data, policies, and other documentation for review and analysis.

A thorough review of existing staffing, operations, policy guidance, management practices, and the impact of the regulatory environment will indicate whether the Department is able to provide a level of service that is in line with generally accepted standards and benchmarks for a community of like character.

Project Approach:

Deployment Analysis

MRI will conduct a service demand study of the Westfield Fire Department. This study will incorporate a site visit to the City; tour of the community; coordination with personnel from the City's Geographic Information System, review of target hazards, and interviews with members of the City and the Fire Department on the day of the site visit; and preparation of a report which will include recommendations as to how the Department should be deployed to be most productive.

The topics to be included in the deployment analysis are as follows:

A. Evaluation of the current deployment pattern and locations.

B. Evaluation of organizational staffing and response.

C. Evaluation of organizational compliance with OSHA 2-in2-out and NFPA 1710.

D. Evaluation of response times from the time of alarm through the arrival of the first due unit.

E. Evaluation of mutual and automatic aid practices in Westfield.

F. Review Department policies, procedures, and operational guidance and comment on how the current set of policies reflects fire service best practices.

G. Provide Westfield GIS personnel with an overview of what response time and incident heat maps are needed.

H. Evaluate GIS mapping generated by the City of Westfield relative to station location, incident location, and response time.

I. Comment and graphically portray the level of service provided to the City.

Strategic Operational Data Driven Analysis

MRI will review the manner in which fire services are provided within the City. Using this review as a basis, MRI will make recommendations for improvements that are to take into consideration the current and future financial ability of the City and appropriate modifications to the delivery systems to provide optimum response time and service to the City. Emphasis will be placed on the following:

I. Administration: Day-to-day management of the Westfield Fire Department as well as the management structure of the organization. Areas to be evaluated include:

a. Critical issues;
b. Challenges of the future;
c. internal and external communications;
d. Budgetary decision-making process;
e. Resource allocation; and
f. Incident reporting and records management.

II. Identification of service level

a. Current service level
b. Average response time
c. Incident cluster locations
d. Expected service level
e. Review of elongated response times.

III. Review of growth, demographics and projected development

a. Target hazard analysis
b. Best practice strategies; and
c. Review of planned development

IV. Training, policy, procedure, and operational guidance review

a. Review of Organizational policies
b. Review of standard operating procedures
c. Review of organizational training

V. OSHA 2-in2-Out and NFPA 1710 Staffing Compliance: Review operational staffing levels. Areas to be considered include:

a. Shift staffing
b. Recall of personnel (time and number)
c. Automatic and mutual aid practices
d. Responsibilities and activity levels of personnel; and
e. Provision of services during a major incident

VI. Recommendations: This evaluation should provide a range of options, identification of implications of options, and recommendations that include, but are not limited to:

a. Develop short- and long-range recommendations/proposals for an administrative structure that can provide a high level of service today and five years into the future constrained by anticipated fiscal and economic projections; expand and contract with future needs; anticipated aging population and fiscal constraints of reimbursements from public and private sources;

b. Develop strategies to improve efficiency of administration of services; and

c. Identify the costs to implement and maintain future improvements, impact on services, and political and other ramifications.

Methodology

MRI's project methodology and approach was targeted to fulfill the scope of work in a thorough and comprehensive manner. MRI consultants performed several days of on-site work, interviews, and observations in Westfield and via Zoom. Our project team made multiple visits to Westfield and completed a wide variety of tasks in the development of this report. The assessment employed the following methodologies: a tour of the community; review of the fire Department's facilities, apparatus and equipment, staffing, interviews with key fire service personnel, and interviews with the Mayor, and other key City officials. These discussions focused on the current fire and EMS delivery system and structure to identify any concerns or areas requiring special focus, and to gather thoughts and ideas about areas of potential improvement and long-range visions, needs, goals, and objectives.

The team spent significant time with the fire chief to gain an understanding of the organizational, operational, and management systems and approaches currently in place, and then compared the current structures against contemporary practice and convention. There were also reviews of relevant statistics and operational data that was furnished by the Department.

MRI's project team utilized an eight-phase process to conduct the assessment of the WFD and to develop the strategic planning recommendations. The eight phases include:

1. Development of an action plan.

2. Orientation, stakeholder input, data gathering, and identification of significant issues facing the City of Westfield.

3. Information review, inventory, and assessment of the emergency risks and target hazards located within the City, and effectiveness and current operational readiness of the WFD.

4. Development of an assessment and inventory of current fire Department operations including the adequacy of current staffing/deployment models and organizational structure.

5. Evaluation of the Department's station and apparatus resources.

6. Evaluation of the overall effectiveness, efficiency, and quality of service of the fire protection and EMS delivery systems within the City of Westfield.

7. Preparation of a final evaluation report including planning recommendations for the City of Westfield and the fire Department.

8. As the project concludes, we will provide a presentation of a final project report to the City Officials and/or other selected stakeholders.

During the course of this study, the MRI team investigated areas such as the organizational and command structures of the fire Department, chain of command, budgeting, staffing, recruitment and retention, service demands, training and professional development, fire prevention services, deployment of personnel, standards of cover, the communications and data processing functions, perceptions within the community, working relationships with other persons and agencies, responsiveness, internal policies and procedures, adequacy and reasonableness of facilities and equipment, and compliance with various state and federal regulations.

Following our on-site visits, the data and documentation collected, and observations made, were subjected to analysis by the project team, both individually and collectively. The information was then compared with contemporary fire service and public safety standards, recommendations, and best practices, to formulate the recommendations contained in this report, and utilized for the development of this document.

The study also included a request by the City to include benchmarking with some similar peer communities that Westfield could utilize for the purpose of comparative analysis. To facilitate this process, our team developed a spreadsheet containing appropriate points of comparison and provided that to the City. It was agreed that the fire Department would contact the selected communities and populate the spreadsheet. The information was provide and included within this document.

Using this review as a basis, the project team made recommendations for improvements that take into consideration the current and future financial ability of the City, appropriate modifications to the delivery systems to provide optimum service to the entire community, adequacy of physical facilities and equipment, efficient use of resources, and whether the current organizational structure is appropriate or should be modified.
We have produced a comprehensive report containing recommendations that will assist the City of Westfield and its fire Department, to set a clear course of action for future service improvements and delivery.

All recommendations for improvement are based on various administrative regulations promulgated at the federal and state levels, nationally accepted consensus standards developed by the Insurance Services Office (ISO), National Fire Protection Association (NFPA), Commission on Fire Accreditation International (CFAI), Commission on Accreditation of Ambulance Services (CAAS), and industry best practices and procedures. However, since every community has unique characteristics, challenges, and resource limitations, our recommendations are specifically designed to address the immediate and long-term needs of the City of Westfield.

The project team has developed a series of short- and long-range recommendations for an administrative structure that can provide a high level of service today, and five years into the future; constrained by anticipated fiscal and economic projections; expand and contract with future needs; and be able to navigate any fiscal constraints of reimbursements from public and private sources.

To these ends, MRI looked to provide information relative to:

1. Short term opportunities for improvement of the Department's service delivery capabilities.

2. Identify future needs for apparatus and equipment.

3. Present short- and long-term organizational and deployment adjustments that seek to improve service delivery to the City.

4. Develop a report that will address operations, staffing, organizational structure, service demand trends, apparatus set configuration, and capital and facility needs over the next decade.

The resulting recommendations are also based upon an acknowledgement that fire departments are living and constantly evolving organizations. They must constantly change and adapt to current, and anticipated, conditions and realities. A municipal fire department, while steadfastly holding onto traditions, is an organization that must be progressive and proactive, and requires a perpetual commitment to improvement. The modern fire and emergency service is constantly besieged with ever increasing demands from the public and must readily adapt to changes in technology, constantly evolving risks and hazards, and new generations of men and women entering this highly rewarding and challenging public service avocation. The delivery of high-quality fire and emergency medical services requires energetic, enlightened, progressive, and proactive leadership at all levels of the fire and rescue services delivery system. Every day must include an effort to improve and move forward.

CHAPTER II
COMMUNITY OVERVIEW

The City of Westfield

The City of Westfield is located within Hampden County, in the Pioneer Valley of Western Massachusetts. It is bordered by Southampton, Holyoke, West Springfield, Agawam, Granville, Russell, Southwick and Montgomery. It is located 95 miles west of Boston, 30 miles from Hartford Connecticut, and 145 miles from New York City. The City is split into two sections, North and South by the Westfield River. The City covers approximately 47.4 square miles of which 1.1 square miles is water. The population of Westfield is 41,303 (not including the Westfield State University Community) With an overall population density of 875.8 people per square mile. There are approximately 14,797 households, of which 31.5% have children under the age of 18.

Westfield consists of a diverse mix of residential and commercial occupancies, which are located throughout the City. There is a robust commercial industry with approximately 500 commercial businesses. There are also multiple industrial facilities dispersed throughout. The City is known for being the home of Westfield State University and for the Westfield-Barnes Airport and the home of Barnes Air National Guard Base. Westfield-Barnes is one of the largest airports in the state with a strong flight training, general aviation and military presence. The airport spans 1,200 acres. There are eleven schools and two private schools within the City. Westfield State University Campus spans 256 acres and has a population of 5,500 students, many of whom are commuters. There are two hospitals within the City, Noble Hospital which is a community hospital and Western Mass Hospital that is state

owned and focuses on long term care and substance abuse. Interstate 90 (Massachusetts Turnpike), US Route 202/Route 10, Us Route 20 and Route 187 all traverse through the community.

The Westfield Fire Department

The Westfield Fire Department (WFD) is a career all hazards, emergency services organization that delivers fire, rescue, and emergency medical services (EMS) to the City of Westfield. The Department is currently (with all positions filled) made up of one Fire Chief, a suppression/EMS staff consisting of 72 firefighters/EMS providers, 8 Captains, and 4 Deputy Chiefs. Fire prevention and inspection has one Deputy assigned, the Training division has one Captain, and the EMS division has one firefighter. The Department is also assisted by two civilian administrative assistants and a mechanic.

The Department operates three stations (points of deployment). These deployment points are listed below:

- Fire Headquarters located at 34 Broad Street, houses all the administrative offices, training areas, living quarters for the on-duty personnel, and equipment and apparatus.

- A substation on the north side (Station Three) is located at 129 Southampton Road provides the response of two pieces of apparatus, typically and engine and an ambulance.

- Station Two, the third station is located at 366 Little River Road. The response from this station varies based upon staffing and typically consists of an engine or an ambulance.

The Westfield Fire Department operates five engines, one aerial tower, one brush truck, one rescue, five Advanced Life Support (ALS) ambulances, two boats and six command/support/utility vehicles.

The Department provides EMS services to the community at the advanced life support (ALS)/paramedic transport level. New full time career personnel must obtain ALS/paramedic certification and maintain it for the duration of their employment.

The WFD is an all-hazards response agency that responds to a wide range of emergency incidents and requests for assistance each year from within the City. The fire Department is trained to operate at the hazardous materials operations level.

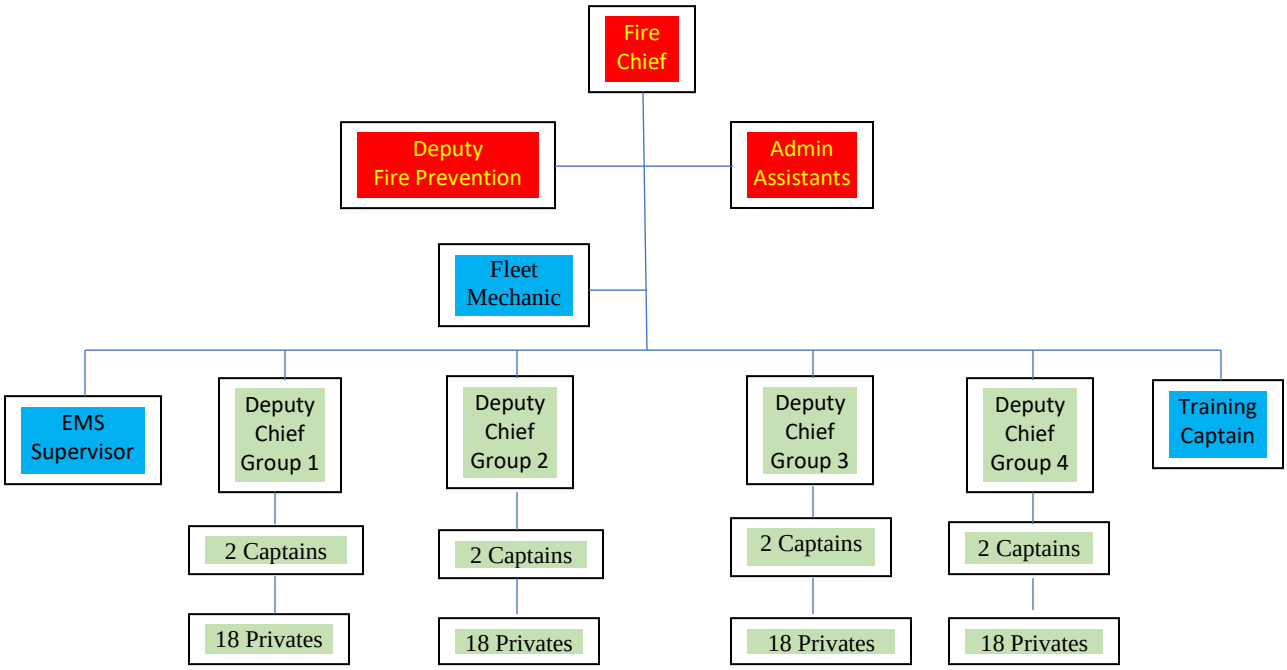

FIGURE II-1: WESTFIELD FIRE CURRENT ORGINIZATIONAL CHART

Shifts are typically staffed with 21 personnel as outlined below. A full shift of staff working is deployed in the following manner:

Headquarters: -1 Deputy Chief – shift commander
-1 Captains (2 Captains if the training Captain is available)
- 10 Privates

Station 2: - 4 Privates

Station 3: -1 Captain
-4 Privates

The collective bargaining unit allows for any shift to run to a minimum of 17 personnel (allowing four personnel to be on leave before overtime hiring is required) broken down as follows:

Headquarters: - Deputy Chief – shift commander
- Engine 4 with a Captain and two privates
- Engine 5 with two privates who also cross man Med 50
- Med 40 with two privates
- Tower 1 with two privates

Station 2: - Engine 2 with two privates who also cross staff Med 20.

Station 3: -Engine 3 with a Captain and two privates
-Med 30 with two privates

Operational Staffing Notes:

a. When a piece is cross staffed the other piece of apparatus is out of service.

b. When the training Captain is on duty and available he responds on the tower as an officer. This is only Monday through Thursday daytime hours.

c. On all Second Alarm fires personnel are recalled to duty (if available).

The response area for the Department includes all the 47.3 square miles and includes a significant and remote section of the Massachusetts Turnpike. In addition, the Department provides ALS intercept services and some patient transportation to communities around the City that do not have Advanced Life Support services that the City provides. Considering the EMS services to the other communities the footprint of coverage goes to approximately 132 square miles.

The City itself is divided into three districts representing each of the three fire stations. Headquarters is located in the center of downtown Westfield and covers 15.62 square miles with many residential, commercial and industrial occupancies. Station 2 covers 6.57 square miles in a predominantly residential area with some of the largest homes in the City. This area also consists of large box stores, commercial strips and dining areas along Route 20. Station 3 first due area is 25.12 square miles and has commercial, industrial and manufacturing in the district. This area also has the most open land and agriculture in the City.

Fire Administration

The administration of the Department consists of a Fire Chief and two civilian administrative assistants. For a City the size of Westfield coupled with the average span of control the overall size of the management team for the Department is not conducive for a well-run forward-thinking Department. Each of the Deputy Chiefs have an assigned role and responsibility above and beyond that of running a shift. These assignments are listed below:

- One Deputy takes care of all of the Tier 2 (Hazardous materials reporting), records management (First Due) software management and is the police fire liaison.
- Another Deputy serves as the dispatch liaison.
- The third deputy is the LEPC (Local Emergency Planning Coordinator) Chairperson.
- The fourth handles all EMS related items except for training. An EMS Superintendent is in charge of all EMS equipment and all EMS training.

The span of control leaves a very heavy workload for the fire chief. Considering ongoing administrative and operational activities the chief does not often have the time or the support to focus on strategic tasks and responsibilities. This leaves little if any time to plan for the future or explore new and potentially safer and more efficient programs for the Department to better serve the City. Most departments of this size have at least one assistant chief who focuses on the day-to-day operations of a department and allows for a strong second in command while the chief is unavailable to handle items of concern that require an immediate response. One of the key factors in this position is succession planning.

Community Growth and Development

The MRI team reviewed some sections of the "Westfield Master Plan – updated 2023" and found the data provided in the population & demographic section to be a good source for demonstrating the future potential needs of the Department. As the City grows the need and response criteria for fire and EMS will need to be evaluated as well.

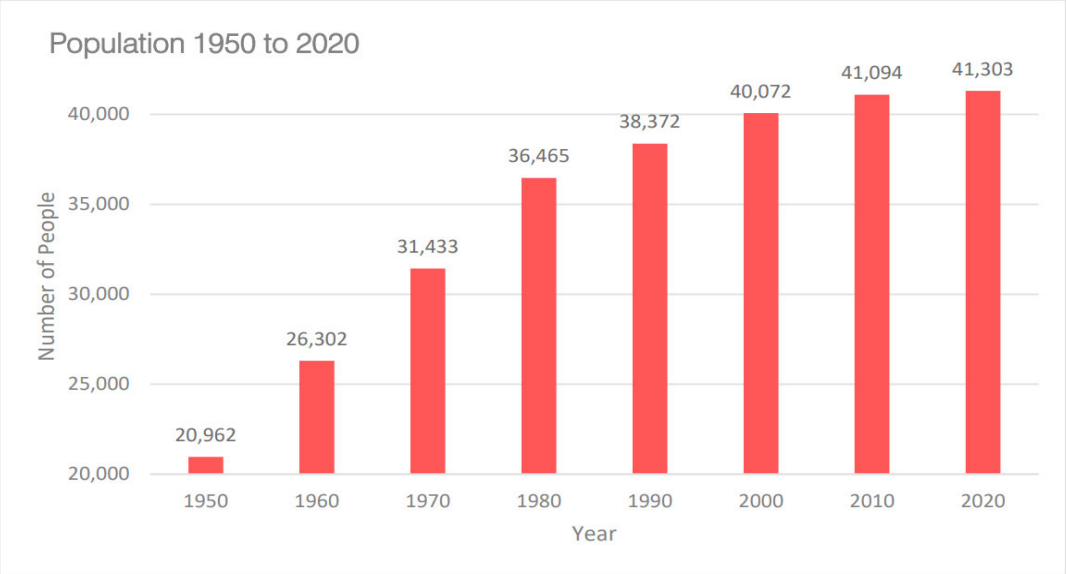

Figure I-1. Change in Population of Westfield
Source: U.S. Census, 2020

FIGURE II-2 – WESTFIELD POPULATION TREND CHART

The current population of the City of Westfield is 41,303 (U.S. Census Bureau, 2020). Figure I-1 above shows Westfield's significant population growth between 1950-2020. The City had a population growth of 97% between 1950 and 2020.

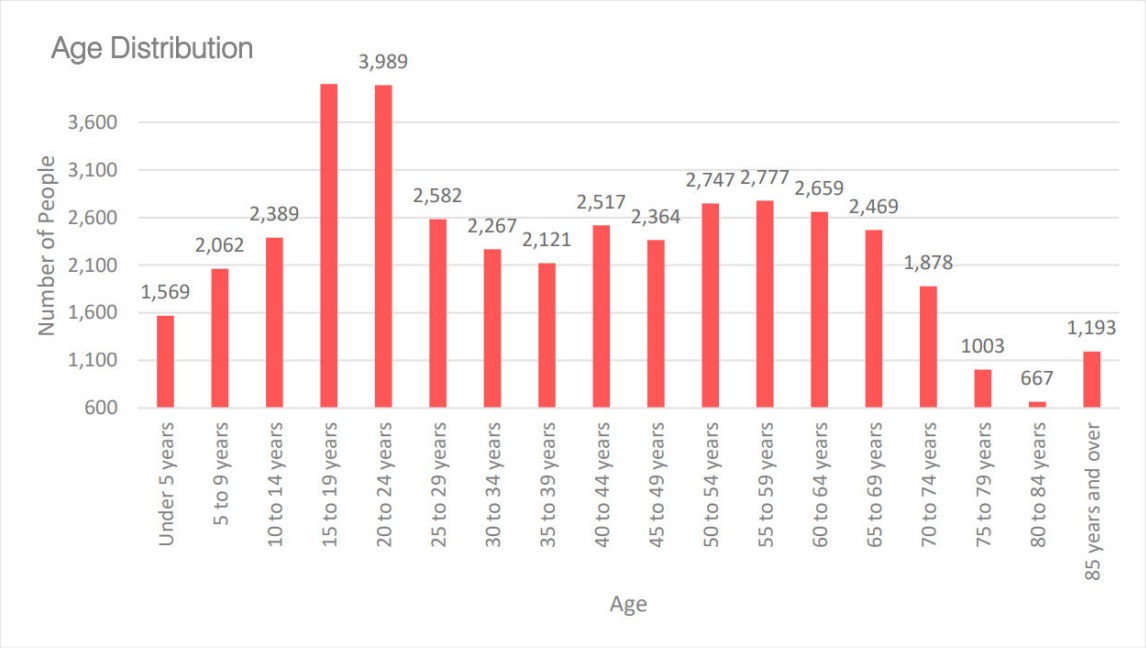

Figure I-2. Age Distribution in Westfield
Source: U.S Census Bureau, 2020

FIGURE II-3 – WESTFIELD AGE DEMOGRAPHIC CHART

The University of Massachusetts (UMass) Donahue Institute provides 20-year population projections in five-year increments for each community in Massachusetts. Table II-2 presents the population projections for 2020 through 2040 for the City of Westfield. Using 2020 ACS 5-Year Estimate population of 41,303, the Planning Information Center projections suggest an increase between 2020-2040 of approximately 2.88%, with most of this increase anticipated to occur between 2020 and 2025 (UMass Donahue Institute, 2020).

Figures II-2 below provide further demographic information related to age. The age distribution in Westfield is somewhat skewed towards adults, with 26.3% of age distribution from 20 to 39. Thereare 2,469 individuals that are likely to beretired or approaching retirement (ages 65-69) (U.S. Census Bureau, 2020). Figure I-2 provides an overview of age distribution.

Anticipating and planning for this growth is essential for the City and fire Department to continue to provide the community with the desired level of emergency services. Based upon what has been developed, and future potential development, it is reasonable to anticipate that growth will impact the delivery of fire and EMS services in the City of Westfield.

Community Risk Profile

Fire and rescue services protecting all communities generally have a common overall mission, the protection of life and property; but have different community profiles in which they operate. These dissimilarities create vastly different fire and rescue services operational needs based on a unique community risk profile, service demands, and stakeholder expectations.

A community risk assessment is a comprehensive process to identify the hazards, risks, fire, and life safety problems, and the demographic characteristics of those at risk in a community. In each community, there are numerous hazards and risks to consider. For each hazard, there are many possible scenarios and potential incidents that could be encountered depending on timing, magnitude, and location of the hazard or incident. A thorough risk analysis provides insight into the worst fire and life safety problems and the people who are affected. The analysis results create the foundation for developing risk-reduction and community education programs.

Conducting a community risk analysis is the first step toward deciding which potential fire or injury problem needs to be addressed. Risk analysis is a planned process that must be ongoing, as communities and people are constantly changing. Too often, an objective and systematic community risk analysis is a step that is overlooked in the community education process. Many emergency service organizations address risks based on a perceived need for service that is not there. This approach can be costly (i.e., misdirected resources, continued property loss, injuries, or deaths). In short, a good community risk assessment will produce a realistic picture of what the hazards and potentials for incidents are, identify who is at risk, and attempt to quantify the expected impacts (**Figure II-4**).

Understanding the definition of hazards and risks is critical to the risk assessment process. Hazards are physical sources of danger that can create emergency events. Hazards can be items such as buildings, roadways, weather events, and fires. Risk relates to the probability of a loss due to exposure to a hazard. People and property can be at risk. Consequences to the community are also factors to consider. Each of these factors is assessed during the community risk process (**Figure II-5**).

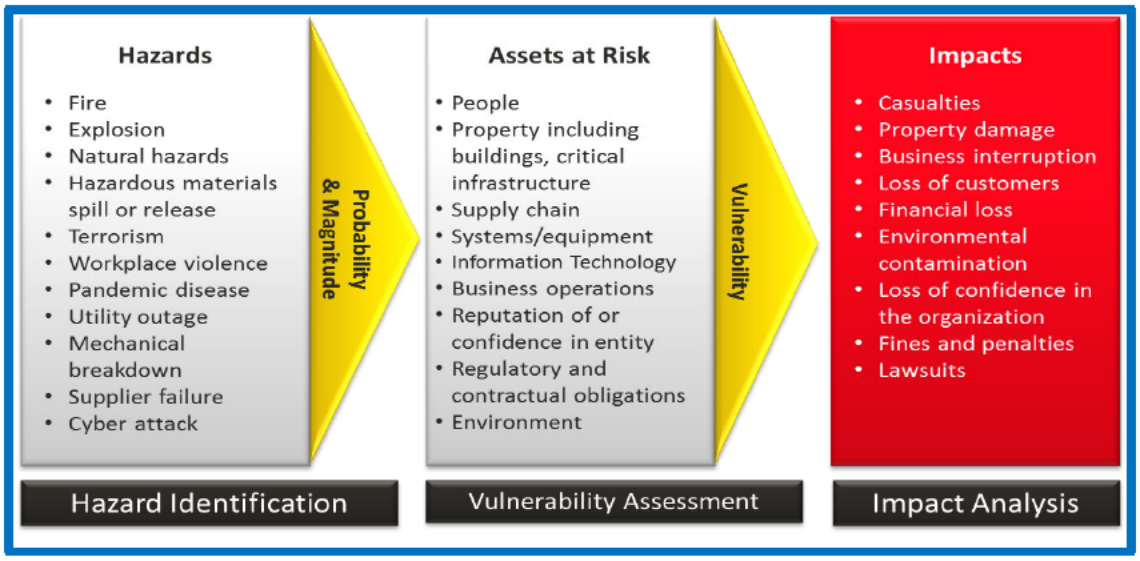

FIGURE II-4: RISK ASSESSMENT PROCESS
Image credit: www.ready.gov/risk-assessment

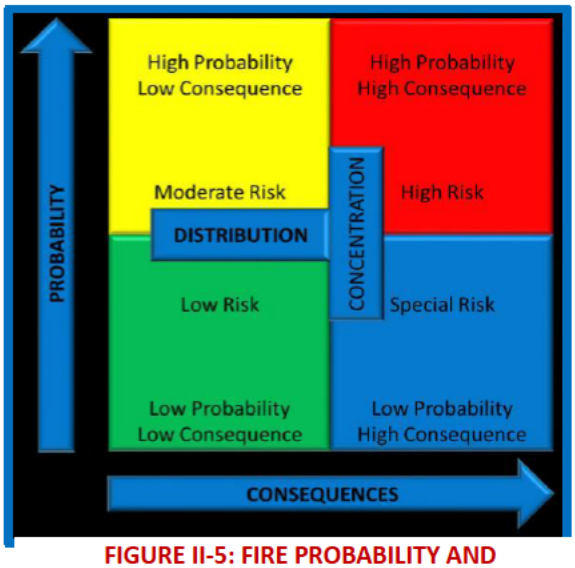

FIGURE II-5: FIRE PROBABILITY AND CONSEQUENCES MATRIX
Image credit: Commission on Fire Accreditation

In performing a risk assessment, a community determines which hazard may occur, how often it is likely to occur, and potential impact from that hazard. Most municipalities' hazard mitigation plans address numerous natural hazards, including but not limited to, floods, hurricanes, tornadoes, and winter storms. They also usually cover a wide variety of human-caused hazards such as fire, hazardous materials releases, and transportation incidents. Almost any of the comprehensive list of potential hazards identified in these plans will involve the community's fire and EMS responders, at least during the initial stages.

A more focused community fire risk assessment is performed by assessing such factors as the needed fire flow, probability of an incident, consequences of an incident, and occupancy risk. The "score" established is then utilized to categorize the area, or even individual properties, as one of low, moderate, or high/maximum risk. This categorization can assist a fire department in establishing fire risk/demand areas or zones. Having this information readily available provides the community and the fire department with a better understanding of how fire stations, response run cards, and staffing patterns can be used to provide a higher concentration of resources for higher-risk scenarios or, conversely, fewer resources for lower levels of risk.[1] The community fire risk assessment may also include determining and defining the differences in fire risk between a detached single-family dwelling, a multi-family dwelling, an industrial building, and a high-rise building by placing each in a separate category.

According to the NFPA *Fire Protection Handbook*, these hazards are defined as:

> **High-hazard occupancies:** Schools, hospitals, nursing homes, high-rise buildings, and other high life-hazard or large fire-potential occupancies.
>
> **Medium-hazard occupancies:** Apartments, offices, mercantile, and industrial occupancies not normally requiring extensive rescue by firefighting forces.
>
> **Low-hazard occupancies:** One-, two-, or three-family dwellings and scattered small business and industrial occupancies[2].

[1] *Fire and Emergency Service Self-Assessment Manual,* Eighth Edition, (Commission on Fire Accreditation International, 2009) p. 49.
[2] Cote, Grant, Hall & Solomon, eds., *Fire Protection Handbook* (Quincy, MA: National Fire Protection Association, 2008), p. 12.

The NFPA also identifies a key element of assessing community vulnerability as fire department operational performance, which is comprised of three elements: resource availability/ reliability, department capability, and operational effectiveness[3].

> **Resource availability/reliability:** The degree to which the resources are ready and available to respond.
>
> **Department capability:** The ability of the resources deployed to manage an incident.
>
> **Operational effectiveness:** The product of availability and capability. It is the outcome achieved by the deployed resources or a measure of the ability to match resources deployed to the risk level to which they are responding.[4]

As with most communities, the greatest fire safety concern in Westfield is the potential life loss in fires that occur in non-sprinklered, single, and multi-family residential dwellings during sleeping hours, which is consistent with national trends. These fires are fueled by new "lightweight" construction and more flammable home contents. The time to escape a house fire has dwindled from about 17 minutes, 20 years ago, to three to five minutes today. This poses a severe risk not only to occupants but also to firefighters as they now have less time to do their job and save residents' lives and property.

Westfield presents a unique mix of challenges and hazards that must be protected by its fire Department. Although the City has moderate residential areas, it is not just a prototypical bedroom community. It has a moderate density concentration of commercial and industrial occupancies.

Target hazards are defined as significant hazards; those that can strain the fire department response capability. Target hazards could include hospitals, schools, churches, storage facilities, or manufacturing plants.

As part of the MRI teams tour of the community, it was noted that there are several high-level target hazards the Department must be able to respond to and to properly mitigate an incident at. Some of these are as follows:

- 1515 Granville Road – five 1-ton chlorine containers
- C&S Wholesale – 62,000 lbs. Anhydrous ammonia – 100 employees operating 24X7
- NGL Terminal - Propane distribution center – up to 19 Rail cars during peak season
- Rail Yard facility – Varied materials including Butane

[3] http://www.nfpa.org/assets/files/pdf/urbanfirevulnerability.pdf
[4] National Fire Service Data Summit Proceedings, U.S. Department of Commerce, NIST Tech Note 1698, May 2011.

- Westfield Electro plating
- Westfield Coating – Sulfuric Acid
- Westfield State University
- 31 Tier two reporting locations (Tier two refers to an annual requirement for reporting chemical storage at a facility and the associated dangers.)
- Barnes Airport
- Pioneer Valley Railroad – 4 miles low speed - Propane to plastic pellets
- CSX Railway – High speed 7 miles rail – Myriads of items
- Home Depot Distribution Warehouse – 657,000 square feet
- 1111 Southampton Road – Mixed use 640,105 square feet
- 211 Servistar Industrial Way – 446,849 square feet with partial fertilizer storage
- Lowes Distribution Center large storage – no sprinklers
- Boise Cascade – Large storage with no sprinklers

Fortunately, many of these commercial and industrial structures are equipped throughout with complete automatic fire suppression (sprinkler) systems, which considerably reduce the overall risk of these structures. Automatic sprinklers are highly effective elements of total system designs for fire protection in buildings. They save lives and property, producing large reductions in the number of deaths per thousand fires, in average direct property damage per fire, and especially in the likelihood of a fire with large loss of life or large property loss. They do so much quicker, and often more effectively and with less damage than firefighters do. No fire safety improvement strategy has as much documented life safety effectiveness as fire sprinklers because they extinguish the fire, or, at a minimum, holds it in check and prevent flashover, until the arrival of the fire department.

Newer multi-family residential/apartment complexes are generally fully protected by fire suppression and detection systems. However, as noted below, these systems have limitations as they may not protect all areas of the building or are not always properly maintained.

In 2007-2011 fires in all types of structures, when sprinklers were present in the fire area of a fire large enough to activate sprinklers in a building not under construction, sprinklers operated 91% of the time[5]. When they operated, they were effective 96% of the time, resulting in a combined performance of operating effectively in 87% of reported fires where sprinklers were present in the fire area and fire was large enough to activate sprinklers[6]. **In homes (including apartments), wet-pipe sprinklers operated effectively 92% of the time. When wet-pipe sprinklers were present in the fire area in homes that were not under construction, the fire death rate per 1,000 reported structure fires was lower by 82%, and the rate of property damage per reported home**

[5] U. S. Experience with Sprinklers. John R. Hall, Jr. National Fire Protection Association, June 2013.
[6] U. S. Experience with Sprinklers. John R. Hall, Jr. National Fire Protection Association, June 2013.

structure fire was lower by 68%[7]. In all structures, not just homes, when sprinklers of any type failed to operate, the reason most often given (64% of failures) was shutoff of the system before the fire began[8].

Even with the presence of automatic fire suppression systems, the firefighting and emergency response challenges that may confront firefighters in commercial and industrial structures and occupancies are none-the-less much more complex; often require significantly more resources to mitigate and are potentially more dangerous from a life safety perspective to both occupants and firefighters, than those usually found in single-family dwellings. While built-in fire protection should significantly reduce the spread of fire, it may not completely extinguish the fire. Firefighters still need to complete the extinguishment and perform ventilation, overhaul, and salvage operations.

Current Massachusetts codes prohibit municipalities from requiring residential sprinkler systems in all new occupancies. However, the fire department can approach the developer/builder/owner to discuss the pros and cons of residential sprinkler systems during the approval process for subdivisions and large single-family residences and encourage them to consider the installation of these life safety systems regardless of where they are located. There are several publications that the fire department can use as resources to market the benefits of residential fire suppression systems including NFPA, which has developed the standards for their design and installation.

Buildings more than three stories in height pose a special risk in an emergency. Fire on higher floors may require the use of ladder trucks to provide an exterior standpipe, to be able to deliver water into a building that does not have a system in place. For victims trapped on higher floors, a ladder truck may be their only option for escape. Large area buildings sometimes referred to as horizontal high rises, such as warehouses, malls, and large "big box" stores often require greater volumes of water for firefighting and require more firefighters to advance hose lines, long distances into the building. They also present challenges for ventilation and smoke removal.

The fire service further assesses the relative risk of properties based on several factors. Properties with high fire and life risk often require greater numbers of personnel and apparatus to mitigate a fire emergency effectively. Staffing and deployment decisions should be made with consideration of the level of risk within each area of the community. The assessment of each factor and hazard as listed below took into consideration the likelihood of the event, the impact on the community itself, and the impact on the WFD's ability to deliver emergency services,

[7] U. S. Experience with Sprinklers. John R. Hall, Jr. National Fire Protection Association, June 2013.
[8] U. S. Experience with Sprinklers. John R. Hall, Jr. National Fire Protection Association, June 2013.

which includes automatic aid capabilities as well. The list is not all- inclusive but includes categories most common; or that may present to the department.

Low Risk:

- Automatic fire/false alarms.
- Single patient/non-life threatening BLS EMS Incidents.
- Minor fire incidents (fire flow less than 250 gallons per minute) with no life safety exposure.
- Minor flooding with thunderstorms.
- Good Intent/Hazard/Public Service.
- Minor rescues.
- Outside fires such as grass, rubbish, dumpster, vehicle with no structural/life safety exposure.
- Small fuel spills.

Moderate Risk:

- Fires in single-family dwellings and equivalently sized commercial office properties (needed fire flow generally between 250 gallons per minute to 1,000 gallons per minute) where fire and/or smoke is visible indicating a working fire.
- Life-threatening ALS medical emergencies.
- Motor Vehicle Crash (MVC).
- MVC with entrapment of passengers.
- Hazardous materials emergencies requiring specialized skills and equipment but not involving a life hazard.
- Technical rescues involving specialized skills and equipment (such as low angle rescue involving ropes and rope rescue equipment and resources).
- Larger brush and outside fires, particularly if structures are exposed.
- Suspicious substance Investigation involving multiple fire and law enforcement agencies.
- Surface water rescue.
- Good Intent/Hazard/Public Service fire incidents with life safety exposure.

High Risk:

- Fires in larger commercial properties and target hazards with a sustained attack (fire flows more than 1,000 gallons per minute).
- Cardiac/respiratory arrest.
- Multiple patient medical/mass casualty incidents with more than ten but less than 25 patients.

- Major releases of hazardous materials that causes exposure to persons or threatens life safety.
- High-risk technical rescues:
  - Confined space rescue.
  - Structural collapse involving life safety exposure.
  - High angle rescue involving ropes and rope rescue equipment.
  - Trench rescue.

Special Risk:

- Working fire in a structure greater than three (3) floors.
- Fire at an industrial building or complex with hazardous materials.
- Multiple patient medical/mass casualty incidents with more than 25 patients.
- Rail or transportation incident that causes life safety exposure or threatens life safety through the release of hazardous smoke or materials.
- Explosion in a building that causes exposure to persons or threatens life safety or outside of a building that creates exposure to occupied buildings or threatens life safety.

Overall, it is the project team's assessment that the WFD's current relative basic fire and life risk translates to (**Figure II-6**):

OCCUPANCY DESCRIPTION	RISK
Single Family Residential (unsprinklered)	Moderate
Multi-family Residential (sprinklered)	Moderate
Multi-family Residential (unsprinklered)	High
Commercial (retail and office) (sprinklered)	Moderate
Commercial (retail and office) (unsprinklered)	High
Industrial	Moderate/High
Open Space	Low
Transportation Incident	Moderate
Water Rescue Incident	Low

FIGURE II-6: WFD FIRE AND LIFE SAFETY RISK LEVELS

The weather a community experiences can impact the fire department's ability to respond. Snow, ice, and other conditions can slow response. Major storms can create emergency situations that can overwhelm local emergency response forces. The Westfield area enjoys a moderate climate typical of the New England region. Thunderstorms, strong windstorms, and significant rain events

happen several times in an average year. Tropical storms and hurricanes also occasionally impact the area. Snowfall is experienced annually and occasionally in amounts that paralyzes the region. Although rare, tornadoes have occasionally touched down in Massachusetts.

Aggressive adoption and enforcement of fire and building codes in both new and existing facilities will continue to be a critical factor in managing risk throughout Westfield. Communications regarding major projects need to be kept open and frequent. Any new development projects that are proposed should continue to be sent to the fire Department for review and input on fire protection needs and concerns. Ensuring that existing buildings continue to maintain code compliance is also an important component of a community's overall fire protection system.

The implementation of successful community risk reduction strategies after completion of a community risk assessment are linked directly to the prevention of civilian and firefighter line of duty deaths and injuries. In fact, they directly address goals found in firefighter Life Safety Initiatives 14 and 15. Virtually every risk reduction program in the fire and emergency services will have elements of what are called *"The 5 Es of Prevention*". These include:

Education ▪ Enforcement ▪ Engineering

Economic Incentives ▪ Emergency Response

Figure II-7: FIVE ES OF PREVENTION IN A COMMUNITY RISK REDUCTION PROGRAM
Image credit: www.beaherosaveahero.org

Understanding and addressing only one element will not lead to a successful program. All five "Es" must be integrated into every program for it to be effective[9] (**Figure II-7**). Strong fire prevention codes have been shown to be extremely effective means, to reduce risk in a community. Fire alarm and sprinkler systems mandates for not only commercial buildings; but all occupancies including single family dwellings, dramatically reduce fire risk and increases life safety. Code implementation that doesn't require these creates an increased risk. Strong code provisions and enforcement have demonstrated a greater ability to decrease fire problems than continuing to acquire more traditional fire department resources.

Looking ahead, the City of Westfield will continue to experience some steady, probably moderate, growth and development. While this development will have a definitive impact on the WFD, the exact amount is difficult to quantitatively and accurately predict. Increased development of any type will mean an increase in the number of people living, working, and traveling within the area. Each of these will reasonably be expected to result in an increased

[9] http://www.beaherosaveahero.org/2013/10/community-risk-reduction-crr-overview/ February 5, 2016

number of requests for services from the fire Department. They can also impact response times through increased traffic and congestion.

It is likely the most significant increase in requests for emergency services will be EMS related. More people simply increase the number of medical emergencies that occur. It would not be unreasonable to expect that the increase in EMS incidents would be proportional to the increase in population; however, that is not always the case. Although many factors can ultimately impact the requests for service, such as ages or socio-economic status of new residents, or an aging population, it could reasonably be anticipated that an increase in population, along with potential increases in employment from any significant commercial development, would translate into an increase in emergency medical incidents.

The above information is intended to provide a community "snapshot" of the City of Westfield. It is not intended to be all-inclusive or comprehensive. For the City's governing body and fire Department leadership, it serves to put the community and its associated hazards and risks into some context as the fire Department works to carry out the recommendations of this study and implement their long-range plans. Looking ahead, as it develops a more in-depth risk management plan, that assessment should include:

- Clearly identify and classify the City's current risks.
- Place the risks in context with the fire Department's current operational capabilities and procedures.
- Reflect what the City Council feels is an acceptable level of risk for the City of Westfield.
- Implement short- and long-range plans based upon a desire to reduce those risks and/or improve service delivery levels.

Overall, our team found that Westfield is a very diverse community and contains many hazards with a combination of residential, educational and commercial properties; aging buildings, aging population, waterways, highways, an airport, rail lines, industrial areas with chemical processes, two hospitals, and multiple places of assembly.

Comparative Analysis

The process of benchmarking, also known as comparative analysis, is an effective way of making general comparisons between similar communities and identifying trends and patterns, but there are limitations as to how the data should be used. The data gathered through this process

provides a perspective on organizational norms and best practices. Ideally, a community would utilize this information to identify needed change and through paced action, work incrementally toward implementation.

The information in the next set of tables provides very basic organizational comparisons, of the organization and operations of four peer communities like Westfield. There are similarities between each of these departments, but it should be noted that there are also differences in how each community delivers fire and EMS services. As an example, Fitchburg and Chicopee do not have paramedics on staff or provide advanced life support services. Although this is a distinct difference that needs to be considered, these organizations are similar in other respects.

In this comparison, each municipality and its fire department provide emergency and other public services based on the expressed desires of that community and its citizens. What may be effective in one community may not be in a neighboring town or city. The ability of the fire department to provide the services desired by the community it serves is based on its perceived risk and available funding and resources.

Community	Community Population	Square Miles
Fitchburg	42,000	28
Leominster	43,000	26.5
Chicopee	54,737	23.9
Northampton	29,321	35.75
Average	**42,265**	**28.5**
Westfield	**40,517**	**47.3**
Deviation	**0.96**	**1.66**

Community	Fiscal 2024 Community Budget	Fire / EMS Budget for Fiscal Year 2024
Fitchburg	$159,090,563.00	$8,951,182.00
Leominster	$161,872,478.00	$10,461,295.00
Chicopee	$241,705,043.20	$14,200,883.70
Northampton	$132,333,990.00	$7,227,889.00
Average	**$173,750,519**	**$10,210,312**
Westfield	**$ 171,068,510**	**$9,510,468**
Deviation	**0.98**	**0.93**

Community	Cost per Capita	Overtime Budget
Fitchburg	213	$ 515,000.00
Leominster	243	$2,000,000.00
Chicopee	259	$1,600,000.00
Northampton	247	$ 520,187.00
Average	**$240.50**	**$1,158,797**
Westfield	**$234.73**	**$ 350,000**
Deviation	**0.98**	**0.30**

Community	Number of Fire Stations	Average Land Area Covered by Each Station
Fitchburg	3	9
Leominster	3	9
Chicopee	6	4
Northampton	2	18
Average	**3.5**	**10**
Westfield	**3**	**15.76**
Deviation	**0.86**	**1.57**

Community	Number of Officers on Each Shift	Minimum Shift Strength
Fitchburg	5	15
Leominster	5	19
Chicopee	9	27
Northampton	3	13
Average	**5.5**	**18.5**
Westfield	**3**	**17**
Deviation	**0.55**	**0.92**

Community	Total Number of Incidents Calendar Year 2023	Number of Structure Fires 2023
Fitchburg	11,125	64
Leominster	10,000	27
Chicopee	10,355	79
Northampton	9,364	35
Average	**10,211**	**51**
Westfield	**11,060**	**86**
Deviation	**1.08**	**1.68**

Community	Number of EMS Responses 2023	Number of of EMS Transports 2023
Fitchburg	7,973	5,600
Leominster	6,800	4,900
Chicopee	10,355	7,792
Northampton	6,670	5,541
Average	**7,950**	**5,958**
Westfield	**7,882**	**5,892**
Deviation	**0.99**	**0.99**

Community	Total Ambulance Revenue	Average Revenue per Transport
Fitchburg	N/A	N/A
Leominster	$ 2,800,000.00	$ 571.00
Chicopee	$ 3,759,312.34	$ 482.46
Northampton	$ 3,331,252.53	$ 601.20
Average	**$ 3,296,855**	**$ 551.55**
Westfield	**$ 3,713,577**	**$ 630.27**
Deviation	**1.13**	**1.14**

Community	Rank and Number of Staff Assigned to Training	Staffing on Ladder Trucks Officer/FF
Fitchburg	Deputy & Captain	3
Leominster	1 Deputy, 1 LT.	1 LT., 2 FF
Chicopee	1	2
Northampton	1 Captain	2 (cross staffed)
Average	**1.5**	**2.5**
Westfield	**1**	**2.5 (3 M-Th)**
Deviation	**0.67**	**1.00**

Community	Fire Dollar Loss 2023	Dedicated Training Facility
Fitchburg	$ 2,301,547.00	Yes
Leominster	$ 362,006.00	Yes
Chicopee	$ 405,250.00	No
Northampton	$ 224,492.00	Yes
Average	**$ 823,323.75**	**Yes**
Westfield	**$4,024,250.00**	**No**
Deviation	**4.89**	**No**

Community	Firefighter Injuries 2023	Civilian Death or Injury 2023
Fitchburg	6	0
Leominster	14	20
Chicopee	11	10
Northampton	20	Not Reported
Average	**12.75**	**7.50**
Westfield	**2**	**3**
Deviation	**0.15**	**0.4**

Community	ISO Rating	Engine Company Crew Size Officer/FF
Fitchburg	2	3
Leominster	3	1 with 1/3, 2 with 1/2
Chicopee	2	3
Northampton	3	1 Cap/2 FF
Average	**2.50**	**3.00**
Westfield	**3**	**2 or 3**
Deviation	**1.2**	**0.83**

Community	Ladder Crew Size Officer/FF	Total Number of Sworn Personnel
Fitchburg	3	81
Leominster	2	92
Chicopee	2	136
Northampton	2 FF (when staffed)	69
Average	**1.75**	**94.50**
Westfield	**2 FF (day Captain)**	**87**
Deviation	**1.42**	**0.92**

Community	Total Number Civilian Personnel	Number of Staffed Ambulances
Fitchburg	4	1
Leominster	6	2 (1 Fly)
Chicopee	4	4
Northampton	2	3
Average	**4.00**	**2.00**
Westfield	**3**	**4**
Deviation	**0.75**	**2**

Community	Number of Paramedics	Number of Department Mechanics
Fitchburg	0	1
Leominster	7	1
Chicopee	0	1
Northampton	51	1
Average	**14.50**	**1.00**
Westfield	**48**	**1**
Deviation	**4.46**	**1**

Community	Command Vehicle Staffed	Chief Officers not assigned to a shift
Fitchburg	1	2
Leominster	1	2
Chicopee	1	2
Northampton	1	3
Average	**1**	**2**
Westfield	**1**	**2**
Deviation	**1.00**	**1.00**

Community	Number of Personnel assigned to Fire Prevention	Number of Inspectors
Fitchburg	2	2
Leominster	3	3
Chicopee	4	4
Northampton	2	2
Average	**3**	**3**
Westfield	**1**	**1**
Deviation	**0.33**	**0.33**

Community	Number of Civilian Employees assigned to Fire Prevention	Number of Admin Support for Fire Prevention
Fitchburg	0	1
Leominster	0	0
Chicopee	0	0
Northampton	0	0
Average	**0**	**0.25**
Westfield	**0**	**0**
Deviation	**0.00**	**0.00**

Community	Units with Mobile Records Management Technology	NFPA 1710 Compliant
Fitchburg	0	Yes
Leominster	8	No
Chicopee	0	No
Northampton	11	Partial
Average	**5**	**Partially**
Westfield	**0**	**Yes**
Deviation	**0.00**	

Community	OSHA 2/2 Compliant	Automatic Aid in Place for Target Hazards
Fitchburg	Yes	Yes
Leominster	Yes	No
Chicopee	Yes	No
Northampton	Yes	Yes
Average	**Yes**	**50/50**
Westfield	**Yes**	**No**
Deviation		

Community	Is the Chief under Civil Service	Are the FF's & Officers under Civil Service
Fitchburg	Yes	Yes
Leominster	Yes	Yes
Chicopee	Yes	Yes
Northampton	No	Partially
Average	Yes	Yes
Westfield	Yes	Yes
Deviation	0.00	0.00

FIGURE II-8 – WESTFIELD COMPARATIVE ANALYSIS TABLES

A review of this information provides the following perspective and pertinent findings for the City of Westfield Fire Department:

- Westfield has a population within 4% of the average of the peer communities.
- Westfield has a 66% larger land/response area.
- The overall community budget for the City of Westfield is within 2 percent of the average of the peer communities and the fire/EMS budget is 7% percent below the average of the peer communities.
- Cost per capita in Westfield is two percent below average.
- The amount of overtime budgeted in Westfield is 70% below average when compared to the average overtime expenditures within the peer communities.
- Westfield has three fire stations compared to the average of 3.5 stations within the peer communities. This results in a larger land area or response area being covered by each station.
- Westfield has three (3) officers on each shift, which is lower than the average of 5.5 officers per shift.

- The minimum shift strength in Westfield is 18 percent below the average of 18.5 personnel.
- Westfield Fire responds to eight percent more emergencies than the average responses within the peer communities.
- Westfield experiences sixty-eight percent more structure fires than the average within the set of peer communities.
- While EMS volume is Westfield is near the average, revenue is 13 percent higher than the average.
- Westfield has fewer personnel assigned to training (1) than the average within the peer communities (1.5). In addition, the Westfield training officer cross staffs the Ladder so this further deteriorates the training effort in the City.
- Fire dollar loss in Westfield is almost five times the average. While dollar loss is somewhat subjective this indicates that the fire problem in Westfield is more severe than within the peer communities.
- Three of the four peer communities have a dedicated training facility, Westfield does not have a facility of this type.
- Despite a more severe fire experience (volume and loss) Westfield experiences far fewer firefighter and civilian injuries than the average.
- All of the surveyed communities operate an engine with three personnel. In Westfield some are staffed with three while at times others (Station 2) can be staffed with two. This has a direct impact on operational capability and safety.
- Westfield has 87 (92 percent of the average) sworn personnel. The average in peer communities is 94.50 sworn personnel.
- Westfield has 75 percent of the average in terms of civilian staff.
- Westfield staffs more ambulances than the average in the peer communities.
- Westfield has one person assigned to fire prevention compared to the average of three.
- Westfield has no mobile records management/NFIRS capability, which is well below the average of five units per department.
- One half of the peer organizations have automatic aid in place for their response to high or target hazards, Westfield does not.

Recommendations

II-1 ***The WFD should make it a priority to complete a comprehensive fire and rescue community risk assessment. This assessment should be done in conjunction with a fire and EMS call for service demand analysis and consider the fire Department's operational capabilities and preparedness.***

II-2 ***The WFD should dramatically increase the use of technology and records management. Preplanning of target hazards on an electronic platform available to all first response units should be a top priority for all target and high hazard locations. This will be emphasized in other chapter.***

II-3 ***The WFD should work to develop and implement an internal risk management plan following the recommendations of NFPA 1500, Standard for a Fire Department Occupational Safety and Health Program, and NFPA 1250, Recommended Practice in Fire and Emergency Services Organization Risk Management.***

CHAPTER III
ORGANIZATIONAL STRUCTURE

The organizational structure of any organization or entity, whether public or private, establishes and illustrates the important hierarchical relationships between various personnel, supervisors/subordinates, levels, divisions, and bureaus within the organization that allow it to function properly, and operate effectively and efficiently in its daily operations or the pursuit of its mission. It also helps to clearly define the organizational chain of command from top to bottom, an especially important consideration in a quasi-military public safety organization such as a fire department where everyone from the highest rank to the lowest is subject to receiving orders, and with the exception of the lowest rank, also issues them. Effective communications in any organization, but especially public safety agencies, are essential. A cohesive chain of command allows everyone to know exactly who they report to and/or who reports to them.

Figure III-1 illustrates the Westfield Fire District's organizational structure that was in effect in 2024.

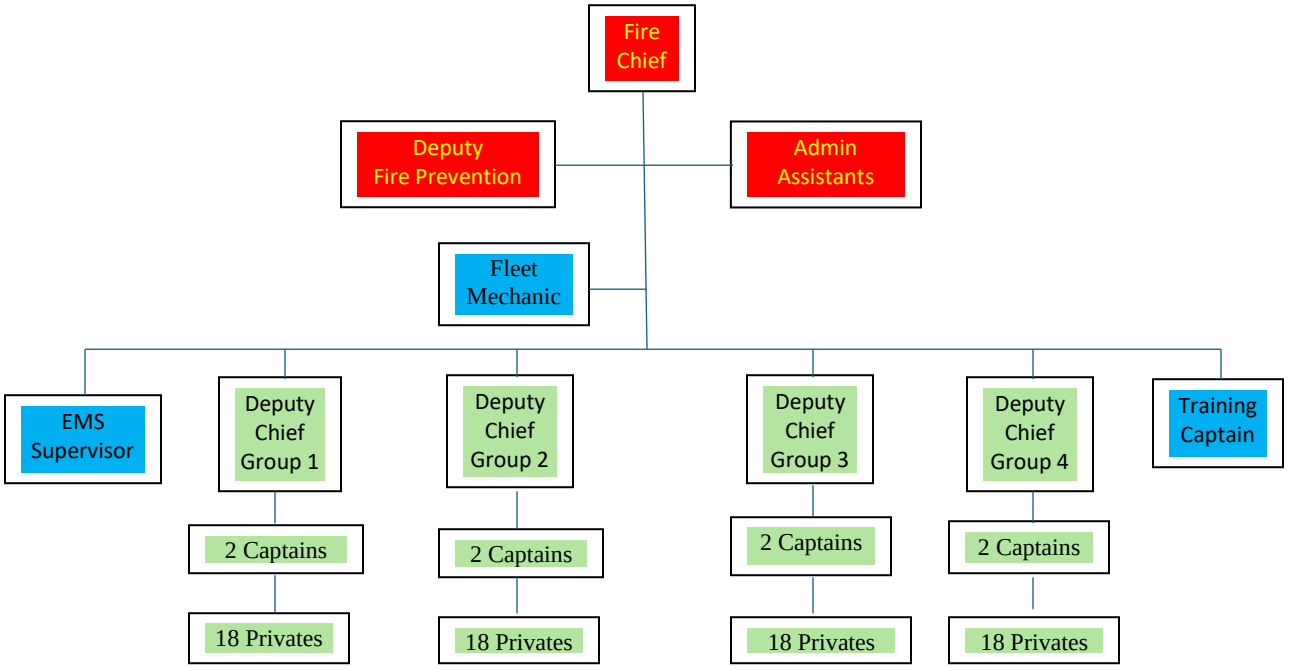

FIGURE III-1: CURRENT WFD ORGANIZATIONAL CHART

The Department and its personnel are part of the Massachusetts Civil Service System. As such, the City must follow the requirements for recruiting, hiring, promoting, disciplining, and terminating fire Department employees in harmony with the Collective Bargaining Agreement.

Fire Chief Patrick Egloff is the Department's highest ranking officer and serves as the administrative and operational head of the Department. The fire chief is appointed by the Westfield Fire Commission and reports to the Commision and the Mayor. The chief works a straight day work schedule, Monday through Friday. He is assisted by two civilian administrative assistants who provides a wide range of administrative and support functions. All ranks within the organization are filled through the Massachusetts Civil Service proccess. Within the current administrative organization of the Department there is a three-person Board of Fire Commisioners. This Board is involved with hiring, promotions, termination, step 2 of greviences and any discipline over 5 days. The board meets once a month to handle the bussiness at hand. Often the meetings are cancelled due to not having all members available. This often creates issues with the need to process elements they are tasked to handle and has had an effect on the effective and efficient handling of personnel matters. In a 1989 Westfield Fire Report, finding number 30 stated the following "The fire commission should be abolished. The concept of the fire commission is outdated and serves little purpose in adminstering the needs of the Department." The MRI team finds this still to be accurate and recommends the City begin the procecces of abolishing the Commission. Typically, this will include changes to the City Charter as well as changes that are applicable to the Collective Bargaining Agreements. In addition, the City Council may want to consider establishing a Public Safety Committtee as a means at looking at long term strategic planning.

The deputy fire chiefs serve as shift officers and fire prevention officer for the City. Currently, only the chief is considered to be management and is not a part of a collective bargaining unit. The deputy chiefs are members of a separate collective bargaining unit than the firefighters. As a result, the chief does not have a real management and support assistant that can share responsibilities for confidential personnel matters, supervision, handling grievances or potential grievances, administering the collective bargaining agreement, overseeing budgetary expenditures, assisting with the development of policies and procedures, and the myriads of administrative and management tasks that are associated with running a modern, full-service emergency services provider. In the absence of the fire chief, the City is without a true member of the executive management team to oversee a critical public safety agency. The level of team collaboration is subject to significant debate among the various stakeholders interviewed by the MRI study team.

The Department is authorized for a total of eight captains who are assigned as supervisors on the four platoons/groups, and function as the shift commanders. The captains serve as the Department's first line supervisors, providing critical direction and direct oversight to the firefighters assigned to that group while also providing initial incident command and management. They form an integral part of their company, and with the firefighters assigned to each group, it is frequently necessary for them to assume hands-on involvement in operations

while simultaneously providing oversight and direction to their personnel. Captains must be able to focus on the completion of specific tasks that have been assigned to their respective companies, such as interior fire attack, rescue, ventilation and/or water supply. During structure fires and other dangerous technical operations, it is imperative that these officers accompany, and operate with their crew to monitor conditions, provide situation reports, and assess progress toward incident mitigation. During structure fires they must be capable of operating inside of the fire building with their crews, the most dangerous place on the incident scene. Consequently, it is imperative that they are highly qualified and experienced and can command the confidence of their personnel.

One downside to the 24-hour schedule is that there can be a tendency for continuity and/or progress on projects to be slowed by the fact that the personnel assigned to or working on them are only available every third or fifth day. When personnel work weekends and holidays, when the fire chief is not normally working is factored in; communications can be problematic, as the fire chief may go for a week or longer without seeing certain personnel who he may need to get updates from and provide direction/instruction to. While there is a wide array of alternative communications mediums available today that can minimize these issues, there is still no form of communication that is as effective as face-to-face communication.

All uniformed personnel, other than the fire chief are represented in collective bargaining units by the Professional Firefighters of Westfield, and the International Association of Firefighters (IAFF). The ranks of Firefighter up to Captain are in one unit and the Deputies are in a separate one.

It is the project team's opinion that the City should revise the Department's overall table of organization to more clearly delineate the chain of command and make it more effective by identifying exactly who reports to who, and what the hierarchical relationships are. As with any organization that continues to grow and evolve based upon the expanding needs of its customers, the WFD's organizational structure should continue to be evaluated in an ongoing manner to ensure it is still appropriate and meeting the Department's needs. If, in the future, revisions are deemed appropriate, they can be considered at that time.

The MRI team reviewed the Westfield Fire Report developed in 1989 and found that a reccomendation to staff an engine companies with a three person minimium including an officer was presented in that document. Even in 1989 the span of control was recognized as being too large and should be reduced. Our report will reiterate this 35 year old recommednation and suggest that having a three person minimum on and engine (including and officer) is essential to both operational capability and the safety of Westfield Fire personnel.

Recommendations

III-1 ***The WFD would benefit by the addition of an Assistant Chief position. This position would provide better and more direct support for the chief and partnering agencies. It would streamline and improve workload distribution and make the positions more sustainable and aid in succession planning for the positions of Chief and Assistant Chief.***

To that end, The City of Westfield should make it a priority to negotiate with the local bargaining unit for the purpose of establishing a non-union position of Assistant Fire Chief delineating a clear number two position in the WFD and to provide the Chief with another confidential management position to assist him with leading the Department. This position should be an executive management position that is also exempt from the firefighters and officers respective collective bargaining units.

III-2 ***The City should create a rank of Lieutenant which can be done with or without adding additional staff.***

III-3 ***The City should increase the minimum staffing level to 18 personnel including a minimum of an officer and two firefighters staffing Station 2.***

III-4 ***The City of Westfield should revise the WFD's overall table of organization to clearly delineate the chain of command and make it more effective by identifying exactly who reports to who and what the hierarchical relationships are (Figure III-3).***

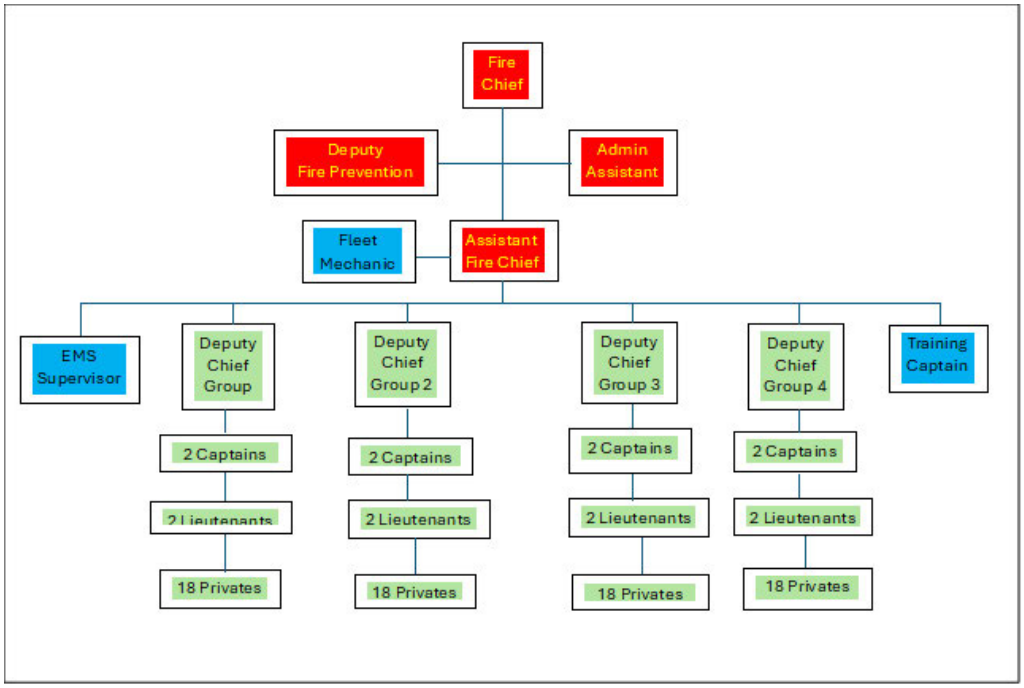

FIGURE III-3: PROPOSED WFD TABLE OF ORGANIZATION

III-5 ***The City should work with the Council and the Collective Bargaining units to remove the need for the Board of Fire Commissioners and to transfer the responsibilities to the Mayor.***

III-6 ***The Mayor, City Council and, and the fire chief must come to agreement on the proper role of each when it comes to the operations of the WFD. There must also be an acknowledgment that the fire Department is not a totally independent or autonomous entity, it is a unit of the overall municipal government of the City of Westfield. As such, there needs to also be an acknowledgement of the rights of City management to establish the level of service, set financial parameters, and to establish goals and performance measures.***

III-7 ***Although the Westfield fire chiefs' position is designated a "strong" fire chief, the Council and the Mayor should establish a reporting relationship where the fire chief reports normal operational activities to the Mayor. The Chief must continue to have a significant level of autonomy to lead and manage the Department, including at times making unpopular decisions, without undue political influence, or even meddling, as may be more inclined to occur with a "weak" chief who would be more susceptible to these pressures. It is essential that the fire chief work as a member of the City's management team and transparently oversee the operations of a 21st century fire Department.***

III-8 ***The City should work to remove the Fire Chiefs position from Civil Service to allow the Mayor and council to rapidly select the best candidate for the position from either an inside promotion or from the outside.***

III-9 ***WFD administration should participate more frequently with Department heads meetings at City hall. Currently the fire Department only participates quarterly when there are monthly meetings conducted with City hall Departments. A member of the command staff should attend these monthly meetings.***

CHAPTER IV
MANAGEMENT AND ADMINISTRATION

Management and Administration

The operation of a 21st century fire and emergency medical service provider is a complex business. As calls for fiscal accountability and more efficient operations become the norm, fire service leaders and managers are increasingly under pressure to operate more like a business and apply private sector management techniques to their operations. Management, in the context of the emergency services, can then be defined as: ***"A dynamic process which effectively utilizes all resources available, human and material, in the achievement of the goals and objectives that have been established for the Department."*** Included in this process are personnel administration, budget management, record keeping systems and information management, operational oversight and evaluation, training, public relations, supervisory responsibilities, and other related areas. In addition, emergency services leaders and managers are being held accountable for mistakes, a phenomenon that was once nearly unheard of.

Management of any organization, whether public or private, generally has between four and six functions as illustrated in Figure IV-1.

FIGURE IV-1: MANAGEMENT FUNCTIONS

It is also important to note that while frequently used interchangeably, administration and management are also different. Administration is usually the policy making or governing body of elected officials who determine the level and type of emergency services protection that their community will have. It is their responsibility to establish broad emergency services and protection goals for the community and define the policies to be followed in achieving these goals. The policy-making body also makes final decisions on the allocation of resources, which in turn determines to what extent the department's objectives will or will not be achieved. The management of the emergency service organization is charged with the responsibility of executing the established policies and achieving the goals and objectives. While management may establish rules, regulations, and other operating procedures to guide their day-to-day operations, they must always be within the financial and/or legal constraints established by the governing body.

Financial oversight and management are critically important to the successful operation of a modern- day fire department. Budget preparation and management must be an ongoing process in every aspect of the fire and emergency medical services.

The taxpayers of Westfield make a large financial investment into the operations of the WFD. For this investment, the community expects to receive effective and efficient fire, rescue, and emergency medical services. To assure the community that these funds are well spent and that operations are being managed effectively, the fire department must have data-driven management systems in place to provide management evaluation and oversight into at least the following areas:

1. Performance of resources (units/personnel) responding to emergencies.
2. Training for fire and EMS skills.
3. Budgetary performance.
4. Fire/EMS "Run" reports.

The Department employs two civilian administrative assistants that nominally provides support to both the chief and the Department's membership.

While the City itself appears to have adequate administrative and financial procedures and processes in place regarding the management and day-to-day operations of their functions, the MRI study team believes the WFD needs to expand the level of administrative and fiscal control. Based upon that fact and other information examined by the team, the WFD should dramatically increase the use of data and statistics as part of ongoing organizational monitoring and evaluation, regarding how well the Department is achieving established performance measures.

Doing this helps to provide an objective measurement with which to evaluate the fire Department's operations and performance against either recognized national consensus benchmarks, or local standards of cover as established by the City of Westfield. Continual performance monitoring can greatly assist with planning decisions related to staffing and deployment needs, training, and equipment purchases.

During this assessment and our interviews, multiple stakeholders expressed concern that communication internally within the WFD, or externally with the other members of the City government need to be expanded. It is important to note that the chief appeared open and forthcoming with the MRI study team during our field visits to the City.

Among the concerns that were expressed to and/or identified by the MRI study team regarding the fire Department's administration were (some of these were noted in previous reports as well):

- The Chief should meet with the mayor to develop a set of annual goals for the WFD and review progress accomplishing previous goals
- The Chief should be required to develop, provide, and present a written monthly report regarding the Department's operations and how well it is meeting established national benchmarks.
- The level of internal communication within the WFD should increase and the monthly report provided to the City should be posted and/or e-mailed to all members.
- Officers' meetings should be conducted monthly and group meetings should be conducted every two or three months.
- The Department's training program should be reorganized with an enhanced level of structure, documentation, and communication.

Based upon our evaluation of the WFD, there appears to be, at minimum, a moderate and sometimes contentious relationship that exists between the City of Westfield and the fire chief. This situation has developed at least in part due to a past H/R incident. **Regardless of what the root cause of this ongoing dispute is we strongly believe that it is having an adverse impact on the WFD.** It is imperative that we stress that we are not making any value judgements on the merits of the dispute or are in any way taking sides. We are merely offering an opinion of what we perceive, from a leadership perspective, to be in the best interests of the City of Westfield and the WFD.

While this is not meant to minimize the extent of the challenges that these issues present to the City and the fire Department, and any solutions will take time to establish and get fully operational, they are at the same time relatively simple: **COMMUNICATIONS!** Communication is a two-way street that requires open, honest, and frank discussion between all key parties. This is particularly true when dealing with an emergency services provider as a vital component of not only the City government, but also the critical public safety system. The MRI team makes several recommendations in this chapter to enhance the communications between stakeholders and enhance the WFD's overall operations. Hopefully, they will also serve to reestablish a productive working relationship between the fire Department leadership and the remainder of the City's administration and governing body.

Fiscal Operations

Emergency services budgets are more than the dollar amount allocated for the operation of the various departments. The budgets are documents that reflect the goals and objectives that the City and the fire Department have established for delivery of services to the community. The budgets should be used as a planning tool by the Department and its members and should represent the needs of the Department to serve the public properly and safely.

Budget preparation and management must be an ongoing process in every aspect of the Departments. Before one budget cycle is completed, the next must already be in process. The fire chief along with his/her other officers must continuously monitor their Department and their ongoing needs, as well as anticipate the demands that will be placed upon them in the future. The Department must compare their current budget, and the work plan that is driven by that budget, with the upcoming budget allocation. The current and future budgets should be linked directly to the strategic plan and level of service established by the governing body, in this case, the City Council.

Most funds for most fire department budgets come from property taxes and the rates charged to property owners. Some funds also come from a variety of fees for services, grants, and other sources. This is particularly true of the EMS part of operations which generates income through EMS third party billing. Some long-term capital funding may be included as part of a bond issue that will be paid back over a number of years. Some departments are using leases and lease purchase programs to assist with replacing undependable or unsafe apparatus and equipment. Contracting to provide shared services, such as for dispatching, has been proven to assist with generating funds in some departments, or conversely, reducing expenses by joining another community.

While a comparative study can evaluate the level of effort and ability of residents to fund services, it cannot measure residents' willingness to pay over the long run. Caution should be used if looking for hard and fast answers using statistical comparisons on their face value alone.

Every emergency services provider and every government entity has developed creative methods for service delivery and cost labeling based on specific needs. Additionally, the information that might be obtained from various other government agencies could vary to some degree as to how they report expenses such as employee benefits or vehicle maintenance.

The MRI study team reviewed the budget documents provided to us by the WFD. The Department's budget appears reasonable to meet the current needs of the organization to maintain the existing levels of service.

A review of WFD's annual operating budget shows that it was funded for fiscal year 2025 at $5,866,579.21. The Department utilizes a traditional line-item budget to identify and track funding and expenses. Personnel costs account for the greatest portion of the budget cost in most fire departments. In the current fiscal year employee compensation accounts for $4,953,476.00, or 84% percent of the Westfield fire budget while operating expenses remain the balance. The budget documents provided to MRI do not reflect any revenue generated by the Department to offset the operating costs. Overall, this budget does not seem to be out of line with other comparable communities. However, the cost of overtime (although well managed) appears to be low and there is a need to have a line item for training tools and equipment as well as compensation that needs to be added and properly funded. This is discussed further within this report. The overtime budget is paid for from the ambulance budget that comes from the Ambulance Enterprise Account.

Other Departmental Relationships

Over the course of several days, interviews were conducted with Department staff, City Department heads, mutual aid partners, partnering agencies, and other internal and external stakeholders. The goal of any interview in a study of this magnitude is to solicit feedback from stakeholders and determine what the Department is doing well, what can be improved upon, and what could or should be changed from their perspective. It is important to note that while the responses may be factual, they are also the perceptions of the individuals overall which can be both objective and subjective in nature. The main focus of the interviews was on the following questions/categories:

- Interagency cooperation and coordination.
- What do you think WFD does well and what can be improved upon?
- What do you see as immediate and future needs of WFD?
- What is your role/organization's role with WFD?
- What is the level of communication between both agencies?
- What can WFD do to support you and the community?

Other questions arose, as they naturally do during the scope of these interviews, that were more specific to each agency. However, the nature and tone of the conversations were similar and very positive overall. A key takeaway from the interviews conducted is that the Westfield Fire Department is striving to be progressive and an example of excellence in the region, but that could be impacted by current staffing levels, budgetary constraints and political influences.

Related to interagency cooperation, coordination, and communication on a whole; all respondents stated that the relationship between their respective agencies was excellent. Additionally, they noted having an excellent working relationship with not only the administration but with other designated points of contact with the fire Department. However, one specific item noted was that the Department would benefit by having a dedicated assistant chief as a primary point of contact for some items. This could be seen as assisting with both administrative workloads, but also to provide consistency in organizing the various designees as it currently exists. Although the overall message was positive, another item discussed consistently was to make sure Department staff have a base of knowledge of what the other agencies do, how they operate, and how they can support each other's mission. This is specifically noted by the communications center in that employees of both agencies should spend time at the other agency respectively to get a better understanding of each agency's role and so personnel know who is on the other side of radio. Lastly, on this topic, there should be more interagency training with mutual aid partners, communications personnel as noted, and emergency management.

Respondents identified that the fire Department appears to be successful in achieving its current mission in providing value-added services to the community. However, as with any organization, there is always room for change or improvement. The first step in this process is to identify strengths and weaknesses that the Department is facing. Then a strategy can be developed to plan on how to address both. This study is one part of that undertaking. Specific items noted that the Department can improve upon are expanding fire prevention/education programs, conducting a formal Department needs assessment, increased opportunities for training, and providing other departments with a clearer picture of the services provided by the Westfield Fire Department.

Grants

There are a number of federal, state, and private grants available for fire departments and communities to consider for supplementing their budgets. If successful in receiving a grant award, most departments can acquire equipment, training, and programs that they would not

be able to achieve through the normal budget process. Though the process can be difficult, and time-consuming, the outcomes can be very beneficial to the fire department.

While the economic challenges of the last decade and a half have had an impact on grants from private entities and foundations, fortunately, the federal grant programs targeted to the fire service, the Assistance to Fire Firefighters Grants (AFG) for equipment, the Staffing for Adequate Fire and Emergency Response (SAFER) Grants for personnel, and the Fire Prevention and Safety (FP&S) Grants for fire prevention and public fire education programs, continue to be funded, although not anywhere near their authorized levels.

The AFG program provides financial assistance directly to fire departments to enhance their capabilities with respect to fire and fire-related hazards. The AFG supports fire departments that lack the tools and resources necessary to more effectively protect the life and safety of the public, and their emergency response personnel with respect to fire and all other hazards. Since 2001, AFG has helped firefighters and other first responders to obtain critically needed equipment, protective gear, emergency vehicles, training, and other resources needed to protect the public, and emergency personnel, from fire and related hazards.

The goal of the SAFER grants is to enhance the fire departments' ability to comply with staffing, response, and operational standards, established by NFPA and OSHA (NFPA 1710/1720 and OSHA 1910.134). Specifically, SAFER funds assist the fire department to increase their staffing and deployment capabilities to respond to emergencies whenever they may occur. SAFER grants are awarded to departments for both hiring of career personnel, and recruitment and retention of volunteer/call personnel. However, a department cannot apply for both categories of grant in the same year.

FP&S grants support projects that enhance the safety of the public and firefighters from fire and related hazards. The primary goal is to target high-risk populations and mitigate high incidences of death and injury.

There are several other grants available to fire departments for various purposes. Some grants that may be available to the WFD are the Fireman's Fund Heritage Grants, Factory Mutual grants for fire investigation, and Wal-Mart community grants. Other large chains, such as Home Depot and Lowes, are frequently willing to provide funding, and/or enter into partnerships for specific projects. The key to success at this level is finding grants for which the Department may be eligible, and, ensuring that the application is tailored to the grant program's priorities. The Commonwealth of Massachusetts also has grants that are available to fire departments for various uses.

The federal grant process is extremely competitive and many fire departments have a limited record of success regarding grants they have applied for. One of the shortcomings in the AFG

program is that departments which submit grant applications that are ultimately not successful are notified of that fact, however, they are not informed as to why. Typically, only about 8% of all grant applications submitted are approved and funded. Nearly 50% of the applications fail to make it past the initial computer review where statistical aspects of the application are reviewed to determine their compatibility with the established grant criterion/ priorities.

There is no doubt that in order to even have a chance to obtain a grant, the Department and community must put together a strong grant application that demonstrates a strong case for need.

Potential Sources of Additional Funding

In this era of extremely tight budgets, where every governmental entity is looking for alternative revenue streams to offset declining tax receipts, there are many other sources of potential revenue for the fire Department that the City of Westfield and WFD may want to explore and consider implementing. Among these are:

- Increased fire prevention business registration, inspection, plans review, system testing, and permit fees.
- Billing insurance companies for response to motor vehicle accidents exclusive of third-party billing for ambulance transport.
- Registration fees for fire alarm systems; and the issuance of penalties for those whose systems generate repeat false alarms.
- Negotiation of a payment in lieu of taxes (PILOT) program with tax- exempt properties for providing services.
- Explore the potential to enter into public/private partnerships with local businesses who may be interested in assisting the Department with funding for specific projects or activities.
- Implement aggressive EMS billing to collect unpaid bills from patients who are not residents of the community.
- While often more closely associated with volunteer emergency services providers, consideration of an annual subscription fee where residents of the City pay an annual subscription which entitles them to have any remaining balance for EMS transport fees not paid by their insurance to be waived.

- While Massachusetts law does not permit the imposition of impact fees related to development projects within the community, there is no prohibition on the City negotiating with the developer to provide "mitigation" funds to assist the emergency services meet the potential increased requests for service generated by the new development.

- The implementation of a community paramedicine program as discussed later in this report can serve to increase revenue through the negotiation of agreements with various entities.

- Consideration could be given to implementing a fee for response to EMS incidents that do not result in transport to the hospital. This (along with a community paramedicine program) can have the dual benefit of reducing responses to "frequent flyers", persons who use the EMS system on a regular basis.

Organizational Policies and Standard Operating Procedures/Guidelines (SOPS/SOGS)

Effective communications systems are key to the successful operation of any emergency services organization. SOPs/SOGs and other orders are mission critical to consistent, effective, and safe operations. Without them there is a tendency to "freelance" and personnel may not all be on the "same page" regarding a wide range of emergency and administrative operations.

Generally speaking, policies are set and/or issued by the governmental authority having jurisdiction, in this case the City of Westfield. Individual departments have either Standard Operating Procedures (SOPs), or Standard Operating Guidelines (SOGs) which among other things, can be used to implement policy at the department level, and establish operational procedures that guide day to day activities. From the perspective of this discussion, the terms procedure and guideline can be used interchangeably, but should be applied consistently throughout the system.

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

procedures. The inclusion of written documents such as training, and safety bulletins serves to make the system more effective.

Fire department rules, regulations, and policies should work in tandem with and be consistent with the overarching ordinances, rules, regulations, and policies that have been adopted by the City of Westfield. For example, policies concerning such topics as non-discrimination, sexual harassment, purchasing, freedom of information, Internet and computer usage (including social media), and smoking (on City premises or in municipal vehicles) are typically applied across-the-board to all departments and employees. While the City should provide training and familiarization concerning these policies on a regular basis (an annual review is usually adequate, with appropriate documentation), employees are obligated to be familiar with and comply with each policy.

Standard Operating Procedures/Guidelines (SOPs/SOGs) document how operational tasks should be accomplished. In essence, they provide personal guidance relative to how to accomplish operational activities safely and consistently. To be effective, SOPs/SOGs should be developed by each Department through a participative process. Once developed, personnel need to be trained on the SOPs and periodically refreshed as to their content.

Standard Operating Procedures/Guidelines are developed for specific instances and based on the operations, training, resources, services delivered, and the administrative needs of a fire department. These written policies and internal regulations are typically based on recognized standards, regulations, and local government rules. These are the procedures that personnel rely on to perform their duties effectively and safely, and which the department utilizes to establish administrative processes and oversight.

MRI's evaluation of the WFD's written communications system indicated that many of the documents contained within were originally developed/issued a while ago. Many of these procedures do not indicate that they have been reviewed or revised since then.

Since these are the only written communications (operational procedures) documents that were provided to the MRI project team, it is the assumption that these documents comprise the entire system at this time. If this is in fact is the case, the system as it exists is totally inadequate for providing the wide-ranging guidance and direction necessary for operations involving a 21st century emergency services provider. The lack of an effective system of standard operating procedures/guidelines (SOPs/SOGs) will have an adverse impact on many different facets of the day-to-day operations of the Department that can result in a lack of consistency during operations, freelancing, unsafe actions, loss of accountability and discipline, poor performance of individuals and operational crews, and increased risk to firefighters and citizens.

There are limited operational procedures/guidelines in place to deal with mission critical operations such as *Structure Fires*, *Basic Engine Company and/or Truck Company Operations*, *Rapid Intervention Team Operations*, *Vehicle Extrication Operations*, or *Thermal Imaging Camera* and *Automatic External Defibrillator Use* to name just a few. Procedures that were recommended back in 2004 such as *Two-In/Two-Out*, *Progressive Discipline*, *Personal Alert Safety System*, *Self-Contained Breathing Apparatus (SCBA) Use and Care*, and *Critical Incident Stress*, do not appear to ever have been developed. There is also not a single operational procedure/guideline, devoted to *EMS Operations,* and only one related *to Training.* These are the types of operational procedures/guidelines that are most important and provide standardization and consistency of operations. There are also no procedures/guidelines that deal with any of the Department's administrative and/or non-emergency types of operations that might cover topics such as personal grooming, meal and rest periods, unit coverage procedures when vacancies occur, incident reports, etc.

It was reported to the MRI study team that the current SOP/SOGs were prepared solely by the fire chief. In the modern fire service this is not conducive to effective operations, good communications, building moral and esprit de corps. The personnel who are going to be required to adhere to and follow the procedures should have input into their development.

The MRI project team also believes that the WFD should establish a separate rules and regulations document that identifies and establishes expected levels of conducted and prohibited actions for all members of the Department. In addition, it must be ensured that the City's personnel and other policies that are applicable to members of the fire Department, such as non-discrimination, sexual harassment, purchasing, freedom of information, Internet and computer usage (including social media), and smoking (on City premises or in municipal vehicles), are fully integrated into the fire Department's written communications system and are available to all members of the Department since they should definitely be applicable to them. The relative importance and relationship to each of the various types of documents should be clearly delineated in the rules and regulations.

Department level communications should be referred to as standard operating procedures (SOPs) or standard operating guidelines (SOGs). General Orders should be used for the issuance of immediate and/or specific directives.

The challenge for Westfield, as with many fire departments will be to increase organizational buy-in, by establishing a participative development process and on-going training related to these procedures. Fire rescue personnel can provide valuable technical resources in the development of SOPs/SOGs. For the most part, the development and drafting of these procedures should not be solely a top-down management driven process. The personnel who are going to be required to adhere to and follow the procedures should have input into their development. Input from personnel at all levels will strengthen the quality and effectiveness of

SOPs/SOGs. In addition, the Department's officers should play a critical role in the development and implementation of any SOPs. MRI encourages fire departments to draw upon the policies, practices, and procedures of other organizations, both local and distant. The experiences and lessons learned from other fire and rescue agencies can be extremely helpful in the development of SOPs/SOGs. No emergency services provider should be expected to write a policy document from scratch or without a template.

The chief should establish a committee comprised of a cross-section of department members of all ranks to develop an SOP/SOG manual, and moving forward, regularly review the current SOPs/SOGs to ensure that they reflect the organization's current operations. Once the initial set of SOPs/SOGs have been developed, the committee should work with the chief to develop new SOPs/SOGs that fit the needs of the organization. Once an SOP/SOG has been developed, it should be presented to department personnel, and then periodically reviewed to ensure that these practices are implemented on the incident scene. In addition, one SOP/SOG and one policy should be reviewed by a randomly selected member at each shift change briefing and training session. Once personnel get used to this expectation, the knowledge and respect for SOPs/SOGs will grow within the organization and become an accepted part of the department's culture.

Discipline is another important area that lacks a formal policy/procedure/process in the WFD. Discipline is most effective when the least amount of corrective force is applied in a timely and consistent manner. Interviews conducted during this study revealed that discipline is not consistently applied, things that happen are not addressed, and the lack of a formal policy or process perpetuates this issue. The purpose of discipline is to bring about positive change with the least impact on the employee. It should not be punitive but rather constructively address performance, conduct, or attendance problems. A good discipline policy offers supervisors a guide to be fair and consistent.

Effective intra-department communications were noted, almost unanimously, as a major concern within the WFD. One electronic communications tool that is absent from the fire Department, and which would go a long way towards correcting this deficiency, is weekly or monthly e-mail from the Chief to every member of the Department. It is the opinion of the project team that the City of Westfield should provide every member of the Department with their own e-mail address and verify that it is being used. In conjunction with the development of a procedure that requires all members to check their e-mails regularly, at least weekly, this would significantly improve communications within the Department. Documents that could be distributed electronically include, but would certainly not be limited to, training announcements, schedules, meeting/assignment announcements and reminders, and once implemented, components of the Department's written communications system such as *Standard Operational Procedures*, *General Orders*, *Training Bulletins*, *Safety Bulletins*, and *Informational Bulletins*.

Recommendations

IV-1 ***One of the first, most important, and ongoing, priorities that should come from the recommendations contained in this report is there needs to be a concerted attempt by ALL parties to attempt to rebuild the critical bridge between the City and the WFD and its administration. An inclusive, team-based approach will be essential to moving the Department forward.***

IV-2 ***The Mayor and City Council should take an active role in setting appropriate service level expectations and goals for the fire Department. City officials should include residents and the Department in an open and honest discussion within the goal setting process. This process could provide the foundation for the formation of a long-range strategic planning committee comprised of a cross section of community stakeholders.***

IV-3 ***The Mayor and the City Council should establish an annual goal-setting workshop with the fire chief to develop the sense of common vision necessary to improve the Department and the quality of fire and EMS services the City of Westfield receives.***

IV-4 ***The fire chief should immediately begin to provide regular briefings to the Mayor and the Council concerning the operations of the WFD. The chief should communicate regularly with the Mayor and Council to receive feedback on the performance of the Department. The chief should provide the Mayor and the City Council with monthly reports that indicate the number of calls by types, response time analysis, staffing analysis particularly related to call responses and FT firefighter recalls, number of times mutual aid required, number of permits issues/inspections performed, etc., training synopsis, etc.***

IV-5 ***The fire chief should immediately implement a monthly officers meeting for all Department officers. Regular attendance at these meetings should be mandatory. An agenda for the meeting should be prepared and distributed prior to, and minutes should be prepared and distributed immediately afterwards.***

IV-6 ***The fire chief should implement bimonthly group meetings and semi-annual Department meetings where he can provide updates to members of the Department, answer questions, take suggestions, and allow just an open forum and sharing of information between all personnel. An agenda for the meeting should be prepared and distributed prior to, and minutes should be prepared and distributed afterwards to all personnel.***

IV-7 ***All officers should have one or more administrative duties/responsibilities to assist the fire chief with the Department's overall management, in addition to their normal***

emergency scene operational duties and station management responsibilities. This should be impact bargained.

IV-8 ***The City of Westfield and WFD should review all fees on an annual basis for possible increases in accordance with state law. This review should be conducted annually.***

IV-9 ***The City of Westfield and WFD should explore additional potential ways to generate revenue to offset the fire Department's operating costs. Consideration could be given to billing insurance companies for response to motor vehicle accidents; registration fees for fire alarm systems; the aggressive pursuit of non-residents who have been billed for ambulance transportation; and the implementation of a fee for ambulance responses that do not result in a transport.***

IV-10 ***The WFD should identify and prioritize its most critical equipment, training and/or operational needs, and apply annually to the Assistance to Firefighters Grant (AFG) program. This should include making applications for apparatus capital replacement projects that will otherwise be funded through the City's capital budget and at City meeting.***

IV-11 ***The City of Westfield should determine its most critical staffing needs based upon recommendations made elsewhere in this report to apply annually for a federal SAFER grant citing an attempt to better comply with the provisions of NFPA 1710/1720.***

IV-12 ***The WFD should prioritize its fire prevention and public fire education needs and apply annually to the Fire Prevention and Safety Grant (FP&SG) program.***

IV-13 ***The City of Westfield and WFD should actively search for other grant opportunities. Grants for fire protection, fire safety, fire prevention, domestic and emergency preparedness, and homeland security may be available from federal, state, corporate, and foundation sources.***

IV-14 ***The WFD should actively seek out businesses that may be interested in establishing public/private partnerships that could provide, or assist with, funding for various programs, projects, or initiatives.***

IV-15 ***With the growth in the City expected to continue, the City of Westfield and the WFD should consider working with with the developers of major projects or facilities to provide "mitigation" funds to assist the emergency services meet the unique public safety needs for the potential increased requests for service generated by the new development. This is typically done working with the Planning Board.***

IV-16 ***The WFD should form a management-labor committee to develop a comprehensive Rules and Regulations document that identifies anticipated, acceptable/ permitted, and prohibited behaviors. Due to the urgency of this task, and its significant importance, the committee should be given whatever support is necessary to complete this task within 12 - 18 months. If necessary, outside professional assistance is available to assist with facilitating this endeavor. This document should be reviewed by City Solicitor and provided to the Mayor and then distributed to and signed for by each member of the Department.***

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

- ***A preamble***
- ***Department vision statement and mission statement***
- ***Purpose of the rules and regulations***
- ***Organization***
- ***Membership requirements***
- ***General rules of conduct and prohibited behaviors***
- ***Officer qualifications and selection (may just reference current department procedure, CBA language and/or civil service language)***
- ***Officer duties and responsibilities***
- ***Chain of command***
- ***Uniforms and grooming***
- ***Discipline***
- ***Other areas that may be agreed upon for inclusion***

IV-17 ***The WFD should form a committee as soon as possible to begin the development of a comprehensive updated Department Standard Operations Procedures or Guidelines (SOP/SOG) manual. Utilizing a cross section of Department members they should be tasked with the development of a comprehensive Department standard operations procedures or guidelines (SOP/SOG) manual starting with mission critical procedures such as, but not limited to, basic engine company and truck company operations, dwelling fires, commercial structures, industrial incidents, rapid intervention team operations, personnel accountability, gas leaks, hazardous materials incidents, ice rescue, vehicle extrication operations, thermal imaging camera and automatic external defibrillator use, and mass-casualty incidents. The addition of numerous other procedures covering additional operational, routine administrative and training procedures should then follow.***

The committee should be comprised of members of each rank and include specific representation by a senior officer of each of the bargaining units. Due to the urgency of

this task, and its significant importance to the Department's future success, the committee should be given whatever support is necessary to complete this task within 12 - 18 months. If necessary, outside professional assistance is available to assist with facilitating this endeavor.

The general set up and organization of the manual is a very important consideration, and the Department must ensure that the manual/system is easy to utilize and cross reference the necessary procedure. If personnel are going to be required to learn and adhere to the Department's procedures, then the format, organization, and filing of them must be user friendly, otherwise they will sit on a shelf unused.

The first operational procedure should identify and explain the components of the Written Communications System, including the use and organization of the SOP manual and other components of the system such as standardized forms. This procedure should also contain a provision that the entire SOP Manual will be reviewed on at least an annual basis and that updates and revisions can/will be made at any time, as necessary. All procedures/revisions should be approved and issued after being signed by the fire chief.

IV-18 ***The WFD should adopt a standardized SOP/SOG format that includes the following information:***

- ***Title of the SOP/SOG***
- ***Number of the SOP/SOG***
- ***Category of the SOP/SOG (EMS Operations, Training, Administration, etc.)***
- ***Page number and total number of pages***
- ***Effective date***
- ***Revision date (if applicable)***
- ***Approval/signature of the fire chief***

If a procedure is re-issued with only minor to moderate revisions it can carry the original issue date with the revision date also noted. Revisions from the previous version should be identified by some means within the revised document. Full-scale revisions to a procedure should result in it being reissued with a new issue date.

Each SOP/SOG should, at a minimum, contain the following sections:

- ***Purpose***
- ***Scope (If necessary and/or appropriate)***
- ***Definitions of terms (If necessary and/or appropriate)***

- ***Procedure(s)/Main body***
- ***References (If necessary and/or appropriate)***

IV-19 ***Working in close consultation with the City's legal and Human Resources personnel the WFD should ensure that all of their operational procedures meet, and are consistent with applicable federal and state laws and regulations, and City ordinances, bylaws, and policy. This would include such topics as handling Freedom of Information requests, and human resources related issues such as Family Medical Leave Act, Pregnancy, Sexual Harassment, Equal Employment Opportunity (EEO), Diversity, Privacy, and Health Insurance Portability and Accountability Act (HIPAA).***

IV-20 ***The WFD should institute a process for issuing General Orders, which are directives and/or special instructions that cover various facets of Department operations but can be quickly issued as needed. They may cover a particular period of time regarding a special situation or may provide a temporary procedure pending development and issue of a full operational procedure.***

Also included in the system should be Training Bulletins that would be issued to serve as reference with regard to tested and approved methods of performing tasks; Safety Bulletins, that are issued to serve as references with regard to general and specific safety and health issues; and Informational Bulletins or Memorandums that are published for the general knowledge of recipients such as temporary street closures, hydrants out of service, community events, etc. A numbering system should be implemented to keep track of these documents for indexing and future reference purposes.

IV-21 ***The WFD should develop an effective system for ensuring that any new Standard Operating Procedures, General Orders, Training Bulletins, Safety Bulletins, and Informational Bulletins are distributed to all personnel. Electronic communications is highly recommended as the method of choice for distributing Departmental communications and documents. All City policies and Department procedures should be posted on the Department intranet and employees should be required to review this information. All revisions should be e-mailed to each member and then posted on the intranet.***

IV-22 ***Since City policies and personnel regulations apply to all City employees, this material should be made available in the station (or online), and policy training should be conducted on a periodic basis for all personnel.***

IV-23 ***The WFD should develop and implement a procedure that provides for the documented review of policies, procedures, general orders, training and/or safety bulletins, etc. that***

includes a provision requiring each member of the Department to sign that they received the document, have read it, and understand it.

IV-24 ***At least one policy or SOP/SOG should be reviewed by the shift officer with each crew during every shift. The deputy fire chief should select the material to be reviewed and provide that material to his/her shift commanders so that all crews review a consistent set of documents.***

IV-25 ***The City of Westfield should ensure that the Department disciplinary policy is progressive, consistent, and negotiated with respective bargaining units.***

IV-26 ***All formal grievances that originate within the fire Department should be forwarded to the City's Human Resource Director regardless of the level at which they were resolved. This will allow the City to fully track grievance activity and monitor for consistency of settlement, setting of precedent, etc.***

IV-27 ***All formal discipline (written reprimand and above) that occurs within the fire Department should be forwarded to the Human Resources Director for inclusion in the member's permanent personnel file. This will also allow human resources personnel to track progressive discipline, consistency of discipline, and allow them to provide appropriate guidance and support to the fire chief and his staff. Records of previous verbal warnings that later resulted in a written reprimand or higher should also be forwarded to personnel for inclusion in the personnel file.***

IV-28 ***The WFD should immediately review and or develop a comprehensive respiratory protection plan in accordance with 29 CFR 1910.134, and a blood borne pathogens/ exposure control plan in accordance with 29 CFR 1910.1030. Appropriate SOPs that implement various components of these plans should also be developed as part of the ongoing process to develop that manual. Annual training as required should be provided to all personnel, as well as additional requirements such as annual fit testing for SCBA use.***

IV-29 ***The City of Westfield and WFD should take steps to ensure that there is an establish Department or City e-mail account for every member of the fire Department. The fire Department should also concurrently develop a procedure that requires every member of the Department to check their e-mail at least weekly. <u>The fire chief should immediately begin providing a weekly e-mail update to all members of the WFD. Establishment of the e-mail accounts and this procedure will significantly improve communications and flow of information within the Department.</u> Documents could then be sent out electronically include, but would certainly not be limited to, training announcements, schedules, meeting/assignment announcements and reminders, and***

once implemented, components of the Department's written communications system such as Operational Procedures, General Orders, Training Bulletins, Safety Bulletins, and Informational Bulletins.

IV-30 ***The WFD should consider the implementation of a procedure to actively seek feedback from "customers" to whom the Department has provided service. It is recommended that this procedure involve a formal customer satisfaction survey instrument that can be sent to every customer, or at a minimum, is sent to some statistically valid and reliable sampling or percentage of those the Department has served. To be effective, the feedback must be analyzed, and, if necessary, corrective action is taken on any identified deficiencies.***

IV-31 ***The WFD should look to provide more interagency training between agencies and mutual aid partners. Of specific note is training for both communications personnel and FD line personnel to enhance knowledge and perspective of both agencies' roles and how they work together. This can be accomplished by having the shift commanders provide a ride along with communications personnel and having FD personnel spend some time in the communications center observing their operation.***

IV-32 ***The WFD should provide data to agencies such as the COA on such things as how many responses/transports related to falls. Data such as this would provide a targeted message and expand community risk reduction efforts. Also, The WFD should partner with the COA with providing home safety surveys.***

IV-33 ***The WFD should work with both the fire commission and the Personnel Department to expedite the civil service and hiring process so that the Department reduces the potential from missing out on quality entry level candidates.***

IV-34 ***The Chief should adopt a new format to provide the Mayor, City Council, Fire Commission and each department member with a general update on operations and activities including the accomplishment of personnel. An example format has been provided in the appendix of tis document.***

CHAPTER V
EMERGENCY OPERATIONS AND RESPONSE METRICS

Fire, rescue, and emergency medical system (EMS) incidents and the fire department's ability to respond to, manage, and mitigate them effectively, efficiently, and safely are mission-critical components of the emergency services delivery system. In fact, fire, rescue, and EMS operations provide the primary, and certainly most important basis for the very existence of the fire Department. As with many fire departments today, the majority of WFD responses are emergency medical service related. Improved building construction, code enforcement, automatic sprinkler systems, and aggressive public education programs have contributed to a decrease in serious fires in many communities and more importantly, fire deaths among civilians. However, while no longer generating most of the fire department's responses as they once did, fire-related incidents are still justifiably an extremely high priority for the "fire" Department and comprise a significant part of their operational missions.

These trends and improvements in the overall fire protection system, notwithstanding, fires still do occur, and the largest percentage of those occur in residential occupancies where they place the civilian population at risk. Although they occur with less frequency than they did several decades ago, when they occur today, they grow much quicker and burn more intensely than they did in the past. As will be discussed later in this report, it is imperative that the fire department is able to assemble an ***effective response force*** **(ERF)** within a reasonable time to successfully mitigate these incidents with the least amount of loss possible.

NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments,* 2020 edition (National Fire Protection Association, Quincy, MA) addresses the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career – and primarily career - fire departments to protect citizens and the occupational safety and health of fire department employees.[10] It is the benchmark standard that the United States Department of Homeland Security utilizes when evaluating applications for staffing grants under the Staffing for Adequate Fire and Emergency Response (SAFER) grant program. The ability to get enough personnel, along with appropriate apparatus, to the scene of a structure fire is critical to operational success and firefighter safety.

[10] NFPA 1710 is a nationally recognized standard, but it has not been adopted as a mandatory regulation by the federal government or the Commonwealth of Massachusetts. It is a valuable resource for establishing and measuring performance objectives in the Westfield Fire Department but should not be the only determining factor when making local decisions about the City's fire and EMS operations. ***While the NFPA standards are nationally recognized consensus standards, it is still the responsibility of the local jurisdiction to determine the acceptable level of risk and corresponding fire protection/EMS services.*** *When applying any standard, including the NFPA standards, it is important to apply the document in its entirety. One should not selectively extract requirements to the exclusion of others or take a requirement out of context.*

Accomplishing this within the four-minute (240 second) travel time for the first emergency response unit to arrive on location for both fires and medical emergencies, along with the eight-minute (480 second) time frame for either advanced life support (ALS) medical care, or sufficient personnel for structural firefighting operations to arrive, as specified in NFPA 1710, are both important operational benchmarks.

In addition to structural firefighting and emergency medical services, the fire department is tasked with responding to and managing a broad spectrum of other types of emergencies, including, but not limited to, vehicle crashes, building collapse, water and ice rescue, mass casualty incidents, weather-related emergencies, and natural and technological disasters. These types of incidents require specialized equipment and specialized training. In all types of emergency responses, an incident command system (ICS) should be utilized that conforms to the National Incident Management System (NIMS) guidelines that have been promulgated by the U.S. Department of Homeland Security.[11] Since safety is the primary focus throughout all operations, a formal component of the ICS program includes the consistent assignment of an on-scene safety officer when appropriate.

The strategic and tactical challenges that the various hazards the department protects need to be identified and planned for through a community risk analysis planning and management process. The community risk and vulnerability assessment evaluates the community, measures all property and the risks associated with that property, and then segregates the property as either a high-, medium-, or low-hazard, which are further broken down into varying degrees of risk. Community risk assessment and the categorization of hazards were discussed in detail in Chapter II, *Community Overview*. The development of a community risk and vulnerability assessment should drive many of the key decisions associated with the deployment of resources for fire and medical emergencies.

Fire Operations

The WFD is equipped and staffed to respond to a wide variety of emergency incidents. Although EMS calls are more prevalent, the department must still be prepared to fulfill its core firefighting mission. As with most communities in the United States, the primary focus of firefighting operations is on fires in residential occupancies (single- and two-family dwellings, multi-family units) due to the high potential for loss of life. Firefighting in commercial occupancies – of which Westfield has a large number for a City of its size - is important to the economic well-being of the community; however, large commercial occupancies are often equipped with automatic fire

[11] In order to remain eligible for fire, EMS, law enforcement, and emergency management grants from the U.S. Department of Homeland Security, the City of Westfield must adopt and implement NIMS/ICS for all emergency incidents. ALL personnel who have emergency management and disaster response duties, including the City administration, fire, police, and public works must receive NIMS/ICS training.

suppression systems to reduce risk and damage from fire. Until residential fire sprinkler systems become commonplace as a critical lifesaving feature in homes, the fire department will continue to be the only "front-line" resource available for firefighting and rescue. The fire codes in the Commonwealth of Massachusetts do not require residential sprinklers and prohibit communities from mandating them through local codes or ordnances.

Structural firefighting has become far more challenging and dangerous in the last thirty years with the introduction of significant quantities of plastic and foam-based products into homes and businesses (*e.g.*, furnishings, mattresses, bedding, plumbing, electrical components, home and business electronics, decorative materials, insulation, and structural components). These materials ignite easily, burn quickly, and produce extreme heat and toxic smoke. A fire can easily double in size and intensity every 30 seconds. If firefighters cannot arrive in a timely manner and attack the fire quickly, a strong possibility exists that a dangerous flashover (simultaneous ignition of all combustible materials in a room) will occur. Flashover can occur in as little as five to seven minutes after fire ignition and is one of the most dangerous events that a firefighter can face. When a flashover occurs, initial firefighting forces are generally overwhelmed and will require significantly more resources to affect fire control and extinguishment.

Figure V-1 illustrates the time progression of a fire from inception through flashover. The time versus products of combustion curve shows activation times and effectiveness of residential smoke alarms and sprinklers (approximately one minute), commercial sprinklers (four minutes), flashover (eight to ten minutes), and firefighters applying first water to the fire after notification, dispatch, response, and set up (ten minutes). It also illustrates that the fire department's response time to the fire is one of the only aspects of the timeline that the fire department can exert direct control over. It is also important to keep in mind that once units arrive on the scene, they will need to get set up to commence operations. NFPA recommends that units be able to commence an initial attack within two minutes of arrival, 90% of the time.

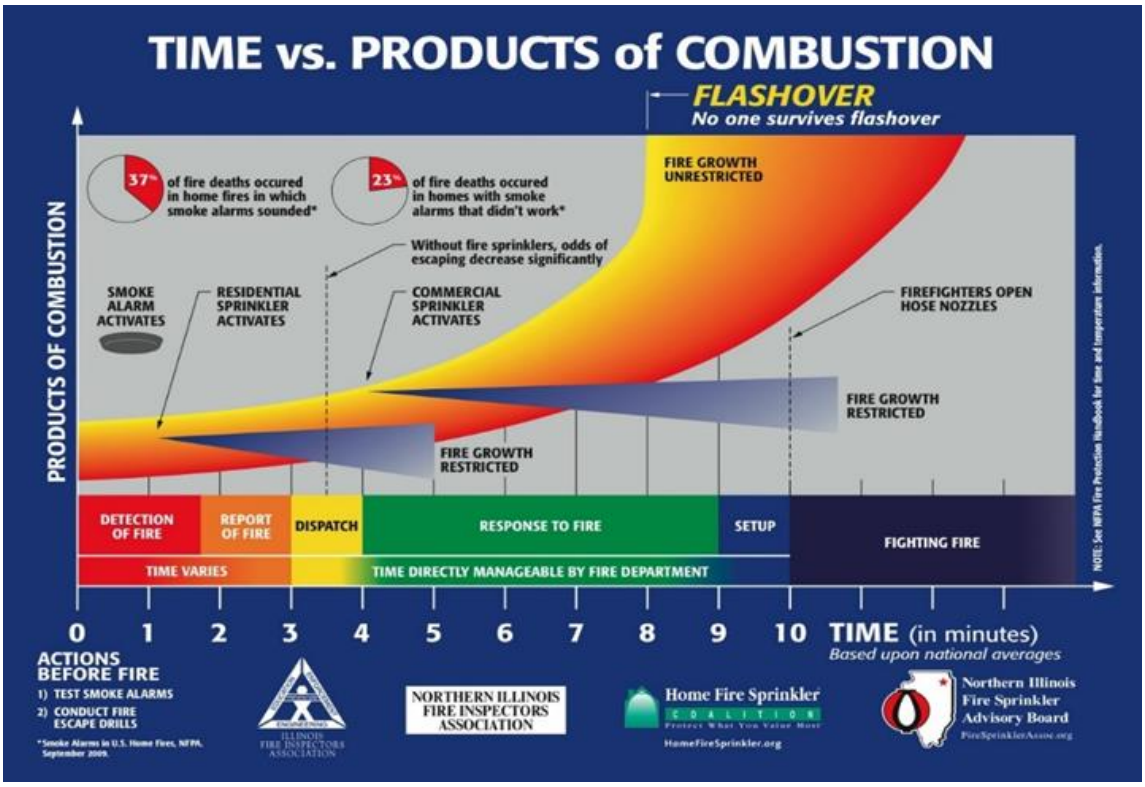

FIGURE V-1:
HOME FIRE TIMELINE CURVE SHOWING ACTIVATION TIMES AND EFFECTIVENESS OF RESIDENTIAL SPRINKLERS (APPROXIMATELY 1 MINUTE), FLASHOVER (3 TO 5 MINUTES) AND FIREFIGHTERS APPLYING FIRST WATER TO THE FIRE AFTER NOTIFICATION, DISPATCH, RESPONSE, AND SET UP (10 MINUTES).
Image credit: Home Fire Sprinkler Coalition

One of the most effective tools the fire department has to assist them with handling fires and other emergencies in commercial and industrial facilities are pre-fire plans. The purpose of a fire pre-planning program is to allow firefighters to become familiar with buildings and/or facilities within their response area prior to an emergency, alert them to on-site hazards and risks, and develop a detailed fire response plan for them that includes specific tactics that will be required to mitigate fires or other emergencies. A comprehensive pre-fire plan includes as much data about the building as possible. Information collected for pre-fire/incident plans includes, but is certainly not limited to, data such as:

- the occupancy type
- floor plans/layouts
- building construction type and features
- fire protection systems (sprinkler system, standpipe systems, etc.)
- utility locations

- hazards to firefighters and/or firefighting operations
- special conditions in the building
-
- apparatus placement plan
- fire flow requirements and/or water supply plan
- forcible entry and ventilation plan

The information contained in pre-fire/incident plans allow firefighters and officers to have a familiarity with the building/facility, its features, characteristics, operations, and hazards, thus enabling them to more effectively, efficiently, and safely, conduct firefighting and other emergency operations. Pre-fire plans should be reviewed and updated regularly. They should be tested and validated by table-top exercises and on-site drills. Lack of an up-to-date pre-fire plan is often attributed to being one of the primary contributing factors in large fire losses.

It was reported to MRI that the WFD has done some pre-planning on some of the numerous significant target hazards in the City. To derive maximum benefit from pre-fire plans, departments should implement not only a comprehensive program, but also make pre-fire plans accessible on mobile data terminals (notebook/laptop computers) on fire apparatus, ambulances, and in the command vehicle(s) for use in-route to an incident, and while on-scene. The information can also be sent to smart phones. With a cloud-based system all the information would be available in real time.

Fire department operations and service delivery can be dramatically improved in those departments that commit resources to goal setting, master planning, risk assessment, and performance measurement. Several tools and resources are available to guide management in these efforts from organizations such as the US Fire Administration (USFA), National Fire Protection Association (NFPA), International Association of Fire Chiefs (IAFC), International Association of Fire Fighters (IAFF), the Massachusetts State Fire Marshal and Fire Academy, the U.S. Department of Transportation (USDOT), and Massachusetts Emergency Medical Services (OEMS).

The point of the performance measures is to identify the community's expectations in a quantifiable way and to use the measurement of the fire department's performance against these objectives to identify areas which may need improvement or additional resources. The process should also include a provision for modifying SOGs, training priorities, and equipment as determined by the performance improvement program.

Performance improvement for fire suppression will become even more important in the coming years as fire department personnel evolve from being a group with significant firefighting experience, to a group with stronger EMS knowledge. Major fire incidents continue to decline because of better fire prevention and building code compliance, the advent of advanced fire detection and suppression systems, and fire-retardant building components and contents. As a result, the fire service will be challenged in the future to maintain the necessary skill sets to

properly command and control major fire incidents. Training and performance improvement strategies must be aggressively enhanced in anticipation of this paradigm shift in fire department capabilities and experience.

EMS Operations

A critical component to a community's emergency services protection is that of emergency medical services (EMS) response and transport. There is no set standard of how that service is structured and each community must choose which model works best for them. Some operate as first responder supplemental services relying on private or volunteer ambulance services for transport, while others operate a true fire-based EMS service (response and transport) from within the organizational structure of the municipal fire service. The latter is the case in the Westfield Fire Department.

The Department operates an advanced life support (ALS) based service utilizing three (3) primary transport ambulances out of each station with a backup ambulance out of the main firehouse. Personnel out of fire headquarters and Little River are dedicated to two (2) of the ambulance for primary response. Station 3 and the backup ambulance out of headquarters rely on cross-staffing personnel to answer either suppression or EMS calls. Staffing apparatus (suppression and EMS) with both basic level emergency medical technicians (EMTs) and paramedics allows the Department to provide an additional level of ancillary/support service for medical response.

As with most communities, the percentage of EMS related incidents are a large representation of true emergencies that personnel respond to. Extrapolated from data provided, the fire Department operates at an average of 12000 incidents a year, with a majority of those being EMS related calls; averaging 8,000 per year or nearly 70%. Response to, rapid primary emergency medical care, and transport by highly quality trained personnel are absolutely the most vital components in life-or-death incidents.

Data provided from reporting software illustrates the volume of EMS calls and response times (dispatch to arrival) for Westfield's EMS response. It should be noted that there are several incidents where response times are more than 10 minutes.

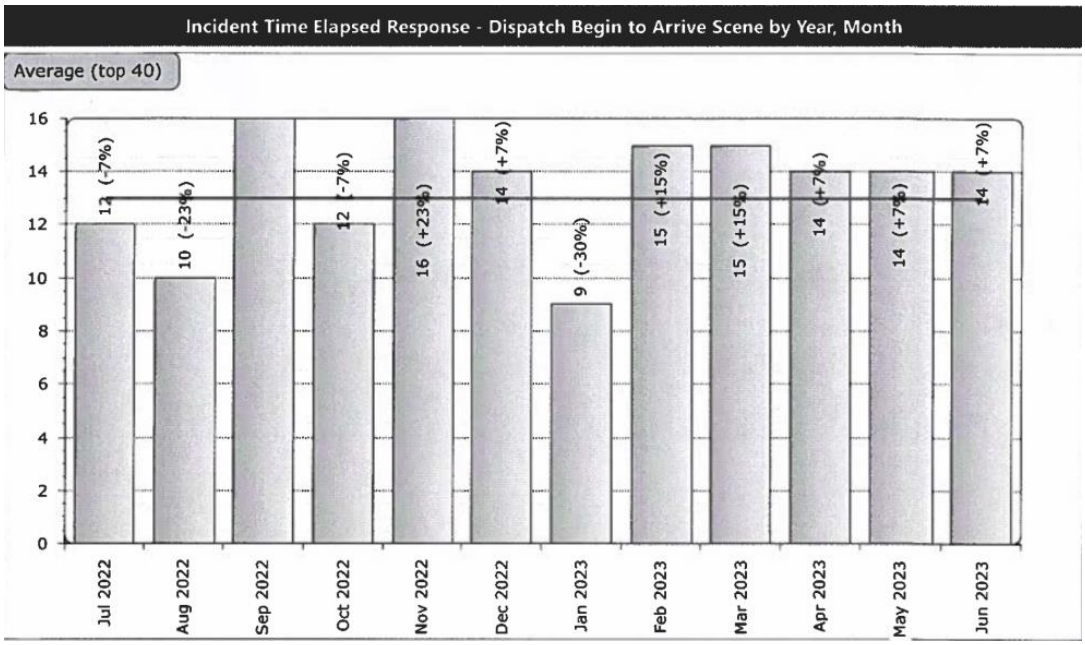

FIGURE V-2 – AVERAGE ELONGATED EMS INCIDENT RESPONSE TIME

This can be attributed to many factors including volume of incidents, unit availability based on transport to and turnaround times at local hospitals or medical receiving facilities, and the overall size/square mileage of the community protected. The nature of survival and ultimate patient outcome, especially with trauma related incidents and cardiovascular (cardiac arrest, heart attack, stroke), is predicated on the timeliness of initial patient care and intervention followed by rapid transport.

Heart attack and stroke victims require rapid intervention, care, and transport to a medical facility (**Figure V-3**). The longer the time duration without care, the less likely the patient is to fully recover. Numerous studies have shown that irreversible brain damage can occur if the brain is deprived of oxygen for more than four minutes. In addition, the potential for successful resuscitation during cardiac arrest decreases exponentially with each passing minute that cardio-pulmonary resuscitation (CPR), or cardiac defibrillation, is delayed. The potential for successful resuscitation during cardiac arrest decreases exponentially, 7% to 10% with each passing minute, that cardio-pulmonary resuscitation (CPR) or cardiac defibrillation and advanced life support intervention is delayed. Few attempts at resuscitation after 10 minutes are successful.

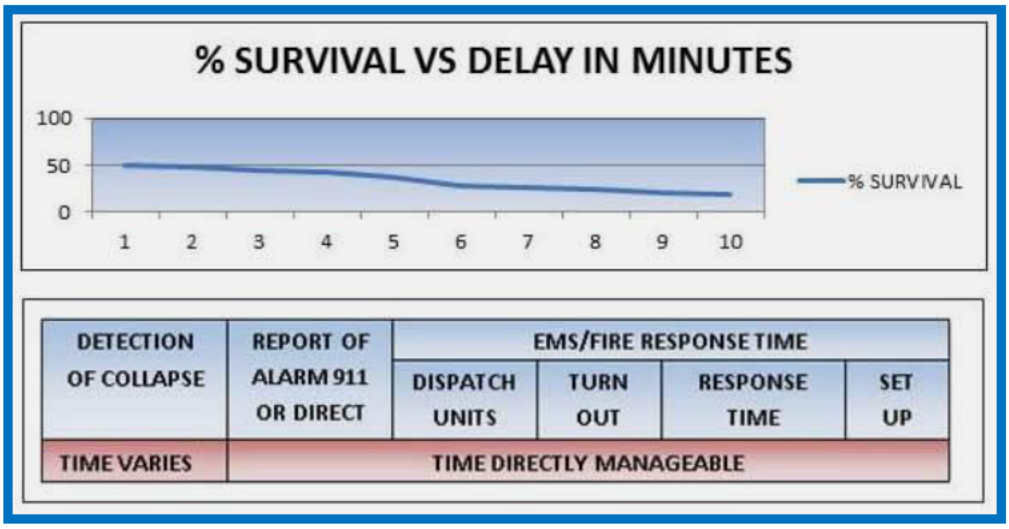

FIGURE V-3:
CARDIAC ARREST SURVIVAL TIMELINE

It is important to note, as mentioned in the training section of the report, that the EMS component of the emergency services delivery system is more heavily regulated than the fire side. In addition to NFPA 1710, NFPA 450 *Guidelines for Emergency Medical Services (EMS) and Systems*, (2009 edition), provides a template for local stakeholders to evaluate an EMS system and to make improvements based on that evaluation. The Commission on Accreditation of Ambulance Services (CAAS)[12] also establishes benchmarks for EMS operations. Massachusetts regulates EMS agencies, and certain federal Medicare regulations are also applicable.

Typically, less than 10% of 9-1-1 patients have time-sensitive ALS needs. However, for those patients who do, time can be a critical issue of morbidity and mortality. For the remainder of those calling 9-1-1 for a medical emergency, though they may not have a medical necessity, this ninety percent still expects rapid customer service. Response times for patients and their families are often the most important issue regarding the use of the fire department's services and are what is most often referred to when they "rate" their local emergency responders. Regardless of the service delivery model, appropriate response times are more than a clinical issue; they are also a customer service issue. The Westfield Fire Department should ensure that its model for resource availability and response is adequate for the needs of the community.

One of the largest hurdles any EMS organization is faced with is that of funding and regulations. One thing the City and fire Department will need to monitor very closely are any impacts the ongoing debates over funding the Affordable Care Act (ACA) may have on their billing and revenues. Over the past several years with the changes in insurance reimbursements brought

[12] The Commission on Accreditation of Ambulance Services (CAAS) is an independent commission that established a comprehensive series of standards for the ambulance service industry.

about by the ACA, a growing number of EMS providers are looking to get out of the ALS business. Increasingly, private insurance companies and the government have reduced (or are considering reductions in) reimbursement rates, and are becoming more reluctant in general, to compensate departments for the full cost of emergency room transportation fees, especially for non-emergency treatment. Communities that provide EMS transport services are therefore facing pressure on their transport revenues.

The fire-based ambulance service is supported by a separate operating budget and enterprise fund. This study did not investigate the ambulance fees, collection or policies regarding billing and collections.

Medical calls are generally classified from Alpha (minor/least severe) to Echo (life threatening/most severe). In many locations (not necessarily New England) normal procedures send only an ambulance, with two personnel, to minor category, Alpha and Bravo calls unless the arrival of an ambulance will be delayed (**Figure V-4**).

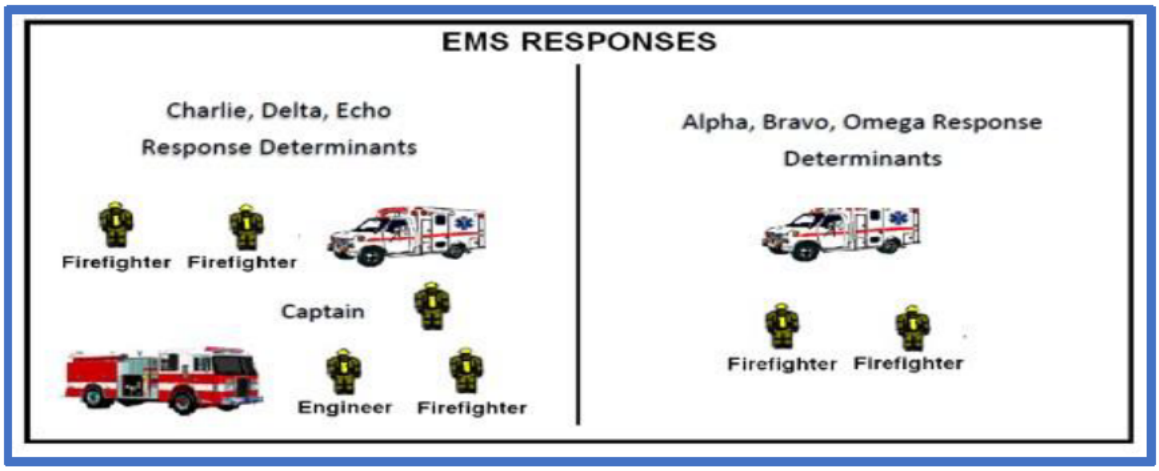

FIGURE V-4:
EMS RESPONSE MATRIX

Overall, the EMS operations appear to be adequately run, and the City is happy with the service that is being provided. There is also reported to be a low level of system abuse in Westfield which reduces the number of unnecessary responses and contributes to better resource availability for actual medical emergencies.

Mobile Integrated Health Care and Community Paramedic (MIH/CP) present a possible solution to some of these problems. Mobile Integrated Healthcare is defined by the National Association of EMTs (NAEMT) as ***"the provision of healthcare using patient-centered, mobile resources in the out of hospital environment."*** It can be provided through community paramedicine

programs, which are programs that use EMTs and paramedics to provide this out-of-hospital health care. MIH/CP programs help facilitate more appropriate uses of emergency care resources and enhance access to primary care, particularly for underserved populations, by focusing on chronic disease management, post-discharge follow up, and transport to non-emergency care settings.

The benefits of MIH/CP are therefore two-fold. These programs potentially help provide more appropriate health care to community residents, and if reimbursement arrangements can be agreed upon, also offer a substitute funding stream, separate from emergency transport, for community-based EMS transport programs.

There are government funds available for implementation of these types of programs, and some recent changes to the Medicare regulations indicate a possibly favorable view on billing for these services. The Foxborough Fire Department obtained a grant to implement this type of program effective as of July 1, 2019. With the addition of a new full-time paramedic who was designated a special agent of the Board of Health, the Department implemented a community/public health program to address these types of needs within the City**.** It is MRI's belief that a program of this type in Westfield would improve both levels of service offered to the community and EMS revenues generated. While this type of undertaking would most likely require a full-time person to undertake, this could be a potential duty for a future full-time EMS coordinator/officer.

Like most agencies that provide EMS transport services, the WFD bills third party insurance carriers for the cost of providing that service. Also, like most services, the Department does not aggressively bill to collect unpaid fees. While ambulance billing fees provide funding to offset the cost of providing the service they usually come nowhere close to fully funding the cost of providing the service.

Some of the increased demands on EMS are being seen today are in large elder care facilities. There is a population that is growing older and in general need EMS services more and more. The numbers of facilities that are housing this population will need to be monitored to ensure both a fire and EMS response needs can be met. This is an issue all over Massachusetts and New England and is becoming a popular business model that many families are looking into to take care of their parents in their elder years.

Response Metrics

A community's demand for fire and EMS services are based on that community's demographics, socio-economic factors, the percentage of commercial, industrial, and residential properties, as well as the district's infrastructure. By reviewing the historical demand for fire and EMS services and the fire department's ability to respond to those needs within the expressed expectations of that community; a fire department can evaluate what types and levels of services that they will

need to provide. Though fire and EMS standards are helpful for modeling those services, no two communities are exactly alike. Budgeting and resources often determine what level of service a community expects and can afford. Fire departments, in conjunction with their governing bodies and community political leaders, should work to establish plans that can deliver fire protection and emergency medical services at a point that meets the level of expectation that the community has established.

One of the best ways to get a broad overview picture of an emergency services organization is to look at, and analyze, their emergency response/incident statistics. Looking at statistical data that is compiled from incident reports that are generated for each and every emergency response, and /or request of assistance, will assist with determining the adequacy of current operations, as well as, to identify trends in responses (i.e., increasing vs. decreasing volume, changing types of incident requests, increasing or unacceptable response times, frequency of simultaneous incidents). Utilizing current trends to help predict future events, while not an exact science, can be helpful to communities and fire departments. This information can be utilized to plan for future operational needs, such as additional stations. However, as with any other type of statistical analysis, the information that is produced is only as good and/or reliable as the data that was originally entered and provided for evaluation.

The data that was analyzed for this report was provided to the MRI study team by the dispatch center, which handles emergency dispatch for the City, and the Massachusetts Fire Incident Reporting System (MFIRS). Each emergency incident that the WFD responds to results in the generation of a National Fire Incident Reporting System (NFIRS) report.

During the three-year period from 2022 - 2024, the WFD responded to a total of 9,675 calls for emergency service, an average of 3,225 per year, or 8.84 per day (**Figure V-5**). This does not include automatic and mutual aid responses.

Overall, the WFD responds to about 61% medical related calls and 39% for fires and other emergencies (**Figure V-5).** The yearly percentage of EMS calls compared to total call volume ranged from a low of 56.7% in 2018 to a high of 63.7% in 2020. The percentage of EMS related incidents is lower than in many communities where EMS related calls often account for 70% to 80% of responses. This indicates that the Department needs to remain focused on not only the EMS aspect of its operations, but also its fire suppression mission.

The year-to-year incident statistics showed a decrease from year to year instead of a steady upward trajectory as is often observed. As noted above, in 2020, many EMS providers experienced significant declines in the number of responses which is attributed to the COVID pandemic. They are expected to rise again as the pandemic is eventually brought under control. It is MRI's experience that nearly every community continues to see annual increases in call volume, and we believe this trend will also occur in Westfield.

NFIRS Reporting System	FY 22		FY 23		FY 24		3 Year Average	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
100 Series- Fires	85	3%	112	3%	66	2%	88	3%
200 Series - Ruptures / Explosions	3	0%	4	0%	4	0%	4	0%
300 Series - Rescue / EMS	1592	50%	1678	52%	1752	54%	1674	52%
400 Series - Hazardous Condition	130	4%	114	4%	127	4%	124	4%
500 Series - Service Call	314	10%	302	9%	287	9%	301	9%
600 Series - Good Intent	395	12%	397	12%	330	10%	374	12%
700 Series - False Alarm	672	21%	613	19%	669	21%	651	20%
800 Series - Severe Weather	2	0%	0	0%	2	0%	1	0%
900 Series - Special Incident	9	0%	11	0%	5	0%	8	0%
TOTAL	**3202**	**100%**	**3231**	**100%**	**3242**	**100%**	**3225**	

FIGURE V-5 WFD TOTAL INCIDENT TREND
FY 2022-2024

Note: Our analysis indicates that the data provided does not include all EMS Calls.

Figure V-5 further breaks down the fire related incidents into more specific categories. For actual fire incidents, the statistical sample is small. Per NFIRS protocols, the category for *"Fire Incident"* must be an actual fire situation, that in many, but not all situations caused some type of damage. Many of the incidents that are classified under other types of incidents were probably initially dispatched as some type of fire incident, but ultimately were classified otherwise, for reporting purposes, based upon the situation actually found at the scene. From FY 2022 through FY 2024, the Department responded to a total of 263 actual fire incidents, an average of 88 per year, or about .59 per week. Actual fires accounted for 3% of the fire Department's total responses during these years.

Fire departments respond to many other types of incidents that may or may not be fire related. These types of incidents frequently constitute a significant number of fire department responses, and each must be treated as an emergency. In the case of automatic fire alarm systems, the incident must be treated as a potential actual fire until such time as a trained and qualified emergency responder arrives on the scene and determines otherwise. These types of responses account for 95.1% of the Department's fire-related responses. Other incidents, such as fuel or chemical spills, create other dangers and hazards to people, property, and the environment unless they are properly mitigated.

One issue in Westfield, as with many communities, is either actual or anticipated call volume growth. The three-year incident trend analysis indicated that incidents are on an upward trajectory. Overall experience shows, particularly considering developments occurring and proposed in the City, that call volume will continue to increase. Looking forward, if this growth in

service demand continues, maintaining the current service level will only be possible if the level of resources dedicated to these services increase.

Every emergency services organization periodically experiences simultaneous, or overlapping, incidents. Whether they are handled by that department themselves, or, through automatic/ mutual aid provisions need to be made to ensure that these incidents are handled effectively, efficiently and in a timely manner. However, as the number of simultaneous, or overlapping, incidents increase, that community and/or Department can no longer rely on their neighboring communities/departments to handle an ever-increasing percentage of their incidents. This is a key benchmark in the need to consider increasing the number of available resources that are in service.

While good data was not available regarding the number of simultaneous or overlapping incidents that occur in Westfield, the MRI study team personally observed several instances where this occurred during our field visits to the City.

To analyze the number of incidents that the Department responded to each day of the week and by time of day, the study team was forced to use a somewhat different data set that was provided by the WFD. This data, while also utilizing a three-year period, utilized fiscal year – from July 1 through June 30 – rather than a calendar year. Since this data in particular is more foundational and merely presents a snapshot, it is our opinion that this does not impact the important response data in any way and does not calculate into our recommendations. The number of incidents that the Department responded to each day of the work week, Monday through Friday is very consistent with just 39 incidents difference in the three-year period between the slowest day, Mondays, and the busiest day, Fridays (**Figure V-6**). As our experience often indicates, the weekends tended to have fewer calls with 107 fewer incidents on Sundays than on Fridays.

Incidents by Day of the week										
	FY 22		FY 23		FY 24		3 Year Average	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
Monday	452	14%	441	14%	485	15%	459	14%
Tuesday	471	15%	441	14%	458	14%	457	14%
Wednesday	463	14%	461	14%	450	14%	458	14%
Thursday	486	15%	488	15%	452	14%	475	15%
Friday	468	15%	491	15%	499	15%	486	15%
Saturday	473	15%	449	14%	434	13%	452	14%
Sunday	389	12%	460	14%	464	14%	438	14%
	3202	**100%**	**3231**	**100%**	**3242**	**100%**	**3225**	**100%**

FIGURE V-6: RESPONSES BY DAY OF THE WEEK FY 2022 - 2024

Incident activity rose and fell throughout the day depending upon the hour. The busiest hours of the day were between about 8:00 AM and 6:00 PM. (**Figure V-7**). This is consistent with most studies that MRI completes.

Incidents by Time of Day	FY 22		FY 23		FY 24		3 Year Average	
	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls	# Calls	% of Calls
0000 to 0359	197	6%	173	5%	204	6%	191	6%
0400 to 0659	208	6%	218	7%	198	6%	208	6%
0700 to 0959	429	13%	427	13%	411	13%	422	13%
1000 to 1259	578	18%	570	18%	551	17%	566	18%
1300 to 1559	513	16%	610	19%	553	17%	559	17%
1600 to 1859	552	17%	511	16%	581	18%	548	17%
1900 to 2059	432	13%	464	14%	449	14%	448	14%
2100 to2400	293	9%	258	8%	295	9%	282	9%
TOTAL	3202	100%	3231	100%	3242	100%	3225	100%

FIGURE V-7: RESPONSES BY TIME-OF-DAY FY 2012 – 2024

A breakdown of calls by weekday daytime, weekday nighttime, weekend daytime, and weekend response time is an important measuring instrument to determine how well a fire department is currently performing, to help identify response trends, and to predict future operational needs. Getting emergency assistance to the scene of a 9-1-1 caller in the quickest time possible may be critical to the survival of the patient, and/or successful mitigation of the incident. Achieving the quickest and safest response times possible should be a fundamental goal of every fire department.

Fire departments are being held increasingly accountable for their response times and the consequences of extended or inadequate responses. The performance and effectiveness of fire department operations can be significantly impacted by the time it takes for them to arrive on the scene of an emergency incident. The United States Fire Administration's (USFA) report, *Structure Fire Response Times,* has a useful framework for total emergency incident response time, including definitions and components. The same report notes that about half of structure fires confined to the room of origin (51%) and confined to the floor of origin (51%) had a response time of less than five minutes. More than half of fires confined to the building of origin (54%) and nearly half of fires beyond the building of origin (49%) had a response time of less than six minutes.

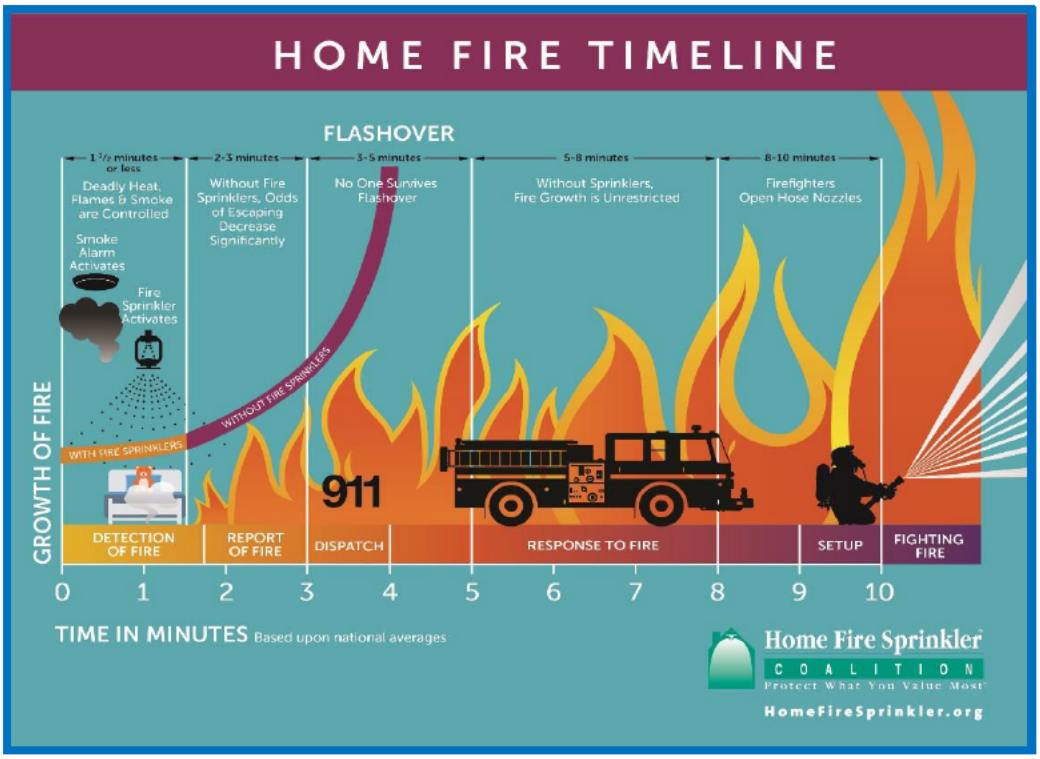

FIGURE V-8: HOME FIRE TIMELINE CURVE SHOWING ACTIVATION TIMES AND EFFECTIVENESS OF RESIDENTIAL SPRINKLERS (APPROXIMATELY 1 MINUTE), FLASHOVER (3 TO 5 MINUTES) AND FIREFIGHTERS APPLYING FIRST WATER TO THE FIRE AFTER NOTIFICATION, DISPATCH, RESPONSE, AND SET UP (10 MINUTES).
Image credit: Home Fire Sprinkler Coalition

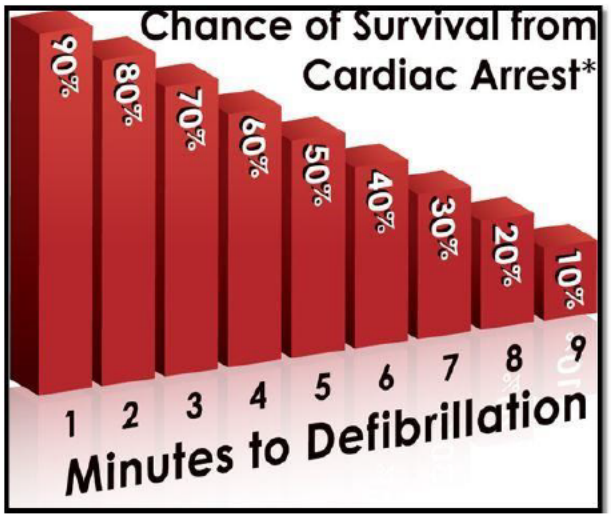

FIGURE V-9
CARDIAC SURVIVAL MATRIX

Also, as previously noted, heart attack and stroke victims require rapid intervention, care, and transport to a medical facility. The longer the time duration without care, the less likely the patient is to fully recover. Numerous studies have shown that irreversible brain damage can occur if the brain is deprived of oxygen for more than four minutes. In addition, the potential for successful resuscitation during cardiac arrest decreases exponentially with each passing minute that cardio-pulmonary resuscitation (CPR) or cardiac defibrillation is delayed (**Figure V-9**).

Since the 1970s, arriving within eight minutes of receipt of an emergency call, 90%

of the time, has been the recognized benchmark for determining the quality of an EMS system. Today, the national standard of care benchmark based on stroke and cardiac arrest protocols has evolved to have an emergency response unit on scene at a medical emergency within six minutes of receipt of the call.

NFPA Standard 1710 – Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (2020 Edition), is the nationally recognized consensus standard on staffing and deployment by career fire departments. It is the benchmark standard that the United States Department of Homeland Security utilizes when evaluating applications for staffing grants under the Staffing for Adequate Fire and Emergency Response (SAFER) grant program. Paragraph 4.1.2.1 of NFPA 1710 states that:

> ***The first arriving engine company shall arrive at the scene of a fire suppression incident within four minutes or less (240 seconds), and/or the entire full first alarm response should arrive on scene within eight minutes (480 seconds). For EMS incidents, a unit with first responder or higher-level trained personnel should arrive within four minutes (240 seconds), and an Advanced Life Support (ALS) unit should arrive on scene within eight minutes (480 seconds).***
>
> ***Paragraph 4.1.2.2 requires the establishment of a 90% performance objective for these response times.***

NOTE: The four-minute response time is from when the units are physically moving to the incident. One minute (actually 64 seconds) can be added for call processing and dispatch, and one minute to one minute, 20 seconds can be added for turnout time, that is from when firefighters in the station are notified, until they are actually responding, providing six total minutes from the time the 9-1-1 call is answered until the first unit arrives on location.

Regarding the EMS response benchmark for cardiac events, NFPA 1710 states, ***"This requirement is based on experience, expert consensus, and science. Many studies note the role of time and the delivery of early defibrillation in patient survival due to heart attacks and cardiac arrest, which are the most time-critical, resource-intensive medical emergency events to which fire Departments respond."***

For the purpose of most analysis ***Response Time*** is a product of three components: *Dispatch Time*, *Turnout Time*, and *Travel Time*.

- **Dispatch time** is the time interval that begins when the alarm is received at the initial public safety answering point (PSAP) or communications center and ends when the

response information begins to be transmitted via voice and/or electronic means to the emergency response facility or emergency response units or personnel in the field.

- **Turnout time** is the time interval that begins when the notification process to emergency response facilities and emergency response personnel and units begins by an audible alarm and/or visual announcement and ends at the beginning point of travel time. The Fire department has the greatest control over these segments of the total response time.

- **Travel time** is the time interval that initiates when the emergency response unit is actually moving in response to the incident and ends when the unit arrives at the scene.

Response time, also known as **total response time**, is the time interval that begins when the call is received by the primary dispatch center and ends when the dispatched unit(s) arrives on the scene of the incident to initiate action.

The WFD is dispatched by, a civilian emergency communications center that is a separate entity in the Citty.

According to NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Departments*, 2020 Edition:

- ***Alarm processing time or dispatch time*** should be less than or equal to 64 seconds 90 percent of the time.

- ***Turnout time*** should be less than or equal to 60 seconds for EMS incidents, and 80 seconds (1.33 minutes) for fire and special operations 90 percent of the time. As noted above, turnout time is the segment of total response time that the fire department has the most ability to control.

- ***Travel time*** shall be less than or equal to 240 seconds for the first arriving fire suppression or EMS unit, 90 percent of the time. The standard further states the initial full first alarm assignment for structure fires should be assembled on scene in 480 seconds, 90 percent of the time.

WFD response time data from 2022 through May 1, 2024, is included below within Figure V-12. This figure illustrate the various components of average response times to incidents the WFD responded to including from call receipt to dispatch (call processing time), dispatched to responding (turnout time), and 1st unit call received to arrival on scene. They also include a time for all units dispatched to arrival on scene. They do not include a specific breakout from when the first fire Department unit was responding until it arrived on location. As with many of the

other requests for data that were made during this study, getting usable data in the proper format proved to be difficult. As a result, it was difficult to perform an accurate analysis.

Response time				
	FY 22	FY 23	FY24 (upto 4/30)	3 Year Average
Response Time(tone to scene)				
All inclusive	9:11	8:59	8:57	9:02

FIGURE V-10: RESPONSES CALL TO ON SCENE

Both NFPA and ISO have established different indices in determining fire station distribution and thus a basis for a standard of cover. The ISO Fire Suppression Rating Schedule, Section 560, NFPA Standard 1710, Section 5.2.4.1.1, suggests an engine placement that achieves a 240-second (four-minute) travel time from the time the unit is responding. Using an empirical model called the "piece-wise linear travel time function" the Rand Institute has estimated that the average emergency response speed for fire apparatus is 35 mph. At this speed, the distance a fire engine can travel in four minutes is approximately 1.97 miles.[13] A polygon based on a 1.97-mile travel distance results in a service area that on average is 7.3 square miles.[14]

A more conservative and stricter measure of total response time is the 90th percentile measurement. Simply explained, for 90 percent of calls, the first unit arrived within a specified time. This is the benchmark that NFPA 1710 recommends for the various response time components. The MRI study team was unable to obtain this information from Westfield as it was not a data point that they track.

The total dollar loss for a community is something that is not easily compared as each community has different characteristics for commercial and residential mix. With the significant incidents in Westfield that appear to be happening in the industrial section of the City, the dollar loss would be expected to be much higher. Figure V-11 looks at the three fiscal year periods ending up with an average of $1,889,935 per year.

Property Loss				
Dollar Loss	FY 22	FY 23	FY 24	3 Year Average
Property Loss	$ 1,290,260.00	$ 2,395,620.00	$ 1,983,925.00	$ 1,889,935.00
Total Loss	**$ 1,290,260.00**	**$ 2,395,620.00**	**$ 1,983,925.00**	**$ 1,889,935.00**

FIGURE V-11: DOLLAR LOSS

[13] University of Tennessee Municipal Technical Advisory Service, *Clinton Fire Location Station Study*, Knoxville, TN, November 2012. p. 8.
[14] University of Tennessee Municipal Technical Advisory Service, *Clinton Fire Location Station Study*, Knoxville, TN, November 2012. p. 9.

Deployment and Response – Geographic Information Systems (GIS) Mapping

As part of this project five GIS maps were developed to provide a perspective on deployment and response. These maps include:

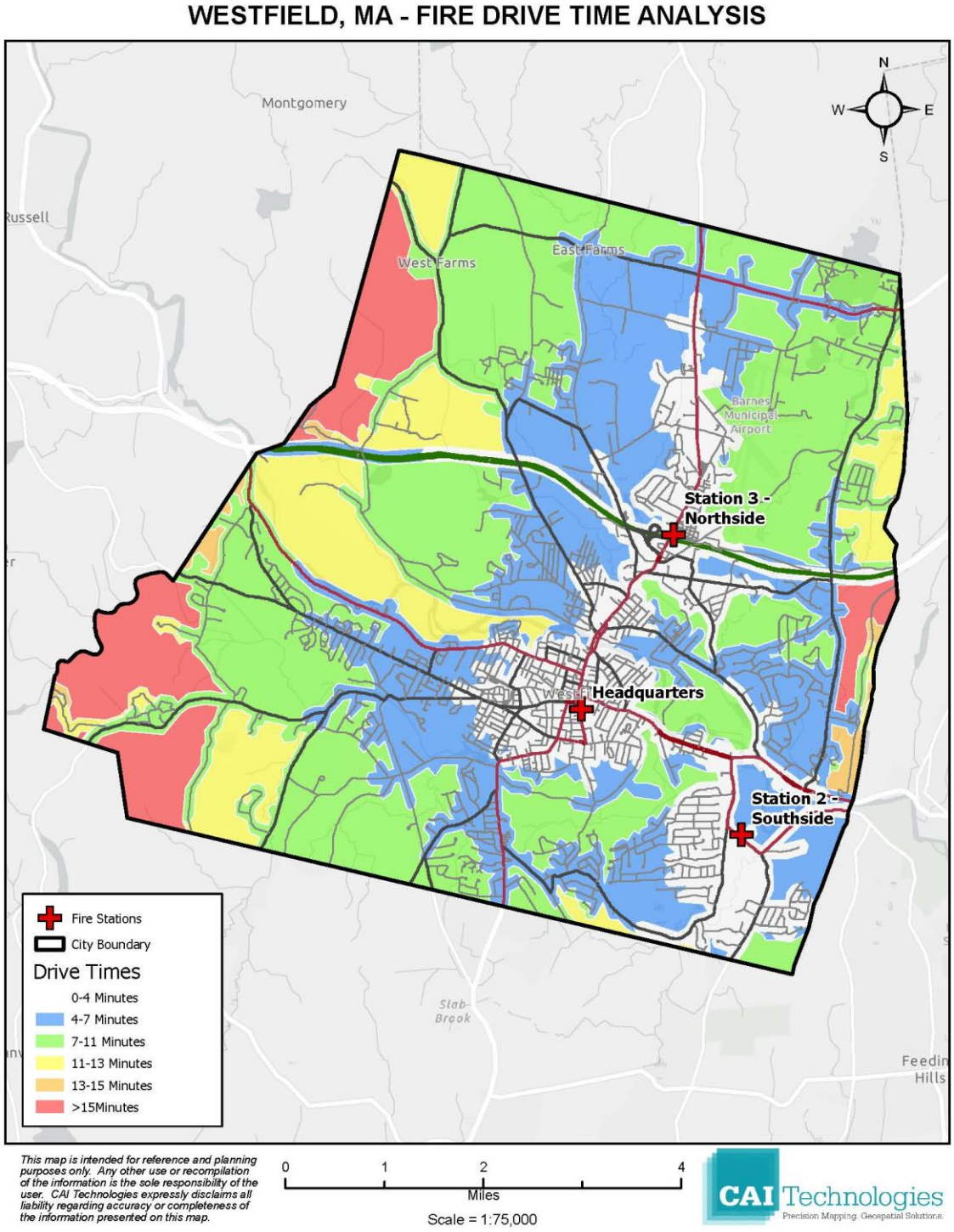

Figure V-12 – Response Drive Time Analysis

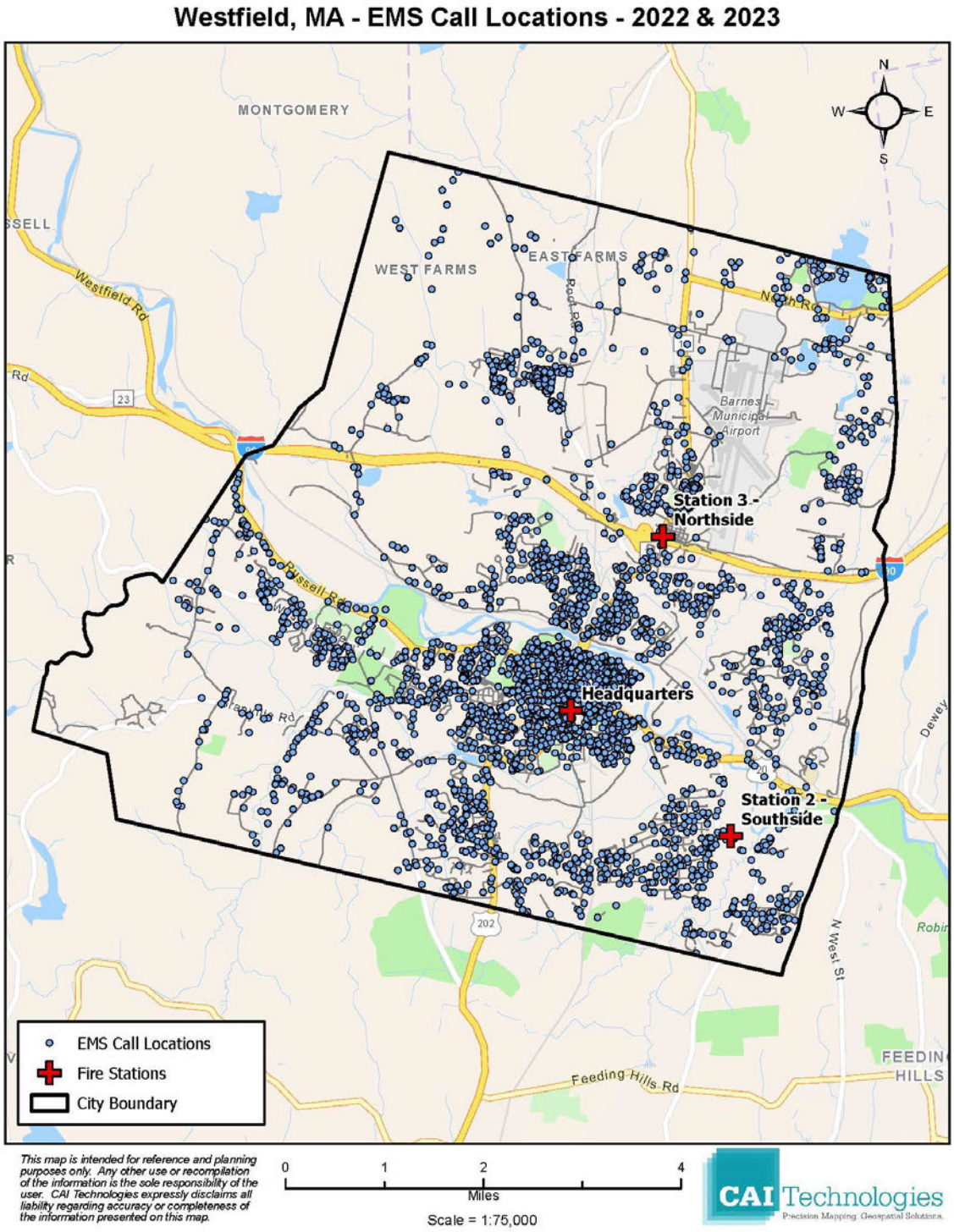

FIGURE V-13 – EMS CALL LOCATIONS AND CLUSTERS

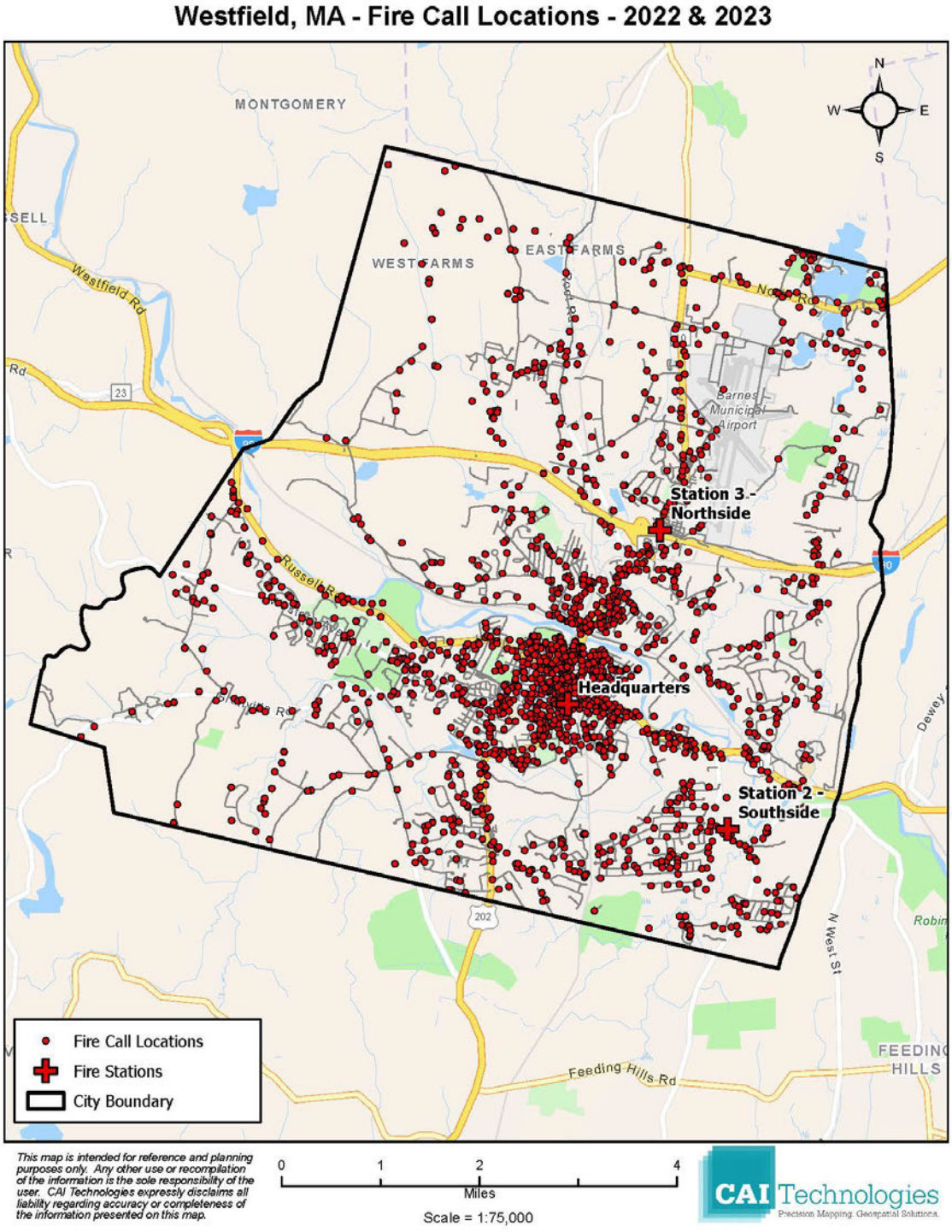

FIGURE V-14 – FIRE CALL LOCATIONS AND CLUSTERS

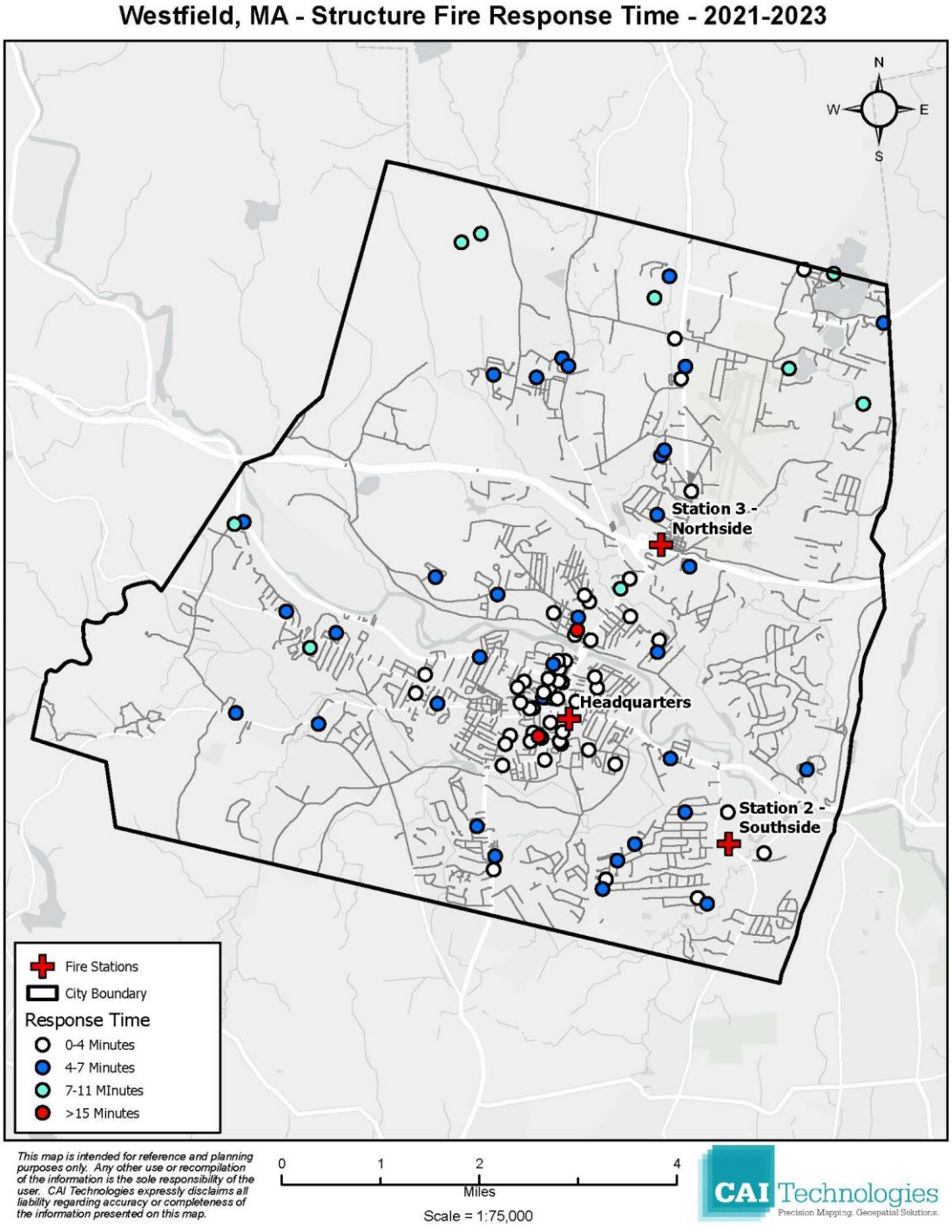

FIGURE V-15 – STRUCTURE FIRE LOCATIONS AND DEPLOYMENT POINTS

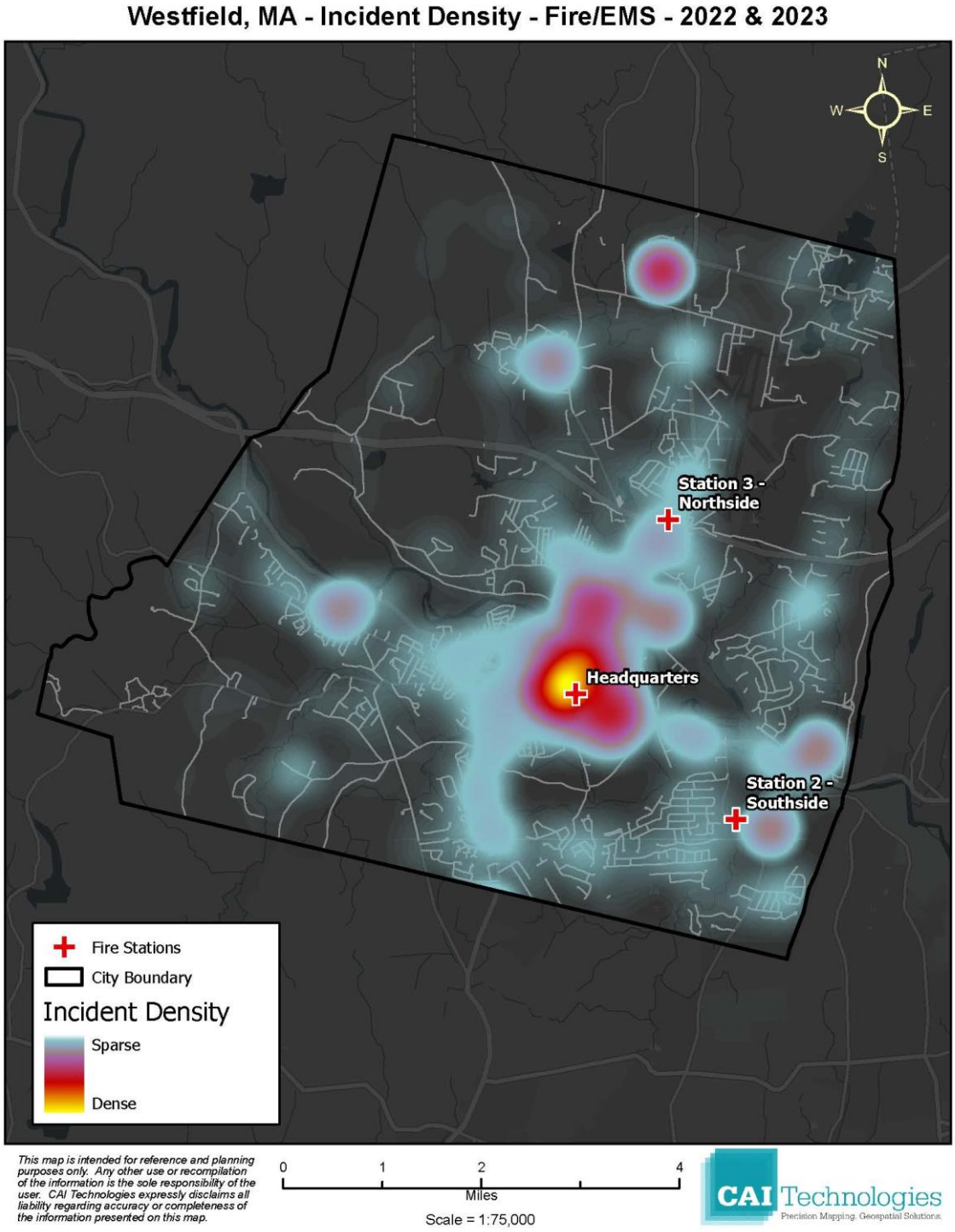

FIGURE V-16 – INCIDENT HEAT MAP AND DEPLOYMENT POINTS

Figure V-12 provides an emergency vehicle drive time analysis for the City of Westfield from the three existing stations. Obviously the lower the drive time the quicker the overall response. Based on our experience this map indicates that the areas of higher population and those areas with high incident frequency other than the Massachusetts Turnpike and Barnes Airport/Air National Guard Base are reasonably well served by the current three station deployment model. It should be noted that Barnes Air National Guard Base staffs its own fire Department and that station is not shown as it is not under the control of the City. Areas requiring excessive response time are predominantly based on limited access or the more rural areas in the western portion of the City.

Figure V-13 identifies where EMS calls have occurred during 2022 and 2023. A medical emergency can occur anywhere within the City. However, for the purpose of this analysis and to evaluate deployment of resources it is valuable to consider where incidents frequently occur (clusters). Figure V-15 identifies where structure fires have occurred from 2021 – 2023. Overall, this indicates that the existing stations are well placed and optimize response time to the vast majority of these incidents.

Summarizing the previous maps, Figure V-16 provides a cumulative heat map indicating where incidents most frequently occur. Overall, this map (with two areas of exception) indicates that the existing stations are well placed and optimize response time to the vast majority of these incidents.

Staffing and Critical Tasking

The issue of fire department staffing has, over the past three or four decades, become one of the most widely and frequently debated topics in fire service history. This debate has intensified over the past several years as tax collection revenues have declined precipitously in many communities and governmental entities seek to reduce expenses.

Personnel costs account for the largest percentage of the operating budgets of career fire Departments. In many cases this one-line item is 90% or more of the total budget. The debate becomes intense when the discussion turns to how many firefighters are necessary to provide adequate levels of service, fulfill the department's core mission(s), and how those firefighters are deployed. This is a basic risk assessment and management decision. Ultimately, determining the acceptable level of risk they are willing to assume for the citizens they represent is a key decision that is made by the Westfield City Council Selectmen.

The operations necessary to successfully extinguish a structure fire, and do so effectively, efficiently, and safely, requires a carefully coordinated, and controlled, plan of action, where

certain operations, such as venting ahead of the advancing interior hose line(s), must be carried out with a high degree of precision and timing. Multiple operations, frequently where seconds count, such as search and rescue operations and trying to cut off a rapidly advancing fire, must also be conducted simultaneously. If there are not enough personnel on the incident initially to perform all the critical tasks, some will, out of necessity, be delayed. This can result in an increased risk of serious injury, or death, to building occupants and firefighters, and increased property damage.

There has been much research done by a number of fire departments on the effects of various staffing levels. One constant that has emerged is that company efficiency and effectiveness decrease substantially, while injuries increase, when company/unit staffing falls below four personnel. A 2010 comprehensive yet scientifically conducted, verified, and validated study titled *Multi-Phase Study on Firefighter Safety and the Deployment of Resources,* was performed by the National Institute of Standards and Technology (NIST) and Worcester Polytechnic Institute (WPI), in conjunction with the International Association of Fire Chiefs (IAFC), the International Association of Fire Fighters, and the Center for Public Safety Excellence. This landmark study researched residential fires, where the majority of fire, injuries, and fatalities occur. ***The study concluded that the size of firefighter crews has a substantial effect on the fire department's ability to protect lives and property in residential fires and occupancies[15].***

Several key findings of the study include:

- Four-person firefighting crews were able to complete 22 essential firefighting and rescue tasks in a typical residential structure 30% faster than two-person crews, and 25% faster than three-person crews.

- The four-person crews were able to deliver water to a similar sized fire 15% faster than the two-person crews, and 6% faster than three-person crews, steps that help to reduce property damage and reduce danger/risks to firefighters.

- Four-person crews were able to complete critical search and rescue operations 30% faster than two-person crews, and 5% faster than three-person crews.

The United State Fire Administration, part of the Federal Emergency Management Agency, in the Department of Homeland Security, recommends that a minimum of four firefighters respond on or with each apparatus. In its respected textbook *Managing Fire Services,* the International City/County Management Association (ICMA) states, *"that at least 4 and often 8 or more firefighters under the supervision of an officer should respond to fire suppression operations"*. They further state, *"If about 16 firefighters are not operating at the scene of a working fire, within*

[15] This study looked at staffing only and its implications on fire ground operations. It did not consider other factors such as cost.

the critical time period, then dollar loss and injuries are significantly increased, as is fire spread". Many communities continue to struggle to generate a sufficient response.

The current career staffing pattern in the WFD consists of four work groups that work an average of 42-hours per week. These groups work rotating 24-hour shifts, and this schedule provides the community with 24/7 coverage.

The MRI study team was informed that the Department does not generally have a sick or injury leave problem. The Department – with support from the City – has maintained on duty shift staffing minimums from our perspective the expense of maintaining a level of service is reasonable, and funding well invested.

To effectively respond to and mitigate requests for emergency services, an agency must have a thorough understanding of its community's risk factors, both fire and EMS. Once identified and understood, each category or level of risk is associated with the necessary resources and actions required to mitigate it. This is accomplished through a critical task analysis. The exercise of matching operational asset deployments to risk, or critical tasking, considers multiple factors including national standards, performance measures, and the safety of responders.

Critical tasks are those activities that must be conducted in a timely manner by responders at emergency incidents to control the situation and stop loss. Critical tasking for fire operations is the minimum number of personnel needed to perform the tasks required to effectively control a fire. The same is true for EMS as there are specific patient care tasks that must be completed in succession and often together to support positive prehospital care. The specific number of people required to perform all the critical tasks associated with an identified risk is referred to as an ***Effective Response Force*** (ERF). The goal is to deliver an ERF within a prescribed time frame. NFPA 1710, as a nationally recognized consensus standard on staffing and deployment for career fire departments, provides a benchmark for ERF.[16]

During fire incidents, to be effective, critical tasking must assign enough personnel so that all identified functions can be performed simultaneously. However, it is important to note that secondary support functions may be handled by initial response personnel once they have completed their primary assignment. Thus, while an incident may end up requiring a greater commitment of resources or a specialized response, a properly executed critical task analysis will provide adequate resources to immediately begin bringing the incident under control.

[16] It is important to note that compliance with NFPA 1710 has not been mandated in the Commonwealth of Massachusetts or by the federal government. It is considered a "best practice" that fire Departments strive to achieve.

The NFPA *Fire Protection Handbook*[17] classifies buildings and occupancies by their relative risk and provides recommendations on the minimum ERF that will be needed to handle fire incidents in them. These include:

High-hazard Occupancies: Schools, hospitals, nursing homes, high-rise buildings, and other high life safety-hazard or large fire-potential occupancies.

> ***Operational Response:*** at least 4 pumpers, 2 ladder trucks (or combination apparatus with equivalent capabilities), 2 chief officers and other specialized apparatus as may be needed to cope with the combustible involved; not less than 24 firefighters and 2 chief officers ***plus*** a safety officer and a rapid intervention team. The Westfield Fire District has several of these types of occupancies including schools, a large senior citizen complex, a large lumberyard complex and several other very large warehouses.

Medium-hazard Occupancies: Apartments, offices, and mercantile and industrial occupancies, not normally requiring extensive rescue by firefighting forces. The Westfield Fire District has a significant (and growing) number of occupancies of these types.

> ***Operational Response:*** At least 3 pumpers, 1 ladder truck (or combination apparatus with equivalent capabilities such as a quint), 1 chief officer, and other specialized apparatus as may be needed or available; not less than 16 firefighters and 1 chief officer ***plus*** a safety officer and a rapid intervention team.

Low-hazard Occupancies: One-, two-, or three-family dwellings and scattered small business and industrial occupancies.

> ***Operations Response Capability:*** At least 2 pumpers, 1 ladder truck (or combination apparatus with equivalent capabilities such as a quint), 1 chief officer, and other specialized apparatus as may be needed or available; not less than 12 firefighters and 1 chief officer, ***plus*** a safety officer, and a rapid intervention team.

NFPA 1710 suggests that the following personnel are needed to safely mitigate a structure fire involving several rooms in a 2,000-square foot dwelling (**Figure V-17**). Obviously, this number dramatically increases based on the extent of involvement, size of the structure, presence of hazardous materials, and use of the occupancy. As an example, a significant fire within a garden style apartment complex or an open-air strip mall commercial requires a minimum of 27/28 personnel based on the potential hazards that could be encountered.

[17] Cote, Grant, Hall & Solomon, eds., *Fire Protection Handbook* (Quincy, MA: NFPA 2008), 12-3

CRITICAL TASK	NEEDED PERSONNEL
Incident Command	1
Continuous Water Supply	1
Fire Attack via Two Handlines	4
Hydrant Hook Up - Forcible Entry - Utilities	2
Primary Search and Rescue	2
Ground Ladders and Ventilation	2
Aerial Operator if Aerial is Used	1
Establishment of IRIC (Initial Rapid Intervention Crew)	4
TOTAL EFFECTIVE RESPONSE FORCE	16 (17 if aerial is used)

FIGURE V-17: NFPA 1710 MINIMUM LOW TO MODERATE RISK STRUCTURE FIRE STAFFING NEEDS

Figure V-18 illustrates in a different way the critical tasks and resource deployment required on low and moderate-hazard incidents such as residential and small commercial structure fires. Although some people advocate that these types of incidents can be handled with fewer personnel, unless it is a small fire, there is the possibility there will not be sufficient personnel available to perform all the critical tasks necessitating that some be delayed. Ultimately, determining the acceptable level of risk they are willing to assume for the citizens they represent will be a key decision that the Mayor and the Westfield City Council will need to make.

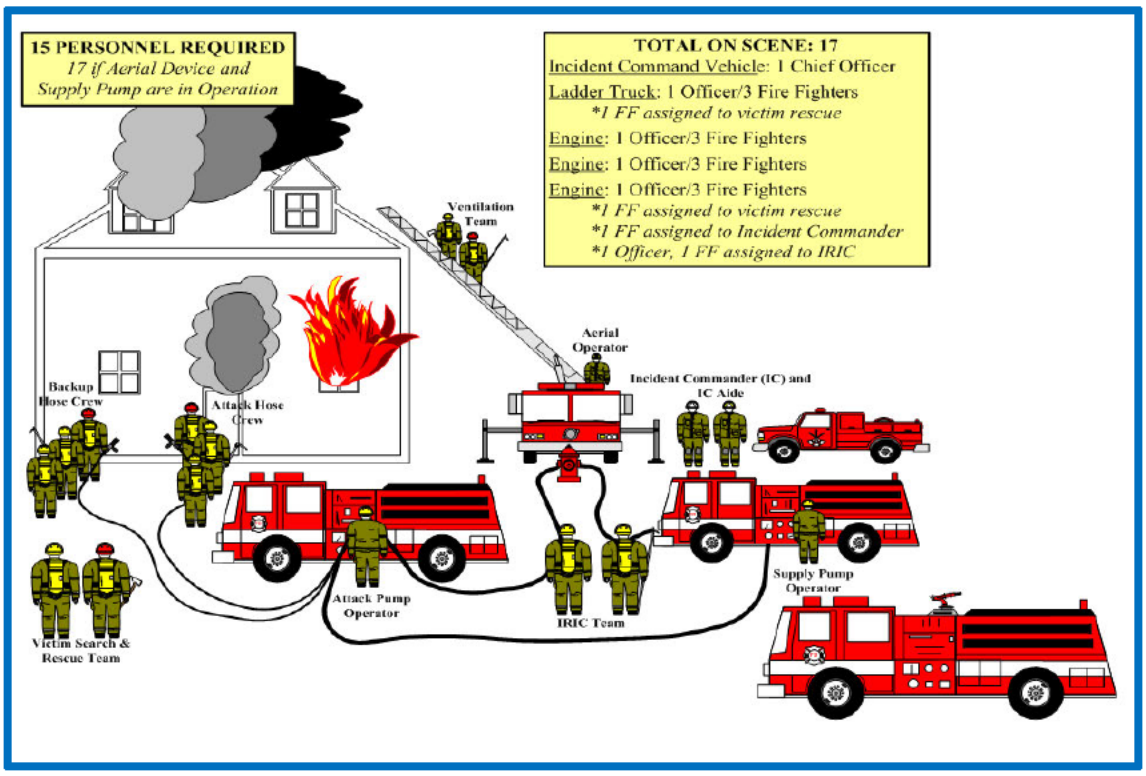

FIGURE V-18: LOW TO MODERATE RISK RESPONSE-INTERIOR FIRE ATTACK

Typical minimum staffing needs career or primarily career fire Departments for a fire involving several rooms in a 2,000-square foot, one-family residential occupancy. These are the proverbial "bread and butter" structural fire incidents that fire Departments respond to, and are by far, the most common type of structure fire, accounting for around 70% of those types of incidents. The full first alarm assignment should arrive on scene within eight minutes of dispatch.

Image credit: IAFF 266

The ability to get enough personnel, along with appropriate apparatus, to the scene of a typical residential structure fire is critical to operational success and firefighter safety. ***Accomplishing this within the eight-minute time frame (to have 16 – 17 personnel on scene) as specified in NFPA 1710 is an important operational benchmark.*** The WFD should make achieving this goal its highest priority.

The 2020 edition of NFPA 1710 recommends a minimum of 27/28 personnel on the initial response for fires involving moderate hazard garden-style apartments and strip shopping centers (**Figure V-14**).

CRITICAL TASK	NEEDED PERSONNEL
Incident Command	2
2 – Independent Water Supply Lines/Pump Operators	2
Fire Attack via Three Handlines	6
Support Firefighter for each Handline	3
2 - Search and Rescue Teams	4
2 - Ground Ladders and Ventilation Teams	4
Aerial Operator (if Aerial is Used)	1
Rapid Intervention Team (1 Officer/3 Firefighters)	4
EMS/Medical	2
EFFECTIVE RESPONSE FORCE	27/28

FIGURE V-19: STRUCTURE FIRE – MODERATE RISK

Beyond the NFPA standard(s) which as standards, do not carry the weight of regulation or law, is the Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard, CFR 1910.134, which carries the weight and force of regulation, thus making compliance mandatory. One key provision of the Respiratory Protection Standard that is directly applicable to fire department staffing is known as the ***"Two-In/Two-Out"*** rule. In brief, this regulation specifies that anytime firefighters operate in an environment/atmosphere that is "immediately dangerous to life and health" (IDLH), whenever two members enter the IDLH area together/as a team, they must maintain visual or voice communication with two additional firefighters who must remain outside of the IDLH atmosphere, prepared to render immediate emergency assistance to those inside (**Figure V-20**).

The OSHA rule does provide an exception however, which states that the rule does not apply in emergency rescue situations where a person is visible and in need of immediate rescue, or there is credible and reasonable information that potentially viable victims are still in need of rescue. It is important to note that the potential for an IDLH atmosphere to exist is not just limited to structure fires. They can exist on natural gas leaks, carbon monoxide incidents, confined space emergencies, chemical spills, and even automatic fire alarm activations where there is an actual fire in progress.

To comply with the "Two-In/Two-Out" rule, a team of four firefighters must be assembled before an interior fire attack can be made when the fire has progressed beyond the incipient stage, except in an imminent life-threatening situation when immediate action could prevent the loss of life or serious injury, before the team of four firefighters are assembled. The serious concern

of the MRI project team is that the OSHA "Two-In/Two-Out" rule permits an exception for life hazard or rescue situations. The reality is that in one of the most serious life hazard fire situations that can be encountered, trapped civilians, a firefighter may need to place himself/herself in extreme danger by entering the structure alone.

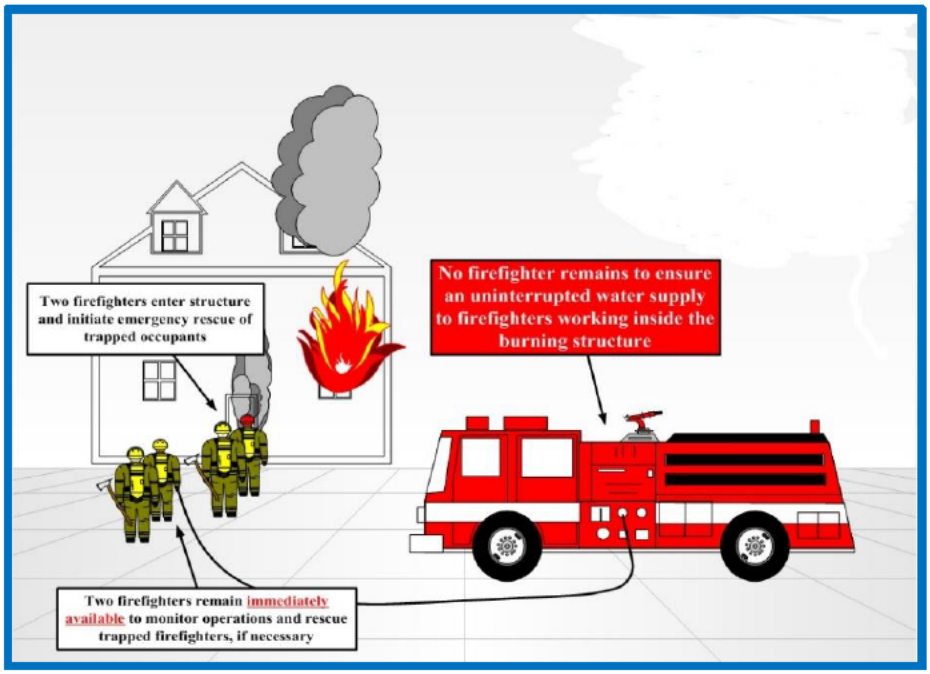

FIGURE V-20: OSHA TWO-IN/TWO-OUT
Image Credit: IAFF 266

Regarding incident management and the safety of on-scene operations, the MRI team was advised that fire Department incident commanders rarely provide status updates to the dispatch center, time checks are not utilized, and personnel accountability reports (PAR) are rarely given. All of these are standard incident management practices that are expected to be provided during any significant incident.

Many communities in the United States (but not necessarily Massachusetts) that are similar sized to Westfield are protected by combination fire departments comprised of both career and call/volunteer personnel, or, in many instances fully call/volunteer fire departments. Like most of these communities, Westfield is struggling to recruit and retain well-trained staff. This is a problem that is not going to go away. These factors are particularly relevant in Massachusetts where most communities have career firefighters and there are many opportunities for those who wish to pursue a career in the fire service.

It is critically important to stress that in the context of staffing requirements for fire and emergency response operations that certain minimum standards of training and certification

must be met. Just because an individual has been on the fire Department roles for many years, has a set of personal protective equipment (PPE), and responds to calls does not necessarily make them a "qualified" firefighter by modern day standards and best practices. This issue is discussed further in the Training section of Chapter VII, *Support Services.*

Looking ahead, as growth and developments continue to occur in the City, along with the expected corresponding increase in call volume, the fire Department will probably eventually need to hire at least two additional personnel to provide four personnel on duty around the clock.

Mutual and Automatic Aid

Mutual aid is an essential component of almost every fire Department's operations. Except for the largest cities, no municipal fire department can, or should, be expected to have adequate resources to respond to mitigate large scale complex incidents safely, effectively, and efficiently. Mutual aid is shared between communities when their day-to-day operational fire rescue and EMS capabilities have been exceeded and ensure that the citizens of the community are protected, even when local resources are overwhelmed. Fire department mutual aid is provided without financial charge.

Automatic aid is assistance that is dispatched automatically by agreement between two or more communities or fire districts to all first alarm structural fires. The automatic aid will depend upon the location in the community and the type of equipment that each department can share, as well as staff. It is predetermined by each community's fire department so that on the initial notification through 9-1-1 the neighboring department is also notified and responds provided they are available. If they are unable to respond because they are not available due to an incident in their own community, Westfield would rely on the regional mutual aid agreements and go further out to other fire departments.

As a hallmark of fire department operations throughout Massachusetts (and in most other areas of the country as well) the WFD engages in robust mutual aid relationships with all of its surrounding communities and departments. These departments respond together regularly to a wide range of incidents. The departments operate seamlessly together, even with regard to chief/command level officers responding to and assisting with managing incidents, regardless of which community it is occurring in. In most cases they respond immediately, or simultaneously upon the report of any structure fire. Doing so quickly increases the number of firefighting personnel who are available. This is not the case in Westfield as units from Westfield are dispatched alone to structure fires with the officer deciding when to request assistance. NFPA 1710 also recommends that the appropriate number of personnel arrive on scene within eight minutes (480 seconds) travel time.

The use of extensive automatic aid is an exceptional practice utilized in many locations that has served to increase the service level to all participating communities while reducing the cost of individual fire services. In many cases this practice is viewed as a means for "mutual survival" by chief officers. The MRI project team views it as a mechanism to not only enhance operational safety, but a major factor in future operational success.

Like most communities in Massachusetts, Westfield utilizes a 10-alarm run card to determine responses to various types of incidents. These cards are revised on an annual basis, as necessary. Mutual and automatic aid is provided reciprocally throughout the municipalities in the commonwealth

Many organizational assessments suggest that automatic aid practices should be developed further as they reflect an industry best practice. Moving forward, the WFD should attempt to enter into enhanced automatic aid agreements with surrounding communities to provide for the simultaneous dispatch of additional resources to attempt to better achieve the recommended benchmarks – both personnel and time on location – for each specific type of structure fire. These revised response assignments should be based upon critical staffing needs as identified in this report.

The MRI team was given the following statements regarding Mutual aid:

Automatic/mutual aid for the City of Westfield is when the apparatus are committed to other emergencies. Engine responses when needed come from West Springfield, Holyoke, Southwick, Southampton or Agawam based on emergency location and availability. Ladder responses come from Holyoke, West Springfield, or Southwick based on availability.

A first alarm assignment will not need mutual or automatic aid. Our fire alarm assignment will have the 14-15 firefighters needed for NFPA 1710 within 8 minutes of a call. A second alarm assignment will request a ladder and an engine to the City for Westfield coverage. Dispatch staff will call back a Deputy, a Captain, and 6 firefighters many of which will staff our spare engine if it is available. The call back of personnel plus mutual aid will support staff for full assignment if another fire were to occur. A third alarm assignment will commit those resources obtained from a second alarm to a fire and an additional engine and a ladder will be needed for City coverage. A third alarm will not commit 14-15 members needed to respond should a third call become needed.

The sections of the City where there are no hydrants a water shuttle will be needed. In those cases, a tanker from Barnes ANG, Southwick, Southampton or Montgomery will be requested. In rare instances, resources can come from further away. Three takers are typical, one filling, one emptying, and one on standby to ensure continuous operation. In those cases, the tanker will be committed, and no other apparatus will be requested from the mutual aid town/City. Resources,

such as engines and ladders will still be needed for City coverage while the water shuttle apparatus is committed to the fire.

Barnes Airport Fire Department's primary responsibility is to be the first response to the airport property. They have agreed to be the first call for airport issues except for a few buildings, such as hangers, including Gulf Stream. Barnes is used in the automatic aid setting and is our primary RIT agency and typically responds with 2-3 personnel. NFPA 1710 requires RIT to be established by the initial attack crew or the alarm response. 5.2.4.1.1. Barnes is not our initial alarm response- they are called for RIT purposes and only with a confirmed structure fire. Barnes tanker does assist with a mobile water supply as stated above per NFPA 1710 5.2.3.5.1 when in service. It is unlikely Barnes ANG will have the capacity to assist in both tanker and RIT capacity. Typically, it is one or another. The tanker is unreliable and is in the process of being replaced. The status of the tanker is unknown. RIT can come from anyone of the listed towns but when those apparatus are committed to one assignment like RIT, water supply, or suppression coverage then other towns will not be stripped of their suppression coverage.

Insurance Services Office (ISO)

The Insurance Services Office's (ISO) *Public Protection Classification* (PPC) program evaluates communities according to a uniform set of criteria defined in the *Fire Suppression Rating Schedule* (FSRS). This criterion incorporates nationally recognized standards developed by the National Fire Protection Association (NFPA) and the American Water Works Association (AWWA). Using the FSRS, ISO evaluates the fire suppression capabilities of a community and assigns a PPC classification; a number rating from 1 to 10. Class 1 represents exemplary fire protection (by ISO's standards), and Class 10 indicates that the area or community's fire suppression program does not meet minimum recognized criteria or standards. In most cases, this means there is no recognized fire department or formal fire protection. Any building more than five road miles from a fire station or outside the boundary of a fire protection area is rated 10. Generally, areas of a community that are more than 1,000 feet from a fire hydrant, but within five road miles from a fire station, are rated Class 9.

The FSRS allocates credit for fire protection by evaluating these three major categories (**Figure V-21**):

1. **Fire Alarm and Communication System:** This aspect of the evaluation examines a community's facilities and support for handling and dispatching fire alarms. This includes telephone lines and systems, staffing, dispatching systems, and equipment. This component equates to 10% (10 points) of the evaluation.

2. **Fire Department:** This component of the evaluation, which accounts for 50% of the total classification (50 points), focuses on the fire department and its operations. Areas that are examined include the number of engine and ladder/service companies, distribution of fire stations and fire companies, equipment carried on the apparatus, pumping capacity, testing of hose, pumps and ladders, reserve apparatus, department and on-duty staffing, and training.

3. **Water Supply System:** The third component of the evaluation is an analysis of the community's water supply system for fire protection. Chief among the areas that are examined include fire hydrant size, type, flow, and installation. In addition, the condition and frequency of inspection of the hydrants is evaluated. Finally, the overall capabilities of the water supply system are assessed in comparison to the needed fire flow for target hazards in the community. Forty percent of the final rating (40 points) is based on the water supply system.

A relatively new addition to the FSRS, the *Community Risk Reduction* section offers a maximum of 5.5 points, resulting in 105.5 total points now available in the FSRS. The inclusion of this section for "extra points" allows recognition for those communities that employ effective fire prevention practices, without unduly affecting those who have not yet adopted such measures.

The addition of the *Community Risk Reduction* section gives incentives to those communities who strive proactively to reduce fire severity through a structured program of fire prevention activities. The areas of community risk reduction evaluated in this section include:

- Fire prevention
- Fire safety education
- Fire investigation

FIGURE V-21: FOUR KEY PARTS OF ISO PPC EVALUATION PROCESS
Source: ISO

Every City, or area that provides fire protection services is subject to being graded to establish a PPC. Individual buildings, both residential and commercial, are subject to the community's PPC. When calculating property insurance premiums, insurance companies using the PPC apply a factor that reflects a particular community's PPC. Some individual facilities within a community may also be individually assessed and assigned a specific rating.

Although there may be validity to the argument that this rating is no longer utilized by all insurance companies that issue policies to industrial and commercial facilities within Westfield, ISO is still recognized as a comparative benchmark of public fire protection. Moreover, within the past several years, ISO has significantly revised its FSRS, and as a result, the PPC to reflect new innovations and technology, and the evolving standards and industry best practices within the fire service. Among these changes are:

- Greater reference to nationally accepted consensus standards; NFPA and AWWA.
- Increased recognition of automatic fire sprinklers.
- Greater reliance on technology-based solutions (e.g., GIS, thermal imaging cameras).
- Increased emphasis on fire training activities.
- New reference to national standard safety requirements.
- New reference to accreditation; focus on master/strategic planning.

According to ISO, the PPC helps measure the effectiveness of fire protection and provides an important advisory evaluation to both insurers and communities. It is applied nationwide, and more than ever incorporates accepted national consensus standards. The PPC is used in marketing, underwriting, and pricing of both homeowners and commercial lines of fire/property insurance. Broadly speaking, the cost of insurance premiums is generally lower with better protection which translates into lower losses; the cost is higher in areas that have lower levels of protection which often translates into higher losses. Many insurers still rely on this information, at least partially, to set their fire insurance rates.

Based on the most recent 2017 ISO evaluation, the WFD was awarded a rating of Class 3/3X. This placed the Department in the top 10% of fire Departments across the country. However, MRI believes that the WFD could attain a higher rating of Class 2 during the next rating cycle. Figure V-22, below, provides a graphical representation of the rating distribution across the United States.

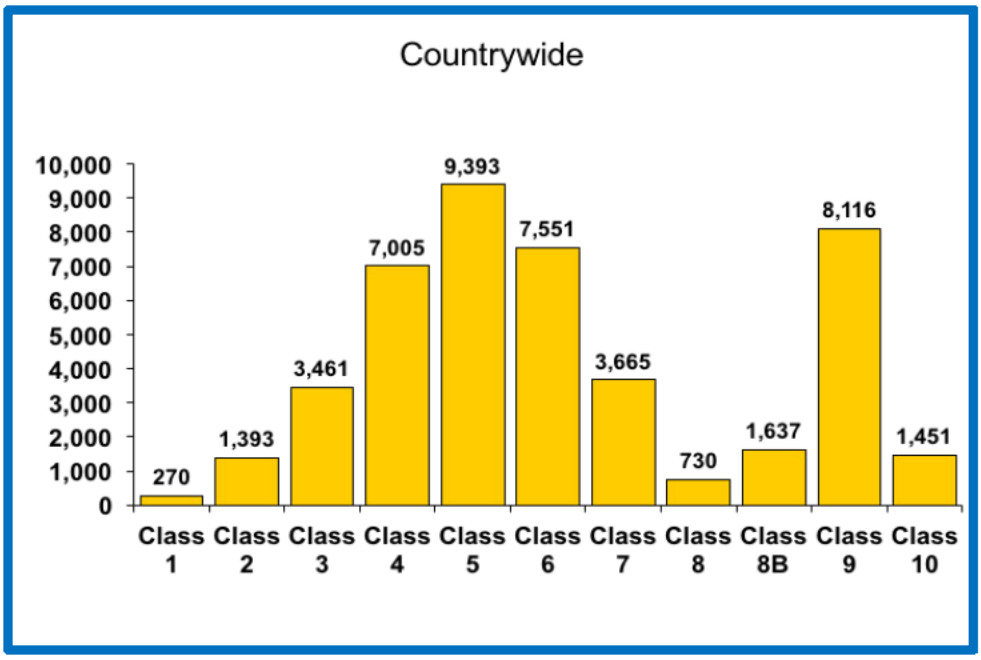

FIGURE V-22: INSURANCE SERVICE OFFICE RATING DISTRIBUTION CHART
Source: ISO

It is important to note that the ISO grade is only for fires and has nothing to do with EMS response, capabilities, equipment etc…

SRS Feature	Earned Credit	Credit Available
Emergency Communications	6.77	10
Fire Department	31.08	50.00
Water Supply	33.04	40.
Community Risk Reduction	3.56	5.50
Total (with a 4.24 deduction for Divergence)	70.51	105.5

FIGURE V-23– WESTFIELD PUBLIC PROTECTION CLASSIFICATION SCORING

Under the Fire Department category there are three items that could be improved upon that would make a difference in the report as well as an operational difference in the Department. The first is deployment analysis that has a maximum of 10 points and Westfield receiving 4.31. This gives consideration for the number and adequacy of existing engines and ladder companies to cover the built upon areas of the City. The second component is company staffing which reviews the average number of existing (at the time of the rating) firefighters and company officers that to respond to a reported first alarm structure fire. Westfield received 8.65 or 15 available points in this category. The third section looks at training. The Department received 2.87 points out of 9.This is something that is included in this report.

The Community Risk Reduction section of the FSRS offers a maximum of 5.5 points, resulting in 105.5 total points available in the FSRS. The inclusion of this section for "extra points" allows recognition for those communities that employ effective fire prevention practices, without unduly affecting those who have not yet adopted such measures.

It is MRI's belief that with the implementation of recommendations within this report, particularly in the areas of staffing, training, fire prevention, and pre-fire/incident planning, along with other changes that the WFD can implement internally that may not be specifically identified, the Department should be able to achieve an ISO rating of Class 2.

Recommendations

V-1: ***The WFD should establish a formal pre-fire/incident planning program with the goal of having an up-to-date pre-plan for every business and commercial occupancy (including schools, churches, etc.). The purpose of a pre-fire/incident planning program is to develop a fire/emergency response plan for buildings in the City. A pre-fire/incident plan includes data such as the occupancy type, floor plans, construction type, hazards to firefighting, special conditions in the building, apparatus placement plan, water supply plan, and forcible entry and ventilation plan. Pre-planning will improve the firefighter knowledge of the specific tactics needed to handle a fire or other emergency***

at a facility and will alert them to on-site hazards and risks. Pre-fire/incident plans should be reviewed regularly and tested by periodic table-top exercises and on-site drills. It is recommended they utilize a cloud-based system that utilizes iPad in apparatus and other vehicles to enhance response capability by providing the information for use enroute to an incident and while on scene.

V-2: ***Appropriate pre-planning software should be obtained and installed in apparatus mobile data terminals (MDTs) in all apparatus, ambulances, and command/staff vehicles.***

V-3 ***The WFD should establish a formal "performance "improvement" process for fire suppression operations. The process should include the adoption of performance standards such as NFPA 1710[18], the creation of a formal review and critique process for all incidents, and a process for modifying SOGs, SOPs, training priorities, and equipment as determined by the performance improvement program. NFPA 1710 includes several on-scene performance indicators such as:***

- ***On-scene to charged line at the front door of a structure fire: two minutes or less, 90% of the time.***
- ***Water from hydrant to supply engine: three minutes or less, 90% of the time.***

V-4 ***The WFD should consider a procedure that Alpha and possibly Bravo level EMS calls are responded to without light or sirens. Consideration should also be given to making hospital transport calls that are non-emergent, and the patient is stable, without lights and sirens. It is safer for responding personnel, general citizens, and the patient, to reduce the number of times that red lights and sirens are utilized.***

V-5 ***The City of Westfield and WFD should explore the long-term feasibility of implementing some type of community based mobile integrated health care in an attempt to provide better service to the community, and possibly increase their EMS revenue.***

V-6 ***The WFD should work internally to ensure all EMS related incidents are properly classified as either advanced life support (ALS) or basic life support (BLS) criterion, based upon the actual situation found on scene, not what the incident was dispatched as.***

[18] For example, NFPA 1710 also establishes performance goals for turn-out time and response times for fire and EMS emergency calls.

V-7 ***The WFD should work with the dispatch supervisor to identify any potential ways to reduce call processing time (from receipt of the call to dispatch of the incident) with the goal of attempting to achieve a 90th percentile time of not more than 64 seconds as recommended in NFPA 1710. Reducing call processing time can assist with leading to improved overall response times. Several agencies have utilized pre alerts (units alerted as the call comes in so that personnel can move toward responding apparatus) as a tool to provide a more rapid response.***

V-8 ***The WFD should further analyze their response time data, and if necessary, work to identify potential ways to reduce incident turnout time with the goal of attempting to achieve a 90th percentile time of not more than 60 seconds for EMS incidents and 80 seconds for fire incidents as recommended in NFPA 1710. Turnout time is the response time component that the agencies have the most direct control over which can lead to reduced overall response times. (see Recommendation V-7)***

V-9 ***The WFD should significantly enhance their data collection and analysis procedures and their ability to generate statistics regarding a wide range of their operations. This should include 80th and 90th percentile turnout and travel times as recommended in NFPA 1710. Having these more conservative times available will provide a more accurate response assessment and allow for better long- range master planning.***

V-10 ***The WFD should develop a SOP, specifying what information and times are necessary for the dispatcher to enter onto a fire incident report prior to the report being passed to the fire Department. In order to develop the most accurate statistical database, all response time data should be entered into the appropriate National Fire Incident Response System (NFIRS) incident reporting database in a precise manner (hours/minutes/seconds). In order to accurately assess each component of overall response time, call processing time – turnout time – response time, these times should each be entered separately, and into the appropriate category in the NFIRS database.***

V-12 ***When there is a report of a structure fire, or smoke in a structure, a full structural response should be automatically initiated. This would include the immediate, and automatic, response of several Departments. Although cultural resistance should be expected, this is a common and successful practice employed in many smaller communities that have more limited response capabilities.***

V-13 ***In consultation and cooperation with its neighboring Departments, the WFD should enter into automatic aid agreements that specifies (and increases as appropriate) the number and types of resources that should be dispatched to various types of reported emergencies. For structure fire incidents, the Department should strive to have a minimum of 14/15 firefighting personnel on the scene of every single-family residential***

structure fire within eight minutes of the time that units are responding. For fires in multi-family residential buildings and commercial occupancies, a minimum of 27/28 personnel should be on scene within eight minutes of the time that units are responding in order to be able to establish a full effective response force. Even if additional permanent staffing was added the use of automatic aid and mutual aid will need to continue and should be enhanced, based upon the type of occupancy a reported fire is in. <u>This should be the Department's highest priority.</u>

V-14 ***Working in conjunction with the dispatch center, the WFD should implement a procedure to provide for the dispatch center to provide interval time checks to the incident commander, and, for the incident commander to provide status reports, and as necessary, PAR reports.***

V-15 ***The WFD should apply for a federal Staffing for Adequate Fire and Emergency Response (SAFER) grant to fund the two positions recommended in V-16, citing an increasing call volume, and a desire to improve overall operational effectiveness, efficiency, and safety.***

V-16 ***The WFD should work on correcting the deficiencies noted in the most recent ISO inspection to attempt to achieve a higher Class2 rating. The Department should focus on the staffing, training, fire prevention, and pre-fire/incident planning which are the most achievable.***

V-17 ***The WFD should conduct a separate analysis of its EMS response and transport capability to determine where it can improve in terms of response times and patient outcomes and possible adjust its structure or response mode.***

V-18 ***The WFD should track data on incidents such as elderly falls, drownings, and head injuries as an example to see if there is any pre-incident education and mitigation measures in the area of a community risk reduction strategy to potentially reduce those types of incident responses.***

CHAPTER VI
SUPPORT FUNCTIONS

Training

Training is an extremely valuable and vital component of any fire/EMS-based organization. It is truly the backbone to the success of the organization in meeting its services deliverables and achieving is mission statement. The development, maintenance, and continued assessment of a comprehensive and diverse training program is critical. The fire service needs assessment published by NFPA identify that "training and certification are the most effective ways to ensure firefighters are able to operate safely and effectively…." (NFPA, 2020). The training necessary for today's fire service is wide ranging requiring coverage of a multitude of topics and disciplines. Obvious training related to the Westfield Fire Department are topics covering fire suppression and EMS. However, the training topics must also be relevant to the Department's core mission and could include such topics as; hazardous material response, active shooter hostile event response (ASHER), pre-incident planning, various technical rescue disciplines, and driver training to name just a few. As a rule, training should follow industry standards and best practices and align with Department standard operating procedures and guidelines.
Additionally, the US Occupational Safety and Health Administration (OSHA mandates minimum annual training requirements such as:

- A review of the respiratory protection standard, self-contained breathing apparatus (SCBA) refresher and user competency training, SCBA fit testing (29 CFR 1910.134)
- Blood borne Pathogens Training (29 CFR 1910.1030)
- Hazardous Materials Training (29 CFR 1910.120)
- Confined Space Training (29 CFR 1910.146)
- Structural Firefighting Training (29 CFR 1910.156)
- Lockout/Tag out
- Occupational Noise

Furthermore, there are secondary requirements for both initial training and retraining that include; electrical safety, fall protection, hand and power tool training, hazcom, chainsaw operations, personnel protective equipment, and trenching/excavation. Massachusetts employees are no longer exempt from compliance with federal OSHA regulations, and it is the policy of the Massachusetts Division of Occupational Safety that public-sector employees follow the OSHA standards as a minimum, in the absence of specific standards. There is a pending rule change to OSHA regulation 1901.156 that could impact the Department in several areas, including training and compliance.

The Department provided documentation illustrating it current new hire orientation program, including attendance at the Massachusetts Fire Academy, as well as other in-house and outside training opportunities. The Department does an excellent job recruiting, training and classes for officers as these two sections received either full, or majority credit at the last Public Protection Classification (PPC) review. However, it must be noted that there is room for improvement in various categories such as driver training, hazardous materials, structure fire related subjects, and pre-incident planning.

Training documentation is of absolute importance, and legality, in the fire service. The Department must ensure that all training is documented properly, maintained, and updated as necessary. This will not only assist with future PPC review but in the event of an injury, tragedy, or legal event, the training record of personnel will be one of the primary areas that will be looked at. This cannot be overlooked and must be considered a significant mitigation factor to reduce the City and the Department's potential liability in such cases.

The basis of any formal training program are Department SOP's/SOG's. However, the development of the program must include specific lesson plans written with goals and objectives. These goals and objectives must be measured against national standards, job performance requirements (JPR's), and industry best practices. This process is enhanced through the process of constant evaluation. Unlike their counterparts in law enforcement, with rare exception, the fire service does not perform annual recertification through a system like the police officer standards and training (POST) or the Municipal Police Training Committee (MPTC). Therefore, the utilization of annual skills proficiency evaluations where all members of the department are required to successfully perform certain skills and/or complete standardized evolutions, either individually or as part of a team should be considered. Post-course evaluations, post incident critiques, and evaluation of incident operations and statistics can also provide important feedback regarding the training program.

The Department should continue to provide and support personnel pursuing continued education, professional development, and higher education. This is important for the ranks in which they are currently in, as well as for those positions they aspire too. Taking advantage of such opportunities offered by such organizations as the National Fire Academy, colleges (many of which have online programs), and the Massachusetts Fire Academy for officer development is important to the department's future succession planning efforts. Additionally, various conference nationwide such as the Fire Department Instructors Conference (FDIC), Fire Fusion (formally Firehouse Expo), the International Association of Fire Chief's Fire-Rescue International (FRI) are excellent opportunities not only for professional development but also hands-on training and invaluable professional networking.

Upon review of the material provided, primarily the most recent ISO rating and the credit applied to training, the Department would benefit by having a formalized training program overseen by a dedicated training division headed by training chief. This would ensure alignment and compliance with relevant regulations, standards, and protocols. Lastly, incorporating new technologies and resources, such as web-based training, simulators, and props, into the training program would only enhance it further.

Massachusetts employees are no longer exempt from compliance with federal OSHA regulations, and it is the policy of the Massachusetts Division of Occupational Safety that public-sector employees follow the OSHA standards as a minimum, in the absence of specific standards.

National Fire Protection Association (NFPA) standards contain recommendations for training on various topics such as a requirement for a minimum of 24 hours of structural firefighting training annually for each fire department member.

Firefighters have a thirst for knowledge, will be more confident and will perform in a safer manner if they are well trained. When training is increased, injuries decrease. As with all other fire department operations, there must be consistency in how the training is being conducted.

Lastly, in an effort to contribute to improving the City of Westfield's ISO rating, the Department should consider adopting a training plan that includes improved documentation to obtain full *"points"*. Development of training plans, curriculum, accomplishments, and satisfactory completion is paramount. This action will not only contribute to an improvement in ISO rating but will reduce liability on the City of Westfield.

EMS training is an important task that will contribute to improved clinical outcomes of patients served in the community. The training officer should consider developing a plan that allows for on-duty training that will provide Office of Emergency Medical Services credit toward recertification. This action will work toward reducing overtime, increasing employee time off, and establish a standard level of teamwork and expectations amongst the members.

Even when training is conducted, a formal lesson plan for each session is not formulated. Although MRI fully understands the time constraints facing the members of the Department who are voluntarily attempting to provide some level of training, the lack of formal lesson plans is a serious issue. Each training session needs a written lesson plan with goals and objectives and measured performance standards. As with the lack of formal lesson plans, the lack of completed training reports is a significant problem because even outstanding training in essence did not happen if it is not properly documented. This practice could lead to serious perception and/or liability issues for the Department and the City for a wide range of reasons. Better written

documentation on all training needs to occur, and all members' individual skills and certificates need to be kept up to date.

The critical need for all members to maintain their basic skills proficiency, dictates that a comprehensive training program with proper documentation is required. The Department should have a comprehensive fire, rescue, and EMS training program based upon the Massachusetts State Fire Academy model, with supporting training aids from NFPA, IFSTA, and the National Fire Academy systems. Unfortunately, the demands, particularly time, to develop a quality training program are significant, making the development of a reliable training program, even with support from multiple members, a difficult undertaking.

There are several ways to evaluate the effectiveness of the fire department's training program. One increasingly common way is the utilization of annual skills proficiency evaluations where all members of the department are required to successfully perform certain skills and/or complete standardized evolutions, either individually or as part of a team. Post-course evaluations post incident critiques, and evaluation of incident operations and statistics can also provide important feedback regarding the training program. ***It is important that all training, no matter how minor or inconsequential, be documented.*** Failure to do so can expose the Department and City to significant liability.

Professional development for fire department personnel, especially officers, is also an important part of overall training. The MRI study team determined there was no formal professional development program. Supervisors are not required to hold fire officer certifications (although most of the career officers do), and there is no system for professional development in anticipation of, or after, promotion. The training program at the WFD should contribute toward succession planning to prepare all employees for their futures.

There are numerous excellent opportunities for firefighters and officers to attend training and educational programs on a wide range of topics outside of Westfield, including the National Fire Academy in Emmitsburg, Maryland, the Massachusetts Firefighting Academy, Fire Department Instructors Conference (FDIC) in Indianapolis, Firehouse Expo in Nashville, and local community colleges. Attendance at these should be supported. Officers who meet the admissions criterion should be encouraged to apply for the Executive Fire Officer Program at the National Fire Academy and/or the Chief Fire Officer program provided by the Massachusetts Firefighting Academy and the Collins Center at UMass Boston.

Numerous, free on-line courses and training programs are also available. Beyond the practical benefits to be gained from personnel participating in outside training, encouraging, or if possible, requiring, personnel to earn and/or maintain specialized certifications such as fire instructor, or fire officer, increases the positive professional perception of the organization and can help to demonstrate a commitment to continued excellence.

There are several key weaknesses to the training program in Westfield. The training officer position is held by the junior Captain who may or may not have any interest in conducting training. This is one of the items that has always been this way. The training officer changes every time there is a promotion made, this may be a month or years between appointments. This position should be filled by a person who not only wants to do the job but has the desire and passion to do so. MRI discovered that there are no details, road maps or any guidance that has been created to help a new person in the position. The second key weakness is the use of the training captain as the tower officer or other vacant company officer position as needed when he is on duty. Currently the training captain works days, Monday through Friday. This allows for there to be not only a lack of dedicated training time for the balance of the on-duty shift but also leaves the tower with no officer nights and weekends. In order to have a successful training program the Department should consider having this filled by a long-term person who can and should be the Safety Officer on larger incidents. In today's modern fire service this position should be a standalone position that reports to an Assistant Chief and to have the support and collaboration from all shift Deputies.

The 1989 report Recommendation 30a stated " A training officers position should be created" The Department has created the position at the Captain level. In 1989 the recommendation was to have that position as a Deputy and the City and Department needed to a make a commitment to improve training. This recommendation stands today. There are 3 additional training recommendations in the 1989 report that work on development, management and using outside resources.

Fire Prevention

The core service that a fire department provides to the public it serves begins with fire prevention. Fire prevention activities are one of the most important missions of a modern-day fire department. A comprehensive municipal fire protection system should include, at a minimum, the key functions of fire prevention, code enforcement, inspections, and public education. Preventing fires before they occur, and limiting the impact of those that do, should be priority objectives of every fire department. Educating the public about fire safety and teaching them appropriate behaviors on how to react should they be confronted with a fire is also, an important life safety responsibility of the fire department.

Fire prevention activities in a municipal fire department typically include fire safety inspections; fire code enforcement; issuance and oversight of permits; review of construction plans for new buildings and the renovation of existing buildings; and public fire safety education programs. Since fire prevention should be approached in a systematic manner, and because the City has other departments that have a vested interest and/or responsibility in these efforts, various activities such as plan reviews, permits, and inspections should be coordinated with similar activities in the municipal building inspection Department and the planning Department.

Inspection and code enforcement procedures and policies must conform to Commonwealth of Massachusetts statutory requirements and the regulations and the policies of the Massachusetts Department of Fire Services, Office of the State Fire Marshal. The local fire chief or designee is authorized to enforce 527 CMR, *Board of Fire Prevention Regulations*, also known as the Massachusetts Comprehensive Fire Safety Code and MGL C148. The office is currently staffed by a Deputy Chief as required by section 7-22© of the City's Ordinances.

This fire prevention function within a fire department must be led by a person who is not only knowledgeable in fire codes and standards; they must also have the ability to work with the public, contractors, and other government officials. The fire prevention officer must work closely with field suppression forces to ensure a smooth flow of information between the fire companies and the fire prevention division.

Fire prevention is a key responsibility of, and efforts should involve all members of, the Department. For example, on duty personnel can be assigned with the responsibility for in-service inspections to identify and mitigate fire hazards in buildings and to familiarize firefighters with the layout of buildings, identify risks that may be encountered during firefighting operations, and to develop pre-fire plans. In many departments, these personnel are also assigned responsibility for permit inspections and public fire safety education activities. In service companies are often able to recognize hazards or violations, whereas inspectors are often able to identify features of a specific property that could prove important during an emergency. Effective information sharing enhances the ability of the fire department to protect the community.

The fire prevention program must be organized in a manner that most effectively supports the goals of the community and department. Establishing the goals and objectives to be accomplished should be the first priority of a fire prevention program. It is imperative that the organization establish clear, specific goals and objectives they wish to achieve. The overarching goals should be included in the core values and vision statements of the organization and must be understood by all fire department personnel.

The Commonwealth of Massachusetts requires that the fire department and the building department work together to enforce their respective codes/regulations. There is a significant overlap in their respective responsibilities, particularly in restaurants, assembly occupancies and educational uses, and in some areas, they share joint jurisdiction. Both departments need to sign off annually that required fire and life safety inspections have been satisfactorily completed as required for businesses that hold a liquor license and some that have assembly uses. It was reported to the MRI project team that the fire chief and building commissioner enjoy a very good working relationship.

The Commonwealth of Massachusetts has implemented 3 levels of fire prevention credentialing. Level 1 allows personnel to perform basic company level inspections. Level 2 provides more advanced knowledge and understanding of the code and administrative procedures. Level 3 is for fire prevention administration and management. It is important to remember that performing fire prevention inspections is a life safety specialty. Using people who are not properly credentialed to perform inspections may present a liability to the City.

As was previously identified and recommended in Chapter III, *Organizational Structure*, with the large amount of commercial and industrial properties in Westfield, the MRI study team recommends increasing staffing in the Fire Prevention Division. It is our recommendation that this addition be the deputy/assistant fire chief reassigned to an administrative schedule. The deputy/assistant chief could then concentrate on enhancing relationships with other inspectional services, working with economic development groups, and promoting the use of a technical review committee. This committee should be utilized to get all inspectional services into one room at a regularly scheduled time and place so that prospective businesses can meet with a unified group, get consistent information, and hopefully stimulate further commercial growth in the community. By allowing ease of access to all stakeholders the business community will respond positively and are likely to draw other businesses to Westfield.

Westfield does not appear to have an active public fire education program which is an important component of an overall fire prevention program. The WFD should place an emphasis on conducting public fire education activities. Nearly 75% of all fires, fire deaths and injuries occur in the home, an area where code enforcement and inspection programs have little to no jurisdiction. Public education is the area where the fire service will make the greatest impact on preventing fires and subsequently reduce the accompanying loss of life, injuries and property damage through adjusting people's attitudes and behaviors about fires and fire safety.

The fire department should be an active participant in the grant funded Student Awareness of Fire Education (SAFE) program sponsored by the Massachusetts State Fire Marshal's Office. Funding is available annually to support the education of children, a noted "vulnerable population, within the community. This program could be presented by firefighters who have been trained by the state and is typically worked into the annual curriculum within the public schools. It has been noted that the Department had taken part in this program for 25 years but due to lack of interest from staff the coordinator position has not been filled and unused funds returned to the state.
The Department also has grant funding availability to conduct fire safety training for the elderly, another vulnerable population, which would normally be done by "line" personnel.

In 1989 the report stated that there should be at least one additional full-time fire prevention officer that should be assigned to assist the Deputy. Today the workload is even more than it was in 1989, and the amount of code enforcement requires the attention of more than just one

person. The current Deputy is assigned to cover shifts and work to cover shifts even though he works a day schedule while the others work a rotating 24-hour schedule. The Fire Prevention Deputy needs to remain a Monday through Friday staff person and not be made to cover the other Deputies.

Dispatch/ Emergency Telecommunications

Vital to any successful organization is communications. In an emergency service environment, effective and timely communications can often be a determining factor in the successful mitigation of an emergency. Response performance of an emergency services organization can be seen as one of the most visible aspects of service delivery and response capability, from the perspective of both elected officials and citizens alike. Often referred to as total response time, this is the time from the initial notification to the arrival of resources and is often looked at critically.

The emergency communications center is typically the first contact that a citizen has when requesting either routine or emergency services. The personnel working inside the center are to be considered first responders and a critically important link in the chain of survival. This most common link is seen most often as it relates to a cardiac event/cardiac arrest, illustrated below.

FIGURE VI-1: CHAIN OF SURVIVAL

In all pictographs, the first step is “early access”, shown by the telephone above. The dispatchers are the first step in the process when someone calls 911. Recognizing the call type, emergency medical dispatching (EMD) as appropriate, and sending the necessary resources must be done in a timely manner. This is often looked at as call processing times. *NFPA 1221: Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems* provides guidance as to necessary metrics the communications center should achieve. In addition to alarm handling time of not more the 15 seconds, 90 percent of the time and not more than 20 seconds 95 percent of the time, the standard also identifies:

- Call processing (EMS) 90 seconds or less 90% of the time
- Call processing (other) 64 seconds or less 90% of the time

This key component of total response time starts the clock and shows by which success should be measured. Reviewing applicable data across all response time measurements (call process, turnout, travel, response, and total response time) will provide the entire jurisdiction with the ability to recognize potential deficiencies and areas of improvement. One potential area of improvement is to expand upon and utilize new technologies such as automated station alerting systems. These systems could greatly enhance efficiency with call handling, processing, and dispatch time. The correlation can also be made that the department would then see a decrease in its turnout times and ultimately total response time.

Equally important are the capabilities and responsibilities of the personnel assigned to the communications center. This includes initial training, emergency medical dispatch (EMD) requirements, continuing education, and any other training content or mandates that may be prescribed by the authority having jurisdiction (AHJ). Lastly, those individuals assigned to supervisory functions should receive additional training pertinent to their roles and responsibilities. The Massachusetts Communications Supervisors Association should be looked up as a resource.

During the course of gathering information for the study, the MRI team heard several times about the importance of the communications center and its role as the City's emergency operations center (EOC). The communications center, as a vital hub in the continuum of emergency operations, is a pivotal location for an EOC for all incoming and outgoing communications. There are several things to consider when utilizing your primary service answering point (PSAP) as an EOC. Location, adequate working space, technology, and the ability to effectively separate out the EOC from routine communication center operations must be considered.

Location includes both the geographical location of the center as well as the specific fixed facility it is located within. Identified during visits and interviews in preparing for this study, the geographical location of the communications center was described as ideal. While the fixed facility is not "centrally" located, it is removed enough from any potential threats from natural hazards such as the Huntington Dam. Its location, relative to the National Guard and Barnes Airport provide for both additional space for staging physical assets along with having adjacent response agencies in proximity for when emergency support functions (ESFs) are expanded during an activation.

The fixed physical facility also needs to provide adequate working space for all positions that could be staffed during an emergency operations center activation. This space includes conference rooms, individualized workstation, private or secured work areas, adequate restrooms and facilities (such as kitchen), and if necessary, locations for personnel to rest, dependent on the staffing schedule. While there is not denying the integration of both during an

event, the facility should also have the ability to separate both EOC operations and "routine" operations.

Probably most importantly, is necessary technology. Communication equipment technology is continually changing and all emergency response agencies in the City must ensure they have the technological assets to support their roles and responsibilities. Not only are we discussing radios, but other communications assets (computers, workstations, phones, etc.) must be included. One of the most expensive portions of the system is the physical infrastructure such as base stations, antennas, microwave links, repeaters, etc. These needs must be continually evaluated.

One final consideration is that of continuity of operations. The City of Westfield should identify, in its local emergency operation plan, alternative locations for the communications center, EOC, and other public safety agencies. There is a need to have redundant or back-up systems in place should any location be impacted by hazards, either natural or man-made. Along with other available documents and resources, FEMA's 2016 *Emergency Operations Center Facility and Technology Maintenance Guide* could provide the jurisdiction with an overarching umbrella of considerations. Overall, the focus for any facility and its personnel should be on compliance, redundancy, accessibility, communications, and training.

Recommendations

VI-1 ***The City of Westfield should ensure that the communication center is continuously updated with new technologies to better support all emergency services. This includes interoperability considerations between both town agencies and multiple mutual aid partners.***

VI-2 ***The City of Westfield should research with local vendors on the possibility of a radio lease and maintenance program that would provide continual updates, support, and repair services vs. "rebuilding" the system every 7-10 years.***

VI-3 ***The City of Westfield should ensure that the communication center is continuously updated, as it relates to infrastructure and functionality in its role as an emergency operations center.***

VI-4 ***The City of Westfield should maintain the EOC at the communications center as it is well positioned geographically and away from any potential hazards/threats to its continuity of operations.***

VI-5 ***The WFD in collaboration with the Communication Center, should research an automated station alerting dispatch program such as Brix. This could benefit call processing and turnout times.***

VI-6 ***The WFD in collaboration with the Communication Center, should ensure accurate reporting of fire and EMS incident data to include call processing times, dispatch time, turnout, and response times as it relates to pertinent NFPA standards.***

VI-7 ***The WFD should evaluate and if necessary, revise its apparatus response/run card assignments to ensure an effective response force, more consistency in operations, and provide additional clarity for both communications and fire personnel.***

VI-8 ***The City of Westfield and the Westfield Fire Department should consider once again staffing a fire alarm superintendent. Recent changes in this structure have resulted in the communications center becoming an alarm monitoring company. In lieu of this, all occupancies within the City, inclusive of City owned facilities, should be placed on a dialer type system for transmitting alarms.***

VI-9 ***The City of Westfield should ensure that its public safety telecommunicators are trained in accordance with the Massachusetts Telecommunicator Certification Program, and all other relevant requirements or standards***

VI-10 ***The WFD should conduct a comprehensive and formal training needs assessment for the purpose of determining training program priorities. Part of this needs assessment should be an initial evaluation of the current basic skills proficiency of ALL Department personnel.***

VI-11 ***Based upon the results of the needs assessment, the WFD should begin the development of a comprehensive training program that addresses, but is not limited to: applicable OSHA training (including annual SCBA fit testing and training*** **in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134, and, NFPA 1500,** ***Standard Fire Department Occupational Safety and Health Program(2021 edition), recommended NFPA training, every operational mission and responsibility of the Department, and specialized training including personnel/officer development. The training should comply with accepted and/or recommended practices and standards, should include standardized evolutions, and should be consistent with newly developed and/or updated operational guidelines and Standard Operating Procedures (SOPs).***

VI-12 ***The WFD should establish a mentoring program to guide and encourage new members as they progress through the initial training process.***

VI-13 ***Formal training of some type, lasting a minimum of two hours, should occur on each career platoon daily. The training should be lesson plan driven, and when appropriate, EMT continuing education credit hours should be applied for through the State Office of EMS. Additional opportunities for training can be found during related activities such as weekly/monthly apparatus and equipment inspections, and building pre-planning activities.***

VI-14 ***Additional, high intensity training on various subjects, including periodic live fire training, should be conducted on a quarterly or semi-annual basis at a formal fire academy where appropriate training facilities, structures, and props are available.***

VI-15 ***The WFD should sponsor and support each member to attend two live fire training session per year. Periodic live-fire training exercises at a dedicated training facility need to be conducted in order for personnel to maintain their skills proficiency.***

VI-16 ***The WFD should require that all personnel– receive at least 24 hours of structural firefighting training per year.***

VI-17 ***All WFD personnel should be required to complete a minimum of 96 hours of documented training per year (an average of 8 hours per month) including all mandatory training.***

VI-18 ***Training should be delivered and/or conducted utilizing formal, standardized lesson plans that include objectives and performance criterion. However, when this is not possible or practical (a frequent occurrence in the fire service), a detailed description of the training should be included in the narrative section of the training report.***

VI-19 ***All training that is conducted, no matter how brief or inconsequential it may seem, <u>MUST</u> result in the completion of a formal training report. Training reports should include the date, time training commenced, time duration of the training, the instructor, the officer in charge, names of all personnel trained, and include a detailed description of the training or reference the formal lesson plan utilized. All persons trained should sign or initial either a printed hard copy of the training report, or if this is not practical,***

a sign-in sheet should be attached. The officer in charge, and when possible, the instructor, should also sign the hard copy training report.

A formal operational procedure for the completion of training reports should be developed. The training module of the Department's RMS should be utilized for completion of training reports and to assist with the development of a training database, keeping track of certifications and related lapse dates, etc.

VI-20 ***The WFD should ensure that all Department members are trained/ certified to the minimal NIMS level required for their duties/responsibilities and ranks. The Department should also further enhance the level of incident management training provided to the members of the Department. In addition to the basic I-100/I-700 training mandated, it is MRI's recommendation that all personnel be trained to the ICS-200 level. All officers should be trained to the ICS-300 level. All chief level officers should be trained to the ICS-400 level.***

VI-21 ***The WFD should strongly encourage its officers to obtain a certain level of fire officer certification as a job requirement such as Fire Officer I for lieutenant, Fire Officer II for captain, Fire Officer III for deputy/assistant fire chief, and Fire Officer Level IV for fire chief.***

VI-22 ***The WFD should require that all officers be certified as Incident Safety Officers (ISOs). Additional personnel who may be interested should be encouraged to take this training and obtain this important firefighter safety certification.***

VI-23 ***The WFD should encourage personnel to seek additional training on their own, and to the financial and practical extent possible, send personnel to outside training opportunities. The information gained at this training can then be brought back and delivered to other members of the Department. Training reports should be completed for all this training, and copies of any certificates earned should be placed in the members' personnel and training files. A training board should be placed in the station where upcoming training opportunities can be posted for all personnel to review. These opportunities should also be posted on the Department's website and should be e-mailed to every member once addresses are established.***

VI-24 ***The WFD should seek annual funding in the training budget to upgrade its training resources such as manuals, DVDs, and subscriptions to other available training resources.***

VI-25 ***The WFD should, as part of its written communications system, develop Training Bulletins which would be issued to serve as reference regarding tested and approved***

methods of performing various tasks, and Safety Bulletins which should be issued to serve as references about general and specific safety and health issues.

VI-26 ***The WFD should consider staffing a permanent training officer position at the rank of Deputy Chief. Having a Mon-Fri training position would ensure continued and effective training delivery and program development. The Department could consider merging this position with that of the EMS superintendent, so the training officer provides both suppression and EMS training. This position should not be assigned to staff apparatus as a portion of his/her duties.***

VI-27 ***The WFD should also prioritize, as part of their training program and hazard analysis, formal pre-incident planning.***

VI-28 ***The WFD should develop a robust annual training calendar with set objectives linked to JPR's for the relative NFPA standards (1001, 1002, 1670, etc.). The calendar should also include JPR's or required EMS CEU programming.***

VI-29 ***The WFD should integrate outside instructors into their training delivery programs who are specific subject matter experts bringing in new knowledge and ideas.***

VI-30 ***The WFD should develop a formal professional development program for all ranks within the Department. This would assist the Department and its personnel in succession planning and for future promotion.***

VI-31 ***The WFD should research opportunities to take advance of new technology and resources such as props and simulators, to enhance training delivery.***

VI-32 ***Professional development programs should include all levels of officer training as appropriate in alignment with NFPA 1021 for mid and senior level officers.***

VI-33 ***The WFD should consider building in National Fire Academy classes/offerings into its training program. These can be brought in house, through the Massachusetts Fire Academy, or residential courses on the NFA campus in Emmitsburg, MD.***

VI-34 ***The WFD should consider the NFA's Managing Fire Officer Program for those that meet the necessary prerequisites for the positions of captain and deputy chief, or for those that aspire to those ranks. The NFA's Executive Fire Officer program is ideal for administrative positions at the ranks of assistant chief or chief; or for those that aspire to those ranks.***

VI-35 ***The WFD should continue, through collective bargaining, the process of incentivizing personnel for obtaining higher education degrees in fields related to the operations of the Department.***

VI-36 ***The WFD should stay abreast of changing national standards as well as the changes pending in the proposed rule change of OSHA 1910.156 and its impact on the Department's training program.***

VI-37 ***The WFD should consider a voluntary OSHA audit to ensure it follows current regulations as it relates to training requirements to establish a benchmark.***

VI-38 ***The WFD should support and encourage training and professional development activities for Department members in the fire prevention and fire inspection areas. This can include, among other endeavors, attendance at the Fire Prevention Association of Massachusetts, and Massachusetts Firefighting Academy. Credentialing at the Fire Inspector I, II, and III levels should be required for the fire chief and deputy/assistant fire chief. All additional full-time personnel should be required, at a minimum, to possess/obtain Fire Inspector Level I credentials as a condition of employment, with captains being required to obtain Inspector Level II credentials. The deputy/assistant fire chief should also be required to attend fire prevention and management courses at the National Fire Academy.***

VI-39 ***The WFD should consider a formal in-service fire safety inspection program conducted by the on-duty career personnel as part of a comprehensive community risk reduction program. The on-duty personnel can be assigned with the responsibility for "in-service" inspections to identify and mitigate fire hazards in buildings and to familiarize firefighters with the layout of buildings, identify risks that may be encountered during firefighting operations, and to develop pre-fire plans. On-duty personnel in many Departments are assigned responsibility for permit inspections and public fire safety education activities.***

In order to establish an in-service inspection program, it will be necessary to:

- ***Train personnel on proper procedures (all personnel should be credentialed at least to the Fire Inspector I level recommended above);***
- ***Develop standard operating guidelines for in-service inspections;***
- ***Establish inspection schedules;***
- ***Establish a system for documenting inspections and notifying property owners of fire hazards;***

- ***Establish a follow-up inspection system to ensure that hazards have been mitigated; and,***
- ***Require on-duty personnel to conduct regular in-service inspections of all building construction sites in the City.***

VI-40 ***The WFD should update its website on a regular basis to provide its customers, and other interested parties, with as much information as possible on fire safety, fire prevention, and the Department. The Department should also work actively to make on-line permitting, inspection scheduling, etc. a reality.***

VI-41 ***The WFD should develop a compelling public education program that includes discussing the benefits of installing residential fire sprinklers in new one- and two-family dwellings. Although Massachusetts's construction codes do not allow residential fire sprinkler systems to be mandated, there is no prohibition for property owners to install them if they determine that it is in their best interest.***

VI-42 ***The WFD should make the delivery of year-round public fire safety education programs in the schools, and throughout the community a top priority since this is the area where the fire service is most effective at preventing fires, injuries, and deaths. This should be part of a comprehensive community risk reduction program. Personnel should be encouraged to obtain the Fire and Life Safety Educator certification issued by the state fire marshal's office.***

VI-43 ***The WFD should apply annually for Student Awareness of Fire Education (SAFE) and senior citizen fire safety grant programs sponsored by the Massachusetts State Fire Marshal's Office.***

VI-44 ***The City should fund and install a part-time administrator to handle all the fire prevention phone calls, scheduling and administrative work as assigned by the Fire Prevention and Inspection Division. Based on the workload this should start as a part-time non-benefit position that may grow to a full-time position in the future based on workload demands.***

VI-45 ***The City should fill one full-time and one part-time inspectors' positions within the fire prevention division. These positions could be filled as civilian positions that have the proper credentials to do the required work. As an option the Department can use current staff members who have the proper certifications to do the inspections as needed. Having these added staff people would allow the Inspection Deputy Chief to properly complete plan reviews and to handle the larger scaled projects while still maintaining an oversight on the smaller ones.***

VI-46 ***The WFD should expand fire prevention, education, and community risk reduction program deliveries targeted to high-risk groups. Senior citizens are of note. The success of the 2013 "Retire the Fire program was noted.***

CHAPTER VII
FIRE DEPARTMENT FACILITY AND APPARATUS

Fire Department Facilities

Fire and EMS stations are a critical community asset. The station facilities of a modern fire and EMS Department are designed to do much more than simply provide a garage for apparatus and a place for firefighters and EMS personnel to wait for a call. Well-designed fire and EMS facilities enable staff to perform their duties effectively, efficiently, and safely.

Many communities find that an emergency services station is an ideal place to locate the community's emergency operations center (a large room such as a training classroom can be designed to serve as the EOC when needed). Meeting rooms are also frequently made available to community organizations, thus increasing their versatility. However, in today's environment, serious consideration must be given to station security and whether to allow members of the public, who are not members of the department, to utilize these facilities, particularly if there is open or easy access to the operational areas of the facility.

Fire and EMS capital facilities are exposed to some of the most intense and demanding uses of any public local government facility, as they are subject to use (and may be occupied) 24 hours a day. The very nature of fire and rescue operations necessitates that all stations be functional, adequate to fulfill the department's core missions, and be well maintained. Typically, fire stations have an anticipated service life of approximately fifty years, although some newer stations are being designed to remain functional longer.

There is no specific template for fire station design and construction. Each station must be designed to meet the unique needs of the community it will serve. National best practices, such as guidance provided by the National Fire Protection Association (NFPA) and the Federal Emergency Management Agency (FEMA) recommend that among other things the following features be included in modern fire and rescue station capabilities:

- Seismic-resistant construction (based on local risk assessment)
- Flood hazard protection (based on local risk assessment)
- Automatic fire sprinkler system and smoke detection system
- Carbon monoxide detectors
- Vehicle exhaust extraction system
- Capability to decontaminate, launder and dry personal protective equipment, station uniforms, and tools and equipment
- Adequate facility security
- Emergency power supply and system redundancy

- Exercise and training area(s)
- Compliance with the Americans with Disabilities Act (ADA)
- Compliance with current fire and building codes
- Adequate storage for supplies and equipment, including emergency medical and disaster supplies
- Adequate parking for on-duty personnel, administrative staff, and visitors
- Capability for future expansion

The geography, infrastructure, hazards, and construction features within the community all play a major role in determining the composition of each department's unique and individualized apparatus fleet and equipment inventory. Westfield's environment presents the fire Department with a wide variety of strategic and tactical challenges related to emergency response preparedness and mitigation. For many locations or facilities, these challenges may include, but are not limited to, firefighting, emergency medical responses, complex incidents requiring special operations capabilities such as technical rescue and hazardous materials emergencies.

The operational capabilities of the Department are supported in part by the Department's fixed facility assets identified further in this section. Fire and EMS stations are vital components to the safety and security of the community. They are a significant capital asset. However, adequately designed and maintained firehouses are vital to the safety and security of the personnel that occupy them. They also provide for an appropriate arrangement for the deployment of resources. These stations are exposed to high demand use, more so than other government buildings, because of their typical 24-hour use. They are also expensive to maintain, and routine operational costs can prove to be a challenge in terms of budgeting. Therefore, continued routing maintenance and assessment will help in providing longevity to these buildings. Looking toward the future, should the City choose to relocate, renovate, or add fixed facilities, attention must be placed not only on local/state building and fire codes but also to the appropriate NFPA standards (1482, 1500, and 1581).

The Westfield Fire Department operates out of 3 manned fire stations 24/7. They provide fire, EMS first response, and EMS transport covering the City's nearly 47 square miles and a population of 40, 834 (U.S Census Bureau, 2020). These three stations are geographically located in such a manner to provide adequate response times for all nature of incidents. The Department also maintains an older firehouse that is currently being used as a makeshift repair facility.

Fire Headquarters (**Figure VII-1**) is located at 34 Broad Street in the City's business district. Originally built in 1972, the building is in a prime location for operational needs. However, it is landlocked on all sides with limited capability to expand to address future needs or growth.

FIGURE VII-1: FIRE HEADQUARTERS

Fire headquarters houses the administrative offices (chief, fire Inspector, training) and civilian assistants on the second floor of the building. Also, on the second floor are the living quarters for the on-duty firefighters. Utilizing 5 apparatus bays, the main floor of the building is primarily for housing apparatus and equipment. The building is protected by both a fire detection and suppression system, as well as an exhaust capture device. Concerns surrounding fire headquarters are; no public access to the administrative offices, lack of meeting ADA requirements, haphazard renovations, and ongoing maintenance issues (roof leaks, HVAC). The latter two are focused on living quarters, structural assessment/needs, and energy efficiency. The administration has placed both a renovation for the second-floor kitchen as well as window replacements into their proposed capital budget for 2026. The station's condition is rated as fair.

Station 2, Little River (**Figure VII-2**) is located at 369 Little River Road, and provides a crossed-staff station for either fire suppression or EMS response. It also houses the office of the EMS superintendent. The building underwent extensive renovations in 2017 and is protected by a fire alarm and suppression system as well as an exhaust capture device. The station also has a sizeable training/community room. One opportunity that this station/location presents is the

sizeable building lot to the rear of the station that could be annexed either for a new repair facility or training facility. The station's condition is rated as excellent.

FIGURE VII-2: STATION 2

Station 3 (**Figure VII-3**) is located at 129 Southampton Rd. Originally constructed in 1967 it saw a moderate expansion and renovation in 1997. The station houses an engine, ambulance, as well as marine craft. It does have an exhaust capture device and a fire alarm system; however, it lacks a fire suppression system. The station is not adequately set up with appropriate living quarters for the on duty staff and suffers from environmental, energy efficiency, and HVAC issues. The station's condition is rated as fair. The MRI team noted a considerable amount of black on walls and ceilings at this station. It is recommended that the station have an air quality test completed.

FIGURE VII-3: STATION 3

The WFD repair facility (**Figure VII-4**) is located at 339 Western Ave and was constructed in 1972. It originally served as a fire house and is now housing the vehicle maintenance division. However, the building was not purposely designed for that purpose and lacks both the space needed and equipment to function properly. While there is consideration that the building can be used as a sub-station as part of a continuity of operations plan, it would require significant renovations to do so that could be cost prohibitive. The size limitations on the apparatus floor does not allow for the longer pieces of apparatus to be fully inside, heated and secured while being worked on. The building condition is rated as poor.

FIGURE VII-4: *STATION 4 (MECHANIC)*

Commercial buildings and target hazards present many different hazards and challenges than those required for operations in single-family dwellings. Congestion and access limitations can present different concerns for fire Department tactical operations in areas of the City that have older, narrower streets. All these factors, as well as projected future needs, must be taken into consideration when specifying and purchasing fire apparatus and equipment. Every effort should be made to make new apparatus as versatile and multi-functional/capable as possible and practical.

The MRI project team performed a visual inspection of the WFD's apparatus and vehicle fleets during our site visits. The team also discussed with staff the maintenance practices and procedures; however, maintenance records were not reviewed. It was apparent to the MRI team that the fleet was well-maintained and is not unreasonable in size for the City's fire suppression, EMS, and special operations incidents.

Fire Department Apparatus

The WFD operates a fleet of 22 vehicles which are detailed on the following page and detailed within Figure VIII-4:

- 6 Engines
- 5 ambulances
- 1 tower

- 3 command unit
- 1 rescue
- 2 brush unit
- 2 boats
- 2 support units

The apparatus complement listed above is appropriate for a City with the size and configuration of Westfield. However, our team noted that compared to other similar communities where we have completed operational studies the apparatus set is in less than optimal condition as an example two of the five engines are listed in poor condition and another unit is listed as out of service. This leaves the City with two engines that are in good or excellent condition. It is apparent that the capital plan needs to be updated and the investment into capital assets needs to be both increased and accelerated. This is especially true given rapidly increasing costs and delayed production times.

Unit #	Station Assigned	Type of Apparatus	Manufacture	Year of Manufacture	Miles	Hours	Condition	Replacement Cost
Engine 2	Little River	Pump	KME	1998	46,050	537	Poor	$ 850,000.00
Engine 3	North	Pump	Pierce	2011	113,971		Good	$ 1,000,000.00
Engine 4	HQ	Pump	Pierce	2018	61,212	5741	Excellent	$ 1,000,000.00
Engine 5	OOS	Pump	KME	1999	95,747	9460	OOS	$ 600,000.00
Engine 6		Pump	KME	2000	122,292	13,012	Poor	$ 1,000,000.00
Tower 1	HQ	Tower	Pierce	2014	28,997	3,062	Excellent	$ 1,300,000.00
Rescue 16		Rescue Pump	Freightliner	1997	12,770	1,259	Good	$ 400,000.00
Chief 1	HQ	Adminstration	Explorer	2020	27,723		Excellent	$ 36,000.00
Repair	Mechanic	Utility Body	Ford F350	2012	70,756		Good/Poor	$ 44,000.00
Brush 37	OOS	Forestry	Chevy 2500HD	2001			OOS	$ 35,000.00
Utility 1	HQ	Pick up	Chevy 2500HD	2002	26,884		Poor	$ 80,000.00
EMS Car	HQ	Adminstration	Expedition	2012	76,660		Fair	$ 60,000.00
Prevention	HQ	Adminstration	Explorer	2013	74,308		Good	$ 60,000.00
Chief 2	HQ	Adminstration	Ford F150	2020	27,857		Excellent	$ 70,000.00
Forestry 47	HQ	Forestry	Ford F350	2020	1,918	212	Excellent	$ 80,000.00
Med 20	Little River	Ambulance	International	2018	151,293	10,913		
Med 30	North	Ambulance	Ram	2020	88,558	6,272		
Med 40	HQ	Ambulance	Ram	2020	76,249	7,075		
Med 50	HQ	Ambulance	International	2018	114,351	10,216		
Med 60		Ambulance	Ford	2014	171,809	14,885		
Boat		Boat	Zodiac	2019	N/A	43	Good	
Air Boat	North	Boat	Diamond Back	2024	N/A	15	Excellent	
			Note: Hours and Millage as of August 2024					

FIGURE VII-4: APPARATUS INVENTORY

Despite the lack of clear guidance in the various NFPA standards, there is a significant body of knowledge that suggests that fire apparatus definitely has a finite lifespan. The reasonable serviceable lifespan of fire apparatus will depend on a number of variables such as the level of use, local environment, and operating conditions, and very importantly, the scope of

preventative maintenance. It is generally accepted that lower use fire apparatus, such as units serving communities that are suburban in nature, might still be mechanically sound after twenty years or more, due to their lower frequency of use. However, after twenty years, technical and functional obsolescence may make the apparatus less desirable to use even if mechanically sound and serviceable. Nevertheless, that does not mean that it will still not be serviceable as a spare or reserve apparatus.

One of the biggest factors that can impact the serviceable life of the apparatus is the level of preventative maintenance that is received. NFPA 1911: *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus* (2017 edition) provides guidance on this important aspect of fire department support operations. Apparatus manufacturers also identify suggested programs and procedures to be performed at various intervals. As apparatus ages, it is reasonable to expect that parts will wear out and need to be replaced. It follows then that maintenance costs and overall operating expenses will increase. As a result, cost history and projected costs for the future must be considered as a factor in determining when to replace or refurbish a fire apparatus. In addition, the reliability of the apparatus must be considered. Experiencing low downtime and high parts availability are critical factors for emergency equipment maintenance and serviceability. A pro-active preventative maintenance program can assist with holding costs to an acceptable level.

Overall, the WFD fleet appears to be reasonably well-maintained and in serviceable condition despite its increasing age. However, one of the Departments two in service pumpers is out of service due to frame rail issues and a second pump is nearing boarder line for the same issue. Moving forward the community will need to invest and replace aging apparatus with more capable vehicles that better support the response effort.

A white paper developed by the Fire Apparatus Manufacturer's Association (FAMA) suggests that the front-line lifespan of active-duty fire apparatus in a suburban setting range from 16 to 19 years, with the possibility of an additional 9 to 10 years in a reserve, or spare status. The International City/County Management Association (ICMA) suggests that the lifespan of a fire pumper should be 20 years, and the lifespan of an aerial ladder should be 25 years. The National Fire Protection Association suggests 15 years in front line service with an additional five in reserve status.

One common recommended practice is to purchase one major piece of fire apparatus every 5 years. The goal of this strategy is to spread major purchases out over time in an effort to allow the governmental entity to maintain a consistent level of debt service. Regardless, the decision is left to each locality and represents a balancing of numerous factors: fire department activity levels, maintenance costs and history, individual vehicle reliability, funding availability, technological changes, firefighter safety, and vehicle use. Fire apparatus must be replaced before

it becomes unreliable, but it must be held in service for as long as practical to maximize the benefit of the large initial investment from the community.

As the value of the apparatus or vehicle depreciates, the maintenance costs are evaluated along with the age, mileage, and engine hours so that expected maintenance costs do not exceed the value of the apparatus or vehicle. When considering apparatus usage, hours on the engine and pump must be taken into consideration. Fire apparatus typically spend more time idling while at the scene of emergencies, or when operating the fire pump at a fire. A rule of thumb that can be used is that each hour on the motor is the equivalent of 30 - 35 miles of actual driving mileage.

As newer technological improvements are introduced that increase safety and efficiency for the Department, the capital replacement plan should be evaluated in an ongoing manner, and these other factors should be considered as a component in scheduling replacement apparatus. An important component of the plan is that it allows front-line apparatus to be replaced before it is no longer serviceable due to safety or efficiency issues, but still be usable as a reserve or backup unit.

NFPA 1901, *Standard for Automotive Fire Apparatus* (National Fire Protection Association, Quincy MA, 2016 edition) and ISO (formerly the Insurance Services Office), provide standards for the minimum complement of equipment that should be carried on fire apparatus. It is important to recognize that each agency has different requirements for apparatus and equipment. NFPA focuses broadly on the safety and performance of the apparatus, while ISO focuses specifically on the fire suppression capabilities of the apparatus. These differences are most significant for equipment carried on pumpers and aerials. Differences between NFPA and ISO equipment for pumpers include hose, monitors, ground ladders, foam, and radios. Differences in aerial equipment include self-contained breathing apparatus (SCBA), ground ladders, and radios.

The MRI project team found the WFD's apparatus to be well equipped. All apparatus had a typical selection of portable hand, power, and service tools, and equipment utilized for firefighting and other emergency operations. This includes thermal imaging cameras, automatic external defibrillators, gas meters, and hydraulic rescue tools. However, there are no comprehensive vehicle equipment inventories available for any of the apparatus.

Each riding position on the apparatus is assigned an SCBA and a portable radio. Each career firefighter is also assigned a personal portable radio. Each SCBA carried on the apparatus has a mask assigned to it. Members are not issued their own personal SCBA mask as is the commonly accepted practice in the fire service. The rationale for issuing individual face masks is to minimize the chance of exposure/transmission of infectious and/or communicable diseases and other illnesses (even the common cold) between members. This concern has been amplified during the COVID pandemic. Each member having their own personal mask also ensures that they are wearing a correctly sized, properly fitting mask, not just the mask that happened to be available.

There are no spare masks available consequently a minor mask component malfunction or failure effectively places the entire SCBA unit out of service.

Of significant concern to the study team, and a source of potential significant liability to the City is the lack of annual SCBA fit testing. The OSHA Respiratory Protection Standard, 29 CFR 1910.134, and, NFPA 1500, Standard Fire Department Occupational Safety and Health Program mandate that annual fit testing be completed, after personnel have been medically cleared to wear SCBA. The Department is currently non-compliant with this regulation.

Both NFPA and ISO set standards for annual testing of fire department apparatus and equipment. Both require annual service testing of fire pumps and fire hose. NFPA also requires annual testing of fire department ground and aerial ladders.

The MRI project team was informed during the assessment that testing on the Department's truck and ground ladders are conducted every two to three years by an outside vendor. It was noted that the Department's ground ladders do not have current certifications. Pump testing is performed annually by an outside vendor, however, because the fire station was still undergoing renovations at the time of MRI's field visits, the records were not easily accessible to review. Annual SCBA flow testing is also performed on an annual basis by an outside vendor.

Recommendations

VII-1 ***The WFD should conduct immediate testing of the air quality at station 2.***

VII-2 ***The WFD should conduct a full needs assessment of each existing building to develop a long-term facilities plan. This will help determine feasibility related to renovations, reconstruction, and/or relocation as the needs of the Department and community change as well as to follow all current building codes and ADA requirements.***

VII-3 ***Safety and Security of each building needs to be addressed. Expanding proximity card reader (door security) access to reduce reliance on hard keys for secured areas and to monitor access. This should be done for all buildings. The installation of security cameras at all locations with a focus on station property, entry/exit points, parking lots, and common areas (publicly accessible spaces and apparatus bays). And lastly, all stations should be equipped with a full fire alarm and suppression system. AFG grants are available for such projects.***

VII-4 ***Research and install a station alerting system across all facilities Department wide. This will increase response efficiency and impact firefighter health and safety.***

VII-5 ***Relocate or co-locate the vehicle repair division with other City maintenance facilities to ensure adequate space, resources, and ensure personnel safety.***

VII-6 ***The Department should utilize the existing lot at the rear of Station 2 to develop/build a training facility. This would help incorporate live fire training as well as support daily training needs for the Department instead of relying on acquired structures or having to take personnel off-duty or on overtime to train outside of the City. Consideration should be given to building a joint training facility that can be utilized by both the fire and police departments.***

VII-7 ***Turnout gear should be moved from the apparatus bays and stored in a separate and ventilated space to protect personnel from the danger of additional exposure from off-gassing chemicals and products of combustion absorbed into the gear.***

VII-8 ***A specific long-term plan for the space needs at Fire Headquarters for administrative and living conditions that takes into consideration both males and females needs to be done. Year 1 would include a thorough inspection of the building with a space needs study for today and the next 10 to 20 years. Year 2 would take the study and develop construction documents***

VII-9 ***The WFD should conduct research and field testing to determine if equipping new pumping apparatus with compressed air foam system (CAFS) capabilities to improve fire knockdown capabilities, especially in limited staffing conditions, would be beneficial to the Department's operational capabilities.***

VII-10 ***The WFD should continue to ensure that all fire apparatus pumps are serviced, inspected, and tested at intervals no greater than 12 months apart, in accordance with NFPA and ISO standards. All tests conducted, results including deficiencies noted, and any corrective action taken should be documented.***

VII-11 ***The WFD should ensure all Department aerial and ground ladders are serviced, inspected, and tested at intervals no greater than 12 months apart, in accordance with NFPA standards. All tests conducted, results including deficiencies noted, and any corrective action taken should be documented.***

VII-12 ***The WFD should continue its annual program of SCBA flow testing at intervals no greater than 12 months, in accordance with NFPA standards and manufacturer's recommendations. All tests conducted, results including deficiencies noted, and any corrective action taken should be documented.***

VII-13 ***The WFD should continue to ensure that all Department hoses are inspected and tested, at intervals no greater than 12 months, in accordance with NFPA and ISO standards. All tests conducted, results including deficiencies noted, and any corrective action taken should be documented. It is further recommended that the Department contract with an outside vendor to complete this testing rather than performing them in-house***

VII-14 ***The WFD should develop a complete inventory of all Department equipment, review compliance with NFPA criteria (and assess the Department's own operational and equipment needs. The inventory should be updated at least annually to ensure that it is current.***

VII-15 ***The City of Westfield and WFD should establish a formal replacement plan for equipment. The regular replacement of large cost items such as hose, ladders, PPE, portable radios, AEDs, and even SCBA on an incremental basis will avoid major one-time increases in the annual operating budget where such purchases should be funded. For instance, the hose and ladders on one vehicle can be replaced in the next fiscal year, another the following year, etc. The life expectancy of these items can be estimated based on usage and manufacturer's recommendations. Items such as hose and ladders can remain in service indefinitely, provided they continue to successfully pass their annual tests.***

VII-16 ***The City of Westfield and WFD should take advantage of the fire apparatus and ambulance group purchasing system that is sponsored by the Fire Chiefs Association of Massachusetts (FCAM) and the Metropolitan Area Planning Council (MAPC). Municipalities may select a specific design and manufacturer from a pre-determined bid list and are not required to establish their own bid process. It is estimated that this group purchasing system will save approximately five to ten percent of the cost of a fire truck or ambulance.***

VII-17 ***The procurement of most of the WFD's future apparatus needs will normally be funded at the annual City meeting. However, in any given year, a federal Assistance to Firefighters Grant (AFG or FireAct) could also be pursued as a way to obtain funding. This is particularly true if the requested apparatus is going to replace more than one unit. If the AFG grant application is successful, then any already capital project funding can be cancelled.***

VII-18 ***The WFD should issue <u>ALL</u> personnel their own personal SCBA mask. The rationale for issuing individual facemasks is to minimize the chance of transmission/exposure of infectious and/or communicable diseases and other illnesses (even the common cold) between members.***

VII-19 ***The WFD should purchase a supply of spare SCBA masks in any size that is utilized by a member of the Department. A minimum of one spare mask of each of these sizes should be placed on each apparatus for emergency use in the event of the failure of a mask during emergency operations.***

VII-20 ***The City and Department should purchase a second set of PPE for all staff to allow for proper decontamination after each fire.***

CHAPTER VIII
CONCLUSIONS AND LOOKING TO THE FUTURE

Current State of the Fire and EMS Delivery System

The missions performed by the fire Department are some of the most basic and fundamental functions of government; to ensure the safety and protection of its residents and visitors. The real issue facing Westfield then, as it is for every community, is to determine an acceptable level of risk and then define an appropriate level of service for the community. There is no "right" amount of fire protection or EMS delivery. It is a constantly changing level based upon the expressed needs of the community. Determining the appropriate level of service also involves deciding upon the City's fiscal ability, and willingness, to pay for the desired level of service. Planned growth of the fire Department is essential to provide a consistent service level to the community while keeping pace with increased demands for service caused by continued development. It is the unenviable task of the City Councilors and the Mayor to translate those needs into reality, maximize the delivery of fire, rescue, and EMS services, and do it in the most fiscally responsible manner possible.

The National Fire Protection Association (NFPA) Standard 1710 has been referred to within this study and should be considered by the community as a foundation to determine an acceptable level of service. The recommendations in this report consider applicable NFPA standards, as well as other regulations, such as OSHA.

Based upon the analysis of the current day operations of the WFD, MRI found an organization that is well equipped, albeit with an aging apparatus fleet that will continue to require an ongoing capital investment. On paper, at least, the Department appears to have enough personnel to handle the expected workload within the community. As would be expected, the Department has a dedicated core group of members who are trying to make their organization one that provides dependable, high quality emergency services to the City of Westfield. From all accounts, once they arrive on the scene of an emergency, the WFD personnel perform their duties competently, and can be counted upon to complete assignments given to them. They should be commended for their efforts and given the support they need to continue to try to be successful.

However, although the fire Department possesses several positive attributes, it is also facing serious challenges both today and looking toward the future. Based on our analysis of the current day operations of the WFD we have found an organization that is currently in crisis. The majority of Department stakeholders believe that there needs to be increased team-based focus, direction, and common vision within the Department. The Department is definitely at an important crossroads and now is the time to change the culture of the Department and to begin to build a stronger community-based Department.

During the course of this assessment and our interviews, multiple stakeholders expressed concern relative to the level of internal and external communication. It is apparent that based on a perceived communication deficit, members of the Council have pursued alternative means – other than the chain of command – to try to obtain information. These "end runs" around the chain of command can result in a break down in organizational discipline.

Based upon our evaluation of the WFD, there appears to be, at minimum, a dysfunctional, and contentious relationship that exists between the City of Westfield and the fire chief. Regardless of what the root cause of this ongoing dispute is we strongly believe that it is having an adverse impact on the fire Department. Resolving the situation must be the number one, most important priority taken from this report! The MRI study team feels strongly that strong leadership, effective management, and a common vision for the future will be required to address the numerous recommendations contained within this report.

Although most Department members appear dedicated to their department, as one would expect from emergency services personnel.

The WFD appears to be well behind fire service best practice in the following areas:

1. Records Management Systems and technology
2. Use of data and performance metrics to inform the community relative to service demand and operations
3. Use of mobile data
4. Preplanning
5. Development of an effective training strategy
6. Fire Prevention division configuration and operations
7. The WFD's current written procedures system is very limited in scope, content, and timeliness.
8. Capital planning and the purchase of an effective apparatus fleet
9. Span of control - Create an effective span of control for administration, support services and operations-including adding a supervisor to station 2.
10. Automatic aid is currently not being used- Create automatic aid to assure safety and compliance with NFPA 1710.

Sense of Common Vision

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

The perceptions shared by members of an organization can be extremely important in either establishing, or conversely distorting, that sense of a unified common vision. Whether accurate or not, and regardless of the myriad of factors that can influence them, the individual and/or shared perceptions of members of an organization can, and often do, become their reality. If there is a perception of distrust, or, lack of mutual respect, between members of the organization, and/or between various entities or groups within an organization, the goal of successfully achieving that sense of common vision will be difficult, if not impossible.

As part of this organizational assessment process, MRI interviewed numerous stakeholders from both inside and outside the WFD. The study team spent numerous hours in the City over several days and assessed the attitudes and performance of the members of the WFD. Part of these interviews involved asking for perspective on what the stakeholders see as the needs of the organization moving forward.

The information that was requested by, and provided to, the MRI study team offered the following mission statement:

> ***"Our goal is to provide the highest quality fire suppression, fire prevention, public education and emergency medical service to the community with the resources available to us. Also, we will ensure a safe and enlightened work environment for our most valuable asset, the employees whose efforts and contributions are not only recognized, but also appreciated.***
>
> ***The purpose of a "mission statement" is twofold. First, to provide all members with an understanding of the goals and objectives envisioned for the Department. Secondly, to remind us of who we are and who we serve.***

This statement, if truly accurate, should provide the very foundation for the WFD and why it exists. This mission statement should be providing that broad direction that everything else that the fire Department does is going to be built upon. The study team believes that while to a certain extent the fire Department is fulfilling its mission and generally do so in an adequate manner, it is not planning as well for the future as it should be, or, making the most efficient use of its human resources and equipment. The study team did not notice the mission statement displayed in the fire station, or even on the Department's home page on the City's website.

It is our opinion that fulfillment of the fire Department's mission on a daily basis is more a product of the normal sense of duty, responsibility, and service, that is the very hallmark of the fire and emergency services, and a sense of community pride and involvement, both proud traditions, rather than a clear sense of common vision for the future of the WFD. In addition, the fire Department does not currently have any formal vision statement, nor has it developed any core values that will help to drive the organization forward. The fire Department's mission statement

should be prominently displayed in the fire station along with the vision statement and core values.

The MRI study team is very concerned that our interviews and interactions with the fire Department's internal stakeholders indicated little sense of common vision within the Department. Multiple stakeholders expressed a perception that the fire Department views themselves as their own entity, independent and autonomous from the City government. Many of these concerns center around the relationship mentioned above.

In addition to the leadership issues identified, the MRI team was informed during multiple interviews that:

- If any goals and objectives are being established annually, or long range, none of the members interviewed were familiar with them.
- There is a general sense that the culture within the organization needs to change.
- There is a general sense that the shifts all operate very differently in the way apparatus is staffed, when apparatus goes to call or not.
- How training is not taken serious and is weak.

Many of those we interviewed stated that communication should be enhanced, between the various personnel components of the Department – firefighters, officers, etc., and between the City and the fire Department. As a result, each group basically "does their own thing". This causes friction between all the various entities from time to time.

In any successful fire Department there must be open, and effective, lines of intra-Department communications between the various groups, divisions, units, etc. Each of these groups, both individually and collectively, has a major stake in the operation of, and ultimately, the organization's level of success. In addition, no one person has all the answers, knows everything, or in the modern era can do it all without assistance. All personnel need to be empowered, provided with an appropriate *"ownership"* stake, and, have duties and authority delegated to them. Recognizing that *"they can very easily fail on their own, but, need a lot of assistance from their 'team' to be effective and successful"* has led most successful leaders today to adopt an inclusive style of management and decision making. However, the leadership team must not be afraid to set up and make the difficult decisions that are in the best interests of the organization and its customers rather than the self-interests of the individual entities.

A few of the Department's long-serving members expressed skepticism that anything will be done as a result of this report. They informed the study team that several other studies have been completed over the years only to be shelved because certain people did not like or agree with what they said. This is a perception that the City will only be able to prove incorrect by truly using this report for what it is intended to be…a roadmap for moving the WFD forward.

Strategic Planning (AKA Looking to the Future)

Strategic planning is an organization's process of defining its direction, and, making decisions relative to the optimization of limited resources. A strategic plan also contains tools that can guide the implementation of the strategy. Strategic planning became prominent in corporations during the 1960s and remains an important aspect of organizational planning.

Strategy has many definitions, but generally involves setting goals, determining actions to achieve the goals, and mobilizing resources to execute the actions. A strategy describes how the ends (goals) will be achieved by the means (resources). Strategy can be planned (intended) or can be observed as a pattern of activity (emergent) as the organization adapts to its environment or competes. Through this document, the goal is to assist the City of Westfield and the WFD in moving forward in a planned or intended strategic manner.

Strategic implementation is analytical in nature and involves identifying how to best reach a goal or desired outcome. The recommendations contained in this document form the framework for action and indicate where change is necessary. The strategic implementation process considers the intricacies of the organizational environment including the following:

- Inputs – information utilized to formulate recommendations.
- Outputs – development of a plan of implementation
- Outcomes – that require evaluation.

Fire and rescue operations and service delivery can be dramatically improved in those Departments that commit resources to goal setting, master planning, risk assessment, and performance measurement. A number of tools and resources are available to guide management in these efforts from organizations such as the US Fire Administration (USFA), National Fire Protection Association (NFPA), International Association of Fire Chiefs (IAFC), International Association of Fire Fighters (IAFF), Center for Public Safety Excellence (CPSE), the Massachusetts Firefighting Academy, U.S. Department of Transportation (USDOT), the Massachusetts State Fire Marshal and, Massachusetts Emergency Medical Services (OEMS). A 2006 Volunteer Fireman's Insurance Service (VFIS) report notes:

"No business is successful without some type of strategic planning – making sure that the business will survive. The ESO is no different. Strategic Plans in business (and ESOs) lay the groundwork for effective organizational management and performance."[19]

Performance measures should be easily understood and easily calculated. Suggested performance measures for the fire and emergency services often have a range depending on local factors. The point of the performance measures is to identify the community's expectations in a quantifiable way, and to use the measurement of fire and EMS performance against these objectives to identify areas, which may need improvement, or require additional resources.

A Capital Improvement Plan (Program), or CIP, is a plan or varying duration, in government, usually five (5) to ten (10) years in duration, which identifies major (capital) projects and equipment purchases, organizes long term projects, provides a planning schedule and identifies options for financing the plan. The plan serves as a mechanism for decision-making, to identify priorities early to allow for more deliberate planning of financial resources. It can provide an important link to Westfield's long range strategic plan, and to communicate those long-range plans and needs to businesses and the community.

Budgetary pressures often divert government resources away from capital renewal. At a time when many governments are challenged by citizen demands for additional or improved services and taxpayer resistance to higher tax levies to pay for these services, the capital budget is often the first to be cut in an effort to balance the budget. Careful planning is required to ensure that strategic and capital needs receive the full attention and commitment of government officials. A well-planned capital improvement program is a crucial tool to systematically plan for and manage capital needs. On-going service delivery can be assured only if adequate consideration is given to capital needs. If facilities and infrastructure are not maintained, they will deteriorate until costly maintenance is required, services are threatened, and community growth stagnates or declines.

Recommendations

VIII-1 ***Regardless of which recommendations contained within this report the City of Westfield ultimately decides to implement, an inclusive, team-based approach will be an essential to successfully moving the fire Department forward and assuring that the City continues to be able to maintain a strong, dedicated, and vibrant combination fire Department.***

VIII-2 ***In conjunction with, and support from, the Council and the Mayor, the fire chief should form a membership/management committee. This committee should be designed to***

[19] http://www.msfa.org/content/recruit/file/CEO%20MANUAL%20ARIAL%20-%20disc.pdf

enhance communication, construct more positive relationships, and provide a mechanism for members to have an active voice within the organization and begin setting the direction for the future. This committee should consist of as many stakeholders as wish to participate. The chief should hold two meetings per month for the first six months to a year and then meet monthly for the foreseeable future. Minutes of these meetings should be developed, shared with the Department the the Council and the Mayor, as an attachment to the chief's monthly report. If necessary, outside professional assistance is available to assist with facilitating this endeavor.

VIII-3 ***The fire chief should develop a formal process that will enable employees to provide input into the Department's operations. Once submitted, employees must understand that not every idea will be utilized. When input is received, the employee should receive feedback relative to his/her idea. The fire chief should communicate examples of ideas that have been utilized/implemented as examples of success.***

VIII-4 ***The fire chief should immediately begin providing a weekly e-mail update to all members of the WFD. This regular update designed to enhance communications should be started no later than January 1, 2025.***

VIII-5 ***Based upon the recommendations contained in this report, the City of Westfield and WFD should develop a formal process for implementing a long-term vision and strategic plan for the fire Department. The development of the long-range strategic plan should involve both internal and external stakeholders, including members of the public.***

VIII-6 ***If necessary, and appropriate, to achieve recommendation IX-5, above, the WFD's mission statement should be revised to properly and accurately reflect the Department's overall mission within the community. In addition, a vision statement along with a set of core values should be developed by utilizing the input of a cross section of Department stakeholders. Although this can be a time-consuming process it serves as a foundation to bridge divided loyalties and set a common direction for the organization.***

VIII-7 ***The WFD mission statement should be prominently displayed in the fire station along with the vision statement and core values.***

VIII-8 ***The City of Westfield and the WFD should publicly recognize the achievements of the Department and individual members in reaching the various established goals as they are accomplished.***

VIII-9 ***Inter- and intra-organizational communications and relationships within the various***

entities that comprise the WFD and City of Westfield must be improved. Efforts to develop a new sense of shared and common vision, maintaining open lines of communication, committing to address the numerous issues identified in this report, developing a long range strategic plan, and instilling a sense of organizational ownership while recognizing the contributions of the individual personnel and groups, instituting standardized training and professional development programs, and, instilling a sense of team and esprit de corps will all help to instill an increased sense of pride in the WFD.

Conclusion

Overall, and despite its shortcomings, and the challenges it is facing, the WFD appears to have a positive public image, and is respected for its long-standing service to the community. This is commendable. If the recommendations contained in this report are implemented, those levels of service will only improve to the ultimate benefit of every citizen of, and visitor to, the City of Westfield. **However, we must stress one final time that it is imperative that a sense of unity and common vision be instilled within the Westfield Fire Department! It is mission critical that not only must everyone in the Department be in the same boat regarding where the Department is heading, they must also be rowing in unison and in the same direction toward those common goals and objectives. It is the collaborative job of the City's governing body, City administrator, and fire Department leadership to oversee and continue to guide these efforts.**

This report should be studied and considered in its entirety to gain a complete picture of MRI's recommendations and the rationale behind them. While the recommendations are numbered in each section, for the most part they have NOT been listed in any preferential manner or order of importance. The numbering is for reference purposes only. However, certain recommendations such as addressing and solving the issues between the City governing body and administration and the fire chief, the limited amount of training being conducted and lacking operational procedures (SOPs) are of the utmost importance and priority. **They are truly mission critical to the future success of the WFD.**

The areas that need improvement are by no means insurmountable, or beyond the City and its leadership's ability to deal with them. However, there are some significant issues that are facing the WFD. City and fire Department leaders may collectively develop their own priorities or modify the recommendations based on the ever-changing needs of the City and the fire Department. They must also collectively coordinate and prioritize solutions based on time, personnel, and fiscal realities.

In order to address the recommendations that have been identified in this report, the City and its fire Department leadership should:

1. Consider this report as a guide and a tool.

2. Approach recommendations strategically and systematically.

3. Break them down into reasonably sized components. Categorize them as short-term and long-term and/or high-priority and low-priority. This will allow a clear implementation plan to emerge that considers things such as which items can be accomplished within existing resources, and which items will require additional funding and/or time to accomplish in the coming years.

4. Use this document as a roadmap to guide change and improvement within the Department focused on service enhancement.

5. Use them as the basis for the development of a long-range strategic plan for change and improvement.

6. Refer to specifics within this report when initiating discussions, check recommendations off as they are accomplished, revise the plan as necessary moving forward just making sure to maintain forward progress, and most importantly, recognize the positive achievements publicly.

CHAPTER IX
SUMMARY OF RECOMMENDATIONS

Chapter II

II-1 ***The WFD should make it a priority to complete a comprehensive fire and rescue community risk assessment. This assessment should be done in conjunction with a fire and EMS call for service demand analysis and consider the fire Department's operational capabilities and preparedness.***

II-2 ***The WFD should dramatically increase the use of technology and records management. Preplanning of target hazards on an electronic platform available to all first response units should be a top priority for all target and high hazard locations. This will be emphasized in other chapter.***

II-3 ***The WFD should work to develop and implement an internal risk management plan following the recommendations of NFPA 1500, Standard for a Fire Department Occupational Safety and Health Program, and NFPA 1250, Recommended Practice in Fire and Emergency Services Organization Risk Management.***

Chapter III

III-1 ***The WFD would benefit by the addition of an Assistant Chief position. This position would provide better and more direct support for the chief and partnering agencies. It would streamline and improve workload distribution and make the positions more sustainable and aid in succession planning for the positions of Chief and Assistant Chief.***

To that end, The City of Westfield should make it a priority to negotiate with the local bargaining unit for the purpose of establishing a non-union position of Assistant Fire Chief delineating a clear number two position in the WFD and to provide the Chief with another confidential management position to assist him with leading the Department. This position should be an executive management position that is also exempt from the firefighters and officers respective collective bargaining units.

III-2 ***The City should create a rank of Lieutenant which can be done with or without adding additional staff.***

III-3 ***The City should increase the minimum staffing level to 18 personnel including a minimum of an officer and two firefighters staffing Station 2.***

III-4 ***The City of Westfield should revise the WFD's overall table of organization to clearly delineate the chain of command and make it more effective by identifying exactly who reports to who and what the hierarchical relationships are (Figure III-3).***

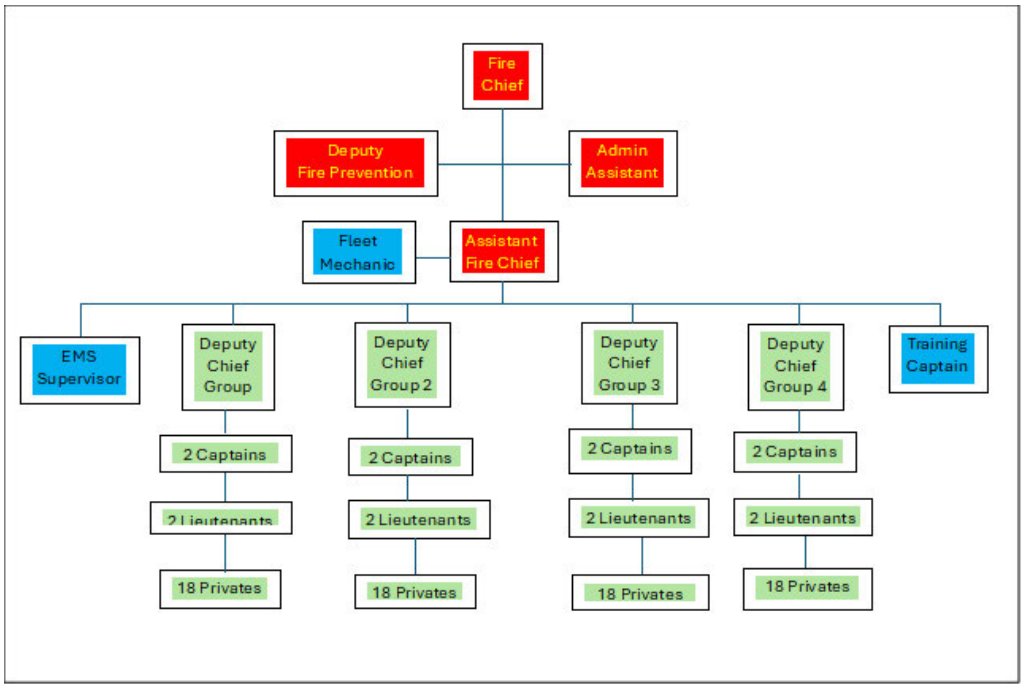

FIGURE III-3: PROPOSED WFD TABLE OF ORGANIZATION

III-5 ***The City should work with the Council and the Collective Bargaining units to remove the need for the Board of Fire Commissioners and to transfer the responsibilities to the Mayor.***

III-6 ***The Mayor, City Council and, and the fire chief must come to agreement on the proper role of each when it comes to the operations of the WFD. There must also be an acknowledgment that the fire Department is not a totally independent or autonomous entity, it is a unit of the overall municipal government of the City of Westfield. As such, there needs to also be an acknowledgement of the rights of City management to establish the level of service, set financial parameters, and to establish goals and performance measures.***

III-7 ***Although the Westfield fire chief is designated a "strong" fire chief, the Council and the Mayor should establish a reporting relationship where the fire chief reports normal operational activities to the Mayor. The Chief must continue to have a significant level of autonomy to lead and manage the Department, including at times making unpopular decisions, without undue political influence, or even meddling, as may be more inclined to occur with a "weak" chief who would be more susceptible to these pressures. It is essential that the fire chief work as a member of the City's management team and transparently oversee the operations of a 21st century fire Department.***

III-8 ***The City should work to remove the Fire Chiefs position from Civil Service to allow the Mayor and council to rapidly select the best candidate for the position from either an inside promotion or from the outside.***

III-9 ***WFD administration should participate more frequently with Department heads meetings at City hall. Currently the fire Department only participates quarterly when there are monthly meetings conducted with City hall Departments. A member of the command staff should attend these monthly meetings.***

Chapter IV

IV-1 ***One of the first, most important, and ongoing, priorities that should come from the recommendations contained in this report is there needs to be a concerted attempt by ALL parties to attempt to rebuild the critical bridge between the City and the WFD and its administration. An inclusive, team-based approach will be essential to moving the Department forward.***

IV-2 ***The Mayor and City Council should take an active role in setting appropriate service level expectations and goals for the fire Department. City officials should include residents and the Department in an open and honest discussion within the goal setting process. This process could provide the foundation for the formation of a long-range strategic planning committee comprised of a cross section of community stakeholders.***

IV-3 ***The Mayor and the City Council should establish an annual goal-setting workshop with the fire chief to develop the sense of common vision necessary to improve the Department and the quality of fire and EMS services the City of Westfield receives.***

IV-4 ***The fire chief should immediately begin to provide regular briefings to the Mayor and the Council concerning the operations of the WFD. The chief should communicate regularly with the Mayor and Council to receive feedback on the performance of the***

Department. The chief should provide the Mayor and the City Council with monthly reports that indicate the number of calls by types, response time analysis, staffing analysis particularly related to call responses and FT firefighter recalls, number of times mutual aid required, number of permits issues/inspections performed, etc., training synopsis, etc.

IV-5 ***The fire chief should immediately implement a monthly officers meeting for all Department officers. Regular attendance at these meetings should be mandatory. An agenda for the meeting should be prepared and distributed prior to, and minutes should be prepared and distributed immediately afterwards.***

IV-6 ***The fire chief should implement bimonthly group meetings and semi-annual Department meetings where he can provide updates to members of the Department, answer questions, take suggestions, and allow just an open forum and sharing of information between all personnel. An agenda for the meeting should be prepared and distributed prior to, and minutes should be prepared and distributed afterwards to all personnel.***

IV-7 ***All officers should have one or more administrative duties/responsibilities to assist the fire chief with the Department's overall management, in addition to their normal emergency scene operational duties and station management responsibilities. This should be impact bargained.***

IV-8 ***The City of Westfield and WFD should review all fees on an annual basis for possible increases in accordance with state law. This review should be conducted annually.***

IV-9 ***The City of Westfield and WFD should explore additional potential ways to generate revenue to offset the fire Department's operating costs. Consideration could be given to billing insurance companies for response to motor vehicle accidents; registration fees for fire alarm systems; the aggressive pursuit of non-residents who have been billed for ambulance transportation; and the implementation of a fee for ambulance responses that do not result in a transport.***

IV-10 ***The WFD should identify and prioritize its most critical equipment, training and/or operational needs, and apply annually to the Assistance to Firefighters Grant (AFG) program. This should include making applications for apparatus capital replacement projects that will otherwise be funded through the City's capital budget and at City meeting.***

IV-11 ***The City of Westfield should determine its most critical staffing needs based upon recommendations made elsewhere in this report to apply annually for a federal SAFER grant citing an attempt to better comply with the provisions of NFPA 1710/1720.***

IV-12 ***The WFD should prioritize its fire prevention and public fire education needs and apply annually to the Fire Prevention and Safety Grant (FP&SG) program.***

IV-13 ***The City of Westfield and WFD should actively search for other grant opportunities. Grants for fire protection, fire safety, fire prevention, domestic and emergency preparedness, and homeland security may be available from federal, state, corporate, and foundation sources.***

IV-14 ***The WFD should actively seek out businesses that may be interested in establishing public/private partnerships that could provide, or assist with, funding for various programs, projects, or initiatives.***

IV-15 ***With the growth in the City expected to continue, the City of Westfield and the WFD should consider working with with the developers of major projects or facilities to provide "mitigation" funds to assist the emergency services meet the unique public safety needs for the potential increased requests for service generated by the new development. This is typically done working with the Planning Board.***

IV-16 ***The WFD should form a management-labor committee to develop a comprehensive Rules and Regulations document that identifies anticipated, acceptable/ permitted, and prohibited behaviors. Due to the urgency of this task, and its significant importance, the committee should be given whatever support is necessary to complete this task within 12 - 18 months. If necessary, outside professional assistance is available to assist with facilitating this endeavor. This document should be reviewed by City Solicitor and provided to the Mayor and then distributed to and signed for by each member of the Department.***

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

- ***A preamble***
- ***Department vision statement and mission statement***
- ***Purpose of the rules and regulations***
- ***Organization***
- ***Membership requirements***
- ***General rules of conduct and prohibited behaviors***
- ***Officer qualifications and selection (may just reference current department procedure, CBA language and/or civil service language)***

- ***Officer duties and responsibilities***
- ***Chain of command***
- ***Uniforms and grooming***
- ***Discipline***
- ***Other areas that may be agreed upon for inclusion***

IV-17 ***The WFD should form a committee as soon as possible to begin the development of a comprehensive updated Department Standard Operations Procedures or Guidelines (SOP/SOG) manual. Utilizing a cross section of Department members they should be tasked with the development of a comprehensive Department standard operations procedures or guidelines (SOP/SOG) manual starting with mission critical procedures such as, but not limited to, basic engine company and truck company operations, dwelling fires, commercial structures, industrial incidents, rapid intervention team operations, personnel accountability, gas leaks, hazardous materials incidents, ice rescue, vehicle extrication operations, thermal imaging camera and automatic external defibrillator use, and mass-casualty incidents. The addition of numerous other procedures covering additional operational, routine administrative and training procedures should then follow.***

The committee should be comprised of members of each rank and include specific representation by a senior officer of each of the bargaining units. Due to the urgency of this task, and its significant importance to the Department's future success, the committee should be given whatever support is necessary to complete this task within 12 - 18 months. If necessary, outside professional assistance is available to assist with facilitating this endeavor.

The general set up and organization of the manual is a very important consideration, and the Department must ensure that the manual/system is easy to utilize and cross reference the necessary procedure. If personnel are going to be required to learn and adhere to the Department's procedures, then the format, organization, and filing of them must be user friendly, otherwise they will sit on a shelf unused.

The first operational procedure should identify and explain the components of the Written Communications System, including the use and organization of the SOP manual and other components of the system such as standardized forms. This procedure should also contain a provision that the entire SOP Manual will be reviewed on at least an annual basis and that updates and revisions can/will be made at any time, as necessary. All procedures/revisions should be approved and issued after being signed by the fire chief.

IV-18 ***The WFD should adopt a standardized SOP/SOG format that includes the following information:***

- ***Title of the SOP/SOG***
- ***Number of the SOP/SOG***
- ***Category of the SOP/SOG (EMS Operations, Training, Administration, etc.)***
- ***Page number and total number of pages***
- ***Effective date***
- ***Revision date (if applicable)***
- ***Approval/signature of the fire chief***

If a procedure is re-issued with only minor to moderate revisions it can carry the original issue date with the revision date also noted. Revisions from the previous version should be identified by some means within the revised document. Full-scale revisions to a procedure should result in it being reissued with a new issue date.

Each SOP/SOG should, at a minimum, contain the following sections:

- ***Purpose***
- ***Scope (If necessary and/or appropriate)***
- ***Definitions of terms (If necessary and/or appropriate)***
- ***Procedure(s)/Main body***
- ***References (If necessary and/or appropriate)***

IV-19 ***Working in close consultation with the City's legal and Human Resources personnel the WFD should ensure that all of their operational procedures meet and are consistent with applicable federal and state laws and regulations, and City ordinances, bylaws, and policy. This would include such topics as handling Freedom of Information requests, and human resources related issues such as Family Medical Leave Act, Pregnancy, Sexual Harassment, Equal Employment Opportunity (EEO), Diversity, Privacy, and Health Insurance Portability and Accountability Act (HIPAA).***

IV-20 ***The WFD should institute a process for issuing General Orders, which are directives and/or special instructions that cover various facets of Department operations but can be quickly issued as needed. They may cover a particular period of time regarding a special situation or may provide a temporary procedure pending development and issue of a full operational procedure.***

Also included in the system should be Training Bulletins that would be issued to serve as reference with regard to tested and approved methods of performing tasks; Safety Bulletins, that are issued to serve as references with regard to general and specific

safety and health issues; and Informational Bulletins or Memorandums that are published for the general knowledge of recipients such as temporary street closures, hydrants out of service, community events, etc. A numbering system should be implemented to keep track of these documents for indexing and future reference purposes.

IV-21 ***The WFD should develop an effective system for ensuring that any new Standard Operating Procedures, General Orders, Training Bulletins, Safety Bulletins, and Informational Bulletins are distributed to all personnel. Electronic communications is highly recommended as the method of choice for distributing Departmental communications and documents. All City policies and Department procedures should be posted on the Department intranet and employees should be required to review this information. All revisions should be e-mailed to each member and then posted on the intranet.***

IV-22 ***Since City policies and personnel regulations apply to all City employees, this material should be made available in the station (or online), and policy training should be conducted on a periodic basis for all personnel.***

IV-23 ***The WFD should develop and implement a procedure that provides for the documented review of policies, procedures, general orders, training and/or safety bulletins, etc. that includes a provision requiring each member of the Department to sign that they received the document, have read it, and understand it.***

IV-24 ***At least one policy or SOP/SOG should be reviewed by the shift officer with each crew during every shift. The deputy fire chief should select the material to be reviewed and provide that material to his/her shift commanders so that all crews review a consistent set of documents.***

IV-25 ***The City of Westfield should ensure that the Department disciplinary policy is progressive, consistent, and negotiated with respective bargaining units.***

IV-26 ***All formal grievances that originate within the fire Department should be forwarded to the City's Human Resource Director regardless of the level at which they were resolved. This will allow the City to fully track grievance activity and monitor for consistency of settlement, setting of precedent, etc.***

IV-27 ***All formal discipline (written reprimand and above) that occurs within the fire Department should be forwarded to the Human Resources Director for inclusion in the members' permanent personnel file. This will also allow human resources personnel to track progressive discipline, consistency of discipline, and allow them to provide***

appropriate guidance and support to the fire chief and his staff. Records of previous verbal warnings that later resulted in a written reprimand or higher should also be forwarded to personnel for inclusion in the personnel file.

IV-28 ***The WFD should immediately review and or develop a comprehensive respiratory protection plan in accordance with 29 CFR 1910.134, and a blood borne pathogens/ exposure control plan in accordance with 29 CFR 1910.1030. Appropriate SOPs that implement various components of these plans should also be developed as part of the ongoing process to develop that manual. Annual training as required should be provided to all personnel, as well as additional requirements such as annual fit testing for SCBA use.***

IV-29 ***The City of Westfield and WFD should take steps to ensure that there is an establish Department or City e-mail account for every member of the fire Department and the account is being used. The fire Department should also concurrently develop a procedure that requires every member of the Department to check their e-mail at least weekly. The fire chief should immediately begin providing a weekly e-mail update to all members of the WFD. Establishment of the e-mail accounts and this procedure will significantly improve communications and flow of information within the Department. Documents could then be sent out electronically including, but would certainly not be limited to, training announcements, schedules, meeting/assignment announcements and reminders, and once implemented, components of the Department's written communications system such as Operational Procedures, General Orders, Training Bulletins, Safety Bulletins, and Informational Bulletins.***

IV-30 ***The WFD should consider the implementation of a procedure to actively seek feedback from "customers" to whom the Department has provided service. It is recommended that this procedure involve a formal customer satisfaction survey instrument that can be sent to every customer, or at a minimum, is sent to some statistically valid and reliable sampling or percentage of those the Department has served. To be effective, the feedback must be analyzed, and, if necessary, corrective action is taken on any identified deficiencies.***

IV-31 ***The WFD should look to provide more interagency training between agencies and mutual aid partners. Of specific note is training for both communications personnel and FD line personnel to enhance knowledge and perspective of both agencies' roles and how they work together. This can be accomplished by having the shift commanders provide a ride along with communications personnel and having FD personnel spend some time in the communications center observing their operation.***

IV-32 ***The WFD should provide data to agencies such as the COA on such things as how many responses/transports related to falls. Data such as this would provide a targeted message and expand community risk reduction efforts. Also, The WFD should partner with the COA with providing home safety surveys.***

IV-33 ***The WFD should work with both the fire commission and the Personnel Department to expedite the civil service and hiring process so that the Department reduces the potential from missing out on quality entry level candidates.***

IV-34 ***The Chief should adopt a new format to provide the Mayor, City Council, Fire Commission and each department member with a general update on operations and activities including the accomplishment of personnel. An example format has been provided in the appendix of this document.***

Chapter V

V-1: ***The WFD should establish a formal pre-fire/incident planning program with the goal of having an up-to-date pre-plan for every business and commercial occupancy (including schools, churches, etc.). The purpose of a pre-fire/incident planning program is to develop a fire/emergency response plan for buildings in the City. A pre-fire/incident plan includes data such as the occupancy type, floor plans, construction type, hazards to firefighting, special conditions in the building, apparatus placement plan, water supply plan, and forcible entry and ventilation plan. Pre-planning will improve the firefighter knowledge of the specific tactics needed to handle a fire or other emergency at a facility and will alert them to on-site hazards and risks. Pre-fire/incident plans should be reviewed regularly and tested by periodic table-top exercises and on-site drills. It is recommended they utilize a cloud-based system that utilizes iPad in apparatus and other vehicles to enhance response capability by providing the information for use enroute to an incident and while on scene.***

V-2: ***Appropriate pre-planning software should be obtained and installed in apparatus mobile data terminals (MDTs) in all apparatus, ambulances, and command/staff vehicles.***

V-3 ***The WFD should establish a formal "performance "improvement" process for fire suppression operations. The process should include the adoption of performance standards such as NFPA 1710[20], the creation of a formal review and critique process for***

[20] For example, NFPA 1710 also establishes performance goals for turn-out time and response times for fire and EMS emergency calls.

all incidents, and a process for modifying SOGs, SOPs, training priorities, and equipment as determined by the performance improvement program. NFPA 1710 includes several on-scene performance indicators such as:

- ***On-scene to charged line at the front door of a structure fire: two minutes or less, 90% of the time.***

- ***Water from hydrant to supply engine: three minutes or less, 90% of the time.***

V-4 ***The WFD should consider a procedure that Alpha and possibly Bravo level EMS calls are responded to without light or sirens. Consideration should also be given to making hospital transport calls that are non-emergent, and the patient is stable, without lights and sirens. It is safer for responding personnel, general citizens, and the patient, to reduce the number of times that red lights and sirens are utilized.***

V-5 ***The City of Westfield and WFD should explore the long-term feasibility of implementing some type of community based mobile integrated health care in an attempt to provide better service to the community, and possibly increase their EMS revenue.***

V-6 ***The WFD should work internally to ensure all EMS related incidents are properly classified as either advanced life support (ALS) or basic life support (BLS) criterion, based upon the actual situation found on scene, not what the incident was dispatched as.***

V-7 ***The WFD should work with the dispatch supervisor to identify any potential ways to reduce call processing time (from receipt of the call to dispatch of the incident) with the goal of attempting to achieve a 90th percentile time of not more than 64 seconds as recommended in NFPA 1710. Reducing call processing time can assist with leading to improved overall response times. Several agencies have utilized pre alerts (units alerted as the call comes in so that personnel can move toward responding apparatus) as a tool to provide a more rapid response.***

V-8 ***The WFD should further analyze their response time data, and if necessary, work to identify potential ways to reduce incident turnout time with the goal of attempting to achieve a 90th percentile time of not more than 60 seconds for EMS incidents and 80 seconds for fire incidents as recommended in NFPA 1710. Turnout time is the response time component that the agencies have the most direct control over which can lead to reduced overall response times. (see Recommendation V-7)***

V-9 ***The WFD should significantly enhance their data collection and analysis procedures and their ability to generate statistics regarding a wide range of their operations. This***

should include 80th and 90th percentile turnout and travel times as recommended in NFPA 1710. Having these more conservative times available will provide a more accurate response assessment and allow for better long- range master planning.

V-10 ***The WFD should develop a SOP, specifying what information and times are necessary for the dispatcher to enter onto a fire incident report prior to the report being passed to the fire Department. In order to develop the most accurate statistical database, all response time data should be entered into the appropriate National Fire Incident Response System (NFIRS) incident reporting database in a precise manner (hours/minutes/seconds). In order to accurately assess each component of overall response time, call processing time – turnout time – response time, these times should each be entered separately, and into the appropriate category in the NFIRS database.***

V-12 ***When there is a report of a structure fire, or smoke in a structure, a full structural response should be automatically initiated. This would include the immediate, and automatic, response of several Departments. Although cultural resistance should be expected, this is a common and successful practice employed in many smaller communities that have more limited response capabilities.***

V-13 ***In consultation and cooperation with its neighboring Departments, the WFD should enter into automatic aid agreements that specifies (and increases as appropriate) the number and types of resources that should be dispatched to various types of reported emergencies. For structure fire incidents, the Department should strive to have a minimum of 14/15 firefighting personnel on the scene of every single-family residential structure fire within eight minutes of the time that units are responding. For fires in multi-family residential buildings and commercial occupancies, a minimum of 27/28 personnel should be on scene within eight minutes of the time that units are responding in order to be able to establish a full effective response force. Even if additional permanent staffing was added the use of automatic aid and mutual aid will need to continue and should be enhanced, based upon the type of occupancy a reported fire is in. <u>This should be the Department's highest priority.</u>***

V-14 ***Working in conjunction with the dispatch center, the WFD should implement a procedure to provide for the dispatch center to provide interval time checks to the incident commander, and, for the incident commander to provide status reports, and as necessary, PAR reports.***

V-15 ***The WFD should apply for a federal Staffing for Adequate Fire and Emergency Response (SAFER) grant to fund the two positions recommended in V-16, citing an increasing call***

volume, and a desire to improve overall operational effectiveness, efficiency, and safety.

V-16 ***The WFD should work on correcting the deficiencies noted in the most recent ISO inspection to attempt to achieve a higher Class2 rating. The Department should focus on the staffing, training, fire prevention, and pre-fire/incident planning which are the most achievable.***

V-17 ***The WFD should conduct a separate analysis of its EMS response and transport capability to determine where it can improve in terms of response times and patient outcomes and possible adjust its structure or response mode.***

V-18 ***The WFD should track data on incidents such as elderly falls, drownings, and head injuries as an example to see if there is any pre-incident education and mitigation measures in the area of a community risk reduction strategy to potentially reduce those types of incident responses.***

Chapter VI

VI-1 ***The City of Westfield should ensure that the communication center is continuously updated with new technologies to better support all emergency services. This includes interoperability considerations between both town agencies and multiple mutual aid partners.***

VI-2 ***The City of Westfield should research with local vendors on the possibility of a radio lease and maintenance program that would provide continual updates, support, and repair services vs. "rebuilding" the system every 7-10 years.***

VI-3 ***The City of Westfield should ensure that the communication center is continuously updated, as it relates to infrastructure and functionality in its role as an emergency operations center.***

VI-4 ***The City of Westfield should maintain the EOC at the communications center as it is well positioned geographically and away from any potential hazards/threats to its continuity of operations.***

VI-5 ***The WFD in collaboration with the Communication Center, should research an automated station alerting dispatch program such as Brix. This could benefit call processing and turnout times.***

VI-6 ***The WFD in collaboration with the Communication Center, should ensure accurate reporting of fire and EMS incident data to include call processing times, dispatch time, turnout, and response times as it relates to pertinent NFPA standards.***

VI-7 ***The WFD should evaluate and if necessary, revise its apparatus response/run card assignments to ensure an effective response force, more consistency in operations, and provide additional clarity for both communications and fire personnel.***

VI-8 ***The City of Westfield and the Westfield Fire Department should consider once again staffing a fire alarm superintendent. Recent changes in this structure have resulted in the communications center becoming an alarm monitoring company. In lieu of this, all occupancies within the City, inclusive of City owned facilities, should be placed on a dialer type system for transmitting alarms.***

VI-9 ***The City of Westfield should ensure that its public safety telecommunicators are trained in accordance with the Massachusetts Telecommunicator Certification Program, and all other relevant requirements or standards***

VI-10 ***The WFD should conduct a comprehensive and formal training needs assessment for the purpose of determining training program priorities. Part of this needs assessment should be an initial evaluation of the current basic skills proficiency of ALL Department personnel.***

VI-11 ***Based upon the results of the needs assessment, the WFD should begin the development of a comprehensive training program that addresses, but is not limited to: applicable OSHA training (including annual SCBA fit testing and training*** **in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134, and, NFPA 1500,** ***Standard Fire Department Occupational Safety and Health Program(2021 edition), recommended NFPA training, every operational mission and responsibility of the Department, and specialized training including personnel/officer development. The training should comply with accepted and/or recommended practices and standards, should include standardized evolutions, and should be consistent with newly developed and/or updated operational guidelines and Standard Operating Procedures (SOPs).***

VI-12 ***The WFD should establish a mentoring program to guide and encourage new members as they progress through the initial training process.***

VI-13 ***Formal training of some type, lasting a minimum of two hours, should occur on each career platoon daily. The training should be lesson plan driven, and when appropriate, EMT continuing education credit hours should be applied for through the State Office of EMS. Additional opportunities for training can be found during related activities such as weekly/monthly apparatus and equipment inspections, and building pre-planning activities.***

VI-14 ***Additional, high intensity training on various subjects, including periodic live fire training, should be conducted on a quarterly or semi-annual basis at a formal fire academy where appropriate training facilities, structures, and props are available.***

VI-15 ***The WFD should sponsor and support each member to attend two live fire training session per year. Periodic live-fire training exercises at a dedicated training facility need to be conducted in order for personnel to maintain their skills proficiency.***

VI-16 ***The WFD should require that all personnel– receive at least 24 hours of structural firefighting training per year.***

VI-17 ***All WFD personnel should be required to complete a minimum of 96 hours of documented training per year (an average of 8 hours per month) including all mandatory training.***

VI-18 ***Training should be delivered and/or conducted utilizing formal, standardized lesson plans that include objectives and performance criterion. However, when this is not possible or practical (a frequent occurrence in the fire service), a detailed description of the training should be included in the narrative section of the training report.***

VI-19 ***All training that is conducted, no matter how brief or inconsequential it may seem, <u>MUST</u> result in the completion of a formal training report. Training reports should include the date, time training commenced, time duration of the training, the instructor, the officer in charge, names of all personnel trained, and include a detailed description of the training or reference the formal lesson plan utilized. All persons trained should sign or initial either a printed hard copy of the training report, or if this is not practical, a sign-in sheet should be attached. The officer in charge, and when possible, the instructor, should also sign the hard copy training report.***

A formal operational procedure for the completion of training reports should be developed. The training module of the Department's RMS should be utilized for completion of training reports and to assist with the development of a training database, keeping track of certifications and related lapse dates, etc.

VI-20 ***The WFD should ensure that all Department members are trained/ certified to the minimal NIMS level required for their duties/responsibilities and ranks. The Department should also further enhance the level of incident management training provided to the members of the Department. In addition to the basic I-100/I-700 training mandated, it is MRI's recommendation that all personnel be trained to the ICS-200 level. All officers should be trained to the ICS-300 level. All chief level officers should be trained to the ICS-400 level.***

VI-21 ***The WFD should strongly encourage its officers to obtain a certain level of fire officer certification as a job requirement such as Fire Officer I for lieutenant, Fire Officer II for captain, Fire Officer III for deputy/assistant fire chief, and Fire Officer Level IV for fire chief.***

VI-22 ***The WFD should require that all officers be certified as Incident Safety Officers (ISOs). Additional personnel who may be interested should be encouraged to take this training and obtain this important firefighter safety certification.***

VI-23 ***The WFD should encourage personnel to seek additional training on their own, and to the financial and practical extent possible, send personnel to outside training opportunities. The information gained at this training can then be brought back and delivered to other members of the Department. Training reports should be completed for all this training, and copies of any certificates earned should be placed in the members' personnel and training files. A training board should be placed in the station where upcoming training opportunities can be posted for all personnel to review. These opportunities should also be posted on the Department's website and should be e-mailed to every member once addresses are established.***

VI-24 ***The WFD should seek annual funding in the training budget to upgrade its training resources such as manuals, DVDs, and subscriptions to other available training resources.***

VI-25 ***The WFD should, as part of its written communications system, develop Training Bulletins which would be issued to serve as reference regarding tested and approved methods of performing various tasks, and Safety Bulletins which should be issued to serve as references about general and specific safety and health issues.***

VI-26 ***The WFD should consider staffing a permanent training officer position at the rank of Deputy Chief. Having a Mon-Fri training position would ensure continued and effective training delivery and program development. The Department could consider merging this position with that of the EMS superintendent, so the training officer provides both suppression and EMS training. This position should not be assigned to staff apparatus as a portion of his/her duties.***

VI-27 ***The WFD should also prioritize, as part of their training program and hazard analysis, formal pre-incident planning.***

VI-28 ***The WFD should develop a robust annual training calendar with set objectives linked to JPR's for the relative NFPA standards (1001, 1002, 1670, etc.). The calendar should also include JPR's or required EMS CEU programming.***

VI-29 ***The WFD should integrate outside instructors into their training delivery programs who are specific subject matter experts bringing in new knowledge and ideas.***

VI-30 ***The WFD should develop a formal professional development program for all ranks within the Department. This would assist the Department and its personnel in succession planning and for future promotion.***

VI-31 ***The WFD should research opportunities to take advance of new technology and resources such as props and simulators, to enhance training delivery.***

VI-32 ***Professional development programs should include all levels of officer training as appropriate in alignment with NFPA 1021 for mid and senior level officers.***

VI-33 ***The WFD should consider building in National Fire Academy classes/offerings into its training program. These can be brought in house, through the Massachusetts Fire Academy, or residential courses on the NFA campus in Emmitsburg, MD.***

VI-34 ***The WFD should consider the NFA's Managing Fire Officer Program for those that meet the necessary prerequisites for the positions of captain and deputy chief, or for those that aspire to those ranks. The NFA's Executive Fire Officer program is ideal for administrative positions at the ranks of assistant chief or chief; or for those that aspire to those ranks.***

VI-35 ***The WFD should continue, through collective bargaining, the process of incentivizing personnel for obtaining higher education degrees in fields related to the operations of the Department.***

VI-36 ***The WFD should stay abreast of changing national standards as well as the changes pending in the proposed rule change of OSHA 1910.156 and its impact on the Department's training program.***

VI-37 ***The WFD should consider a voluntary OSHA audit to ensure it follows current regulations as it relates to training requirements to establish a benchmark.***

VI-38 ***The WFD should support and encourage training and professional development activities for Department members in the fire prevention and fire inspection areas. This can include, among other endeavors, attendance at the Fire Prevention Association of Massachusetts, and Massachusetts Firefighting Academy. Credentialing at the Fire Inspector I, II, and III levels should be required for the fire chief and deputy/assistant fire chief. All additional full-time personnel should be required, at a minimum, to possess/obtain Fire Inspector Level I credentials as a condition of employment, with captains being required to obtain Inspector Level II credentials. The deputy/assistant fire chief should also be required to attend fire prevention and management courses at the National Fire Academy.***

VI-39 ***The WFD should consider a formal in-service fire safety inspection program conducted by the on-duty career personnel as part of a comprehensive community risk reduction program. The on-duty personnel can be assigned with the responsibility for "in-service" inspections to identify and mitigate fire hazards in buildings and to familiarize firefighters with the layout of buildings, identify risks that may be encountered during firefighting operations, and to develop pre-fire plans. On-duty personnel in many Departments are assigned responsibility for permit inspections and public fire safety education activities.***

In order to establish an in-service inspection program, it will be necessary to:

- ***Train personnel on proper procedures (all personnel should be credentialed at least to the Fire Inspector I level recommended above);***
- ***Develop standard operating guidelines for in-service inspections;***
- ***Establish inspection schedules;***
- ***Establish a system for documenting inspections and notifying property owners of fire hazards;***

- ***Establish a follow-up inspection system to ensure that hazards have been mitigated; and,***
- ***Require on-duty personnel to conduct regular in-service inspections of all building construction sites in the City.***

VI-40 ***The WFD should update its website on a regular basis to provide its customers, and other interested parties, with as much information as possible on fire safety, fire prevention, and the Department. The Department should also work actively to make on-line permitting, inspection scheduling, etc. a reality.***

VI-41 ***The WFD should develop a compelling public education program that includes discussing the benefits of installing residential fire sprinklers in new one- and two-family dwellings. Although Massachusetts's construction codes do not allow residential fire sprinkler systems to be mandated, there is no prohibition for property owners to install them if they determine that it is in their best interest.***

VI-42 ***The WFD should make the delivery of year-round public fire safety education programs in the schools, and throughout the community a top priority since this is the area where the fire service is most effective at preventing fires, injuries, and deaths. This should be part of a comprehensive community risk reduction program. Personnel should be encouraged to obtain the Fire and Life Safety Educator certification issued by the state fire marshal's office.***

VI-43 ***The WFD should apply annually for Student Awareness of Fire Education (SAFE) and senior citizen fire safety grant programs sponsored by the Massachusetts State Fire Marshal's Office.***

VI-44 ***The City should fund and install a part-time administrator to handle all the fire prevention phone calls, scheduling and administrative work as assigned by the Fire Inspector. Based on the workload this should start as a part-time non-benefit position that may grow to a full-time position in the future based on workload demands.***

VI-45 ***The City should fill one full-time and one part-time inspectors' positions within the fire prevention division. These positions could be filled as civilian positions that have the proper credentials to do the required work. As an option the Department can use current staff members who have the proper certifications to do the inspections as needed. Having these added staff people would allow the fire inspector to properly complete plan reviews and to handle the larger scaled projects while still maintaining an oversight on the smaller ones.***

VI-46 ***The WFD should expand fire prevention, education, and community risk reduction program deliveries targeted to high-risk groups. Senior citizens are of note. The success of the 2013 "Retire the Fire program was noted.***

Chapter VII

VII-1 ***The WFD should conduct immediate testing of the air quality at station 3.***

VII-2 ***The WFD should conduct a full needs assessment of each existing building to develop a long-term facilities plan. This will help determine feasibility related to renovations, reconstruction, and/or relocation as the needs of the Department and community change as well as to follow all current building codes and ADA requirements.***

VII-3 ***Safety and Security of each building needs to be addressed. Expanding proximity card reader (door security) access to reduce reliance on hard keys for secured areas and to monitor access. This should be done for all buildings. The installation of security cameras at all locations with a focus on station property, entry/exit points, parking lots, and common areas (publicly accessible spaces and apparatus bays). And lastly, all stations should be equipped with a full fire alarm and suppression system. AFG grants are available for such projects.***

VII-4 ***Research and install a station alerting system across all facilities Department wide. This will increase response efficiency and impact firefighter health and safety.***

VII-5 ***Relocate or co-locate the vehicle repair division with other City maintenance facilities to ensure adequate space, resources, and ensure personnel safety.***

VII-6 ***The Department should utilize the existing lot at the rear of Station 2 to develop/build a training facility. This would help incorporate live fire training as well as support daily training needs for the Department instead of relying on acquired structures or having to take personnel off-duty or on overtime to train outside of the City. Consideration should be given to building a joint training facility that can be utilized by both the fire and police departments.***

VII-7 ***Turnout gear should be moved from the apparatus bays and stored in a separate and ventilated space to protect personnel from the danger of additional exposure from off-gassing chemicals and products of combustion absorbed into the gear.***

VII-8 ***A specific long-term plan for the space needs at Fire Headquarters for administrative and living conditions that takes into consideration both males and females needs to be done. Year 1 would include a thorough inspection of the building with a space needs study for today and the next 10 to 20 years. Year 2 would take the study and develop construction documents***

VII-9 ***The WFD should conduct research and field testing to determine if equipping new pumping apparatus with compressed air foam system (CAFS) capabilities to improve fire knockdown capabilities, especially in limited staffing conditions, would be beneficial to the Department's operational capabilities.***

VII-10 ***The WFD should continue to ensure that all fire apparatus pumps are serviced, inspected, and tested at intervals no greater than 12 months apart, in accordance with NFPA and ISO standards. All tests conducted, results including deficiencies noted, and any corrective action taken should be documented.***

VII-11 ***The WFD should ensure all Department aerial and ground ladders are serviced, inspected, and tested at intervals no greater than 12 months apart, in accordance with NFPA standards. All tests conducted, results including deficiencies noted, and any corrective action taken should be documented.***

VII-12 ***The WFD should continue its annual program of SCBA flow testing at intervals no greater than 12 months, in accordance with NFPA standards and manufacturer's recommendations. All tests conducted, results including deficiencies noted, and any corrective action taken should be documented.***

VII-13 ***The WFD should continue to ensure that all Department hoses are inspected and tested, at intervals no greater than 12 months, in accordance with NFPA and ISO standards. All tests conducted, results including deficiencies noted, and any corrective action taken should be documented. It is further recommended that the Department contract with an outside vendor to complete this testing.***

VII-14 ***The WFD should develop a complete inventory of all Department equipment, review compliance with NFPA criteria (and assess the Department's own operational and equipment needs. The inventory should be updated at least annually to ensure that it is current.***

VII-15 ***The City of Westfield and WFD should establish a formal replacement plan for equipment. The regular replacement of large cost items such as hose, ladders, PPE, portable radios, AEDs, and even SCBA on an incremental basis will avoid major one-time increases in the annual operating budget where such purchases should be funded. For***

instance, the hose and ladders on one vehicle can be replaced in the next fiscal year, another the following year, etc. The life expectancy of these items can be estimated based on usage and manufacturer's recommendations. Items such as hose and ladders can remain in service indefinitely, provided they continue to successfully pass their annual tests.

VII-16 ***The City of Westfield and WFD should take advantage of the fire apparatus and ambulance group purchasing system that is sponsored by the Fire Chiefs Association of Massachusetts (FCAM) and the Metropolitan Area Planning Council (MAPC). Municipalities may select a specific design and manufacturer from a pre-determined bid list and are not required to establish their own bid process. It is estimated that this group purchasing system will save approximately five to ten percent of the cost of a fire truck or ambulance.***

VII-17 ***The procurement of most of the WFD's future apparatus needs will normally be funded at the annual City meeting. However, in any given year, a federal Assistance to Firefighters Grant (AFG or FireAct) could also be pursued as a way to obtain funding. This is particularly true if the requested apparatus is going to replace more than one unit. If the AFG grant application is successful, then any already capital project funding can be cancelled.***

VII-18 ***The WFD should issue <u>ALL</u> personnel their own personal SCBA mask. The rationale for issuing individual facemasks is to minimize the chance of transmission/exposure of infectious and/or communicable diseases and other illnesses (even the common cold) between members.***

VII-19 ***The WFD should purchase a supply of spare SCBA masks in any size that is utilized by a member of the Department. A minimum of one spare mask of each of these sizes should be placed on each apparatus for emergency use in the event of the failure of a mask during emergency operations.***

VII-20 ***The City and Department should purchase a second set of PPE for all staff to allow for proper decontamination after each fire.***

Chapter VIII

VIII-1 ***Regardless of which recommendations contained within this report the City of Westfield ultimately decides to implement, an inclusive, team-based approach will be an essential to successfully moving the fire Department forward and assuring that the City continues to be able to maintain a strong, dedicated, and vibrant combination fire Department.***

VIII-2 ***In conjunction with, and support from, the Council and the Mayor, the fire chief should form a membership/management committee. This committee should be designed to enhance communication, construct more positive relationships, and provide a mechanism for members to have an active voice within the organization and begin setting the direction for the future. This committee should consist of as many stakeholders as wish to participate. The chief should hold two meetings per month for the first six months to a year and then meet monthly for the foreseeable future. Minutes of these meetings should be developed, shared with the Department the the Council and the Mayor, as an attachment to the chief's monthly report. If necessary, outside professional assistance is available to assist with facilitating this endeavor.***

VIII-3 ***The fire chief should develop a formal process that will enable employees to provide input into the Department's operations. Once submitted, employees must understand that not every idea will be utilized. When input is received, the employee should receive feedback relative to his/her idea. The fire chief should communicate examples of ideas that have been utilized/implemented as examples of success.***

VIII-4 ***The fire chief should immediately begin providing a weekly e-mail update to all members of the WFD. This regular update designed to enhance communications should be started no later than January 1, 2025.***

VIII-5 ***Based upon the recommendations contained in this report, the City of Westfield and WFD should develop a formal process for implementing a long-term vision and strategic plan for the fire Department. The development of the long-range strategic plan should involve both internal and external stakeholders, including members of the public.***

VIII-6 ***If necessary, and appropriate, to achieve recommendation IX-5, above, the WFD's mission statement should be revised to properly and accurately reflect the Department's overall mission within the community. In addition, a vision statement along with a set of core values should be developed by utilizing the input of a cross section of Department stakeholders. Although this can be a time-consuming process it serves as a foundation to bridge divided loyalties and set a common direction for the organization.***

VIII-7 ***The WFD mission statement should be prominently displayed in the fire station along with the vision statement and core values.***

VIII-8 ***The City of Westfield and the WFD should publicly recognize the achievements of the Department and individual members in reaching the various established goals as they are accomplished.***

VIII-9 ***Inter- and intra-organizational communications and relationships within the various entities that comprise the WFD and City of Westfield must be improved. Efforts to develop a new sense of shared and common vision, maintaining open lines of communication, committing to address the numerous issues identified in this report, developing a long range strategic plan, and instilling a sense of organizational ownership while recognizing the contributions of the individual personnel and groups, instituting standardized training and professional development programs, and, instilling a sense of team and esprit de corps will all help to instill an increased sense of pride in the WFD.***

CHAPTER X
THE PROJECT TEAM

The MRI project team consisted of the following personnel:

Director of Fire Services:

Brian P. Duggan, Director Fire Services Group, retired from the Fire Department in Northampton, Massachusetts, where he instituted substantial changes to modernize and restructure the entire Department including equipment, facilities, personnel, and training. In conjunction with his staff, Brian integrated Emergency Medical Services (EMS) into the organization and created a regional Advanced Life Support (ALS) Program that currently serves 18 communities within the Northampton Area. He formerly commanded the Northborough, Massachusetts, Fire Department, and has significant experience with the Massachusetts Department of Fire Services where over three decades, he held several key positions. Following his retirement, Brian has continued his active fire service involvement by serving as both a volunteer chief fire officer and through continuing to develop training and certification programs as a program Coordinator for the Massachusetts Department of Fire Services.

Mr. Duggan developed and directed the Graduate and Undergraduate Fire Science Programs at Anna Maria College in Paxton Massachusetts from 1995 - 2003. Mr. Duggan has a Business Management/Fire Science degree from Providence College and a Master's Degree of Business Administration (MBA) from Nichols College in Dudley, Massachusetts. He is also a graduate of the National Fire Academy Executive Fire Officer Program and the Senior Executive Program for State and Local Leaders at Harvard University. In December 2012, Mr. Duggan received a Master's Degree in Homeland Security through the Naval Post Graduate School based in Monterey, California, where his thesis entitled "*Enhancing Decision-making during the First Operational Period of Surge Events"* was selected as an outstanding thesis. He was one of the first fire service professionals to be designated as a Chief Fire Officer by the Commission on Fire Accreditation International.

Brian led the Massachusetts fire service through his affiliation as Chairman of the Fire Chief Association of Massachusetts Technology Committee and as a Regional Director on the Massachusetts State Fire Mobilization Committee. Mr. Duggan has authored several publications, inclusive of writing Section 7, Chapter 3, Fire Department Information Systems, in the Nineteenth and Twentieth Editions of the National Fire Protection Association's Fire Protection Handbook. Chief Duggan has been affiliated with MRI as a subject matter advisor since 2002 and he has served as Director of Fire Services since 2015. Currently, Mr. Duggan is regarded as an expert specific to fire service response to photovoltaic and battery energy storage

system (BESS) emergencies. He has developed several nationwide training programs providing first responders with new insight on these emerging challenges.

Team Leader:

David Houghton is a devoted fire and emergency management professional who has recently retired from the Wayland Massachusetts Fire Department after a distinctive 38-year career from being a call firefighter and rising through the ranks to Fire Chief. Along with dedicating his service to the City of Wayland, he continues to work for the Massachusetts Department of Fire Services as both an instructor and in the Special Operations Division doing special projects. In 1999 he was given the challenge by the State Fire Marshal to develop and implement what today is known as Special Operations. This development included designing, building and implementing specialized equipment and staffing to respond to Emergency and planned incidents throughout the Commonwealth. This program was a shared vision between David and the Fire Marshal and today has been shared in whole or in part in other areas of the country. David has a B.S. degree in Fire Science, an A.S. Degree in Fire Science and Technology, and has completed a Local Government and Management program with Suffolk University and the Massachusetts Municipal Association. David has a diverse background in Firefighting, EMS (ALS and BLS), Dispatch, Fire Prevention, Emergency Management, and operations. He is a nationally certified Firefighter, Fire instructor, Fire Inspector, Fire Officer. He is a certified Emergency Medical Technician both at the National Level and in the Commonwealth of Massachusetts.

David has most recently continued his fire service career by being appointed as a call firefighter with the City of Moultonborough Fire Rescue and is a certified New Hampshire Emergency Medical Technician. He continues to be active with the Commonwealth of Massachusetts Fire and Ambulance Mobilization team in the continuous updating and redevelopment of the program. Prior to his retirement as Fire Chief, David was an active member in the Massachusetts Fire District 14 where he was a driving force behind the creation of the District Operational budget, an operation manual and the formalizing of the various specialized teams within the district. David was also selected as the Chief overseeing the Fire District communications team and equipment as well as serving on several other progressive programs within the district. He is a member of the Fire Chiefs Association of Massachusetts, and the International Association of Fire Chiefs.

Team Member:

Eric Heath is a 30-year veteran of the fire service, beginning his fire service career in 1994 as a volunteer for the Enfield Fire District in Enfield Connecticut. He has been a career firefighter for the Southington Fire Department (CT) since 1999 and currently serves as the Fire Chief, Fire Marshal for the Southington Fire Department, with both operational and administrative responsibility. He is also the appointed Deputy Emergency Management Director for the City of Southington. Eric has been the principal grant writer of the Southington Fire Department since 2012, securing approximately $2.5M in grant awards for training, equipment, and manpower.

Eric graduated from the University of New Haven in 2011 with a Bachelor's Degree in Fire Service Administration, and from Columbia Southern University on 2015 with a Master's Degree in Emergency Services Management. In 2023 he graduated from Columbia Southern University with a Master's in Public Administration. Eric also completed the Executive Fire Officer program, through the National Fire Academy in 2019. He is a certified Fire Marshal, ProBoard/IFSAC Fire Investigator, and ProBoard/IFSAC certified Fire Officer 4. He is also a credentialed Chief Fire Officer (CFO) from the Center for Public Safety Excellence.

Eric was honorably discharged from the United States Army Reserve, as a Civil Affairs Specialist in 2001. He is a member of the International Association of Fire Chiefs (New England, EFO, and VCOS divisions), International Association of Emergency Managers, Connecticut Fire Chiefs Association, Connecticut Fire Marshal's Association, Connecticut Chapter of the International Association of Arson Investigators, and the Connecticut Fire Department Instructor's Association.

APPENDIX A

HOUGHTYS HEROES

Monthly News from the Wayland Fire Department

Volume Seven July 2017

Hazardous Materials Response: Around 11am on May 16th the duty officer received a call from a resident who stated a contractor that was cleaning out their house to sell, knocked over a bottle in the basement, and a strong odor and cloud were coming out of the bulkhead. The fire department responded with an engine, ambulance, duty officer and Chief who arrived to find that the cloud was produced from a container of 100% Nitric Acid. The area around the house was made safe, the occupants were all checked by EMS, and the State Hazardous Materials Response Team was called to neutralize the spill and make the product safe for disposal. This is something the Fire Department does not have the protective equipment or tools to do. This was a several hour project that involved a response from DEP since the site was close to the water, and eventually the State Police Explosive Unit who removed a quantity of black powder from the dwelling as well. After consulting with the Health Director the house was deemed safe to re-occupy the next day. This is the second time that we have had this type of incident at residential structures in the past two years, and both times it was family members cleaning out the house for the older parents that had passed away or moved to an assisted living center.

Diver Dan: The opening of the Town Beach on Memorial Day weekend (even though it rained) almost did not happen. As part of the inspection of the beach, the Health Department was notified of an "anchor" that was used to hold the docks in place was somewhere in the water and could injure people who came upon it or dived into the water. The anchor broke off last fall when the docks were moved. Although the Fire Department does not have a dive team and this was not something for which we could activate the district dive team, Lt. Dan Buentello (a certified recreational diver) was contacted to see if he wanted to help out. Dan arrived with gear in tow in the rain on Friday afternoon and located the missing anchor. The anchor was removed and the beach was declared safe to open. Kudos to Diver Dan for going above and beyond for Wayland Residents.

Dispatch Upgrade: The equipment and furnishings in dispatch are utilized 24 hours a day and have been in place for more than 16 years. Working with grant money, we are upgrading the work spaces for our dispatchers with more enhanced ergonomic individual work stations, and will be adding a third work station to be used for during storms, critical incidents, etc. The biggest challenge is to accomplish this while the center is still operating. It is our intention to have the vast majority of the work complete in August when the call volume is typically down. The coordination of the needed vendors during the summer months further adds to the challenge. With the help of firefighters and dispatchers we are already well on our way to moving around equipment and will be working with the vendor in early August to install the furniture.

Mulch Fires: We are seeing an increase in smoldering mulch this year. The mulch in and around flower and shrub beds is very dry, and the major cause seems to be careless disposal of smoking materials. Luckily, since the passing of a code two years ago not allowing mulch up against combustible materials, we have not seen any structural damage to buildings.

We Are Hiring: Well, not really, but we are preparing a list of potential candidates as we are anticipating losing two staff members before the end of the year. There are several local communities that are looking to hire paramedics to fill new roles within their departments, and they are having a hard time finding qualified certified paramedics to hire. Unlike other towns, we have worked with Human Resources to cast a wide net to look for people in various stages of fire and ems qualifications so we are ready when the need arises.

Dad and Me: The Fire Department was happy to work with the Wayland Dads and the Recreation Department on their first "Dad and Me" overnight campout at the high school Fathers' Day weekend. Lt. Williams and the Chief were on hand with an engine to be sure the "bonfire" was safe so the participants were able to safely melt their marshmallows for their s'mores and to provide lighting as needed overnight. Both groups did a great job on this event.

Canine Rescue Masks: Canine Companions donated three sets of animal oxygen masks for the department to carry on the first line fire apparatus. The kit has various size masks to fit a wide range of animals, and allows us to give them 100% oxygen when they need it. Although we cannot transport the animals to a vet or a hospital, we can at least assist their breathing until arrangements can be made.

Ride to school with C2: Every year as part of their fundraising efforts, each elementary school auctions off a ride to school with the Chief. This year three families got to ride to school with Assistant Chief Neil and received some hats and shirts, too. It's still not clear who had more fun, the Assistant Chief or the kids!

It Arrived: On June 28th the new Engine 2 was delivered to the station by our local dealer. Once the truck was inspected to make sure it met our specifications, we swapped paperwork, and the old Engine 2 was taken back in trade. It will take a few weeks to get the new Engine equipped and the staff trained, but it is our hope to have it in service at Station 2 in Cochituate by the end of July.

Extinguished: On May 20th Assistant Chief McPherson gave a class to the staff at the Carriage House on the proper use of fire extinguishers. This class had twelve participants who all were able to successfully put out a small fire and follow the proper procedures.

Way-Secure: We are proud of the collaboration between the Council on Aging staff and the Fire Department on the new Way-Secure program. We have met with several families and have been able to educate them and offer services to help keep them safe, and information provided assists fire and EMS staff when they are called upon. We know the program will grow in the coming months as the word gets out of the services available, most of which are free to residents. Anyone with questions is encouraged to call the Council on Aging or the Fire Chief's office.

Pictured: Chief Houghton, Administrative Assistant Sharon Maloney, COA Director Julie Secord, Outreach Coordinator Sue Hatton, Firefighter Todd Winner and Assistant Chief McPherson

Hazardous Waste Update: On June 21st Clean Harbors met the Fire Department to remove drums of hazardous waste that had been safely stored after being illegally disposed of on conservation property earlier this year. The police detectives are working with DEP and the District Attorney's Office on charges for this illegal dumping. Costs are currently being paid for by the Fire Department with hopes of restitution.

Biker Down: On May 17th a biker called 911 from his cell phone after he fell off his bike along the railroad tracks between Plain Road and the Weston town line. The ambulance and engine crew and the "Off Road Utility Vehicle" responded and found the male patient on the ground with an injured hip. The utility vehicle was driven down the tracks, however, the condition of the patient warranted a smooth carry out by the duty shift not over the bumpy railroad ties. Once the rail trial is complete, accidents like this will be much easier to respond to and will allow safer and smoother removal the potential patients to an ambulance.

Parade: As always the firefighters were proud to volunteer to march in the annual Memorial Day Parade. It is with great honor that we show our support for all those who are currently serving and those who gave their lives in all branches of the military.

Pictured: Lt. Ken McGuire, Assistant Chief McPherson, Captain Dan Buentello, Deputy Chief Andy Holland, Lt. Greg Halfpenny, Firefighter Dean Casali, and Firefighter Deb Durant

And The Roof Fell In: In the very early morning hours on May 25th the Fire Department responded to a house on Edgewood Road that had a tree fall into it. The house was unoccupied at the time, and the on duty shift had the power and gas shut off at the street to prevent a fire. The Building Commissioner met the Fire Department on site and deemed the house unsafe. The house will require a great deal of work before it can be safely lived in.