2025

Emergency Management Group

Township of Asphodel Norwood

Master Fire Plan

Township of Asphodel Norwood
A Growing Success

ANFR
FIRE/RESCUE

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EXECUTIVE SUMMARY

This Master Fire Plan (MFP) encompasses a comprehensive review of the Asphodel-Norwood Fire/Rescue and Emergency Services (ANFRES) strengths, weaknesses, opportunities, and challenges. This MFP also includes a review of the current services provided, as well as the Community Risk Assessment (CRA) report, and identifies present and future population statistics, along with the anticipated growth of the community. The Emergency Management Group Inc. (EMG) developed this 10-year Master Fire Plan for the ANFRES by conducting these reviews.

Benefits of Fire Service Reviews

The benefits of master planning are many, but the key advantages are:

- Having a clearer vision of what the future needs will require implementation and when,
- A guide that includes options and budgetary estimates for implementation,
- Prioritization of each project, and
- They enable communication with staff, internal stakeholders, and external stakeholders about the organization's future goals.

The recommendations in this MFP document are submitted to provide a set of strategies and goals for implementation, assisting the Fire Chief and Council in making informed decisions regarding the efficient allocation of ANFRES resources and staffing. The recommendations provided by EMG are in the following timelines:

Ultimately, implementing the recommendations will depend on the direction provided by the Asphodel-Norwood Council, the allocation of associated resources, and the ability to move forward with the recommendations outlined in the document.

Immediate
0 to 1 year (should be addressed **urgently** due to legislative or health and safety requirements)
Short-Term
1 to 3 years
Mid-Term
4 to 6 years
Long-Term
7 to 10 years
Future Consideration
Over 10 years

Scope of Work

As noted in the original Request for Proposal (RFP), the following outlines the Consultant's responsibilities in developing the Municipality's FMP.

This study and final document will include, as a minimum, the project's Scope of Work and Deliverables as follows:

- Assess present and future population statistics and anticipated growth.
- Evaluate past and present service levels provided by the ANFR in relation to service goals and expectations.
- Provide a comprehensive look at how well ANFR is meeting the needs of its staff and the community it serves.
- Recommendations shall comprise Operational Recommendations for Department consideration and Strategic Recommendations that require the approval and support of the Council to move forward.
- The Township of Asphodel-Norwood has initiated the proposal for a replacement of Fire Station 1 in the Town of Norwood, so the RFP shall address this possibility.

Master Fire Plan Process

As part of our engagement to develop a comprehensive Master Fire Plan, our firm has undertaken a detailed review and analysis of the fire department's current operations, services, and resources. The planning process is structured to ensure alignment with legislative requirements, best practices, and the unique needs of the community. The key areas of focus are outlined below:

- Governance

  We are reviewing all relevant provincial legislation, regulations, and municipal bylaws that govern fire protection services, with recommendations aimed at ensuring compliance and enhancing policy alignment.

- Service Delivery

  An assessment is being conducted on the current level and range of services and programs delivered by the fire department. Recommendations will consider projected community growth and evolving service expectations to identify future service delivery requirements.

- Emergency Response

  Our review includes an analysis of call volumes and trends, types of incidents, apparatus and resource deployment, response staffing, and the effectiveness of automatic and mutual aid agreements. Special operations capabilities (e.g., hazardous materials, technical rescue, marine and water/ice rescue) and firefighter safety will also be addressed.

- Training

  We are evaluating the fire department's training programs for both recruits and officers, with recommendations aimed at ensuring effective, consistent, and compliant training delivery across all levels.

- Apparatus and Equipment

  This includes a review of the department's fleet, fire apparatus, and major equipment, with a focus on age, condition, lifecycle management, utilization, and suitability for current and anticipated service demands.

- Maintenance Program

  We are examining maintenance practices related to fire vehicles, apparatus, and equipment, and will provide recommendations for ensuring operational readiness, safety, and asset longevity.

- Facilities

  A review of all fire department facilities—including fire stations, administrative offices, and dispatch centres—is being conducted. Recommendations will address optimal facility locations, configurations, and potential needs related to long-term service delivery goals.

- Administration

  The department's administrative structure and practices are under review, including staffing, policies, records management, information technology, purchasing, inventory, and customer service. Recommendations will support operational efficiency and accountability.

- Finance

  We are evaluating the department's budgeting processes, reserve strategies, and potential revenue opportunities. Recommendations will include financial models aligned with proposed service levels.

- Human Resources

  An in-depth review of staffing, including full-time and part-time/on-call roles, organizational structure, recruitment and retention strategies, job descriptions, succession planning, and occupational health and safety, is underway.

- Communications

  We are assessing the fire department's communication systems, including dispatch, paging, telephone systems, IT equipment, mobile and portable radios, and supporting infrastructure. Recommendations will enhance system reliability and interoperability.

- Emergency Management Program *(if applicable)*

  The department's role in the broader Community Emergency Management Program is being reviewed, with recommendations to support effective emergency preparedness and response.

- Community Risk Assessment

  We are reviewing the existing Community Risk Assessment in accordance with the Fire Protection and Prevention Act and O. Reg. 378/18. Recommendations will include updates or enhancements to ensure it remains accurate, actionable, and legally compliant.

Final Deliverables

Our recommendations will include service delivery options along with associated funding models to support Council's decision-making. The Master Fire Plan is designed to be a practical, strategic tool that ensures the fire department is well-positioned to meet the current and future needs of the community.

Summary Overview of Recommendations

Based on the information received during the meetings, the review of supplied documentation, and references to industry standards and best practices, there are 43 recommendations for consideration and inclusion by the fire chief, senior management, and council to assist in developing the plan. The Fire Chief will determine the implementation of recommendations in collaboration with the CAO and in alignment with the Council's priorities.

Further information regarding recommendations can be found in the section from which it originated. The EMG emphasizes that any cost estimates noted in this document can vary significantly based on when the recommendations are implemented and to what extent they are adopted, as well as what the Fire Chief ultimately recommends.

Note: A chart found in Section 10 outlines all the recommendations, their suggested implementation timelines, estimated costs and rationale.

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DEFINITIONS

Immediate	Urgent addressing due to legislative or health and safety requirements.
Short Term	1 to 3 years
Mid-Term	4 to 6 years
Long-Term	7 to 10 years
Future Consideration	Over 10 years

ACRONYMS

ANFRES	Asphodel-Norwood Fire/Rescue and Emergency Services
CAO	Chief Administrative Officer
CEMC	Community Emergency Management Co-Ordinator
CRA	Community Risk Assessment
CRR Plan	Community Risk Reduction Plan
CRRP	Community Risk Reduction Plan
EMCPA	Emergency Management and Civil Protection Act
EMG	Emergency Management Group Inc.
EMPC	Emergency Management Program Committee
ERO	Emergency Response Plan
EOC	Emergency Operations Centre
FPO	Fire Prevention Officer
FUS	Fire Underwriters Survey
HIRA	Hazard Identification and Risk Assessment
HRFP	Health-Related Fitness Programs
IMS	Incident Management System
MECG	Municipal Emergency Control Group
MEP	Municipal Emergency Plan
MFP	Master Fire Plan

ACRONYMS

NFPA	National Fire Protection Association
NGO	Non-Governmental Organizations
OBC	Ontario Building Code
OFC	Ontario Fire Code
OFM	Office of The Fire Marshal
OHSA	Ontario Occupational Health and Safety Act
PPE	Personal Protective Equipment
RFP	Request for Proposal
PFS	Peterborough Fire Service
PPS	Peterborough Police Service
RMS	Records Management System
SCBA	Self-contained breathing apparatus
SOG	Standard Operating Guidelines
SOP	Standard Operating Procedures
TTE	Tabletop Exercise

Introduction

INTRODUCTION

Project Methodology

The EMG has based its review process on the municipality's initial Request for Proposal (RFP) and EMG's proposal response document. EMG completed this MFP utilizing best practices, current industry standards, and applicable legislation as the foundation for all work undertaken.

The EMG also utilized quantitative and qualitative research methodologies to understand the community's current and future needs and circumstances. The methodology involves considerable research, documentation review, data analysis, and stakeholder consultation. From that, the report and the recommendations were derived. The final product is a living document that provides a high-level strategic direction for the municipality and its fire department. To accomplish the scope of requirements, EMG has:

- Reviewed the Establishing and Regulating Bylaw.
- Reviewed applicable municipal, provincial, and federal legislation.
    - Identified and compared industry best practices for fire and emergency services performance measurement.
- Reviewed several documents from the planning department regarding the community and growth areas.
- Pending availability, reviewing previous risk assessments, the council's strategic priorities, and other pertinent documents.
- Assessed the current Community Risk Assessment and considered the Community Risk Profile, including building stock, industry, care occupancies, transportation networks, etc.
- Reviewed current service agreements with neighbouring municipalities.
- Gathered information on operational requirements, including past and current response statistics (call volumes/response times) to analyze trends, staff availability/needs, response capabilities, etc.
- Reviewed ANFRES' administration, including staffing, organizational structure, administrative support, record keeping, information management/technology, purchasing, and inventory control.
- Toured the fire stations and conducted a location/ response analysis.
- Examined fire vehicles, apparatus and equipment, including the maintenance program.
- Reviewed fire service policies, procedures, emergency response operational guidelines, training programs and records.

- Collected information on the fire prevention program, including education programs, inspection reports/data, enforcement data, and investigations.
- Reviewed current staff recruitment and retention practices, promotional policy, succession planning and demographics.
- Review the operational and capital budgets, the reserves, and revenue generation programs, including the Township's Development Charges By-law.

Based on these criteria, the consulting team, through meetings and surveys with members of the council, the municipality's senior leadership team, firefighters, and community stakeholders, completed a thorough review of elements that are working well and areas requiring improvement within the fire department.

Performance Measures and Standards

This MFP has been based upon (but not limited to) key performance indicators identified in national standards and safety regulations, such as:

- The Fire Protection and Prevention Act (FPPA)
- The Office of the Fire Marshal (OFM) Communiques
- The Ontario Occupational Health and Safety Act (OHSA) and the National Institute for Occupational Safety and Health (NIOSH)
- The Ontario Fire Service, Section 21, Advisory Committee Guidance Notes
- The National Fire Protection Association (NFPA) standards
- The FUS technical documents

Project Consultants

Several EMG staff were involved in the collaboration and completion of this MFP, and the overall review was conducted by:

- Darryl Culley, President
- Lyle Quan, Vice President of Operations and Quality Assurance
- Greg Hankkio, Fire Service Consultant, and
- Rick Monkman, Fire Service Consultant

The team has amassed considerable experience in all aspects of fire and emergency services program development, review, and training.

Section 1

Community and Fire Department Overview

Emergency Management Group

SECTION 1: COMMUNITY & FIRE DEPARTMENT OVERVIEW

1.1 Community Overview

The Corporation of the Township of Asphodel-Norwood became incorporated on January 1, 1998, after the amalgamation of the Village of Norwood and the Township of Asphodel. The Township is a growing rural community that blends rural, village, and cottage living. The Township comprises several villages and hamlets, including the following communities: Birdsall, Birdsall Station, Norwood, and Westwood.

With 161.62 square kilometres in southern Peterborough County, Asphodel-Norwood encompasses the historic villages of Norwood and Westwood, boasting a population of 4,658 as of 2021.[1] The population density is 28.8 persons per square kilometre. The Township has a rich history dating back to the early 1800s and was the traditional territory of the Mississauga First Nations.

TABLE #1 - ASPHODEL-NORWOOD PERMANENT POPULATION BY YEAR

Year	2016[2]	2021
Asphodel-Norwood		
Population	4,109	4,658
% Population Increase/ Decrease	+1.7% from 2011	+13.4%
Norwood		
Population	1,380	1,585
Population Increase/ Decrease	-0.7% from 2011	+14.9%

The six trailer parks, which house approximately 2,540 trailers during the summer, can accommodate up to 630 seasonal guests. The Township offers numerous sports opportunities,

[1] Profile table, Census Profile, 2021 Census of Population - Asphodel-Norwood, Township (TP) [Census subdivision], Ontario, Accessed May 2025, https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?Lang=E&DGUIDlist=2021A00053515003&GENDERlist=1,2,3&STATISTIClist=1,4&HEADERlist=0

[2] Census Profile, 2016 Census - Asphodel-Norwood, Township [Census subdivision], Ontario and Peterborough, County [Census division], Ontario, Accessed May 2025, https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3515003&Geo2=CD&Code2=3515&SearchText=asphodel&SearchType=Begins&SearchPR=01&B1=All&TABID=1&type=0

including a modern single-pad arena, a baseball diamond, a skateboard park, a children's splash pad, and a playground.

The population growth forecast for the County of Peterborough is between 30 and 50% between 2023 and 2051.[3]

Development in Norwood has historically occurred adjacent to the Ouse River. The Ouse River is a tributary of the Trent River with an upstream drainage area of over 125 hectares.[4] Two significant residential developments are in progress, to the Township's credit and in support of provincial legislation promoting residential growth. Upon each development's completion, the forecasted growth is expected to exceed 500 new residents. As with new residences, the call volumes and demands on ANFRES for service will also increase.

One area the province would like to see intensified is through the development of multi-unit residential structures, such as low- and high-rise buildings. Currently, the Township's limit on the number of storeys is three. However, growth depends on the Township's service provision, such as water supply and wastewater collection. Two developments are currently on hold due to the lack of wastewater capacity to serve the areas. Upgrading to either system is very expensive and may burden current taxpayers if no external funding sources materialize from the Provincial and Federal governments. For any growth, the onus is typically on the developer to install the infrastructure for the development.

Often forgotten and not put in place before occupancies are permitted are the construction of facilities to house emergency services, school additions, recreation and library facilities. Collections from the Development Charges By-law typically cover the funding needs associated with these facilities. In many situations, adequate funding is unavailable, and the municipality must raise taxes or issue a debenture to cover the costs.

1.2 Fire Service Overview

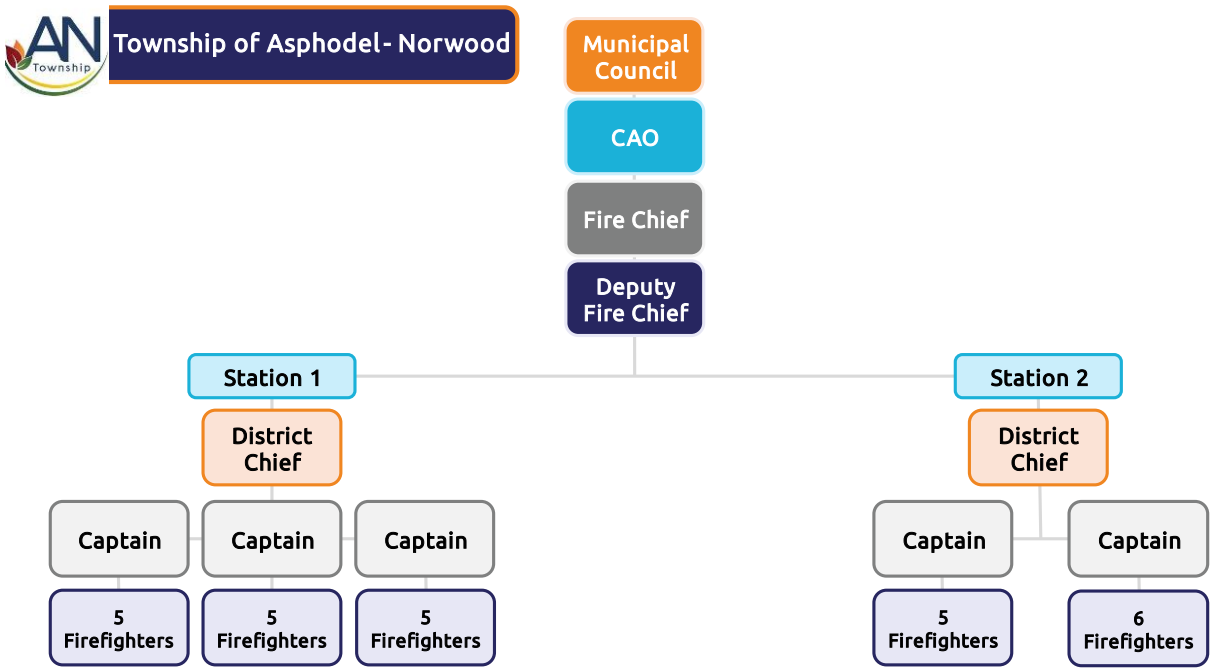
The ANFRES consists of two fire stations staffed by 35 paid-on-call (POC – volunteer) firefighters under the direction of a full-time fire chief. The department responds to approximately 400 calls, including fires, medical assistance, hazardous materials (HAZMAT) incidents, complaints about burning debris, and motor vehicle collisions.

[3] Ontario population projections | ontario.ca, Accessed May 2025, https://www.ontario.ca/page/ontario-population-projections

[4] Draft County Official Plan, Accessed May 2025, https://www.ptbocounty.ca/en/growing/resources/New-Official-Plan/New-County-OP-as-adopted--amended-full---2022-06-29.pdf

The department's present organizational structure appears to be meeting its current needs. However, a new reporting structure will need to be developed as the organization grows. Noticeably missing from the chart are the following Divisions: Administrative Assistant, Training, Fire Prevention, Dispatch Services, and Fleet/Mechanical. Some departments have also included support services such as Mental Wellness and Chaplaincy.

FIGURE #1 - ANFRES ORGANIZATIONAL CHART



During this review of the ANFRES, the EMG undertook a high-level SWOT (strengths, weaknesses, opportunities, and threats) analysis. Overall, ANFRES is a well-run organization with very competent officers at the helm, supporting a dedicated team of firefighters.

Strengths

- Senior officers supported by a strong officer core, engaging a professional group of firefighters
- The department's capabilities with the resources available
- The dedication and commitment of its membership.
- A well-designed training regimen supported by the Eastern Ontario Emergency Training Academy (EOETA).

- The community holds the department in high esteem.
- A robust hiring practice is in place for recruits, ensuring they are fully aware of the commitment required to be a member of ANFRES.

Weaknesses

- The Provincial and Federal Governments' downloading of costs is having a financial impact on the department.
- Maintaining the required competencies to maintain NFPA certifications
- The economic reality that faces the municipality.
- The aging of Stations 1 and 2, as both require substantial upgrades or replacement.
- The number of personnel in the department has remained unchanged since 1998, placing additional pressure on those who respond due to the limited personnel resources.

Opportunities

- The projected growth of Asphodel-Norwood will have a direct impact on the operations and service levels provided by the ANFRES due to increased call volumes and demand for fire prevention-related matters, such as inspections and public education.
- Increase the number of personnel in the department, both full-time and paid-on-call members.
- To prepare for the anticipated growth over the next five to ten years, ANFRES should initiate a robust fire inspection and public education program to reduce the risk of fires occurring.

Threats

- Maintaining NFPA competencies due to course availability, fiscal responsibility and constraints on the operation of the department and meeting the requirements as established by the OFM.
- The high costs associated with replacing fire apparatus and equipment that meet industry standards and best practices, such as FUS replacement schedules, ensure there is little to no impact on insurance grades set for the Township.

To tie into the SWOT analysis, a review of current and future challenges helped provide a picture of how the department will look in the years to come.

- The most significant challenge is the financial realities of maintaining two fire stations and the required apparatus to meet the current and future needs of the Township.
- There is a need to develop and implement a succession plan for the senior officers as they retire. Several have been with ANFRES for over 40 years.

Planning for ANFRES's management of future demands on the department, caused by current and future growth. Increasingly, people are leaving urban areas to move into rural Ontario, placing pressure on all municipal services. Compounding the issue is that many of the new residents come from built-up areas that have many more services than what the Township is capable of providing, such as libraries, recreational facilities with pools and multiple ice rinks, and a career fire department that responds within a couple of minutes versus a paid-on-call one where it takes longer to amass a crew to respond.

Soon to be considered is the need for a full-time fire chief, supported by a full-time multi-role fire prevention/public educator/firefighter and a full-time training officer/firefighter. Current demands on the fire chief, with their limited hours available, result in their working past their allotted time. Meeting the administration, training, and fire prevention needs of the department results in their working past regular hours. Each of these is discussed further in this MFP.

1.3 Assessment of Current Fire Services By-laws and Agreements

When assessing a fire department and its operations, examining fire service-related bylaws offer valuable insights into its objectives and standards.

1.3.1 Establishing & Regulating By-law – 2019-32

The Establishing and Regulating By-law (E&R By-law), 2019-32, supports the fire administration in fulfilling the Council's needs and expectations. The document requires reviewing and updating to reflect changes aligned with the municipality's requirements and the fire department's operational needs. The E&R By-law must comply with the *Fire Protection and Prevention Act* 1997.

The E&R By-law serves as the Council's directive to the fire department, outlining the services the ANFRES provides.

By-law 2019-32 is the updated version of By-law 2013-27. It identifies a progression to provide the best level of service to residents while respecting the financial challenges faced by all municipalities. The ANFRES and the Municipality should be pleased to have updated this By-law, but it is due to be revisited and revised to meet the current needs of the Township. Bylaws

affecting fire department operations require annual review or review as significant changes occur in either community. Doing so will ensure that the fire chief's noted service levels, expectations, and authority align with the changing needs of the community.

As part of any bylaw update process, drafts require vetting by the municipality's solicitor before being presented to the Council for approval. The fire chief should also consider bringing the E&R By-law forward to newly sitting councils every four years. Doing so will enable new council members to understand the level of service provided to the community and the Council's responsibility to fund this level of service, as established by the Council.

In collaboration with the fire chief, the council must establish an objective, definitive response time in the E&R Bylaw. The NFPA recommends completing some assessments to evaluate a baseline for a department's response time goal. This review aims to provide an understanding of the department's performance and identify areas for potential improvement, including station location, vehicle allocation, and staffing distribution.

An updated E&R By-law should reflect new legislation, changes in the types and levels of response, and training expectations. Consideration should also include reference to such guidelines and standards as:

- Section 21 Firefighter Guidance Notes
- *Occupational Health and Safety Act* (OHSA) of Ontario
- OFM Guidelines concerning staffing and response recommendations.
- *FPPA* 1997
- Related NFPA Standards that deal with:
    - Training
    - Fire prevention and public safety programs
    - Fire department response goals and objectives
    - Communications and vehicle dispatching
    - Response times.
    - Fleet and Maintenance
- Underwriters Laboratories of Canada (ULC), Canadian Standards Association (CSA) and Fire Underwriters Survey (FUS)

By incorporating these guidelines and standards, the Council supports ANFRES' efforts to ensure that staffing, training programs, fire prevention, public education initiatives, and community response adhere to industry best practices.

Recommendation #1

Fire Administration is to review the bylaws that affect the daily operations of the fire department.

The Mission Statements, while similar, are not identical. The Fire Chief should author their preference to meet the current operations of the ANFRES. Once completed, include the three statements in the E&R By-Law as they guide the fire department. The following are definitions of what each statement is and what it includes:

Mission Statement

The mission statement defines the core purpose of the fire department and serves as a foundational element in strategic planning. It communicates the department's role within the community, its primary responsibilities, and its overarching goals.

As part of the Master Fire Plan process, the development or refinement of the ANFRES mission statement will be guided by the following key questions:

- What does the ANFRES do today?
- Who does the ANFRES serve?
- What does the ANFRES wish to accomplish?
- What goals does the ANFRES want to achieve?

The resulting mission statement will articulate the department's purpose in a clear, concise manner and act as a touchstone for future planning and decision-making. It will ensure alignment between departmental operations and the needs and expectations of the community it serves.

Vision Statement

The Vision Statement outlines the long-term aspirations of the fire department. It serves as a forward-looking declaration of what ANFRES strives to become and achieve, both operationally and in terms of its impact on the community.

In developing the Vision Statement, the following guiding questions are considered:

- Where is ANFRES going forward?
- What goals does ANFRES wish to achieve in the future?

- What will society look like in the future?

The Vision Statement will express a compelling picture of the future for ANFRES, motivating continuous improvement and innovation while serving as a framework for strategic priorities.

Values Statement

The Values Statement defines the fundamental beliefs and ethical principles that guide the actions, decisions, and culture of ANFRES. It represents the core commitments that underpin how the department interacts with the public and with one another.

Key questions informing the development of the Values Statement include:

- What does the ANFRES stand for?
- What behaviours does the ANFRES value over all else?
- How will the ANFRES conduct its activities to achieve what the Mission and Vision Statements state?
- How will the ANFRES treat its members and the citizens of the community it serves?

Together, the Mission, Vision, and Values Statements will provide a unified and inspirational framework that shapes the identity of ANFRES and guides all aspects of its operations and planning.

Lacking is the need to complete a risk assessment, which should be a Community Risk Assessment (CRA). The bylaw should state that CRAs shall comply with the Office of the Fire Marshal (OFM), *Regulation 378/18*, CRA, which came into effect on July 1st, 2019.[5] Bylaw 2019-032 became effective before this legislation took effect. It should also specify the need for an annual review and the production of a new document every five years. It should also identify the Community Risk Reduction Plan (CRRP) and implementation as part of the CRA.

Recommendation #2

ANFRES develops a Vision and Values statement to support the Mission Statement and includes them in the Establishing and Regulating By-law Schedule.

Upon the Council's approval, the Fire Chief post the three statements at each fire station.

The *FPPA* requires fire departments to have a smoke alarm program, and it should expand to include carbon monoxide (CO) alarms, which

[5] O. Reg. 378/18: COMMUNITY RISK ASSESSMENTS (ontario.ca), Accessed May 2025, https://www.ontario.ca/laws/regulation/180378

became mandatory in 2014. The program, including its purpose, goals, and expected outcomes, should be included in the new document. Fire departments are including a fire prevention policy in their E&R bylaw, supporting the three lines of defence.

It would be appropriate to include whether the fire apparatus carries smoke alarms and carbon monoxide alarms. These safety devices, as legislated requirements in homes, will be installed before the firefighters depart the scene, regardless of the reason for their presence. Doing so is a great community fire safety initiative.

Other items to consider changing within the current bylaw include:

- Reference the Ministry of Labour's Section 21 Guidance Notes.
- Consider changing the reference to the firefighters from "volunteer" to "paid-on-call." Doing so will better reflect that the Township compensates fire department members for their service.
- The By-Law's Schedule "A" requires updating and should include future pay rates for the next four years, when this By-Law needs to be revised.
- The organizational chart (Schedule "C") does not identify the roles of the administrative assistant, fire prevention, training, and dispatch within the organization.
- The level of service provision for technical rescue and hazardous material (HAZMAT) incidents is in the bylaw. Still, an elevator rescue or its response level is not.
- The bylaw states that ANFRES responds to water rescue and, thus, requires more specific identification regarding the type of water rescue, i.e., surface, swift, dive, vessel and flood, per NFPA 1006.
- Since ANFRES responds to the awareness level for most technical rescue and HAZMAT incidents, the bylaw's mitigation strategy includes the department's participation in the Peterborough County Specialized Rescue Unit. Still, it does not identify the team's response level or whether the training meets the NFPA Standards.
- Include the full cost recovery of any expenses associated with technical rescue and HAZMAT incidents in the by-law provisions.
- Suggested that the bylaw include a list of all agreements and memoranda of understanding with outside agencies or third parties, such as Dispatch, Tiered Medical, etc. and associated bylaws.
- An Article should include the level of training required for the firefighters to attend a tiered medical incident and whether they are trained on the use of an automatic external defibrillator (AED) or permitted to administer medications such as naloxone, epinephrine (EPI-PEN), or 81 mg acetylsalicylic acid (ASA).

- Include whether there are PTSD and Cancer Prevention Programs as legislated.
- Identify whether a Respiratory Program is in place and compliant with the OHSA, O. Reg., 833, O. Reg. 490/09, CSA Z.94.4, NFPA 1981 and Section 21, GN 4-9.
- The construction of the fire apparatus must comply with NFPA 1901 and CAN/ULC S-515.
- As mentioned, include a baseline response time and goals based on NFPA 1720.
- Identify who is responsible for fire investigations and their required NFPA 1033 qualifications, including certification.
- Move from the list of duties of the Division of Fire Suppression Clause C to the Division of Fire Prevention to meet industry best practices and the FPPA.
- Make mention of Asset Management Planning for Municipal Infrastructure Regulation, *O. Reg. 588/17* (as amended by *O. Reg. 193/21*), effective January 1, 2018, and Record Management Programs and retention policies. Effective January 1, 2016, amendments came into force mandating enhanced records retention procedures under Ontario's two public sector privacy and access laws – the *Freedom of Information and Protection of Privacy Act* (FIPPA) and the *Municipal Freedom of Information and Protection of Privacy Act* (MFIPPA).
- List any Fire Protection, Automatic or Response (i.e., HAZMAT/Tech Rescue with the City of Peterborough) Agreements in place.
- Include the dispatching agreement and bylaw.

1.4 Assessment of Other Fire Services Related By-laws

1.4.1 Open Air Burning By-Laws – 2016-79, 2022-22 and 2023-10 as Amended

The Open-Air Burning By-law stipulates the parameters for outdoor burning within the Township of Asphodel-Norwood. It came into effect in 2016 and is nine years old. Since there have been at least two amendments to the original Bylaw 2016-79, incorporate them into a new bylaw. The original Bylaw of 2016 should be reviewed and updated before being considered by the Council. Doing so will reflect current trends in fire safety, reduce the risk of both structure and wildland fires, and make the community a safer place to live.

The following needs inclusion in the revised bylaw:

- The amended bylaw should reference the Ontario Fire Code Article 2.4.4.4.

- Reference O. Reg 256/14, amendments to the FPPA.
- The bylaw should reference O. Reg. 207/96, Outdoor Fires, from the Forest Fires Prevention Act.
- With the increase in residential occupancy and population, there is also an increase in the burning of leaves and grass clippings. Burning this vegetation should be prohibited unless in a rural setting and approved by the Chief Fire Official.
- Consider including the importance of proper installation and use of wood-burning outdoor furnaces, which are gaining popularity. If not correctly installed and used, they can be a fire hazard.
- The By-law should include approved manufactured burning appliances with spark arrestors, as found in chimineas.
- It should also state that manufactured appliances should not be placed or used on wooden surfaces, such as decks and porches.

1.4.2 Fireworks By-Law

Most municipalities have a standalone bylaw specific to the sale and discharge of fireworks. Asphodel-Norwood lacks a bylaw to regulate the sale and discharge of fireworks. If a by-law is developed and brought forward for the council's approval, consider the following clauses:

The bylaw should include specifics regarding recreational usage, public high-hazard displays, and those released during a show or music concert, such as pyrotechnics.

The municipal authority to control fireworks rests within the Ontario Fire Code (OFC) O.Reg. 213/07, Division B, Part 5, ss 5.2.

Consider the following for inclusion in a stand-alone Fireworks By-law:

- Reference the federal regulation regarding the training required to set off commercial and pyrotechnic fireworks.
    - Doing so will direct those who need this training and education and assist them in locating the supporting information. The bylaw should differentiate between consumer, display, and pyrotechnic fireworks, as defined in the *Explosives Act, R.S. c. E-15*.
- The bylaw should include the importance of fire safety while setting off fireworks. Therefore, it would also be appropriate to have safety information on the proper method of setting off fireworks and the equipment worn by those setting off consumer fireworks.

    - Along with this document, it will also be essential to outline the need for some form of extinguishment that should be readily available, such as a pail of water, a fire extinguisher, or a garden hose.
- List the occasions and holidays when the public may set off fireworks, such as Victoria Day, Canada Day, Simcoe Day (Civic Holiday), New Year's Eve, and some religious celebrations.
- Beaches and parks are prevalent locations for parties, and a section should address the discharge of fireworks on public lands, such as parks.
- Include a requirement that all those discharging high-hazard fireworks have completed the National Fireworks Certification Program (NFCP) on discharge.[6]
- The document should include when fireworks, such as wind gusts exceeding a pre-determined speed, should not be discharged.
- A guide on how to set off "Family Fireworks" should be written, i.e., use a pail of sand to place the firework in, have a charged garden hose or a fire extinguisher close by, keep children away from the discharge area, etc.
- For discharging high-hazard ordinances, the ANFRES should conduct a pre-event inspection of the site to ensure it complies with the application by a member of ANFRES who has completed the NFCP course.
- The bylaw must include a fire apparatus with four firefighters standing by at the site of high-hazard firework displays.
- There should be at least two post-event inspections of the area adjacent to the discharge zone to look for unexploded ordnance. One takes place the night of the display, and the second the following morning during daylight hours.
- The Fees and Charges By-law should include pre- and post-discharge inspections, as well as the standby fire crew.

[6] Fireworks operator certification - Natural Resources Canada, Accessed May 2025, https://natural-resources.canada.ca/minerals-mining/explosives-fireworks-ammunition/fireworks-pyrotechnics/fireworks-operator-certification

1.5 Policies, Guidelines, & Procedures

Fire department policies and guidelines have immense value for a department. They are the foundation of a fire department's success. The backbone of any fire service is its Departmental Policies, Standard Operating Procedures (SOPs), and Standard Operating Guidelines (SOGs), which govern and provide direction for its operations.

Policies - Policies are the foundation for all operations in the fire service. From apparatus maintenance to anti-retaliation policies, these guidelines establish expectations, offer guidance, and safeguard firefighters and fire departments. A high-level statement that expects consistent compliance. It permits very little to no flexibility.

Guidelines - Standard Operating Guidelines (SOGs), similar to Standard Operating Procedures (SOPs), are crucial for fire department training and operations. They spell out the dos and don'ts for fire department personnel, sometimes as strict requirements and other times as recommended best practices. A standard with an acceptable level of quality or attainment. It provides direction on how to act in each situation with non-mandatory controls.

Procedure – NFPA 1561 Clause 3.3.57 best describes what a procedure is and why they are important. A requirement with an acceptable level of quality or accomplishment in a series of detailed steps to accomplish an end. There are step-by-step instructions for execution and completion.

The ANFRES has many SOPS/SOGS in place. While there are many, the titles are confusing because the header in some boxes refers to "Policy," and the Statement of Intent, Admn-01, refers to Guidelines. For this section, EMG will refer to them as SOGS. There needs to be consistency throughout all directives regarding whether they are Policies or Guidelines, as defined above. A community's circumstances and needs constantly change, so ensuring all the SOGS are current is an ongoing requirement. To ANFRES' credit, each SOG has a history log of reviews and/or updates.

Reviewing the SOGS can be an incredibly detailed and very involved process. Writing new Standard Operating Guidelines (SOGs) and maintaining existing ones is a daunting task that should not be the sole responsibility of the chief officers. The ANFRES does not have an SOG committee per se, as all its officers aid in developing and reviewing previously developed ones. The officers regularly meet to create new Standard Operating Guidelines (SOGs) and review older ones, thereby relieving some pressure on the chief officers.

The development of a structured SOG Committee, with representatives from all ranks and divisions of the department, would then create its Terms of Reference, which would be a great benefit to the ANFRES in several ways:

- Updated and current SOGS.
- More staff would be more involved in the fire department operations.
- Continues to provide a safer environment for members to work.

Some fire departments review a third of their SOGS annually. Adopting this procedure ensures that the entire set of documents receives a full review every three years.

The Section 21 Committee is part of the *OHSA* initiative for firefighter safety. A good source of information is Section 21 Guidance notes, which are kept current by a provincial team of fire service personnel. The many NFPA standards are also good resources for developing SOGS.

For a fire department to operate safely and efficiently, it is imperative that all members adhere to all policies and SOGS, and those who fail to do so should be held accountable.

Recommendation #3

Establish an SOG Committee representing all divisions of the ANFRES that develops new SOGS and reviews current ones regularly.

Section 2

Risk Assessment

Emergency Management Group

SECTION 2: RISK ASSESSMENT

2.1 Community Risk Assessment Data

Risk assessment is the process used to identify the level of fire department services required within the Municipality's boundary. It measures the probability and consequences of an adverse effect on health, property, an organization, the environment, or a community due to an event, activity, or operation.

The Council has the authority to establish fire protection within its Municipality. The fire chief is responsible for informing the Council of all risks existing within the community. Therefore, the Community Risk Assessment (CRA) aims to provide an overview of identified risks within Asphodel-Norwood, along with suggested options for mitigation. Based on this information, the Council can decide on the service level that ANFRES will provide.

O. Reg. 378/18 Community Risk Assessment (CRA) states that "…*every municipality shall complete a CRA by July 2024, with renewal to occur every five years*." Asphodel-Norwood's 2023 Edition of its CRA requires an annual review and updating as the municipality's needs and circumstances change.

The accumulation and analysis of the following factors will assist in applying this information to identify potential risk scenarios. It is during the assessment of the information gathered, which includes the likelihood of these scenarios occurring and subsequent consequences, while answering the following questions:

- What could happen?
- When could it happen?
- Where could it happen?
- To whom could it happen?
- Why could it happen?
- What is the likelihood that it could happen?
- How bad would it be if it happened?
- What programs need development to mitigate or prevent any or all of the above?

Once answered, these questions will frame the basis for formulating and prioritizing risk management decisions to reduce the likelihood of these incidents and mitigate their impact. The completed CRA may identify gaps and areas where conditions vary from the desired outcomes.

Data reviewed for each mandatory profile include:

Demographics Profile – Includes age, gender, educational attainment, socioeconomic makeup, vulnerable individuals or occupancies, transient population, and ethnic and cultural considerations.

Critical Infrastructure Profile – The facilities and services that contribute to the interconnected networks, services and systems that meet vital human needs, sustain the economy, and protect public safety and security.

Geographic Profile – Considers waterways, highways, and other landforms, railroads, wildland-urban interface, bridges, and other specific community features.

Building Stock Profile – Potential high-risk occupancies, whether residential, commercial, or industrial, building density, building code classifications, structure(s) age, occupancies that could be a high life safety risk, and historic buildings.

Public Safety Response Profile – How are resources other than fire department-related services distributed within the community, their deployment and usage, types of incidents responded to and the frequency of such incidents, including the seasonal variations and time of day?

Community Service Profile – Existing planning and zoning committees, schools, seniors' organizations, ratepayers' associations, mental health organizations, faith-based groups, and cultural/ethnic groups.

Hazard Profile – Human, technological, or natural hazards.

Economic Profile – Review the infrastructure, local employers and industries, institutions, the community's tax base, and local attractions.

Past Loss/ Event Profile – Consideration of the impact and frequency of an event; identify significant acute events with a low frequency but a high impact or small chronic events with a high frequency and a low impact.

The CRA is a separate document from this MFP. During its completion, the fire chief should have reviewed the risks and initiated discussions of their findings with the Council, the Chief Administrative Officer (CAO), and senior management. When compiled, recommendations and options for mitigation within the CRA and this MFP will form the basis for developing a Community Risk Reduction (CRR) Plan.

2.1.1 The Township of Asphodel-Norwood Fire Loss Statistics

The OFM provided the following information and documents, which were obtained from past reports supplied to EMG. The following data is an overview of concerns within the community, from the highest to the lowest level, for ease of review. This information will assist in formulating and implementing fire prevention and public safety awareness initiatives. The following information concerns occurrences within the Township of Asphodel-Norwood, regardless of the responding fire department.

The Township of Asphodel-Norwood Fire Loss by Property Classification

Based on the information received from the OFM's Standard Incident Reporting (SIR)system, the following building classifications for property loss are listed based on the number of fires in each occupancy from 2020 to 2024:

- Group C - Residential – 60% of all structure fires (15), of which nine were in residential occupancies, with damage totalling $2,740,000.
- Classified under the National Farm Building Code - it accounted for 6% of all the fires, totalling 10, and fire loss totalling $500,000.
- Structures/ Properties - Not classified by the Ontario Building Code - accounted for 13% of this type of fire, totalling two, with $60,000 in damage.
- Group D – Business and Personal Services - accounted for 20% of the structure fires, totalling $855,000 in damage.
- Historically, the losses are often the focal point of a structure fire, while the property saved from the fire is not. A fire may incur $1 M in damage but $3 M in property saved.

Note: *The following fire data pertains to the Township of Asphodel-Norwood and does not include areas where ANFRES provides fire protection in surrounding municipalities.*

The Township of Asphodel-Norwood Reported Fire Cause

Assessing the possible cause of the fires is essential when identifying potential trends or areas considered for introducing additional public education on fire prevention initiatives as part of the community fire protection plan in conjunction with the CRR Plan.

The leading causes of fires were:

- Mechanical/electrical failure accounted for 40%, with a total of six fires
- Misuse of ignition source/ materials first ignited accounted for 7%, with a total of one fire

- Undetermined accounted for 20%, with a total of three fires
- "Other" accounted for 7%, with a total of one fire
- Unintentional undetermined accounted for 20%, with a total of three fires
- Notably, over the 5 years, there were no intentionally set structure fires with damage.

The Township of Asphodel-Norwood Ignition Source Class

The leading causes of ignition sources were:

- Miscellaneous accounted for 27%, with a total of 4 fires
- Electrical distribution equipment accounted for 20%, with a total of 3 fires
- Other electrical/mechanical accounted for 20%, with a total of 3 fires
- Cooking equipment accounted for 13%, with a total of 2 fires
- Heating equipment, chimney, etc., accounted for 6%, with a total of 1 fire
- Exposure accounted for 6%, with a total of 1 fire
- Lighting Equipment accounted for 6%, with a total of 1 fire

The compiled data indicate that most fires occur in residential occupancies, with mechanical or electrical failure being the leading cause. In many cases, the ignition source is from miscellaneous means.

2.2 Community Risk Assessment

Completing a CRA enables the Municipality and its fire service to make informed decisions about the fire protection they will provide to their residents. Risk measures the probability and possibility of an event that could adversely affect the community, including health, property, organization, environment, and society. The most effective way to mitigate any fire risk is to address the threat before the fire department is required to respond.

To develop an effective community fire safety plan, the OFM identifies a fire protection planning strategy known as the "Three Lines of Defence" (refer to table #3). Applying this strategy highlights the importance of recognizing that there are options for developing an effective community fire safety plan through education, code enforcement, and emergency response. Although emergency response (fire suppression) will always be required, this is a reactive endeavour. A fire service must proactively optimize public fire safety programs within the community.

Preventing fires from occurring can be effective through a robust fire prevention program that includes ongoing fire inspections, smoke and carbon monoxide alarm initiatives and public education.

TABLE #2 - OVERVIEW OF THE THREE LINES OF DEFENCE

Line of Defence	Description
Public Education and Prevention	Educating community residents on ways to fulfill their responsibilities for fire safety is a proven method of reducing the incidence of fire. Only by educating residents can fires be prevented, and those affected can respond correctly to save lives, reduce injury, and reduce the impact of fires.
Fire Safety Standards & Enforcement	Completing inspections and enforcing the OFC will ensure that buildings have the required fire protection systems and safety features. This necessity may require property owners or tenants to develop and implement fire safety plans, as well as maintain functioning smoke alarms and sprinkler systems, which will help minimize the effects of a fire.
Emergency Response	Fire departments require well-trained and equipped firefighters, directed by capable officers, to suppress the spread of fires once they occur and protect the lives and safety of residents.

2.2.1 Community Risk Assessment – Identified Risks

During the development of this MFP, the Township requested a review of its current CRA, completed in Q4 2023. Overall, the CRA is well-written, but the author should have completed the templates using the example worksheets supplied by the Office of the Fire Marshall, which would have been much less labour-intensive and onerous to complete. The following are comments and suggestions for improving the present document.

- The Geographic Profile's Risks identified the risks at every railway crossing in the Township, whereas discussing the risks regarding the entire railway would be adequate.

The same applies to each identified risk, including the location(s) of the dangers, in cases where a summation would suffice.

- When discussing Bodies of Water, look at them in their entirety rather than individually.
- While the document is comprehensive, it may be too in-depth in some profiles, such as the Building Stock Profile. While the author had access to the Township's files that included every address and occupancy, there was no need to complete segments for every location. A summation of the risks in each occupancy group would suffice. Additional data is available through Statistics Canada's 2021 census and the Municipal Property Assessment Corporation (MPAC) information, which can be obtained from the Township's Finance Department.
- The Critical Infrastructure Profile includes every pharmacy, dentist, and chiropractic office, where a single mention is adequate by listing the risks and outlining a mitigation strategy for handling the risk where it occurs.
- The Demographic Profile could have included additional tables outlining specific demographics, such as those of Indigenous peoples and Visible Minorities. A breakdown of occupations, level of education, and employment statistics would have provided a more fulsome outlook of the demographics of the Township. Worksheet 4B could have provided the same information with much less data, such as the locations where each identified demographic resides. The 2021 Statistics Canada Census would be a great resource when completing this profile.
- The Hazard Profile would also have benefited from using OFM's template and Risk Matrix. The Township's Hazard Identification and Risk Assessment (HIRA) list was an ideal reference material.
- It appears that ANFRES omitted some public agencies during the completion of the Public Safety Profile that could have been included, such as the Ministry of Natural Resources, the Ministries of Labour and Environment, Search and Rescue – Trenton, and the Public Health Unit, to name a few.
- Many Government agencies, such as Social Services and Children's Aid, could be included when completing the Community Services Profile. Like some of the other Profiles, there was no need to recite each group, such as all the religious facilities in the Township. Some of those listed in this profile belong in the Public Safety Profile.
- The Economic Profile, which is 17 pages long, could have been reduced. Again, there is no need to list every occupancy in the Township. A general overview of what each group could provide would be adequate, such as faith-based organizations offering emergency shelter, groceries, clothing, and, in some cases, financial support.

- Worksheet 9 regarding the Past Fire Loss and Event History would have benefited from using the OFM's template as designed. The OFM's template asks for three years of data, whereas ANFRES provided seven years.
- The ANFRES did not complete Worksheet 10, a summary document of each Profile.

Having noted the previous comments about areas for consideration, the document was well written and full of detail. The CRA's author, the Fire Chief, should be commended for their effort to complete the Township's CRA. Since its inception, the author has updated the document annually as mandated in O. Reg. 378/18.

Now that Asphodel-Norwood has completed its Community Risk Assessment (CRA), the Fire Chief can implement strategies to address the identified risks, including public education and enforcement of the Fire Code.

A thorough review, coupled with sound strategic planning, will yield successes in the form of fewer fires, reduced fire-related injuries, and lower dollar property losses through ongoing fire prevention initiatives. These initiatives include early warning detection systems (e.g., smoke alarms), proactive inspections, and public education.

2.3 Next Steps

As the community grows, the frequency of calls and the need for service will grow. Based on this growth, there may be a future need for additional staff. Supporting information relating to the staffing needs of each division can be found in the sections associated with this MFP.

The provincial government has recently introduced updates to *FPPA*, which outlines the responsibilities of a community and its fire department concerning service level expectations. The updates to the *FPPA* are:

- Certification for firefighters, fire service instructors (training officers), and fire service inspectors (fire prevention inspectors)
- Mandatory reporting requirements
- Completion of the mandatory annual review of the CRA and completion of a new one every five years.
- Establish an inventory of all building stock, including identifying those with lightweight construction (LWC) components, which is mandatory.

These four additions will put an even more significant strain on fire departments to ensure proper training, reporting, and completion of CRAS.

2.4 Residential Fire Sprinklers & Monitoring Fire Alarm Systems

The NFPA, the Canadian Association of Fire Chiefs (CAFC), and the Ontario Association of Fire Chiefs (OAFC) strongly support the installation of residential sprinkler systems to reduce the risk to life and property from fire. Because fire sprinklers react so quickly, they can dramatically reduce the heat, flames, and smoke produced in a fire. Properly installed and maintained fire sprinklers help save lives, minimize damage, and make it safer for firefighters.

Fire sprinklers have been in use for over a century, protecting commercial, industrial, and public buildings. Many people are unaware that the same life-saving technology is also available for homes. According to the OFM, in 2022, roughly 90% (102) of all civilian fire deaths in Ontario occurred in residential occupancies. By 2024, the number had decreased to 98 residential fire deaths, 78% of all fire deaths in the province. Early detection systems, such as smoke and heat alarms and sprinkler systems, monitored by an external agency, enhance fire protection, reduce the risk of loss of life and help minimize fire damage.

ANFRES has been promoting residential fire sprinklers primarily in structures with more than three storeys. By collaborating with developers and the public to encourage the installation of home sprinkler systems, ANFRES is demonstrating a proactive approach to educating the public on another viable option for homeowners to help mitigate fire risk. As such, EMG applauds ANFRES for incorporating this into its safety initiatives, alongside fire prevention and life safety education initiatives.

2.5 Survey Results

A component of assessing ANFRES' service levels included soliciting feedback from primary stakeholders, including the Council, the community, paid-on-call (volunteer) firefighters, and full-time staff, to enhance the assessment of ANFRES and understand how well the department meets the community's needs. This input helped develop recommendations to support the Township of Asphodel-Norwood in making future strategic decisions related to the fire service. These surveys also help identify what is working well, as well as possible areas for improvement.

2.6.1 External Surveys

Appreciation and Gratitude

- Multiple respondents sincerely thanked the volunteer firefighters for their dedication and bravery.
- Acknowledged that, although volunteer-based, the department performs professional-level work and deserves recognition.

- Many described the department as fantastic, amazing, and going above and beyond in their duties.

Staffing and Growth

- Respondents emphasized that ANFRES needs additional human resources and improved response times.
- Suggested transitioning to a combination department (volunteer and full-time staff), especially to improve daytime coverage.
- The community recognized that the township is experiencing an increase in housing developments due to growth, and as such, the fire department needs to prepare for this change.

Funding and Resources

- Acknowledged the challenge of limited financial resources and suggested the township invest more in the fire department.
- One respondent proposed exploring amalgamation with another township or transitioning to county-controlled fire services to manage costs.
- Highlighted the need to balance community size and tax base with equipment and staffing requirements.

Public Education and Engagement

- Positive comments on existing community outreach efforts, like the pancake breakfast.
- Suggested more community engagement events, such as a torchlight parade modelled after programs in other towns.
- Some questioned the value of giveaway items (e.g., plastic utensils) given to children, suggesting that the funds might be used more effectively elsewhere.
- Emphasized the importance of educational programs that help the public better understand who firefighters are and what they do.

Technology and Emergency Response

- Concerns about 9-1-1 call tracking accuracy were raised, particularly for individuals with speech impairments or distress.
- Implement a text-to-9-1-1 capability or enhance location tracking for emergency calls to prevent misdirection during critical situations. *

**Note:* *The comments should be resolved in Question 5 when the County's Next Generation 9-1-1 went online in Q1 of 2025.*

Summary

Respondents overwhelmingly expressed appreciation and gratitude for the fire department, recognizing its volunteer members' dedication, professionalism, and bravery. Many noted that, despite being a volunteer-based service, the department performs duties equivalent to those of a professional department and deserves recognition and respect.

Several comments emphasized the need for increased staffing to enhance response times and recommended transitioning to a hybrid department model that incorporates both full-time and volunteer firefighters. Staffing is especially important in light of community growth and the expansion of residential developments. There was also a call for greater investment in the fire department, acknowledging the challenges of operating within the constraints of a small township tax base. Suggestions included increasing funding, evaluating compensation and support structures, and even considering amalgamation with neighbouring municipalities or transitioning to county-level fire services to alleviate financial pressures.

Public education and engagement were also key themes. Respondents valued community initiatives such as the pancake breakfast and suggested more events, including creative ideas like a torchlight parade inspired by programs in other towns. Some respondents questioned the effectiveness of certain promotional items distributed through school programs and proposed redirecting those funds to more impactful educational efforts.

Technological improvements were recommended, particularly concerning 9-1-1 call accuracy. One personal story highlighted the risks associated with poor location tracking during an emergency and emphasized the need for capabilities such as text-to-9-1-1 and improved GPS data to support vulnerable individuals. Respondents demonstrated deep respect for the department while suggesting practical, community-driven approaches to help it grow and adapt in the years to come.

2.6.2 Internal Surveys

Question: What actions should the fire department take to improve its response to emergencies?

Staffing and Availability

- Hire full-time personnel to ensure quicker response times when volunteers are unavailable.

- Improve daytime coverage by hiring more people or improving staff selection.
- Increase wages to improve attendance and retention.
- Ensure enough responders are available for emergencies.
- Encourage better attendance among current members.

Equipment and Technology

- Ensure reliable equipment is always ready and accessible.
- Install GPS units (such as computers or tablets) in trucks for enhanced navigation.
- Install blue lights on all trucks for enhanced visibility during emergency responses.
- Make the grass fire unit more readily available during the fire season (April–October) rather than limiting it to a single vehicle.

Infrastructure and Growth

- Construct a new fire hall to enhance training conditions and improve departmental functionality.
- Adapt and grow with the population, ensuring the department keeps pace with the township's rapid growth.

Training and Response Procedures

- Tailor training programs to better reflect the types of calls received.
- Require the Fire Chief to stop at Station 1 before going to emergencies to ensure equipment and crew coordination.

Public Awareness

- Increase public education to encourage respect for emergency vehicles on the road.

Summary

Respondents provided several suggestions to improve the fire department's emergency response capabilities. A common recommendation was the need for increased staffing, particularly through the development of full-time positions. This would ensure quicker response times, especially when volunteer members are unavailable. Enhancing daytime coverage through additional hires or improved staff selection was also emphasized, along with increasing wages to encourage attendance and retention. Ensuring adequate responders were

consistently available was critical in improving overall response efficiency. From an equipment standpoint, participants recommended maintaining reliable apparatus and outfitting trucks with GPS-enabled tablets or computers for improved navigation. Adding blue lights to all emergency vehicles was also suggested to enhance visibility while responding to calls.

Furthermore, there was a call for more strategic use of the grass fire unit, particularly ensuring it is accessible during peak fire seasons. Regarding infrastructure, the suggestion was that a new fire station is needed to enhance training and operations. Respondents also highlighted the importance of adapting to the Township's rapid population growth by scaling fire services. Training programs should be more aligned with the specific types of calls received. The recommendation was that the Fire Chief coordinate with Station 1 before proceeding to incidents to ensure that the appropriate apparatus and personnel are deployed. Ultimately, public education is necessary to foster greater respect and awareness among drivers for emergency vehicles on the road.

Question: If it were up to you, what would the fire service be like in 5 to 10 years from today, and why?

Staffing and Leadership

- Full-time Fire Chief and Deputy Fire Chief positions.
- A combination of full-time and volunteer firefighters ensures a consistent and timely response.
- Add a full-time fire prevention officer/trainer to support education and preparedness.
- Grow department membership back to 40 firefighters, matching pre-amalgamation levels.
- Shift towards a more professional fire service, with increased wages to support recruitment and retention.

Facilities and Infrastructure

- New Station 1 in the same area (for accessibility and school visits).
- Renovate Station 2 to add bays, accommodate more equipment (e.g., trailer), and include a clean room.
- Expansion of Station 2 by at least two to three bays.
- Fire stations should be updated and modernized to support the department's growth and evolving equipment needs.
- Hybrid fire stations will support mixed staffing models and operational flexibility.

Equipment and Safety

- Up-to-date personal protective equipment (PPE) for the health and safety of firefighters.
- Continued investment in specialized and modern equipment for rescue operations.

Evolving Role and Capabilities

- Recognition that the fire service is shifting from primarily firefighting to rescue and medical response.
- Ensure the department is equipped to respond to vehicle accidents, medical emergencies, and other non-fire calls.

Collaboration and Community Engagement

- Improved collaboration with EMS, police, and neighbouring fire departments.
- The department should implement more robust community education programs to raise awareness and support prevention efforts.
- Emphasis on adapting and evolving continuously in response to the community's changing needs.

Summary

Looking ahead over the next 5 to 10 years, respondents envision a more professional fire service that is well-equipped and responsive to the community's changing needs. A recurring recommendation was to establish full-time leadership, including a Fire Chief and Deputy Fire Chief, along with a combination of full-time and volunteer firefighters, to ensure adequate coverage and timely responses. Many also supported the addition of a full-time fire prevention officer or trainer to strengthen preparedness and community outreach. The department's membership should ideally return to 40 firefighters, as before municipal amalgamation. To support this growth, wages should increase to attract and retain skilled personnel.

Modernizing infrastructure is another priority, with strong support for constructing a new Station 1 in its current area to maintain accessibility and community engagement through school visits. Renovations to Station 2 were also recommended, including the addition of two to three bays, more space for equipment such as trailers, and a clean room separated from the apparatus bays. Updated and spacious fire halls would enable continued growth and serve as hybrid departments suitable for both full-time and volunteer models.

Firefighters should also have the most current personal protective equipment (PPE) to ensure their safety and well-being. Recognizing the shift in emergency response, many noted the

importance of being better equipped for rescue operations, as medical calls and vehicle accidents now account for a significant portion of the call volume. There is a need for enhanced collaboration with EMS, police, and neighbouring departments and expanding community education programs was also emphasized. Overall, respondents stressed the importance of continuous evolution and adaptation to meet the demands of a growing and changing community.

Question: Do you have any other comments or suggestions you would like to add to help improve the services delivered to the community?

Communication and Internal Engagement

- Host a town hall meeting with firefighters to foster open communication between leadership and members.
- Ensure those reviewing feedback understand the fire service and its unique challenges.
- Address intergenerational communication gaps within the department by implementing learning and development strategies that connect members from Baby Boomers to Gen Z.

Public Education and Community Outreach

- Develop a comprehensive public education program beyond elementary school outreach.
- Hire a dedicated educator or coordinator with a background in education to create and manage public programs.
- Suggested initiatives include:
    - Smoke alarm safety programs
    - Meet and greets
    - Station tours
    - Community events
- Enhance community outreach efforts, as public education is currently a weak area within the department.

Staffing and Recognition

- Introduce more full-time roles to improve response times and increase the department's presence in the community.

- Compare firefighter compensation and appreciation practices with other townships and departments to ensure fairness and boost morale.

Technology and Administration

- Modernize administration by adopting technology for record-keeping and internal processes.

Commitment and Pride

- One respondent expressed gratitude for the opportunity to serve and a strong desire to continue volunteering to support the community.

Summary

Respondents shared several thoughtful comments aimed at improving the services delivered to the community. A strong recommendation was for better communication and internal engagement within the fire department. Suggestions included holding a town hall meeting with firefighters to foster an open dialogue and ensure leadership is approachable and informed about frontline realities. Emphasized, those reviewing and acting on feedback should have a solid understanding of fire service operations. Bridging generational gaps within the department was another key point, with recommendations to implement learning and development strategies that cater to the diverse age range from Baby Boomers to Gen Z.

Regarding public engagement, participants noted a lack of community outreach and called for a more robust public education program. While current efforts focus on elementary school students, there is a clear need for expanded outreach to all age groups. Respondents proposed hiring a dedicated educator or coordinator with a background in teaching to lead initiatives such as smoke alarm safety programs, station tours, community events, and informal meet-and-greet sessions. Increased public education to build trust and awareness about the fire service. From a staffing perspective, expanding full-time roles was recommended to help improve response times and enhance the department's visibility and impact within the community.

Additionally, the department suggested evaluating how other municipalities show appreciation and compensate their firefighters to ensure fair and competitive local practices. Lastly, modernizing administrative processes involves adopting digital tools, such as record-keeping systems. One respondent also expressed a deep sense of pride and gratitude for the opportunity to serve, emphasizing a strong personal commitment to the community and its safety.

2.6.3 Council Interviews

What do you believe are the greatest strengths of the Fire Department?

Knowledge and Experience

- Strong community knowledge from volunteer firefighters and leadership.
- Depth of experience due to long-standing members who have served for many years.

Commitment and Dedication

- Widely praised was the commitment of the volunteers to serve the community.
- Recognized as a devoted group with a strong sense of responsibility and service.

Training and Equipment

- The department is seen as well-trained and well-equipped to handle emergencies.
- A training centre in Norwood is a major asset for ongoing skill development.

Geographic Coverage

- Two bases allow for faster response times and effective coverage across the township.

Summary

The fire department's greatest strengths are its members' dedication, experience, and training. The department benefits from the extensive community knowledge of its volunteer firefighters and leadership, with many members serving for several years. This deep-rooted experience enhances the department's ability to respond effectively to local needs. The commitment and dedication of the volunteers were highlighted as a core strength, as they consistently demonstrated a strong sense of responsibility to the community.

Additionally, the department is well-trained and well-equipped, ensuring it is ready for various emergencies. The training centre located in Norwood provides a valuable resource for ongoing professional development. Finally, the department's geographic coverage is also a notable strength, as having two bases allows quicker response times and efficient coverage of the entire township.

Question: What are the top risks/issues facing the Fire Department (i.e., barriers to response/delivery of service, recruitment, and retention)?

Recruitment and Retention Challenges

- Difficulty retaining volunteers arises due to some members using their experience to transition into professional firefighting careers, which impacts training continuity and retention.
- Succession planning is a concern, as there is a need to pass on the depth of community knowledge to newer members.
- Retention risks could increase the cost of recruitment and training.

Space and Infrastructure Needs

- The department needs a larger space for training and storing equipment, which could limit the ability to manage and expand operations efficiently.

Funding and Provincial Support

- Keeping up with provincial standards is a challenge, particularly for rural fire departments that may lack sufficient resources.
- A call for increased provincial funding to support rural fire services and help cover the costs associated with recruitment, training, and maintaining readiness.

Summary

The fire department faces several key risks and challenges that impact its ability to deliver effective service. One of the primary concerns is recruitment and retention, as some volunteers use their experience to transition into professional firefighting careers, making it difficult to retain trained members and maintain continuity in training recruits. There is also a need for succession planning, as the wealth of the department's community knowledge must be passed on to newer members to ensure long-term success. Retention remains a concern, as it increases the costs associated with recruitment and training.

Additionally, the department requires larger spaces for training and equipment storage to support its operations more effectively. Another significant issue is keeping up with provincial standards, which strains resources. The department has called for increased provincial funding to support rural fire services, which will help alleviate the financial burden of maintaining compliance, recruitment, and ongoing training.

Question: Can you share any input from your constituents or staff concerning the fire protection services, whether cost-related, service-related, or fire safety and education-related?

Funding and Infrastructure Challenges

- Funding challenges were mentioned, particularly regarding the maintenance and expansion of fire services.
- There is concern about the future need for a new Fire Hall and how this will impact the Westwood Fire Hall location. Raised was the possibility of a centralized Fire Station.
- Suggested a need for more social media presence to increase awareness of the Volunteer Fire Department and provide regular updates to residents.

Provincial Support and Regulations

- There is a lack of understanding at the provincial level regarding the costs associated with rural fire departments compared to large city fire departments.
- Concerns about new regulations, such as replacing barely used bunker gear and meeting new MTO standards, add significant costs for small tax bases.

Emergency Dispatch and Medical Calls

- A respondent hopes that the new emergency dispatch system will help reduce the number of medical calls and represent a significant portion of the fire department's service.

Positive Service Feedback

- While most feedback has been positive regarding the service received from the fire department, there are ongoing concerns about the costs of maintaining these services.

Summary

Constituents and staff have expressed various concerns and input regarding fire protection services, particularly funding challenges. One key issue highlighted is the potential need for a new Fire Hall in the future, with questions surrounding the impact on the Westwood Fire Hall location and whether a centralized Fire Hall would be more effective. There is also a suggestion to improve the Volunteer Fire Department's presence on social media, providing more frequent updates to residents.

At the provincial level, there is a lack of understanding of the unique financial challenges faced by rural fire departments compared to those in larger urban areas. There were concerns regarding new regulations, such as replacing barely used bunker gear and implementing new MTO standards, which significantly cost small tax bases. Additionally, there is hope that the new emergency dispatch system will reduce the number of medical calls, as they account for a significant portion of the service. Despite these concerns, feedback on the service received from the fire department has been overwhelmingly positive, though the costs of maintaining these services remain a point of concern.

Question: Do you see an opportunity for the Fire Services to develop strategic partnerships with other organizations concerning cost and service efficiencies? If so, then with whom and why?

Partnership with Neighbouring Fire Services

- Partnering with neighbouring township fire services could help make the organization more cost-efficient by sharing resources and services.

Engaging with the Public and Private Facilities

- Engage with the public to ensure they understand the challenges faced by small fire departments.
- There may be an opportunity to partner with private facilities such as Maple View and Pleasant Meadows, where cost-sharing for service calls could be explored, particularly for non-emergency calls.

Shared Resources and Joint Training

- While sharing equipment may be challenging, joint training sessions with neighbouring municipalities could offer potential efficiencies, though savings are uncertain.

Collaboration on Medical Calls and Resources

- Collaboration with Peterborough County-City Paramedics (PCCP) for medical calls may help improve service efficiency, especially with the updated dispatch services.
- Shared resources, such as a Safety/Education officer between neighbouring municipalities, could enhance service delivery while reducing costs.

Bulk Purchasing

- Bulk purchasing with other municipalities could help secure better supplier pricing, as all departments share similar needs.

Summary

There is potential for Fire Services to develop strategic partnerships with neighbouring township fire services to enhance cost-efficiency by sharing resources and services. Engaging more with the public to raise awareness of the challenges faced by small fire departments is essential. Additionally, exploring partnerships with private facilities, such as Maple View and Pleasant Meadows, for cost-sharing of non-emergency service calls is also crucial. While sharing equipment may pose challenges, there is an opportunity for joint training sessions with neighbouring municipalities, although the extent of savings remains uncertain.

Additionally, collaboration with PCCP for medical calls could increase efficiency, particularly with the updated dispatch system. Other opportunities include sharing resources, such as serving as a Safety/Education officer and bulk purchasing supplies with neighbouring municipalities to secure better pricing, as these departments face similar needs.

Question: Are there any other aspects or factors you believe should be considered that we have not touched on already?

Relevance of the Report and Funding

- Consider whether this report will remain relevant once funding becomes available, especially as small municipalities face escalating costs due to provincial and federal mandates.

Fire Prevention and Education

- Emphasis on improving community fire prevention and education efforts, particularly in rural areas.
- Consider proactive measures such as controlled burns, fire bans during dry seasons, and public education campaigns on fire safety.
- Suggestion to use videos rather than just posts to disseminate information, as people are more likely to watch a video than read a full post.

New Fire Hall Considerations

- Conversations around a new fire hall in Norwood are ongoing, as the current hall is outdated.
- Suggest exploring the possibility of donated land in a central location within the township for a new fire hall to serve both existing halls.

- Involving the county in the construction process could allow for the inclusion of a paramedic base, helping to share the cost of the build.

Summary

One important consideration is whether this report will remain relevant once funding becomes available, particularly as small municipalities face escalating costs due to provincial and federal mandates. Additionally, there is a strong emphasis on improving community fire prevention and education, especially in rural areas, through proactive measures such as controlled burns, fire bans during dry seasons, and public education campaigns on fire safety. Suggested was that video format be utilized instead of traditional posts, as they are more likely to capture the public's attention.

Regarding infrastructure, the ongoing discussions around a new fire hall in Norwood highlight the need to replace the outdated facility. Consider seeking donated land for a centrally located fire station that could potentially serve both halls. Collaboration with the county to incorporate a paramedic base into the new facility would help share the construction costs, making the project more financially feasible.

2.6 Community Risk Reduction Plan

With the completion of the CRA and all identified risks, the next step is to develop a Community Risk Reduction (CRR) Plan. When properly applied, the CRR Plan coordinates emergency operations with prevention and mitigation efforts throughout the community and at the fire station level. The involvement of fire station personnel is crucial for gathering local risk data and performing the necessary activities to implement the CRR Plan.

Aside from the primary benefits to the community, a CRR Plan can positively impact the fire department. A CRR Plan enhances the safety and occupational health of firefighters and emergency responders, thereby reducing line-of-duty deaths. This is partly due to enhancements in the number of fire inspections and fire and life safety education events conducted, as well as the enforcement of the Ontario Fire Code (OFC), which has resulted in a reduction in the number of fires.

In addition to firefighter safety, there are several other reasons why departments should begin the process of developing a CRR Plan, including:

- Identifying new and emerging hazards and managing risks makes the community safer.
- To improve resource allocation among declining budgets within fire departments and local governments.

- It identifies rapidly changing demographics in the community.
- It increases the community's engagement.
- May avoid the potential ramifications of overlooked hazards.
- Better defines the fire department's purpose and value within the community beyond just fighting fires.

Completing the CRA and this MFP document, the Fire Chief has the components needed for the CRR Plan. The CRR Plan's foundation is on the information and recommendations provided in the CRA and MFP forms. A successful CRR Plan will conjure additional resources through partnerships within the fire department and the community it serves. The community-based approach enhances public safety through the collective efforts within the community to understand, assess, and develop inclusive solutions to community safety issues. NFPA 1300 is an excellent resource when formulating the CRR Plan.

2.7 Next Steps

As the community grows, the frequency of calls and the need for service will grow. Based on this growth, there will be a future need for additional staff in the Fire Prevention Office, the Fire Suppression Division and Training. Supporting information relating to the staffing needs of each division can be found in the sections associated with this MFP document.

The provincial government has recently introduced updates to the *FPPA*, which outlines the responsibilities of a community and its fire department concerning service level expectations. The updates to the *Act* are:

- Mandatory certification for firefighters, fire service instructors (training officers), and fire service inspectors (fire prevention inspectors).
- Mandatory Reporting requirements
- Mandatory annual review of CRAs and complete a new one every five years.
- Mandatory inventory of all building stock, including identifying those with LWC components.

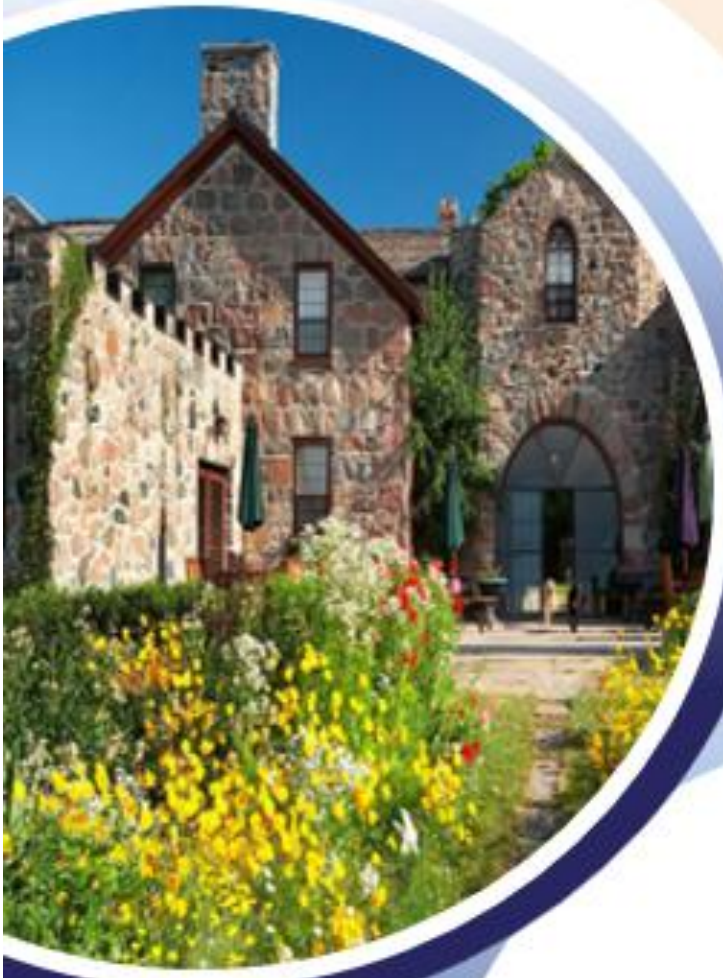
These four additions have placed an even greater strain on fire departments to ensure proper training, reporting, and completion of CRAS.

Recommendation #4

Now that the completion of the Community Risk Assessment and this Master Fire Plan has taken place, EMG recommends that the Fire Chief utilize the components of the two documents' recommendations for developing and implementing the Community Risk Reduction Plan.

Section 3

Fire Department Divisions



SECTION 3: FIRE DEPARTMENT DIVISIONS

According to the RFP issued by the Municipality, identifying staffing needs was a task EMG completed by reviewing the capabilities of existing staffing and identifying future needs for each of the divisions and/or services provided, including Administration, Prevention and Suppression, and Training.

3.1 Community Safety – Four Lines of Defence

The OFM community safety model identifies three lines of defence: Public Education, Safety Standards and Enforcement, and Emergency Response. EMG views Emergency Management as the fourth, inclusive line of defence and has added it to the overall concept of community safety. Reference to these lines of defence helps to set the goal of this divisional review.

1. Public Education – educating residents has proven to be the most effective means of reducing and preventing fire and property damage incidents. Reducing the number of fires before they start and identifying how the municipality will continue to meet the fire education needs while it grows.
2. Safety Standards and Enforcement – ensuring that fire code inspection and enforcement occur so that buildings meet the required safety standards.
3. Emergency Response – the availability of well-trained and well-equipped firefighters to respond and effectively mitigate the incident is the last defence identified by the OFM. The staff, equipment, and fire station locations may impact the mitigation of emergencies.
4. Emergency Management – a municipality is legislated to have an emergency preparedness program to ensure the safety of the community's residents by having a training, education, response, and mitigation plan in place for any possible emergency the community may encounter.

Along with these four lines of defence, the following industry best practices help to inform a fire department of industry expectations. Neither the NFPA nor the FUS is a legislated requirement, but EMG strongly encourages utilizing them to improve a community's fire service.

3.2 National Fire Protection Association 1201

NFPA Standard 1201—*Standard for Providing Fire and Emergency Services to the Public* notes the services that fire services should offer and how they are to be delivered based on the composition of an emergency service. To accomplish this, a Fire and Emergency Services

Organization (FESO) must ensure open and timely communication with the CAO and governing body (council), create a master plan for the organization, and ensure that mutual aid and automatic aid programs, along with an asset control system and maintenance program, are in place.

The NFPA suggests using response times as a primary performance measure for emergency services, providing a clearer focus on the ultimate goals for response criteria. NFPA 1720 refers to the goals and expectations for volunteer emergency services incorporated into evaluating the emergency services' response and staffing needs.

3.3 Administration Division

The Asphodel-Norwood Fire Service is a paid-on-call (volunteer) service with a part-time Fire Chief and a Fire Prevention Officer, who is paid by the hour for any fire prevention-related duties. The volunteer firefighters fill all other positions. This staffing shortfall requires the Fire Chief to assume all administrative responsibilities of the fire department, including developing and implementing policies and procedures, as well as submitting all Office of the Fire Marshal (OFM) reports. The Fire Chief is also expected to respond to all emergencies and is on call 24/7 for major incidents.

In addition to the abovementioned duties, the Fire Chief serves as the Township's Community Emergency Management Coordinator (CEMC). This assignment can also consume a significant amount of the Fire Chief's time, depending on the requirements of the Emergency Management program.

The Township does provide some administrative support to the tune of 3.5 hours a week, but this falls short of what is required for the Fire Chief to effectively address all his duties and related reporting requirements to the OFM and Council, not to mention training and certification requirements (imposed by the OFM) for all the firefighters in the province.

Recommendation #5

Increase the time allotted to providing administrative support to the Fire Chief.

Although the Fire Chief is doing an admirable job of meeting the administrative duties, there is a need for additional administrative support, whether that comes from the Township's administrative department or by hiring a part-time administrative person who would focus solely on the Fire Department's needs. This person could start with 10 to 15 hours a week and build as needed.

As mentioned, the Fire Chief has done an admirable job maintaining most of the ANFRES records with limited assistance from their Administrative Assistant. With the vast number of duties, the Fire Chief manages on their own for the most part, they have done well on a shoestring budget of weekly hours. They are presently paid for 30 hours per week, while most municipalities provide 35 hours per week. It is well-known how much extra time the Fire Chief provides to the Township without pay. The pay rate needs to be commensurate with the duties performed and comparable to other local jurisdictions; otherwise, the temptation to leave may turn a dedicated and loyal employee.

Recommendation #6

That the Township of Asphodel-Norwood analyze and consider implementing the following:

a) Review the hours per week allotted for the Fire Chief of other municipalities in the County of Peterborough and other surrounding areas. Consider increasing the weekly allotment from 30 to 35 hours.
b) Analyze the pay rates of those same municipalities allotted to the fire chief, noting those designated CEMC, such as ANFRES's fire chief.

3.4 Fire Prevention and Public Education

3.4.1 Fire Prevention Division (Public Education, Fire Code Enforcement, and Fire Cause Determination)

The ANFRES has one Fire Prevention Officer who also performs public fire and life safety educator duties. The hours allotted to fire prevention, which includes public education, are minimal at best, with 25 hours quarterly (100 hours in total per year). Having so few hours prevent ANFRES from implementing a robust fire prevention program that includes proactive inspections. The current policy is that fire inspections are conducted only upon receipt of a complaint, by request or as mandated by the Province. With so few hours available for fire inspections by the FPO, the Fire Chief must complete many tasks that take them away from administrative duties.

The number of hours allocated to the FPO should initially increase to 200 per year, and after a year, develop a hybrid inspection frequency, expanding this time to 10 hours per week. The Fire Chief then monitors the number of inspections completed to analyze the value of transitioning to a part-time position, possibly shared with another municipality to make it full-time, with each

paying a share of the cost. The FPO would work 5 days each two-week pay period in Asphodel-Norwood and the balance in the other municipality. Currently, the FPO well exceeds their allotted yearly hours in completing fire prevention duties. The administrative aspect of completing inspections requires time, which adds up over the course of a year.

Many fire departments in Ontario subscribe to the provision of fire protection services through three specific overarching strategies ascribed by the Office of the Fire Marshal, including:

1. The delivery of public education programs, educating the community about fire risks,
2. the enforcement of applicable legislation (the FPPA) through applied inspection and enforcement actions, and
3. The delivery of effective fire suppression capabilities is tailored to each community's unique needs and circumstances.

Asphodel-Norwood has adopted these strategies and can reinforce this by embedding them within the fire department's Establishing and Regulating By-law.

This section focuses on the "Fire Prevention Division" activities, characterized as including not only public education and code enforcement (the first two "lines of defence") but also inherently the function of fire cause determination since it follows that an understanding of a community's own fire "experience" is necessary to construct proactive measures intended to reverse developing trends in respect of fires. While many communities share common themes in this respect (i.e., careless smoking caused fires), the local reaction to these trends can drive influences specific to each community.

In the case of Asphodel-Norwood, a comprehensive review of the fire prevention program and the activities conducted has identified several opportunities to develop actions that will ultimately reduce the level of risk to the Municipality and the impact of unwanted fires on the community itself.

This analysis included a review of the municipality's "Fire Prevention Program," as reviewed with staff.

3.4.2 Public Education Activity Opportunities

An informed and well-educated public is the cornerstone of a fire-safe community. When departmental resources focus on activities that support ongoing educational initiatives, having these programs in place lessens the reliance on fire suppression and its inherent costs. Every municipality must establish a public education program concerning fire safety, as legislated by the FPPA. The program must include specific components, such as a smoke alarm program.

Other content of the public education program is largely left up to the local fire department to determine based on its "unique needs and circumstances."

As required, the ANFRES offers a smoke alarm program to the community, primarily through its proactive smoke alarm checks conducted when crews are responding to an incident. Officers leisurely check for working smoke alarms and, when needed, provide smoke alarms or batteries to the public where the Department finds them outdated or lacking altogether.

ANFRES provides targeted messaging to their community through print and/or social media campaigns, Fire Prevention Week open houses, school and daycare visits or similar events. Community awareness initiatives are an essential part of a comprehensive public education program, an area that the Township should pursue with additional vigour. Given the community's predominance of agricultural and seasonal lodging interests, develop focused preventative messaging for these community risks.

Many communities develop additional, comprehensive public education programs with various elements designed to target specific community segments. As an example, the Emergency Management Group (EMG) points to the following programs as part of a comprehensive public education program:

Several organizations exist to support local fire departments with their public education initiatives. These include the National Fire Protection Association (NFPA), the Ontario Municipal Fire Prevention Officers Association (OMFPO), the Fire Marshal's Public Fire Safety Council (FMPFSC), and the Ontario Association of Fire Educators (OAFE), amongst others. Departmental

memberships in organizations such as these ensure that local service providers stay informed about current and emerging trends in fire safety.

As discussed in other sections of this report, the professional competencies of those involved in public education activities have become vital. The NFPA 1035 standard outlines the minimum qualifications for individuals engaged in public education activities. Within ANFRES, four members have completed NFPA 1035, and another enrolled in the course.

The importance of a properly designed and supported media relations program cannot be overstated. The full potential of public education is not realized without the active support of local media outlets. Inherent in this is the department's use of social media channels to reach as broad a consumer base as possible. Facebook, Instagram, and Twitter (amongst others) are critical in developing an effective media strategy and public education program for the department.

Each year, ANFRES receives calls for assistance regarding malfunctioning smoke or carbon monoxide (CO) alarms, as well as complaints about burning. The Fire Chief has addressed these calls, which inevitably affect their time away from work when calls are after hours. If the FPO is unavailable, the responsibility of checking smoke and CO alarms and addressing burning complaints would be best handled by either the Fire Prevention Officer/Public Fire and Life Safety Educator (FPO/PFLSE) or the District Chiefs. A more robust public education program teaching the public how to troubleshoot alarm issues would possibly reduce the number of unnecessary callouts. The FPO/PFLSE should have access to ANFRES' social media accounts, such as Twitter, Facebook, and Instagram.

Recommendation #7

The number of hours allocated to fire prevention initiatives will be increased from 100 annually to 200 annually. At the same time, allocate 25 hours per investigation to the FPO when completing a fire investigation, and ensure these hours do not surpass 100 per year.

Recommendation #8

The FPO/PFLSE and District Chiefs take a more active role in mitigating non-emergent calls, such as check calls.

3.4.3 Fire Cause Determination

Subsection 14. (2) the *Fire Protection and Prevention Act* (*F.P.P.A.*) requires the Fire Chief to report all fires to the Fire Marshal. It provides specific powers for the Fire Chief and certain other members of the department who have been appointed as "Assistants to the Fire Marshal" to enter on land or premises where a fire has occurred or is likely to occur.

Beyond this mandate, it's in the interest of the community and department to initiate an investigation as to the origin and cause of each fire that occurs for a variety of reasons – a) to inform fire prevention and public awareness campaigns; b) to identify faulty consumer goods that may give rise to other fires; and c) to determine whether a fire was accidental or human-caused and therefore potentially a criminal act.

When a fire meets the criteria established by the OFM, one of their investigators will investigate the Asphodel-Norwood incident. For all other cases, either the Fire Chief or the Fire Prevention Officer will conduct the investigation. The Fire Chief is not certified to the IFSAC/Pro Board standards and should work towards receiving this milestone. In the case of the FPO, although grandfathered to NFPA 1033, they are not certified either. Having other individuals properly trained to augment the existing qualified staff members is prudent. To aid in completing investigations in the future, ANFRES has additional members completing the course. Doing so may be a challenge, and EMG recognizes and acknowledges that certain specialized courses, such as NFPA 1033, are not readily available and, when offered, are typically conducted only at select locations in the province. Attendance at these courses is challenging for many departments.

A small portion of the NFPA 1033 course offered by the OFM includes a small segment of NFPA 921 relating to investigating explosions. This is not the entire course; ANFRES must also register members to complete it. Unfortunately, it is not yet a course that leads to certification in Canada.

Alternatively, consideration should be given to formalizing agreements with neighbouring fire services that have qualified staff available for such activities, perhaps on a reciprocal basis.

Recommendation #9

Those members of ANFRES who complete NFPA 1033 become certified and then enroll to complete NFPA 921, which does not require certification.

3.4.4 Fire Code Inspection and Enforcement

Every community in Ontario must have an effective and proactive inspection and code enforcement strategy. Inspections and enforcement are the "second line of defence" against unwanted fires. The Fire Inspector has developed a work plan that includes the ability to conduct regular inspections in "Vulnerable Occupancies," such as schools, multi-unit dwellings, key industrial or commercial facilities, and, as requested or upon complaint, as a minimum.

The Office of the Fire Marshal of Ontario has mandated that all fire departments conduct building inspections in all residential and institutional settings housing "Vulnerable Ontarians" and on a "request or complaint" basis as a minimum requirement. As mentioned, the ANFRES employs its Fire Prevention Officer (FPO) for 25 hrs per quarter of the year (100 hours annually).

The residents of the Township would greatly benefit from a program that focuses on making most buildings code-compliant. Building owners should be aware of their building's fire safety features and be motivated to maintain them in good condition. Ontario fires have lost many lives due to non-functioning alarm systems, defective fire separations, blocked exits, and poorly designed or maintained building systems.

Inspecting existing buildings by properly qualified inspectors can greatly reduce the risk of exposure to litigation for a municipality. Conversely, a poorly or inadequately conducted inspection that fails to identify a hazard can significantly increase a municipality's liability risk in the event of a fire.

Fire Underwriters Survey (FUS) is an organization that assists the insurance industry by examining the effectiveness of fire departments (and other impacting factors) as they serve their communities in Canada. They assess the impact of municipal programming and preparedness/effectiveness on fire losses (building values destroyed or damaged by fire). FUS provides grading for communities and shares this with many insurance companies, which use this advice to set insurance rates for consumers in each community.

In terms of inspection programs that have an impact on fire rates, FUS recommends inspection intervals for various community elements based on the following table (provided for illustrative purposes only):

Recommendation #10

The ANFRES should adopt the FUS frequency for inspections, and if unable to achieve it, develop an achievable hybrid schedule.

Occupancy Type	Inspection Frequency Benchmark
Assembly (Class A)	3 to 6 months
Institutional (Class B)	12 months
Single Family Dwellings (Class C)	12 months
Multi-Family Dwellings (Class C)	6 months
Hotel/Motel (Class C)	6 months
Commercial (Class E)	12 months
Industrial (Class F)	3 to 6 months

The person conducting fire inspections in the Township is the Fire Prevention Officer (FPO), who was grandfathered to the NFPA 1031 Standard and can call upon firefighters who have completed and are certified or grandfathered to assist when required. The Fire Chief will need to monitor the workload of the Fire Prevention Officer (FPO).

Over the past four years, ANFRES's FPO completed the following number of inspections as identified in table #3.

TABLE #3 - ASPHODEL-NORWOOD INSPECTIONS BY YEAR

Occupancy	2021	2022	2023	2024
Assembly	0	0	1	0
Educational	3	3	3	3
Business	2	3	1	10
Business Agricultural	8	3	0	3
Day Care	1	1	1	1
Institutional Health Care	4	4	4	4
Mercantile	1	1	0	0
Residential – Single Family	4	4	2	4
Residential – Motel	1	0	0	1
Mixed Use	2	0	0	1
Chip Trucks	1	1	2	2
Norwood Fair Booth Inspections	18	13	15	13
Total Inspections	**45**	**33**	**28**	**42**

On average, ANFRES conducts 30 to 45 inspections annually, either by the Fire Chief or the FPO/PFLSE. While a single inspection does not seem onerous on the surface, the research and preparation of technical orders that often follow can take days or weeks to prepare correctly. The inspection frequency also does not account for the follow-up site visits required to ensure the property owner has achieved compliance.

Beyond that, where a property owner refuses to comply with an order, the follow-up actions required of the inspector (including prosecutions under the Ontario Fire Code) can take months to complete. However, this measure has not been required very often in Asphodel-Norwood.

3.4.5 Plans Examination

A subset of an Inspector's role includes reviewing plans submitted to the Municipality for approval, which is not the case in Asphodel-Norwood. Their duties in this respect would include reviewing site plans for new subdivisions or commercial/industrial developments (fire department access, hydrant locations, roadway configurations, etc.) and individual building plan submissions (for compliance or input regarding sprinkler systems, fire alarm systems, water supply for firefighting, exiting requirements, location of fire suppression system components, fire separations, closures, etc.). In large communities, these duties typically fall to a municipally staffed Fire Protection Engineer; however, few small communities have the luxury of having such a person on staff.

Typically, municipal building officials welcome input from fire inspectors or prevention officers to ensure that complex building codes are properly interpreted and applied practically and pragmatically. Anecdotally, the relationship between local building officials and fire inspectors can be challenged by differing interpretations of complex code requirements; therefore, both departments should be encouraged to work more collaboratively in the future.

In 2022, amendments to the Ontario Building Code (OBC) require Building Officials to notify the Fire Chief of all new construction, except houses, that incorporate components of lightweight building materials, including roof trusses, floor joists and metal wall studs. The fire department should make it a practice to assume all new homes have some form of lightweight construction within them. Failure to communicate this critical information to the fire department could result in a firefighter's injury or worse.

The OBC and OFC work hand in hand, and the Building Department and Fire Department must work in unison to ensure that enforcement measures are in place. This working relationship involves the fire department reviewing all new building plans submitted for approval to ensure that fire and life safety systems are in place and meet the requirements outlined in the Ontario Building Code (OBC) and Ontario Fire Code (OFC).

3.5 Training and Career Development

Evaluating the current training, education, and development programs of ANFRES with the Council-approved fire protection delivery model is a crucial step in ensuring the department is well-equipped to meet both the operational demands of emergency response and the evolving needs of community risk reduction.

This assessment is crucial for identifying training gaps, ensuring compliance with industry standards such as the NFPA and Ontario Regulation 343/22 Firefighter Certification, and aligning the department's training initiatives with its emergency response goals and community risk reduction programs. The evaluation also anticipates future training requirements and associated costs, allowing for the efficient and effective allocation of resources.

The foundation of any effective fire service lies in a well-trained and well-equipped workforce. Fire protection services can only be deemed acceptable when personnel possess the necessary skills, knowledge, and tools to adapt to the constantly changing demands of the environment. This includes not only responding to emergencies but also actively participating in community risk reduction efforts, promoting fire prevention, and ensuring a high standard of safety for both firefighters and the public.

Firefighters must receive thorough training to perform their tasks effectively. Training programs should extend beyond teaching new skills to include a component focused on maintaining and refining existing ones. The Fire Chief is ultimately responsible for ensuring that firefighters train to meet the service levels the public expects, both the service levels expected by the public and the requirements outlined in the Occupational Health and Safety Act.

The expectations placed on today's firefighters are higher than ever. Community fire protection requires extensive training and qualifications in prevention, suppression, management, and administration. The decisions made at an emergency scene can have life-or-death consequences, making a high level of training and strong situational awareness critical.

A career path training model should be adopted, where training programs are structured to support the progression of personnel from entry-level firefighter to officer. This model should be applied across all specialized functions and positions within the department.

Training programs should also align with the Job Performance Requirements (JPR) in the applicable NFPA standards, adhere to legislative requirements such as O. Reg. 343/22 Firefighter Certification, and support the fulfillment of response objectives. EMG evaluated current educational programs and identified benchmarks and targets, including key deliverables based on the ANFRES fire protection delivery model and community needs. EMG also reviewed ANFRES's training programs, division capacity, and record-keeping, identifying gaps in service

and operating needs. Ensuring measurable targets and quantifiable areas for ongoing improvement were developed based on ANFRES's levels of service applied against the following:

NFPA 1500
Standard on Fire Department Occupational Safety, Health and Wellness Program

NFPA 1201
Standard for Providing Fire and Emergency Services to the Public

NFPA 1041
Standard for Fire and Emergency Services Instructor Professional Qualifications

NFPA 1006
Standard for Technical Rescue Personnel Professional Qualifications

NFPA 1403
Standard on Live Fire Training Evolutions

NFPA 1401
Fire Service Training Reports and Records

NFPA 1072
Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction

3.5.1 Legislative Requirements

Firefighting is a high-risk profession, making training a crucial requirement for fire service personnel to achieve successful outcomes during emergency incidents safely.

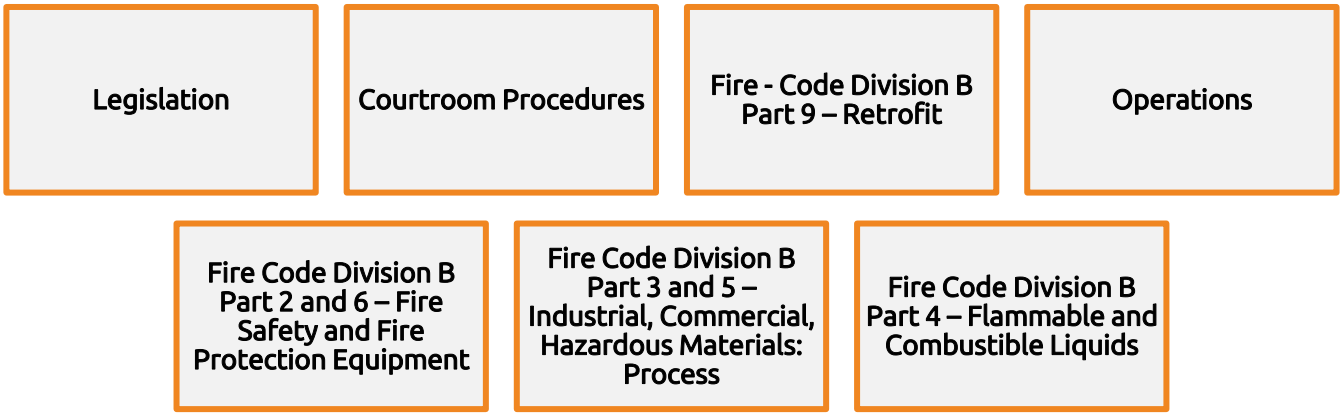
Part III of the *OHSA* identifies the duties of employers, stating that:

> *25 (2) Without limiting the strict duty imposed by subsection (1), an employer shall,*
>
> *(a) provide information, instruction, and supervision to a worker to protect the health or safety of the worker,*
>
> *(c) when appointing a supervisor, appoint a competent person; and*
>
> *(h) take every precaution reasonable in the circumstances for the protection of a worker.*

In addition to the *OHSA*, the Section 21 Firefighter Guidance Notes offer best practices for safeguarding the health and safety of fire service workers in Ontario. Part 7 of the Guidance Notes, which focuses specifically on training, is particularly important.

The *FPPA* (1997) outlines the responsibilities of a municipality concerning fire protection services. To address this, Ontario municipalities implement an Establishing and Regulating Fire Department By-law (E&R By-law), which defines the level of services to be provided based on local needs and circumstances. The E&R By-law informs the fire department about the required type and level of training. In the case of ANFRES, the By-law establishes twenty-one core response levels. In the summer of 2022, O. Reg. 343/22 Firefighter Certification under the FPPA came into effect, stipulating that any firefighter performing fire protection services must be certified, at a minimum, according to the certification standards established in the regulation:

In Ontario, Fire Code-specific training supports the Job Performance Requirements in standards such as NFPA 1031 and 1033. This training is available through the Ontario Fire College, is Ontario-focused, and is designed for Fire Prevention Officers and Inspectors. These include:



3.5.2 Training Programs

The NFPA 1201 *Standard for Providing Fire and Emergency Services to the Public,* Article 5.1.1, in particular, assists the Fire Chief in developing training programs to protect lives, property, critical infrastructure, and the environment from the effects of hazards such as fires, hazardous materials, and natural disasters. Section 4.11 of the Standard requires the Fire and Emergency Services Organization to implement training and education programs to ensure that personnel are trained and maintain the necessary competencies to perform their duties safely, effectively, and efficiently.

The responsibility for training programs within the fire service lies with the Fire Chief. This responsibility includes allocating a budget for training facilities, supplies, training aids, and personnel, including in-house and contract instructors, when necessary. The Fire Chief is also

responsible for maintaining accurate training records and evaluating the effectiveness of the training programs. The Fire Chief must also meet the professional qualifications required for their position.

In any fire service, training delivery typically covers four key areas:

3.5.2.1 Recruit Firefighter Training

EMG could not identify a formal policy or procedure that directly addresses what the ANFRES recruit training program entails. However, to provide clear direction for selecting recruits and ensure the application of a consistent and fair process, recruitment selection follows the process outlined in Policy Number Sup-05, Selection of New Recruits. Additionally, Policy Number Sup-04 Orientation of New Recruits provides direction for the orientation of recruits as follows:

- It shall be the responsibility of the Fire Chief to ensure that such orientation is provided.
- New Recruits shall be introduced to and trained in the ANFRES Policies and Procedures, the regulating document of the Corporation of the Township of Asphodel-Norwood Establishing and Regulating By-law and required to attend a reasonable amount of training and incidents.
- New recruits shall be introduced to and trained in the Health and Safety Guidelines for Ontario's Fire Service (including the OHSA) and the required regulations.
- New Recruits shall be introduced to the Township of Asphodel-Norwood's Policies and Procedures and complete the Municipality's new employee package.

EMG determined that recruit firefighters receive certification training following NFPA 1001: *Standard for Firefighter Professional Qualifications,* Levels I and II, at the EOETA. Additionally, recruits complete operations-level certification under NFPA 470.

Furthermore, NFPA 1500, Section 5.1.3, stipulates that the fire department shall establish training and education programs that provide new members with initial training, proficiency opportunities, and a method for evaluating skills and knowledge required for duties assigned to the member before engaging in emergency operations. It further states in Section 5.1.9 that, as a duty of function, members shall be responsible for maintaining proficiency in their skills and

knowledge and for utilizing the professional development opportunities provided to them through the department's training and education programs.[8]

This statement applies to all fire department members across all divisions and ranks. The skill set required to be an effective firefighter is extensive, and it is essential to recognize that ongoing, repetitive training is necessary to master specific tasks. Firefighters are often required to perform in high-pressure, high-stress situations where coordination and precision are critical. Regular, focused training in a controlled environment helps ensure that fireground operations are conducted safely and efficiently, ultimately enhancing overall performance in real-world scenarios.

A defined and documented recruit firefighter training program is vital to ensure consistency, safety, and regulatory compliance within the fire service. It provides all recruits with standardized instruction aligned with NFPA and provincial requirements, such as O. Reg. 343/22, helping to reduce liability and support operational readiness. Structured training enhances safety by preparing recruits to respond effectively to emergencies, while clear documentation supports accountability, audits, and certification processes. Additionally, it sets performance expectations, aids in professional development, and contributes to overall operational efficiency by fostering confident, capable team members.

Recommendation #11

The Fire Chief shall formally develop, implement, and maintain a defined and documented Recruit Firefighter Training Program. This Program should be aligned with NFPA standards and comply with provincial regulations, including O. Reg. 343/22 (Ontario Firefighter Certification). The Program should outline clear learning objectives, performance benchmarks, and documentation protocols to ensure consistency, regulatory compliance, and operational readiness.

The Office of the Fire Marshal (OFM) recommends that municipal fire protection services base their operations on the three lines of defence. The first line of defence, public fire safety education, is critical to community safety. NFPA 1035: Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist, and Youth Firesetter Program Manager Professional Qualifications identifies the minimum requirements for these programs. The Fire Chief should evaluate the Recruit Firefighter Training Program to determine the feasibility and benefits of incorporating NFPA 1035 certification training into the program. Doing so will enhance public education capabilities and

[8] Free Access - NFPA 1500: Standard on Fire Department Occupational Safety, Health, and Wellness Program. February, 2025. https://link.nfpa.org/free-access/publications/1500/2021

communication skills, enabling recruits to engage with the community on public safety initiatives effectively.

3.5.2.2 Professional Development Training

The purpose of professional development training is to prepare firefighters for advancement within the service. Inclusive of certification training to the NFPA 1021 Standard for Fire Officer Professional Qualifications Levels I to IV, training should also focus on management functions such as dealing with difficult people, time management, labour relations, and effective leadership, to name a few.

Additional educational opportunities are available through community colleges and universities, such as fire service administration certificate programs and degrees in emergency management, for personnel who want to advance to the position of Fire Chief or Deputy Chief. It is also not uncommon for today's highly trained and educated fire service leaders to advance to higher-level corporate management positions or leadership positions in the private sector.

3.5.2.3 Special Operations Training

According to NFPA 1500, Section 5.4.1, the fire department shall provide specialized and advanced training to members who engage in special operations as technicians.[9]

Depending on the needs and circumstances of the community, fire services may not need to provide a technical rescue response. In other instances, the service may not have the personnel or equipment capacity to provide such a response and may rely on a fire protection agreement, for example, to fill the service gap.

For those departments that do provide technical rescue response, NFPA 1006: *Standard for Technical Rescue Personnel Professional Qualifications* details the minimum job performance requirements at the awareness, operations, and technician levels.

3.5.2 Current Status

To ensure that the ANFRES training programs are effectively meeting the department's needs and achieving the necessary response objectives as established by the Council, the Fire Chief considers the following factors:

[9] Free Access - NFPA 1500: Standard on Fire Department Occupational Safety, Health, and Wellness Program, February, 2025. https://link.nfpa.org/free-access/publications/1500/2021

Required Training Programs: The specific training programs are based on the services the fire department is required to provide.

Certification Requirements: The number of hours required for each competency as outlined in relevant NFPA standards and as required under O. Reg. 343/22.

Resources: Assess the resources necessary for successful training, including instructors, curriculum, training aids, and equipment.

Annual Training Calendar: An annual training calendar should be developed at the beginning of each year and presented by the fire chief. It should outline training goals and objectives aligned with the department's needs and response objectives.

Training Records: Maintain comprehensive and accessible training records that track individual firefighter history, training completion, and success rates.

The OH&S Act places direct responsibility on the Fire Chief to ensure the provision of information, instruction, and supervision to workers to protect their health and safety.

The Fire Chief distributes the ANFRES Training and Special Events Schedule to all personnel annually. This schedule outlines predetermined training events that support ANFRES's operational objectives, with regular sessions typically held on the first, third, and fourth Wednesdays of each month and with additional training sessions added as needed. It thoughtfully accounts for seasonal emergencies – for example, training for grass and brush fires is scheduled before the fire season. Public education initiatives, such as Fire Prevention Week, are included in the schedule, providing firefighters with ample time to prepare for and support these vital community outreach efforts.

Except for vehicle extrication, it appears that not all personnel conduct training in all technical rescue disciplines annually. A review of the current and previous five-year schedules shows that topics such as farm equipment extrication and rescue, elevator rescue, shore-based water rescue, and assisting technical rescue teams are addressed every two or three years. However, EMG did not identify any maintenance training related to hazardous materials.

To the Fire Chief's credit, mandatory policy-related training, such as Occupational Health and Safety and Workplace Violence and Harassment training, is consistently conducted on an annual basis. The training calendar and associated programs are well organized and align with ANFRES's core services. Conducting a thorough assessment of training gaps related to these core

Recommendation #12

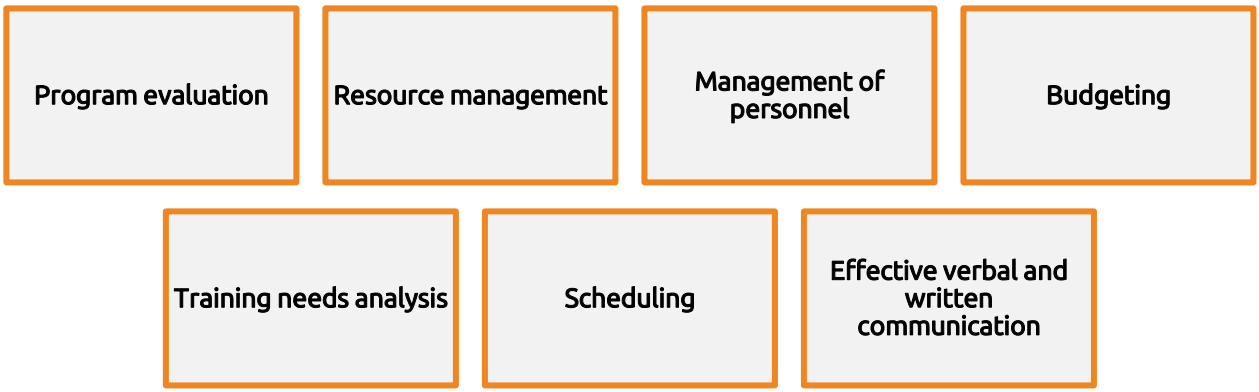
The Fire Chief should assess the training schedule for the opportunity to provide more frequent technical rescue and hazardous materials training opportunities.

services while incorporating the recommendations outlined in this report is expected to enhance the effectiveness and completeness of the department's overall training program.

3.5.3 Workload

The Fire Chief, certified to the NFPA 1401 standard, is primarily responsible for delivering the training necessary to effectively respond to ANFRES's twenty-one core services.

According to the NFPA 1041, the management of fire service training programs requires a manager, regardless of fire service affiliation or instructor level, who can accomplish the following tasks:[10]



The Fire Chief does an admirable job managing the department's overall training program. However, coordinating staff attendance at training events, securing training materials, delivering instruction, and maintaining accurate training records all demand a significant investment of time. These responsibilities add to an already demanding role, given the broad range of duties required of a Fire Chief.

Recommendation #13

Conduct a comprehensive workflow analysis to evaluate the current demands on the Fire Chief and the training function.

This analysis should assess whether additional support is warranted to ensure the department can maintain training standards, meet

[10] Free Access - NFPA 1041: Standard for Fire and Emergency Services Instructor Professional Qualifications Accessed April, 2025 https://link.nfpa.org/free-access/publications/1041/2019

regulatory requirements, and deliver high-quality service without overextending key leadership personnel.

3.5.4 ANFRES Training Programs

3.5.4.1 Hazardous Materials Training

National Fire Protection Association Standard 470 outlines the minimum requirements for personnel responding to incidents involving hazardous materials and weapons of mass destruction. Asphodel-Norwood Fire/Rescue and Emergency Services responds to such incidents in accordance with NFPA 470 at the Awareness Level.

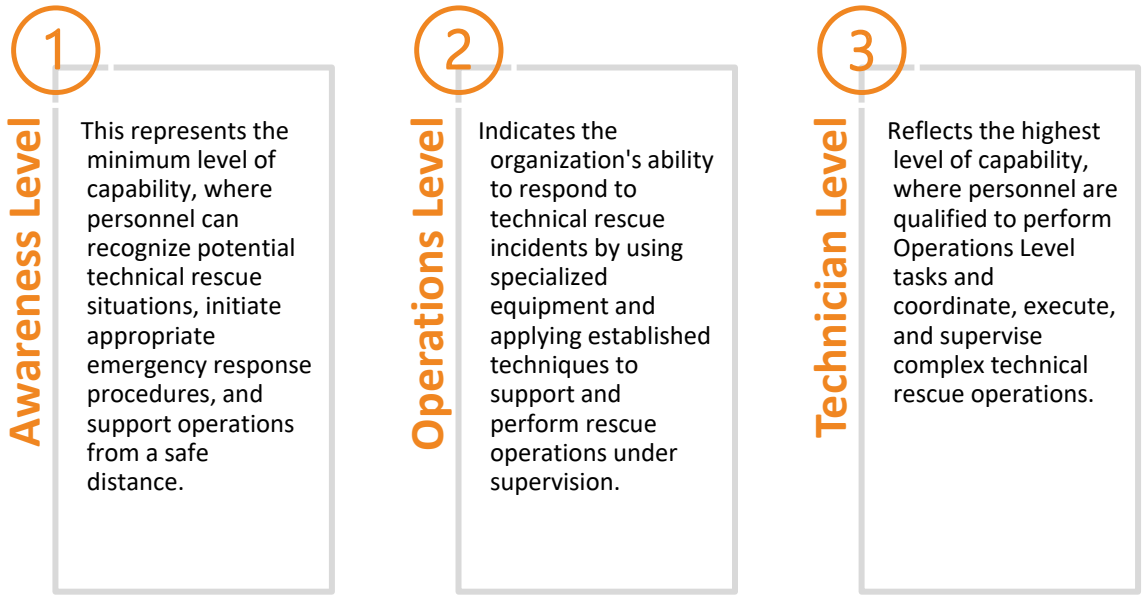
In addition, ANFRES operates under the County of Peterborough Mutual and Automatic Aid Plan and Program, which includes the *Peterborough County Hazardous Materials Response Support Agreement.* This agreement ensures that the closest available specialized assistance is immediately dispatched to hazardous materials incidents, regardless of municipal boundaries.

As part of this agreement, the City of Peterborough Fire Department, whose personnel are trained and equipped to the NFPA 470 Operations Level, has committed to providing support across the County upon request from any participating fire department.

3.5.4.2 Technical Rescue Training

Technical rescue encompasses a wide range of specialized emergency responses that fire departments may be called upon to handle. The relevant standard governing the qualifications for personnel involved in these incidents is the NFPA *1006 Standard for Technical Rescue Personnel Professional Qualifications.* This standard outlines the minimum professional requirements for responders who perform technical rescues, ensuring they have the knowledge and skills to operate safely and effectively in these complex incidents. The NFPA 1006 standard contains nineteen chapters related to technical rescue. It identifies that the fire department must establish written Standard Operating Procedures (SOPs) that align with the operational level determined for each technical rescue response it will be responding to.

The three operation levels identified in the standard are:



Asphodel-Norwood Fire/Rescue & Emergency Services train for technical rescue incidents at the following level:

- Trench Rescue – Awareness
- Ice/Water Rescue – Shore Based
- Elevator Rescue – Trained to the Technical Standards and Safety Authority requirements
- Confined Space Rescue – Awareness
- High/Low Angle Rescue – Awareness
- Auto Extrication - undefined

The Mutual and Automatic Aid Plan and Program outlines the County's Specialized Rescue Support Program, which includes response capabilities for high-angle and confined space rescue emergencies. Under this Program, the Peterborough Fire Services, along with a specialized rescue team composed of members from participating County Fire Departments (s) (excluding Selwyn), is responsible for properly training and equipping them to provide these rescue services. As part of the agreement, ANFRES firefighters must train to respond at the awareness level in support of high-angle and confined space rescue incidents.

Specialized Rescue Team (SRT) members train together at least twice monthly at the Eastern Ontario Emergency Training Academy (EOETA) or in the field at various locations designed to simulate real-time emergency scenarios. Asphodel-Norwood Fire/Rescue and Emergency

Services currently has four dedicated SRT members, supported by a group of alternate personnel who are available when needed.

3.5.4.3 Fire Suppression Training

Effective fire service training relies on repetitive practice in a controlled yet realistic environment to ensure firefighters are prepared for real emergencies. A well-structured training program strengthens operational efficiency, enhances firefighter safety, minimizes property damage during incidents, and upholds high-quality public service.

Fire service training incorporates a range of instructional methods, including video-based lessons, classroom instruction, and practical, hands-on drills. Technological advancements have increased accessibility, enabling personnel to complete preliminary coursework through online platforms or textbooks, thus reducing traditional classroom hours. However, the cornerstone of firefighter preparedness remains hands-on experience, reinforcing crucial skills and situational awareness through scenario-based applications.

Regardless of the specific training goal, practical training sessions should link to each task's Job Performance Requirements (JPRs). These scenarios require development and delivery annually to ensure personnel maintain proficiency across all departmental response objectives.

The ANFRES benefits from its proximity to the EOETA, located on a 20-acre site at 36 Industrial Drive in Norwood, Ontario. The EOETA is a primary training facility for the Sir Sanford Flemming College's Pre-Service Fire Program and is well equipped to support a wide range of fire service training needs. The site features a three-storey burn tower, a search and rescue maze, a confined space training area, a firefighter survival unit, a forcible entry prop, propane fire props, a trench rescue pit, a fire extinguisher training system, a drafting pit, classrooms accommodating 40–50 students, and an on-site cafeteria.

EOETA Burn Tower

EOETA Classroom

Fire Department Administration Office

This site serves as the primary location for ANFRES's training, where personnel relevant to the department's response objectives receive training. It is essential to note that personnel conduct live-fire training at this facility twice a year. The department utilizes textbooks from the International Fire Service Training Association (IFSTA) as the foundation for its training curriculum. Classroom-based training sessions is held at the facility located at 4440 Highway 7 in Norwood.

At present, the department does not utilize an online learning platform. While such platforms offer numerous benefits, including flexibility, accessibility, increased efficiency, cost-effectiveness, and enhanced record-keeping, EMG did not identify an immediate need for this resource. Nevertheless, the Fire Chief should continue to evaluate the department's training delivery methods and programs to determine whether an online learning platform may be beneficial in meeting future training needs.

Recommendation #14

The Fire Chief regularly reviews and assesses the department's training delivery methods to determine if an online learning platform would enhance training accessibility, consistency, and effectiveness, particularly as training needs evolve or operational demands increase.

3.5.4.4 Medical Training

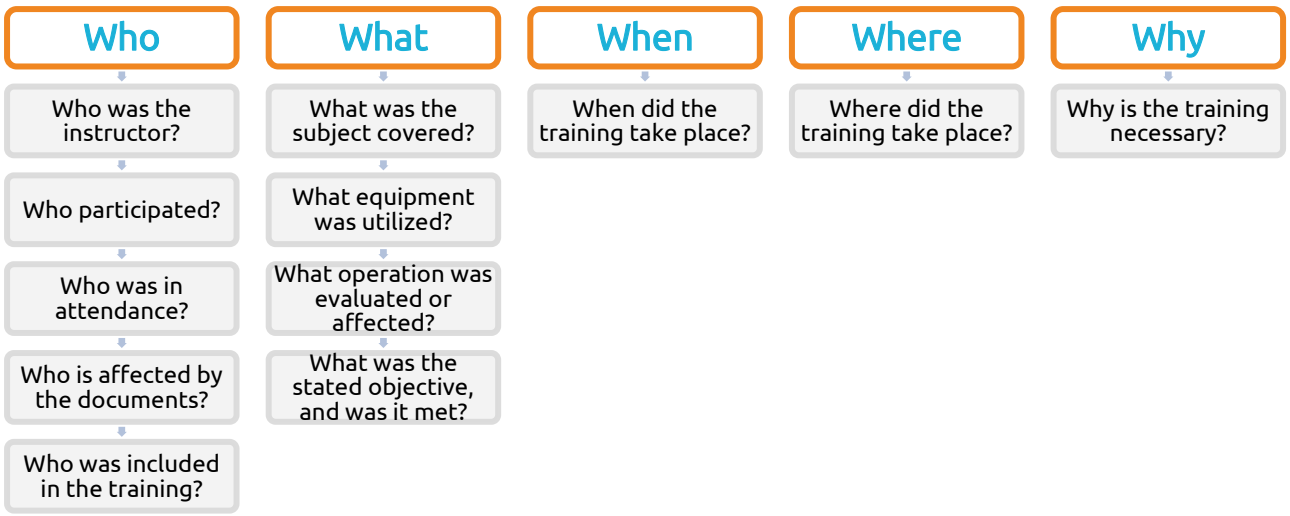
In support of the Peterborough County Medical Tiered Response Program, suppression personnel train to the Red Cross specifications for Cardio Pulmonary Resuscitation (CPR) and First Responder Certification. Automatic External Defibrillators (AED) are readily available during life-threatening medical emergencies on Rescue 1, 2 and Car 1. Additionally, firefighters are trained to administer Naloxone, carried on the apparatus.

Based on EMG's review of multiple ANFRES training calendars, medical training is conducted annually, with all required recertifications completed accordingly. Given that medical emergencies accounted for 232, or 54% of all incidents between 2019 and 2023, firefighters must regularly engage in diverse medical training scenarios to maintain their proficiency and readiness.

3.5.5 Training Documents and Training Records

The Fire Chief has direct responsibility for ensuring that all personnel's training records are up to date. The National Fire Protection Association Standard 1401, Fire Service Training Reports and Records, presents a systematic framework for organizing and managing training documentation and activities within a fire service organization. Training records play a vital role in managing a fire service organization. Beyond meeting legal and statutory requirements, well-maintained records support effective planning, programming and budgeting decision-making.

Training records should prioritize content, accuracy, and clarity regardless of their purpose or level of detail. When reviewing a training document, the reader should be able to identify the following information easily:



Training records should extend beyond basic documentation to include additional key details, thereby enhancing accuracy, traceability, and effectiveness. These should consist of the training source and content, the training delivery method, the evaluation of learning objectives and finally, the training safety plans. Asphodel-Norwood Fire/Rescue and Emergency Services maintains individual training records for all personnel, and EMGs review confirms that these records generally align with the requirements outlined in NFPA 1401 and should take advantage of any opportunities for improvement based on the guidance and recommendations outlined in this section of the Master Fire Plan.

In addition to individual records, ANFRES also maintains a separate document that tracks each member's NFPA certifications. This document effectively monitors personnel's progress and readiness regarding the upcoming mandatory compliance requirements outlined in the Ontario Firefighter Certification Regulation.

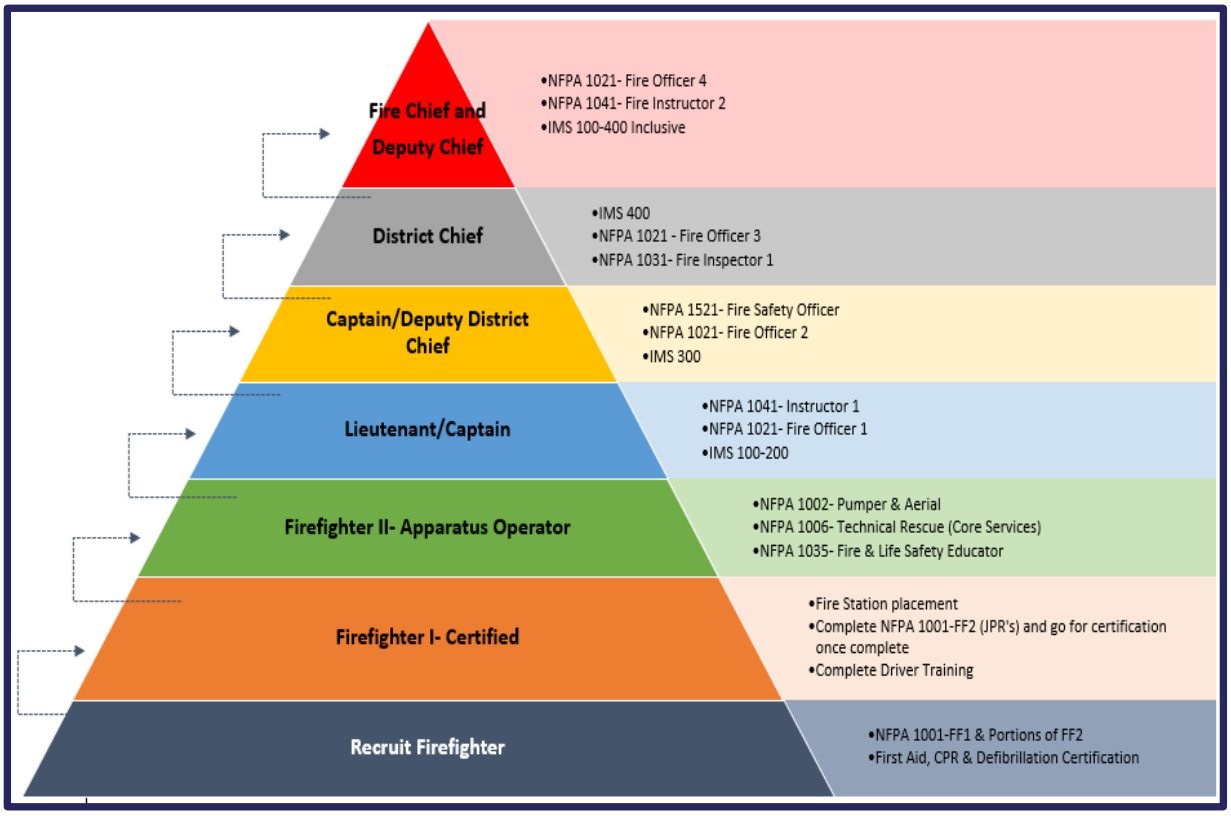
Recommendation #15

The Fire Chief should review ANFRES's training records to ensure alignment with NFPA 1401 and identify opportunities for improvement based on the guidance and recommendations outlined in this section of the Master Fire Plan.

3.5.6 Career Development and Succession Planning

It is essential to ensure that staff acquire the necessary knowledge, skills, and abilities, as well as understand how progression through the rank structure typically occurs. With the adoption of NFPA standards for Ontario's fire services, the ANFRES should clearly define the training program and succession pathway for current and anticipated positions.

FIGURE #2 – TRAINING CONTINUUM MODEL



The image above represents a typical fire department rank structure, along with the corresponding educational levels aligned with NFPA standards. While not depicted, the position of Fire Prevention Officer is generally equivalent to that of Firefighter Level II or Lieutenant. It requires additional NFPA certifications specific to the role, according to O. Reg. 343/22 Firefighter Certification.

In today's fire service, developing personnel through structured firefighter training programs and defined career pathways is critical for individual growth and effective departmental management. These staff development programs are typically shaped by the department's operational needs, service levels, and community expectations. At the same time, they empower personnel to take ownership of their professional development. For administration,

training programs and career paths are valuable tools in planning departmental budgets and individual learning plans.

At its core, a firefighter's career generally follows one of two primary streams: Fire Leadership (Administration) or Fire Department Operations. While each path offers distinct roles and responsibilities, both share the unified purpose of delivering high-quality emergency services to the community.

A strong career development plan begins with clearly defined job descriptions. Asphodel-Norwood Fire/Rescue and Emergency Services Policy Number ANFRES 41 – *Job Descriptions (Suppression*) provides the foundation for developing a formal career progression framework. These job descriptions enable personnel to understand the responsibilities and training requirements of each role, helping them prepare for future advancement within the department.

There is a need for comprehensive job descriptions for all positions and ranks within the organization. These documents must align with the department's operational needs, service levels, and community expectations and comply with relevant legislative requirements, such as O. Reg. 343/22 Firefighter Certification, the OH&S Act, and any mandated corporate training policies.

Recommendation #16

ANFRES should update existing job descriptions to reflect the department's operational needs, service levels, and community expectations, as well as comply with relevant legislative requirements, such as O. Reg. 343/22 Firefighter Certification, the OH&S Act, and any mandated corporate training policies and ANFRES uses the updated job descriptions as the basis for developing a formal career pathway plan.

Section 4

Suppression Division / Emergency Response

Emergency Management Group

SECTION 4 - FIRE SUPPRESSION / EMERGENCY RESPONSE

This section provides a comprehensive analysis of the capabilities and limitations of the current volunteer firefighter response model while assessing opportunities for improvement. In conducting this analysis, consideration has been given, but not limited to, industry best practice guidelines such as the relevant National Fire Protection Association (NFPA) standards, applicable legislation, including the *Fire Protection and Prevention Act*, 1997 (FPPA), and the *Ontario Occupational Health and Safety Act*, and Standard Incident Report (SIR) data provided by ANFRES to EMG.

To conduct an effective analysis of staffing, response, and station location for any fire service, it is essential to establish a benchmark or standard against which the response model can be evaluated. Furthermore, for the Fire Chief to make well-informed decisions about the positioning and deployment of resources, the following factors should be taken into account:

- Has the Council provided clear direction to the Fire Chief regarding the expected response times that the fire department is required to achieve?
- Is the fire department facing challenges in ensuring that the required number of firefighters consistently respond from assigned station locations, thereby maintaining an appropriate level of response according to the deployment model?
- How will future growth, including residential, commercial, and industrial development, affect the location of fire stations, staffing levels, and the deployment of firefighters?

The National Fire Protection Association (NFPA) 1720 Standard identifies the number of personnel for the deployment of paid-on-call (volunteer) firefighters:

NFPA 1720 - 4.3 Staffing and Deployment

Section 4.3.1:

"the Fire Department shall identify minimum staffing requirements to ensure that the number of members that are available to operate are able to meet the needs of the department".

Table 4.3.2 shall be used by the Authority Having Jurisdiction (AHJ) to determine staffing and response time objective for structural firefighting, based on a low-hazard occupancy such as a 2000 ft² (186 m²), two-story, single family home without a basement and exposures and the percentage accomplishment of those objectives for reporting purposes as required in 4.4.2.*

- *In urban areas with a population greater than 1,000 per square mile or 2.6 km², there should be a minimum response of 15 staff within 9 minutes, 90% of the time.*

- *In suburban areas with a population density of 500 – 1,000 people per square mile (2.6 km²), there should be a minimum response of 10 staff members within 10 minutes, 80% of the time.*
- *In rural areas with a population of less than 500 per square mile or 2.6 km², there should be a minimum response of 6 staff within 14 minutes, 80% of the time.*
- *In remote areas with a travel distance of greater than or equal to 8 mi or 12,87 km, there should be a minimum of 4 staff directly dependent on travel distance 90% of the time.*

With a population of approximately 4,658 (2021) spread across 161.62 km² (62.24 mi²), Asphodel-Norwood is considered a rural area, with roughly 74.9 residents per 2.6 km². This requires having six firefighters on the scene within 14 minutes, 80% of the time. This 14-minute timeframe accounts for a 4-minute assembly period for paid-on-call (POC) (volunteer) firefighters, which is the average time it takes for them to reach the station and respond in an emergency vehicle.

Tracking this key response time is critical for helping ANFRES determine whether it is consistently meeting or approaching NFPA recommendations. Regularly reporting these response times to the Council is crucial in providing them with a clear understanding of the fire service's performance and capabilities.

Recommendation #17

The Asphodel-Norwood Council should adopt a 14-minute response time for inclusion in the ANFRES Establishing & Regulating By-law.

NFPA 1720 - 4.6 Initial Firefighting Operations

- *4.6.1 Initial firefighting operations shall be organized to ensure that at least four members are assembled before interior fire suppression operations are initiated in a hazardous area.*
- *4.6.2 In the hazardous area, a minimum of two members shall work as a team.*
- *4.6.3* Outside the hazardous area, a minimum of two members shall be present for assistance or rescue of the team operating in the hazardous area.*
- *4.6.4 Initial attack operations shall be organized to ensure that if, upon arrival at the emergency scene, initial attack personnel find an imminent life-threatening situation where immediate action could prevent the loss of life or serious injury, such action is permitted with less than four personnel when conducted in accordance with NFPA 1500.*

The National Institute of Standards and Technology (NIST)

The primary goal of the fire department is to reach the emergency scene as quickly and safely as possible. Suppose a responding apparatus can arrive at the scene within four minutes or less with a recommended crew of four firefighters. In that case, the likelihood of containing the fire to its area of origin increases, preventing its spread throughout the rest of the structure. However, if the first apparatus arrives with fewer than four firefighters, the capabilities for effective initial operations are limited.

Studies by NIST and NFPA emphasize the crucial role of crew size and rapid response time in effectively managing residential fires. It emphasizes that arriving at a fire scene within four minutes with a minimum crew of four firefighters significantly improves the ability to contain a fire at its point of origin, thereby reducing the risk to life and property.

This research confirms that safe and effective interior fire operations require adequate staffing, particularly adherence to the "two-in, two-out" rule. A four-person crew can effectively perform essential tasks, such as scene assessment, setting up water supplies, and deploying hoses, in an efficient and safe manner.

4.1 Intervention Time and the Fire Response Curve

When evaluating the response times and needs of a community, the fire response curve provides an overview of how quickly a fire can escalate within a compartment of a furnished residential structure over a short period. The rate of fire growth can be influenced by various factors, which may either accelerate or slow down the burn rate through fire control measures within the structure. The response time of a fire department is influenced by several factors, including but not limited to:

- Call handling time, or the amount of time it takes for the dispatch communicators to assess a call and notify the fire department.
- The assembly time of firefighters, both at the station before departure and once on the scene, preparing to act on the fire.
- The time it takes to move between the station and the location of the incident is also known as travel time. Several factors influence travel time, including distance, weather, road conditions and closures, traffic, level rail crossings, and the absence of direct routes due to watercourses, among others.

As shown in the following fire propagation diagram, early intervention in fire suppression efforts is crucial. Similarly, time is critical when responding to other life-threatening

emergencies, such as technical rescues, medical incidents, and motor vehicle collisions, among others.

FIGURE #3 – TIME VS. COMBUSTION

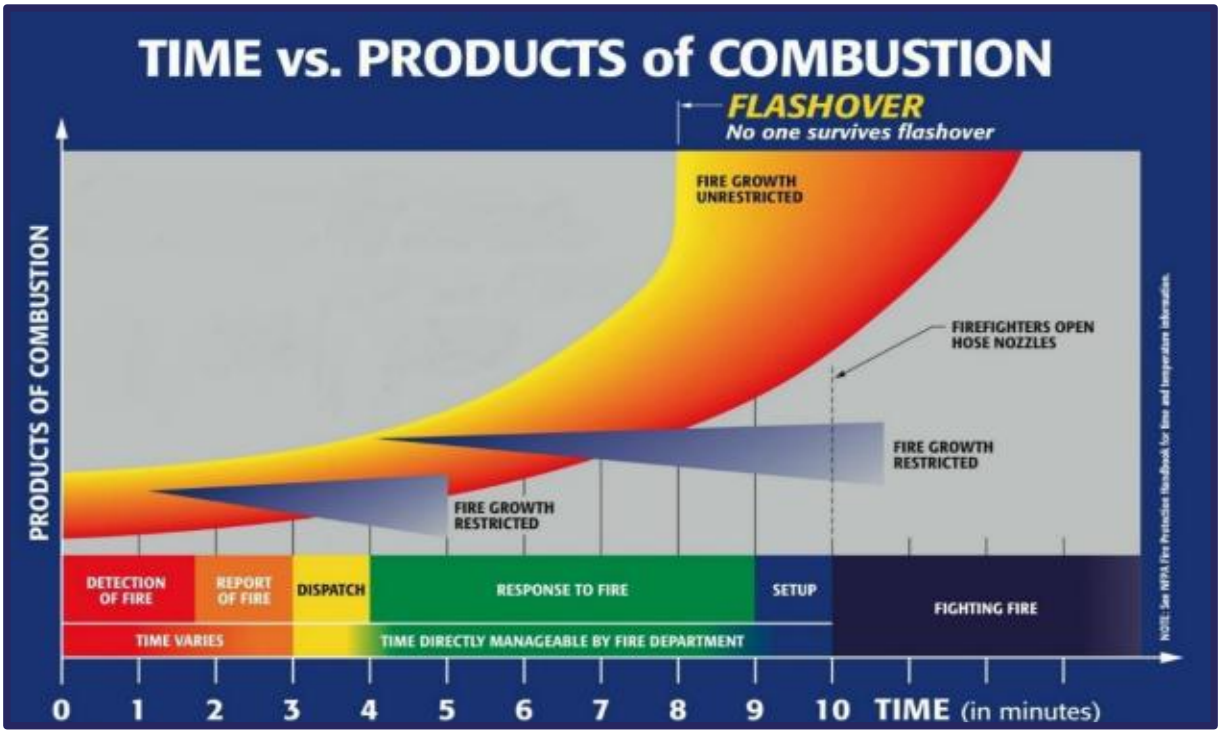


Figure #3 shows the time intervals in the fire propagation curve:

- Detection of Fire – this is when an occupant or passerby discovers that there is a fire. When discovered, the fire may be in the incipient phase or may have been burning for quite some time before being detected.
- Report of Fire – this is the time it takes for someone to call 9-1-1 and report the fire.
- Dispatch – this is the time it takes for the dispatch communicator to process the information being received and dispatch the appropriate resources.
- Response to the Fire – response time is a combination of the following:
    - Turnout Time – how long it takes paid-on-call firefighters to get to the station after being notified of the incident and begin to respond on an apparatus.
    - Travel Time – the time it takes from when the officer notifies dispatch they are responding until the time it is reported the crew is on the scene.
- Setup Time – the time it takes for the IC to conduct a size-up and formulate an incident action plan while the firefighters prepare to act on the fire. (NFPA 1410 *Standard on Training for Emergency Scene Operations* can be used to exercise basic evolutions to

evaluate minimum acceptable performance during training for fire suppression activities).

- Fighting Fire – the time between the application of an agent on the fire and extinguishment.

4.2 Response Data and Gap Analysis

As previously identified, Asphodel-Norwood is considered a "rural" area according to NFPA 1720. This requires having six firefighters on the scene within 14 minutes, 80% of the time. It is worth noting that NFPA Standards are not mandated, but they are recognized as an industry best practice. Therefore, fire departments should use the NFPA standards as guidelines to strive for.

The travel time polygons in the following figures were calculated using GIS software, which utilizes the road network from the responding fire station to the coverage area boundaries, taking into account posted speed limits. The calculation also takes into account the direction of travel, traffic lights, and stop signs. While the posted speed limit is typically used, fire apparatus may exceed the limit when responding to calls, provided it is safe to do so. Conversely, due to traffic congestion, weather conditions, or construction, fire apparatus may need to travel at speeds lower than the posted speed limit. As such, using the posted speed limit is a reasonable method for calculating travel time.

Using the NFPA 1720 rural area criteria and considering a 4-minute assembly time for volunteer firefighters, the GIS mapping in Figure #4, based on a 10-minute travel time, shows that coverage across the Township is adequate. There is a significant overlap between the first-due demand zones of both stations, which is advantageous. This overlap enables a faster assembly of an effective firefighting response force compared to a scenario without such redundancy. During the analysis, EMG was unable to accurately determine the average assembly time due to limitations in the data provided. As a result, the coverage illustrated in Figure #6 represents an ideal scenario. Any actual assembly times exceeding the assumed 4-minute average would lead to a reduction in overall response time coverage.

FIGURE #4 – 10-MINUTE TRAVEL TIMES FROM STATION 1 AND STATION 2

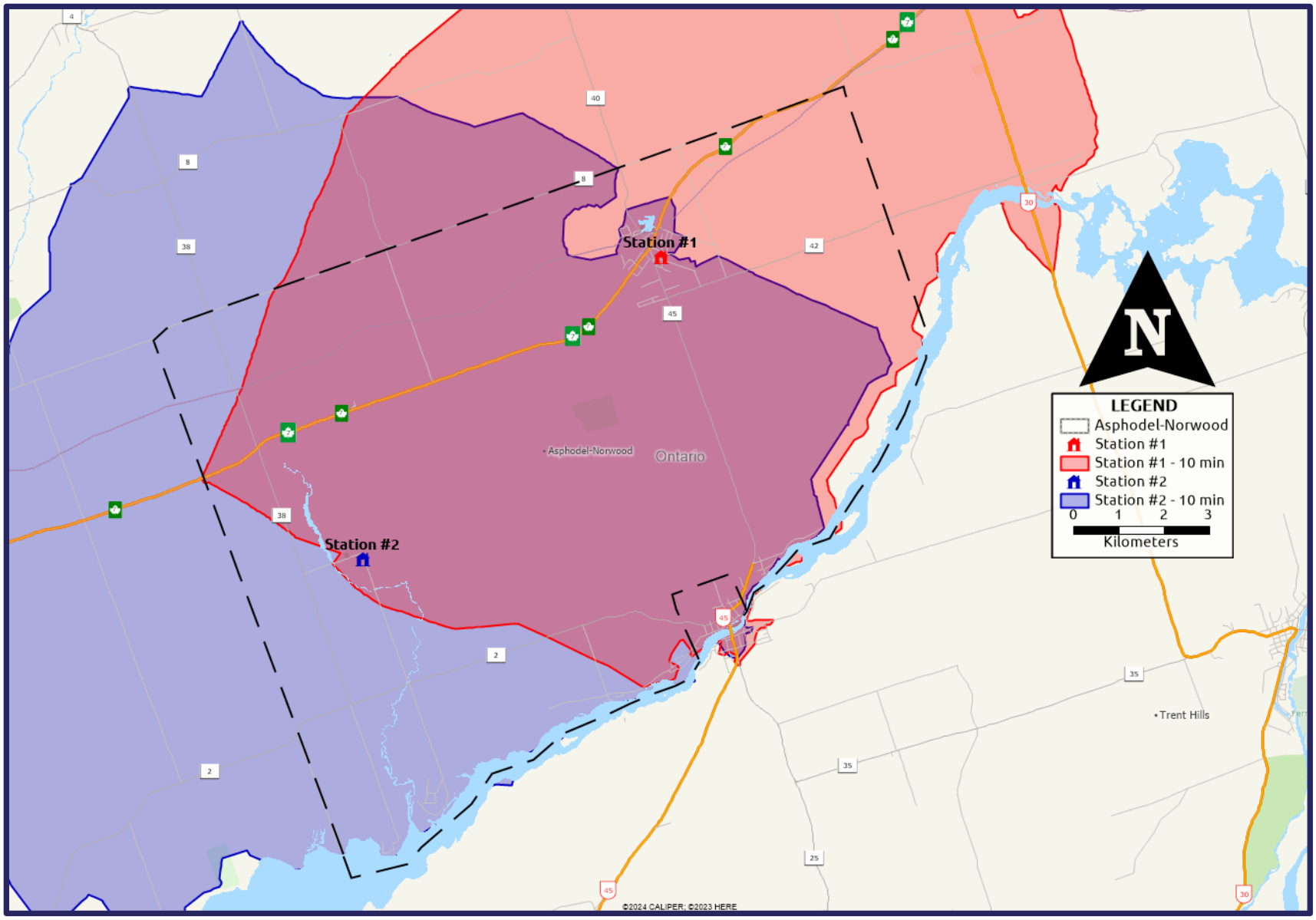


Figure #5, which displays emergency incident locations from 2021 to 2023, reveals that the majority of calls for service are concentrated within the Station 1 demand zone. Nonetheless, incidents are dispersed throughout the Township, which demonstrates the importance of maintaining a timely response capability across the entire community, supported by a sufficient number of available firefighters.

FIGURE #5 – 2021 - 2023 EMERGENCY INCIDENT LOCATIONS

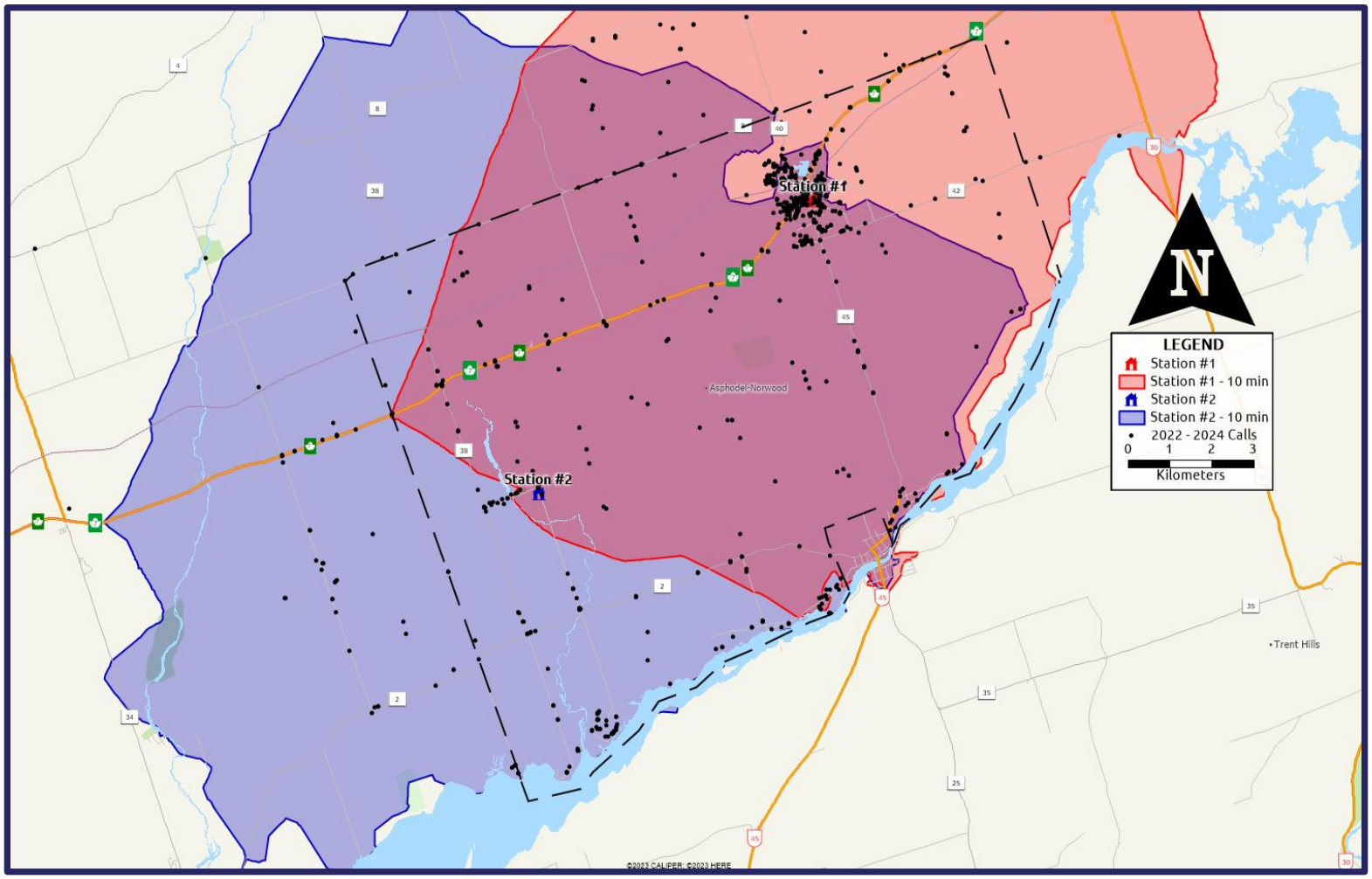


TABLE #4 - 2019 – 2023 RESPONSE DATA BY INCIDENT TYPE

Response Type	2019	2020	2021	2022	2023
Property Fires/explosions	4	1	12	10	16
Rescue	17	6	39	40	25
Pre-fire conditions/no fire	0	1	9	5	5
Burning (controlled)	4	5	9	11	7
CO Alarm Calls	0	0	4	10	1
Fire Alarm Activations	9	5	16	25	28
Public Hazard	2	4	16	16	14
Medical/Resuscitator Call	71	51	209	190	232
Other Response	25	24	70	71	66
Totals	132	97	384	378	394

As previously noted, ANFRES' objective is to assemble a minimum of 6 firefighters on the scene of a fire in a low-hazard occupancy, such as a 2000 ft2 (186 m2), two-story, single-family home without a basement and exposures, in 14 minutes, 80% of the time. Table #5 outlines the average number of responders and response time for all emergency incidents from 2022 to 2024, while Table # details the same metrics specifically for structure fires. Based on the averages provided to EMG by ANFRES and an analysis of ANFRES's structure fire responses against the requirements of NFPA 1720, it appears that ANFRES met the minimum staffing and response time standards in both 2023 and 2024.

TABLE #5 - 2022 – 2024 AVERAGE NUMBER OF FIREFIGHTERS RESPONDING AND AVERAGE RESPONSE TIME

Year	# Of Calls	Average # of Responders	Average Response Time
2022	356	5.2	19min26sec
2023	366	4.6	12min 14sec
2024	362	5.3	8min 49sec

TABLE #6 - 2022 – 2024 STRUCTURE FIRES, AVERAGE NUMBER OF FIREFIGHTERS RESPONDING, AND AVERAGE RESPONSE TIME

Year	# Of Structure Fires	Average # of Responders	Average Response Time
2022	5	17.2	15min 21sec
2023	12	13.6	10min09sec
2024	6	12.8	9min 47sec

Understanding the timing of emergency calls, including the time of day and day of the week, is crucial for the effective operation of a volunteer fire department. This data-driven analysis supports decision-making across several key areas:

Volunteer Availability – Many volunteer firefighters have to balance their emergency service duties with full-time employment and personal obligations. Analyzing call timing helps identify potential gaps in coverage, particularly during standard work hours or on weekends, enabling proactive planning to address these periods.

Staffing and Response Planning – Identifying peak call periods enables the department to consider establishing standby schedules, targeting recruitment efforts for times with limited availability, and strengthening fire service agreements to supplement response capacity during periods of peak demand.

Training and Preparedness – Scheduling training to align with high-frequency call periods enhances firefighter readiness and availability.

Community Risk Reduction – Call data can inform public education and prevention strategies. For example, suppose an increase in incidents is noted on weekends or evenings due to cooking or recreational activities. In that case, targeted messaging can be deployed to reduce risk and enhance community safety.

TABLE #7 - 2021 – 2023 CALLS BY DAY OF THE WEEK

Calls by Day of the Week	2021	2022	2023	Average
Total Calls	384	378	394	385
Monday	54	62	62	59
Tuesday	57	54	58	56
Wednesday	49	55	60	55
Thursday	46	58	48	51
Friday	56	41	57	51
Saturday	63	65	55	61
Sunday	59	43	54	52

TABLE #8 - 2021 – 2023 CALLS BY TIME OF DAY

Calls by Time of Day	2021		2022	2023	Average
Total Calls	384		378	394	385
Midnight to 2:59 am	30		29	24	28
3 am to 5:59 am	23		12	19	18
6 am to 8:59 am	39		49	43	44
9 am to 11:59 am	46		58	48	52
Noon to 2:59 pm	70		68	65	68
3 pm to 5:59 pm	70		62	68	67
6 pm to 8:59 pm	50		49	74	58
9 pm to 11:59 pm	42		46	51	46

The response data indicates that emergency incidents are relatively evenly distributed across both days of the week and times of the day. However, from 2021 to 2023, the data shows a higher volume of calls for service occurring on Saturdays and between noon and 5:59 p.m. While this insight can help support various operational decisions, it also highlights a potential challenge: the peak period for incidents often overlaps with times when volunteer firefighters may be at work or involved in other commitments, such as extracurricular activities.

Ongoing assessment of peak call volume periods may necessitate the implementation of mitigation strategies, such as assigning dedicated on-call shifts for personnel, introducing paid-on-call coverage during high-demand times, enhancing fire protection agreements with neighbouring departments, and focusing recruitment efforts on individuals who are available during these peak hours.

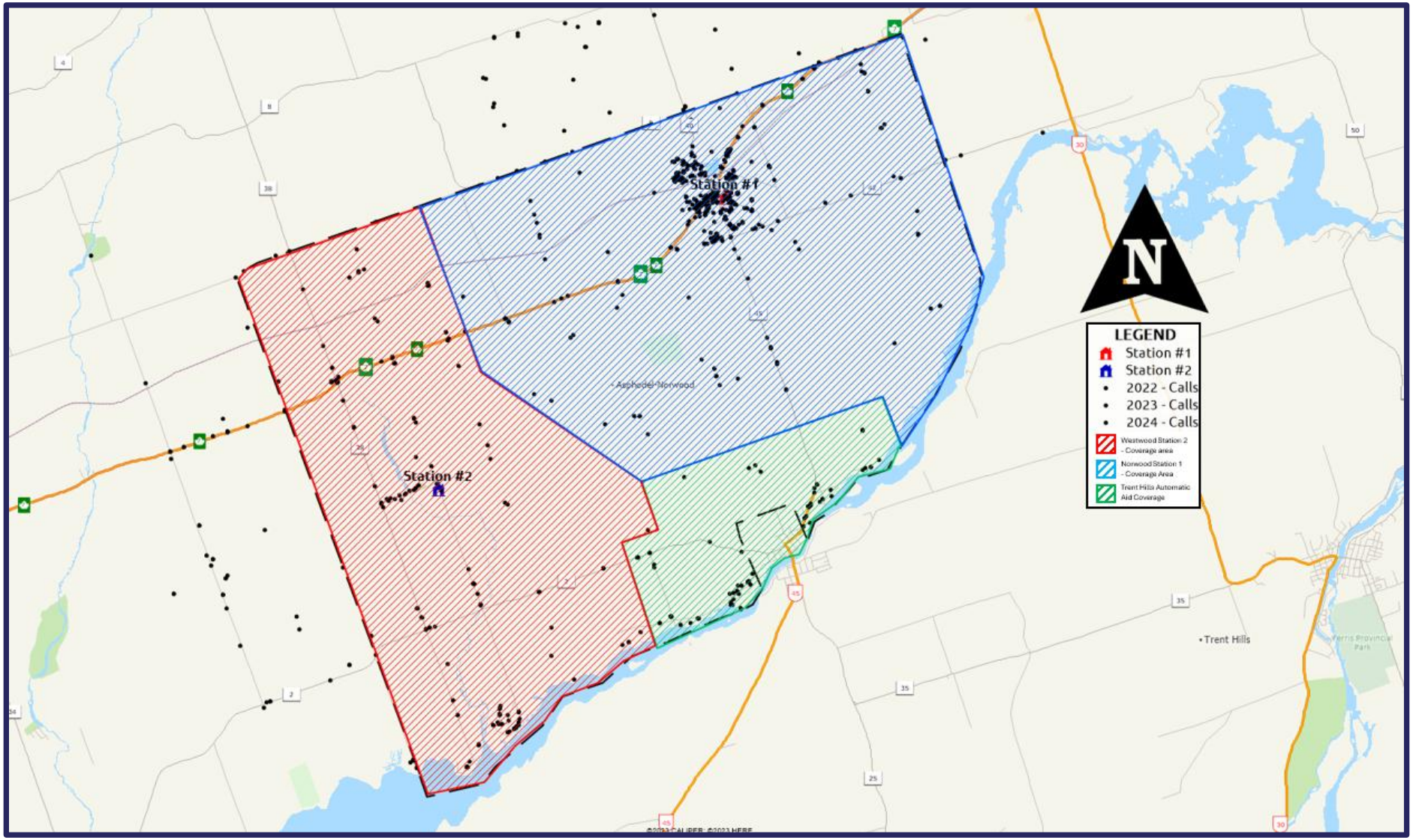
Recommendation #18

The Fire Chief should continue to assess the current staffing and response models to determine whether additional support or alternative scheduling strategies required to address peak call volumes, particularly between noon and 5:59 p.m.

4.3 Deployment of Resources

At the time of this report, the department was operating at full complement and responded from two fire stations. Currently, 20 Firefighters are assigned to Station 1 (Norwood), and 15 firefighters are assigned to Station 2 (Westwood). EMG research indicates that the current staffing levels have been in place since 1998. Under the current deployment model, each station is responsible for a designated demand zone, as illustrated in Figure #6. The current deployment model utilizes a paging system with built-in redundancy. If there are two consecutive "no-response" events from firefighters within the primary station's demand zone, personnel from the alternate station are automatically paged to respond to the incident. A "no-response" event is when no firefighters respond to a call from dispatch indicating they are responding to an emergency incident.

FIGURE #6 – STATION 1 AND STATION 2 DEMAND ZONES



Emergency Management Group

Policy Number SUP-33, Deployment of Fire Suppression Resources, outlines the minimum staffing requirements for a pumper, the full initial response configuration for structural fires, and the optimal number of personnel required on scene – 15 firefighters. This target aligns closely with NFPA standards for an effective response force to combat a fire in a 2,000 ft2 (186 m2), two-story, single-family residence, as previously discussed.

Further detailed in Section 7 of this report, the Township of Asphodel-Norwood has established an Automatic Aid Agreement with the Municipality of Trent Hills, as authorized by By-law Number 2015-88. This agreement supplements the Township's emergency response capabilities, and the designated coverage area is illustrated in Figure #6.

Due to anticipated community growth, increased call volumes during peak times, evolving personal commitments among volunteer firefighters, and staffing levels that have remained unchanged since 1998, there is a clear need for a gradual increase in volunteer firefighter staffing at ANFRES. Expanding the roster will also help the department continue to meet the Fire Underwriters Survey recommendation of maintaining a minimum of 15 firefighters per station. To address this, EMG is recommending the following:

Recommendation #19

A phased staffing level increase over the next five years, adding 10 firefighters to Station 1 (Norwood) and 5 firefighters to Station 2 (Westwood). This would bring the total staffing to 30 firefighters at Station 1 and 20 at Station 2.

The implementation of this phased increase should be carried out at the discretion of the Fire Chief, based on the department's capacity to effectively recruit, train, and equip the additional personnel. Successful execution will also depend on ongoing support from the Council through the annual budget processes.

4.4 Tiered Medical Response

Tiered medical response agreements are commonly used to coordinate the swift delivery of emergency medical services to the public. These agreements aim to deploy the most suitable agency based on factors such as training, equipment, and response time. The goal is to provide the most effective aid at the scene of a medical emergency while recognizing that the primary response agency may not always be the first to arrive on the scene. As outlined in Schedule "B" of the E&R By-law, ANFRES responds to medical emergencies at the First Responder level, including the use of an Automatic External Defibrillator (AED). Under an agreement between Peterborough Public Health and the Township, ANFRES equips its apparatus with Naloxone kits containing Narcan Nasal Spray, and all firefighters train in the administration of this life-saving

medication. Additionally, while Epinephrine is not on the apparatus, firefighters are authorized and trained to administer it on the scene when an emergency requires this type of intervention.

TABLE #9 - MEDICAL CALLS AND AVERAGE NUMBER OF FIREFIGHTERS RESPONDING

Year	# Of Medical Calls	Average # of Responders
2022	190	4
2023	232	3.9
2024*	186	4

***Note**: The 2024 data is sourced from the ANFR Standard Incident Response information. Please note that the Office of the Fire Marshal of Ontario has not yet verified this data.*

TABLE #10 - 2019 TO 2024 MEDICAL RESPONSE

Year	Medical Incidents	Total Incidents	Percentage
2019	71	132	53.8%
2020	51	97	52.6%
2021	209	384	54.4%
2022	190	378	50.3%
2023	232	394	58.9%
2024	186	293	60.0%

From 2019 to 2024, medical/resuscitator calls made up approximately 54.6% of the total response calls for ANFRES. Any incident category that represents over 50% of call volumes must be considered a core service and should continue to be supported with the appropriate operational resources and organizational focus.

The Mutual and Automatic Aid Plan and Program for the County of Peterborough outlines the notification, activation, and response criteria for ANFRES within the Medical Tiered Response Program for the City and County of Peterborough. Under the terms of the agreement, and detailed in Appendix "L"-1, ANFRES are notified of and respond to the following:

- Vital Signs Absent
- Unconscious

- Real or Suspected Heart Attack, Chest Pain
- Airway Compromise – Airway Obstruction, Absence of Breathing, Shortness of Breath
- Motor Vehicle Collision
- Seizure – NO History
- Severe Trauma – Injury, Uncontrolled Bleed, Burns
- Trapped Person – Rescue, Extrication, Ice and Water, Remote Access

Research indicates that there is generally good support among the community, the Council, and the fire department regarding response to medical emergencies. Although the ANFRES provides limited technical rescue and hazardous materials response capabilities, it is guided by

4.5 Technical Rescue/Hazardous Materials

The ANFRES provides limited technical rescue and hazardous materials response capabilities, guided by NFPA 1006 and NFPA 470 standards. The department operates within the framework of its Establishing and Regulating By-law (2019-32), which outlines its Council-approved level of service. Technical rescue operations are performed primarily at the Awareness Level, including high-angle, confined space, trench rescue, and shore-based ice and water rescue. Responses to vehicle and other rescue emergencies, however, remain undefined in terms of formal qualification levels.

Given limitations in a technical capacity, ANFRES relies on mutual and automatic aid agreements, particularly with the City of Peterborough, along with a Specialized Rescue Team (SRT) composed of trained members from participating Peterborough County fire departments. The SRT is trained and equipped to handle high-angle and confined space rescue and will respond county-wide when requested. In such cases, the home fire department is responsible for command, ongoing scene presence, and logistical support, including fire suppression.

A similar mutual aid structure exists for hazardous materials incidents, where ANFRES operates at the Awareness Level, and the Peterborough Fire Services provides specialized HAZMAT response at the Operations Level. The home department must initiate the request, secure the scene, maintain command, and support the HAZMAT team, including identifying materials and directing incoming personnel. A HAZMAT cleanup trailer, maintained by Peterborough, is available upon request, with costs for materials and delivery billed to the requesting department.

Data from 2019 to 2024 shows that rescue incidents have fluctuated, with vehicle collisions comprising the majority. While average firefighter turnout varies, 2023 showed a notable spike in average response numbers, followed by a return to previous levels in 2024.

TABLE #11 - RESCUE INCIDENTS AND AVERAGE NUMBER OF FIREFIGHTERS RESPONDING

Year	# Of Rescues	Average # of Responders
2022	40	4.3
2023	25	9
2024*	38	4.2

Note: *The 2024 data is sourced from the AFES Standard Incident Response information. Please note that this data has not yet been confirmed by the Ontario Office of the Fire Marshal.*

TABLE #12 - 2019 TO 2023 RESCUE INCIDENTS BY TYPE

		2019	2020	2021	2022	2023
Rescue	Total Rescue Calls	17	6	39	40	25
	% Of Total Calls	13%	6%	10%	11%	6%
	Animal Rescue	0	0	2	1	0
	Confined Space Rescue	1	0	0	0	0
	High Angle Rescue	0	0	0	1	0
	Low Angle Rescue	0	0	1	0	0
	Other Rescue	0	0	1	2	0
	Vehicle Collision	14	6	33	33	25
	Vehicle Extrication	1	0	1	1	0
	Water Ice Rescue	1	0	1	1	0
	Water Rescue	0	0	0	1	0

In summary, ANFRES provides basic-level technical rescue and hazardous materials response, supplemented by mutual aid. Ongoing interdepartmental cooperation, defined roles, and established communications protocols are critical for ensuring effective emergency response across Asphodel-Norwood and Peterborough County.

4.6 Recruitment and Retention

Whether a volunteer or paid-on-call fire service requires a high degree of professionalism and commitment from its personnel, this is achieved through training, career development, and cultivating a sense of self-worth and belonging within the community.

A 2023 census conducted by the Canadian Association of Fire Chiefs (CAFC) showed that there are 126,000 firefighters in Canada, of which 90,000 are volunteers. Many receive some form of paid-on-call compensation or an honorarium or are given funding to cover expenses, but they do not earn a living wage from firefighting. The survey estimated there are currently 15,000 vacant positions in the fire service, with 9845 volunteer firefighters leaving the service in 2023.[11]

A common theme across Canada and the United States is the challenges associated with recruiting and retaining volunteer firefighters. The goal of any paid-on-call fire department is to overcome recruitment barriers and increase retention by adapting to influencing factors, such as changing demographics, a lack of affordable housing, and the increased desire for improved work-life balance, among others. The modern fire service must reassess its approach to recruiting and retaining firefighters. The fire service is no different than any other civic organization. Most civic organizations have experienced declines of greater than 63% over the last decade. To attract members, the fire service must be visible, approachable, inviting, inclusive, and open-minded.[12]

One of the main reasons why members quit is that they do not feel appreciated. People's time and energy are precious commodities; therefore, the fire service must find ways to show appreciation to its members and their families.[13]

4.6.1 Recruitment and Retention Findings

As previously detailed, ANFRES is currently at full complement, and EMG research indicates that public interest in being a firefighter is strong within the community, with inquiries about recruitment regularly received by the department. From 2018 through 2024, ANFRES has added

[11] 2022 Census Report - Canadian Association of Fire Chiefs Accessed May, 2025. https://cafc.ca/page/2022Censusresults https://www.iafc.org/topics-and-tools/resources/resource/breaking-bad-habits-recruitment-and-retention-of-volunteer-firefighters

[12] Breaking Bad Habits: Recruitment and Retention of Volunteer Firefighters Accessed May, 2025. https://www.iafc.org/topics-and-tools/resources/resource/breaking-bad-habits-recruitment-and-retention-of-volunteer-firefighters

[13] Breaking Bad Habits: Recruitment and Retention of Volunteer Firefighters Accessed May, 2025. https://www.iafc.org/topics-and-tools/resources/resource/breaking-bad-habits-recruitment-and-retention-of-volunteer-firefighters

18 firefighters to its ranks. It is worth noting that, in support of firefighter retention, the Township regularly holds recognition ceremonies that include the presentation of provincial and federal long-service medals.

During the development of this report, ANFRES was actively seeking firefighters. The recruitment campaign, advertised on the Township website, provided valuable information regarding the requirements for applicants, including the job description for a firefighter, the required knowledge, and working conditions.

Notwithstanding that ANFRES is currently positioned well concerning the recruitment and retention of firefighters, sustaining this momentum requires a strategic, multifaceted approach that directly addresses the factors contributing to a trend of declining volunteer participation in the fire service. Fire departments can significantly enhance engagement with their members through targeted efforts in recruitment, training, support, and leadership development.

To enhance recruitment, departments can focus on community outreach and awareness. Hosting public events such as open houses and demonstrations, partnering with schools and local organizations, and leveraging social media can effectively promote volunteer opportunities. Targeted campaigns aimed at diverse groups, such as women and visible minorities, can broaden the candidate pool.

Training and development are crucial to maintaining firefighter engagement. The ANFRES is fortunate to have a collaboration with the EOETA, and additional improvements, such as the introduction of an online learning platform, may prove beneficial in accommodating the various lifestyles of volunteers. Strong leadership plays a vital role in firefighter retention. Officers should train in effective leadership, conflict resolution, and volunteer management. Regularly seeking feedback from firefighters ensures their needs and concerns are addressed, fostering a responsive and adaptive department culture.

Recommendation #20

It is recommended that the Fire Chief continue to assess the ANFRES recruitment process for best practices in community outreach, flexible training, formal recognition, and leadership development.

In summary, by adopting a comprehensive and proactive strategy while continuing to build on its already successful recruitment and retention efforts, ANFRES can effectively attract new volunteers and sustain a committed, capable team.

4.7 Cancer Prevention/Decontamination/Rehabilitation

4.7.1 Cancer Prevention

The National Institute of Standards and Technology (NIST) recently conducted two comprehensive studies on firefighter cancer, finding that firefighters have a nine percent higher risk of cancer diagnosis and a fourteen percent higher risk of cancer-related deaths compared to the general United States population.[14]

In Ontario, if a firefighter or a fire investigator is diagnosed with a prescribed cancer on or after January 1, 1960, and meets the employment duration and additional criteria for the prescribed cancer, then the disease is presumed to be an occupational disease due to the nature of the worker's employment unless the contrary is shown. [15]

While the government deserves recognition for acknowledging the risks of firefighting and passing legislation that offers quicker access to support and benefits, the financial burden on employers due to this presumptive legislation can be substantial. As a result, it is crucial to make every effort to minimize or prevent firefighter workplace exposures.

The Ontario Ministry of Labour, Training and Skills Development's Firefighter's Cancer Prevention Checklist can be used as a self-audit tool for fire services to learn how to protect personnel from exposure to contaminants that may cause cancer or other occupational illnesses. The purpose of the checklist is to help fire service employers, and workers increase their knowledge about the steps that can be taken to minimize or prevent exposures and maintain a healthy and safe workplace. [16]

The checklist guides the employer through the following programs and makes

- Respiratory protection program

Recommendation #21

The Fire Chief should complete the firefighter's cancer prevention checklist in cooperation with the worker members of the Joint Occupational Health and Safety Committee. Upon completion, the necessary additional SOPs can be developed as recommended in the checklist or updated as required if they already exist

[14] Firefighters and the risks of cancer | NFPA Accessed May, 2025. https://www.nfpa.org/education-and-research/emergency-response/firefighters-and-cancer

[15] Cancers in Firefighters and Fire Investigators | WSIB Accessed May 9, 2025. https://www.wsib.ca/en/operational-policy-manual/cancers-firefighters-and-fire-investigators

[16] Ministry of Labour, Training and Skills Development Firefighter's Cancer Prevention Checklist. Pg. 2

- Air management program
- Work practices – scene/fire training ground
- Work practices – fire hall
- Inspection of PPE
- Use of PPE during decontamination activities

To its credit, ANFRES has developed the Firefighter Cancer Prevention Policy, numbered Per/Safe – 53. This policy aims to educate firefighters on how to protect themselves from exposure to contaminants that could lead to cancer or other occupational illnesses. It addresses the routes of entry for contaminants and emphasizes the importance of decontaminating exposed personal protective equipment (PPE) and other equipment.

4.7.2 Decontamination

Firefighter decontamination procedures are essential for ensuring the health and safety of personnel. During emergency responses, firefighters are frequently exposed to hazardous substances, including carcinogens, toxic chemicals, and biological contaminants. Routine decontamination effectively removes these harmful agents from personal protective equipment (PPE) and skin, significantly reducing long-term health risks, including cancer, respiratory illnesses, and skin conditions.

In addition to protecting individual firefighters, proper decontamination helps prevent cross-contamination. By eliminating residual contaminants before returning to fire stations or homes, these procedures safeguard fellow firefighters, support staff, and family members from secondary exposure. This practice also aligns with occupational health and safety regulations and NFPA standards such as NFPA 1581: *Standard on Fire Department Infection Control Program*, NFPA 1500: *Standard on Fire Department Occupational Safety, Health and Wellness Program* and NFPA1851*: Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Firefighting and Proximity Fire Fighting*, helping departments meet compliance requirements and uphold industry best practices.

Moreover, consistent decontamination maintains the functionality and longevity of PPE and equipment, ensuring operational readiness for future incidents. Emphasizing decontamination as a routine part of emergency response demonstrates a professional commitment to safety and fosters a responsible, health-conscious culture within the fire service.

To provide direction regarding the handling of contaminated PPE, tools, and equipment, ANFRES has developed Policy Number SUP-48. The policy establishes that the Incident Commander perform a risk assessment to determine the level of soiling and/or contamination required before returning items to service. Based on this assessment, decontamination procedures, including gross decontamination and containment of equipment, to advanced cleaning of PPE, Self Contained Breathing Apparatus (SCBA) and other equipment, is identified. Policy SUP-16 SCBA Cleaning and Sanitizing and Policy SUP-36 Cleaning of Turnout Gear support policy SUP-48.

Recommendation #22

The Fire Chief should expand Policy SUP-48 to formally include procedures for personnel, apparatus, and living spaces, ensuring a comprehensive and consistent approach to containment control. This includes the expansion of on-scene decontamination equipment, such as soap, pails, brushes, and decontamination spray, among other items.

The decontamination of firefighting personnel, apparatus, and living spaces is just as important as equipment decontamination because contaminants can easily transfer from PPE and equipment to people and environments, posing serious health risks.

4.7.3 Rehabilitation

Firefighters are more likely to die from stress and heat-related illnesses than from burns or injuries caused by structural collapses. While firefighting remains an inherently dangerous and physically demanding profession, implementing emergency scene rehabilitation procedures can help reduce the risks of stress and heat-related illnesses and fatalities. EMG was able to identify the following ANFRES policies that address emergency scene rehabilitation, hydration and nourishment:

- Sup – 37 Short Term Rehab.
- Sup – 38 Long Term Rehab
- Sup – 43 Heat Stress and Rehab

For many years, the fire service viewed rehabilitation as the place to obtain a new self-contained breathing apparatus (SCBA) cylinder, a cup of coffee, and a donut. While recognizing the limitations placed on smaller fire services with respect to on-scene staffing, rehabilitation remains an important sector of fireground operations and should not be culturally viewed as a dreaded place to be.

Chapters 20 through 23 of NFPA 1580, *Standard for Emergency Responder Occupational Health and Wellness*, establishes the minimum criteria for developing and implementing processes for member prehabilitation, contamination control, rehabilitation, and recovery from incident scene operations and training exercises.

Recommendation #23

The Fire Chief should evaluate ANFRES rehabilitation processes against NFPA 1580.

4.8 Mental Wellness Programs

Mental resilience is essential for everyone, but it holds particular importance for firefighters. It significantly influences their capacity to manage daily stress and traumatic experiences encountered on the job, helping them preserve their overall well-being. While resilience doesn't eliminate stress or hardship, it equips individuals with the skills to navigate adversity and grow stronger through it.

Studies have shown that first responders, including firefighters, are at higher risk of developing PTSD compared to the general population. The physical demands of firefighting, combined with the emotional toll of witnessing destruction and loss, can lead to the development of this disorder.[17]

It is crucial to address the prevalence of PTSD among first responders to ensure their well-being and support their recovery. Some of the ways that the fire service can support staff in building psychological strength are as follows:

- Encourage regular self-assessments
- Establish a Peer Support Program
- Develop healthy coping mechanisms
- Encourage physical health
- Provide resiliency training

Employers of workers covered by the presumption in the *Workplace Safety and Insurance Act* are required to provide information about their plans to prevent PTSD in their workplaces.[18]

[17] PTSD in First Responders: Causes, Symptoms &Treatment - CBH Accessed May, 2025. https://compassionbehavioralhealth.com/ptsd-in-first-responders/

[18] Post-traumatic stress disorder prevention plans | ontario.ca Accessed May 23, 2025. https://www.ontario.ca/page/post-traumatic-stress-disorder-prevention-plans

Under this requirement, the Township, in cooperation with ANFRES, has submitted a PTSD Prevention Plan to the Ministry of Labour (MOL).[19]

To its credit, ANFRES also has the following policies that address firefighter mental health and well-being:

- Per/Safe -15 Critical Incident Stress Guidelines
- Per/Safe – 30 Traumatic Stress Introduction
- Per/Safe – 31 Traumatic Stress Signals of Distress
- Per/Safe – 32 Traumatic Stress Coping with Traumatic Stress
- Per/Safe – 33 Traumatic Stress Post Traumatic Stress Disorder Introduction
- Per/Safe – 34 Traumatic Stress Post Traumatic Stress Disorder
- Per/Safe 35 – Stress Management for Emergency Personnel

The ANFRES deserves recognition for its dedication to promoting the mental health and well-being of firefighters. Combined with the Township's PTSD Prevention Plan, which offers essential guidance on crisis response, access to treatment, and the enhanced insurance coverage that ensures firefighters can receive care when needed, these initiatives create a strong, comprehensive support system for firefighters' mental health.

4.9 Communications and Technology

The ANFRES receives its dispatching services from the City of Peterborough Fire Services (PFS), per By-Law 2023-69, and is very pleased with its service. The PFS also dispatches seven other fire services in the County of Peterborough. When receiving emergency calls at the answering and dispatching communications service, they are responsible for sending alerts to firefighters to respond to any incident 24 hours a day through a technically advanced digital radio pager voice system, which replaces the previous text messaging method in Q1 2025.

The Peterborough Police Communications (PPC) is the designated Primary Public Safety Answering Point (PPSAP) for the Township of Asphodel-Norwood, as with all the County's other municipalities. The Secondary Public Safety Answering Point (PSAP), which is PFS, receives the emergency 9-1-1 call (i.e., police, fire, or EMS) and then transfers it to the appropriate agency. The PFS has a 9-1-1 system that allows dispatchers to communicate with the deaf, hard of

[19] Post-traumatic stress disorder prevention plans | ontario.ca Accessed May 23, 2025. https://www.ontario.ca/page/post-traumatic-stress-disorder-prevention-plans

hearing, or speech-impaired community within all the jurisdictions they currently dispatch to via text messaging during an emergency. The T9-1-1 (T–text) service is available to anyone with a compatible cell phone and who has registered their cell phone with their wireless service providers. When someone from the hearing-impaired community requires 9-1-1 services, they dial 9-1-1 on their cell phone. There is no need for them to speak, as the 9-1-1 call taker will receive an indicator that directs them to communicate with the caller via text messaging. The 9-1-1 call taker then initiates text messaging with the caller to address the emergency. For those within the deaf, deafened, hard of hearing, or speech-impaired (DHHSI) community who have not yet registered their cell phones, the PFS has TTY machines that will enable Dispatchers/Call Takers to communicate with them.

The ANFRES uses the "Who's Responding" app, a cellular phone-based notification system. Firefighters can interact with this program, receiving emergency notifications and reporting their response. This feature provides the senior officers with critical information on the number of firefighters available and those responding to specific calls. This application identifies available members, provides call information, and indicates who is responding when a call is received. If firefighter responses are low, a call goes out for additional resources. This system provides various other benefits that will aid the fire department in managing responses. It would be inherent for ANFRES to ensure that SOGs, policies, and training are in place so that members use the app to their advantage.

Supported by the CAD (Computer-Aided Dispatch) software program, which assists with dispatching fire services, the program documents and retains records of each incident's dispatch log, which is forwarded to ANFRES for incident reporting within the local Records Management System. The PFS is NFPA 1225 compliant, including having a secondary communications centre.

The OFM requires communicators in the province to be certified in NFPA 1061, *Standard for Public Safety Telecommunications Personnel Professional Qualifications*.

4.9.1 Next-Generation 9-1-1 Communications (NG9-1-1)

The Next-Generation 9-1-1 program is a mandated change to the 9-1-1 infrastructure that requires upgrades to new technologies to be in place by March 2025. However, this deadline was extended to March 31, 2027, after it was found that many 9-1-1 centres were not prepared to implement the advancements. The County of Peterborough and its Municipalities have everything in place and operational well before the revised deadline.

4.9.2 Technology Services – Radio System

The ANFRES has taken a proactive approach to ensuring a reliable and technically advanced radio system is in place and operating as it should. In 2025, ANFRES upgraded its radio system, ensuring reliable communications for many years. The radio system operates on a digital platform repeater system, providing a much stronger radio signal. The radio tower will provide uninterrupted radio communication during power outages, supported by batteries, until the automatic emergency generator resumes the power supply, which should occur within a minute.

The department has a mobile repeater available in Pumper 1 to enhance radio signals in areas where communications may be challenging. However, with the current upgrades, the frequency of use is expected to decrease. The ANFRES may need to monitor new buildings with high amounts of concrete and steel. In the future, larger structures may require bi-directional antennas to enhance radio coverage. This enhancement would require the cooperation of both the Planning and Building Departments during the approval processes.

A reliable radio system is imperative for the health and safety of firefighters, and ANFRES has taken steps to ensure this is in place.

4.9.3 IT Solutions

An integrated record management system (RMS), ANFRES, which utilizes FirePro, is essential for today's fire department. These systems enable fire department personnel to perform their duties efficiently, providing valuable information for both emergency and non-emergency responses. Information technology is the future of fire services. The ANFRES has two tablets in service, one at each station, and their usage could be expanded to include:

- The delivery of public education
- Fire inspections
- Developing and accessing pre-incident plans
- Maps for responding units
- Hydrant locations
- Road closures
- Resources for the mitigation of hazardous material incidents

Connectivity, both at the station and remotely, is vital. An adequately funded IT support system is required to provide in-station and remote connectivity, hardware and software management, and life-cycle updates.

4.9.4 Pre-Incident Plans

The ANFRES has an active pre-incident plan program and maintains pre-incident plans that the Incident Commander can refer to during an emergency. Staff resources, including tablets, should be allocated to ensure the plan's completion is consistent and current. Several companies offer pre-incident plan programs to assist fire departments in developing their plans. When required, ANFRES actively updates their information.

ANFRES complies with Ontario Fire Service Health and Safety *Guidance Note 6-45*, Pre-Incident Planning, and NFPA 1620, *Standard for Pre-Incident Planning*, and maintains these documents in the Records Management System, which is accessible remotely.

The ANFRES is ahead of the technology curve and deserves recognition for incorporating these technologies into its service provision.

Section 5

Facilities, Vehicles, & Equipment

SECTION 5: FACILITIES, VEHICLES, & EQUIPMENT

5.1 Fire Station Review

EMG reviewed the Asphodel-Norwood Fire/Rescue and Emergency Services (ANFRES) fire stations addressed in this section. It is worth mentioning that the walkthrough of the fire stations was a visual inspection. EMG did not conduct any destructive testing or engineering assessments of the buildings.

Fire stations should be strategically located to provide the most effective and efficient response to the community. Locating a fire station within a geographic response zone established for timed responses within that zone may not be the optimal location. Fire station locations depend on several factors. These factors include key risks within the response zone, the community's future growth, and the composition of the response team (full-time or paid-on-call firefighters). Another consideration is the geographical layout of the community, which can include natural barriers or divides, such as water, that may necessitate having some stations located near each other.

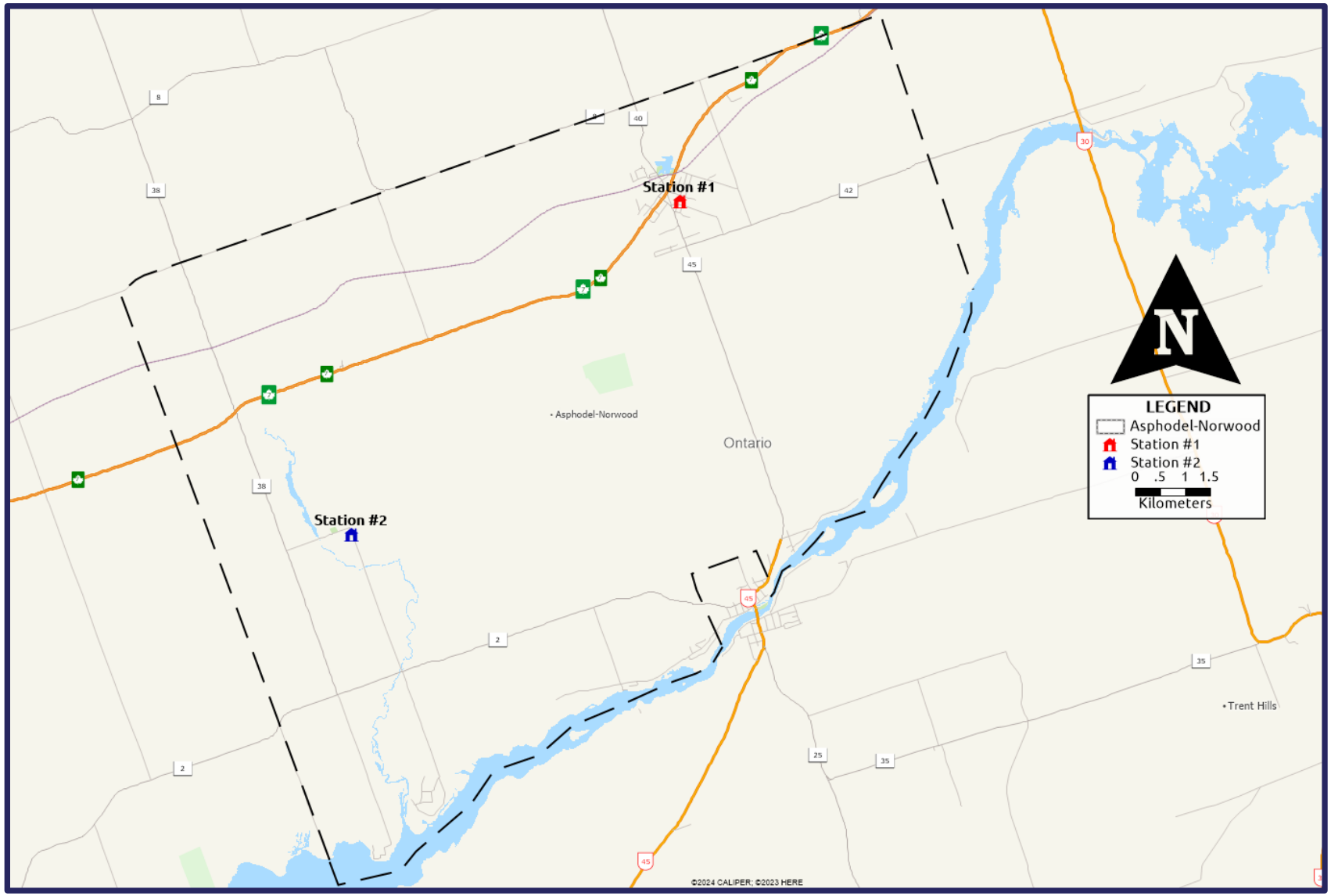
Distance and travel time may be a primary consideration. However, pending the community's decision-makers setting a basic expectation of response time, ANFRES will be able to identify a criterion that provides a more realistic level of service and a suitable location for a fire station.

NFPA 1720 establishes travel times for paid-on-call (volunteer) stations. Chapter 4.3.2 presents a chart that categorizes response zones by population density. Most of Asphodel-Norwood falls within the definition of a “rural area,” according to this NFPA table. This indicates that the population density is less than 500 people per square mile (or 2.6 square kilometres). This section establishes performance objectives of:

- Minimum of six staff responding.
- Response time (on the scene) within 14 minutes
- Meet this criterion, 80% of calls

A department like ANFRES will need to determine the most effective deployment of resources to locate them efficiently. The paid-on-call firefighters may provide effective quantity and localized responses. However, as the Asphodel-Norwood decision-makers near implementing recommendations presented in this document, they should consider a thorough review of current call data to help identify the implementation of a response criterion. The fire chief should consider all relevant factors when developing a report to the council, taking into account data as it becomes available and long-term growth plans are established.

FIGURE #7 - FIRE STATION LOCATIONS



5.2 Asphodel-Norwood Fire Stations

Station 1 - Norwood

Station 1 is a two-story building constructed around 1950, with an addition made in 1978. It has three bays, which are not drive-through. All vehicles must reverse into the fire station. There are three fire department vehicles at this facility.

Station 1

Apparatus Bay

Apparatus Bay

Training Room and Kitchen

Main Floor Equipment Store Room

Basement Store Room, Workbench and Laundry Room

Although the station meets the firefighters' basic needs, a dedicated office area is lacking because what they previously used is now the bunker gear and equipment storage room. This station is at capacity, and because the fire station is landlocked, there is no room to expand this facility.

Station Concerns

- The firefighter's bunker gear is located on the apparatus floor, rather than in a separate negative-pressure room.
- The lack of a diesel exhaust extraction system puts all firefighters' gear at risk of exhaust contamination.
- The station requires a permanent emergency backup power supply
- Safety issue with clearance to back in vehicles
- There is no ability for the expansion of the facility due to its location within the residential area (with houses all around the fire station).

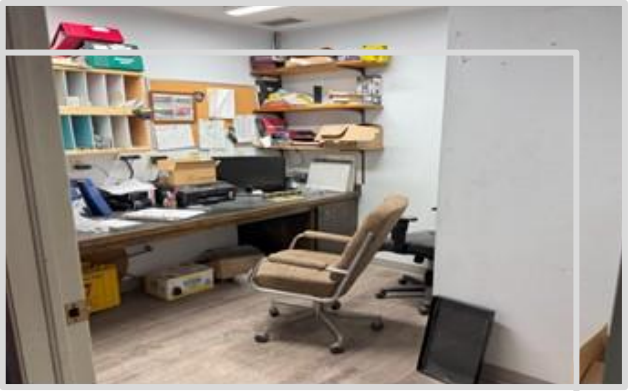
Station 2 - Westwood

Station 2 is a single-storey station built during the 1960s. It has three bays for fire apparatus. It does not have drive-through bays. This facility is a shared building with the Historical Society at the front and the fire station at the rear.

Station 2

Apparatus Bay and PPE Racks

Apparatus Bay and PPE Racks



Office

Due to the low number of calls this station responds to, it presently meets the basic needs of the firefighters, although the station does not have a dedicated training room.

Station Concerns

- The firefighter's bunker gear is located on the apparatus floor, rather than in a separate negative-pressure room.
- The absence of a diesel exhaust extraction system puts all the firefighters' gear at risk of exhaust contamination.
- Safety issue with clearance to back in vehicles
- The station requires a permanent emergency backup power supply

Recommendation #24

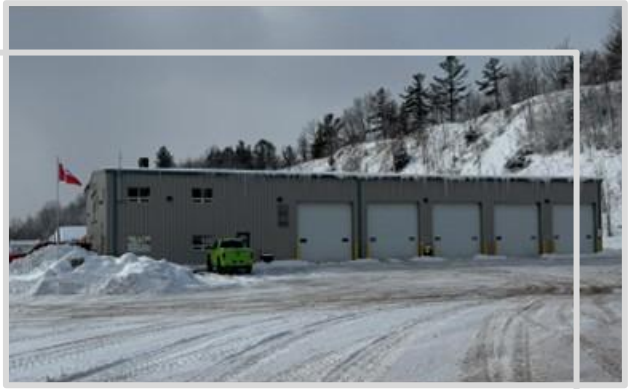
Install a diesel exhaust extraction system at each fire station.

Recommendation #25

Each fire station requires an emergency power back-up system.

Fire Chief's Office and Training Room

The fire chief's office is on the second floor of the Township's Works Yard. Training could occur in the larger room adjacent to the fire chief's office. Due to the open space available at this location, this could be an option for relocating Station #1 – Norwood.



Works Yard

Fire Chief's Office

Training Room

5.3 Fire Station Concerns

The following is a summary of concerns noted for the two fire stations.

- The proximity of firefighter bunker gear to vehicle exhaust is concerning. This, combined with the lack of exhaust removal systems, creates an issue referenced in the Ministry of Labour's Section 21 Guidance Note 3-1, 'Controlling exposure to diesel exhaust,' which addresses the issue of diesel exhaust and potential contamination without adequate ventilation systems. Ideally, bunker gear is located in a room adjacent to the apparatus floor, outfitted with a negative-pressure ventilation system that activates periodically to ventilate the room and draw any hazardous gases that may be present for removal to the outside.
- There is no option to store the PPE in a separate room. Mechanical ventilation is a proven method for significantly reducing exposure to carcinogens.
- Space issues within Stations #1 and #2 related to vehicle backing could result in injury or damage to the apparatus.
- Neither station has sensors on the overhead doors that prevent them from closing when an obstacle is in the doorway, which could result in damage to fire apparatus or serious injuries.
- It would be advantageous to install red and green lights at the overhead doors to indicate to drivers when it is safe to leave the station.
- Both fire stations require a permanent emergency backup power supply.
- Neither station has adequate apparatus floor drainage systems that include separation tanks to prevent environmental impacts from drainage.
- Due to the lack of storage space at Station 2, members must meet at the Works Yard for training, as the meeting room is now used for storage and is too small.
- There is a lack of septic weeping beds, and we must rely on holding tanks, which require frequent pumping.
- There appears to be no need to replace Station 2, as renovations will easily meet future needs, such as a larger training room, offices, kitchen, bunker gear storeroom, and 2 to 3 apparatus bays that are deep enough to house two apparatus in each bay. The estimated cost of renovation ranges from $3 to $5 million, depending on the size of the addition.

5.4 Training Centre

Asphodel-Norwood Fire and Emergency Services has access to the Eastern Ontario Training Centre. The centre features a variety of indoor search and rescue, firefighter survival props, an outdoor multi-level live fire prop, and an additional outdoor fire behaviour prop. Two classrooms are in the station portion, one upstairs and one downstairs.

Additional information about the Training Centre can be found in the Training Section of this report.

5.5 Options Relating to Fire Station Future Locations

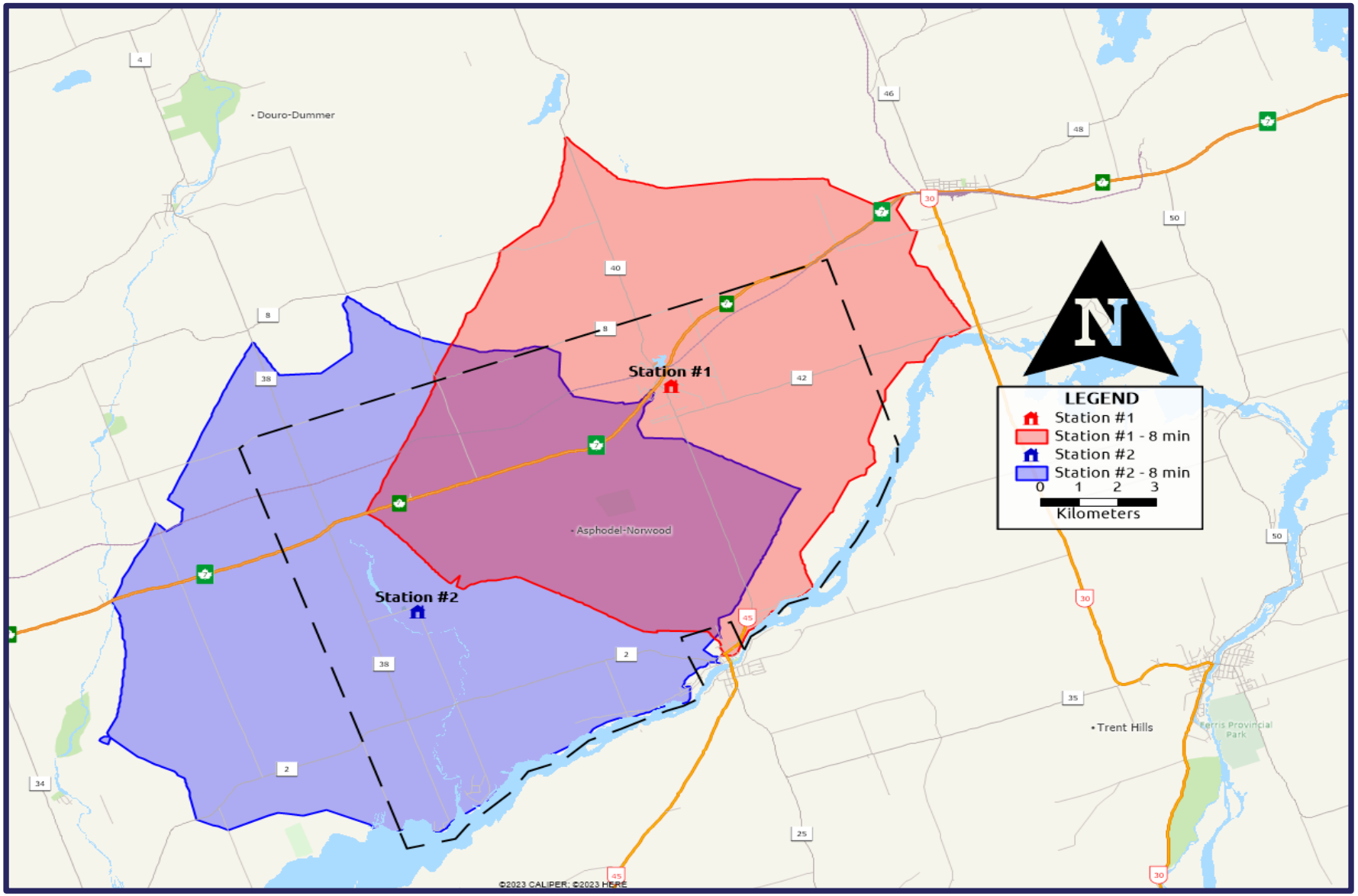
During the review of the station locations and facilities, there may be an opportunity to relocate Station #1 to the Town's Works Yard

The following map depicts an 8-minute drive time. EMG has factored in a minimum response time of 6 minutes to the fire station by firefighters (the NFPA response goal for a community of Asphodel-Norwood's size and population is 14 minutes). This 8-minute drive time could be even longer due to weather, road conditions, and the time of day of the call. As such, the response could be even longer than 14 minutes (from the call for assistance). This deficiency in response capabilities is in some of the response data in the fire suppression section.

Recommendation #26

Relocate Fire Station #1 to the Town's Work Yard.

FIGURE #8 - FIRE STATION LOCATIONS AND RESPONSE COVERAGE



5.5.1 Future Station Options for Consideration

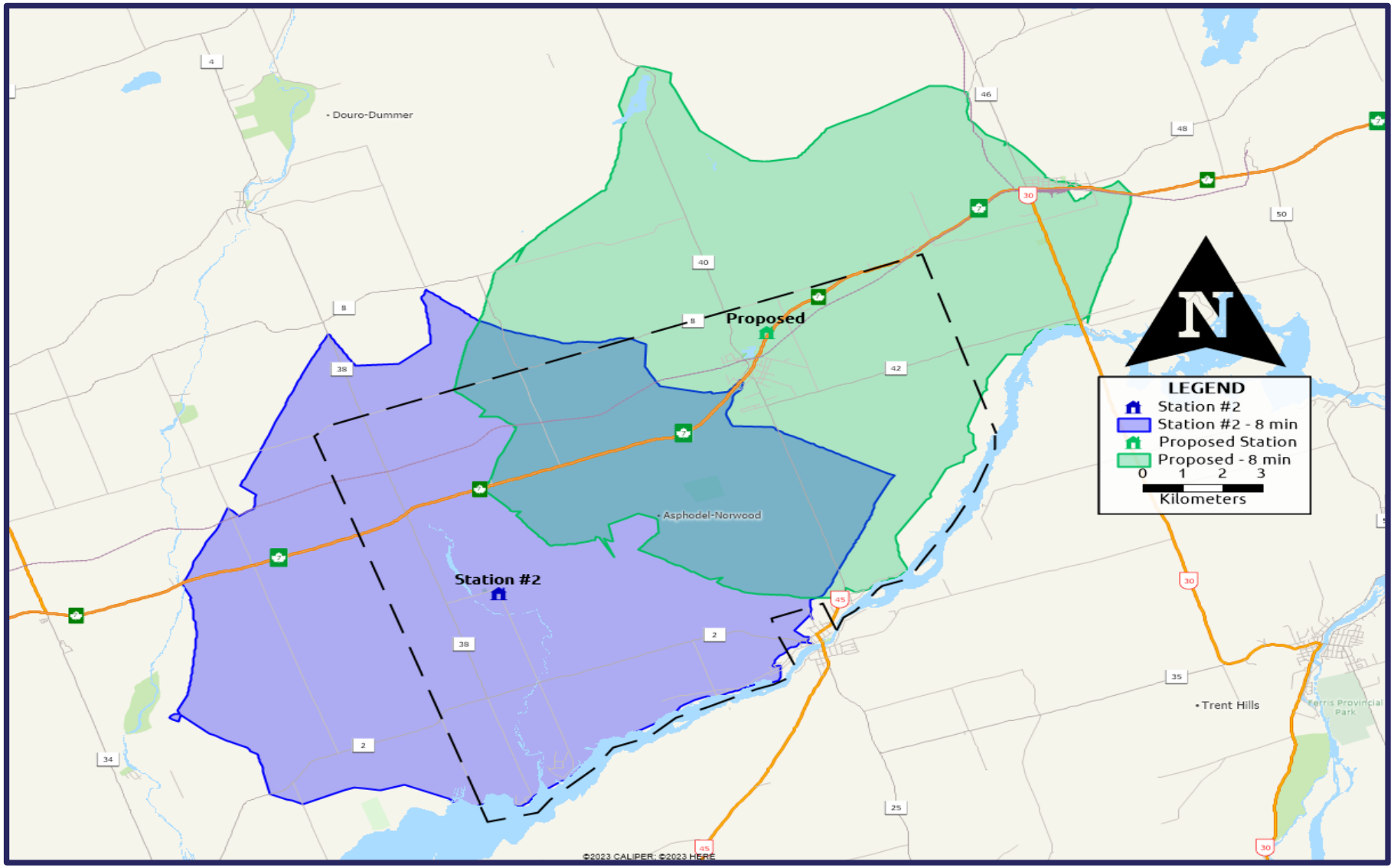
The current two-station model provides ample coverage to the community within an 8-minute response time. However, as previously noted, Fire Station #1 is at its capacity limits and has no additional property to accommodate growth.

The Township can relocate Station #1 to the Town's Works Yard on Highway #7. This facility has land available for a fire station. By relocating the station, it accommodates two challenges:

- The first is that the Township can build an expansive and functional facility with future growth in mind, and
- Second, it provides straightforward access to the highway, which relocates the station out of a residential area (thereby reducing the possibility of accidents when firefighters respond to the fire station).

It is common across Canada for different services to be co-located, including fire and police, fire and paramedics, or other services in the same building, with separate entrances and facilities. This allows each service to operate independently while benefiting from the efficiencies of a unified structure. By relocating Station #1 to the Works Yard, the Town would utilize town-owned property. This eliminates the need to acquire property and saves taxpayers the cost of purchasing a lot large enough to accommodate a station.

FIGURE #9 - FIRE STATION RESPONSE COVERAGE WITH WORKS YARD LOCATION USED



As shown in Figure #9, relocating Station #1 to the Town Works Yard would still provide good coverage to the community within an 8-minute drive time. There is still considerable overlap in coverage between the two fire stations. Moving the fire station out of the residential area reduces the chances of vehicular mishaps involving firefighters responding to the fire station. The Work Yard, situated on a major highway, enables reduced congestion of firefighters' vehicles at the current Station #1 Fire Station and a lower risk of pedestrian-related incidents.

As such, EMG recommends allocating property at the Town's Works Yard as the future location of Fire Station #1.

5.6 Feasibility Study

Before making a final decision, EMG recommends that a feasibility study be conducted by the Works Department and/or a third party to better understand what is required to bring Station #1 up to a state that will enable it to continue serving the community for the next 20 years and beyond. A station condition assessment may be required to assess the station, which may include minor destructive testing to check for mould. The feasibility study could indicate whether the current Station #1 is worth renovating at a reasonable cost or if relocation is the better long-term solution. The study would need to fully assess costing, coverage and staffing considerations, along with a timeline for implementation.

5.7 Type of Buildings and Options for Fire Stations

Relocating staff and equipment from Station 1 to the new facility at the Township's works yard will create a station that is appropriately designed to accommodate staff, equipment, and provide room for growth.

Partnerships with non-profit organizations, EMS, and law enforcement agencies, as well as leasing available space in a new fire station, are options as municipalities become more innovative in incorporating fire stations into the community. This model may not be suitable for every community, but exploring these options can help decrease costs while increasing the fire department's response capacity.

Leasing an available facility is an option that reduces the initial capital outlay, placing the responsibility for building maintenance on the landlord and allowing the municipality the flexibility to relocate should there be a change in community development.

The City of Barrie has leased the end unit of a commercial strip mall as a fire station (pictured below). The landlord constructed the unit to meet the city's requirements.

EXTREME Fire Stations is a relatively new concept and a Canadian-built product from Lethbridge, Alberta. They are modular-based buildings built to seismic and building code standards, using high-efficiency, energy-code-compliant HVAC systems and fire suppression systems; these are standard on EXTREME stations.

As technology, community demographics, and operational requirements evolve, maintaining flexibility in the station design, construction, and location will benefit the community in the long term. EXTREME fire stations are a relatively new concept that some fire departments have embraced.[20] They are custom-built at a factory and transported to the site, where they are quickly placed on-site and ready for occupancy.

EXTREME Fire Station Assembly (On-Site)

[20] Fire Station Modular Building, EXTREME, Accessed May 2025, https://extrememodularbuildings.com/modular-buildings-fire-stations.php

A typical fire station has a life expectancy of approximately 50 years, after which the cost-benefit ratio begins to work against the municipality in terms of maintenance, basic function, and design. The EXTREME fire stations can meet that life cycle because they are made from steel and aluminum and can add additional modules if the station needs to expand its footprint.

EXTREME Fire Station (Multi-Bay Example)

The West Conrad station is an example of the diversity of EXTREME fire station designs and how they are designed and expanded to meet customers' needs and/or the addition of a joint emergency services facility (also housing EMS or police).

Calgary Fire Department Waldon Station

The Calgary Waldon station is an example of the EXTREME fire station's one-bay design, and it, too, can be expanded to meet the customer's needs.

5.8 Fire Apparatus - New and Replacement Schedules

The reliability of fire apparatus is critical to the successful operation of a fire service. Over the long term, delaying the replacement of a vehicle is ill-advised, as it will increase the overall maintenance costs of the apparatus and can negatively impact insurance rates, based on the Emergency Service's Fire Underwriters Survey (FUS) grading.

5.8.1 Fire Underwriters Survey – Vehicle Replacement Recommendations

The Fire Underwriters Survey considers the age of a fire truck as one of its guidelines when assessing an emergency service's ability to respond and meet the community's needs.

The Rural Communities (outlined in blue) recommends replacing vehicles (pumpers) in a community the size of Asphodel-Norwood. This allows for a 25-year replacement cycle, during which the fire vehicle becomes a second-line response vehicle. It is, however, recommended that all first-line units be replaced by a new or younger unit when they reach 20 years of age.

TABLE #13 - FUS VEHICLE REPLACEMENT RECOMMENDATIONS[21]

Apparatus Age	Major Cities [3]	Medium Communities[4]	Small Communities [5] and Rural Centres
0 – 15 Years	First Line Duty	First Line Duty	First Line Duty
16 – 20 Years	Reserve	2nd Line Duty	First Line Duty
20 – 25 Years [1]	No Credit in Grading	No Credit in Grading Or *Reserve* [2]	No Credit in Grading Or 2nd Line Duty [2]
26 – 29 Years [1]	No Credit in Grading	No Credit in Grading Or *Reserve* [2]	No Credit in Grading Or *Reserve* [2]
30 Years +	No Credit in Grading	No Credit in Grading	No Credit in Grading

[21] TECHNICAL BULLETIN, FIRE UNDERWRITERS SURVEY™, A Service to Insurers and Municipalities, INSURANCE GRADING RECOGNITION OF USED OR REBUILT FIRE APPARATUS, accessed January 2025, file:///C:/Users/EmergencyLT/Downloads/FUS-TechnicalBulletin-InsuranceGradingRecognitionofUsedorRebuilt%20(1).pdf

[1] All listed fire apparatus 20 years of age and older are required to be service tested by a recognized testing agency on an annual basis to be eligible for grading recognition (NFPA 1071).

[2] Exceptions to age status may be considered in small to medium-sized communities and rural centres conditionally when the apparatus condition is acceptable and the apparatus successfully passes required testing.

[3] Major cities are defined as an incorporated or unincorporated community that has:

- a populated area (or multiple areas) with a density of at least 400 people per square kilometre; AND
  - a total population of 100,000 or greater.

[4] Medium Communities are defined as an incorporated or unincorporated community that has:

- a populated area (or multiple areas) with a density of at least 200 people per square kilometre, AND
  - a total population of 1,000 or greater.

[5] Small Communities are defined as an incorporated or unincorporated community that has:

- no populated areas with densities that exceed 200 people per square kilometre, AND
  - does not have a total population in excess of 1,000.

Fire Underwriters Survey's definition of First Line Duty, 2nd Line Duty, and Reserve is:

- 1st line is the first fire truck utilized for response at the fire station
- The 2nd line is the next truck used if the 1st line unit is long-term at a call, and
- The reserve vehicle is the one kept in the fleet to be put into service if a first- or second-line vehicle is out of service.

Insurance companies review the FUS. The department will retain its fire rating for vehicle replacement if emergency services adhere to the recommended replacement timelines outlined in an approved capital replacement schedule. The Township would demonstrate due diligence in ensuring a dependable response fleet for emergency services and the community it serves through a regular vehicle replacement schedule.

5.8.2 National Fire Protection Association – Vehicle Replacement Recommendations

The NFPA 1911 *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus* also supports a regular replacement schedule for fire vehicles. This standard includes guidance on retirement criteria for fire apparatus. NFPA 1911 recommends replacing all front-run apparatus on a 15- to 20-year cycle, depending on the community size.

For emergency services considering refurbishing their vehicles to extend their in-service life, refer to NFPA 1912, *Standard for Apparatus Refurbishing*. Note that although the FUS considers refurbishing vehicles, it assigns no credit rating to apparatuses over 30 years old.

5.8.3 ANFRES – Vehicle Replacement

The ANFRES operates with pumper trucks, tankers, and support vehicles required for primary response to calls within the Township.

Based on the FUS/NFPA replacement recommendations, all front-line vehicles require replacement at the 20-year cycle, with any 2nd-line units at 25 years. However, ANFRES does not have any 2nd line pumpers or tankers. Therefore, the following replacement chart is based solely on the frontline cycle.

TABLE #14 - APPARATUS INVENTORY OF ANFRES

Year of Apparatus	Type	Lifecycle	Year for Replacement
2013	Pumper	20 years of front line	2038
2007	Tanker	20 years of front line	2027
2018	Rescue/Medical Pickup Truck	At Township's discretion	N/A
2024	Pumper	20 years of front line 25 years 2nd line	2044
2009	Tanker	20 years of front line 25 years 2nd line	2029
2006	Rescue (one-ton style pickup)	At the Township's discretion	N/A

Replacement of any apparatus should begin three years before the year it's removed from service to ensure its replacement arrives before the proposed removal date. The ANFRES fleet complies with the FUS/NFPA replacement cycle recommendations.

In the United States, it is common for paid-on-call (volunteer) departments, which often respond to high volumes of calls and operate on a tight budget, to lease apparatus for a ten-year term and then return it for a new one at the end of the term. The returned apparatus sells for a fraction of the cost of a new one, often with low mileage. While it may seem like a good opportunity for fire departments in Canada to take advantage of these savings, with the exchange rate between Canadian and American currency being what it is, plus transportation costs, mechanical safety, thread conversion and import taxes, the final price may not be far from being the same if the department were to purchase a new apparatus. Leasing has not caught on in Canada as an option for departments to consider.

Fire departments are transitioning from single-purpose apparatuses, such as rescue vehicles, to more versatile ones, including pumper-rescue vehicles or pumper-rescue tankers. Typically, a rescue is a mobile toolbox that acts as a taxi, transporting firefighters. They serve no other purpose than the movement of equipment and personnel. The advantage of having a more versatile apparatus is that it can carry extra water for fighting. If the main pumper is out for repairs, the pumper rescue or pumper-tanker can assume the lead role until its return. The primary difference between a pumper-tanker and a pumper-rescue is the configuration of the compartments.

Recommendation #27

All pumpers and tankers should be on a replacement cycle based on the Fire Underwriters and the NFPA recommendation lifecycles.

5.8.4 Spare Fire Vehicles

Based on the Fire Underwriters' recommendations, there should be a spare pumper truck for every eight vehicles. So, a department with eight or fewer pumper trucks should have a spare one in its fleet. If the department has more than eight pumper trucks, its fleet should include two spare trucks.

Presently, ANFRES does not have any spare pumper trucks in its fleet. The key here is to ensure the replacement is not older than the FUS recommended age, as noted in the previous FUS chart. One key stipulation that may assist the ANFRES in maintaining a spare truck in its fleet is that it is beyond the recommended replacement age. The following excerpt is from the FUS replacement chart (table #13):

Recommendation #28

ANFRES should ensure the availability of at least one spare pumper truck.

[2] *Exceptions to age status may be considered in small to medium-sized communities and rural centres conditionally, when apparatus condition is acceptable, and the apparatus successfully passes required testing.*

Purchasing pumper-tankers in accordance with NFPA 1901 and ULC requirements may alleviate the problem of not having a spare pumper, as the pumper-tanker could temporarily assume the role of the pumper.

The Township's geography is composed of rural and wildland settings, including numerous recreational trails, such as the abandoned rail line. Due to the expansive open areas, the risk of wildland fire increases. The ANFRES lacks a multi-purpose utility terrain vehicle (UTV) and must rely on neighbouring departments to bring theirs when required for either a wildland fire or the

removal of persons in medical distress from non-accessible areas. Due to the lack of space at either station, the ANFRES is currently unable to acquire one. In the interim, it should enter into a response agreement with neighbouring fire services to respond with theirs until ANFRES has space to store one of its own.

5.9 Maintenance

ANFRES does not have a mechanical division, but a 3rd-party shop handles all repairs, which is common for smaller communities. Based on the information from the fire chief, this arrangement works for the department.

5.10 Bunker Gear

Every year, firefighters in ever-increasing numbers are being diagnosed with cancer. A contributing factor to their illness has been the contaminants that adhere to the structural firefighting gear during firefighting operations. After a fire, the structural firefighting gear should be packaged and sent for cleaning to reduce this risk. The ANFRES does have a small-capacity commercial extraction washing machine that can accommodate light cleaning of gear and clothing. In extreme contamination cases, the gear is sent to a third party for cleaning and inspection before being returned to the Department.

While structural firefighting gear is out for cleaning, the firefighter requires a replacement set so they do not go without clean gear to wear. Ensuring that the cleaning of gear is a high priority after fires and that firefighters have access to properly fitting bunker gear during the cleaning process will help the Department meet its decontamination and hygiene program objectives. The ANFRES does not issue a second set of bunker gear to each firefighter. Still, it does have a small inventory of spare gear for use in the short term, where the original gear returns from cleaning and inspection.

When used for interior structural firefighting, bunker gear has a lifespan of 10 years, as stated in NFPA 1851, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Firefighting and Proximity Firefighting*. The ANFRES will follow this replacement standard if the gear is compromised and has included bunker gear replacement in the capital budget each year.

Further to contaminating the bunker gear, toxins also contaminate the firefighter's uniform and personal clothing. Each firefighter should have a clean uniform or personal clothing available so that they can clean the uniform or clothing they wore to fight a fire before departing the station, thereby preventing contaminants from being taken home and exposing others to toxins. The risk of toxin exposure extends not only to firefighting personnel, whether full-time or paid-on-call, but also to their families at home.

5.11 New Technologies

Technology is continually evolving within the fire service, with new equipment added to the resources available to an incident commander. One such technology that has proven to be a valuable tool is drones, also referred to by Transport Canada as Remotely Piloted Aircraft Systems (RPAS). Police services have used them to locate missing persons or document accidents and crime scenes. Using drones in the fire service is a growing trend as a multi-purpose tool that can assist with large-scale assessments of fireground and hazardous material incidents, enhance search and rescue functions, and in pre-incident planning.

They have proven beneficial for hazardous materials incidents, forest fires, and large-scale emergencies, as the drone can quickly deploy and provide the Incident Commander with a live view of the incident. Reducing risk to firefighting personnel is a significant benefit of drone technology, along with its live-view capabilities, which provide invaluable information to the Incident Commander.

Drone pilots must follow the Canadian Aviation Regulations (CARS) Part IX, Remotely Piloted Aircraft Systems, which contain the rules for drones weighing up to 25 kilograms. Advanced operations include flying in controlled airspace, flying over bystanders, or flying within 30 meters of bystanders.

The new SCBA features built-in telemetry systems that identify the firefighter's location, like those found in some portable radios. New technology SCBAS have thermal imaging and can transmit GPS data, track the amount of air in the SCBA cylinder, and monitor heart rate, level of exertion, and body temperature.

Monitoring the benefits and opportunities of integrating these devices into the fire service is crucial as technology continues to advance.

5.12 Water Supply

5.12.1 Hydrant System

Asphodel-Norwood has 133 fire hydrants located in Norwood and nine in the Trentview Estates.

The failure of a hydrant to operate as required may result in catastrophic consequences and expose the Municipality to the risk of litigation. The Township ensures that hydrants get serviced annually.

5.12.2 Dry Hydrants and Cisterns

Asphodel-Norwood has six dry hydrants in service, four municipally operated and two privately operated. As NFPA 1142 (current edition) requires, Section 8.7.1 states that dry hydrants shall be inspected quarterly and maintained as necessary to keep them in good operating condition. Having dry hydrants benefits residents by lowering their insurance rates, as a nearby water supply is available in the event of a fire.

The EMG commends the Township and ANFRES for having dry hydrants and several identified drafting sites throughout the community. Both options ensure a reliable water source for firefighting purposes.

There is a single cistern in Asphodel-Norwood that complies with NFPA 22. While they contain water for firefighting, the tank's size dictates how long the department can draw from it. Typically, they hold 45,460 litres (10,000 gallons) of water.

5.13 Fire Underwriters Tanker Shuttle Accreditation

The ANFRES has attained its FUS Superior Tanker Shuttle Accreditation. In doing so, FUS adjusts its insurance grades within that community, resulting in possible insurance savings for residents.

The Superior Tanker Shuttle Accreditation demonstrates that the fire department can effectively respond to rural fires, maintaining a consistently high volume of water flow in areas without fire hydrants. The ANFRES has achieved a water flow rate of 2,400 l/m (528 IGPM), which is a very good rate. The department's latest accreditation was in 2024 and is set to expire in 2029.[22]

The municipality has a large area that is not serviced with water and must rely on transporting large quantities of water to fight fires. Mutual aid can be activated to support tankers from neighbouring fire departments when required.

To be recognized for fire insurance grading purposes, the protected property must be within the following:[23]

[22] Asphodel-Norwood Township, Accessed May 2025, https://www.antownship.ca/en/township-services/resources/Documents/PDF-Docs/Asphodel-Norwood-Township-STSS-Cert-2024.pdf

[23] FUS, "Alternative Water Supplies for Public Fire Protection" accessed February, 2025. https://fireunderwriters.ca/assets/img/FUS-AlternativeWaterSupplyAccreditationProtocol2012.pdf

Commercial Lines (Public Fire Protection Classification (PFPC) - 5 km of a fire station AND 2.5 km of an approved water supply point

Personal Lines (Dwelling Protection Grade (DPG) - 8 km of a fire station AND 5 km of an approved water supply point.

The ANFRES has proactively ensured an ample water supply for the fire department when needed and deserves recognition for its efforts in public safety.

Section 6

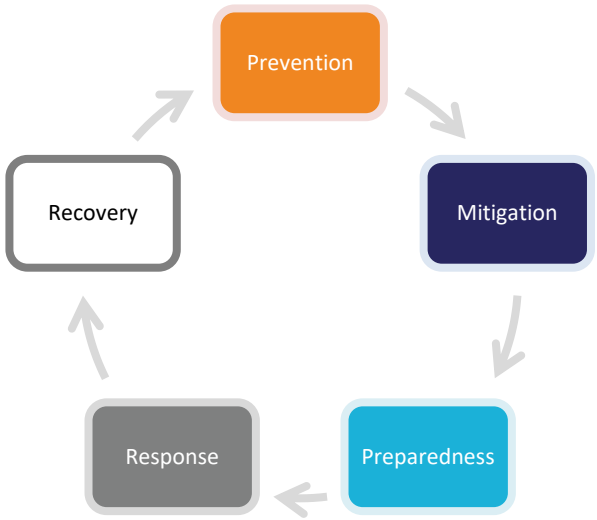
Emergency Management

SECTION 6: EMERGENCY MANAGEMENT

6.1 Community Emergency Management Program

6.1.1 Background and Authority

An emergency is a situation or impending situation that poses a significant danger, potentially resulting in serious harm to persons or substantial property damage caused by the forces of nature, a disease or other health risk, an accident, or an act, whether intentional or not. [24] Although municipalities in Ontario are generally safe, emergencies can occur unexpectedly and at any time. A strong emergency management program contains five key components: Prevention, Mitigation, Preparedness, Response, and Recovery.



An essential first step in any large-scale emergency is for individuals and families to take responsibility for their safety. This means that residents must prepare to manage independently for at least 72 hours following the onset of an emergency.

The *Emergency Management and Civil Protection Act* (*EMCPA*) outlines the responsibilities of municipalities to develop and implement an Emergency Management Program, which the municipality's Council must adopt through a by-law. Additionally, under the *EMCPA*, municipalities are required to create a Municipal Emergency Response Plan (MERP), which outlines the provision of essential services during an emergency and establishes procedures for how municipal and other personnel will respond to such emergencies. The municipality's Council must formally adopt this emergency plan by passing a by-law.[25]

[24] Emergency Management and Civil Protection Act, R.S.O. 1990, c. E.9 | ontario.ca, Accessed February, 2025 https://www.ontario.ca/laws/statute/90e09

[25] Emergency Management and Civil Protection Act, R.S.O. 1990, c. E.9 | ontario.ca, Accessed February, 2025 https://www.ontario.ca/laws/statute/90e09

Under the *EMCPA*, municipalities are to conduct and report on several mandatory program elements annually to ensure ongoing engagement in emergency management and preparedness. These program elements include:

- Appointment of Emergency Management Program Coordinator
- Emergency Management Program Committee (EMPC)
- Hazard Identification and Risk Assessment (HIRA)
- Critical Infrastructure (CI) List
- Municipal Emergency Plan
- Municipal Emergency Control Group (MECG)
- Emergency Operations Centre (EOC)
- Emergency Information Officer (EIO)
- Public Education
- Emergency Management Program Annual Review
- Emergency Management Program By-law

These mandatory program elements help ensure municipalities maintain an effective emergency management program. Regular reporting enables accountability, evaluation, and continuous improvement of emergency management efforts within Ontario municipalities.

6.2 Township of Asphodel – Norwood - Current Status

EMG has completed a thorough evaluation of the emergency planning program in place for Asphodel-Norwood, including a review of the following documents:

- The Corporation of the Township of Asphodel-Norwood By-law 2024-43
- The emergency plan developed for the Town of Asphodel-Norwood
- Hazard Identification and Risk Analysis (HIRA) document
- The Critical Infrastructure Inventory
- The activities of the 'community's program committee
- The annual compliance submission for each of the past five years
- The response from the Ministry to these submissions
- The work plan that the program committee has established
- Training activities conducted, including annual exercises

- The Township of Asphodel-Norwood is undertaking ongoing supporting activities.

The Corporation of the Township of Asphodel-Norwood By-law 2024-43 adopts the municipal Emergency Management Program (EMP) and Emergency Response Plan (ERP), thus meeting the requirements under the *EMCPA* and repeals By-law 2018-19.

Under the By-law, the Fire Chief is the designated primary Community Emergency Management Coordinator (CEMC). It is responsible for the emergency management program for the Township, including maintenance of the Plan, training, exercise, public education, and other duties and responsibilities as outlined in the *EMCPA*. The Treasurer is the designated alternate CEMC.

As mandated, the By-law establishes an Emergency Management Program Committee (EMPC) or Municipal Control Group (MCG) that advises the Council on the development and implementation of the EMP and must review the program annually. The Chief Administrative Officer (CAO) is appointed as the Chair. Using the Incident Management System (IMS) principles, the By-law established the Emergency Control Group (ECG) or MCG members.

EMG's research suggests a strong and cooperative working relationship exists between upper-tier and lower-tier municipalities in Peterborough County. The CEMCs within the County and the City of Peterborough CEMC have established an association that meets quarterly to share emergency management information and best practices, ensuring *EMCPA* compliance among all members. Peterborough County also organizes a shared exercise that CEMCs can attend and participate in.

The Emergency Plan is well-structured and provides clear operational guidance to members of the Control Group, including Command Staff, support personnel, and partner organizations. It incorporates a series of sub-plans designed to address and mitigate identified risks. Within the 2024 operating budget for emergency management, the allocation was $1,700. This amount included $1000 for the mandatory annual exercise, $100 for supplies and services, and $600 for utility costs reimbursed to Public Works.

Recommendation #29

In consultation with the CEMC and Program Committee, Asphodel-Norwood should assess the Emergency Management Operating budget for adequacy and consider establishing a Capital Reserve fund for MOC improvements and upgrades.

For five years, the Treasury Board Secretariat and Emergency Management Ontario have issued compliance letters to Asphodel-Norwood, indicating compliance with the 13 mandatory program elements under the *EMCPA*.

6.2.1 Emergency Exercises

Annual compliance with the legislation includes the requirement to exercise the 'Township's emergency plan annually, and Asphodel-Norwood has demonstrated this requirement by most recently conducting the following exercises:

2023	2024
Simulated fire inside the pumping station supplied by the water tower.	• Main damn failure and community flooding.

Just as meeting the requirements to be a competent firefighter is essential, emergency management training exercises play a critical role in developing and maintaining an effective response during real-world emergencies. Municipalities have a variety of exercise options available to them. These range from simple EOC activations to full-scale unannounced simulations. When planning an emergency exercise, several formats can be considered, including the following:

EOC Activation Exercise - Focuses on activating primary and alternate MCG members. In the event of an actual or impending emergency, these individuals are to play a critical role within the EOC. During the exercise, they activate the EOC as if responding to a real emergency, and all designated MCG members are to report to the identified EOC location, bringing any necessary resources and materials required to support emergency mitigation efforts. Personnel responsible for preparing and setting up the EOC are to report and carry out their duties as part of the exercise.

Tabletop Exercise (TTE) - Tabletop Exercise (TTE) engages MCG members in a simulated, hypothetical emergency scenario. The primary objective is to assess the effectiveness of the ERP by guiding participants through the response and recovery phases of the simulated incident.

Tabletop exercises can vary in complexity. The emergency scenario remains static in a basic exercise, allowing MCG members to discuss response strategies and decision-making processes openly. In contrast, a more advanced exercise presents a dynamic and evolving scenario. In this case, participants receive pre-scripted inputs from the exercise organizers and must develop and present time-sensitive solutions within a defined operational period. These exercises assess the control group's ability to adapt under pressure and coordinate a suitable response.

Command Function Exercises (CFE) – Command Function Exercises (CFE) assess both individual and cross-functional capabilities within the Incident Management System (IMS) structure. Depending on the scenario, participants can assume key leadership roles, such as Incident Commander or Sector Officer.

These exercises can be realistic in real time; however, they simulate the physical deployment of equipment and personnel. The focus is on evaluating participants at the command and management level, specifically their ability to implement relevant policies and procedures, coordinate resources, provide direction, and effectively manage the emergency response.

Full-Scale Exercise (FSE) – A Full-Scale Exercise (FSE), also referred to as a "real-time" exercise, is the most comprehensive and resource-intensive type of emergency management exercise. It typically involves multiple organizations, agencies, and jurisdictions collaborating to assess various preparedness and response capabilities.

When conducted on a large scale, FSES allow testing complex coordination systems such as the Unified Command Structure and the Joint Information Coordination System. Scenarios unfold in real-time, requiring participants to make operational-level decisions under pressure.

Personnel and equipment may be physically deployed to one or more simulated incident sites, allowing for the assessment of tactical and task-level decision-making by front-line responders. This exercise offers the most realistic simulation of an emergency, challenging participants to apply critical thinking, act decisively, and coordinate effectively in a high-pressure, multi-agency environment.

The Township should lobby for a county-wide full-scale emergency exercise to occur within the next five years. However, full-scale exercises require more detailed planning and are staff-intensive; moving to this next level of exercise is a logical step in local emergency management program development.

6.2.2 HIRA

Based on a hazard identification vs. risk assessment process, the 'Township's Hazard Identification and Risk Assessment (HIRA) categorizes hazards as likely, possible, or unlikely instead of assigning a numerical scale to the identified risks.

The Township HIRA identifies the following risks as most likely to occur:

The Township's HIRA and Critical Infrastructure (CI) documents, required under the EMCPA, are current and are reviewed annually by the Emergency Management Program Committee. Divided into various sectors and assigned a priority number, the CI list accurately reflects the current risk profile of the Township as it pertains to emergencies within the context of this review. It is worth noting that the HIRA reflects the same outcome as the process used to develop the Asphodel-Norwood Community Risk Assessment (CRA) as mandated by O. Reg. 378/18 under the FPPA.

6.2.3 Incident Management System (IMS) and Training

The Incident Management System (IMS) is a standardized approach to the command, control, and coordination of emergency responses, providing a standard structure for responders from multiple agencies. Used widely by emergency responders across Canada, IMS efficiently manages emergencies and disasters. It establishes a clear chain of command, defines roles and responsibilities, and ensures effective communication and coordination among all responders. IMS is flexible and scalable, making it adaptable to emergencies of any size or complexity.

EM 200 – Basic Emergency Management (BEM)
This training provides an overview of Ontario's emergency management system, including the processes for preventing, mitigating, preparing for, responding to, and recovering from emergencies and disasters.
IMS 100 – Introduction to IMS
This training aims to build awareness and provide a basic understanding of Ontario's IMS.
IMS 200 – Basic Incident Management System
This training is for individuals implementing IMS in simple incidents or during the early phases of a complex incident.

IMS 300 – Intermediate Incident Management System
This training prepares individuals to respond effectively in leadership roles within an expanded IMS structure during complex incidents involving multiple organizations.
IMS 400 – Advanced Incident Management System
Advanced IMS training emphasizes large-scale organizational development, roles and relationships of the command and general staff, and planning, operational, logistical, and fiscal considerations related to large-scale and complex incidents.

The benefits of using IMS are as follows:

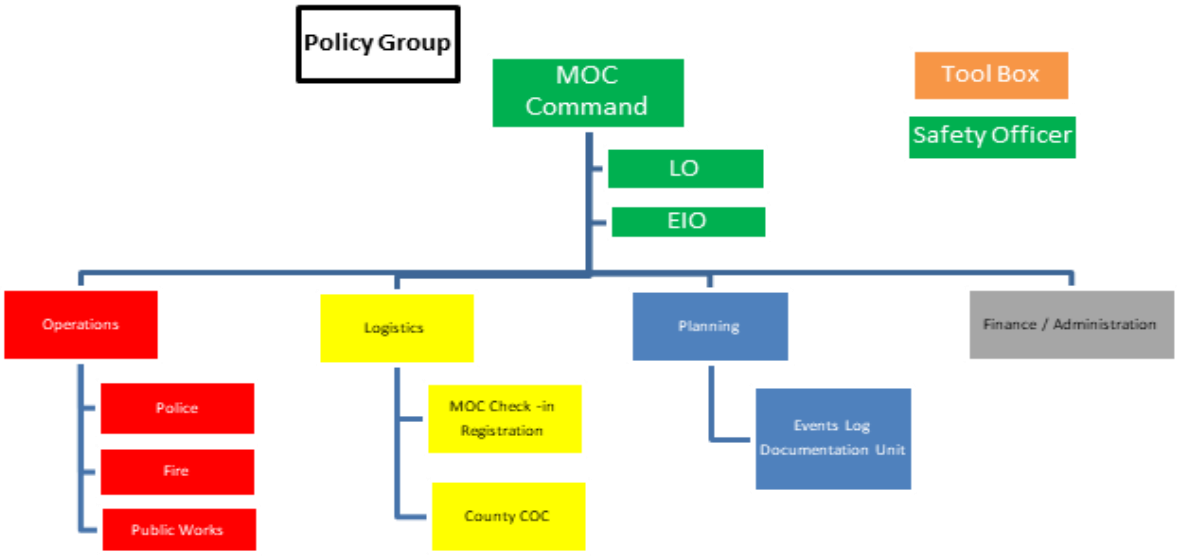
Improved Response Times: IMS offers a standardized approach to emergency response, ensuring that all responders can swiftly and efficiently address incidents by following a well-established structure.

Improved Communication and Coordination: IMS establishes a clear chain of command, defines roles and responsibilities, and utilizes a common language, all of which promote effective communication, coordination, and alignment among responders and community partners, including Police, Fire, EMS, and other government agencies.

Situational Awareness: IMS provides a comprehensive framework for emergency response, ensuring that all responders have a clear understanding of the situation, the established chain of command, and the necessary guidance to enable authorities to make informed decisions based on accurate information.

Improved Decision-Making: IMS provides a clear decision-making framework, ensuring responders make informed decisions that align with the objectives of the emergency response.

FIGURE #10 – TOWNSHIP OF ASPHODEL-NORWOOD EXPANDED IMS STRUCTURE



The CEMC meets all of the mandatory IMS training requirements, the Alternate CEMC is completing the training, and last year's emergency exercise included an IMS refresher for Control Group members. All personnel operating in the MOC must have an understanding of the principles of IMS.

Recommendation #30

The Township should consider facilitating a county-wide full-scale emergency exercise in the next five years. However, full-scale exercises require more detailed planning and are staff-intensive; moving to this next level of exercise is a logical step in local emergency management program development.

Recommendation #31

At a minimum, all personnel operating in the MOC complete EM 200, IMS 100 and IMS 200 training, and Incident Commanders and General Staff (Operations, Logistics, Planning, Finance/Administration) complete IMS 300 training.

Recommendation #32

At a minimum, all ANFRES Incident Command Officers must complete EM200 training.

Recommendation #33

Asphodel-Norwood conducts a Post-Incident Evaluation of the 2025 ice storm to assess the MOC's functionality and evaluate the Control Group's performance.

6.2.4 Municipal Operations Centre (MOC) and Municipal Emergency Control Group (MECG)

A Municipal Operations Centre (MOC) is a facility where the Municipal Emergency Control Group (MECG) work together in conjunction with the communities and organizations they represent to:

- Support responders at the incident site, as well as other MOCS, when applicable
- Coordinate resources and inter-organizational activities related to the incident.
- Develop and coordinate plans for both short-term and long-term needs
- Manage and direct incident response from the MOC, particularly in situations where the incident is not site-based
- Facilitate collaboration between various incident response organizations and multiple MOCS
- Share responsibilities with on-site responders, managing specific operations such as emergency shelters or distribution points.

These key activities involve critical tasks with associated resource requirements, such as personnel, supplies, and equipment. These requirements play a key role in shaping the design of the MOC. A vital step in the design process is identifying the capabilities needed for the MOC.

The following factors require consideration when evaluating the overall functionality of an MOC:

1. Space Requirements

- Plan for minimum and maximum staffing levels to ensure 24-hour operations are sustained.
- Additional Personnel Space Requirements – Consider the need for support services, restroom facilities, meeting spaces, quiet rooms for counselling services (if required), areas for meals, rest break areas, and storage areas for food, water, and supplies.

2. Communications Requirements

- Interoperability with agencies that are responding alongside emergency responders (Fire, Police, EMS)
- Telecommunications needs include teleconferencing, videoconferencing, text messaging and fax.
- Public safety radios and associated infrastructure, including base radios, chargers, power supply, etc.

3. Information Technology Requirements

- Internet connectivity, mobile wi-fi, portable routers and boosters, USB sticks, and internet by satellite.
- Relocating to an alternate site to establish connectivity if required.
- Computer systems.
- Audiovisual support

4. Supplies and Equipment

- Furniture and office equipment
- Food supply.
- Medical and sanitary supplies.
- Status and situation boards (whiteboard).
- Administrative supplies.
- Support Services.

6.2.5 MOC/MCG Current Status

The Emergency Plan appropriately identifies a Primary MOC location and two alternate locations. All three sites have auto-start, natural gas-powered generators capable of energizing the facility. For security reasons, the primary and alternate locations are confidential.

The Emergency Management Group's research confirms that adequate space is available at both the Primary MOC and the designated first alternate location and that all necessary amenities are in place. During the March 2025 ice storm, maintaining the Township's information technology infrastructure became difficult.

The newly implemented digital radio frequencies performed exceptionally well; however, mobility issues arose due to the gradual degradation of cellular networks throughout the storm. This impacted the functionality of the 'Who's Responding backup paging system. Fortunately, using multiple mobile service providers offered a degree of redundancy, helping to mitigate total communication failure.

Nevertheless, the widespread damage caused by the storm led to prolonged power outages and the loss of landline telephone and internet services, resulting in notable disruptions to the Township. Additionally, EMG noted that adequate equipment and supplies are in place at the MOC locations.

While emergencies like the March 2025 ice storm can have significant negative impacts on municipalities, they also present valuable opportunities for improvement.

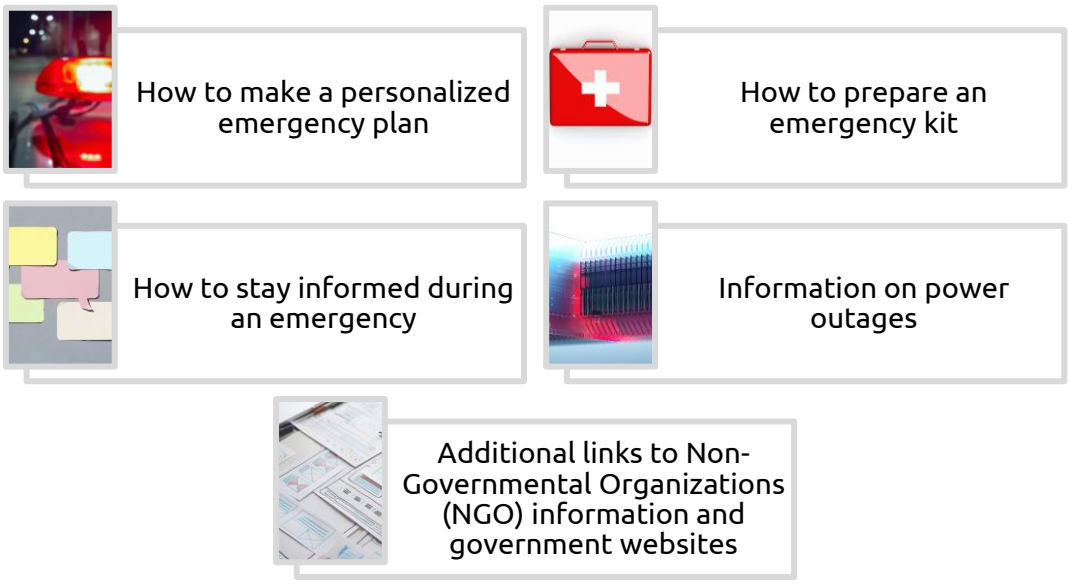
Asphodel-Norwood conducts a Post-Incident Evaluation to assess the MOC's functionality and evaluate the Control Group's performance. This review will help identify strengths, address gaps, and enhance the Township's overall emergency preparedness and response capabilities.

6.2.6 Public Education and Alerting

As mentioned earlier, a crucial first step in preparing for a large-scale emergency is for individuals and families to take personal responsibility for their safety. Many local governments use social media platforms and the municipality's website to encourage residents to prepare for emergencies and offer guidance on the essential supplies needed to sustain themselves for 72 hours.

The Emergency Preparedness page of the Asphodel-Norwood website is informative and provides valuable information to the public.[27] The webpage includes information on, but is not limited to, the following:

Knowing the risks in the community:



Congratulations to the Township of Asphodel-Norwood for its proactive and informative messaging to the public before, during, and after the March 2025 ice storm event.

6.2.7 Agreements and Non-Governmental Organizations

Long-duration emergencies can significantly strain local resources, making the effective response and recovery largely dependent on the widespread use of all available community resources. Involving non-governmental organizations (NGOs), many of which have trained volunteers ready to assist, is crucial for maintaining critical functions throughout the emergency. In addition to provincial and municipal organizations, which can provide a wide range of equipment, supplies, and skilled personnel, national and international agencies are also available to assist, often in specialized areas such as psychological support.

Section 19 of the Emergency Plan—Non-Governmental Organizations—lists the Canadian Red Cross, the Salvation Army, St. John Ambulance, and Amateur Radio as participating agencies. The plan outlines activation protocols for each organization and clearly defines their respective

[27] Emergency Preparedness - Township of Asphodel-Norwood Accessed April 2025. https://www.antownship.ca/en/live-play/emergency-preparedness.aspx

responsibilities. However, EMG's research indicates no formal agreements exist with these NGOs. In addition, EMG has identified strong, though informal, working relationships with local community groups such as the Norwood Lions Club, Norwood Legion, Norwood Food Banks, and various churches within the Township.

There is always the possibility that a municipality may become overwhelmed during an emergency. Requests for assistance that extend beyond municipal boundaries or involve non-governmental organizations (NGOs) require planning. The rationale behind this is straightforward: in the event of a widespread emergency, NGOs may be called upon to deploy their resources elsewhere, and they do so based on their decision-making processes unless clear agreements exist. Formal agreements should outline expectations from both parties before an emergency occurs.

Recommendation #34

The Township needs to investigate establishing formal agreements with the NGO's identified in the Emergency Plan.

6.2.8 Evacuation and Reception Centres

Identifying evacuation and reception centres before an emergency occurs offers essential advantages for emergency preparedness and response. Having pre-determined locations allows authorities to act swiftly and efficiently, directing people to safety with minimal confusion and panic. This clear guidance reduces chaos during high-stress situations and provides a sense of security for affected populations.

Advanced identification also allows emergency services, NGOs, and local officials to coordinate their efforts more effectively. Logistics, including supplies, transportation, and medical support, can be planned and rehearsed through exercises, thereby enhancing readiness. Planning also supports vulnerable populations by arranging accommodations in advance, ensuring that no one is denied access due to a disability, health condition, or language barrier.

Recommendation #35

Asphodel-Norwood should conduct a third-party evaluation of the Asphodel-Norwood Community Centre as an evacuation/reception centre against the Health Canada Guidelines for Emergency Social Services.

Identifying centres in advance supports broader long-term planning. Authorities can assess site safety, accessibility, and infrastructure and address needs such as climate resilience and sanitation. Sheltering should comply with the Health Canada Guidelines for Emergency Social Services. The

Public Health Agency of Canada's Centre for Emergency Preparedness and Response (CERP) website provides direction regarding these guidelines.[28]

The Township has appropriately identified the Asphodel-Norwood Community Centre as its primary evacuation centre. Vulnerable occupancies and daycare facilities within the Township have also identified the Community Centre as a secondary evacuation centre in their internal safety plans. Currently, the Township has not established additional evacuation centres.

The Community Centre has an emergency backup generator capable of energizing the entire building. The facility also features ample personal hygiene infrastructure, including showers, social areas, mobile device charging stations, and meeting spaces. During an emergency and when the facility is in use, it is managed primarily by Asphodel-Norwood Parks and Recreation Staff and volunteers.

Recommendation #36

Asphodel-Norwood should investigate an alternate evacuation/reception centre location.

[28] Emergency Response Services - Canada.ca Accessed May, 2025. https://www.canada.ca/en/public-health/services/emergency-preparedness-response/centre-emergency-preparedness-response/emergency-response-services.htm l

Section 7

Mutual Aid, Automatic Aid and Fire Service Agreements

Emergency Management Group

SECTION 7: MUTUAL AID, AUTOMATIC AID AND FIRE SERVICE AGREEMENTS

7.1 Mutual Aid

The RFP identified a focus on distinguishing response coverage areas and recommending potential opportunities for rationalizing coverage areas. Based on this focus, EMG has reviewed the existing mutual aid plan, program, and automatic agreements and provided information on opportunities to improve ANFRES efficiencies.

The Provincial Mutual Aid Program is a borderless, reciprocal agreement that allows participating fire departments to assist other fire departments that have exhausted their local resources in mitigating emergency events. Under this plan, assistance is provided at no direct cost to the Department requesting it. Public Fire Safety Guideline 04-05-12 notes, "Mutual aid plans allow a participating fire department to request assistance from a neighbouring fire department authorized to participate in a plan approved by the Fire Marshal." Section 7 of the FPPA, 1997, S.O. 1997, c. 4 provides the authority for the Fire Marshal to appoint Fire Coordinators who establish and maintain the Mutual Aid Plan.

In support of mutual aid efforts across Ontario, the OFM requires fire departments to update their equipment lists, specifying the apparatus they have and what could be available for mutual aid purposes. However, it is incumbent upon each participating fire department to also have a clear understanding of what resources are available from its neighbouring fire department(s) and how to access these during times of need. During an emergency, it is not the time for a fire chief to contact a neighbouring department looking for specialized equipment.

The documents provided while developing this MFP are dated 2016, meaning they are nine years old. Some sections were updated last in 2013. The contact list is outdated, with numerous retirements and the departure of Chief Officers.

Recommendation #37

The Fire Chief lobbies other County of Peterborough Mutual Aid Plan and Program members to complete an update to the document and its Appendices.

Mutual aid plans are essential for communities, as they enable fire departments to assist one another when existing resources are overwhelmed and unable to mitigate the emergency.

The Township of Asphodel-Norwood and its fire department have several fire protection and automatic aid agreements in place, all of which require updating to meet the needs of the Township and some neighbouring Municipalities. As these documents are many years old, the Fire Chief of ANFRES should clarify if the existing criteria in the agreements are still valid and meet the needs of all the participating Municipalities.

Mutual aid, automatic aid, and fire protection agreements are programs used to:

- Support a community's fire department at times when local resources are exhausted.
- Offer quicker response coverage to areas closer to a bordering fire department's response area than the host department.
- Create an automatic response by bordering fire departments to properties closer to their fire stations than the host fire department.

The ANFRES has a positive working relationship with the other fire departments in the surrounding jurisdictions.

7.2 Automatic Aid and Fire Protection Agreements

Automatic aid and fire protection agreements typically exist between fire departments when time and resources are a factor in responding to an emergency. These agreements often identify the personnel and equipment that will be dispatched automatically under certain conditions.

The ANFRES has Fire Protection agreements with the following communities:

- The Corporation of The Township of Douro-Dummer
- The Corporation of the Township of Otonabee-South Monaghan
- The Corporation of the Municipality of Trent Hills

Since their inception, many factors that may have arisen require inclusion in the new documents.

Only one of the abovementioned agreements involves resources responding to Asphodel-Norwood, which is with the Township of Trent Hills in the south-central area.

Recommendation #38

The Fire Chief must review and update all by-laws relating to Mutual Aid, Automatic Aid and Fire Protection and present the updated version to the Council for their consideration and passage.

The benefits of an automatic aid agreement are that the necessary equipment and resources will automatically be dispatched for suppression services, rescue, and other identified emergencies that fall within the parameters of the automatic agreement, thereby saving critical time.

It is in the best interest of fire departments to include annual training sessions in a fire protection agreement, an automatic aid agreement, or a mutual aid plan, where firefighters become familiar with the equipment of other departments. These combined training sessions also build working relationships and morale between fire departments. Essentially, automatic aid agreements bring fire departments together to work as a team for the benefit of the public. However, without combined training sessions to practice as a team, the team cannot effectively function, and breakdowns occur.

Another benefit of the mutual training session is the identification of gaps in equipment, communication, or training that may occur before a real emergency. These mutual aid meetings also allow fire chiefs and chief officers from the participating departments to discuss issues or gaps in response protocols.

Section 8 – Finance

SECTION 8: FINANCE,

Municipalities must strike a balance between maintaining existing services and infrastructure while planning for future growth, all within a framework of fiscal sustainability. To achieve this, effective management is essential. Key principles include long-term planning and budgeting, sound financial policies, regular reviews of programs and services, and consistent financial reporting to the Council.

In preparation for the review and development of the section related to the financial operation and function of ANFRES, EMG analyzed several reports and documents. These documents included the Township of Asphodel-Norwood Municipal Operating and Capital Budget Presentation[29], Asset Management Plan 2024[30], Draft Strategic Plan 2022 - 2024[31], the 2023 Township of Asphodel-Norwood Development Charges Background Study[32], and various operating and capital budget documents that were made available for review.

The Township has approved a 6.75% tax rate increase for 2025. This increase applies solely to the Township portion and does not include potential increases from Peterborough County, the Education tax rate, or Municipal Property Assessment Corporation (MPAC) assessments.

In Asphodel-Norwood, municipal property taxes are distributed as follows: 56% to the Township, 30% to the County, and 14% to Education.

For 2025, the Township has allocated $552,332 for fire services – an increase of $88,424 compared to 2024. This represents 10.23% of the Township's total budget and includes both capital and operating expenditures.

Under the authority of the Municipal Act and other legislations, the primary sources of municipal revenue for operating and capital budgets are as follows:

- Property Taxes

[29] TAN Final Budget 2024 Presentation Accessed April, 2025. https://www.antownship.ca/en/township-services/resources/Documents/PDF-Docs/Budget/TAN-Final-Budget-2025-Presentation.pdf

[30] Asset Management Plan Accessed April, 2025. https://www.antownship.ca/en/township-services/resources/Documents/PDF-Docs/AsphodelNorwood_2024AMP_v1_20250328.pdf

[31] TAN Strategic Plan 2022-2024 Accessed April, 2025. https://www.antownship.ca/en/resources/en/resources/news/TANDraftStrategicPlan2022-2024.pdf

[32] Development Charges Background Study Accessed April, 2025. https://www.antownship.ca/en/township-services/resources/Documents/PDF-Docs/Planning/Asphodel-Norwood-2023-DC-Background-Study---Final.pdf

- User Fees
- Development Charges
- Reserve Funds
- Federal and Provincial Grants

The Township's budget process involved the development of three draft versions, each building on the outcomes of the previous year and incorporating any known changes, including decisions made throughout the current fiscal year. Like many municipalities, a wide range of factors are taken into account when preparing the budget. These include, but are not limited to, the following:

- Consumer Price Index (CPI)
- Canadian Inflation Rate
- Transfers from other orders of government
- Current Value Assessment (CVA)
- Municipal Growth
- Municipal Priorities
- Infrastructure needs and deficit
- Legislative requirements
- Risk to the community

The Consumer Price Index (CPI) reflects changes in the cost of living as experienced by Canadian consumers. It tracks price fluctuations over time by comparing the cost of a consistent basket of goods and services. Although the effects of the COVID-19 pandemic have now stabilized, the initial impact significantly drove up inflation, pushing the CPI beyond levels seen in recent years. As illustrated in table #15, inflation rates in Canada are beginning to level off; however, the CPI continues to trend upward.

TABLE #15 - CONSUMER PRICE INDEX (CPI) AND INFLATION RATE

Year	CPI	Annual Inflation Rate
2018	133.4	2.27%
2019	136	1.95%
2020	137	0.72%
2021	141.6	3.39%
2022	151.2	6.80%
2023	157.1	3.89%
2024	160.4	2.44%

Municipal budgets are inherently dynamic, and while every effort is made to accurately forecast year-end expenses relative to revenue, unforeseen in-year costs can result in negative operating variances. An analysis of the ANFRES budget from 2022 to 2024 reveals an average annual variance of -$11,591 during this period. As detailed in Table #16, a larger negative variance was realized in 2023, resulting from decreased revenue in a specific revenue line. Furthermore, a comparison between year-over-year budget increases and the annual inflation rate shows the ANFRES budget growth has, on average, outpaced inflation. This reflects strong fiscal oversight. Both the Fire Chief and the Council should be commended for their prudent financial management and for ensuring that the ANFRES receives the necessary funding to operate effectively and efficiently.

TABLE #16 - 2022 TO 2025 APPROVED BUDGET/YEAR-END ACTUAL/VARIANCE

Year	Approved Budget	Year End Actual	Variance
2022	$428,309	$439,888	-$11,579
2023	$459,289	$507,752	-$48,463
2024	$463,908	$438,639	$25,269
2025	$552,332	N/A	N/A

TABLE #17 - BUDGET INCREASE VS. INFLATION RATE (2023 – 2025)

Year	Budget Increase	% Increase	Canadian Inflation Rate
2023	$30,980	7.23%	3.89%
2024	$4,619	1.00%	2.44%
2025	$88,424	19.06%	TBD

8.1 Potential Impacts of Tariffs on Fire Department Budgets

At the time of writing, tariffs imposed by the United States of America (USA), along with any retaliatory measures taken by the Canadian government, remain subject to change. Emergency Management Group Inc. acknowledges the potential for significant negative impacts that a trade dispute with the USA could have on both the Canadian economy and municipal budgets.

In particular, escalating tariffs between the two countries may affect Canadian fire department budgets in several indirect but meaningful ways – most notably through increased costs for equipment, materials, and day-to-day operations. The following outlines key areas where USA-imposed tariffs could influence the financial planning and expenditures of Canadian fire services:

- Increased costs for imported firefighting equipment and gear.
- Higher construction and maintenance costs for fire stations and facilities.
- Rising apparatus and maintenance costs.
- Potential for delayed or limited procurement.
- Inflationary pressure across services.

8.1.1 Strategies for Municipal Mitigation

To address these challenges, municipalities may need to adopt proactive strategies, including:

- Exploring alternative suppliers from non-U.S. markets to diversify supply chains.
- Bulk purchasing and collaborative procurement to negotiate better deals and offset tariff-related cost increases.
- Refurbishing existing fleets where feasible and practical while acknowledging long-term limitations.

- Adjust municipal budgets and/or seek additional government funding to maintain fire department readiness.
- Leasing or financing vehicles to spread costs and preserve capital for other priorities.

American tariffs have the potential to impact Canadian fire department budgets both directly and indirectly. The most immediate effects would likely stem from increased costs for imported equipment, vehicles, materials, and supplies. Beyond these direct expenses, tariffs may also contribute to wider economic disruptions, potentially reducing municipal revenues and placing additional strain on already limited budgets. In response, fire departments may need to adapt by revising operational strategies, exploring alternative suppliers, or advocating for increased financial support from local governments.

8.1.2 Extending the Life of Aging Fire Trucks – Risks and Realities

In response to rising costs, many municipalities may choose to extend the service life of their existing fire apparatus. While this approach may offer short-term budgetary relief, it also introduces several operational, financial, and safety risks, including:

- Increased Downtime: Aging fleets are more prone to breakdowns, which can potentially reduce availability during emergencies.
- Higher Maintenance Costs: Older vehicles require frequent and costly repairs, especially if replacement parts are also subject to tariffs.
- Operational Inefficiencies: Outdated vehicles often exhibit reduced performance and fuel efficiency, which limits their response effectiveness.
- Safety Concerns: Older apparatus may lack modern safety and operational features, putting firefighters and the public at greater risk.

Refurbishing existing fire apparatus can offer a short-term solution to budget constraints; however, it is not a sustainable strategy for maintaining an effective and reliable emergency response system over the long term. Any refurbishment efforts must adhere to the NFPA 1910 Standard for the Inspection, Maintenance, Refurbishment, Testing, and Retirement of In-Service Vehicles and Requirements for Marine Firefighting Vessels, as well as comply with the recommendations provided by the Fire Underwriters Survey (FUS) regarding apparatus refurbishment33.

[33] PUBLIC PROTECTION SURVEY INFORMATION, Accessed May 2025, https://fireunderwriters.ca/assets/img/FUS-TechnicalBulletin-InsuranceGradingRecognitionofUsedorRebuilt.pdf

8.1.3 The Benefits of Leasing Fire Apparatus/SCBA

Leasing fire apparatus and Self-Contained Breathing Apparatus (SCBA), as examples, presents a practical and flexible financial strategy for municipalities, particularly those with limited budgets or smaller departments. Key advantages include the avoidance of large upfront capital costs, predictable payments for easier budgeting, access to newer equipment equipped with the latest safety technology, and reduced maintenance costs due to manufacturer warranties. Additionally, leasing arrangements often include flexible options, such as lease-to-own or equipment refresh programs. They may have a less significant impact on municipal debt limits compared to traditional borrowing. Furthermore, leasing costs are typically accounted for under Operating expenses and, due to structured terms of lease agreements, are generally predictable, making them easier to budget for and reducing the strain on larger Capital expenditures.

For municipalities seeking to maintain high standards of emergency response while managing financial constraints, leasing provided a viable and strategic alternative to outright purchasing. It supports operational readiness, improves financial planning, and ensures departments can continue to meet the evolving needs of their communities with modern, reliable equipment.

8.2 Operating Budget

An operating budget is a crucial tool for managing a fire department's day-to-day expenses, including compensation, utilities, and maintenance. It serves multiple roles within the fire department framework. As a policy document, it outlines the department's goals and objectives. As a communication tool, it provides summary information that can be shared with the public to support transparency. As a financial plan, it details projected revenues and expenditures in alignment with the municipality's accounting system, enabling the monitoring and evaluation of economic performance throughout the year.

The ANFRES operating budget encompasses several cost centres, including revenue, general expenses, fire prevention, fire station operations, and emergency management. As previously noted, the Fire Chief has done an admirable job in managing this budget. However, a review of the cost centres, as shown in tables #18 and #19, highlights the importance of ongoing monitoring and adjustment to align expenditures as closely as possible with projections. While year-over-year adjustments have been made to specific cost centres, a best practice is to annually assess five-year

Recommendation #39

In partnership with a representative from the Township's Finance Department, the Fire Chief conducts a full cost center analysis of the operating budget based on a five-year average.

rolling averages for each cost centre when preparing budget submissions. To enhance collaboration and transparency, this process can be conducted in partnership with a representative from the Township's Finance Department.

TABLE #18 - 2023 COST CENTRE BUGETS VS ACTUAL EXPENDITURES

Cost Centre	2023 Budget	2023 Actual	Variance
Full-Time Wages	$73,483	$78,412	-$4,929
Other Payroll Costs	$22,000	$26,560	-$4,560
Equipment Repairs and Maintenance	$15,000	$18,208	-$3,208
Vehicle Repairs & Maintenance	$15,000	$17,381	-$2,381
Hastings Contract	$2,500	$8,150	$5,650
Supplies & Services	$3,500	$7,262	-$3,762

TABLE #19 - 2024 COST CENTRE BUDGETS VS ACTUAL EXPENDITURES

Cost Centre	2024 Budget	2024 Actual	Variance
Full-Time Wages	$76,053	$82,859	-$6,806
Other Payroll Costs	$23,000	$35,923	-$12,923
Equipment Repairs & Maintenance	$16,000	$21,772	-$5,772
Vehicle Repairs and Maintenance	$12,000	$15,156	-$3,156
Hastings Contract	$5,000	$6,300	$1,300
Supplies & Services	$3,500	$4,880	-$1,380

8.3 Asset Management Plan

In many parts of Ontario, aging infrastructure is deteriorating faster than it can be repaired or replaced, putting the delivery of essential municipal services at risk. In response to this growing challenge, the province introduced the Asset Management Planning for Municipalities Infrastructure Regulation (O. Reg. 588/17), as amended by O. Reg. 193/21, which came into effect on January 1, 2018. Under this regulation, municipalities are required, by July 1, 2025, to

identify and plan the necessary lifecycle activities for each asset category over ten years to maintain the proposed levels of service.

In response, the Township developed the Asphodel-Norwood Asset Management Plan (AMP) 2024, which identifies the current practices in place to manage public infrastructure and makes recommendations for further refinement.

Over time, the condition and performance of most assets naturally decline. This deterioration is influenced by several factors, including the asset's characteristics, location, usage, maintenance history, and environmental conditions. As assets degrade, their ability to perform as intended diminishes, often leading to higher costs, increased risks, and the potential for service interruptions. The Asphodel Norwood Asset Management Plan states the following:

"To ensure that municipal assets are performing as expected and meeting the needs of customers, it is important to establish a lifecycle management strategy to manage asset deterioration proactively".

Within the plan, asset condition assessments have been conducted for fire stations and fire apparatus. The findings indicate that a substantial portion of general government, administrative, and fire building assets are in poor to worse condition. (Figure #11).

Fire services account for one of the largest shares of the Township's vehicle portfolio. With condition data available for only 42% of fire service vehicles, based on replacement costs, age was used to estimate conditions for the remaining assets. The assessment concluded that the vast majority of vehicles supporting critical services, such as fire, are in poor or worse condition. (Figure #14)

FIGURE #11 – VALUE AND PERCENTAGE OF ASSET SEGMENTS BY REPLACEMENT COST (BUILDINGS)

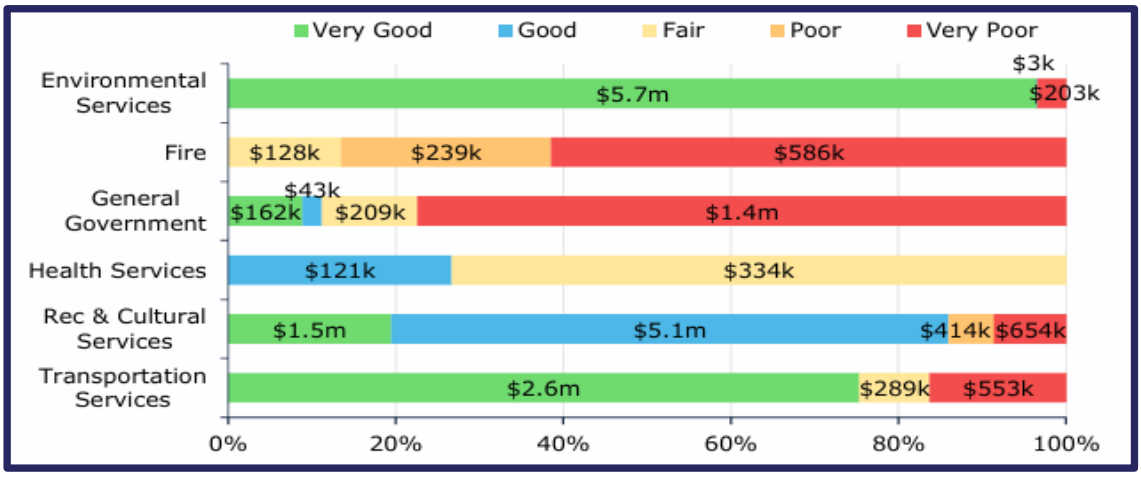
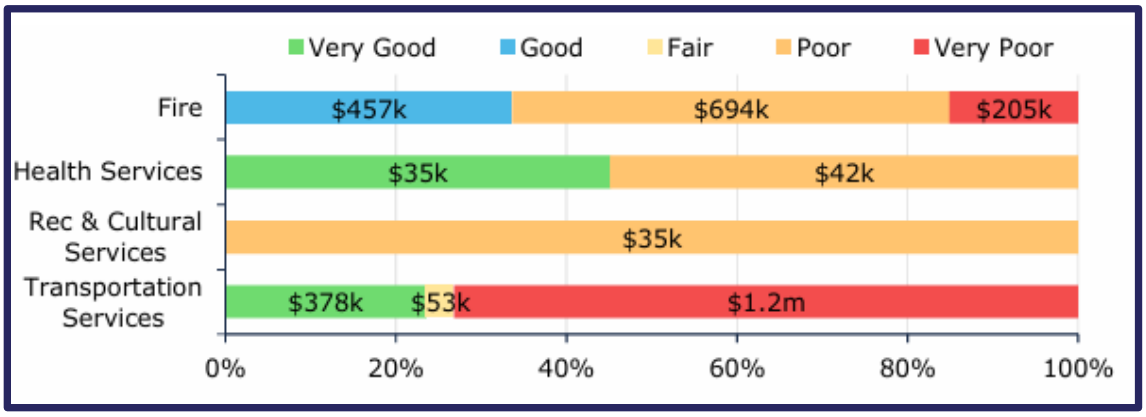


FIGURE #12 – VALUE AND PERCENTAGE OF ASSET SEGMENTS BY REPLACEMENT COST (VEHICLES)



Combining a Long-Range Capital Forecast with an AMP is particularly valuable for the fire service, as it supports long-term planning for critical infrastructure, apparatus, and equipment. This integrated approach ensures that the fire service can maintain operational readiness, meet service-level expectations, and plan proactively for future growth and evolving risks.

The AMP provides essential data, including the age, condition, and performance of fire apparatus, stations, and specialized equipment. These details inform the Long-Range Capital Forecast by identifying when assets will require maintenance, refurbishment, or replacement. Projects are then prioritized based on risk assessments, service delivery impact, and compliance with relevant standards, such as those established by the National Fire Protection Association (NFPA) and the Fire Underwriters Survey (FUS) guidelines.

Financial strategies developed through this integration allow for sustainable funding of fire-related capital needs. The Long-Range Capital Forecast can incorporate funding sources such as development charges, reserves, grants, and user fees to address lifecycle costs while reducing reliance on property taxes. Involving fire services staff, finance, and asset management teams in this process ensures the plan reflects operational realities and long-term financial capacity.

Recommendation #40

Asphodel-Norwood develops a long-range capital forecast for the fire service that is fully integrated with the Township Asset Management Plan and considers relevant standards such as NFPA and FUS.

Regular updates to the integrated plan enable the fire service to adapt to changing community needs, technological advancements, and fiscal constraints. Presenting the plan to the Council

and the public promotes transparency and reinforces the importance of consistent investment in fire service infrastructure to ensure public safety and effective emergency response well into the future.

8.4 Capital Budget

A capital budget focuses on planning for the maintenance, improvement, or development of fire department infrastructure, including core assets like fire stations, apparatus, and equipment. Research indicates that Capital budget requests are typically made on an annual basis and are driven by the life-cycle replacement needs of fire service assets.

At present, a formal Long-Range Capital Forecast, integrated with the Township's AMP, is lacking. However, the Township intends to implement 5-, 7-, and 10-year capital plans once Phase 3 of the compliance requirements under O. Reg. 588/17 is completed in the Fall of 2025.

The Emergency Management Group has identified the following Capital purchases and/or recommended transfers to reserves for the years 2023 through 2025:

2023 Capital Expenditures

$30,000 – Four sets of bunker gear, safety vests, 35 ft. ladder, defibrillators
$80,000 – Transfer to reserve for Pumper replacement (2025)
$6,400 – Air cylinder replacement

2024 Capital Expenditures

$141,800 – Transfer from reserve ($75,000 from DC's for paging tower, $50,000 for Rescue replacement ($6,800 air cylinder replacement)
$80,000 – Transfer to reserve for Pumper replacement (2025)

2025 Capital Expenditures

$425,656 – Transfer from reserve for Pumper replacement
$16,000 – Bunker Gear replacement
• **$10,000 –** Air cylinder replacement

In the absence of a formal Long-Range Capital Forecast, ANFRES is actively addressing its capital asset replacement needs. The creation of a forecast that the Council approves and integration with the AMP will only lead to enhanced effectiveness in this area of the ANFRES operation.

8.5 Development Charges

The Development Charges Act, 1997, S.O. 1997, c. 27, as amended (the "Act") provides that the Council of a municipality may pass By-laws for the imposition of Development Charges against land to pay for increased Capital Costs required because of the need for Service arising from Development in the area to which the By-law applies.

Through this authority, and with a desire to ensure that the capital cost of meeting growth-related demands for or burden on municipal services does not place an excessive financial burden on the Township or its existing taxpayers while at the same time ensuring new taxpayers contribute to more than the net capital cost attributable to providing the current level of municipal services; on December 12, 2023, the Township authorized By-law Number 2023-65 for the imposition of Development Charges for Fire Protection Services.

The By-law establishes a phased-in development charge with five escalating increments over ten years. Under Schedule "A" of the By-law, Fire Protection Services receives Development Charges associated with the construction of single and semi-detached dwellings, other multiples, apartments that are two bedrooms or more, bachelor and one-bedroom apartments, and non-residential occupancies.

The charges, detailed in table #20, are phased in as follows:

First Year of By-law	The second year of By-law	The third year of By-law	The fourth year of By-law
(80% of Full Rates)	(85% of Full Rates)	(90% of Full Rates)	(95% of Full Rates)

TABLE #20 - SCHEDULE OF DEVELOPMENT CHARGES – FULL RATES

Service	Residential				Non-Residential
	Single & Semi-Detached Dwelling	Other Multiples	Apartments - 2 Bedrooms +	Apartments - Bachelor And 1 Bedroom	(Per sq. ft. of Gross Floor Area)
Fire Protection Services	$2,919	$2,212	$2,173	$1,152	$0.92

Asphodel-Norwood's decision to implement development charges reflects a strategic shift in funding capital improvements, from relying primarily on property taxes to placing a portion of the financial responsibility on developers. This approach is grounded in the principle that the infrastructure demands created by growth should be partially funded by those driving the growth.

8.6 Reserve Funds

Reserve and reserve funds are established through municipal By-laws and/or applicable legislation and are considered part of the annual budget process. Reserves are generally set aside for specific, pre-determined purposes, such as the purchase of fire apparatus. Reserve funds are more strictly regulated, with restrictions imposed by legislation or specific direction from the Council.

The Township of Asphodel-Norwood has established a Fire Service Reserve through By-law Number 2023-65. Contributions to this reserve may also be made through the tax levy, provided such allocations are requested during the budget process and approved by the Council. As previously noted, the Township is actively utilizing the Fire Service Reserve fund to support the procurement needs of ANFRES. As a result of planning for the purchase of a pumper in 2025, the current balance in this reserve is $0.

8.7 User Fees

The implementation of fire department user fees provides several important benefits that enhance both the financial sustainability and operational efficiency of municipal fire services. These fees generate additional revenue, helping to offset operational costs and reduce reliance on property taxes. They also support cost recovery for specific services such as motor vehicle collisions, inspections, and specialized emergency responses, ensuring that those who use the services contribute fairly. By promoting user accountability, these fees encourage responsible behaviour, particularly in reducing avoidable incidents, such as unregulated burning. Moreover, the additional funds can be either reinvested in essential areas, such as equipment and training or used to offset departmental operating costs. A clearly defined user fee structure also fosters transparency and public awareness, helping residents understand the true cost of fire services and supporting informed municipal budgeting.

Recommendation #41

The Fire Chief conducts an annual review of the Fees and Charges By-law to ensure it remains consistent with comparable jurisdictions and that the fees adequately support cost recovery for the services provided.

EMG also conducted a review of Schedule "A" to By-law Number 2024-49, Fees and Charges By-law, and offers the following recommendation.

Section 9

EMG Emergency Management Group

Fire Underwriters Survey (FUS)

SECTION 9: FIRE UNDERWRITERS' SURVEYS

9.1 Fire Underwriters Surveys

The Fire Underwriters Survey (FUS) is a Canadian organization that has critically assessed fire protection capabilities across Canadian communities for over a century. The primary purpose of the FUS is to provide data on public fire protection to support the underwriting and statistical work of insurance companies that are subscribing. This data is essential for determining a property's insurability and associated risk levels, which ultimately influence insurance premiums for property owners.

9.2.1 Origins and Development

The FUS established standardization when evaluating fire protection services across Canada. Its origins date back to the early 20th century when the need for a systematic approach to assessing fire risks became apparent. As urbanization increased, so did the complexity and scale of fire protection challenges. The FUS emerged as a response to these challenges, offering a structured method for assessing the capacity of municipalities to manage fire risks.

Over the years, the FUS has developed a comprehensive methodology for evaluating fire services. This methodology involves detailed field surveys conducted by FUS-certified fire protection specialists. These specialists assess various factors, including the adequacy, reliability, strength, and efficiency of fire departments, water supplies, and other protective facilities within a community. The results of these surveys establish a Public Fire Protection Classification (PFPC) for each municipality, which helps insurance companies determine the level of risk they are willing to underwrite in those areas. Impact on Insurance and Community Planning

The PFPC system plays a pivotal role in determining fire insurance rates for properties within a community by setting insurance grades for the community. While the FUS does not directly set insurance rates, the information it provides through the Fire Insurance Grading Index is crucial for insurance companies when developing rates for commercial and residential properties. The PFPC, which evaluates a community's overall fire protection capabilities, is complemented by the Dwelling Protection Grade (DPG), which specifically assesses the ability of fire services to protect detached dwellings.

Communities that achieve better PFPC or DPG ratings often see a reduction in the cost of insurance premiums for their residents. This rating system also incentivizes municipalities to

invest in improving their fire protection services, as enhanced ratings can lead to significant economic benefits for property owners.

9.2.2 The Role of FUS in Modern Fire Protection

In addition to assessing fire risks, the FUS allows communities to apply for specialized accreditations, such as the Superior Tanker Shuttle Service (STSS) accreditation. This accreditation is awarded to fire departments that demonstrate the ability to deliver a continuous, adequate water supply to fight fires in areas without hydrants, similar to what would be available in urban settings with a hydrant system.

FUS reports play a crucial role in guiding municipal planning and development. The data and recommendations provided by the FUS help municipalities make informed decisions about the placement and resources of fire stations, the procurement of firefighting equipment, and the overall strategic direction of their fire services.

The FUS data helps insurers evaluate the level of fire risk in different communities, which is critical for determining the level of insurable risk and the corresponding premiums. By subscribing to FUS, these companies gain access to standardized fire protection classifications, enabling them to evaluate the adequacy and reliability of fire services in various municipalities, which ultimately informs their insurance offerings and pricing strategies.

The overall intent of the PFPC system is to provide a standardized measure of the community's protective facilities' ability to prevent and control significant fires. This process is accomplished by evaluating, in detail, the adequacy, reliability, strength, and efficiency of the protective facilities and comparing the level of protection against the level of fire risk in the built environment.

The fire insurance grading system does not consider past fire loss records but rather fire potential based on the physical structure and makeup of the built environment. Every insurance company has a formula for calculating its underwriting capacities and insurance rates; however, the PFPC and DPG classifications are extremely useful to insurers in determining the level of insurable risk in a community. When a community improves its PFPC or DPG, property owners may see a reduction in their insurance rates, while their underwriting capacities may increase.

9.2.3 Asphodel-Norwood FUS Grading

The FUS grading in 2020 for the Township of Asphodel-Norwood was a PFPC 6 grading awarded to the Norwood Station and a 9 for Westwood. The DPG was 3B for the residential dwellings in the municipality beyond 300m from a hydrant. For those with hydrants in Norwood, a 3A grade was provided, provided they were within 8 km of the fire station and 300m of a hydrant. The

Public Fire Protection Classification (PFPC) is a numerical grading system, scaled from 1 to 10, that Commercial Lines insurers use. Class 1 represents the highest grading possible, and Class 10 represents an unrecognized level of fire protection, or fire protection, beyond 5 km by road travel distance from the nearest responding fire station and 150m from the closest hydrant. The PFPC grading system assesses the effectiveness of a community's fire protection programs in preventing and controlling significant fires that may occur in multi-family residential, commercial, industrial, institutional, and construction developments. With a grade of 6, improving this grade would require enhancements in fire inspection, public education, and the installation of additional dry hydrants as a water source in rural settings. Farms with ponds or rivers flowing through them would also benefit from an improved grade from installing dry hydrants. Future tanker replacements with larger water capacity tanks of 11,365 litres (2,500 imp. gallons) or more would also improve the grade. Larger tankers would enhance the Superior Tanker Shuttle Service grade as the department would have the capacity to flow greater amounts of water.

The second grading system, Dwelling Protection Grade (DPG), assesses the protection available for small buildings such as single-family dwellings and is used by Personal Lines insurers. The DPG is a numerical grading system scaled from 1 to 5. One (1) is the highest grading possible, and five (5) indicates little or no fire protection. Class 5 also represents fire protection beyond the 8 km by road travel distance of a responding fire station. This grading reflects a community's ability to handle fires in small buildings, such as single-family dwellings and semi-detached dwellings. The Township of Asphodel-Norwood is assigned a Grade of 3B, which means some houses are within 8 km in road travel distance of a recognized fire station and 300 m of hose lay of a recognized public hydrant on a recognized water distribution. Again, as mentioned previously, installing additional dry hydrants could improve the grading of some residences as a water source is closer to their building.

With the continuing and anticipated growth of Asphodel-Nowood, EMG recommends that the Township continue to update and receive FUS grades every five years. Doing so will help the community plan future fire service and water delivery infrastructure. The Fire Chief can update and maintain ANFRES's current status using FUS's online portal. All Fire Chiefs have free access to the portal, which allows quick and easy information entry. The EMG also recommends that the Municipality engage FUS for a public fire protection analysis to inform better decisions for future planning. The most recent study by FUS was in 2020, and it has been FUS practice to complete one every five years or so.

A Public Fire Protection Analysis (PFPA) conducted by the Fire Underwriters Survey (FUS) offers numerous benefits to municipalities, helping them enhance their fire protection services, optimize resource allocation, and potentially lower insurance costs for residents. This analysis provides a comprehensive evaluation of the fire risks within a community. It assesses the

effectiveness of the fire protection services in place, ultimately contributing to improved public safety and financial savings. Comprehensive Risk Assessment

A PFPA enables municipalities to optimize their fire protection services by identifying the most effective service models based on the specific needs and goals of the community. This optimization includes analyzing current service coverage and proposing improvements that align with best practices and industry standards. For instance, recommendations may involve relocating fire stations, upgrading equipment, or modifying staffing levels to ensure the fire department can respond promptly and effectively to emergencies. Potential for Reduced Insurance Premiums

One of the significant financial benefits of a PFPA is its impact on insurance premiums. The Fire Underwriters Survey uses the results of the PFPA to assign a Public Fire Protection Classification (PFPC) and a Dwelling Protection Grade (DPG) to the community. These grades are critical factors that insurance companies consider when determining property insurance rates. If a municipality improves its PFPC or DPG by implementing the PFPA's recommendations, property owners may see a reduction in their insurance premiums. Additionally, the community's underwriting capacities may increase, providing broader access to insurance coverage.

Strategic Planning for Future Growth

A PFPA is valuable for addressing current fire protection challenges and planning for future growth and development. As communities expand and develop, the demand for fire protection services increases. A PFPA helps municipalities anticipate these changes and plan, accordingly, ensuring that fire protection services remain effective and sustainable as the population and infrastructure grow. This forward-looking approach is crucial for maintaining high public safety standards over the long term.

Recommendation #42

The Municipality ensures that its statistical data on the Fire Underwriter Survey (FUS) is the most recent information on the Municipal portal.

For ANFRES to maintain a FUS grading, each station must maintain an active roster of at least 15 firefighters. Failing this may result in a significant adjustment to the grade, such as a Grade 5, which is equivalent to having an unprotected community, which most likely results in a negative outcome, such as increased insurance rates.

Recommendation #43

The Municipality should consider commissioning a Public Fire Protection Analysis with FUS.

Section 10

Recommendations, Timelines and Associated Costs

EMG Emergency Management Group

SECTION 10: RECOMMENDATIONS, TIMELINES, AND ASSOCIATED COSTS

10.1 Conclusion

During the completion of this review, the Fire Chief, the Deputy and paid-on-call firefighters demonstrated that they are truly dedicated to the community they serve. The council are sincerely committed to ensuring the safety of the community and the firefighters.

The ANFRES endeavours to offer the most efficient and effective service possible based on current staffing, equipment, and fire station locations. By acquiring this MFP, the Municipality has demonstrated its desire to improve its services and delivery.

All costs and associated timelines noted in this report are approximate estimates that may be subject to change through implementation prioritization between the Fire Chief, CAO, and the Council.

This MFP is a long-range planning document, and EMG recommends that annual updates be completed, along with a full review conducted at the five-year mark.

10.2 Recommendations, Estimated Costs, & Rationale

The following chart provides a detailed overview of the recommendations presented throughout this report, along with estimated costs and suggested implementation timelines.

This MFP is the culmination of 43 recommendations.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
Section 1 – Community and Fire Department Overview				
1	The Fire Administration is responsible for reviewing the bylaws that affect the daily operations of the fire department on an annual basis.	Staff Time	Short-Term (1 to 3 years)	Having current by-laws will reflect the changing circumstances of the Municipality and meet federal or provincial Acts and Regulations.
2	ANFRES develops a Vision and Values statement to support the Mission Statement and includes them in the Establishing and Regulating By-law Schedule. Upon the Council's approval, the Fire Chief post the three statements at each fire station.	Staff Time	Short-Term (1 to 3 years)	The Mission, Vision, and Values statements will help guide the ANFRES' reason and purpose to its members and the public it serves.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
3	Establish an SOG Committee representing all divisions of the ANFRES that develops new SOGS and reviews current ones regularly.	Staff time Also, time paid to members for their extra participation in the department's activities.	Short-Term (1 to 3 years)	Establishing an SOG committee will facilitate maintaining the information in the database while allowing ANFRES members to participate in determining the fire department's operations.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
Section 2 – Risk Assessment				
4	Now that the Community Risk Assessment and this Master Fire Plan are completed, EMG recommends that the Fire Chief utilize the recommendations from both documents to develop and implement the Community Risk Reduction Plan.	Staff Time Some recommendations may include associated costs	Short-Term (1 to 3 years)	Keeping track of the Community Risk Assessment and Master Fire Plan recommendations, along with their implementation and the outcomes resulting from these recommendations, will ensure proper tracking and accountability.
Section 3 – Fire Department Divisions				
5	Increase the time allotted to providing administrative support to the Fire Chief. More administrative assistance needs to be assigned to the Fire Chief. Whether from the Town's administrative pool or a part-time administrative person is hired for the fire department.	Staff Time Part-time person at approx. $20,000 annually.	Short-Term (1 to-3 years)	Currently, the Fire Chief is the only full-time member of the fire department and is responsible for all administrative duties, except for approximately 3.5 hours a week, which are assigned to a Town employee. Due to the legislative and training requirements placed on the Fire Chief's position, more support is required.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
6	The Township of Asphodel-Norwood analyze and consider implementing the following: • Review the hours per week allotted for the Fire Chief of other municipalities in the County of Peterborough and other surrounding areas. Consider increasing the weekly allotment from 30 to 35 hours. • Analyze the pay rates of those same municipalities allotted to the fire chief, noting those designated CEMC, such as ANFRES's fire chief.	$20,000 to $25,000 with benefits.	Short-Term (1 to-3 years)	The Fire Chief of the ANFRES is a very dedicated and loyal employee of the Township who cares deeply about the department, its members, and their community. Each week, they dedicate their time to providing the best-trained and most competent firefighters to protect the lives of those residing in the Township of Asphoel-Norwood, and they deserve appropriate compensation.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
7	The number of hours allocated to fire prevention initiatives should be increased from its current 100 annually to 200 annually. At the same time, allocate 25 hours per investigation to the FPO when completing a fire investigation, and ensure these hours do not surpass 100 per year.	$5,000 to $6,500	Short-Term (1 to-3 years)	Increasing the number of hours will enable the FPO/PFLSE to develop and initiate a proactive, robust inspection program rather than on an as-required basis. Doing so will reduce the fire risk in Asphodel-Norwood. There has not been time dedicated to the investigation, as it is grouped with the 100 hours allocated for inspections. There is a need to allocate dedicated time for fire investigation hours within the Fire Prevention Division.
8	The FPO/PFLSE and District Chiefs take a more active role in mitigating non-emergent calls, such as check calls.	$1,500 to $2,000	Short-Term (1 to-3 years)	The Fire Chief attends most, if not all, non-emergent calls, such as smoke and CO alarms that are working intermittently and burning complaints, which takes them away from their time off, affecting the work-life balance. Having the FPO/PFLSE and District Chiefs attending these calls would reduce some of the workload on the Fire Chief while providing experience to responders.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
9	ANFRES enhance its fire investigation capabilities through enhanced training opportunities, including 1033 certification. They also need to complete the NFPA 921 course, which is provided at a high level when completing 1033 but not as in-depth as the actual course.	$2,500 to $3,500	Short-Term (1 to-3 years)	Currently, ANFRES relies on the Fire Chief to conduct investigations under the FPPA. Not being course-certified may bring their qualifications into question in the courts. With additional personnel trained and certified.
10	The ANFRES should adopt the FUS frequency for inspections and, if unable to achieve it, develop an achievable hybrid schedule.	Staff Time	Short-Term (1 to-3 years)	With the number of hours available for the FPO/PFLSE or the Fire Chief to complete inspections, achieving FUS's schedule would be nearly impossible. There may be a need to develop an achievable ANFRES hybrid schedule.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
11	The Fire Chief shall formally develop, implement, and maintain a defined and documented Recruit Firefighter Training Program. This Program should be aligned with NFPA standards and comply with provincial regulations, including O. Reg. 343/22 (Ontario Firefighter Certification). The Program should outline clear learning objectives, performance benchmarks, and documentation protocols to ensure consistency, regulatory compliance, and operational readiness.	Staff Time	Immediate (0 to 1 year)	EMG was unable to identify maintenance training related to Hazardous Materials, and technical rescue-related training in various areas should also be increased.
12	The Fire Chief should assess the training schedule to provide more frequent technical rescue and hazardous materials training opportunities.	Staff Time	Short-Term (1 to-3 years)	EMG was not able to identify maintenance training related to Hazardous Materials, and Technical Rescue-related training in the various areas should be increased
13	Conduct a comprehensive workflow analysis to evaluate the current demands on the Fire Chief and the training function.	Staff Time	Short-Term (1 to-3 years)	The responsibility of the Fire Chief to primarily manage the department's training programs significantly increases an already demanding role, given the broad range of duties required of the Fire Chief.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
14	The Fire Chief regularly reviews and assesses the department's training delivery methods to determine if implementing an online learning platform would enhance training accessibility, consistency, and effectiveness, particularly as training needs evolve or operational demands increase.	Implementation cost ($30,000) Annual operating cost ($3000 to $5000)	Short-Term (1 to-3 years)	Online learning platforms offer numerous benefits, including flexibility, accessibility, increased efficiency, cost-effectiveness, and enhanced record-keeping.
15	The Fire Chief should review ANFRES's training records to ensure alignment with NFPA 1401 and identify opportunities for improvement based on the guidance and recommendations outlined in this section of the Master Fire Plan.	Staff Time	Short-Term (1 to-3 years)	Training records should align with Section 3.3.5 of this report.
16	ANFRES should update existing job descriptions to reflect the ' 'department's operational needs, service levels, and community expectations, as well as comply with relevant legislative requirements, such as O. Reg. 343/22 Firefighter Certification, the OH&S Act, and any mandated corporate training policies and ANFRES uses the updated job descriptions as the basis for developing a formal career pathway plan.	Staff Time	Short-Term (1 to-3 years)	Comprehensive job descriptions should be created for all positions and ranks within the organization. These documents must align with the ' 'department's operational needs, service levels, and community expectations, as well as comply with relevant legislative requirements, such as O. Reg. 343/22 Firefighter Certification, the OH&S Act, and any mandated corporate training policies.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
Section 4 - Suppression				
17	The Asphodel-Norwood Council should adopt a 14-minute response time for inclusion in the ANFRES Establishing & Regulating By-law.	Staff Time	Short-Term (1 to-3 years)	Based on its population density, Asphodel-Norwood is considered a rural area according to NFPA 1720 and should strive to have six firefighters on the scene within 14 minutes, 80% of the time.
18	The Fire Chief should continue to assess the current staffing and response models to determine whether additional support or alternative scheduling strategies are required to address peak call volumes, particularly between noon and 5:59 p.m.	Staff Time	Short-Term (1 to-3 years)	Incident data shows a higher volume of calls for service occurring on Saturday and between noon and 5:59 p.m. While this insight can help support various operational decisions, it also highlights a potential challenge: the peak period for incidents often overlaps with times when volunteer firefighters may be at work or involved in other commitments, such as extracurricular activities.
19	A phased staffing level increase over the next five years, adding 10 firefighters to Station 1 (Norwood) and 5 firefighters to Station 2 (Westwood). This would bring the total staffing to 30 firefighters at Station 1 and 20 at Station 2.	Any costs associated with training, equipping, and compensating additional staff.	Short to Mid Term (0 to 5 years)	Due to anticipated community growth, increased call volumes during peak times, evolving personal commitments among volunteer firefighters, and staffing levels that have remained unchanged since 1998, there is a clear need for a gradual increase in volunteer firefighter staffing at ANFRES.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
20	It is recommended that the Fire Chief continue to assess the ANFRES recruitment process for best practices in community outreach, flexible training, formal recognition, and leadership development.	Staff Time	Short-Term (1 to-3 years) ongoing	By adopting a comprehensive and proactive strategy while continuing to build on its already successful recruitment and retention efforts, ANFRES can effectively attract new volunteers and sustain a committed, capable team.
21	The Fire Chief should complete the firefighter's cancer prevention checklist in cooperation with the worker members of the Joint Occupational Health and Safety Committee. Upon completion, the necessary additional SOPs can be developed as recommended in the checklist or updated as required if they already exist.	Staff Time	Short-Term (1 to-3 years)	The Ontario Ministry of Labour, Training and Skills Development's Firefighter's Cancer Prevention Checklist can be used as a self-audit tool for fire services to learn how to protect personnel from exposure to contaminants that may cause cancer or other occupational illnesses.
22	The Fire Chief to expand Policy SUP-48 to formally include procedures for personnel, apparatus, and living spaces, ensuring a comprehensive and consistent approach to containment control. This consists of the expansion of on-scene decontamination equipment, such as soap, pails, brushes, and decontamination spray, among other items.	$200 to $300 annually.	Short-Term (1 to-3 years)	Firefighter decontamination procedures are essential for ensuring the health and safety of personnel. During emergency responses, firefighters are frequently exposed to hazardous substances, including carcinogens, toxic chemicals, and biological contaminants. Routine decontamination effectively removes these harmful agents from personal protective equipment (PPE) and skin, significantly reducing long-term health risks, including cancer, respiratory illnesses, and skin conditions.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
23	The Fire Chief should evaluate ANFRES rehabilitation processes against NFPA 1580.	Staff Time	Short-Term (1 to-3 years)	Chapters 20 through 23 of NFPA 1580, *Standard for Emergency Responder Occupational Health and Wellness*, establishes the minimum criteria for developing and implementing processes for member rehabilitation, contamination control, rehabilitation, and recovery from incident scene operations and training exercises.
Section 5 - Facilities, Vehicles and Equipment, and Water Supply				
24	Install a diesel exhaust extraction system at each fire station.	The cost depends on the type of exhaust extraction system, ranging from $40,000 to $100,000 per station.	Immediate (0 to 1 year)	Diesel exhaust is a known carcinogen; the more movement of this contaminant from the work environment, the better the working conditions will be for all personnel at the fire station.
25	Each fire station requires an emergency power backup system.	Approx cost of $30,000 to $60,000 per station.	Short-Term (1 to-3 years)	A reliable emergency power backup system will allow each fire station to operate as a fully operational emergency service location during large power outages.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
26	Relocate Fire Station #1 to the Town's Works Yard	$4 to $8 million	Mid to Long-Term (4-10 years)	The present station, #1, is at its limits and has no land available to accommodate additions to the existing building. Moving the fire station to the Works Yard offers good highway access and ample space for building on town-owned property.
27	All pumpers and tankers should be on a replacement cycle based on the Fire Underwriters and NFPA-recommended lifecycles.	As required based on FUS/NFPA	In 2025, a pumper's current market value is between approximately $800,000 and $1 million.	Ensuring a reliable emergency fleet of vehicles is critical to the efficiency and effectiveness of a fire department.
28	ANFD should ensure the availability of at least one spare pumper truck.	During the replacement of a present frontline unit.	This vehicle is being replaced; therefore, no costs are incurred.	Based on the FUS/NFPA recommendations, there should be at least one spare vehicle type for every eight units. Therefore, ANFRES requires one spare pumper truck.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
Section 6 - Emergency Management				
29	In consultation with the CEMC and Program Committee, Asphodel-Norwood should assess the Emergency Management Operating budget for adequacy and consider establishing a Capital Reserve fund for MOC improvements and upgrades.	Any identified cost increases	Short-Term (1 to-3 years)	The 2024 operating budget for emergency management was set at $1,700. This amount included $ 1,000 for the mandatory annual exercise, $100 for supplies and services, and $600 for utility costs, which is reimbursed to Public Works.
30	The Township should consider facilitating a county-wide full-scale emergency exercise in the next five years. However, full-scale exercises require more detailed planning and are staff-intensive; moving to this next level of exercise is a logical step in local emergency management program development.	The cost associated with facilitating the exercise.	Short-Term (1 to-3 years)	It provides the opportunity to test complex coordination systems such as the Unified Command Structure and the Joint Information Coordination System. Scenarios unfold in real-time, requiring participants to make operational-level decisions under pressure.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
31	That at a minimum, all personnel operating in the MOC complete EM 200, IMS 100 and IMS 200 training, and that Incident Commanders and General Staff (Operations, Logistics, Planning, Finance/Administration) complete IMS 300 training.	The cost associated with providing the training.	Short-Term (1 to-3 years)	Enhancing IMS training will support improved response times, enhanced communication and coordination, improved situational awareness, and enhanced decision-making by personnel operating in the MOC (EOC).
32	At a minimum, all ANFRES Incident Command Officers must complete EM 200 training.	The cost associated with providing the training.	Short-Term (1 to-3 years)	This training is designed for individuals involved in implementing IMS at simple incidents or during the early phases of a complex incident.
33	Asphodel-Norwood conducts a Post-Incident Evaluation of the 2025 ice storm to assess the MOC's functionality and evaluate the Control Group's performance.	Staff Time	Short-Term (1 to-3 years)	This review will help identify strengths, address gaps, and enhance the 'Township's overall emergency preparedness and response capabilities.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
34	The Township should investigate establishing formal agreements with the NGOs identified in the Emergency Plan.	Staff Time and any associated costs identified	Short-Term (1 to-3 years)	There is always the possibility that a municipality may become overwhelmed during an emergency. Plan for requests for assistance that extend beyond municipal boundaries or involve non-governmental organizations (NGOs) in advance. The rationale behind this is straightforward: in the event of a widespread emergency, NGOs may be called upon to deploy their resources elsewhere and do so based on their own decision-making processes unless clear agreements are in place.
35	Asphodel-Norwood should conduct a third-party evaluation of the Asphodel-Norwood Community Centre as an evacuation/reception centre against the Health Canada Guidelines for Emergency Social Services.	Staff Time and any associated costs identified	Short-Term (1 to-3 years)	The Red Cross, when requested, will attend evacuation/reception centres and evaluate the centre's suitability as an evacuation or reception centre, including access points, amenities and emergency power.
36	Asphodel-Norwood should investigate and alternate the evacuation/reception centre location.	Staff Time	Short-Term (1 to-3 years)	Identifying an alternate evacuation centre is a vital component of emergency preparedness, ensuring continuity of shelter, accommodating overflow, and enhancing community resilience when the primary centre is unavailable or insufficient.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
Section 7 - Mutual Aid, Automatic Aid and Fire Service Agreements				
37	The Fire Chief lobbies other County of Peterborough Mutual Aid Plan and Program members to complete an update to the document and its Appendices.	Staff Time	Short-Term (1 to-3 years)	Having a current plan and program that meets the needs of the communities in the County of Peterborough, including the separated City of Peterborough, will ensure available resources are known and deployed when requested.
38	The Fire Chief is to review and update all by-laws relating to Mutual Aid, Automatic Aid and Fire Protection and present the updated version to the Council for their consideration and passage.	Staff Time	Short-Term (1 to-3 years)	To ensure uninterrupted service provision, all by-laws that affect the operations of the ANFRES require reviewing and updating to ensure all are current and meet the needs and circumstances of the community at that time.
Section 8 - Finance				
39	In partnership with a representative from the Township's Finance Department, the Fire Chief conducts a full cost center analysis of the operating budget based on a five-year average.	Staff Time	Short-Term (1 to-3 years)	A best practice is to annually assess five-year rolling averages for each cost centre when preparing budget submissions.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
40	Asphodel-Norwood develops a long-range capital forecast for the fire service that is fully integrated with the Township Asset Management Plan and considers relevant standards such as NFPA and FUS.	Staff Time	Short-Term (1 to-3 years)	The AMP provides essential data such as the age, condition, and performance of fire apparatus, stations, and specialized equipment. These details inform the Long-Range Capital Forecast by identifying when assets will require maintenance, refurbishment, or replacement. Projects are then prioritized based on risk assessments, service delivery impact, and compliance with relevant standards, such as those established by the National Fire Protection Association (NFPA) and the Fire Underwriters Survey (FUS) guidelines.
41	The Fire Chief conduct an annual review of the Fees and Charges By-law to ensure it remains consistent with comparable jurisdictions and that the fees adequately support cost recovery for the services provided.	Staff Time	Short-Term (1 to-3 years)	Fire department user fees provide several important benefits that enhance both the financial sustainability and operational efficiency of municipal fire services. These fees generate additional revenue, helping to offset operational costs and reduce reliance on property taxes.

Rec #	Recommendation	Estimated Costs	Suggested Timeline for Implementation	Rationale
Section 9 – Review of Previous Master Fire Plans and FUS				
42	The Municipality ensures that its statistical data on the Fire Underwriter Survey (FUS) is the most recent information on the Municipal portal.	Staff Time	Short-Term (1 to-3 years)	This information will assist FUS in providing relevant gradings for proper insurance coverage and future planning of fire services.
43	The municipality is to consider commissioning a Public Fire Protection Analysis with FUS.	Staff Time	Short-Term (1 to-3 years)	This information will enable the municipality to plan its long-term fire service and water infrastructure effectively.

EMG Emergency Management Group*

Appendices

Appendix A – Five-Step Staffing Process

Appendix B – Ontario Fire College Course Curriculum and Timelines Overview

APPENDIX A: FIVE-STEP STAFFING PROCESS

Step 1: Scope of Service, Duties, and Desired Outputs

Identify the services and duties performed within the organization's scope. Outputs should be specific, measurable, reproducible, and time limited. Among the elements are the following:

Administration	**Data collection, analysis**	**Delivery**	**Authority / Responsibility**
Roles and responsibilities	**Local variables**	**Budgetary considerations**	**Impact of risk assessment**

Step 2: Time Demand

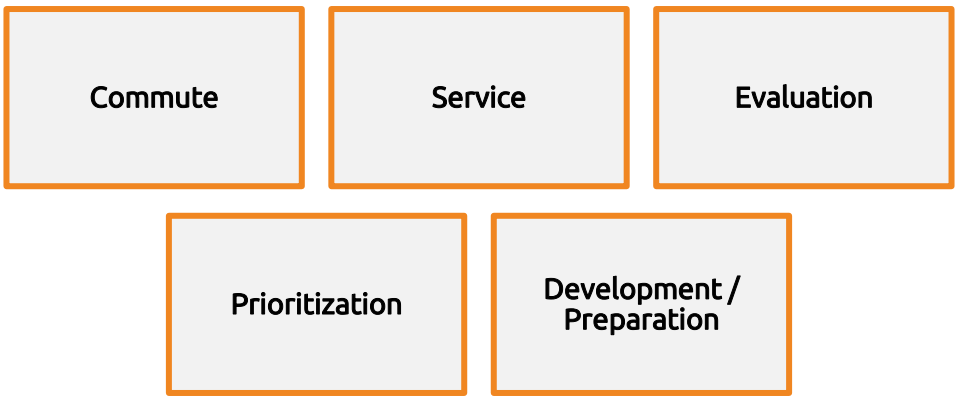
Using the worksheets in Table C.2.2(a)-(d), quantify the time necessary to develop, deliver, and evaluate the various services and duties identified in Step 1, considering the following:

- Local nuances
- Resources that affect personnel needs

Plan Review **-** Refer to Plan Review Services Table A.7.9.2 of the standard to determine Time Demand.

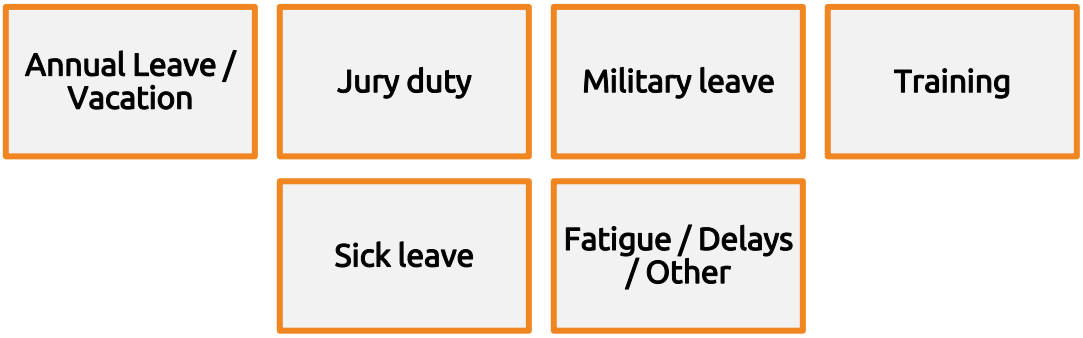
Step 3: Required Personnel Hours

Based on Step 2 and historical performance data, convert the demand for services to annual personnel hours required for each program *[see Table C.2.3(a) through Table C.2.3(e)]*. Add any necessary and identifiable time not already included in the total performance data, including the following:



Step 4: Personnel Availability and Adjustment Factor

Average personnel availability should be calculated, taking into account the following:



Example: Average personnel availability is calculated based on each personnel member's holiday, annual, and sick leave.

Step 5: Calculate Total Personnel Required

The branch of unassigned personnel hours, adjusted by the adjustment factor, will determine the number of personnel (persons per year) required. Any fractional values can be rounded up or down to the next integer value. Rounding up provides potential reserve capital; rounding down means potential overtime or assignment of additional services conducted by personnel. (Personnel can include personnel from other agencies within the entity, community, private companies, or volunteer organizations).

Correct calculations based on the following:

- Budgetary validation
- Rounding up/down
- Determining reserve capital

- Impact of non-personnel resources (materials, equipment, vehicles) on personnel

The National Fire Protection Association 1730 standard contains more information on this staffing equation. The Fire Prevention should assess the previous five steps and evaluate their present level of activity and the future goals of the Branches.

APPENDIX B: ONTARIO FIRE COLLEGE COURSE CURRICULUM AND TIMELINES OVERVIEW

The following chart identifies Ontario Fire College's programs and regional training centres. Costs for each program can vary greatly depending on the pricing of the regional training centre and local colleges that offer these programs. Therefore, EMG does not provide cost formulas for each program.

NFPA Title	Program	Prerequisites	Course Format and Timelines
NFPA 1001 FIREFIGHTER I			
NFPA 1001 FF I Recruit	Fire Fighter I Recruit	Standard First Aid, CPR Level "C," and AED	This program is available in two formats – Blended and In-Class Blended Delivery: Online, self-directed, instructor-supported learning followed by a ten-day in-class session and practicum. In-Class Delivery: This in-class delivery requires students to complete a pre-reading assignment with a knowledge quiz, followed by a 15-day in-class session and a practicum.
NFPA 1001 FIRE FIGHTER II			
NFPA 1001 FF II Recruit	Fire Fighter II Recruit	NFPA 1001 Fire Fighter I	Blended Delivery: Online, self-directed, instructor-supported learning followed by a seven-day in-class session and practicum. In-Class Delivery: This in-class delivery requires students to complete a pre-reading assignment with knowledge, followed by a nine-day in-class session and a practicum.

NFPA Title	Program	Prerequisites	Course Format and Timelines
NFPA 1002 APPARATUS EQUIPPED WITH A FIRE PUMP (CHAPTER 5)			
NFPA 1002 Pump Ops	Apparatus Equipped with a Fire Pump (Chapter 5)	Valid DZ Licence	**Blended Delivery:** Online, self-directed, instructor-supported learning followed by a five-day in-class session and practicums.
NFPA 1021 FIRE OFFICER			
NFPA 1021 FO I	Fire Officer I	NFPA 1001 Firefighter II	**Blended Delivery:** Online, self-directed and instructor-supported learning followed by a three-day in-class session.
NFPA 1021 FO II	Fire Officer II	NFPA 1021 Fire Officer I	**Blended Delivery:** Online, self-directed and instructor-supported learning followed by a five-day in-class session.
NFPA 1021 FO III	Fire Officer III	NFPA 1021 Fire Officer II	**Blended Delivery:** Online, self-directed and instructor-supported learning followed by a five-day in-class session.
NFPA 1021 FO IV	Fire Officer IV	NFPA 1021 Fire Officer III	**Blended Delivery:** Online, self-directed and instructor-supported learning followed by a five-day in-class session.

NFPA Title	Program	Prerequisites	Course Format and Timelines
NFPA 1031 FIRE INSPECTOR			
NFPA 1031 FIRE INSPECTOR I (Ontario certification requires the completion of the six courses & exam outlined in this box) • Legislation (Online Self-Directed) • NFPA 472 or NFPA 1072 Hazardous Material Awareness (OFC Online self-directed course) • NFPA 1031 Fire Inspector I • Fire Code Div. B Part 2 and 6 Fire Safety and Fire Protection Equipment • Courtroom Procedures • Fire Code Div. B Part 9 Retrofit Completing the NFPA 1072 or NFPA 472 Hazardous Materials Awareness Exam through Academic Standards & Evaluation is also required for certification.			
NFPA 1031 FIRE INSPECTOR II (Ontario certification requires the completion of the three courses outlined in this box.) The prerequisite is the completion of NFPA 1031 Fire Inspector I. The following courses can be taken in any order: • NFPA 1031 Fire Inspector II • Fire Code Div. B Part 3 and 5 Industrial, Commercial, Hazardous Materials, Processes and Operations Fire Code Div. B Part 4 Flammable Liquids and Combustible Liquids			

NFPA Title	Program	Prerequisites	Course Format and Timelines
NFPA 1031 FIRE INSPECTOR II (Ontario certification requires the completion of the three courses outlined in this box) The prerequisite is the completion of NFPA 1031 for Fire Inspector I. Fire service personnel can take the following courses in any order: • NFPA 1031 Fire Inspector II • Fire Code Div. B Part 3 and 5 Industrial, Commercial, Hazardous Materials, Processes and Operations Fire Code Div. B Part 4 Flammable Liquids and Combustible Liquids			
NFPA 1031 Fire Inspector I	Fire Inspector I	NFPA 1072 Hazardous Materials Awareness	In-Class Session: Five days
Courtroom Procedures	Courtroom Procedures	None	In-Class Session: Three days
Fire Code Div. B PT 2 & 6	Fire Code Div. B PT 2 & 6 – Fire Safety & Fire Protection Equipment	None	In-Class Session: Five days Online Delivery: Students will have eight weeks to complete the class through online, self-directed learning and instructor support.

NFPA Title	Program	Prerequisites	Course Format and Timelines
Fire Code Div. B PT 3 & 5	Fire Code Div. B PT 3 & 5 – Industrial, Commercial, Hazardous Materials: Process & Operations	Fire Code Div. B PT 2 & 6	**In-Class Session:** Four days **Online Delivery:** Students will have eight weeks to complete the class through online, self-directed, instructor-supported learning.
Fire Code Div. B PT 4	Fire Code Div. B PT 4 – Flammable & Combustible Liquids	Fire Code Div. B PT 2 & 6	**In-Class Session:** Five days **Online Delivery:** Students will have eight weeks to complete the class through online, self-directed, instructor-supported learning.
Fire Code Div B PT 9	Fire Code Div. B PT 9 – Retrofit	Fire Code Div. B PT 2 & 6	**In-Class Session:** Five days **Online Delivery:** Students will have eight weeks to complete the class through online, self-directed, instructor-supported learning.
NFPA 1031 FIRE INSPECTOR II			
NFPA 1031 Fire Inspector II	Fire Inspector II	NFPA 1031 Fire Inspector I, Fire Code Div B PT 2 & 6, Fire Code Div B PT 9, Courtroom Procedures, and OFC NFPA 1072 Hazardous Materials Awareness	**In-Class Session:** Five days

NFPA Title	Program	Prerequisites	Course Format and Timelines
NFPA 1033 FIRE INVESTIGATION			
NFPA 1033 Fire Investigation	Fire Investigator	Intended for officers or firefighters with a minimum of five years of work experience	**Blended Delivery:** Online, self-directed, instructor-supported learning (approximately 40 hours) followed by a four-day in-class session and practicums.
NFPA 1035 FIRE & LIFE SAFETY EDUCATOR			
NFPA 1035 FLSE I	Fire and Life Safety Educator I	None	**In-Class Session:** Three days **Online Delivery:** Students will have eight weeks to complete the class through online, self-directed, instructor-supported learning.
NFPA 1035 FLSE II	Fire and Life Safety Educator II	NFPA 1035 Fire and Life Safety Educator I	**In-Class Session:** Four days
NFPA 1035 Public Information Officer (PIO)	Public Information Officer	None	**In-Class Session:** One day **Online Delivery:** Students will have 30 days to complete the class through online, self-directed, instructor-supported learning. Each of the five modules includes an assignment that helps student-learners develop the knowledge and competencies necessary to complete the required skills for certification.

NFPA Title	Program	Prerequisites	Course Format and Timelines
NFPA 1041 FIRE INSTRUCTOR			
NFPA 1041 Fire Instructor I	Fire Instructor I	None	**Blended Delivery:** Online, self-directed learning followed by a four-day in-class session.
NFPA 1041 Fire Instructor II	Fire Instructor II	NFPA 1041 Fire Instructor I	**Blended Delivery:** Online, self-directed learning followed by a five-day in-class session.
NFPA 1041 Fire Instructor III	Fire Instructor III	NFPA 1041 Fire Instructor II *Participants are expected to have a minimum of five years of experience in a Training Officer role	**Blended Delivery:** Online, self-directed learning followed by a four-day in-class session.
NFPA 1072 Hazardous Materials			
NFPA 1072 HMA Online	Hazardous Materials Awareness	None	**Online Delivery:** Online, self-directed
NFPA 1072 HM Operations	Hazardous Materials Operations	NFPA 1072 Hazardous Materials Awareness	**In-Class Session:** Five days
NFPA 1072 HM Air Monitor	Hazardous Materials Air Monitoring	NFPA 1072 HM Operations	**In-Class Session:** Two days

NFPA Title	Program	Prerequisites	Course Format and Timelines
NFPA 1072 HM Mission Spec	Hazardous Materials Operations Mission-Specific	NFPA 1072 Hazardous Materials Operations	In-Class Session: Five days
NFPA 1072 HM Tech	Hazardous Materials Technician	NFPA 1072 Hazardous Materials Operations	In-Class Session: Ten days (two consecutive weeks)
NFPA 1521 INCIDENT SAFETY OFFICER			
NFPA 1521 ISO	Incident Safety Officer	NFPA 1021 Fire Officer I	Blended Delivery: Online, self-directed, instructor-supported learning followed by a three-day in-class session and practicums.