2025

Emergency Management Group

Municipality of Centre Hastings

Fire Master Plan

HASTINGS
Centre Hastings
COUNTY

CENTRE HASTINGS FIRE RESCUE

www.emergencymgt.com
info@emergencymgt.com
705.719.9007
888.421.0665
Darryl Culley, President

EXECUTIVE SUMMARY

This Master Fire Plan (MFP) provides a thorough evaluation of the Centre Hastings Fire Department's (CHFD) programs, taking into account the department's needs, circumstances, and the community's risk assessment. The report, which emphasizes the department's strengths, weaknesses, opportunities, and challenges, includes an analysis of the department's primary core services, such as, but not limited to:

- Administration
- Fire Prevention and Public Education
- Fire Operations
- Training and Development
- Communications and Dispatching
- Facilities, Apparatus and Equipment
- Emergency Planning
- Fire Service Agreements
- Finance

Through this analysis, the Emergency Management Group Inc. (EMG) was able to formulate a 10-year master plan for the CHFD.

Benefits of Master Planning

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

- Having a well-defined vision of what future needs are to be implemented and when,
- A strategy that includes options and budgetary estimates for implementation,
- The ability to communicate with staff, internal, and external stakeholders about the future goals of the fire service, and
- Prioritization of each project.

The recommendations in this MFP document have been presented to offer a set of strategies and goals designed to assist the Council in making informed decisions regarding the efficient allocation of CHFD resources and staffing. The recommendations provided by EMG are organized into the following timelines:

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

The successful implementation of the recommendations in this report will ultimately depend on the guidance provided by the Municipal Council, the allocation of necessary resources and the capacity to proceed with the recommended actions outlined in the document.

Scope of Work

The CHFD operates from two fire stations with 40 dedicated paid-on-call (volunteer) firefighters. The Municipality prioritizes the safety and well-being of its citizens, relying on a highly trained fire department to manage fire risks, hazardous conditions, and other life-threatening incidents. A MFP will address both current and future service delivery needs. This plan aims to comprehensively evaluate all aspects of the CHFD operations, including planning, fire prevention, public education, training, communications, apparatus maintenance, human resources, station locations, budgeting, large-scale emergency preparedness, cost recovery, and fire service agreements. To this end, this study and final document will include as minimum project deliverables:

- Governance Section
- An Executive Summary with high-level conclusions and recommendations
- A Table of Contents that details the various category sections and page numbers
- An Introduction Section
- A Background Section
- Explanation of the Study Consultation Process with stakeholders

- Detailed conclusions and recommendations by category
    - Include suggested implementation timelines, funding and associated operational and capital costs.

Outcomes and Summary Overview of Recommendations

Based on consultations with Fire Department staff, firefighters, elected officials, department heads, and key stakeholders, the following 79 recommendations reflect best practices for business, operations, and emergency response at the CHFD. They focus on integrating existing and new services, as well as supporting municipal departments, local emergency services, and the community.

This report presents operational and strategic recommendations for Council's consideration.

Operational Recommendations: Will address the fire service's day-to-day functions and immediate needs, focusing on effective service delivery, safety, and compliance with relevant standards.

Strategic Recommendations: They are long-term and aim to reduce risk, plan for the future, and create sustainable service models that align with municipal goals and financial planning.

Municipal Council plays a key role in guiding the fire service's strategic direction by approving budgets, setting policies, and supporting long-term planning. While fire service leaders manage operations, Council ensures strategic decisions reflect community priorities, financial realities, and public safety goals.

For a detailed breakdown of each recommendation, the report includes relevant sections with in-depth information, and Section 8 provides a chart summarizing all recommendations, timelines, costs, and rationale. Cost estimates may vary depending on the timing of implementation, scope, and Fire Chief's future recommendations.

The following are the high-level strategic recommendations that form the foundation of the proposed direction for the fire service:

CHFD Strategic Recommendations

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
1	The CHFD Establishing & Regulating By-law should be updated, considering the requirements detailed in Section 1.3.1 of this report.	Immediate (0 to 1 year)	Staff Time	Best practice recommends reviewing by-laws affecting fire department operations annually or whenever significant changes occur in the community. This approach ensures that the Fire Chief can align with the Council's direction on service levels, performance expectations, and authority while adapting to the evolving needs and circumstances of the community.
7	That the Municipality explore the option of making the part-time Fire Prevention Officer (FPO) position a full-time certified position including the role of Public Fire Life Safety Educator (PFLSE).	Immediate (0 to 1 year)	$85,000 to $95,000 annually according to experience	The effort required to implement a successful Fire Prevention program exceeds the capacity of a part-time employee.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
12	Establish inspection frequencies that extend beyond vulnerable occupancies, taking into account the inspection frequency recommendations provided by Fire Underwriters Survey (FUS).	Immediate (0 to 1 year)	Staff Time (With the addition of a full-time FPO)	Currently, only vulnerable occupancies and complaint driven inspections are being completed. Inspection frequencies for other occupancy types should be performed based on the FUS recommendations.
44	That the CHFD implements a digital training records and online learning platform (RMS) that is in compliance with NFPA 1401.	Short-term (1 to 3 years)	$4000 and up depending on capabilities	The current record keeping practice does not comply with NFPA standards. Records are neither sufficiently complete nor readily accessible and secure. Due to the nature of a volunteer fire service, providing the easiest and least intrusive means to provide training to members is essential.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
52	That the CHFD establish a response agreement with the City of Peterborough, allowing their Hazmat team to respond to and mitigate emergencies that exceed the CHFD's certification and include full cost recovery mechanisms in the Fees and Charges By-law.	Immediate (0 to 1 year)	TBD	A written agreement should be established to mitigate Hazardous Materials incidents that are beyond the capability of the CHFD including mechanisms for full cost recovery.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
55	That the CHFD develop a department specific PTSD Prevention Plan to be submitted to the Ministry of Labour, a Cancer Screening Program, and a Physical Fitness Program	Immediate (0 to 1 year)	Staff Time	The Ministry of Labour requires the development of PTSD Prevention Plans. Ontario Fire Departments should have internal PTSD Prevention Plan. The fire department does not have a cancer screening program in place. The Municipality has a cancer screening program for its employees, and it would be beneficial for firefighters to be included in this program. Firefighters have a very strenuous job that involves working for a long period of time while wearing heavy equipment and using heavy tools. Sustained physical fitness is an important aspect of ensuring firefighters are prepared to effectively perform their duties.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
56	During the next review of the Emergency Communication Services Agreement, the sections referencing to NFPA 1221 and NFPA 1061 should be updated to reflect the *NFPA Emergency Response and Responder Safety Document Consolidation Plan* combining the NFPA 1221 and 1061 into NFPA 1225	Immediate (0 to 1 year)	Staff Time	Section 10 of the Emergency Communication Services Agreement refers to NFPA standards 1061 and 1221 that have been consolidated into NFPA 1225, as of the 2022 Edition.
57	Should the planned transition to a fully digital regional radio system be delayed, The Municipality of Centre Hastings should consider conducting a thorough audit of the CHFD communications system.	Short-Term (1 to 3 years)	Staff Time for Internal Audit External Audit through a third-party consulting firm could cost more than $10K	The regional transition to a digital radio system is the next logical infrastructure improvement that should be made. Should this transition be delayed, it is vital to assess the CHFD communications system to ensure it continues to function as intended. Under section 9 of the Emergency Communication Agreement, it is the responsibility of the Municipality to provide existing or compatible radio systems and hardware to receive transmittals from St. Catharines and to maintain all required equipment owned by the Municipality.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
58	The Municipality of Centre Hastings consider a fire station study for the CHFD. The CHFD has the option of operating as a "one station model," a fire station location feasibility study would provide an analysis of fire services delivered by the Municipality of Centre Hastings.	Mid-Term (3 to 6 years)	Study approximate cost $50,000.00 One-Station Model would generate substantial savings to the Municipality	While analytics shows that consideration for a "one station CHFD model" would not negatively impact the quality of service, the model would also show economical benefits, including less repairs and maintenance costs for facilities, less apparatuses requirement, a reduction in equipment needs, as well as a saving with respect to paid-on-call wages and salaries.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
59	The CHFD should adopt a 20-year replacement schedule for First Line Duty, a 25-year replacement for 2nd Line Duty, and a 30-year replacement for reserve apparatus, would greatly benefit the Municipality and the CHFD.	Immediate (0 to 1 year)	Costs will vary depending on re-alignment of replacement schedule for CHFD fleet.	Although EMG applauds the CHFD and the Municipality of Centre Hastings's initiative to adhere to a replacement schedule, EMG recommends that the Council formally adopt a CHFD-specific vehicle replacement policy based on the NFPA and FUS standards. EMG's review of the CHFD replacement schedule indicated inconsistency in replacement schedule. For instance, Pumper/Tanker 204's replacement schedule is based on a 20-year timeframe, whereas Pumper/Tanker 101's replacement schedule is set at 15 years. Furthermore, the CHFD's rescue vans have a 30- and 38- year replacement dates.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
60	The CHFD should transition from a full-size apparatus to the acquisition of a smaller rapid-response vehicle (RRV) to respond to medical calls and fire in support role, when required.	Short-Term (1 to 3 years)	RRV cost approximately $150,000.00	Between 2019-2022, 34.7% of all calls for service were medical type calls for service. Medical and social service type calls are on the rise. Using an engine or truck to answer medical calls is inefficient, ineffective, and unsustainable in the long-term. Currently, the CHFD utilizes its heavy rescue #202 apparatus in response to medical type calls for service. EMG's investigation revealed that the size of the vehicle is often awkward to manoeuvre in tight places. Research on the matter suggested that the practice of responding to medical calls with full-size fire apparatus was an expansive and inappropriate use of equipment.
61	The monetary value in the "Estimated Costs" columns of the CHFD Apparatus Replacement Schedule should be increased significantly for each vehicle identified (to $1M for each Engine/Pumper/Rescue/Tanker apparatuses).	Immediate (0 to 1 year)	Increase in vehicle replacement cost approximately 35 percent	The replacement of fire apparatus has become an increasingly complex undertaking for all fire departments. The current post-pandemic fire apparatus manufacturing environment has caused several notable changes in how trucks are being purchased with today's market conditions.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
63	For uniformity throughout the CHFD, all firefighters should have their own fit tested facepiece.	Immediate (0 to 1 year)	Facepiece Cost $1,500.00/each	The facepiece is a critical component of the SCBA, serving as the interface between the user and the surrounding atmosphere. It is designed to create an airtight seal around the face, preventing the entry of harmful gases, smoke, or particulates.[1] During the EMG's site visit, it was noted that firefighters at Fire Station 1 are issued individual facepiece for the SCBAs, whereas firefighters from Fire Station 2 do not have individualized facepieces. This phenomenon could be attributed to pre-amalgamation fire department practices.

[1] Delta Emergency, 'The Delta Dispatch – The Crucial Role of SCBA in Firefighting: Navigating Hazards with Confidence, accessed March 10, 2025, https://deltaemergency.com/thedeltadispatch/2023/6/19/the-crucial-role-of-scba-in-firefighting-navigating-hazards-with-confidence

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
64	The CHFD Should invest in asset management software or ensure that the CHFD equipment inventory is programmed into the asset management software (FIREQ) to ensure an efficient and effective replacement plan.	Immediate (0 to 1 year)	Staff Time if FireQ is used for this purpose	Many pieces of equipment have a predetermined life span as established in the NFPA Standards and/or the OH&S Sections 21 Guidance Notes. When it comes to the end of the life span, the items must be decommissioned, replaced with new equipment, and then disposed of to ensure no other outside interests could use them for liability reasons. The asset management program should operate to trigger notifications when an item is approaching the end-of-life span, and plans should be in place for replacement (i.e., identified in the budget).

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
65	The CHFD should procure a compressor for their breathing air containment fill station.	Short-Term (1 to 3 years)	Fill station cost approximately $40,000.00	Currently, the CHFD do not have a compressor for their "SCBA Fill Station." The CHFD relies on the Tweed Fire Department to refill their cascading refill system. The cascading system is assembled in a cargo trailer for mobile convenience at emergency scenes. However, the CHFD does not have a CHFD apparatus equipped with a proper hitch to transport the cargo trailer. The CHFD currently relies on firefighters' personal vehicles to haul the SCBA Fill Station. The current arrangement is an unnecessary risk for the CHFD and the Municipality of Centre Hastings.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
76	That Council assess the CHFD Development Charges allocation against the future cost of asset replacement and consider a more robust fiscal use of reserve fund strategies to support the asset management strategy associated with replacement of apparatuses and equipment be implemented.	Immediate (0 to 1 year)	Staff Time	According to the Municipality of Centre Hastings 2025 Municipal Budget Draft v2, Fire Protection Services showed a negative balance of -$81,161.01 as of December 31, 2024. During the same year, Single and Semi-detached development generated $25,068.57 in revenue which equates to 21.6% of all development charges revenue, leaving a negative balance, after interest (-$3,475.86) of -$81,161.01 as of December 31, 2024. While there are various ways to fund a lifecycle plan, there may be instances where additional funding is needed. This can be addressed through a reserve fund, which is often financed through the operating budget. Once a comprehensive lifecycle plan is established, including the identified funding sources and amounts, it will become clear if any additional reserve funds are required.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
77	That the CHFD institute a fee in Schedule "D" of the User Fees and Charges By-law for the following: • Orders issued under the Ontario Fire Code for immediately dangerous to life situations. • file searches that are requested for the purpose of mortgage clearing/ownership change, and an additional charge should be included based on the timing of the request from real estate agencies or lawyers. • an open-air burning application process, and with an associated burning permit fee. • a suitable fee, for Hazardous Materials response, in line with other response costs based on time committed should be assessed to the property owner (preferred) or contractor creating the hazard.	Short-Term (1 to 3 years)	Staff Time and any associated revenue.	There is currently no fees stipulated to the recovery of costs for these fire department activities.

TABLE OF CONTENTS

ACRONYMS

AHJ	Authority Having Jurisdiction
CAD	Computer-Aided Dispatch
CFAI	Commission on Fire Accreditation International
CHFD	Centre Hastings Fire Department
CRA	Community Risk Assessment
CRR	Community Risk Reduction (Plan)
E&R	Establishing and Regulating (By-law)
EMCPA	Emergency Management and Civil Protection Act
EMG	Emergency Management Group Inc.
EOC	Emergency Operations Centre
FPO	Fire Prevention Officer
FPPA	Fire Protection and Prevention Act
FUS	Fire Underwriters Survey
HAZMAT	Hazardous Materials
HRVA	Hazard Risk Vulnerability Analysis
IMS	Incident Management System
JPRs	Job Performance Requirements
LWC	Lightweight Construction
MFP	Master Fire Plan
MOU	Memorandum of Understanding
MVI	Motor Vehicle Incidents
NFPA	National Fire Protection Association

ACRONYMS

NG 911	Next Generation 911
OFC	Office of the Fire Commissioner
PFLSE	Public Fire and Life Safety Educator
PFPC	Public Fire Protection Classification
PPE	Personal Protective Equipment
PTSD	Post-Traumatic Stress Disorder
RCMP	Royal Canadian Mounted Police
RFP	Request for Proposal
RMS	Record Management System
SCBA	Self-Contained Breathing Apparatus
SOG	Standard Operating Guideline
SOP	Standard Operating Procedures
STSS	Superior Tank Shuttle Service
SWOT	Strengths, Weaknesses, Opportunities, and Challenges

Introduction

Emergency Management Group®

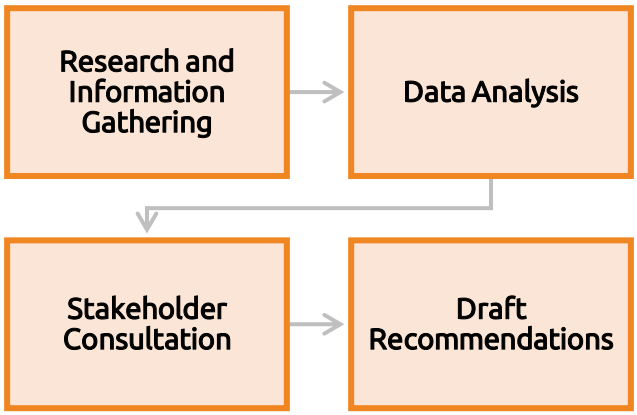
INTRODUCTION

Project Methodology

EMG has based its review process on the Request for Quotation (RFQ) proposal submitted to the Municipality of Centre Hastings. The specific scope of work noted in the proposal was reviewed and is included in each section of this document. To satisfy the outcomes as detailed in the proposal, the MFP review was completed by utilizing best practices, current industry standards, and applicable legislation as the foundation for all work undertaken.

EMG also used quantitative and qualitative research methods to fully understand the community's current environment and how to best reflect future operational and emergency response practices based on the needs and circumstances of Centre Hastings.

Overall, the methodology involves a substantial amount of research, data analysis, documentation review, as well as internal and external stakeholder consultation. From that, the draft report and recommendations are derived. The final product is a dynamic report that provides a high-level strategic direction for the Council of the Municipality of Centre Hastings and the CHFD.



To accomplish the scope of requirements, EMG has considered the following aspects of the fire service and its programs.

- Reviewed the Establishing and Regulating by-law.
- Reviewed applicable municipal, provincial, and federal legislations.
- Reviewed planning department documents regarding the community and areas of growth projections over the next 10-20 years.
- Reviewed current service agreements with neighbouring municipalities and any other current documents.
- Reviewed fire service administration including staffing, organizational structure, policies and procedures, administrative support, record keeping and information management/technology, purchasing and inventory control, public and media relations, and customer service.

- Gathered information on operational requirements including past and current response statistics (call volumes/response times) to analyze trends, staff availability/needs and response capabilities, etc.
- Toured the fire stations conducting a location/ response analysis.
- Examined fire vehicles, apparatus and equipment including the maintenance program.
- Reviewed fire service policies, procedures, and 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.
- Identified and compared industry best practices relating to fire and emergency services performance measurement.
- Reviewed current staff recruitment and retention practices, promotional policy, succession planning and demographics.
- Reviewed the operational and capital budgets along with reserves and current revenue generation programs within the emergency services and the Municipality (development fees).

Based on these criteria, through consultation with members of the Council, members of the municipality's senior leadership team, firefighters, and community stakeholders, EMG was able to conduct an extensive review of elements that are working well and areas requiring improvement within the CHFD.

Performance Measures and Standards

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

- The *Fire Protection and Prevention Act (FPPA), 1997*
- Ontario Regulation 343/22 Firefighter Certification
- The Office of the Fire Marshal (OFM) Public Safety Guidelines and Communiques
- The *Ontario Occupational Health and Safety Act* (OHSA), with reference to 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 Fire Underwriters Survey (FUS) technical documents
- The National Institute of Standards and Technology (NIST).

Note: Users of NFPA Standards should consult applicable federal, state, and local laws and regulations. NFPA does not, by the publication of its codes, standards, recommended practices, and guides, intend to urge action that is not in compliance with applicable laws, and these documents may not be construed as doing so.

The use of NFPA Standards for regulatory purposes should be accomplished through adoption by reference. The term "adoption by reference" means the citing of title, edition, and publishing information only.

Project Consultants

Although several staff at EMG were involved in the collaboration and completion of this MFP, the overall review was conducted by (in order of involvement):

- Greg Hankkio, Fire Service Consultant – Project Lead
- Guy Degagne, Fire Service Consultant
- Eric Nordlund, Fire Service Consultant
- Steve Lambert, Fire Service Consultant
- Lyle Quan, Fire Service Consultant/VP of Operations
- Darryl Culley, President

The EMG project consultants collectively bring extensive experience in fire and emergency services program development, evaluation, and training. The EMG team has worked on a wide range of projects, including fire service reviews, community risk assessments, the creation of strategic master fire plans, and the development of emergency response programs for various clients.

Section 1

Community & Fire Department Overview

Emergency Management Group

SECTION 1: COMMUNITY & FIRE DEPARTMENT OVERVIEW

1.1 Community Overview

1.1.1 Municipality of Centre Hastings

Centre Hastings is a picturesque municipality located in Eastern Ontario, offering a unique blend of rural charm, modern amenities, and a strong community spirit. With an area of 222.79 square kilometers and a population of 4,801, it is an area where nature and small-town living thrive in harmony.

The municipality was formed on January 1, 1998, through the amalgamation of Huntingdon Township and the Village of Madoc and is centrally located within Hastings County. The area includes several villages and hamlets such as Crookston, Fuller, Ivanhoe, Madoc, Moira, Roslin, and White Lake, along with smaller settlements like Buller Siding and Fuller Station.

Its strategic location between Toronto and Ottawa, just north of Belleville, makes Centre Hastings easily accessible while maintaining its rural character. The area is known for its agricultural roots, with farming being the primary driver of the local economy. However, Centre Hastings also boasts a diverse economic base, with contributions from manufacturing, retail, and recreational sectors.

Moira Lake, one of the region's most popular attractions, draws both locals and tourists alike, offering opportunities for boating, fishing, and enjoying the natural beauty of the surroundings. With its rolling hills, mixed forests, and numerous water bodies, the region is a haven for outdoor enthusiasts.

Overall, Centre Hastings combines a laid-back rural lifestyle with modern conveniences, making it an ideal place for families and individuals who appreciate nature, community, and a slower pace of life.[2]

[2] About Centre Hastings - Municipality of Centre Hastings. Accessed on September 25, 2024. https://centrehastings.com/visit-explore/about-centre-hastings/

FIGURE #1 - CENTRE HASTINGS MUNICIPAL BOUNDARY

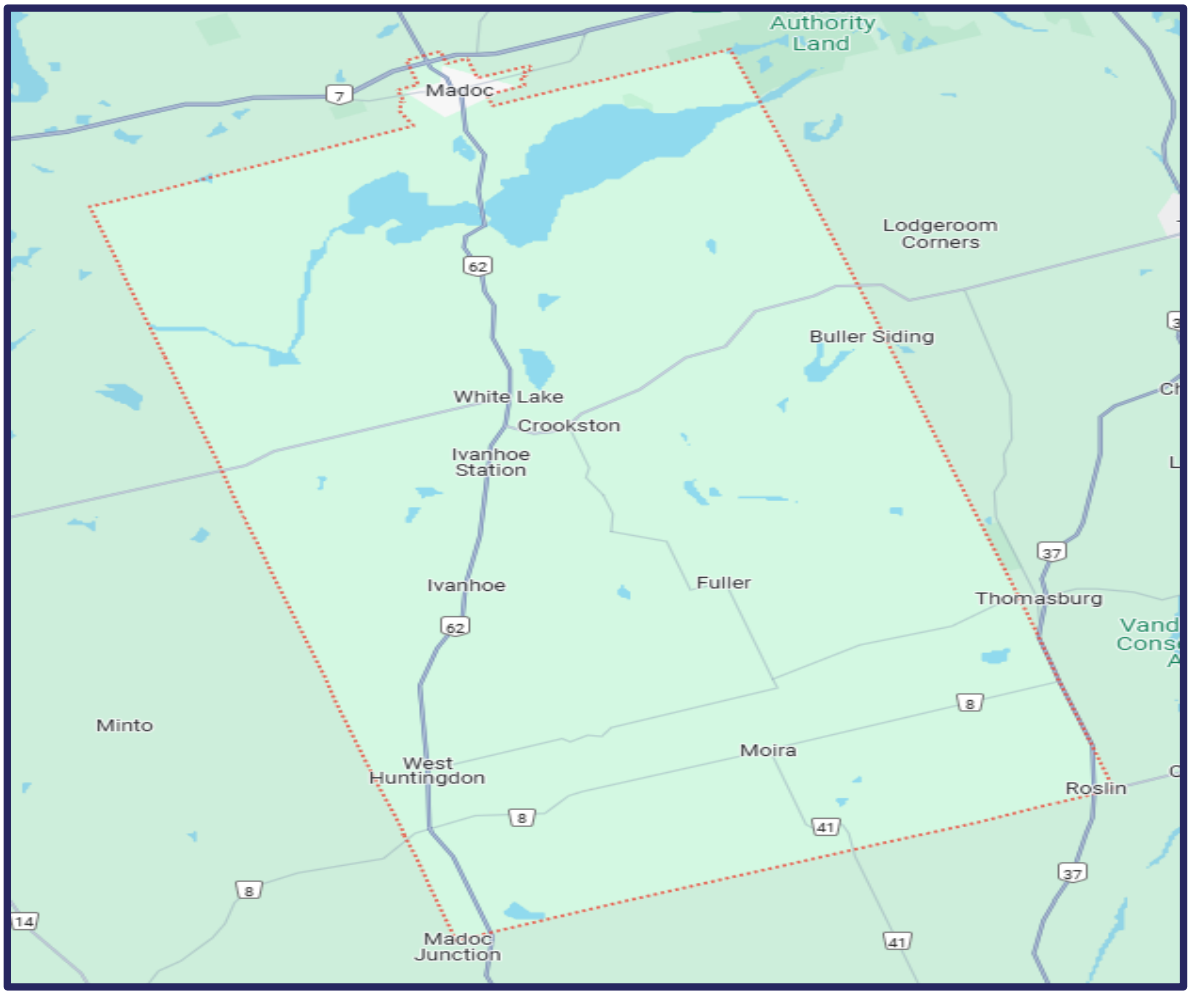


TABLE #1: MUNICIPALITY OF CENTRE HASTINGS POPULATION BY YEAR

Year	2011	2016	2021
Population	4,574	4,774	4,801
Population Increase/Decrease		4.20%	0.60%

***Note**: Retrieved from Stats Canada website, September 25, 2024.* [3]

[3] Census Profile, 2021 Census of Population (statcan.gc.ca). Accessed on September 25, 2024. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E

The Phase 1 Report for the Madoc Water, Wastewater, and Stormwater Master Plan, prepared by J.L. Richards & Associates Limited, forecasts population growth as follows: a short-term increase of 400 people from 2024 to 2029, driven by anticipated residential development; a mid-term growth of 891 people from 2029 to 2034; and a long-term growth of 1,559 people from 2034 to 2044.

TABLE #2: CENTRE HASTINGS AND ONTARIO AGE CHARACTERISTICS

	Population	
Age	Centre Hastings	Ontario
0 to 14 years	15.40%	15.80%
15 to 64 years	59.00%	65.60%
65 years and over	25.60%	18.50%
85 years and over	2.40%	2.50%
Average Age	45.6	41.8
Median Age	49.2	41.6

As the population within the municipality grows, it is expected that there will be a corresponding increase in demand for fire services.

1.2 Fire Department Overview

The CHFD is a volunteer service operating from two fire stations (as shown in Figure #2), staffed by volunteer firefighters under the direction of a full-time Fire Chief. From 2019 to 2023, the CHFD responded to an average of 115 calls for service each year. These calls included property fires and explosions, medical and resuscitation emergencies, motor vehicle collisions (MVC), and rescue operations.

FIGURE #2 - CENTRE HASTINGS FIRE STATION LOCATIONS AND 2021 – 2024 CALL CLUSTER DATA

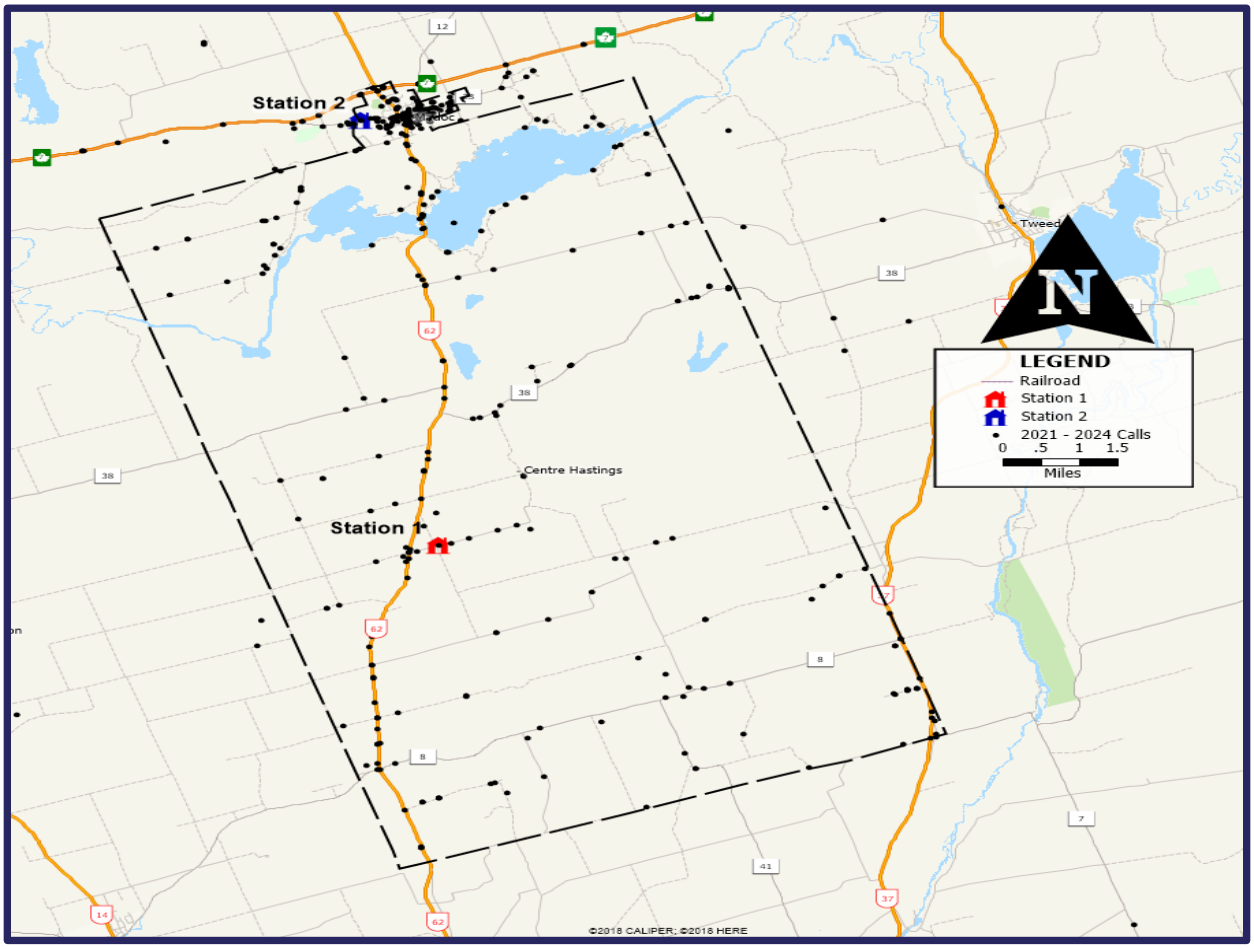
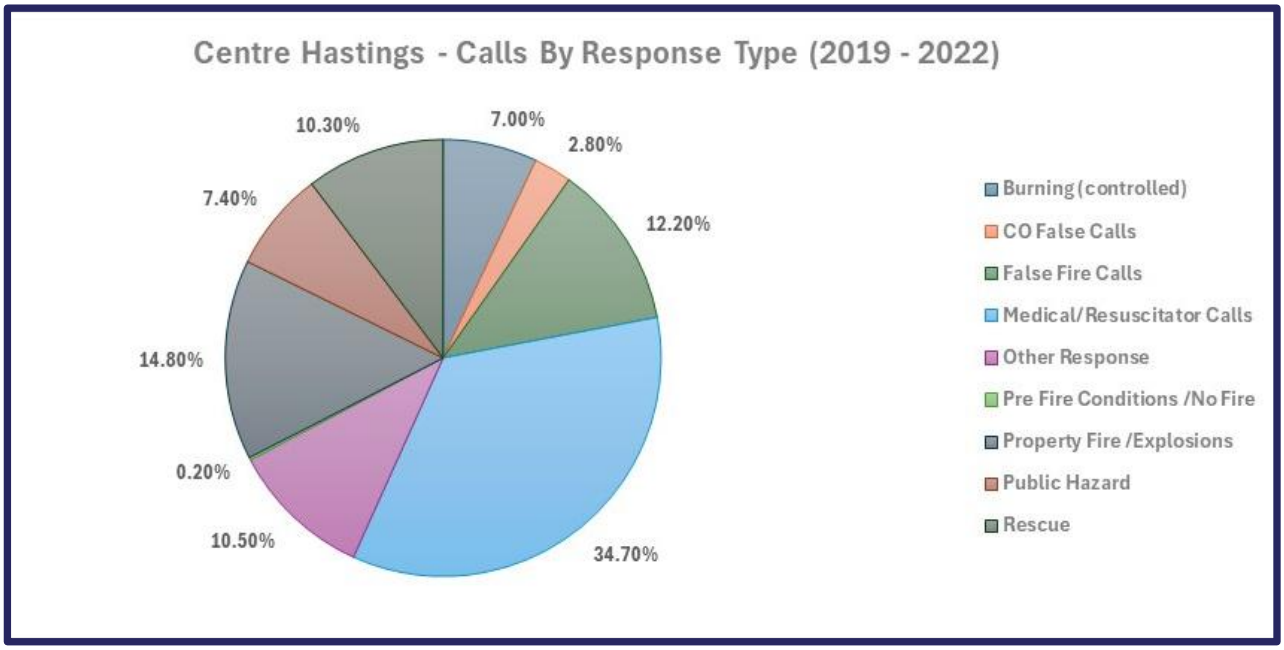


TABLE #3: CHFD 2019 – 2023 TOTAL CALLS FOR SERVICE AND % INCREASE/DECREASE

Year	Total Calls	% Increase/Decrease
2019	105	
2020	101	-4.00%
2021	121	16.50%
2022	131	7.60%
2023	117	-10.60%

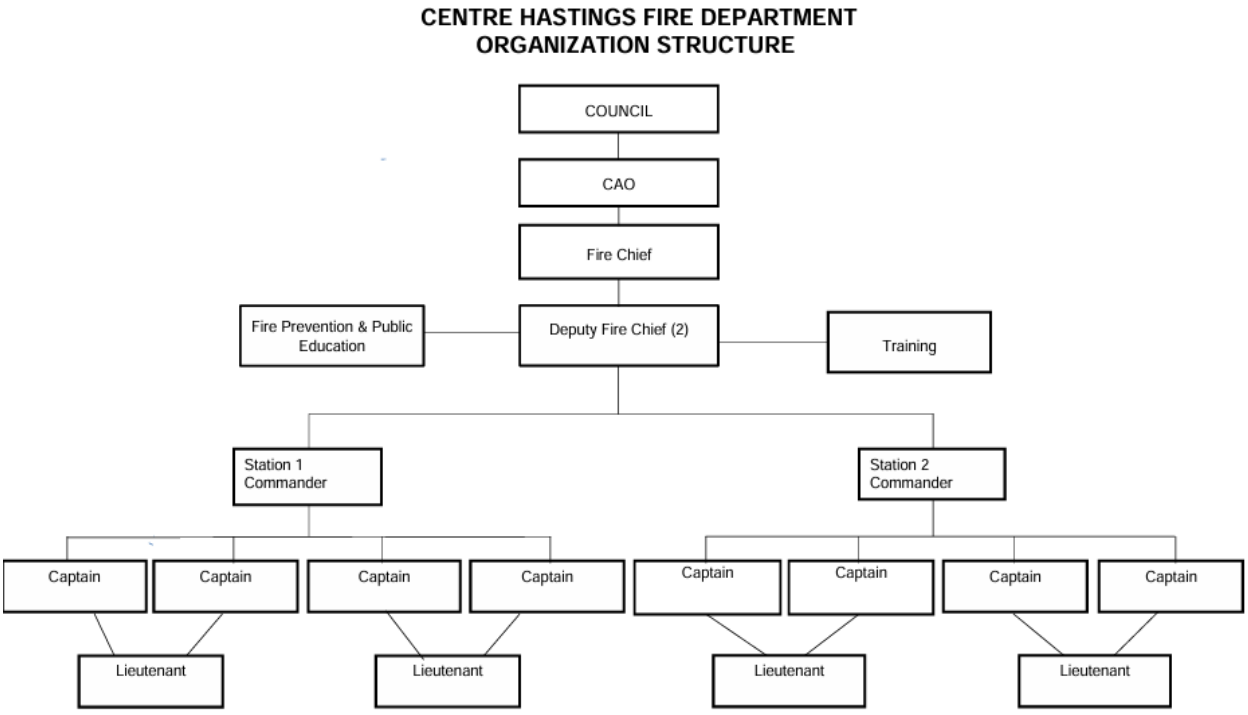
FIGURE #3 - 2019 – 2022 CHFD CALLS BY RESPONSE TYPE CLASS



The Fire Chief is the head of the Fire Department and is ultimately accountable to the Council for the efficient administration and operation of the department, including the provision of Fire Protection Services. The Fire Chief is assisted by two volunteer Deputy Fire Chiefs, and the and the additional volunteer positions within the service are as follows:

- Fire Chief – 1
- Deputy Chiefs – 2
- Station Commanders – 2
- Captains – 7
- Lieutenants – 3
- Firefighters - 25
- Fire Prevention Officers – 1
- Training Officers – 2

FIGURE #4 - CHFD ORGANIZATIONAL STRUCTURE



Note: *The CHFD organizational structure provided to EMG does not consistently align with the reported levels of volunteer personnel in all instances.*

1.3 Assessment of Current Fire Services By-law and Fire Service Agreements

As part of the master plan process, EMG reviewed fire service-related by-laws and, where necessary, has provided recommendations for improvements.

1.3.1 Governance and Establishing & Regulating By-law

To support the Fire Administration in meeting the needs and expectations of the Council, the Establishing and Regulating By-law (E&R By-law) should be updated annually to reflect changes based on the Municipalities requirements and the fire department's operational needs. It is essential that the By-law aligns with the amended Fire Protection and Prevention Act of 1997.

By-law Number 2013-03 of the Corporation of the Municipality of Centre Hastings, which establishes and regulates the Fire Department, formally defines the service, its composition, and the level of services to be provided. Best practice recommends that by-laws affecting fire department operations be reviewed annually or whenever significant changes occur in the

community. This approach ensures that the Fire Chief can align with the Council's direction on service levels, performance expectations, and authority, while adapting to the evolving needs and circumstances of the community.

A generally accepted practice is for the Fire Chief to review the Establishing and Regulating (E&R) By-law with newly elected council members, the CAO, and the Municipal Solicitor every four years. This ensures that new council members gain a clear understanding of the level of service provided to the community and the Council's responsibility to fund that service as established. It also provides an opportunity for the Fire Chief to introduce key legislation governing the fire service, such as the Fire Protection and Prevention Act, and to familiarize the Council with their responsibilities under this legislation.

By-law Number 2013-03 is now over ten years old and should be updated. This is an ideal time to incorporate new legislation, assess changes in the types and levels of response, and address evolving training expectations for the fire department. The review should also consider referencing relevant guidelines and standards such as:

- Section 21 Firefighter Guidance Notes
- *OHSA*
- 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

By incorporating these guidelines and standards, the Council would be better equipped to support the CHFD's efforts in ensuring that staffing, training programs, fire prevention, public education initiatives, and community response align with industry best practices.

The department should also consider including a mission, vision, and values statement in the E&R By-law. The mission statement should guide the department's values and shape its vision for the future. In addition, the updated by-law should reference the Office of The Fire Marshal (OFM) Regulation 378/18, CRA, which came into effect on July 1st, 2019. It should also outline

the requirement for an annual review and the creation of a new document every five years. Additionally, the by-law should identify the Community Risk Reduction Plan (CRRP), which should be implemented as part of the CRA.

The FPPA mandates that fire departments have a smoke alarm program. The program, including its purpose, goals, and expected outcomes, should be incorporated into the new document.

Other considerations for revisions to the current by-law include:

- The levels of service, as prescribed in By-law 2013-03, should align with Table 1 of Ontario Regulation 343/22, made under the FPPA, 1997, using consistent wording to avoid confusion regarding the service levels provided by the Municipality of Centre Hastings.
- Where applicable, By-law 2013-03 should reference the Ministry of Labour's Section 21 Guidance Notes.
- During the next review, the Municipality of Centre Hastings should consider updating the term "volunteer firefighters" to "paid-per-call firefighters" to accurately reflect that these individuals receive an hourly wage for their participation in the department's activities.
- The By-law should include provisions for Mental Wellness and Respiratory programs.
- The By-law should establish a response time baseline, and goals based on NFPA 1720.
- The By-law should clarify who is responsible for fire investigations.
- The By-law should include references to Asset and Record Management Programs, along with retention policies.

1.4 Assessment of Other Current Fire Service-Related By-Laws and Agreements

The following fire service-related by-laws and agreements were also reviewed for this MFP:

Municipality of Centre Hastings

- Open Air Burning By-law 2014-31 (Discussed in Section 1)
- Private Lanes By-law 2007-0014 (Discussed in Section 1)
- Emergency Services Tiered Response Agreement By-law 2024-19 (Discussed in Section 2 and Section 5)
- User Fees and Charges By-law 2024-25 (Discussed in Section 6)

- Development Charges By-law 2020-67 (Discussed in Section 6)
- Automatic Aid Agreement with the Township of Madoc (Discussed in Section 5)
- Emergency Communications Agreement with the City of St. Catharines (Discussed in Section 2)
- MNR Agreement (Discussed in Section 5)

1.4.1 Open Air Burning

Agricultural fires, and wildland fires have been identified as moderate risks to the community with a likely probability of occurrence. Open air burning, if not appropriately regulated, will increase this risk. The Fire Protection and Prevention Act, 1997 (FPPA) empowers municipalities to pass by-laws regulating the setting of open-air fires, including establishing the times during which open air fires may be set.[4]

The Corporation of the Municipality of Centre Hastings By-law Number 2014-31 states the following:

> *During the period between April 1 and October 31 in any calendar year, not fire for the burning of burning of grass, rubbish, garbage, wood or other combustible material shall be permitted outdoors between the hours of 7:00 a.m. and 7:00 p.m.*
>
> - *unless such fire is used exclusively for cooking or warmth or.*
> - *Unless such fire is limited to an area no greater than 1 metre by 1 metre and, attended at all times by one or more persons 19 years of age or older, or,*
> - *Unless such fire is confined within a metal container and is covered by metal mesh less than ¼" (on quarter inch) in size or screening to prevent the escape of coals, and cinders:*
> - *The burning of hazardous and/or toxic materials will not be permitted at any time.*

The By-law establishes fees for non-compliance, and the charges associated with extinguishment should the responsible party fail to keep control of a fire. The By-law also empowers the Fire Chief or designate to restrict or ban any fires in the municipality if, in the opinion of the Fire Chief, climatic conditions are such that a server or extreme risk of fire may exist which could pose a threat to public safety or property.

[4] Accessed October 31, 2024

The resolution establishing By-law 2014-31 states that Council considers excessive smoke, smell, airborne sparks or embers to be or could become or cause public nuisances by creating negative health effects on neighbouring residents, increasing fire exposure hazards, infringing the enjoyment of the use of neighbouring properties and generating false fire alarms.

The By-law, as currently written, allows the burning of materials such as rubbish, garbage, and other combustibles. However, with growing concerns about global warming due to Carbon Monoxide (CO) emissions, along with the rising health risks associated with burning non-organic materials, it is advisable to consider amending the By-law to restrict the types of materials that are permitted for burning.

1.4.1.1 Sky Lanterns

Sky lanterns have become increasingly popular as a way to celebrate similar to that of using fireworks. Sky lanterns pose a serious fire safety hazard, and so much so that their use has been prohibited by the National Fire Protection Association code requirements. As a mitigation strategy to the risks associated with agricultural fires, and wildland fires, Centre Hastings should amend By-law 2014-31 to place a prohibition on the use of flying lanterns.

1.4.2 Private Lanes By-law

The Municipality of Centre Hastings By-law Number 2007-14 is a by-law to implement policies of the Official Plan of the County of Hastings and to establish construction standards and guidelines for private roads.

Private roads, if not constructed to appropriate standards can be more difficult to access by emergency services, such as fire, police and emergency medical services. This by-law aims to address the following objectives:

- Provide for the health and safety of inhabitants and general public;
- Ensure expeditious delivery of emergency services;
- Safeguard investment in property by establishing reasonably maintainable roadways; and.
- Minimize the amount of site and environmental disruption caused by construction.

The By-law is overseen by the Director of Public Works and sets clear road design standards to ensure safe access and egress for emergency services. These standards include, but are not limited to, road width, clearance height, road grade, curve specifications (both horizontal and vertical), intersection requirements, and specifications for culverts and bridges.

While the By-law effectively ensures compliance with the referenced construction standards for use as a Multiple Access Road, EMG could not identify a process for enforcing ongoing maintenance once a permit has been approved.

Section 1: Recommendations

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
1	The CHFD Establishing & Regulating By-law should be updated giving consideration to the requirements as detailed in Section 1.3.1 of this report.	Immediate (0 to 1 year)	Staff Time	Best practice recommends that by-laws affecting fire department operations be reviewed annually or whenever significant changes occur in the community. This approach ensures that the Fire Chief can align with the Council's direction on service levels, performance expectations, and authority, while adapting to the evolving needs and circumstances of the community.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
2	By-law 2014-31 should be amended to restrict the types of materials that are permitted for burning, and be further amended to place a prohibition on the use of flying lanterns.	Immediate (0 to 1 year)	Staff Time	The By-law, as currently written, allows the burning of materials such as rubbish, garbage, and other combustibles. However, with growing concerns about global warming due to Carbon Monoxide (CO) emissions, along with the rising health risks associated with burning non-organic materials, it is advisable to consider amending the By-law to restrict the types of materials that are permitted for burning. Sky lanterns pose a serious fire safety hazard, and so much so that their use has been prohibited by the National Fire Protection Association code requirements.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
3	If identified as a concern by the Fire Chief, By-law 2007-14 should be amended to include a process for enforcing the ongoing maintenance of private roads once a permit has been approved.	Immediate (0 to 1 year)	Staff Time	While the By-law effectively ensures compliance with the referenced construction standards for use as a Multiple Access Road, EMG could not identify a process for enforcing ongoing maintenance once a permit has been approved.

Section 2

Fire Department Divisions

Emergency Management Group

SECTION 2: FIRE DEPARTMENT DIVISIONS

2.1 Administration and Office Systems

Administration within a fire service typically includes Chief Officers and administrative support staff. The CHFD Administration is comprised of one full-time Fire Chief, supported by two Deputy Fire Chiefs. Currently, the department does not have an Administrative Assistant position.

EMG's research suggests that the current administrative structure and staffing are sufficient to meet divisional needs. Additionally, the department's administrative functions are supported by other municipal departments, such as the Director of Finance and Building Services, among others.

Given that the incumbent Fire Chief has been in the position for just over a year, it is understandable that the full scope of the workload associated with the role may not yet be fully realized. The implementation of this MFP, ensuring compliance with O. Reg. 343/22 Firefighter Certification, reviewing and updating Standard Operating Procedures, enhancing public life fire safety education programs, and addressing the impact of municipal growth on the fire department's level of service are just a few examples of tasks that will increase the Fire Chief's workload.

Furthermore, the transition of the Community Emergency Management Coordinator position, which is currently held by the Chief Administrative Officer (CAO), to the Fire Chief will add to the already substantial workload.

Commission on Fire Accreditation International

The CFAI Accreditation program includes a dedicated section that evaluates the administration component of a fire department. This section highlights the following key points:

Category 9C: Administrative Support and Office Systems

> *Administrative support services and general office systems are in place to conduct and manage the agency's administrative functions, such as organizational planning and assessment, resource coordination, data analysis/ research, records keeping, reporting, business communications, public interaction, and purchasing.*

Ensuring stability in staffing resources will support the ongoing development of policies, planning, operational changes, equipment acquisition, and more, all in line with the Department's future direction. Clear goals and outcomes will be set, along with realistic

timelines for their completion. Stability within the Administration Division will also enhance the morale of the Department's members. The Fire Chief should continue to evaluate the need for additional administrative support, such as an Administrative Assistant or a full-time Deputy Fire Chief and present any such requests to Council.

2.2 Fire Prevention and Public Education (and Fire Investigation, Origin, and Cause)

2.2.1 Legislation

This report is completed with the understanding that Chief Snider has only been in this position since November of 2023.

The fire prevention and public education services provided by the Centre Hasting Fire Department (CHFD) are guided by industry's best practices and the most current legislative

Public education and code enforcement are municipal responsibilities that are mandated under the *Fire Protection and Prevention Act, 1997 (FPPA).* Under this Act, municipalities must provide specific fire prevention and protection services, along with additional services deemed necessary by Council, to meet the municipality's needs and circumstances and to comply with the Act. The legislation does not provide a specific definition of a public education program

The Municipality has adopted By-Law No. 2005-46 to guide fire prevention and public education within the Municipality of Centre Hastings. This By-Law outlines the following provisions related to fire prevention and public education:

Fire Prevention and Public Educations activities shall be provided in accordance with the approved fire department Fire Prevention/Public Education and Smoke Alarm Policies.

Provide an effective Fire Prevention Program to:

- Ensure, through plan examination and inspection, that required fire protective equipment is installed and maintained within buildings
- Reduce and/or eliminate fire hazards
- Ensure compliance with applicable Municipal, Provincial and Federal fire prevention legislation, statues, codes and regulations in respect to fire safety.
- Develop and maintain an effective public information system and educational program, with particular emphasis on school fire safety programs; and commercial, industrial and institutional staff training.

The department is further guided by By-Law Number 2013-03, which details the specific expectations for the fire department regarding Fire Prevention and Fire Safety Education within the Municipality:

- Inspections arising from complaints, request or retrofit shall be provided in accordance with the FPPA and policies of the Fire Departments Fire Prevention and Public Safety Division.
- Inspections arising from complaints, request or retrofit shall be provided in accordance with the FPPA and policies of the Fire Departments Fire Prevention and Public Safety Division.
- New construction inspections and plan reviews of buildings under construction in matters respective of fire protection systems within buildings shall be conducted in accordance with the applicable By-law and operating procedures.
- The Ontario Fire Service Standard for Fire Prevention Officers and the Ministry of Municipal Affairs and Housing Standards shall be used as a reference guide for fire prevention training.

Plans for new construction or major renovations are currently handled by the Deputy Clerk, not the fire department. While the fire departments E&R By-law lists this as their responsibility, it is recommended that the CHFD either by involved in the plans review process or update their E&R By-law to specify that the Deputy Clerk is solely responsible for all plan reviews.

2.2.2 Fire Prevention

The CHFD has established a Fire Prevention and Public Education Policy that directs the department's fire prevention and education programs. This policy outlines the participation of department members in fire prevention and public fire education activities and specifies the types of inspection services approved by council. It serves as a clear direction to the Fire Chief, fire department personnel, and the public. This policy states the following:

- The Fire Chief and/or Fire Prevention Personnel will conduct inspections of the properties specified in Appendix A at the frequencies indicated.
- The fire department personnel will conduct a home inspection program for residential dwelling units by request or complaint.
- The fire prevention personnel will examine plans and specifications of new buildings for compliance with applicable fire regulations.

- The fire department personnel will provide fire safety lectures and/or demonstrations for various public sectors such as industries, community groups, service clubs, business groups, day care facilities and schools, upon request where resources are available.
- The fire department personnel will encourage the installation and maintenance of smoke alarms and carbon monoxide detectors in all dwelling units and sleeping units not within a dwelling unit, in accordance with the Law.
- The Fire Prevention Officer will provide public fire safety messages and awareness campaigns through media at recurring intervals including, but not limited to, the holiday season, spring clean-up and fire prevention week.
- The fire department personnel will make available fire prevention information, pamphlets, and fire safety literature to the public through fire stations and other locations in the Municipality, the media and/or circulation during approved fire department activities; and
- The fire department personnel will, in each circumstance and without prejudice, enforce all fire safety legislation which the Fire Department staff have Council approved responsibility for.

The Ontario Fire Marshal Public Fire Service Guideline PFSC 04-09-12, Fire Prevention Effectiveness Model, sets recommended standards for Fire Prevention and Public Safety Guidelines. The guideline states that the Fire Prevention and Effectiveness Model is:

- A planning aid that focuses on one of the eight components of the Comprehensive Fire Safety Effectiveness Model.
- A tool to ensure all issues are identified and addressed when considering any fire prevention programs or activities or when reviewing existing programs.
- At a minimum, a fire inspection program must comply with the requirements of the following regulations and directive:
- Ontario Regulation 365/13: Mandatory Assessment of Complaints and Requests for Approval
- Ontario Regulation 150/13 - Enhancing Fire Safety in Occupancies Housing Vulnerable Ontarians
- Ontario Regulation 364/13 – Mandatory Inspection – Fire Drill in Vulnerable Occupancy
- Fire Marshal's Directive 2014-03: Inspections of All Buildings

The department has one (1) part-time Fire Prevention Officer (FPO) who works on an as needed basis. It was noted that the FPO does not hold certification as an FPO or a Public Fire Life Safety Educator (PFLSE).

It is recommended that the CHFD develop and maintain a more robust Fire Prevention program.

Additionally, it is recommended that the Municipality explore the option of converting the part-time FPO position into a full-time, certified role and designate the individual as a PFLSE.

2.2.3 Facts About Home Fire Sprinklers

The NFPA emphasizes the need to address common myths about fire sprinklers. In Canada, about 220 fire-related deaths occur annually—most in homes, where people feel safest. While sprinklers are mandatory in buildings four stories or higher, they're not required in single-family homes, which leaves them without a critical layer of fire protection. Sprinklers save lives, reduce property damage, and may lower insurance costs.

Myth: All sprinklers go off at once.

Fact: Only the sprinkler closest to the fire activates—usually just one is needed.

Myth: Smoke alarms trigger sprinklers.

Fact: Sprinklers respond to heat, not smoke, activating at 135°–165°F (57°–74°C).

Myth: Water damage is worse than fire damage.

Fact: Sprinklers use far less water than fire hoses and control fires early, limiting damage.

Myth: Sprinklers require expensive maintenance.

Fact: Basic maintenance is simple, and flow tests can be done by homeowners.

Myth: Sprinklers increase insurance costs.

- Fact: Many insurers offer discounts for homes with fire sprinklers.

Bottom Line

Fire sprinklers save lives, reduce injuries, and protect property - and they have been doing it for over 100 years.

It was noted that the CHFD has not been actively promoting the benefits of installing residential sprinklers. It is recommended that the CHFD start promoting the benefits of residential sprinkler installation in all new construction for residential and commercial buildings.

2.2.4 Fire Public Education

The intent of public education programs is to raise awareness of fire safety's importance to the community using many different programs, including presentations, participation at events, and public service announcements.

By-Law Number 2013-03 also guides the fire departments in its Fire Public Education programs. It states the department shall establish the following:

The distribution of fire and life safety information and public education programs shall be administered in accordance with the FPPA and polices of the Fire Departments Fire Prevention and Public Safety Division.

A residential home fire safety awareness program shall be ongoing. Smoke alarms for residential occupancies shall be provided for those in need.

The Fire Chief stated that he conducts mandatory fire drills at the school twice a year. However, currently there is no certified PFLSE to support the department's needs. A Fire Education Group is available to deliver fire educational talks and distribute fire safety pamphlets upon request. In the past, there have not been any records kept that detail the number of events attended, items distributed, and the number of firefighters who attend the event. It is recommended that department develop a records management system to track events details, including the location, number of items distributed, and the firefighters who participated.

2.2.5 Smoke/Carbon Monoxide (CO) Alarm Program

Municipality By-Law No. 2005-46 requires the fire department to have a Formalized Alarm program., as mandated by the FPPA. Most municipalities adopt a smoke/CO alarm program by-law for their residents. This program must include a procedure to ensure that residents have working alarms whenever the fire department interacts with them, such as during emergency responses. It should also track the status of working smoke alarms in residences and also include a method of keeping statistics on whether the alarms are functioning.

When responding to emergencies at residences or buildings, the CHFD checks to ensure there are working smoke/CO detectors present. If detectors are missing or not functioning, the department provides working smoke/ carbon monoxide detectors.

However, it was noted that the CHFD does not have a current policy for canvassing neighborhoods to identify homes without working smoke detectors. It is recommended that the CHFD develop a smoke alarm policy where they go from house to house to identify residences that do not have smoke detectors.

The Fire Chief reported that the department has distributed an average of 15 combination Smoke and CO alarms each year for the last four years. It is recommended that the department develop a policy for distributing smoke detectors, with the proper record-keeping that includes the recipient's name, house number, date of distribution, and how many detectors are given out.

2.2.6 Inspections and Compliance

The Centre Hastings Fire Chief provides complaint-based inspections within the Municipality, as there is no dedicated Fire Inspector. Mandatory annual inspections were completed on the four (4) vulnerable occupancies identified by the department. Complaint inspections are conducted in response to a complaint regarding a possible fire code violation and are mandatory under the FPPA. In total, six complaint inspections were completed, each identifying associated violations. It should be noted that the position of Fire Chief has been held by the current Chief since November 2023. The tables below represent the one year that he has been in his role, and there were no written records prior to his appointment. It is recommended, that in the future, the department ensure proper record-keeping for all inspections, including details on the number of inspections conducted and other relevant information gathered during the process.

TABLE #4: INSPECTIONS BY OCCUPANCY TYPE

Year	Commercial	Multi-Residence	Mixed-Use	Vulnerable Occupancies	Other	Totals
2024	2	4	0	4	0	10
2023	n/a	n/a	n/a	n/a	n/a	0
2022	n/a	n/a	n/a	n/a	n/a	0
2021	n/a	n/a	n/a	n/a	n/a	0
Total	2	4	0	4	0	10

TABLE #5: FIRE CODE VIOLATIONS

Year	Verbal	Letter	FSIR	Order	Total	Resolved
2024	2	2	0	0	4	4
2023	n/a	n/a	n/a	n/a	n/a	n/a
2022	n/a	n/a	n/a	n/a	n/a	n/a
2021	n/a	n/a	n/a	n/a	n/a	n/a
Total	2	2	0	0	4	4

2.2.7 Fire Underwriters Inspection Benchmark

FUS is an organization that supports the insurance industry by assessing the effectiveness of fire departments and other relevant factors that influence their ability to serve their communities across Canada. It evaluates the impact of fire department's programs and preparedness, impact on fire losses, including building values that are destroyed or damaged by fire. FUS provides advice and guidance to numerous insurance companies, who use this advice to set insurance rates paid by consumers in each community.

A department in Ontario should have a Fire Underwriters Survey (FUS) inspection to ensure a public fire protection rating that impacts fire insurance premiums and community evaluations. The FUS helps insurance companies assess risk and set rates, while municipalities use the data to evaluate their fire department's performance and resources. Essentially, a good FUS rating can lead to lower insurance premiums for residents and businesses, and a more efficient and effective fire department.

Regarding inspection programs that impact fire rates, FUS recommends inspection intervals for community elements based on the following table provided for illustrative purposes only. It is recommended that the department follow the FUS recommended inspection frequency.

TABLE #6: FUS RECOMMENDED INSPECTION FREQUENCY

Occupancy	Type	Inspection Frequency Benchmark
Assembly	Class A	3 to 6 months
Institutional	Class B	12 months

Occupancy	Type	Inspection Frequency Benchmark
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

Each classification of building has its own inherent risks and degree of complexity. In many large departments, fire inspectors specialize in one classification of building. For example, multi-unit dwellings can take the form of a legacy home converted to a four-unit apartment. At the same time, another might encompass a six-story, mid-rise building of non-combustible construction. Each building has its own unique characteristics and differing Fire Code requirements based on size, occupant load, construction, etc. It is recommended that the CHFD expand their inspection program to include inspections of structures other than Vulnerable Occupancies and inspections other than complaint driven.

2.2.8 Preplans

It was noted that the Municipality of Centre Hastings is primarily a bedroom community, with very few commercial or manufacturing structures. Despite the limited number of these structures, the CHFD would benefit from developing preplans for these structures. Preplanning would give the firefighters knowledge about the hazards present within each structure, as well as important information such as water, gas, and other shutoff valve, the main exits, and the typical number of occupants. This will ensure firefighters have the basic information for each structure they will need if an emergency ever happens at each location. Currently, the CHFD does not have a preplan program in place. It is recommended that the CHFD develop a preplan program with written guidelines to direct the implementation of the program.

2.2.9 Vulnerable Occupancies

The Municipality of Centre Hastings has 4 vulnerable occupancies listed:

- Kerry's Place: 72 Gray Road, Roslin ON
- Kerry's Place: 200 Thomasburg Road Thomasburg ON
- Kerry's Place: 271 Reid settlement Road Madoc ON
- Timber Trails Retirement Residence: 167 Lawerence Street Madoc ON
- There is currently a 128 LTC Facility being built and will be added to this list.

2.2.10 Fire Investigations

All fire departments have an obligation to attempt to determine the cause of any fire that they attend. While simple fire cause determination efforts can be easily accomplished by most incident commanders, more complex investigations often require the response of personnel who are more thoroughly trained or experienced in investigative techniques. The CHFD currently has two members certified as Level 1 Fire Investigators. These individuals have sought assistance from neighboring municipalities as part of the Hastings and Prince Edward County Mutual Aid Association when additional help is needed for fire scene investigations. It is recommended that the CHFD develop a policy that details the steps the department has to follow when investigating a fire.

Section 14 of the *FPPA* authorizes fire departments to investigate fires, with the Fire Chief having authority to designate all duly appointed officers, including Station Commanders, Captains, Lieutenants, and any uniformed member of the Fire Prevention Division to conduct these examinations pursuant to section 6.6 of the FPPA.

Under the FPPA, the Fire Marshal has a duty to investigate the cause, origin and circumstances of any fire, explosion or condition that, in the opinion of the Fire Marshal, might have caused either:

- fires resulting in either a fatality or serious injury requiring person(s) to be admitted as in-patient(s) to a hospital
- explosions, where the explosion is the primary event
- all fires in vulnerable occupancies such as retirement homes, care and treatment occupancies and care occupancies, as defined in the *Fire Code*
- fires suspected of being deliberately started in an area or circumstances where there should not be a fire, and for which expert investigative assistance is required to determine the cause, origin or circumstance
- large loss fires of $500,000 and over, or where the loss is significant to the community
- fires of unusual origin or circumstances and where expert investigative assistance is required to determine the cause
- fires resulting in unusual fire/smoke spread
- fires involving circumstances that may result in widespread public concern (environmental)

- fires in multi-unit residential occupancies where fire spread is beyond the unit of origin, or where suspected *Fire Code* violations have impacted on the circumstances of the event
- fires involving clandestine drug operations or marijuana grow operations
- provincial interest fires that are identified and defined by the OFM

The Fire Chief is an assistant to the Fire Marshal. The assistants to the Fire Marshal shall report to the Fire Marshal all fires and other matters related to fire protection services as may be specified by the Fire Marshal. There are two (2) members of the department that are Certified Fire Investigator's.

The Fire Chief or one of his designees conduct the initial investigations at the scene of a fire. If the fire meets the criteria outlined in the FPPA, the Fire Marshal's office will be contacted for assistance with the investigation. If the fire does not meet the criteria, the Fire Chief will complete the necessary documentation and submit it to the Fire Marshal's office. Over the past four years, the Fire Marshal's office has been called in to assist in three fire investigations.

The NFPA standard that requires Fire Chiefs need to investigate a fire is NFPA 1033, Standard for Professional Qualifications for Fire Investigator. This standard applies to all fire investigations, including vehicle, outside, and other non-structural fires. The 2022 edition of NFPA 1033 was updated to align with NFPA 921, Guide for Fire and Explosion Investigations, and to make requirements easier to understand.

The fire prevention program appears to be underdeveloped, largely due to a lack of staffing to support fire prevention, education and inspections programs. The Fire Chief manages all these responsibilities alone, and as a result, important aspects may be overlooked or neglected. It is recommended that additional personnel be added to assist the Fire Chief in developing and maintaining fire prevention, public education, inspections, and investigation programs for the CHFD as stated in the E&R By-Law and FPPA.

2.3 Fire Service Training and Career Development

Part II of the Fire Protection and Prevention Act[5] requires that every municipality in the province of Ontario, in addition to establishing a fire prevention program which includes public education, shall also provide such other fire protection services as they determine may be

[5] Fire Protection and Prevention Act, 1997, S.O. 1997, c. 4 (ontario.ca) Accessed January 15, 2025, https://www.ontario.ca/laws/statute/97f04#BK2

necessary in accordance with its needs and circumstances. In Centre Hastings, a fire department has been established by Council[6] to respond to fire and rescue emergencies in the community.

These important fire department program components are commonly referred to as the *Three Lines of Defence*:

This section of the report provides background information and discussion on the status of the training and certification required by those persons assigned to provide this service.

To meet the legislative requirements, along with meeting reasonable standards of service delivery, municipalities need to make informed decisions regarding both the level of fire protection services they provide as well as the types of services required to address the identified risk in the community. It is through the Community Risk Assessment (CRA) process that these risks are identified. The most recent CRA was conducted in 2024 and in addition to the normal risks associated with fighting fires in the community, risks associated with wildfire, water rescue, and inspection of the local building stock were identified.

This analysis included a review of the fire department training and career development practices in the community of Centre Hastings as described by the Fire Chief. To best inform the appropriate strategic direction for the CHFD, EMG conducted a review of the current fire department training and response procedures, policies, processes. knowledge, activities, and capacity. This analysis identified that while Centre Hastings has managed fire service training adequately to this point, the department has management, control and efficiency gaps which can be addressed with minimal effort. Addressing these gaps will yield meaningful benefits to the organization and the community.

[6] Centre Hastings - Document Center Accessed January 15, 2025, https://centrehastings.civicweb.net/filepro/documents/108/?expanded=41066&preview=41070

2.3.1 Legislative Requirements, Codes, Standards, and Best Practices

The Fire Chief is responsible for training programs within their fire service organization. This responsibility has many obligations, the principal of which is to ensure the safety and health of the fire firefighters as they conduct the activities identified in the Establishing and Regulating Bylaw of the fire department. To assist Fire Chief's in meeting their training requirements they are guided and supported by legislation, codes, standards, and best practices. Many of these are identified in this section.

As an example, every Fire Chief should refer to NFPA 1201 *Standard for Providing Fire and Emergency Services to the Public*. This standard is designed to assist the 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.

Specific to training programs and policies, NFPA 1201, Section 4.11 states the following:

> *4.11.1 Purpose: The Fire and Emergency Services Organization (FESO) shall have training and education programs and policies to ensure that personnel train and that competency is maintained to effectively, efficiently, and safely execute all responsibilities.* [7]

NFPA 1201 identifies that it is the FESO leader, the Fire Chief, who is responsible for the professional development program. It is the responsibility of the Fire Chief to assign competent and properly equipped and supported personnel to meet the training requirements of the fire department. This would include both internal training officers and instructors as well as any outside instructors when required.

The Fire Chief is also responsible to ensure that appropriate policies, operating procedures, training records, training facilities, training aids, equipment and supplies, and sufficient training budgets are in place to support the training programs. The Fire Chief is also responsible for ensuring that they and all members meet the professional qualifications which relate to their positions.

In any fire service, there are typically four key areas associated with training delivery.

- Recruit Firefighter Training
- Maintenance Training

[7] Free Access - NFPA 1201: Standard for Providing Fire and Emergency Services to the Public Accessed January 21, 2025, https://link.nfpa.org/free-access/publications/1201/2020

- Special Operations Training
- Professional Development Training

2.3.1.1 Legislation

Ontario Regulation 343/22: Firefighter Certification[8]

This regulation, made under the Fire Protection and Prevention Act, requires that every municipality must ensure that firefighters who perform certain fire protection services are certified to minimum standards in accordance with the legislation.

The legislation accounts for a transition period and for the reasonable time required for municipalities to have these workers certified. All Fire Chiefs have been provided with the details of the requirements and the various tables identifying specific duties and tasks for which certification is required.

Occupational Health and Safety Act[9]

The Occupational Health and Safety Act, R.S.O. 1990, c. o.1 is the principal legislation regarding health and safety in the workplace. It details the duties and responsibilities of all workplace parties including, employers, supervisors and workers. It details worker rights and aims to establish a strong internal responsibility system in the workplace. It establishes measures and procedures for dealing with workplace hazards and provides for the enforcement of law where compliance has not been achieved.

An example of some key components of the act includes detailing duties of employers such as:

- the requirement to provide information, instruction and supervision to a worker to protect the health or safety of the worker
- when appointing supervisors, appoint a competent supervisor

It is important that all fire service members are aware of health and safety legislative requirements and review them periodically to ensure the health and safety of all fire department members and that the fire department and municipality are meeting their obligations and are compliant with any new requirements.

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[8] O. Reg. 343/22 FIREFIGHTER CERTIFICATION | ontario.ca Accessed February 19, 2025, https://www.ontario.ca/laws/regulation/r22343

[9] Occupational Health and Safety Act (OHSA) | ontario.ca Accessed February 19, 2025, https://www.ontario.ca/page/occupational-health-and-safety-act-ohsa

Relevant information pertaining to occupational health and safety should be provided to all firefighters as part of a regular training program.

Section 21 Committee – Guidance Notes

In addition to the requirements of the Occupational Health and Safety Act, Guidance Notes[10] have been developed by the Ontario Fire Service Health and Safety Advisory Committee. The guidance notes help employers identify hazards that are unique to fire services and determine how to prevent injury and illness to their workers.

This guidance material outlines recommended best practices and acceptable standards to be used by workers in the fire service to prevent injury or illness and will comply with the intent and provisions outlined in the *Occupational Health and Safety Act* and related regulations.

As of January 16, 2025, there are 71 approved guidance notes available and posted on the Ontario.ca website.

The Fire Protection and Prevention Act[11]

The Fire Protection and Prevention Act is the principal legislation for the fire service in Ontario and creates the framework for the provision of municipal fire protection. This act addresses the following subjects:

- municipal responsibilities for Fire Protection Services
- the appointment and powers of the Fire Marshal
- establishing the *Fire Code*
- rights of entry in emergencies and fire investigations
- inspection powers
- offences and enforcement
- recovery of costs
- firefighters: employment and labour relations
- Fire Safety Commission
- Fire Marshal's Public Fire Safety Council

[10] Firefighter guidance notes | ontario.ca Accessed February 9, 2025, https://www.ontario.ca/document/firefighter-guidance-notes

[11] Fire Protection and Prevention Act, 1997, S.O. 1997, c. 4 | ontario.ca Accessed February 19, 2025, https://www.ontario.ca/laws/statute/97f04

Other relevant legislation and direction to fire departments for the provision of fire service training activities includes the following examples:

Legislation

- O. Reg. 378/18 Community Risk Assessments
- O. Reg 343/22 Firefighter Certification

Fire Marshal's Directives

- Fire Marshal Directive 2022-001: Use of Information on Lightweight Construction to Inform Fire Suppression Pre-Planning Activities
- Fire Marshal Directive 2023-001: Notification of Fires and Explosions

2.3.1.2 NFPA Standards

Guidance for fire department activity should be informed by industry standards and best practices. The most fundamental in this regard would be the National Fire Protection Association (NFPA) Standards[12].

NFPA Standards are consensus standards developed by committees of experts ensuring they are based on the latest knowledge and best practices in fire safety. The standards are codified into regulations and are used in building and fire codes throughout Canada and the US. They are used by Fire Service and Occupational Health and Safety regulators, the Fire Underwriters Survey (FUS), and the legal community. These standards can be viewed for free by establishing an account on NFPA Link[13].

12 The List of 300+ Codes and Standards Accessed January 21, 2025 https://www.nfpa.org/for-professionals/codes-and-standards/list-of-codes-and-standards#aq=%40culture%3D%22en%22&cq=%40tagtype%3D%3D(%22Standards%20Development%20Process%22)%20%20&numberOfResults=12&sortCriteria=%40computedproductid%20ascending%2C%40productid%20ascending

13 NFPA LiNK | Access Codes & Standards Digitally Accessed January 21, 2025, https://www.nfpa.org/for-professionals/codes-and-standards/nfpa-link

While there are many NFPA standards which need to be referenced by the fire service, the following are some which relate to firefighter training and certification:

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

This standard contains requirements on the structure and operations of fire emergency service organizations (FESOs) to help protect lives, property, critical infrastructure, and the environment from the effects of hazards.

NFPA 1400 – Standard on Fire Service Training

This standard is in the process of being consolidated with other relevant standards as part of the Emergency Response and Responder Safety Document Consolidation Plan. As part of the consolidation plan, NFPA 1400 is combining Standards NFPA 1402, NFPA 1403, NFPA 1404, NFPA 1407, NFPA 1408, NFPA 1410, and NFPA 1451.

NFPA 1401 - Recommended Practice for Fire Service Training Reports and Records

- This standard identifies the recommended approach to providing essential information for training records and reports and managing the training function of the fire service organization.

NFPA 1402 – Standard on Facilities for Fire Training and Associated Props

This standard provides guidance for the planning of fire service training centers, focusing on the main components necessary to accomplish general firefighter training effectively, efficiently, and safely.

NFPA 1403 -Standard on Live Fire Training Evolutions

This standard provides minimum requirements for conducting live fire training to ensure they are conducted in safe facilities and a safe manner for participants.

NFPA 1404 - Standard for Fire Service Respiratory Protection Training

This standard contains requirements for the training component of the Respiratory Protection Program found in NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, and are intended to protect the health and welfare of personnel who work in hazardous atmospheres by preventing accidents, injuries, and exposure to harmful environments.

NFPA 1407 – Standard for Training Fire Service Rapid Intervention Crews

This standard specifies the basic training procedures for fire service personnel to conduct firefighter rapid intervention operations so as to promote firefighter safety and survival.

NFPA 1410 - Standard on Training for Emergency Scene Operations

This standard provides fire departments with an objective method of measuring performance for initial fire suppression and rescue procedures used by fire department personnel engaged in emergency scene operations using available personnel and equipment.

NFPA 1451 - Standard for a Fire and Emergency Service Vehicle Operations Training Program

- This standard contains requirements for a fire and emergency service vehicle operations training program (except for aircraft, watercraft, and law enforcement), including safety procedures for those members who drive or occupy fire and emergency service vehicles.

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

This standard specifies the minimum requirements for an occupational safety and health program for fire departments or organizations that provide rescue, fire suppression, emergency medical services, hazardous materials mitigation, special operations, and other emergency services.

NFPA 1521 - Standard for Fire Department Safety Officer Professional Qualifications

This standard identifies the minimum job performance requirements (JPRs) necessary to perform the duties as a fire department health and safety officer and a fire department incident safety officer.

NFPA 1561 - Standard on Emergency Services Incident Management System and Command Safety.

This standard contains the requirements to be used by emergency services for the structure and operations of an incident management system and the principles of command safety that are to be incorporated into all incidents, training or emergency, to ensure the safety of emergency responders and others on the scene of an incident.

NFPA 1006 - Standard for Technical Rescue Personnel Professional Qualifications

This standard identifies the minimum job performance requirements (JPRs) for fire service and other emergency response personnel who perform technical rescue operations.

NFPA 1001 – Standard for Firefighter Professional Qualifications

This standard identifies the minimum job performance requirements (JPRs) for career and volunteer firefighters whose duties are primarily structural in nature.

NFPA 1021 - Standard for Fire Officer Professional Qualifications

This standard identifies the minimum job performance requirements (JPRs) for fire officer.

NFPA 1002 - Standard for Fire Apparatus Driver/Operator Professional Qualifications

- This standard identifies the minimum job performance requirements (JPRs) for career and volunteer firefighters and fire brigade personnel who drive and operate fire apparatus.

NFPA 1031 – Standard for Professional Qualifications for Fire Inspector and Plan Examiner

This standard identifies the minimum job performance requirements (JPRs) for fire inspectors and plan examiners.

NFPA 1035 - Standard on Fire and Life Safety Educator, Public Information Officer, Youth Fire Setter Intervention Specialist and Youth Fire Setter Program Manager Professional Qualifications

This standard identifies the minimum job performance requirements (JPRs) for public fire and life safety educators, public information officers, youth fire setter intervention specialists, and youth fire setter program managers.

NFPA 1033 - Standard for Professional Qualifications for Fire Investigator

NFPA 1033 facilitates safe, accurate investigations by specifying the job performance requirements (JPRs) necessary to perform as a fire investigator in both the private and public sectors.

NFPA 470 - Hazardous Materials/Weapons of Mass Destruction (WMD) Standard for Responders

This standard identifies the minimum job performance requirements (JPRs) for Hazardous Materials Responders. As part of the Emergency Response and Responder Safety Document Consolidation Plan, NFPA 470 is a combination of Standards NFPA 1072, NFPA 472, and NFPA 473.

NFPA 1041 - Standard for Fire and Emergency Services Instructor Professional Qualifications

This standard identifies the minimum job performance requirements (JPRs) for Fire and Emergency Service Instructors. As part of the Emergency Response and Responder Safety Document Consolidation Plan, this Standard has been combined into new consolidated Standard NFPA 1020.

NFPA 1020 - Standard for Fire and Emergency Services Instructor, Fire Officer, and Emergency Medical Services Officer Professional Qualifications

- This standard identifies the minimum job performance requirements (JPRs) for Fire and Emergency Service Instructors, Fire Officers, and EMS Officers. As part of the Emergency Response and Responder Safety Document Consolidation Plan, this Standard has been combined with others into new consolidated Standard NFPA 1020.

2.3.1.3 Fire Marshal Communiques

The Fire Marshal's communiques[14] are distributed to all Ontario fire departments to convey high priority, fire safety information. They are used to inform and provide updates on fire regulation guidance and fire safety information.

It is important that all Fire Chiefs and those firefighters in leadership positions are aware of the communiques and review them periodically to ensure the fire department and the municipality are meeting their fire service obligations and are compliant with any new requirements.

Relevant information identified in Fire Marshal Communiques should be provided to all firefighters as part of a regular training program.

2.3.1.4 Technical Guidelines and Reports

The Fire Marshal produces technical guidelines[15] and reports on key topics that support the interpretation, understanding and adoption of fire safety and fire prevention standards. These guiding documents comprise best practice doctrine for Ontario fire departments. The technical documents are published when appropriate and as needed.

The focus of much of this information relates to compliance with legislation, the fire code and community risk reduction in general. It is of particular interest to municipal fire service leadership, fire inspection, code enforcement, public education, and fire investigation members.

Information relevant to firefighters which is identified in Fire Marshal technical guidelines and reports should be provided to all firefighters as part of a regular training program.

2.3.2 Training Programs

2.3.2.1 Recruit Training

Background

Firefighter selection and training is an important part of every fire service organization regardless of their size or structure. Every firefighter plays an important role in supporting the community, their valued contribution is often enjoyed for many years. Regardless of whether the firefighter is a full time or volunteer member, the cost to the municipality to train and equip

[14] https://www.ontario.ca/page/office-fire-marshals-communiques-and-bulletins Accessed January 16, 2025

[15] https://www.ontario.ca/page/fire-safety-legislation-and-ontarios-fire-code Accessed January 16, 2025

each member is significant. It is imperative that firefighter selection and training programs are robust to ensure that each member selected will be successful in completing the program and contributing to the organization in a meaningful way.

Recruit firefighter training programs are best developed considering the applicable NFPA standards for guidance. Many of these standards are identified in the preceding section.

A recruit training program should consider the core services that the department is providing and the job description for the position., In Ontario, O. Reg. 343/22[16] establishes the minimum job performance requirements for a new member of the fire service, and this should be the basis used for the development of the program. This regulation will be in force July 1, 2026, and July 1, 2028, and stands today as the consensus best practice for certification minimums.

When seeking recruit firefighters, a job description which accurately reflects the requirements of the position should be made available to applicants. The selection process should consider all the required requirements of the position including the physical and mental requirements along with the ability to pass a criminal record and vulnerable sector check.

Recruit firefighter training programs should ensure that all firefighters are licensed to safely and efficiently operate fire apparatus. Those fire departments whose organizations are comprised predominantly of volunteer firefighters should study the information provided in the Firefighter Fatality and Prevention Program of the Centre for Disease Control in the US (CDC)[17] for valuable insight including contributing factors and key recommendations relating to volunteer firefighter deaths relating to emergency vehicle operation.

Firefighters can experience incredible mental stress as a result of their work as an emergency responder. In addition to the municipal requirements for having a post-traumatic stress disorder plan in which considers prevention, intervention, and recovery/return to work, fire service organizations should consider the mental resilience of new recruit firefighters prior to making an employment decision.

Some municipalities use formal agreements for volunteer firefighters to ensure clarity and compliance with provincial regulations. Additionally, Ontario's firefighter certification requirements emphasize standardized training and service levels, which could be incorporated into such agreements.

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[16] O. Reg. 343/22 FIREFIGHTER CERTIFICATION | ontario.ca Accessed January 22, 2025, https://www.ontario.ca/laws/regulation/r22343

[17] CDC - Firefighter Fatality Investigation and Prevention Program: Investigation Reports - NIOSH Workplace Safety and Health Topic Accessed January 23, 2025 https://wwwn.cdc.gov/NIOSH-fire-fighter-face/Default.cshtml?state=ALL&Incident_Year=ALL&Medical_Related=ALL&Trauma_Related=0019&Submit=Submit

Current Situation

CHFD does not currently have a documented recruit training program in place. Fire Department Policy #211 "Training Policy", while not specifically for recruit firefighters, indicates that it is the policy of the fire department to "provide the training deemed necessary to keep the skills of the firefighter current." This policy was last revised more than 10 years ago and provides outdated references on the standards that firefighters are currently trained and certified to.

The current job description for the position of firefighter identifies that that firefighters must have the physical and mental capacity to perform the work including the ability to work while wearing protective equipment including self contained breathing apparatus. The job description does not detail the types of activities firefighters are expected to be able to perform but provides the job requirements in general terms including the operation and maintenance of fire apparatus and taking direction and working as a team in fire prevention and educational activities as well as fire fighting. The job description does not identify any conditions of employment such as pre-employment physical and mental screening and the ability to obtain clear criminal records and vulnerable sector checks.

The current recruit firefighter selection process involves only an interview with unknown criteria for the determination of suitability. It is unknown if any criteria are applied to determine suitability prior to making the significant investment in bringing new recruits into the organization. The recruit selection process does not identify any objective minimum requirements for the position of firefighter.

The current program for recruit firefighter training and certification in Centre Hastings could not be reviewed by EMG as no written program or syllabus exists. Discussions with the Fire Chief did identify that several important gaps in training exist. There was no training on the following:

- Fire apparatus operations training - NFPA 1002 (including licensing),
- Occupational health and safety,
- Fire legislation,
- Training in occupational stress and PTSD in the fire service.

A review of fire service training records revealed several concerns. Records could not be provided which identified the training for each recruit firefighter. The records do not provide clear information detailing the content and any measurable outcome of the recruit training. Despite having several uncertified recruit firefighters there does not seem to be a recruit specific training program in place.

Opportunities

The current job description for firefighter should be reviewed and updated to identify more succinct job duties and conditions of employment.

The recruit firefighter selection process should be made more robust. It should consider the following:

- Identification of minimum requirements for the position firefighter.
- Adding a performance contract prior to bringing new firefighters into the organization.
- Adding a process to the selection process to add in determining suitability for the position based on objective candidate physical, cognitive and personality testing.
- Adding the requirement for a police vulnerable sector check.

A recruit firefighter training program should be developed which takes into consideration the following:

- Relevant Ontario firefighter training certifications
- Job description for the position of firefighter
- Job functions of the position as required by the Establishing and Regulating Bylaw
- Familiarity with all policies and procedures
- Familiarity with all appropriate Occupational Health and Safety regulations
- Familiarity with all fire department apparatus and equipment for which they may be responsible
- Operation of fire department apparatus on emergency responses
- Workplace hazards for firefighters including occupational illness
- Psychological health training

In collaboration and support of a revised CHFD recruit firefighter training program, consideration should be given to sending new firefighters to an Ontario Fire College regional training centre for firefighter training and testing related firefighter certification. This may improve efficiency in some circumstances, balancing an increased cost with vastly improved timelines for providing the necessary training and gaining valuable fire ground resources in a much timelier manner.

2.3.2.2 Annual Maintenance Training

Background

Annual maintenance training with respect to firefighting generally refers to the practice of maintaining the skills and knowledge firefighters have regarding the foundational tasks of the position as identified both the job description for firefighters and fire officers as well as the exercising the skills required as identified in the establishing and regulating bylaw of the fire department.

The Establishing and Regulating By-law identifies some of the following as the types of fire suppression and emergency response services to be delivered:

- Offensive and Defensive fire suppression
- Fire scene search and rescue operations
- Forcible entry
- Ventilation
- Salvage and overhaul
- Emergency pre-hospital care including first aid, CPR, and defibrillation
- Special Operations including hazardous materials response, water, and ice rescue
- Auto extrication and vehicle fire fighting
- Wildland firefighting

All skills and related knowledge must continually be exercised and updated to ensure the competence and safety of emergency responders as well as ensure the ability of the fire department to meet its obligation as identified in the establishing and regulating bylaw and the tiered response agreement with Hastings County. Additionally, training in skills that support fire prevention and public education for firefighters is required.

Annual training programs provide for an organized and recorded means to introduce new equipment and practices. They provide for a documented opportunity to review internal operational and safety policies and procedures. Annual training programs provide a means to periodically review critical firefighter health and safety guidance such as the Ontario Fire Service Health and Safety Advisory Committee Guidance Notes.

An annual maintenance training program for firefighters should be comprehensive and not only equips firefighters with technical skills but also ensure their well-being and safety throughout their careers.

An annual maintenance training program for firefighters should include focus on health and safety and consider the following key components:

- Physical Health and Fitness: Emphasize fitness routines, nutritional guidance, and conditioning to prepare firefighters for the physical demands of the job.
- Mental Health and Resilience: Include stress management techniques, coping mechanisms for traumatic events, and strategies to build mental toughness.
- Safety Practices: Focus on the use of safety equipment, adherence to standard operating procedures, and risk management during emergency situations.
- Hazard Awareness and Prevention: Provide knowledge about fire behavior, hazardous materials, and environmental dangers to reduce risks on the field.
- Injury Prevention and Recovery: Train on injury prevention techniques and offer guidance on recovery and rehabilitation from common job-related injuries.
- Peer Support and Team Dynamics: Stress the importance of strong teamwork and support systems among colleagues for both safety and morale.
- Continuous Education: Highlight opportunities for ongoing learning, including the latest tools, technology, and research in firefighter health and safety.

Annual training programs should be designed to help trained and certified recruit firefighters continue their professional development as volunteer firefighters and should ultimately help prepare them for future career development as leaders and officers in the fire department.

Current Situation

- EMG did not identify an annual training program to ensure that each firefighter completes documented participation in an annual training program or syllabus of training to ensure proficient skills and knowledge are maintained.
- EMG did not identify a requirement for all firefighters to take part in annual live fire or SCBA training.
- EMG did not identify a program in the CHFD on firefighter survival and self rescue as identified in *Section 21 Guidance Note 7-4 Firefighter survival and self-rescue training.*[18]
- EMG did not identify a program which ensures the firefighters are aware of the critical health and safety information contained in the Ontario Fire Service Health and Safety Advisory Committee Guidance Notes.

[18] 7-4 Firefighter survival and self-rescue training | Firefighter guidance notes | ontario.ca Accessed March 21, 2025, https://www.ontario.ca/document/firefighter-guidance-notes/7-4-firefighter-survival-and-self-rescue-training

Opportunities

- CHFD should consider the preparation and implementation of an annual training program for firefighters. The program should provide the necessary skills and knowledge to ensure that firefighters can safely and effectively provide the community with the services identified in the establishing and regulating by-law and the medical tiered response agreement.
- CHCD should consider include a focus on health and safety as a component of it's an annual maintenance training program for firefighters.
- CHFD should consider a program which ensures that all firefighters take part in periodic live fire training and the use of SCBA.
- CHFD should consider a program which ensures that all firefighters are provided with firefighter survival and self rescue training.
- CHFD should consider a program which ensures that all firefighters regularly review important health and safety information which relates to firefighting including the Ontario Fire Service Health and Safety Advisory Committee Guidance Notes.
- The Fire Chief should ensure that training plans are developed in accordance with Health and Safety Advisory Committee Guidance Notes for each training course and subject covered to ensure safe and consistent training.

2.3.3.3 Hazardous Materials Training

Background

The term Hazardous Materials refers to substances which are intrinsically dangerous or otherwise poses a safety hazard. Some examples are materials which are explosive, poisonous, chemically active, radioactive, or biologically active.

In Ontario, training is required for all firefighters regarding response to hazardous materials incidents. This training is required to ensure the safety of the responders and the public. The establishing and regulating by-law for the service has determined that the fire department is not deemed to be a full-service fire department, in that it limits the training and response of the fire department to the awareness level only.

To ensure timely access to hazardous materials response in the event of an incident, the community would need to request assistance from another community with the necessary capabilities. This support is facilitated through a prearranged agreement that addresses any legal or financial obligations.

Current Situation

Firefighters receive training to the awareness level of hazardous materials response. This is an online course provided through the OFM. There is no annual maintenance training program which includes hazardous materials awareness training.

Centre Hastings does not currently have an approved agreement with another community for hazardous materials response.

Opportunities

Centre Hastings should pursue an approved agreement with another community for hazardous materials response.

Centre Hastings should ensure that all firefighters are trained in updated and reviewed SOPs which deal with hazardous materials responses or any response which may expose firefighters to a situation where it may be possible to exceed their level of training or certification regarding hazardous materials response.

2.3.3.4 Technical Rescue Training

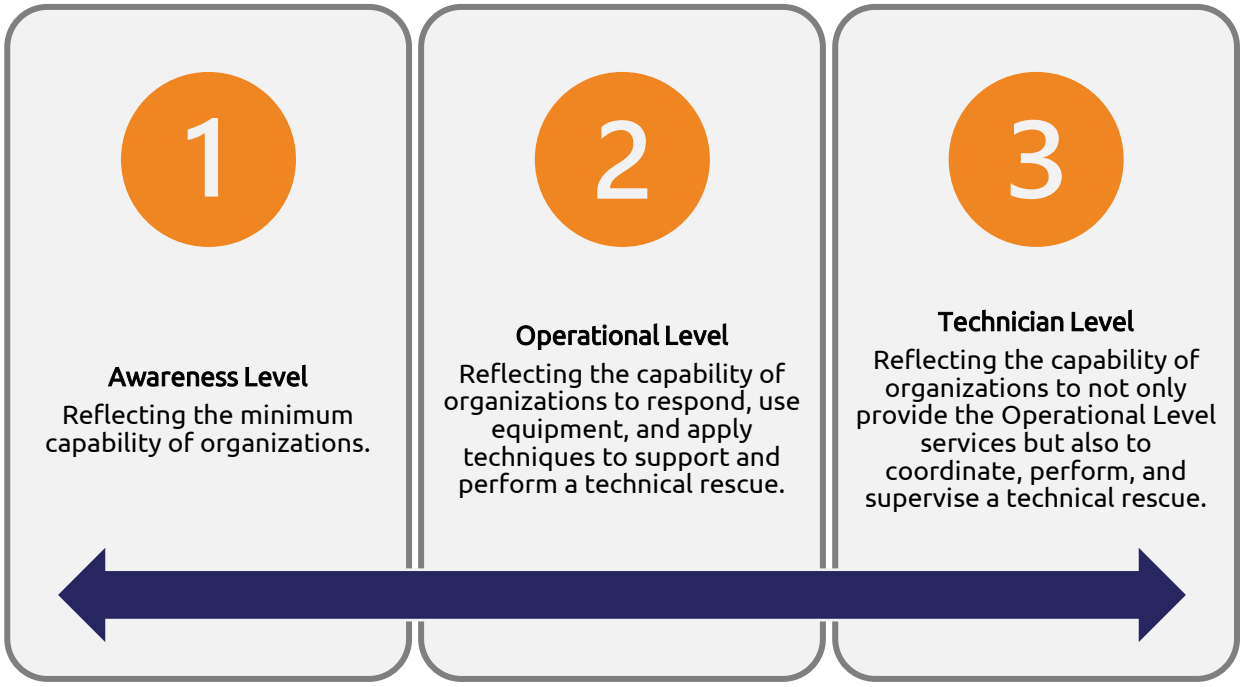
Background

Technical Rescue refers to a broad range of specific emergency responses which a fire service could be called to. NFPA 1006 - *Standard for Technical Rescue Personnel Professional Qualifications* is the relevant standard for consideration for any personnel involved in these specific technical rescue incidents.

The standard contains the following chapters:

The standard identifies that the fire department must establish written SOPs which align with the operational level identified for each of the technical rescue responses it will be responding to.

The three operational levels identified are:



The establishing and regulating bylaw establishes the list of core services which the council has identified shall be delivered by the fire department. The services listed in the bylaw provide the foundation of the response types of the fire department. The bylaw also specifically identifies specific types of technical rescue services which shall not be provided by the fire department.

Any training program which deals with technical rescue should consider NFPA 2500 - Standard for Operations and Training for Technical Search and Rescue Incidents and Life Safety Rope and Equipment for Emergency Services or its predecessor NFPA 1670.

Electric and Electrified Vehicles

The fire service must prepare firefighters for incidents involving electric vehicles. In December of 2023, Ontario had 150,000 electric vehicles registered[19]. Estimates are that by 2030, one

[19] Ontario Making it Easier to Build Electric Vehicle Charging Stations | Ontario Newsroom Accessed February 20, 2025 https://news.ontario.ca/en/release/1004197/ontario-making-it-easier-to-build-electric-vehicle-charging-stations

million electric vehicles will be registered in the province. U.S. Automakers say they hope to have 40% to 50% of new vehicle sales to be Electric Vehicles by 2030[20].

Electric vehicles run on high-voltage lithium-ion batteries, which can result in dangerously high temperatures when involved in fire. Firefighters are also at risk of electric shock when dealing with electric vehicles during a motor vehicle collision or fire.

Small vehicles such as electric scooters and bicycles are also a concern. One apartment building in Toronto banned all types of electric vehicles from their property due to this increasing risk.[21]

Current Situation

It is imperative that policies and procedures be established to provide the guidance needed by emergency responders to ensure they respond in a safe and effective manner which meets the objectives of the fire department. A review of the current CHFD policies and procedures for technical rescue by EMG identified that many provide limited guidance for dealing with technical rescue situations which fall within the scope of their training and no guidance for dealing with technical rescue situations outside of the scope of their training.

It is important that the Fire Chief anticipate what other calls for service would be reasonable to anticipate and provide training and/or direction with supporting policy/procedures for these anticipated types of calls for service. In some cases, this will mean training to only the minimum level (Awareness Level) to ensure the safety of emergency responders. In this case other arrangements are required to ensure mitigation of the event.

When a particular type of emergency response is anticipated and the fire department does not provide this service, other arrangements for the emergency response are required. In most cases this requires an agreement with a neighbouring community in the form of a mutual aid agreement or an automatic aid agreement.

CHFD does not currently conduct any training on the considerations and hazards involved in electric or alternative fuel vehicles.

[20] U.S. automakers to say they aspire to up to 50% of EV sales by 2030 -sources | Reuters Accessed February 20, 2025 https://www.reuters.com/business/autos-transportation/us-automakers-say-they-aspire-up-50-ev-sales-by-2030-sources-2021-08-04/

[21] A Toronto landlord is banning electric vehicles on its property. Tenants' advocates say that's 'unreasonable' | CBC News Accessed February 20, 2025, https://www.cbc.ca/news/canada/toronto/e-scooters-ban-parkdale-building-tenants-1.6966666

Opportunities

- The Fire Chief should review and update all policies and procedures to ensure that they support a safe, timely and effective response.
- The Fire Chief should identify any technical rescue training needs for the fire department and make the necessary plans to support and implement the training.
- The Fire Chief should identify any technical rescue training needs for the fire department that are not reasonable to be provided by the fire department or that may be beyond the technical ability of the fire department and make the necessary plans to support and implement the training.
- The Fire Chief should ensure that an approved automatic aid or mutual aid agreement is put in place to address support for response to technical rescue events in the community which are beyond the scope of the local fire department.
- CHFD should consider taking the NFPA online training course - Alternative Fuel Vehicles Training Program for Emergency Responders[22].

2.3.3.5 Incident Command Training

Background

Emergency responses are managed using the incident management system (IMS), in the fire service this is normally called the Incident Command System (ICS). ICS is a standardized approach to managing emergency incidents, ensuring efficient and effective coordination among various responding agencies.

ICS is designed to enhance coordination, improve resource management, and ensure a clear chain of command during emergency responses[23].

Some of the important aspects of the ICS are noted below. For most of the incidents that CHFD will respond to, the expanded roles identified below will not be needed. It is important, however, that the system be well understood and scaled up or down as appropriate.

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[22] NFPA Alternative Fuel Vehicles (AFV) Training Accessed February 20, 2025 https://www.nfpa.org/for-professionals/training-for-me/buy-alternative-fuel-vehicles-training#aq=%40culture%3D%22en%22&cq=%40subtopics%3D%3D(%22Electric%20vehicles%22)%20%20%40tagproductcategories%3D%3D(%22Online%20Training%22)%20&numberOfResults=12&sortCriteria=%40title%20ascending

[23] Fire Incident Command System: Your Ultimate Guide | WFCA Accessed February 13, 2025, https://wfca.com/preplan-articles/incident-command-system/

- Structure and Roles: ICS is organized into five major functional areas: Command, Operations, Planning, Logistics, and Finance/Administration. Each area has specific responsibilities to ensure a comprehensive response.
- Incident Commander: The Incident Commander (IC) is responsible for overall management of the incident. They establish objectives, make strategic decisions, and ensure safety.
- Command Staff: This includes roles like Public Information Officer, Safety Officer, and Liaison Officer, who support the IC by managing specific aspects of the incident.
- General Staff: This includes the leaders of the Operations, Planning, Logistics, and Finance/Administration sections. They manage their respective areas and report to the IC.
- Flexibility and Scalability: ICS can be scaled up or down depending on the size and complexity of the incident. It can be used for small, routine emergencies as well as large-scale disasters[24].
- Unified Command: In situations involving multiple agencies or jurisdictions, a Unified Command structure allows for joint decision-making and resource sharing.

Emergency scene safety is the single most important component to incident command. NFPA 1561 - Standard on Emergency Services Incident Management System and Command Safety[25] addresses it this way in 4.1 *"The incident management system shall provide structure and coordination to the management of emergency incident operations to provide for the safety and health of emergency services organization (ES) responders and other persons involved in those activities."*

In Ontario, Incident Safety Officer certification is required for identified staff who's regular and expected assignment at an emergency incident could be incident Safety Officer. O. Reg. 343/22 Firefighter Certification provides the details on this requirement. Section 21 Committee Guidance Note 2-4 Incident Safety Officer[26] also informs on how to best address this issue. It also identifies the following actions for employers:

- when a safety sector should be established

[24] Command and Control of Incident Operations-Student Manual Accessed February 13, 2025, https://apps.usfa.fema.gov/ax/sm/sm_0312.pdf

[25] NFPA 1561 Standard Development Accessed February 28, 2025, https://www.nfpa.org/codes-and-standards/nfpa-1561-standard-development/1561

[26] 2-4 Incident safety officer | Firefighter guidance notes | ontario.ca Accessed February 28, 2025, https://www.ontario.ca/document/firefighter-guidance-notes/2-4-incident-safety-officer

- how the ISO is to be identified at the scene
- the roles and responsibilities of an ISO
- the training a worker must receive prior to being assigned as an ISO
- who should be appointed ISO
- when and under what authority the ISO can unilaterally alter, suspend, or terminate dangerous or life-threatening operations
- that the presence of an on-scene ISO in no way diminishes the responsibility of individual officers and the IC for the safety of workers under their direction, and
- how the ISO will integrate with the communication system being used

A fire department member assigned the role of incident safety officer could be a company officer or qualified acting officer with the skills and knowledge to perform the duties. Departments should have policies and procedures in place to outline expectations and assist incident commanders in determining when to establish an incident safety officer, what their expected role supporting the incident commander is, and who is qualified to be assigned the role of incident officer.

Recently, NFPA consolidated several of these key standards which relate to incident safety officers, incident command, and firefighter health and safety. The newly consolidated standard is NFPA 1550 – Standard for Emergency Responder Health and Safety[27]. This standard is the contemporary standard of reference for reviewing an organization's practices in this regard.

A common incident command training program which has been established to assist fire departments define and deliver their incident command system and training program is the Blue Card online incident command training program[28] which marries the critical concepts of incident management, strategy and tactics, and firefighter safety with dynamic structure-fire simulations that require students to apply their knowledge.

Current Situation

- CHFD has several standard operating procedures (SOPs) in place which address the establishment of incident command at incidents as well as addressing some incident command tasks. The SOPs do not address all types of incidents that the fire department responds to, nor do they address all key features of a functional and effective ICS.

[27] NFPA 1550 Standard Development Accessed February 28, 2025, https://www.nfpa.org/codes-and-standards/nfpa-1550-standard-development/1550

[28] Blue Card - Firefighting Incident Command Training & Continuing Education Accessed February 13, 2025, https://bshifter.com/

- CHFD has a SOP 2-4 Incident Safety Officer which identifies the procedure for establishing an incident safety officer and a safety sector at emergency scenes. There is no requirement for the Incident Safety Officer to be certified in accordance with the provincial regulation.
- There is no current formal and practical incident command training program in place.

Opportunities

- CHFD should review and update any current ICS policies or procedures to ensure they reflect a system which is effective, safe and compatible with all mutual aid partners and the local Police and EMS partners. Policies should be established that ensure only incident command trained and competent supervisors are appointed at an emergency incident.
- CHFD should establish a formal ICS training program which ensures that all staff are trained in incident command and conversant in the incident command system. Consideration should be given to adopting a well-established ICS training program such as the Blue Card ICS.
- CHFD should begin the process of certification for all personnel who may be assigned the role of incident safety officer as a normal part of their duties.

2.3.3.6 Live Fire Training

Background

Special considerations should be made regarding the conduct of live fire training. Regular live fire training is important as it allows firefighters to practice both their individual skills such as the use of SCBA, hose handling and fire attack while also working as part of a team with coordinated efforts directed by an incident commander in a realistic setting.

It is important to ensure that live fire training and the facilities, training aids, or props are compliant with the relevant NFPA standards, such as the following:

- NFPA 1402 – Standard on Facilities for Fire Training and Associated Props
- NFPA 1403 - Standard on Live Fire Training Evolutions

The participation in live fire training ensures that all firefighters are prepared and proficient to safely participate as a member of a team in the dangerous activity of operating in an environment which is immediately dangerous to life and health (IDLH) while they use self contained breathing apparatus and conduct fire fighting, ventilations, and search and rescue activities in limited visibility.

All training activities should be supported by policies, procedures and personnel which ensure compliance with relevant NFPA standards and Section 21 Guidance Notes relating to live fire training.

The OFM Mobile Live Training Unit (MLFTU) is a state-of-the-art, propane-fueled simulator designed to provide realistic fire training scenarios. It is managed by Ontario Fire College instructors and funded by the Office of the Fire Marshal (OFM). Communities can access this unit at no cost, as it is funded by the province to ensure accessible training.

Current Situation

- CHFD conducts live fire training in various scenarios. Internal live fire training is conducted at the RTC in Trenton and external training is conducted at the training site in Centre Hastings.
- There is no policy which ensures that all firefighters participate in live fire training on a periodic basis.
- There is no policy in place which ensures that the training structures or props are compliant with the NFPA standards for live fire training evolutions (both internal and external).
- While some training records are currently being maintained the completeness of the records does not meet the requirements of the NFPA standards.
- There are no by policies or procedures in place to ensure live fire training is conducted in compliance with relevant NFPA standards and Section 21 Guidance Notes.

Opportunities

- CHFD should establish a policy which ensures that all firefighters participate in live fire training on a periodic basis.
- CHFD should establish a policy which ensures that the training structures or props are compliant with the NFPA standards for live fire training evolutions (both internal and external).
- CHFD should establish a policy to ensure that training records which meet the requirements of the NFPA standards are maintained.
- CHFD should establish policies and procedures to ensure live fire training is conducted in compliance with relevant NFPA standards and Section 21 Guidance Notes.
- CHFD should consider the use of the OFM Mobile Live Training Unit for conducting live fire training within the community.

2.3.3.7 Officer Development and the Promotional Process

Background

The fire service is an emergency response organization, and its success is measured by its ability to respond swiftly, safely, and effectively to life-threatening situations. This includes making strategic and tactical decisions while taking actions that, at times, put the lives of emergency responders at risk. It is imperative that the organization be highly functional. The key to success in this regard is its leadership.

As a paramilitary organization, the fire service utilizes a rank structure for its members to assign roles and responsibilities within the organization. Members wear uniforms which both identifies them as fire service members to the public and identifies and distinguishes those in supervisor and leadership positions.

At emergency scenes and while training, it is important to have enough company officers assigned and identified so as to ensure a safe and effective span of control can be maintained. The Occupational Health and Safety Act[29] requires that employers are required to ensure that trained and competent supervisors are assigned to oversee workers. In Part II, Section 25, Subsection 2, "Without limiting the strict duty imposed by subsection (1), an employer shall "(c) when appointing a supervisor, appoint a competent person".

A system for preparing members for more responsibility and leadership positions in the fire department is important to ensure the organization can function effectively and has the personnel to safely respond to emergencies at all times. It is important for the members of the fire department to know that they are valued and supported as a component of a well-functioning organization.

Current Situation

- There is currently no formal officer development program in place in the CHFD. Fire Officer training is made available to members to ensure compliance with Ontario fire training certification requirements but not as part of a program to develop incident commanders, emergency scene supervisors and future fire department leaders.
- There are no formal officer selection or promotion criteria established. Promotions are made with a discussion at officer's meetings with no set criteria.

[29] Occupational Health and Safety Act, R.S.O. 1990, c. O.1 | ontario.ca Accessed February 17, 2025, https://www.ontario.ca/laws/statute/90o01#BK51

- While normal fire service supervisor positions are identified using traditional fire service names no fire service uniforms are used.

Opportunities

- CHFD should establish an officer development program to ensure compliance with occupational health and safety requirements, ensure efficient and effective emergency responses, prepare future fire department leaders, and support a well-functioning fire department organizational culture.
- CHFD should revise the current promotional process to include more criteria to ensure the best candidates are being supported and promoted to positions of leadership in the organization.
- CHFD should provide fire service fatigues and dress uniforms to all members which identify names and ranks. The wearing of uniforms should be compulsory for all fire department activities and should be supported by standard operating procedures.

2.3.3.8 Fire Prevention, Fire Investigation and Public Education Training

Background

Training fire department members in fire prevention, code enforcement, fire investigation, and public education is critical for fostering safer communities. The following outlines the importance of each area:

- Fire Prevention: By understanding fire risks and prevention techniques, firefighters can actively work to reduce the occurrence of fires, saving lives and property before emergencies happen.
- Code Enforcement: Familiarity with fire codes allows firefighters to ensure compliance and minimize fire hazards in structures, safeguarding the public and first responders.
- Fire Investigation: Training in fire investigation helps identify causes of fires, whether accidental or intentional. This knowledge aids in preventing future incidents and can provide critical information for legal processes.
- Public Education: Educating the community about fire safety, such as evacuation plans, importance of working smoke and CO alarms, and the proper use of fire extinguishers, empowers individuals to protect themselves and prevent emergencies.

Incorporating these areas into firefighter training ensures a holistic approach to safety—preventing fires, ensuring structures are secure, understanding fire causes, and equipping the public with life-saving knowledge.

Further to the above noted considerations, in accordance with Ontario Regulation 343/22: Firefighter Certification, every municipality must ensure that firefighters who perform certain fire protection services are certified to minimum standards, certification is required for those personnel whose regular duties require that they perform the tasks identified in the legislation.

The Ontario Fire Code retrofit language was designed to enhance fire safety in existing buildings by requiring upgrades to meet modern safety standards. It focuses on improving features like fire alarms, sprinklers, fire-resistant materials, and safe exit routes. Essentially, it ensures older buildings are brought up to date with current fire safety requirements, reducing risks and protecting occupants. Without a qualified and competent fire prevention officer conducting proactive fire inspections of these properties, the fire and life safety risks of these old buildings will remain.

A qualified fire investigator is essential for a fire department to determine the origin and cause of fires accurately. Their expertise helps identify potential arson cases, prevent future incidents through safety recommendations, and provide credible evidence for legal and insurance purposes. This role ensures thorough investigations that uphold public safety and trust.

Current Situation

The establishing and regulating bylaw of the CHFD indicates that the fire department meets the minimum obligations identified in the Fire Prevention and Protection Act and provides the following services related to fire prevention and public education:

- Inspections arising from a complaint or request.
- Inspections to ensure properties are compliant with retrofit requirements.
- Plans review with respect to fire protection systems
- Inspection of new construction
- The provision of smoke alarms to those in need – unqualified criteria
- Residential home fire safety awareness - unspecified
- Distribution of fire and life safety awareness information – unspecified
- Public education programs - unspecified
- The officer currently assigned as Fire Prevention Officer has recently been assigned the role and is still in training. The Fire Chief has some fire prevention training and continues in this role in addition to his existing duties.
- CHFD members have not yet received training to conduct fire code retrofit inspections.

- CHFD members have not been trained in fire code enforcement in accordance with recognized practices in Ontario and the Office of the Fire Marshal's Technical Guideline OFM-TG-01-2012.
- CHFD members have not been trained to review fire protection systems in new building permit applications.
- CHFD members are currently not trained to inspect commercial cooking equipment in compliance with the Ontario Fire Code and NFPA 96 – *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*.
- CHFD members are not qualified to NFPA 1033 – *Standard for Professional Qualifications for Fire Investigator* to perform fire investigations.
- CHFD members are not certified to *NFPA 1035 – Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist, and Youth Firesetter Program Manager Professional Qualifications* for delivering public education in the community.

Opportunities

- A comprehensive training strategy should be established to ensure that the officer currently assigned as Fire Prevention Officer is provided with the necessary training and education to effectively manage the fire prevention, code inspection, and enforcement strategy of the CHFD.
- The fire prevention officer should be trained in all aspects of the Ontario fire code including the requirements of retrofit inspections.
- The fire prevention officer should be trained to conduct fire code enforcement activities in accordance with OFM doctrine.
- The fire prevention officer should be trained to conduct fire protection system reviews of new plans for new building permit approvals.
- The fire prevention officer should be trained to conduct inspections of commercial cooking equipment.
- The fire prevention officer should be qualified to *NFPA 1035 - Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist and Youth Firesetter Program Manager Professional Qualifications.*
- Consideration should be given for the fire prevention officer to be qualified to *NFPA 1033 - Standard for Professional Qualifications* for Fire Investigator to conduct fire investigations.

2.3.4 Training Facilities and Supports

2.3.4.1 Training Facilities

Background

Regardless of whether they are career or volunteer, when responding to an emergency, firefighters are required to be immediately proficient in a myriad of skills in order to meet their obligation to the community. The only way to ensure their abilities are sharp is to continually train. Training facilities which closely represent real situations, and which can be used repeatedly are an important component of a successful firefighter training program.

The obvious challenge in a small community is the cost of constructing and maintaining such a facility. Where it is not possible to maintain a live fire training facility, arrangements should be established for the use of a facility in a neighbouring community.

In addition to participating in realistic live fire training activities as noted previously, firefighters should regularly participate in other emergency response training such as water and ice rescue and auto extrication training. This training can more easily be facilitated in-house and use either training sites owned by the municipality or other public or private sites.

It is important to ensure that, in addition to live fire training facilities, other facilities, training aids, or props are compliant with the relevant NFPA standards, such as the following:

NFPA 1402 – Standard on Facilities for Fire Training and Associated Props

NFPA 1403 - Standard on Training for Emergency Scene Operations

NFPA 1410 - Standard on Training for Emergency Scene Operations

Other guidance for the training sites and facilities can be found in the occupational health and safety Section 21 Committee Guidance Notes. In particular Guidance Note 7- 6 Training Centres[30] provides important information and direction for the establishment and operations of firefighter training facilities.

Current Situation

- Currently the CHFD conducts some live fire training at the Centre Hastings training facility with internal live fire training conducted at the RTC in Trenton.
- An acquired structure is used for some fire department training evolutions.
- Other training is conducted in public areas throughout the community.

Opportunities

- The Fire Chief should ensure that lesson plans and training plans are developed in accordance with Section 21 Guidance Note 7-1 Safe Training, for each training course and subject covered to ensure safe and consistent training.
- The Fire Chief should ensure that all fire service training facilities which are used for training firefighters in skills such as fire suppression techniques, search and rescue, confined space and other related procedures are compliant with Section 21 Guidance Note 7- 6 Training Centres and NFPA 1402 – Standard on Facilities for Fire Training and Associated Props.
- The Fire Chief should ensure that all firefighter training using acquired structures is done in compliance with NFPA 1403 - Standard on Training for Emergency Scene Operations.

2.3.4.2 Training Staff

Background

Training and the people who provide it are key in every fire department. In a small volunteer department, they are vital. They are responsible for ensuring that volunteer community members can be provided with knowledge and skills, on a part time basis, which will ensure they can safely perform a wide array of skills in sometimes challenging and life-threatening conditions.

Firefighter training is the bread and butter of activity in a volunteer fire department. It is important for the organization to identify and support all those members who can support

[30] 7-6 Training centres | Firefighter guidance notes | ontario.ca Accessed February 26, 2025, https://www.ontario.ca/document/firefighter-guidance-notes/7-6-training-centres

firefighter training. They should be provided with sufficient administrative, financial, and professional support to ensure they are effective in their role.

Current Situation

- The organization chart for the CHFD identifies one training officer. It is not confirmed if this individual is certified as a training officer in accordance with Ontario Regulation 343/22 – Firefighter Certification. This is a volunteer position as are all positions with the exception of the Fire Chief.
- Fire Department Policy #211 – Training Policy identifies that training is based on the International Fire Service Training Association (IFSTA) Essentials of Fire Fighting syllabus. The policy identifies that training will be "signed off" by the Deputy Chief, Chief Training Officer and or a Trainer Facilitator.
- Currently only the Fire Chief and one of two Deputy Fire Chiefs are certified as a training officer in accordance with the firefighter certification legislation.
- A position description which identifies the position of Training Coordinator was provided to EMG. The position description is comprehensive but does not identify any requirement for certification to Training Officer I or II.

Opportunities

- The Fire Chief should review and update policy #211 Training Policy to identify the role of training officers in the department and provide updates references to the contemporary training curriculum.
- The Fire Chief should ensure that sufficient members of the fire department are provided with the opportunity for Training Officer certification to ensure the training needs of the fire department can be met.
- The senior training division officer and any chief officer with responsibility for the training division should be certified to Training Officer Level II of *NFPA 1041 - Standard for Fire and Emergency Services Instructor Professional Qualifications*.
- The Fire Chief should seek opportunities to partner or collaborate with neighbouring fire service organizations on training where all CHFD training and safety requirements can be met.

2.3.4.3 On-line Training

Background

Due to the nature of the volunteer fire service, anything which can support improved access to training will enhance the effectiveness of the training program and improve the experience of the learner. Volunteer firefighters spend a significant amount of time away from their families during the evenings while participating in training sessions. Greater use of online training platforms is now becoming commonplace in the fire service.

Many of the online training platforms are customizable to individual fire service organizations and can meet a broad range of training needs. These training platforms provide the following:

- Customizable Training Plans – Fire departments can design tailored training programs using pre-built or personalized content to meet specific operational needs.
- Secure & Accurate Recordkeeping – The platform centralizes training records, ensuring necessary compliance and seamless certification tracking with real-time insights.
- Time-Saving Administration – Automates course assignments, tracking, and reporting, reducing paperwork and cutting administrative hours so departments can focus on preparedness and safety.

An example of one such training platform is provided by Vector Solutions[31].

Current Situation

The CHFD does not currently use an online training platform which provides the ability to host structured customizable training as well as track certification and compliance.

Opportunities

The Fire Chief should research available fire service online training platforms and seek support for the implementation of an appropriate platform in the organization.

[31] Fire Department LMS – Vector LMS Accessed February 27, 2025, https://www.vectorsolutions.com/solutions/vector-lms/fire/

2.3.5 Training Administrative Requirements

2.3.5.1 Operational Guidelines, Policies and Procedures

Background

The purpose and value of comprehensive administrative processes in firefighter training is to provide safe and effective training for all members. Clearly defined processes ensure that necessary standards are met, and internal goals and objectives are achieved. A strong administrative framework helps ensure compliance with all relevant standards and the fire service training doctrine.

To ensure all these important documents are up to date and relevant, some jurisdictions will establish a committee of senior fire service members to review and draft updated policies for approval by the Fire Chief.

All fire department operating guidelines, policies and procedures are relevant to firefighter and fire officer training.

Current Situation

The CHFD has a confusing list of operating guidelines, policies, and procedures (SOPs). In some cases, the documents require updating and in other cases several versions of the same policy exist. Some of the policies have very little substantive content and provide little guidance.

The Fire Chief has the sole responsibility to maintain the operating guidelines, policies, and procedures.

Opportunities

The Fire Chief should establish a committee of senior fire service members, including the senior training officer, to review and revise and draft new procedures for approval by the Fire Chief. This committee should be permanent and meet on a periodic basis.

2.3.5.2 Records and Records Management System

Background

The guiding doctrine for recording and retaining training records for fire department personnel is NFPA 1401 - Recommended Practice for Fire Service Training Reports and Records

This standard provides a structured framework for managing the training functions within a fire department. It offers fire service personnel clear definitions and guidelines for maintaining

records and reports, along with sample forms to aid in effective training administration. Additionally, NFPA 1401 outlines best practices for digitizing records and reports, as well as the legal considerations involved in record keeping.

Training records should clearly and accurately identify the following:

- Who – Who was the instructor, who participated, who was in attendance, who is affected by the documents, who was included in the training (individuals, company, multi-company, or organization)?
- What – What was the subject covered, what equipment was utilized, what operation was evaluated or affected, what was the stated objective, and was it met? this is typically represented by "Training Code" (e.g., Vehicle safety/emergency vehicle operations).
- When – When will the training take place, or when did the training take place?
- Where – Where will the training take place, or where did the training take place?
- Why – Why is the training necessary, or why did the training occur?

Training records should not be limited to the above points, but also include additional details such as the following:

- Source of the information used as a basis for the training – Textbooks title and edition, lesson plan title and edition, policy name and reference number, internet address, industry best practices, post-incident analysis (PIA), or other?
- Method of training used for delivery – Lecture, demonstration, skills training, self-study, video presentation, mentoring, drills(s), or other?
- Evaluation of training objectives – Written test, skills examination, or other?

In addition to creating the training records in a complete and easily readable format it is important that the records are secure and backed up. In most cases records are principally digital and computer systems should be backed up and secure to protect the records.

It is important that the records are reviewed and audited on a periodic basis to ensure that the needs of the organization are met.

In addition to this, the Occupational Health and Safety Act mandates that employers implement a record management system that includes documentation of employee training. Training records serve as proof of that the education and training has been provided to employees. The records must be complete and accurate should they are ever be reviewed by a legal authority.

In many cases, important records, such as training records, can me maintained in a digital records management system which may be either stand alone or combined with other

attributes important to the fire service such as fire inspections, asset management, exposure and critical incident monitoring, pre-incident planning, fire investigations, fire incident documentation, and data analytics.

Current Situation

- Centre Hastings currently uses a training records system which is principally paper based. The records are also recorded in FireQ RVS which is the cloud based digital records system. The system was reviewed by EMG and found to have some value but is limited in its capability. It is not known if the training records system component of FireQ is compliant with *NFPA 1401 – Recommended Practice for Fire Service Training Reports and Records.*
- While some training records are currently being maintained the completeness of the records does not meet the requirements of the NFPA standards.

Opportunities

- CHFD should implement a training records management system which is compliant with NFPA 1401, and which incorporates a digital record management system (RMS).
- CHFD should establish a policy to ensure that training records, which meet the requirements of NFPA standards, are maintained.
- The Fire Chief should review other RMS needs within the fire department to inform decision making on the implementation of an improved RMS which would provide more than training records management.

2.3.6 SCBA and Respiratory Protection Training Program

Background

A comprehensive SCBA and respiratory protection training program is essential for the safety, health, and effectiveness of firefighters in the challenging and hazardous work environments they face.

A training program in respiratory protection is crucial for firefighters for the following reasons:

- Health and Safety: Firefighters are often exposed to hazardous environments with smoke, toxic gases, and other airborne contaminants. Proper respiratory protection training ensures they know how to use equipment like masks and respirators to protect

their lungs and overall health. This is reinforced by the requirements identified in Section 21 Committee Guidance Note 4-9 Respiratory Protection Program[32]

- Compliance with Standards: NFPA 1500 – Standard on Fire Department Occupations Safety, Health, and Wellness Program[33] is the relevant consensus standard for respiratory programs and training.
- Effective Performance: Knowing how to properly use respiratory protection equipment allows firefighters to perform their duties more effectively. This includes maintaining clear communication, visibility, and mobility during firefighting operations.
- Emergency Preparedness: In emergency situations, quick and correct use of respiratory protection can be a matter of life and death. Training ensures that firefighters are prepared to handle such situations with confidence and competence
- Preventing Long-term Health Issues: Continuous exposure to harmful substances without proper protection can lead to chronic respiratory conditions and other health problems. Training programs help mitigate these risks by teaching firefighters how to protect themselves.

With regard to training in the use of respirators and SCBA. O. Reg. 833 Control of Exposure to Biological or Chemical Agents[34] identifies, amongst other requirements, the responsibility of employers to provide training and instruction on the following:

- Limitations of the respirator.
- Inspection and maintenance of the respirator, including, in the case of an air-purifying respirator, end of service life indicators or change out schedules for the cartridge, canister or filter.
- Proper fitting of the respirator.
- Cleaning and disinfecting the respirator.

In accordance with Section 21 Committee Guidance Note 4-9 Respiratory Protection Program a respiratory protection program should address the following:

- program administration, documentation, and evaluation

[32] 4-9 Respiratory protection program | Firefighter guidance notes | ontario.ca Accessed February 27, 2025, https://www.ontario.ca/document/firefighter-guidance-notes/4-9-respiratory-protection-program

[33] Free Access - NFPA 1500: Standard on Fire Department Occupational Safety, Health, and Wellness Program Accessed February 27, 2025, https://link.nfpa.org/free-access/publications/1500/2021

[34] R.R.O. 1990, Reg. 833 CONTROL OF EXPOSURE TO BIOLOGICAL OR CHEMICAL AGENTS | ontario.ca Accessed February 27, 2025, https://www.ontario.ca/laws/regulation/900833

- program administrator training
- training of persons administering fit testing
- proper use of Rapid Intervention/Universal Air Connections and other emergency procedures
- fit testing for all respirators every 2 years (quantitative fit testing for SCBA)
- air quality testing prior to filter change and following major service work, modifications, or extensive repairs
- under what conditions respiratory hazards arise, such as:
    - an unknown atmosphere that is suspected of being hazardous
    - a hazardous atmosphere, such as overhaul
    - an atmosphere that may rapidly become hazardous, such as wind change
    - working below ground level or inside a confined space (unless the safety of the atmosphere can be established by testing and continuous monitoring)
    - potential exposure to biological hazards
- potential use of longer duration SCBA cylinders based on risk assessment of larger and/or complex structures

Current Situation

EMG did not identify documentation supporting an established respiratory protection program. Operational Guideline 4-9 Personal Protective Equipment indicates the purpose of "*To develop a procedure to protect Firefighters while performing their duties at emergency incidents*." This OG does not meet the requirements of a respiratory protection program. In the procedure section of the OG, it is indicated that the employer should develop a respiratory protection program confirming that one does not exist.

EMG did identify a procedure detailing the fit testing protocol. This document was identified as Appendix D Fit Testing Protocol under the title of Centre Hastings Fire Department Respiratory Protection Program. No other program documents were identified. Appendix D did not identify how often each firefighter was required to complete the fit testing.

No records were provided demonstrating fit testing is completed on a regular basis.

Opportunities

The Fire Chief should work in consultation with the joint occupational health and safety committee or other health and safety representatives to develop and implement a respiratory

protection program which complies with the requirements identified in Section 21 Committee Guidance Note 4-9 Respiratory Protection Program.

2.4 Fire Suppression and Emergency Response

This report is completed with the understanding that Chief Snider has only been in this position since November of 2023.

The Centre Hastings Fire Department (CHFD) was formed in 1998 through the amalgamation of the Madoc Fire Department and the Huntingdon Township Fire Department in Ivanhoe. As of 2024, CHFD consists of two all-volunteer fire stations consisting of 50 firefighters.

The department follows a formal organizational structure, with the Fire Chief serving as the head of the department. The Fire Chief operates under the direction of the Council and reports directly to the Chief Administrative Officer (CAO). Fire services are provided to the two service areas from two fire stations.

- Station 1 - Located in Ivanhoe is staffed by 1 Deputy Chief, 1 Station Commander, 4 Captains, 1 Lieutenant, 12 Firefighters, 1 Fire Prevention Officer, and 1 Training Officer.
- Station 2 – Located in Madoc is staffed by 1 Deputy Chief, 1 Station Commander, 3 Captains, 2 Lieutenant, 1 Medical Officer, 12 Firefighters, and 1 Training Officer.

2.4.1 Current Firefighter/Officer Certification Levels

- NFPA 1001 Firefighter Level 1 there are 23 Firefighter/Officers certified
- NFPA 1001 Firefighter Level 2 there are 7 Firefighter/Officers certified
- NFPA 1021Fire Officer Level 1 there are 2 Officers certified
- NFPA 1021Fire Officer Level 2 there are 2 Officers certified
- NFPA CFI 1Fire Inspector Level 1 there are 3 Officers certified
- Haz-mat awareness Level there are 4 Officers certified
- Haz-Mat Operations Level there are 4 Officers certified
- There are 16 uncertified Firefighters on the department

Ontario Regulation 343/22 made under *the Fire Protection and Prevention Act, 1997* states that all firefighters will be certified by July 1, 2026. It is recommended that the 16 uncertified firefighters obtain their NFPA 1001 certification by this deadline.

The CHF provides twenty-four-hour emergency service 365 days a year with an all-volunteer fire fighting force. The primary services provided include firefighting and rescue operations. While technical rescue is performed at the awareness level, the CHFD also routinely provides additional services including medical assistance, hazardous materials (Haz-Mat) at the awareness level, assisting police, traffic control (fire police), fire prevention and public education.

Additionally, the CHFD enjoys an outstanding relationship with all the surrounding communities and fire service providers. It is an active participant in the Hastings/Prince Edward County Mutual Aid Plan and Program. This is a written mutual and automatic aid agreement with all surrounding communities. The CHFD is dispatched through the St. Catharines Fire Services Dispatch Center. Over the last three (3) years the CHFD has received mutual aid six (6) times and provided mutual aid twelve (12) times to its mutual aid partners.

Additionally, the CHFD has established a written policy (2014-206) that outlines the safe operation of emergency vehicles responding to emergency incidents, on scene, and while returning from incidents. This policy is designed to protect firefighters and members of the public when fire department vehicles are operating in emergency situations.

The CHFD has a policy in place for the implementation of a Safety Officer and a Safety Sector during emergencies. SOP 2-4 serves as the guideline which identifies the roles and responsibilities of the Safety Officer at any emergency the department responds to.

It was noted that the CHFD held a Superior Tanker Shuttle Certification, which expired on September 23, 2024. It is recommended that the CHFD apply for an updated Superior Tanker Shuttle Certification.

TABLE #7: INCIDENTS BY YEAR - PROPERTY LOSS – INJURY- BY YEAR

	2021	2022	2023	2024	Total
Number of Incidents	121	131	117	134	503
Fire Loss	$1,487,000	$1,378,300	$1,825,100	$356,200	$5,046,600
Civilian Injuries	0	0	0	1	1
Civilian Fatalities	0	0	0	0	0
Firefighter Injury	0	0	0	0	0
Firefighter Fatalities	0	0	0	0	0

TABLE #8: INCIDENTS BY YEAR AND TYPES

Incidents	2021	2022	2023	2024	Total
Total Calls	121	131	117	134	503
Loss Fire Structure	9	4	4	5	22
Loss Fire Other	2	0	3	4	9
Loss Fire Vehicle	1	8	5	2	16
No Loss Fire	5	10	9	4	28
Burning (controlled)	10	6	9	4	29
CO False Calls	2	4	2	14	22
False Fire Calls	15	17	20	23	75
Medical/Resuscitator Call	35	45	31	31	142
Other Response	16	17	9	10	52
Pre-Fire Conditions/No Fire	0	0	0	4	4
Public Hazard	14	8	8	9	39
Rescue	12	13	17	24	66

FIGURE #5 - STATIONS 1 AND 2 WITH CALL LOCATIONS 2021 - 2024

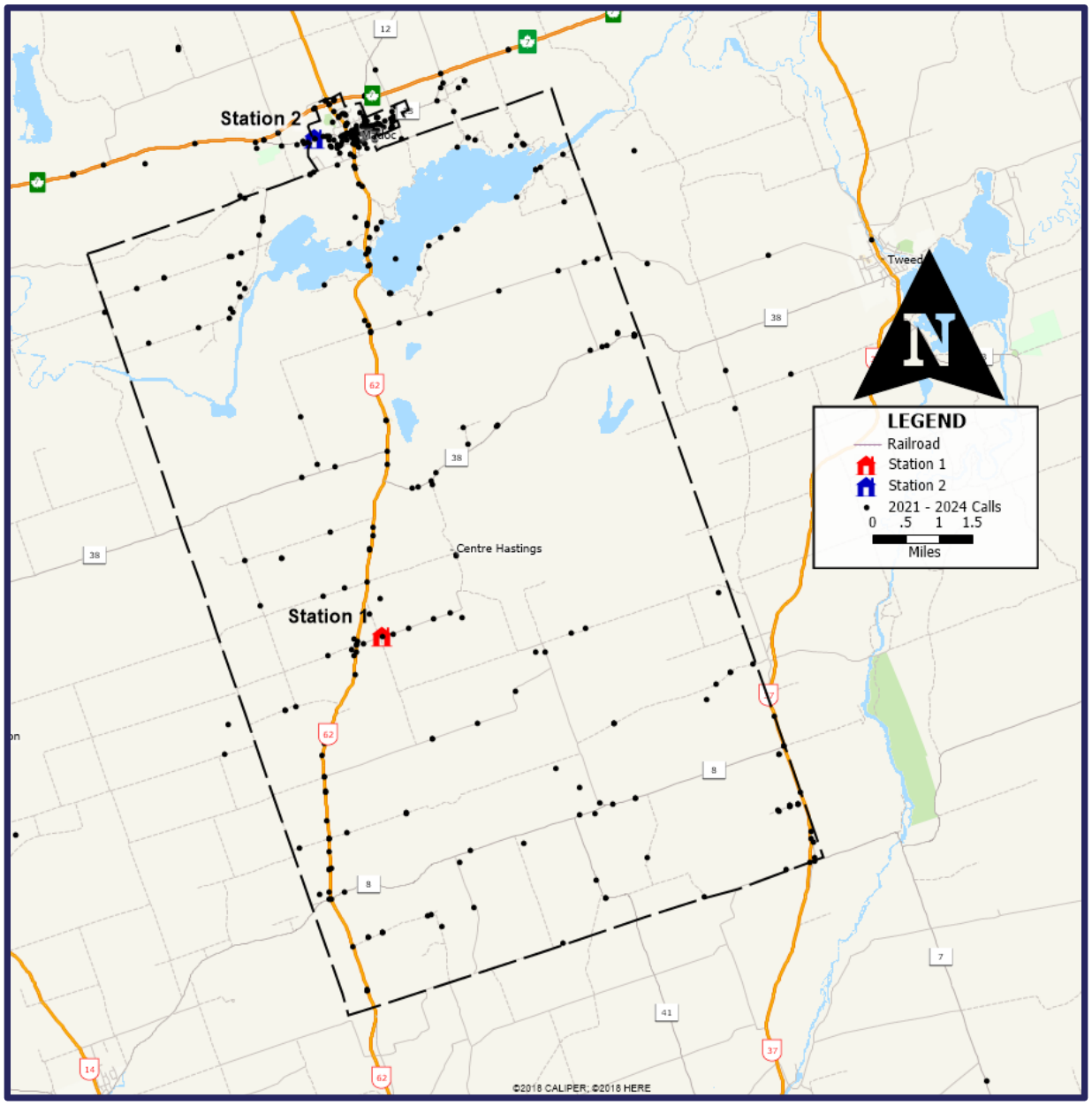
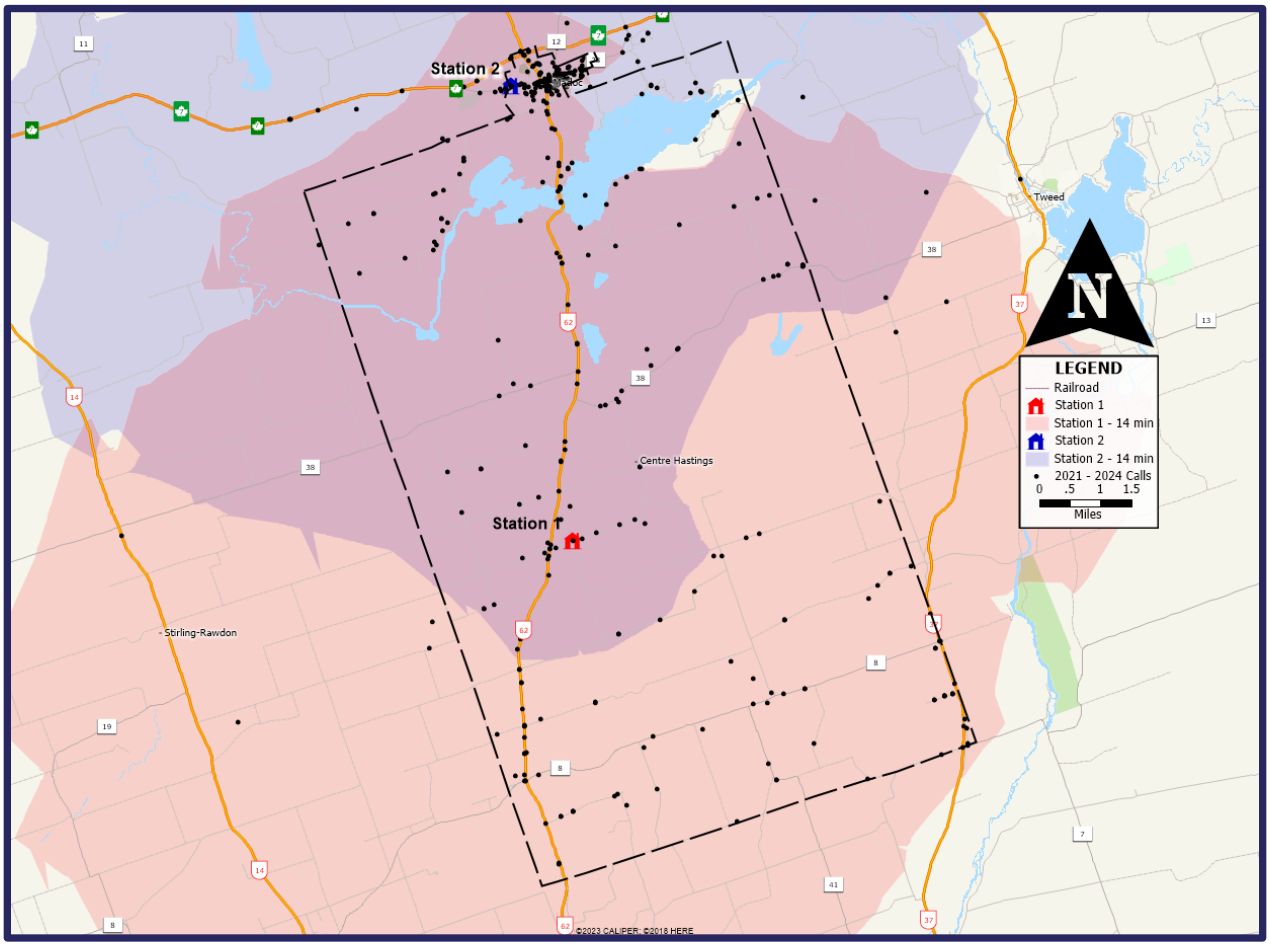


FIGURE #6 - STATIONS 1 AND 2 WITH CALL LOCATIONS AND 14-MINUTE TRAVEL TIMES



2.4.2 Fire Suppression

The CHFD is a composite department with the goal of protecting life, property, and the environment by providing excellent fire services and ensuring public safety. The Fire Chief is the only full-time employee, while all other members are volunteer.

Each Station has distinct response protocols based on its location in either a rural or suburban area. At Station 2 (the suburban area), members are directed to respond to the station, where all turnout gear is stored. At Station 1 (the rural station), firefighters are directed to respond directly to the scene once sufficient apparatus has been confirmed to be responding to an incident. Turnout gear is stored on the rescue unit, and firefighters dress on scene. Typically, Station 1 responds with one or two firefighters per truck, while Station 2 responds with four firefighters per truck. It was noted that there is no written policy in place outlining specific response procedures for firefighters from Stations 1 and 2 when a call comes in. It is

recommended that the department develop a written policy detailing how each station should respond to emergencies.

Additionally, it is recommended that that the department consider having the Station 1 firefighters respond to the station and deploy with the truck and crew. A firefighter arriving without equipment, other than a portable radio, may be limited in their ability to contribute effectively.

The Fire Chief indicated that the department aims to align its staffing levels and response strategies with the NFPA 1720 *Standard for Volunteer Fire Departments* as closely as possible. The table below outlines the key provisions of this standard.

TABLE #9: NFPA 1720 STANDARD FOR VOLUNTEER FIRE DEPARTMENT

	Demographics	Minimum # of Firefighters Responding	Response Time (Turnout + Travel) in Minutes	Performance Objective
Urban Area	>1000 people per square mile	15	9	90%
Suburban Area	500-1000 people per square mile	10	10	80%
Rural Area	<500 people per square mile	6	14	80%
Remote Area	Travel Distance + or – 8 miles	4	Dependent upon travel distance	90%
Special Risks	To be determined by Fire Department	To be determined by Fire Department	To be determined by Fire Department	90%

TABLE #10: AVERAGE FIREFIGHTERS PRESENT ON SCENE BY YEAR

	2021	2022	2023	2024	Average
Firefighters	11.13	9.62	12.45	12.2	11.34

The Fire Chief stated that the average number of firefighters responding to calls between 0700 to 1900 was between 7 to 10 firefighters. And from 1900 to 0700 they averaged 10 to 20 responding firefighters responding to calls.

TABLE #11: LOSS FIRE STRUCTURE – PROPERTY LOSS – INJURY – BY YEAR

	2021	2022	2023	2024	Total
Incidents	9	4	12	5	30
Fire Loss	$1,259,500	$1,310,300	$370,600	$291,200	$3,231,600
Civilian Injuries	0	0	0	1	1
Civilian Fatalities	0	0	0	0	0
Firefighter Injuries	0	0	0	0	0
Firefighter Fatalities	0	0	0	0	0

TABLE #12: LOSS FIRE OTHER – PROPERTY- LOSS – INJURY – BY YEAR

	2021	2022	2023	2024	Total
Incidents	2	0	3	4	9
Fire Loss	$202,500	$000,000	$409,900	$000,000	$612,400
Civilian Injuries	0	0	0	0	0
Civilian Fatalities	0	0	0	0	0
Firefighter Injuries	0	0	0	0	0
Firefighter Fatalities	0	0	0	0	0

TABLE #13: LOSS FIRE VEHICLE – PROPERTY LOSS – INJURY – BY YEAR

	2021	2022	2023	2024	Total
Incidents	1	8	5	2	16
Fire Loss	$25,000	$685,000	$1,045.500	$65,000	$1,820,500
Civilian Injuries	0	0	0	0	0
Civilian Fatalities	0	0	0	0	0
Firefighter Injuries	0	0	0	0	0
Firefighter Fatalities	0	0	0	0	0

TABLE #14: INCIDENTS BY MONTH

	2021	2022	2023	2024	Total
January	6	8	12	11	37
February	10	13	5	11	39
March	12	10	9	7	38
April	10	12	12	8	42
May	13	17	13	12	54
June	8	7	15	13	43
July	10	14	5	10	39
August	8	8	10	13	39
September	7	4	10	14	35
October	11	16	18	12	55
November	16	12	6	14	46
December	10	10	7	9	36
Total	121	131	117	134	503

TABLE #15: INCIDENTS BY DAY OF WEEK

	2021	2022	2023	2024	Total
Sunday	17	19	16	16	68
Monday	16	18	12	26	72
Tuesday	16	24	17	22	78
Wednesday	21	17	17	16	71
Thursday	20	6	19	21	67
Friday	13	20	14	14	61
Saturday	18	27	22	19	86
Total	121	131	117	134	503

TABLE #16: INCIDENTS BY TIME OF DAY

	2021	2022	2023	2024	Total
00:01 To 00:59	2	3	4	1	10
01:00 To 01:59	1	0	2	5	8
02:00 To 02:59	2	0	0	5	7
03:00 To 03:59	4	1	2	5	12
04:00 To 04:59	1	3	1	2	7
05:00 To 05:59	1	2	1	1	5
06:00 To 06:59	2	3	2	2	9
07:00 To 07:59	7	5	6	4	22
08:00 To 08:59	4	7	7	0	18
09:00 To 09:59	2	8	6	4	20
10:00 To 10:59	4	10	8	11	32
11:00 To 11:59	9	9	7	6	31
12:00 To 12:59	4	10	5	5	24
13:00 To 13:59	6	12	5	14	37
14:00 To 14:59	6	6	6	7	25
15:00 To 15:59	9	8	7	8	32
16:00 To 16:59	5	8	4	8	25
17:00 To 17:59	10	9	11	11	41
18:00 To 18:59	9	9	7	5	30
19:00 To 19:59	12	6	4	4	26
20:00 To 20:59	10	6	9	6	31
21:00 To 21:59	6	2	3	8	21
22:00 To 22:59	0	3	7	5	15
23:00 To 23:59	4	1	5	4	14
Total	121	131	117	134	503

According to the 2021 Statistics Canada Census, the population of Centre Hastings was approximately 4,801, reflecting an increase of 54 people from the 2016 population of 4,747. The area spans 222.79 km^2 (86.02 sq mi), with a population density of 21.5 peoples per km2 (55.8 people per sq mi). The Fire Chief stated that most people reside in the suburban area served by Station 2, while the most densely populated area was in the rural Station 1 district. This explains the different response criteria between the two Stations. Regardless of the station, the goal is to have 4-6 firefighters arrive on scene as soon as possible.

The Fire Chief also mentioned that the department strives to adhere as closely as possible to NFPA Standard 1720, which applies to suburban areas with a population density of 500 - 1,000 people per square mile. This standard recommends that 10 firefighters be on scene within 10 minutes. Once the necessary resources are assembled, at the emergency scene, the fire department should be capable of to safely commencing an initial attack within 2 minutes 90% of the time.

NFPA 1720 states that for initial firefighting operations: 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.

- In the hazardous area, a minimum of two members shall work as a team.
- Outside the hazardous area, a minimum of two members shall be present for assistance or rescue of the team operating in the hazardous area.

The overall goal of any fire department is to arrive at the scene of the incident as quickly and as possible. If the first arriving truck arrives on scene in four minutes or less with the recommended crew of four or more firefighters, there is increased opportunity to contain the fire by reducing further spread to the rest of the structure. Alternatively, if the first fire attack team arrives with fewer than four firefighters on board, it is limited to what operations it can successfully attempt.

***Note: To accomplish the National Fire Protection Association Standard, a fire department should endeavor to meet the stated minimum response standards based on responding to a 2,000-sq. ft. single family dwelling. The dwelling (noted in the Standard) does not have a basement or other exposures (buildings close enough to each other to create a greater possibility for fire to spread). Most homes have basements, however, and these homes are often built close enough to each other to create that "exposure" for potential fire spread, which must be considered by the fire department in its response efforts.*

2.4.2.1 Fire Response Curve

When considering the response times and needs of a community, the fire response curve noted in the following diagram presents the reader with a general understanding of how fire can grow within a furnished residential structure over a short period of time. Depending on many factors, the rate of growth can be affected in several different ways, which can increase or suppress the burn rate through fire control measures within the structure. As an example, in some older legacy homes, fire spread, and flashover may progress slower than newer homes due to the type of construction and contents. Some older homes may not witness flashovers for up to 25 minutes. Whereas newer homes could incur flashovers in as little as four minutes within the room or origin.

***Note:** Flashover is a situation in which the entire contents of a room ignite due to the extreme high heat conditions. This situation is not survivable by unprotected occupants that may be caught in this type of situation. Even firefighters are at great risk of severe injury and/or death due to the extreme fire and heat conditions within the area of the flashover.*

The response time of a fire department is a function of various factors including, but not limited to:

- The distance between the fire stations and response location.
- The layout of the community.
- Impediments such as weather, construction, traffic jams, lack of direct routes (rural roads).
- Notification time.
- Assembly time of the firefighters, both at the fire station and at the scene of the incident.

***Note:** Assembly time includes dispatch time, turnout time to the fire station and response to the scene. It should be noted that assembly time can vary greatly due to weather and road conditions along with the time of day.*

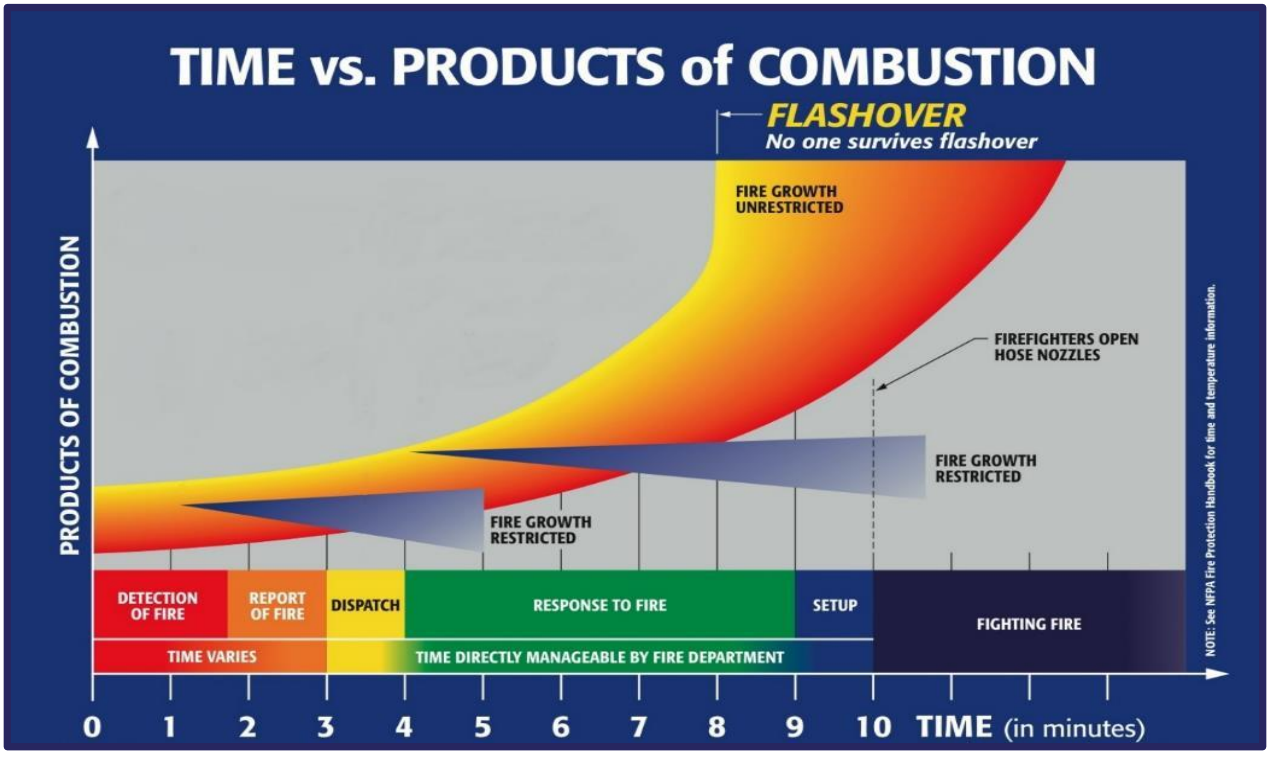
As illustrated in the following fire propagation diagram the need for immediate initiation of fire suppression activities is critical. CHFD responds to more than just fires; motor vehicle collisions can create a medical or fire emergency that also needs immediate response. Therefore, it is imperative to be as efficient and effective as possible in responding to calls for assistance.

TABLE #17: AVERAGE RESPONSE TIME FROM DISPATCH TO ARRIVAL ON SCENE BY YEAR

	2021	2022	2023	2024	Average
Response Time Average	9:23	7:29	8:53	10:17	9:00

It should be noted that the recorded response times reflect the arrival of the first firefighter on scene, rather than the first unit. In some cases, this may have been a firefighter with only a portable radio, rather than a fully equipped fire unit. It is recommended that the department start tracking the response time as the first fire unit that arrives on the scene first.

FIGURE #7 - FIRE RESPONSE/PROPAGATION CURVE



The response time curve notes the following time variables:

- Detection of Fire – this is when the occupant discovers that there is a fire. For the purposes of this chart, detection time is noted as being within one to one and half minutes – this could in fact be shorter or longer. The fire may be in a very early stage or could have been burning for quite some time before being detected.

- Report of Fire – this is when someone has identified the fire and is calling RLFRS for help.
- Dispatch – the time it takes the dispatcher to receive the information and dispatch the appropriate resources.
- Response to the Fire – response time is a combination of the following:
    - Turnout Time – how long it takes the career firefighters to get to the fire truck and respond or how long it takes the volunteer firefighters to get to the fire station to respond on the fire truck.
    - Drive Time – the time from when the crew advises dispatch that they are responding until the time that they report on scene.
    - Setup Time – the time it takes for the fire crews to get ready to fight the fire.
    - Fighting the Fire – actual time it takes to extinguish the fire on scene.

As previously noted, no interior attack is to be made by the firefighters until sufficient personnel have arrived on the fire scene. This team of four can effectively do an assessment of the scene, secure a water source (e.g., fire hydrant), ensure the fire truck is ready to receive the water and get the fire pump in gear, as well as unload and advance the fire hose in preparation for entry into the structure. A team of four also allows for adherence to the recommended "two-in, two-out" rule, referring to the presence of two firefighters inside the structure with two outside ready to go in as back-up.

The CHFD currently lacks response protocols in the form of a Operating Guideline (OG) or policy that specifies which apparatus should respond to different types of calls. It is recommended that the department develop policies that detail what apparatus responds to what call types.

2.4.3 Rescue

The Fire Department provides all emergency rescue services for the Municipality they are four firefighters certified to awareness level.

TABLE #18: RESCUE INCIDENTS BY YEAR

	2021	2022	2023	2024	Total
Incidents	12	13	17	24	66

The Fire Department provides all emergency rescue services for the Municipality and supports the surrounding communities with resources. Members are trained to the awareness level for trench and confined space rescues. However, it was noted that for ice, surface water, swift water, flood water, and watercraft rescues, they are only trained for shore-based operations. The department does not have a marine vessel to perform any water rescue or other water-related needs. It is recommended that the department consider having members trained for rescue at a higher level than the awareness level.

Additionally, it was noted that the department is not trained for elevator emergencies or low/high angle rope rescues. It is recommended that the department explore the option of providing training in elevator rescues, and low/high angle rope rescues for their members.

The Fire Department operates two rescue apparatus at each of its two stations, equipped with the necessary tools for the types of rescues for which they are certified at the awareness level. Each front-line pumper carries basic rescue equipment providing capabilities to begin/complete minor rescue techniques. The aerial apparatus also carries a limited amount of rescue equipment. When asked if the department had ever encountered a technical rescue beyond their training level, the Fire Chief stated this has not occurred in the last 20 years.

2.4.4 Tiered Medical Calls

By-Law 24-19 authorizes the Municipality of Centre Hastings to enter into a Tiered Emergency Services Response Agreement with Hastings County. As part of the agreement, the department may be requested to provide medical assistance from time to time. The department responds to medical emergencies as basic first responders with defibrillation capabilities. It was noted there is a guideline specifying firefighters may only use the CHFD defibrillator. However, the guideline does not address the use of other medical equipment not provided by CHFD. Additionally, it was noted that several members with advanced Emergency Medical Responder (EMR) training carry their own medical kits. It is recommended that CHFD consult with the medical director to determine if the use of personal medical equipment by firefighters poses any legal or liability risks to the department.

There is a current written agreement with Dr.Tristan Snider. This Agreement is entered into on November 22nd, 2024 between the Centre Hastings Fire Department (here in after referred to as "CHFD") and Tristan Snider (here in after referred to as "Medical Director").

TABLE #19: MEDICAL INCIDENTS BY YEAR

	2021	2022	2023	2024	Total
Incidents	35	45	31	31	142

Each apparatus is equipped with Automatic External defibrillators (AEDs), trauma bags, and oxygen. Additionally, each apparatus carries limited first aid equipment, including Naloxone, which can be administered under the direction of their medical director. These incidents typically involve assisting with the lifting of bariatric patients or providing resources for the non-rescue extrication of a patient from a limited access area. Often, firefighters are the first responders on scene to a motor vehicle collision where they provide first aid to patients until paramedics arrive.

A signed agreement, dated March 20, 2024, authorizes the Municipality of Centre Hastings, operating as a Fire Department, to partner with the Corporation of County of Hastings, operating as Hastings Quinte Paramedic Services. This agreement authorizes the activation of the Emergency Response Criteria, as outlined in the letter of agreement, for the provision of contracted Emergency Medical Services in Centre Hastings.

The agreement states that all participating agencies shall:

Ensure that all personnel have been trained and certified, by a credible agency in standard first aid, CPR, and automatic external defibrillation.

- All defibrillators are to be maintained in accordance to manufactures recommendations.
- PPE must be available and utilized when required.
- Routine hand hygiene,
- Wearing disposable gloves,
- At a minimum the use of fluid resistant particulate respirator masks designed to filter airborne particles. (i.e., disposable N95)

When the Fire Department is requested for medical assistance, all fire emergencies and rescues shall take precedent over any request for medical tiered response notifications. No liability shall be incurred by any participant or Fire Chief for failing to respond to a tiered response request. It was noted that the Hastings Quinte Paramedic Services did not replace any items used by the CHFD at an emergency scene.

2.4.5 Hazardous Materials

The CHFD follows an Operational Guideline (6-9) that directs and governs the Haz-Mat as part of its response operations.

Four Firefighters are trained to the awareness level, as required by the Section 21 Guidance Note. To attain their NFPA 1001, *Standard for Firefighter Professional Qualifications* I and II, they must complete NFPA 472, *Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents,* to the operations level, as described in NFPA 1006 *Standard for Technical Rescue*. For any incidents beyond their training capabilities, they contact the Canadian Transport Emergency Centre (CANUTEC), operated by Transport Canada for assistance. Fortunately, there have been no incidents requiring outside resources to mitigate a HAZMAT incident in the Municipality.

The Municipality should investigate entering into a response agreement with the City of Peterborough for its Hazmat team to respond to and mitigate any emergencies that exceed their certification. Additionally, the Municipality should ensure that provisions for full cost recovery are included in the Fees and Charges By-Law for responding to technical rescue or Haz-Mat incidents, including any necessary outside resources are in the Fees and Charges By-Law for the full cost recovery of responding to technical rescue or Haz-Mat incident and outside resources required. It is recommended that CHFD ensure provisions are in the Fees and Charges By-Law for the full recovery cost of responding to technical rescue or HAZMAT incident and outside resources required.

TABLE #20 HAZARDOUS MATERIAL INCIDENTS BY YEAR

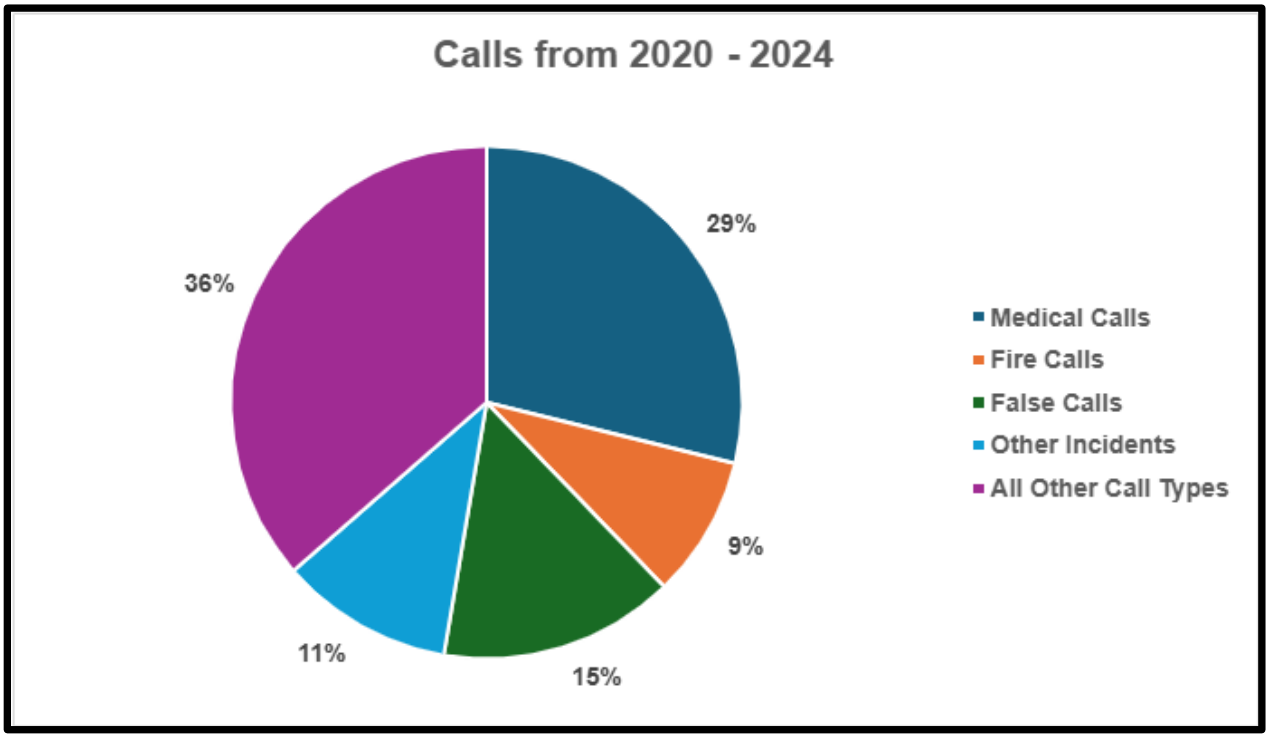
	2021	2022	2023	2024	Total
Incidents	14	7	8	9	38

The Municipality has been divided into two initial response areas: the South Station 1 in Ivanhoe response area and the North Station 2 in Madoc response area. Each station response area is identified by the fire station providing initial response to emergency incidents.

2.4.6 Community Response History

A review of the historical data for the four-year period ending December 31, 2024, indicates the Fire Department responded to a total of 503 incidents in the Municipality. Of these, nearly 29 percent were medical calls, while approximately 15 percent of the calls are false calls. About 9 percent of the calls were categorized as “other” calls, with the remaining incidents evenly divided among the other call types. Fire Loss calls accounted for only 9 percent of total call volume.

FIGURE #8 - CALLS FROM 2020 TO 2024



2.4.7 Recruitment and Retention

The state of paid on paid on call (volunteer) emergency services in some areas is rapidly approaching crisis proportions. In other places the crisis may have already arrived. If it is true that the level of protection is dropping drastically because of a shortage of volunteers in fire departments, then there will be a need to have full-time, professional staffing of these departments. This would be intolerably expensive and result in a dramatic increase in the Municipality's property tax source of revenue.

Most fire departments employ Paid on Call (POC) or volunteer firefighters, who provide a public service estimated to save residents more than billions of dollars annually. Municipalities should anticipate that volunteer firefighter careers will be shorter than full-time personnel and as a result they need strong recruiting and retention programs in place. Recruiting is an investment in the future. Retention is the ability to maximize that investment. Successful organizations are those with a strong organizational philosophy about volunteers. It is vital that adequate and appropriate resources be committed to the recruitment and retention of suitable volunteer firefighters. At this time, the Centre Hastings has 50 active volunteers assigned to its two stations. They appear to be very active in the department. During the review it was found that the CHFD lacks a policy regarding recruitment and retention. This appears not to be a problem at this time with either recruitment or retention but could develop into one in the future. It is

recommended that the department develop plans for the recruitment and retention of firefighters to be used if the occasion ever arises.

2.4.8 Rehabilitation and Decontamination

There is a written Standard Operating Guideline (SOG 6-12) in place that governs firefighter rehabilitation at fire scenes. This guideline provides clear instructions for firefighters who have been actively engaged at a fire or emergency scene, once they meet the criteria outlined in SOG 6-12. Specifically, the guideline addresses:

- The responsibilities of incident commanders.
- The duties of the rehab officer.
- The actions required from the sector officer.
- The procedures firefighters must follow.
- A list of rules and procedures to be adhered to.

Additionally, there is a separate guideline (SOG 4-16) that outlines the protocols for on-scene airborne body fluid decontamination and bunker gear decontamination. This guideline includes:

- The responsibilities of incident commanders.
- The duties of assigned officers.
- The location of the on-scene decontamination area and the necessary equipment to be positioned there.
- The steps to be followed by individuals who have been exposed to contamination.
- A designated area for firefighters to remove their personal protective equipment (PPE).

While these SOGs currently meet the department's needs, there may be a need for future enhancements to address evolving requirements.

2.4.9 Policies/Procedures

The Centre Hastings Fire Department (CHFD) has policies, procedures, and directives in place that guide the department in all the services they provide to the citizens of Centre Hastings.

- Policy: A high-level statement that mandates strict compliance, leaving little to no room for deviation.
- Guideline: A standard that outlines an acceptable level of quality or performance, offering non-mandatory guidance on how to approach various situations.

- Procedure: A standard that outlines specific, detailed steps required to achieve a desired outcome, with clear, step-by-step instructions for implementation.

The policies, guidelines and procedures are available to the firefighters at each station. There are binders in each station as well as one at the municipal office that can be they can be accessed at any time. All firefighters are familiar with departmental policies, guidelines and procedures. Anytime there are new items added or major changes made, they are gone over in a training class or meeting.

After reviewing the policies, procedures, and guidelines provided to EMG, it was noted that many that have not been reviewed in years, and few have a signature indicating approval or modification. Some documents still have the former Fire Chief's name associated with them. It is recommended that all policies, procedures, and guidelines be reviewed and updated with an appropriate signature for approval. Given the time it takes to go over all the policies, procedures and guidelines used by the department, it would be beneficial for the Fire Chief assigned these duties to the two Station Commanders. This would help distribute the workload, as it would be a labor-intensive task for the Fire Chief to address on his own.

2.4.10 Mental Wellness Programs, Cancer Screening

When it comes to being a firefighter, you are expected to remain calm, level-headed, and capable of dealing with most of the challenging situations without fear or showing any emotions. Firefighters are highly aware of this, and it can cause them to suppress their feelings. This can result in devastating consequences to their mental health over years of being a firefighter. Studies have shown that a significant number of firefighters have experienced mental health issues, such as anxiety, depression, post-traumatic stress disorder (PTSD), and suicidal thoughts.

Firefighters are encouraged to seek out treatment when the first signs of these issues arise. Post-Traumatic Stress Disorder (PTSD) can manifest in a variety of ways, and its effects differ from person to person. The trauma firefighters are exposed to often leaves lasting psychological scars that they have to live with for the rest of their lives. Some individuals have better coping skills than others, but it is not uncommon for a firefighter to resign over an incident they were part of. CHFD has a policy in place, SOP 4-15 Post-Traumatic Stress Disorder, for addressing PTSD and supporting firefighters who may suspect or recognize they have a problem.

However, despite being a legislated requirement, the Municipality and its fire department currently lack a Mental Wellness Program for the firefighters.

It is essential for the CHFD to establish a mental health program for its firefighters and submit its plan to the Ministry of Labour as legislated. If the Municipality has an Employee Assistance Program (EAP)program for their employees, the fire department should be included in it. Additionally, while there is an SOP 2-1 policy for post incident analysis, it does not mention anything about firefighter mental wellness. Incorporating mental health supports into this process would be a valuable addition. It is recommended that the department establish a mental health program for its firefighters and submit its plan to the Ministry of Labour as legislated.

Cancer within the fire service is on the rise, with more firefighters are dying from cancer annually than ever before. Firefighters are exposed to many kinds of cancerous causing elements every time they enter a fire scene or hazardous chemical environment. Firefighters have a 9% higher risk of being diagnosed with cancer and a 14% higher risk of dying from cancer compared to the general population.

Factors that contribute to the increased risk of cancer for firefighters include:

- Exposure to carcinogens in fire smoke and within the fire station
- Shift work
- Sedentary behavior
- Fire service food culture
- Lifestyle behaviors such as tobacco use, excessive alcohol consumption, poor diet, inadequate physical activity, and short sleep duration

To reduce the risk of cancer, firefighters can:

- Create and implement a preventative health plan
- Schedule regular health screenings
- Reduce exposure to diesel exhaust
- Clean and care for PPE and SCBA properly
- Wipe exposed areas of the body immediately after being on scene
- Change clothes and wash them after exposure to contaminants
- Shower within the hour

The CHFD has policies in place through their decontamination and hazardous material program, with several SOP's and SOG's addressing these areas. While these measures are helpful, there could be a more robust cancer screening program in place, which the CHFD currently lacks. It is

recommended that the CHFD develop a cancer screening program for the firefighters. Additionally, if the Municipality has a cancer screening program for their employees if would be good if the fire department could be included in that program as well.

2.4.11 Physical Fitness

The firefighters of CHFD are increasingly challenged by the wide variety of structures and terrains they must navigate within their response area, placing significant demands on their physical endurance and overall health. Firefighters are required to wear heavy bunker gear, along with respirators, which can add considerable weight—up to 25 kg in total. The additional weight of the tools they carry further increases the physical strain. The combination of working in extreme conditions, using heavy equipment, and performing tasks such as climbing stairs, ladders, and carrying tools—often in awkward positions or during rescue operations—places tremendous physical demands on firefighters.

Given these challenges, it is crucial for firefighters to maintain good physical fitness, as being in better physical condition helps reduce the risk of injury during demanding activities. However, the CHFD currently lacks a formal physical fitness program, and neither of the two fire stations is equipped with fitness equipment. It is therefore recommended that the CHFD establish a physical fitness program to ensure firefighters are in optimal physical condition, enabling them to perform their duties safely and effectively.

2.5 Communications and Dispatch

Computer-aided fire dispatch services are provided to the Centre Hastings Fire Department (CHFD) by the City of St. Catharines Fire Department (SCFD) under an Emergency Communication Services agreement, which was signed on July 6, 2023, and authorized by By-law No. 2020-156 of the City of St. Catharines.

Under this agreement, the City of St. Catharines will provide the CHFD with emergency communications services and the necessary backup operations for a term extending until December 31, 2037. The City of St. Catharines also provides similar services to other municipalities, all of which are members of a Joint Operating Committee (JOC). This committee meets twice a year to oversee various aspects of emergency communications services, including the following:

- Geographical Information Systems
- Information Technology
- Standard Operating Guidelines
- Performance Targets

The Emergency Communications Centre (ECC) is consistently staffed with a minimum of two Public Safety Telecommunicators. Additionally, the City of St. Catharines' Information System support staff and Radio Technician are available Monday to Friday from 8:30 a.m. to 4:30 p.m. for assistance, with after-hours support coordinated through the on-call St. Catharines Senior Officer, if necessary. Dispatching services are provided 24 hours a day, 7 days a week, and include the receipt, recording, and transmission of all emergency calls to the Centre Hastings Fire Department (CHFD).

The ECC strives to ensure that its operations and communication personnel adhere to the current edition of NFPA 1225, Standard for Emergency Services Communications (formerly NFPA 1221 and NFPA 1061). It is recommended that during the next review of the agreement, references to NFPA 1221 and NFPA 1061 be updated to reflect the consolidation of these standards into NFPA 1225 as part of the NFPA Emergency Response and Responder Safety Document Consolidation Plan, effective as of 2022.

As outlined in Schedule "A" of the current agreement, the 2025 rate for dispatching services is $20,651, which represents a reasonable cost for the level of service provided.

2.5.1 Communications Infrastructure and Dispatching Process

2.5.1.1 Dispatching Process

The St. Catharines radio system is a trunked 700MHz system designed and maintained to meet current standards, ensuring compatibility with the Municipality of Centre Hastings' radio infrastructure. The back-up site is located at the Niagara Regional Police Service (NRPS). Northern 911 serves as the Public Service Answering Point (PSAP) and the Central Emergency Reporting Bureau (CERB).

2.5.1.2 Municipal Communication Infrastructure

The Municipality of Centre Hastings is responsible for maintaining its municipal communications infrastructure. Under the terms of the Emergency Communication Services Agreement, Centre Hastings is tasked with:

- Providing high-speed internet connections dedicated to each station's printer and terminal to receive CAD transmittals.
- Supplying compatible radio systems and hardware to receive necessary transmissions.
- Ensuring that all required equipment (radio system, hardware, and internet) is maintained in good working order.

- Providing necessary maps, road network data, and hydrant locations, and promptly notifying St. Catharines of any inaccuracies.
- Maintaining responsibility for all non-emergency and business calls.
- Covering costs for any additional work related to this agreement.

The CHFD operates on an analog system with one transmission tower, leased from BearCom in Belleville, Ontario. This tower is shared by several municipalities within the County, and BearCom is responsible for its maintenance and upgrades.

The CHFD radio communication operates in simplex mode. Portable radios, including Motorola BPR 50DX models, are in good condition and are part of a replacement rotation, with approximately four radios being acquired annually (two per station). These radios are digital-ready to accommodate the transition to the NEXT GEN 9-1-1 communication system.

Firefighters are dispatched through a pager system and the FireQ application. The system is generally of good quality, but increased radio traffic due to high call volumes and additional transmission requirements (e.g., scene arrival, entry into structures, and water on fire) has led to congestion. Efforts to reduce unnecessary transmissions are ongoing through training initiatives.

The CHFD has two Mobile Data Terminals (MDTs) assigned to the primary pumpers, one for each fire station. These terminals provide valuable support, with applications such as FireQ, Who's Responding, the Emergency Response Guide (ERG), and an auto-extrication app. However, the MDTs do not interface with the SCFD Computer Aided Dispatch (CAD) system.

A radio communication audit has not yet been completed. As the regional transition to a digital radio system is the next logical infrastructure upgrade, should this transition be delayed, a thorough audit of the CHFD communication system should be considered.

2.5.2 Next-Generation Communications (NG 9-1-1)

The Canadian Radio-television and Telecommunications Commission (CRTC) regulates telecommunications providers, including telephone and cell service companies that connect 9-1-1 calls to emergency call centres. When a 9-1-1 call is received, these centres dispatch emergency responders such as police, firefighters, and paramedics. Both emergency responders and 9-1-1 call centres fall under the jurisdiction of provincial, territorial, and municipal governments.

With advancements in telecommunications technology, NG9-1-1 allows for the transmission of text messages, videos, and photos to Public Safety Answering Points (PSAPs). This technology

enables emergency services to receive more detailed information, such as videos of accidents or medical information, leading to safer, faster, and more informed emergency responses.

As the first step, the CRTC has mandated all telephone and cell service companies to upgrade their networks from analog to digital to support NG9-1-1 voice and text messaging services. This will allow these providers to transmit NG9-1-1 calls and connect them to PSAPs. At the same time, provincial, territorial, and municipal governments must ensure their emergency call centres are ready for the new service.

The following is an excerpt from the CRTC website regarding the program and its benefits for enhancing public safety communications:

"NG9-1-1 will make it possible to provide additional details about emergency situations. For example, in the future, Canadians could send a video of an accident, as well as make medical information available to first responders. This will lead to safer, faster, and more informed emergency response."

Establishment Of New Deadlines for Canada's Transition to NG 9-1-1

The CRTC has set new deadlines for the implementation of NG9-1-1 networks and services in Canada, aiming to provide Canadians with improved, Internet Protocol-based emergency services. Network providers must establish NG9-1-1 systems and complete all onboarding activities by 1 March 2022, and be ready to provide NG9-1-1 Voice where PSAPs are established. Telecommunications service providers (TSPs) must update their systems to support NG9-1-1 Voice in their networks by this deadline.

Regarding NG9-1-1 Text Messaging, the CRTC has not established new deadlines but requests that, once standards are sufficiently developed, the CRTC Interconnection Steering Committee provide recommendations for all stakeholders.

Additionally, incumbent local exchange carriers (ILECs) are directed to decommission their existing 9-1-1 network components that are not part of the NG9-1-1 system by 4 March 2025, or earlier if all TSPs and PSAPs in an ILEC's operating territory have completed their NG9-1-1 transition.

Since the CHFD receives dispatching services from SCFD, the responsibility for transitioning to NG9-1-1 lies with the service provider. EMG's research indicates that the transition is appropriately funded and on track to meet the CRTC's established implementation deadlines.

Section 2: Recommendations

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
4	That the Fire Chief continue to evaluate the need for additional administrative support, such as an Administrative Assistant or a full-time Deputy Fire Chief and present any such requests to Council.	Short-Term (1 to 3 years)		The implementation of this MFP, ensuring compliance with O. Reg. 343/22 Firefighter Certification, reviewing and updating Standard Operating Procedures, enhancing public life fire safety education programs, and addressing the impact of municipal growth on the fire department's level of service are just a few examples of tasks that will increase the Fire Chief's workload. Additionally, the transition of the Community Emergency Management Coordinator position, which is currently held by the Chief Administrative Officer (CAO), to the Fire Chief will only add to the workload.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
5	That the CHFD have input into the plans review process or update their E & R By-law to reflect that the Chief Building Official is the person responsible for all plans review.	Immediate (0 to 1 year)	Staff Time	The E&R By-law states the fire department shall ensure through plan examination and inspection, that required fire protective equipment is installed and maintained within buildings
6	That the CHFD develop and maintain a more robust Fire Prevention program.	Immediate (0 to 1 year)	Staff Time	The present fire prevention plan is lacking in several different areas including inspection, education, and other programs the department does or does not do.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
7	That the Municipality explore the option of making the part-time Fire Prevention Officer (FPO) position a full-time certified position including the role of Public Fire Life Safety Educator (PFLSE).	Immediate (0 to 1 year)	$85,000 to $95,000 annually according to experience.	The effort required to implement a successful Fire Prevention program exceeds the capacity of a part-time employee.
8	The CHFD develop a smoke alarm policy where they go from house to house to identify residences that do not have smoke detectors.	Immediate (0 to 1 year)	Staff Time	The CHFD does not currently promote going door to door identifying residences that do not have smoke alarms.
9	That the CHFD start promoting the benefits of residential sprinkler installation in all new construction for residential and commercial buildings.	Immediate (0 to 1 year)	Staff Time	When the Fire Education Group attends events, they should have pamphlets and literature that highlight the benefits of having residential sprinklers installed.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
10	Establish a digital records system for fire prevention and public education, including inspection tracking.	Immediate (0 to 1 year)	Staff Time	Currently, records are not being maintained regarding the status of inspections, including violations found, required remedial actions, orders issued, or outcomes. To gauge the success of any fire prevention or public education program, accurate records must be kept.
11	Establish a smoke alarm policy with a tracking and compliance process.	Short-Term (1 to 3 years)	Staff Time	The law mandates that every residence has a working smoke alarm on every level, and outside of all sleeping areas.
12	Establish inspection frequencies that extend beyond vulnerable occupancies, taking into account the inspection frequency recommendations provided by FUS.	Immediate (0 to 1 year)	Staff Time (Considers the addition of a full-time FPO)	Currently, only vulnerable occupancies and complaint driven inspections are being completed. Inspection frequencies for other occupancy types should be performed based on the FUS recommendations.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
13	That the CHFD develop a preplan program with written guidelines to direct the program.	Immediate (0 to 1 year)	Staff Time	The CHFD currently lacks a pre-plan program. Implementing one would help firefighters become familiar with structures, improving response during emergencies.
14	That the CHFD establish a policy outlining the steps the department must follow when conducting a fire investigation.	Immediate (0 to 1 year)	Staff Time	Currently, there is no policy in place that provides direction regarding conducting a fire investigation.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
15	The current job description for firefighter should be reviewed and updated to identify more succinct job duties and working conditions.	Short-Term (1 to 3 years)	Staff Time	The job description does not detail the types of activities firefighters are expected to be able to perform; It also does not identify any working conditions or the requirement for physical and mental screening and the ability to obtain clear criminal records and vulnerable sector checks.
16	Establish a structured recruitment, selection, and training program.	Short-Term (1 to 3 years)	Negligible costs	The recruit selection process does not identify any objective minimum requirements for the position of firefighter and involves only an interview with unknown criteria for the determination of suitability. There is no formal or written recruit training program or syllabus that is currently in use.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
17	Ensure all new firefighters attend an Ontario Fire College regional training centre and achieve NFPA 1001 Certification.	Short-Term (1 to 3 years)	Costs dependent on number of attendees and number of training courses	This would improve efficiency by balancing any increased cost with vastly improved timelines for providing the necessary training. In additions this would provide access to valuable fire ground resources for a more complete training experience.
18	CHFD should consider the preparation and implementation of an annual training program for firefighters. The program should provide the necessary skills and knowledge to ensure that firefighters can safely and effectively provide the community with the services identified in the establishing and regulating by-law and the medical tiered response agreement.	Short-Term (1 to 3 years)	Staff Time	EMG did not identify an annual training program to ensure that each firefighter completes documented participation in an annual training program or syllabus of training to ensure proficient skills and knowledge are maintained.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
19	CHFD should consider a program which ensures that all firefighters are provided with firefighter survival and self rescue training.	Immediate (0 to 1 year)	Staff Time	EMG did not identify a program in the CHFD on firefighter survival and self rescue as identified in *Section 21 Guidance Note 7-4 Firefighter survival and self-rescue training.*
20	The Fire Chief should ensure that training plans are developed in accordance with Health and Safety Advisory Committee Guidance Notes for each training course and subject covered to ensure safe and consistent training.	Immediate (0 to 1 year)	Staff Time	EMG did not identify training plans which have been developed for each training course and subject in accordance with *Section 21 Guidance Note 7-3 Training Plans* and which would aid in supporting safe and consistent training.
21	The Fire Chief should review and update all policies and procedures to ensure that they support a safe, timely and effective response.	Immediate (0 to 1 year)	Staff Time	The current CHFD policies and procedures provide limited guidance for dealing with technical rescue situations which fall within the scope of the current training and offer no guidance for dealing with technical rescue situations outside of the scope of the current training.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
22	The Fire Chief should identify any technical rescue training needs for the fire department and make the necessary plans to support and implement any necessary training.	Short-Term (1 to 3 years)	Dependent on change in level of response	EMG did not identify a review of past events or existing risks which will assist in identifying the technical rescue training and skills required by CHFD firefighters.
23	In support of any response needs identified by the Fire Chief, which are beyond the training, certification, and equipment of CHFD, the Fire Chief should ensure that an approved automatic aid agreement is put in place to address support for response.	Short-Term (1 to 3 years)	Dependent upon response support required.	Support for hazardous materials response or technical rescue, which is beyond the abilities of CHFD, can be provided by securing these services from a neighbouring community in the form of a mutual aid agreement or an automatic aid agreement.
24	CHFD should provide the NFPA online training course - Alternative Fuel Vehicles Training Program for Emergency Responders, to all firefighters.	Short-Term (1 to 3 years)	Staff Time	Electric and electrified vehicles propose unique risks to firefighters during an emergency response.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
25	CHFD should review and update any current ICS policies or procedures to ensure they reflect a system which is effective, safe and compatible with all mutual aid partners and the local Police and EMS partners. Policies should be established that ensure only incident command trained and competent supervisors are appointed at an emergency incident.	Immediate (0 to 1 year)	Staff Time	The current SOPs do not address all types of emergency incidents the fire department responds to; they do not address all key features of a functional and effective ICS. Emergency scene safety is the single most important component to incident command, as indicated in *NFPA 1561 - Standard on Emergency Services Incident Management System and Command Safety*.
26	CHFD should establish a formal ICS training program which ensures that all staff are trained in incident command and conversant in the incident command system. Consideration should be given to adopting a well-established ICS training program such as the Blue Card ICS.	Short-Term (1 to 3 years)	Approximately $7500 for a Train-the-Trainer Program	The ICS is designed to enhance coordination, improve resource management, and ensure a clear chain of command during emergency responses.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
27	CHFD should begin the process of certification for all personnel who may be assigned the role of incident safety officer as a normal part of their duties.	Short-Term (1 to 3 years)	Dependent upon number of staff and type of course used	In Ontario, Incident Safety Officer certification is required for identified firefighters who's regular and expected assignment at an emergency incident could be incident Safety Officer.
28	CHFD should establish a policy which ensures that all firefighters participate in live fire training on a periodic basis. Consideration should be given to the use of the OFM Mobile Live Training Unit for conducting live fire training within the community.	Short-Term (1 to 3 years)	Staff Time	The participation in live fire training ensures that all firefighters are prepared and proficient to safely participate as a member of a team in the dangerous activity of operating in an environment which is immediately dangerous to life and health (IDLH) while they use self contained breathing apparatus and conduct fire fighting, ventilations, and search and rescue activities in limited visibility.
29	CHFD should establish a policy which ensures that the training structures or props are compliant with the NFPA standards for live fire training evolutions (both internal and external).	Short-Term (1 to 3 years)	Staff Time	It is important to ensure that live fire training and the facilities, training aids, or props are compliant with the relevant NFPA standards.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
30	CHFD should establish policies and procedures to ensure live fire training is conducted in compliance with relevant NFPA standards and Section 21 Guidance Notes.	Immediate (0 to 1 year)	Staff Time	All training activities should be supported by policies, procedures and personnel which ensure compliance with relevant NFPA standards and Section 21 Guidance Notes relating to live fire training.
31	CHFD should establish an officer development program to ensure compliance with occupational health and safety requirements, ensure efficient and effective emergency responses, prepare future fire department leaders, and support a well-functioning fire department organizational culture.	Short-Term (1 to 3 years)	Staff Time	There is currently no formal officer development program in place in the CHFD. Fire Officer training is made available to members to ensure compliance with Ontario fire training certification requirements but not as part of a program to develop incident commanders, emergency scene supervisors and future fire department leaders.
32	CHFD should revise the current promotional process to include more criteria to ensure the best candidates are being supported and promoted to positions of leadership in the organization.	Short-Term (1 to 3 years)	Staff Time	There are no formal officer selection or promotion criteria established. Promotions are made with a discussion at officer's meetings with no set criteria.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
33	CHFD should provide fire service fatigues and dress uniforms to all members which identify names and ranks. The wearing of uniforms should be compulsory for all fire department activities and should be supported by standard operating procedures.	Short-Term (1 to 3 years)	Under $10,000	As a paramilitary organization, the fire service utilizes a rank structure for its members to assign roles and responsibilities within the organization. Members wear uniforms which both identifies them as fire service members to the public and identifies and distinguishes those in supervisor and leadership positions. They are a source of pride to members.
34	Ensure the fire prevention officer is fully trained in inspection, enforcement, investigation, and plan reviews, in compliance with NFPA 1033/1035 and OFM standards.	Short-Term (1 to 3 years)	Up to $5,000 per year	The officer currently assigned as Fire Prevention Officer has recently been assigned the role and is still in training.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
35	The fire prevention officer should be trained in the Ontario fire code requirements regarding retrofit inspections.	Short-Term (1 to 3 years)	In accordance with annual fire prevention training budget	To ensure that buildings which are required to be in compliance with fire code retrofit requirements are competently inspected. No current staff members are trained to conduct these inspections, limiting the ability of CHFD to be in compliance with the requirement to inspect properties for request and complaint in accordance with FPPA.
36	The fire prevention officer should be trained to conduct fire code enforcement activities in accordance with OFM doctrine and the Provincial Offences Act.	Short-Term (1 to 3 years)	In accordance with annual fire prevention training budget	Knowledge of fire code enforcement in accordance with accepted practice in Ontario and Office of the Fire Marshal technical guideline OFM- TG-01-2012 is essential to every fire prevention program.
37	The fire prevention officer should be trained to conduct fire protection system reviews of new plans for new building permit approvals.	Mid-Term (4 to 6 years)	In accordance with annual fire prevention training budget	It is common for building officials to collaborate with the fire service to ensure building plans include the necessary fire protection systems.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
38	The fire prevention officer should be trained to conduct inspections of commercial cooking equipment in accordance with the Ontario fire code and *NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.*	Mid-Term (4 to 6 years)	In accordance with annual fire prevention training budget	The Ontario Fire Code requires commercial cooking equipment to be installed, operated and maintained in accordance with NFPA standards.
39	The Fire Chief should ensure that lesson plans and training plans are developed in accordance with Section 21 Guidance Note 7-1 Safe Training, for each training course and subject covered to ensure safe and consistent training.	Immediate (0 to 1 year)	Staff Time	To ensure consistent and safe training in compliance with Provincial safe training doctrine.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
40	The Fire Chief should ensure that all fire service training facilities which are used for training firefighters in skills such as fire suppression techniques, search and rescue, confined space and other related procedures are compliant with Section 21 Guidance Note 7- 6 Training Centres and *NFPA 1402 – Standard on Facilities for Fire Training and Associated Props, and NFPA 1403 – Standard on Training for Emergency Scene Operations.*	Immediate (0 to 1 year)	Staff Time	To ensure safe training in compliance with Provincial safe training doctrine.
41	The Fire Chief should review and update policy #211 Training Policy to identify the role of training officers and ensure that adequate members of the department are provided with Training Officer Certification (NFPA 1041) training. in the department and provide updates references to the contemporary training curriculum.	Immediate (0 to 1 year)	Staff Time	Firefighter training and certification standards have changed since the implementation of this policy, and the most common and important activity of a fire department is training. More qualified personnel are required to provide effective training within the organization.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
42	The senior training division officer and any chief officer with responsibility for the training division should be certified as Training Officer Level II. In accordance with *NFPA 1041 – Standard for Fire and Emergency Services Instructor Professional Qualifications.*	Short-Term (1 to 3 years)	Dependent upon number of staff requiring certification	It is important, in a small organization, for the senior officers to play a role in the training of all members.
43	That the CHFD implements a digital training records and online learning platform (RMS) that is in compliance with NFPA 1401.	Short-Term (1 to 3 years)	$4000 and up depending on capabilities	The current record keeping practice does not comply with NFPA standards. Records are neither sufficiently complete nor readily accessible and secure. Due to the nature of a volunteer fire service, providing the easiest and least intrusive means to provide training to members is essential.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
44	The Fire Chief should establish a committee of senior fire service members, including the senior training officer, to review and revise and draft new procedures for approval by the Fire Chief. This committee should be permanent and meet on a periodic basis.	Immediate (0 to 1 year)	Staff Time	The CHFD list of operating guidelines, policies, and procedures (SOPs) shows that many require review and updating. The use of a committee of senior members will provide an efficient means to address the concern.
45	CHFD should establish a policy to ensure that training records, which meet the requirements of NFPA standards, are maintained.	Immediate (0 to 1 year)	Staff Time	There is no policy in place which considers the relevant standards and best practices to ensure a robust training records system.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
46	The Fire Chief should work in consultation with the joint occupational health and safety committee or other health and safety representatives to develop and implement a respiratory protection program which complies with the requirements identified in Section 21 Committee Guidance Note 4-9 Respiratory Protection Program.	Immediate (0 to 1 year)	Staff Time	CHFD does not have a respiratory protection program in place which is compliant with provincial doctrine.
47	That the CHFD update its Superior Tanker Shuttle Accreditation.	Immediate (0 to 1 year)	Staff Time	As part of the FUS it could help with lowering insurance premiums for the citizens of Centre Hastings.
48	That the department develop a consistent policy directing firefighters to respond to emergencies in fire apparatus from each of its two fire stations.	Immediate (0 to 1 year)	Staff Time	Currently, there is no clear policy in place providing direction for response to emergency incidents via either personal vehicles or from Station 1 or Station 2 in fire apparatus.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
49	That the CHFD develop a policy that details the type of apparatus that will respond to various incident types and begin tracking response time data using the first fire apparatus on the scene.	Immediate (0 to 1 year)	Staff Time	This will provide direction to personnel regarding the type of apparatus to respond with depending on the nature of the incident, track on scene time by using the fires fire apparatus on the scene.
50	That the CHFD consider having members trained for rescue at a higher level than the awareness level.	Short-Term (1 to 3 Years)	Staff Time	Sooner or later there will be an incident where they will need members to have additional training to help mitigate the incident.
51	That the CHFD consult with the medical director to assess whether allowing firefighters to use medical equipment not provided by the department poses any legal or liability risks.	Immediate (0 to 1 year)	Staff Time	Firefighters using medical equipment that is not provided by the fire department may pose a liability to the Town.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
52	That the CHFD establish a response agreement with the City of Peterborough, allowing their Hazmat team to respond to and mitigate emergencies that exceed the CHFD's certification and include full cost recovery mechanisms in the Fees and Charges By-law.	Immediate (0 to 1 year)	TBD	A written agreement should be established to mitigate Hazardous Materials incidents that are beyond the capability of the CHFD including mechanisms for full cost recovery.
53	It is recommended that the department develop plans for the recruitment and retention of firefighters.	Immediate (0 to 1 year)	Staff Time	A formal recruitment and retention policy should be developed to be prepared for the future needs of the department.
54	That all policies, procedures, and guidelines be reviewed annually and include the date of review and signature of the reviewer.	Immediate (0 to 1 year)	Staff Time	Some of the policies, procedures, and guidelines are old and need reviewing. It appears none include a signature associated with the review process.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
55	That the CHFD develop a department specific PTSD Prevention Plan to be submitted to the Ministry of Labour, a Cancer Screening Program, and a Physical Fitness Program	Immediate (0 to 1 year)	Staff Time	The Ministry of Labour requires the development of PTSD Prevention Plans. Ontario Fire Departments should have internal PTSD Prevention Plan. The fire department does not have a cancer screening program in place. The Municipality has a cancer screening program for its employees and it would be beneficial for firefighters to be included in this program. Firefighters have a very strenuous job that involves working for a long period of time while wearing heavy equipment and using heavy tools. Sustained physical fitness is an important aspect of ensuring firefighters are prepared to effectively perform their duties.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
56	During the next review of the Emergency Communication Services Agreement, the sections referencing to NFPA 1221 and NFPA 1061 should be updated to reflect the NFPA Emergency Response and Responder Safety Document Consolidation Plan combining the NFPA 1221 and 1061 into NFPA 1225	Immediate (0 to 1 year)	Staff Time	Section 10 of the Emergency Communication Services Agreement refers to NFPA standards 1061 and 1221 that have been consolidated into NFPA 1225, as of the 2022 Edition.
57	Should the planned transition to a fully digital regional radio system be delayed, The Municipality of Centre Hastings should consider conducting a thorough audit of the CHFD communications system.	Short-Term (1 to 3 Years)	Staff Time for Internal Audit External Audit through a third-party consulting firm could cost more than $10K	The regional transition to a digital radio system is the next logical infrastructure improvement that should be made. Should this transition be delayed, it is vital to assess the CHFD communications system to ensure it continues to function as intended. Under section 9 of the Emergency Communication Agreement, it is the responsibility of the Municipality to provide existing or compatible radio systems and hardware to receive transmittals from St. Catharines and to maintain all required equipment owned by the Municipality.

Section 3

Fire Station Facilities, Vehicles & Equipment, and Water Supply

SECTION 3: FACILITES, VEHICLES, & EQUIPMENT

This section evaluates the Centre Hastings Fire Department's (CHFD) facility requirements and station locations. It includes a review of existing facilities, recommendations for future locations based on current and projected service delivery needs, alignment with applicable standards, and consideration of potential relocation requirements.

Additionally, this section addresses the apparatus and equipment essential for CHFD to fulfill its emergency response mandate, as outlined by Council in the Establishing and Regulating By-law. Every piece of equipment—regardless of type—must be well-maintained and fully operational to ensure that personnel can use it safely, efficiently, and with confidence.

Based on EMG's on-site assessment, the initial impression is that CHFD is a well-equipped fire service currently operating out of facilities that are approaching the limits of their functional capacity.

3.1 Fire Stations Review

Fire stations should be in their community's most efficient and effective response location. Centering them within a determined response zone based on "timed" responses is not always the best implementation option. Fire station location depends on many factors, such as key risks within the response zone, future growth of the community, and station staffing (full-time or volunteer firefighters). Another consideration is the community's geographical layout, which can include natural barriers or divides, such as water, making it necessary to have some stations close to each other.

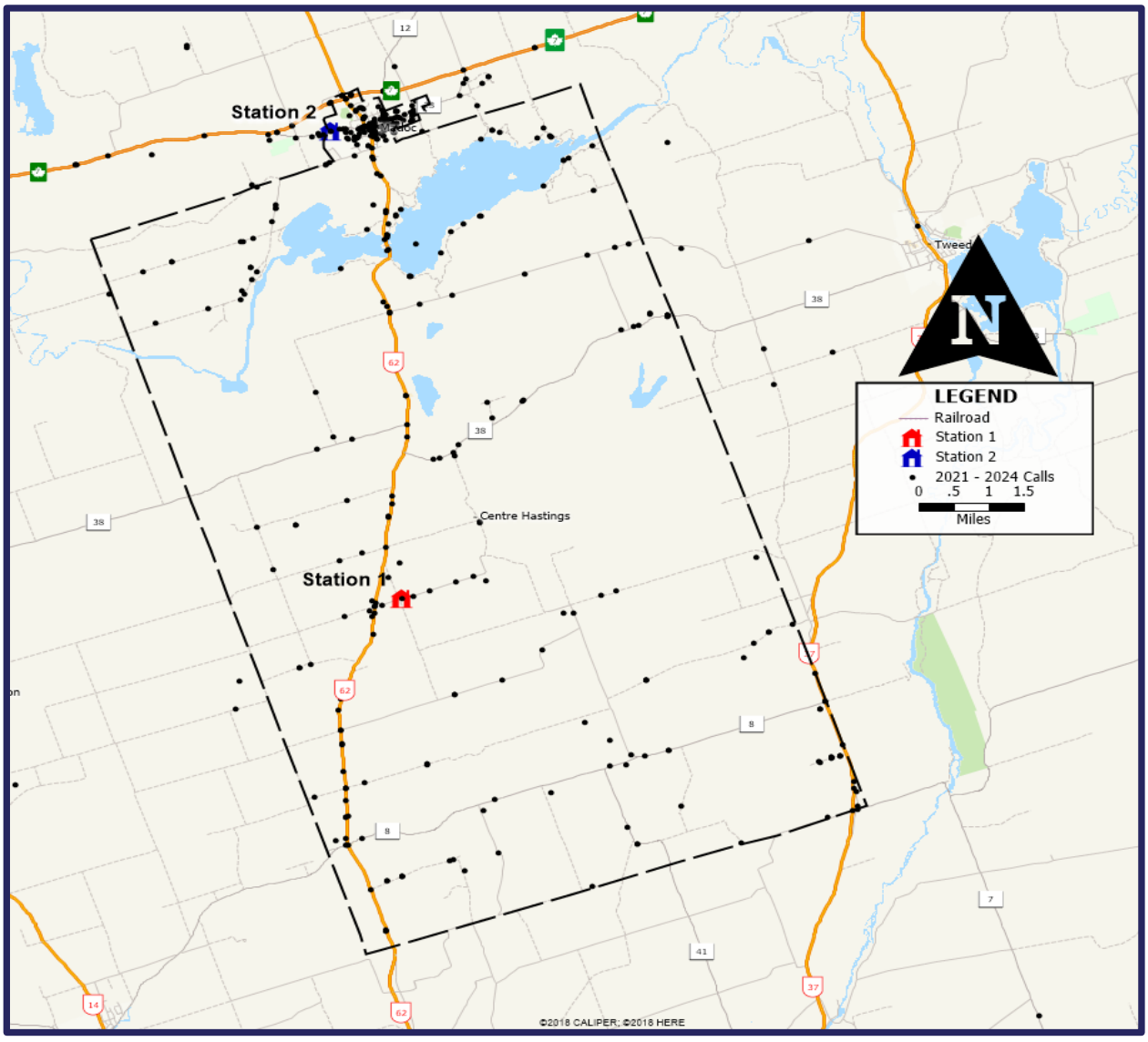
OFM Public Fire Safety Guideline – PFSG 04-87-13 on Fire Station Location states that fire stations should be situated to achieve the most effective and safe emergency responses. Distance and travel time may be a primary consideration; however, if the community's decision makers set a basic expectation of response time, then a more realistic level of service and fire station location criteria may be required.

Fire stations may be considered a community focal point. They have traditionally been located on main roadways in communities to provide quick access and response by the firefighters. The intent is that they last 30 to 50 years, and as such, the planning and design should not solely address the needs of today but those of the department in 20 years and beyond.

The following map represents the Centre Hastings fire stations and the CHFD 2021-2024 call cluster (figure #9). Madoc is the largest community in the Municipality of Centre Hastings. The call cluster demonstrates that the population density is greater in Madoc than the rest of the

Municipality. According to NFPA 1720, the community can be categorized as a Suburban Area demand zone whereas the land area of the remaining of the Municipality can be categorized as Rural Area demand zone. The two different demand zones are important attributes with impact on deployment (recommended number of staff responding to calls for service) and recommended response time.

FIGURE #9 - CHFD FIRE STATION LOCATIONS AND 2021-2024 EMERGENCY CALL CLUSTER

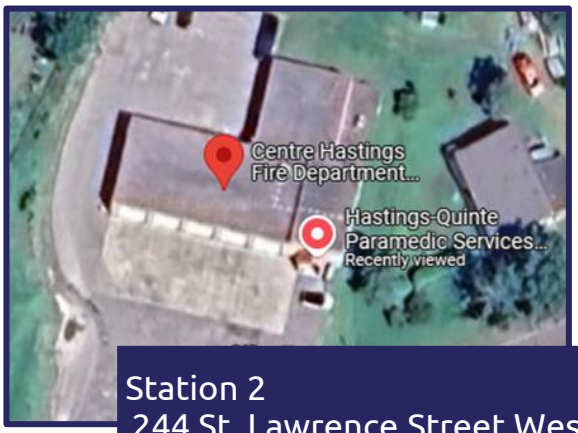


The Municipality of Centre Hastings currently operates two fire stations to meet the fire protection needs of the community. Prior to amalgamation in 1998, Station 1 served as the Township of Huntingdon Fire Department. It is located in the southern part of the

Municipality, in the hamlet of Ivanhoe. Station 2, formerly the Village of Madoc Fire Department, is situated on the outskirts of the Village of Madoc in the Municipality's northwest corner (refer to Figure #10).

FIGURE #10 - CHFD EXISTING FIRE STATION LOCATIONS

Station 1
741 Slab Street



Station 2
244 St. Lawrence Street West

Even though it was not a requirement when Station 1 and Station 2 were built, the two stations do not have post-disaster features installed. Adding such features would be cost-prohibitive as they are typically part of the original design and not completed after structure completion.

3.1.1 Fire Station 1 (South Hall)

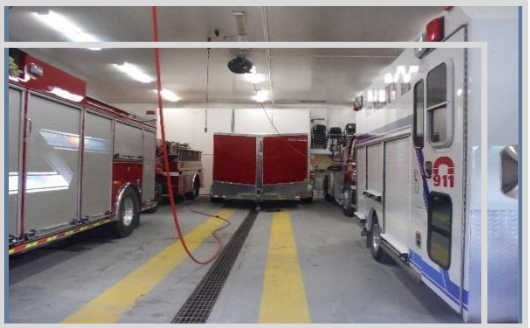
Fire Station 1, located at 741 Slab Street in the hamlet of Ivanhoe, was constructed in 1978. The facility is a one-storey, Type III structure built on a concrete slab, featuring a low-maintenance metal cladding exterior and a metal gable roof. Situated on a rural road just off Provincial Highway 62, the station shares a large municipal lot with the Centre Hastings Public Works Department.

The building is surrounded by open green space, with no traffic conflicts or circulation issues. The design includes two back-in bay doors on the apparatus floor, as well as separate entrances for the apparatus area and the administrative/office space. The facility is secured and monitored.

The interior layout features a clear division between the apparatus floor and office areas. The office portion includes an officer's room and a large multi-purpose room that serves as both a meeting and training space, complete with a kitchenette.

Station #1

Apparatus Bay

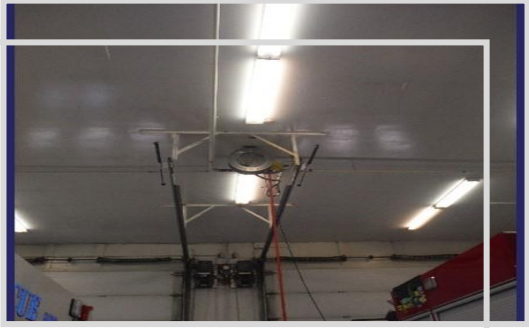


Appartus Bay

Limited Space for Fire Apparatus

Limited Space for Fire Apparatus

Work Room



No Diesel Exhaust Fume System

Training Room and Kitchenette

Office Space

Fire Station 1 – Facility Overview and Assessment

Although the apparatus floor at Station 1 offers sufficient depth, it lacks adequate clearance along the sides, resulting in limited space for equipment storage and creating potential health and safety concerns. A workroom is located on the apparatus floor; however, the space is not equipped with a diesel exhaust fume extraction system.

The eastern portion of the building contains office spaces, including a large training room with a kitchenette. While the facility includes restrooms, it does not have shower facilities to support firefighter decontamination, and it does not fully accommodate the needs of female personnel.

The office area has reliable internet access and is interconnected with both the Municipality and Station 2, supporting communication and administrative functions. The training room is equipped with audio-visual training aids, but it is not large enough to accommodate the full complement of CHFD personnel. Originally designed to support a department of 20–25 firefighters, the space no longer meets the needs of the current post-amalgamation staffing level of over 40 members.

3.1.2 Fire Station 2 (North Hall)

Fire Station 2 is located at 244 St. Lawrence Street West in the Village of Madoc. Built in 1994, the facility features a Type F2 occupancy (medium hazard industrial occupancies) for the apparatus floor and a Type D occupancy (business and personal services occupancies) for the office space. The station is shared with the Hastings-Quinte Ambulance Service, which leases office space and two bays at the back of the building. The building's exterior is designed for low-maintenance, with functional, durable materials.

The apparatus floor is designed to house the current fleet and has sufficient room for future expansion with two bays not currently in use. While the station can accommodate spare apparatuses, the apparatus floor’s limited depth makes parking the aerial apparatus a bit tight. The facility is equipped with a diesel fume exhaust system, ensuring a safer working environment for personnel.

The station’s main office area is public-friendly, with a spacious foyer that leads to the administrative offices. Though the Fire Chief's office is located in the municipal office building, the station's office area is well-suited for fire department administration, though it is currently underutilized for operations and primarily used for storage.

The station includes decontamination facilities, with a separate room and showers available for firefighters. Additionally, a mezzanine level houses a kitchen area and serves as a training/meeting room for staff and volunteers.

Station #2

Outdoor - Shared Space

Automatic Back-Up Generator

Limited Space for Fire Apparatus

Limited Space for Fire Apparatus

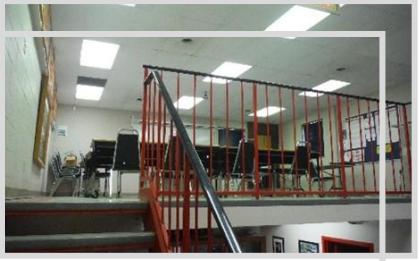
Foyer

Office Space

Decontamination Area

Extractor

Showers



Mezzanine

Dining Area

Kitchen

3.1.2.1 Training Grounds

Station #2 - Training Grounds

Non-Live Fire Training Structure

Live Fire Training Pad

Fire Station 2 – Facility Overview and Assessment

Fire Station 2, located at 244 St. Lawrence Street West in the Village of Madoc, was constructed in 1994 and is a shared-use facility with the Hastings-Quinte Ambulance Service, which leases office space and two apparatus bays at the rear of the building. The apparatus floor, classified as F2 occupancy, is adequately designed to accommodate the current fleet and provides some capacity for growth. However, its limited depth makes it difficult to park larger apparatus, such as the aerial truck, without space constraints. The floor is equipped with a diesel exhaust fume extraction system, and the facility includes an automatic backup generator to ensure operational readiness.

The office area, classified as D occupancy, is separated from the apparatus floor and includes a large foyer and administrative offices. While the Fire Chief's primary office is located at the municipal office, the facility has suitable space to accommodate administrative functions, although these areas are currently underutilized and primarily used for storage. A mezzanine level with a kitchen is used as a training and meeting room.

Fire Station 2 is also equipped with firefighter wellness features, including a dedicated decontamination room and showers, accessible through a separate entrance from the apparatus floor. These features support health and safety protocols in line with modern fire service expectations.

Apparatus Space

To optimize the use of the apparatus floor, a minimum of 5 feet of clearance should be maintained at the front and 20 feet at the rear of each apparatus. This spacing ensures ease of movement, operational safety, and allows for efficient access and operation of the equipment during emergency responses.

Training Grounds

The CHFD's primary training grounds are located at the Madoc Landfill and Recycling Depot site at 106968 Highway 7. These grounds include multiple purpose-built training structures such as a live fire pad, a non-live fire structure, a roof prop, and a Class B fire prop. The site also includes a designated area for auto-extrication training. These facilities enable firefighters to build and maintain skills in structural firefighting and rescue operations.

However, the training site lacks a hydrant connection, making it difficult to meet the water supply requirements for live fire training exercises outlined in NFPA 1403: *Standard on Live Fire Training Evolutions*. Additionally, the site is not equipped with a classroom, and there are no sufficient tables or seating areas to support theoretical instruction. A portable tent is typically

used to provide a temporary rehabilitation area during training, but the grounds would benefit from upgrades such as a permanent canopy for protection in adverse weather and additional storage containers for training equipment and props.

The training grounds also lack internet connectivity and do not interface with the CHFD server. This limits the department's ability to access operational data or communicate effectively in case of emergencies during training sessions.

3.1.3 Facilities Review

Current industry standards for designing and constructing a fire station have identified the need for enhancements, amenities, and features a volunteer fire service would require. The following is a partial list of what is necessary when building a fire station for a volunteer fire department:

- Post-disaster-engineered structure
- Emergency backup power supply
- Gender-neutral washrooms, locker rooms, showers, and dormitory (for when the fire stations have staff, 24 hours a day)
- Barrier-free, Accessibility for Ontarians with Disabilities Act (AODA)-compliant
- Negative pressure bunker gear storeroom
- Vehicle exhaust extraction system
- Water runoff separation tanks in the apparatus floor
- Emergency eye wash and decontamination station
- Offices for the station commander and firefighters
- Study room
- Communications Office (radio system to receive fire calls)
- Technologies room (i.e., phone, computer, radio, etc.)
- Kitchen
- Drive-through apparatus bays
- Lounge
- Fitness room
- Tool/repair room
- Station supply storeroom

- Clean maintenance room for cleaning/disinfecting and repairing items such as face masks, SCBA, medical equipment, etc.
- Bunker gear extraction machine and dryer
- Domestic washing machine and clothes dryer
- Training/meeting room
- Emergency shut off to cooking equipment.
- Given that the station would be a 40–50-year investment, a new station must include amenities required for full-time staffing.
- Red/green lights are installed at the overhead doors to notify the drivers when the overhead door is fully open.
- Sensors at a low level are installed on overhead doors to prevent their closing if the sensor's beam is blocked, indicating an obstruction in the doorway.
- Smoke and CO alarms and, in some instances, fire sprinklers.

As indicated, the Municipality of Centre Hastings was formed in 1998 as a result of the amalgamation of the Village of Madoc and the Township of Huntingdon. The Municipality kept both fire stations under the Centre Hastings Fire Department. Both Fire Station 1 (Township of Huntingdon) and Fire Station 2 (Village of Madoc) kept memorabilia of pre-amalgamation fire halls depicting the Madoc Fire Department and the Township of Huntingdon Fire Department. Pre-Amalgamation, the fire stations were built to accommodate 20 to 25 firefighters, including their administration. Fire Station 1 was built in 1978, and it is approaching its life expectancy of 50 years of age. Fire Station 2 was built in 1994.

The current CHFD employs over 40 personnel. The Fire Chief and the fire administration operates out of the Centre Hastings municipal office.

Although post-amalgamation both fire stations were retained, Fire Station 1 is not adequately serving the needs of the current CHFD. Fire Station 1 does not have adequate room, and there is no additional room available to house the current apparatus complement of the CHFD. Fire Station 2 has room to grow but the office space is underutilised, with the Fire Chief working out of the Municipal Office.

EMG conducted a fire station design assessment. The assessment evaluated the functionality and operability of the fire station in performing fire protection support functions. Fire Station 2 scored 86 out of 100 in optimal functional fire station design, whereas Fire Station 1 scored 48 out of 100 on the optimal fire station design assessment (See Appendix "A" for complete fire station design assessment checklists).

The apparatus floor square footage at Fire Station 1 is only one concern. Inadequate storage, inadequate diesel extraction systems, lack of office space and training room, and inadequate restrooms are a few the additional concerns with the current facility's fire station design.

Fire stations are expensive to build and maintain, and the Municipality must maintain this essential infrastructure to ensure the CHFD longevity. EMG recommends that the Municipality of Centre Hastings initiate procurement of a third party to appraise the condition of Fire Station 1 and Fire Station 2. The appraisal should include the review all aspects of the structure, the mechanical systems, and the fire station design with respect to their efficiencies or lack thereof.

3.1.4.1 Proposed One Station Model for the CHFD

EMG's review of the CHFD would suggest that the CHFD would benefit from moving to a one station fire service model. With a large proportion of calls for service in the Village of Madoc and with a newer fire station with adequate fire station design and room for growth, as well as approximately 20 to 30 years of building life expectancy remaining, the option to move to a one station fire department is viable and financially responsible.

With reasonable anticipated growth, the Municipality could benefit from the space that would be made available from consolidating the CHFD to a one station fire department. Fire Station 1 may be of value to the municipal department of Public Works or financially viable real-estate sale for the Municipality.

When selecting the optimal location for a fire station, many factors must come into play. These include questions such as:

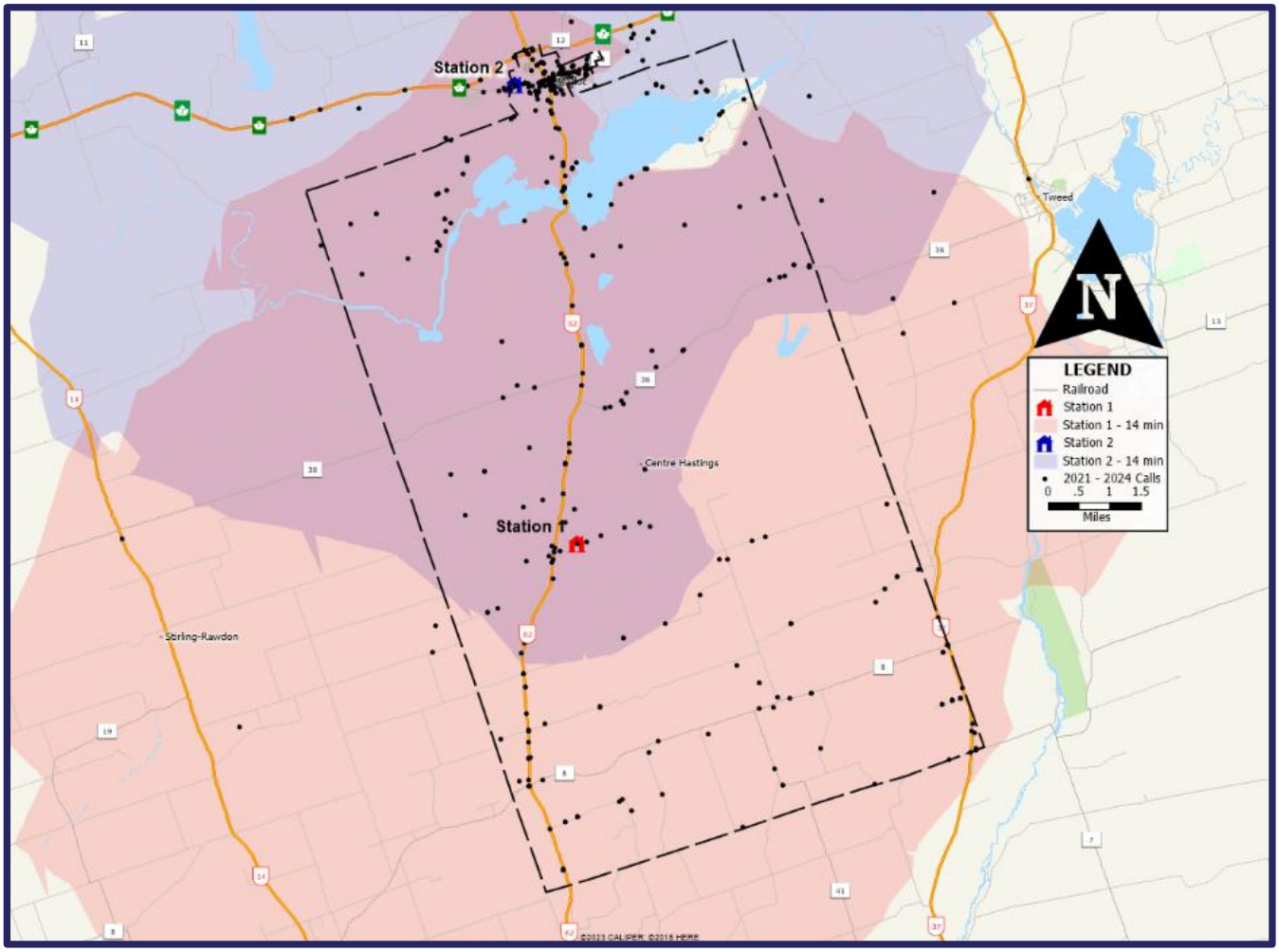
- What is the availability of firefighters in that area?
- What areas of the community is the proposed site to respond to according to industry standards?
- What road system(s) are in the area, and will they impede responding firefighters or apparatus?
- What is the call volume in that area? Is it high enough to justify the spending?
- Is there vacant land available on which to build the fire station?
- Is the size of the lot large enough to accept the size of the station, provide adequate parking, and allow for future expansion?

Fire Station 2 answers all the above questions.

Furthermore, EMG evaluated the response time performance of the CHFD's fire stations 1 and 2. Using GIS analytics, the One-Station option would not negatively impact response time. Based

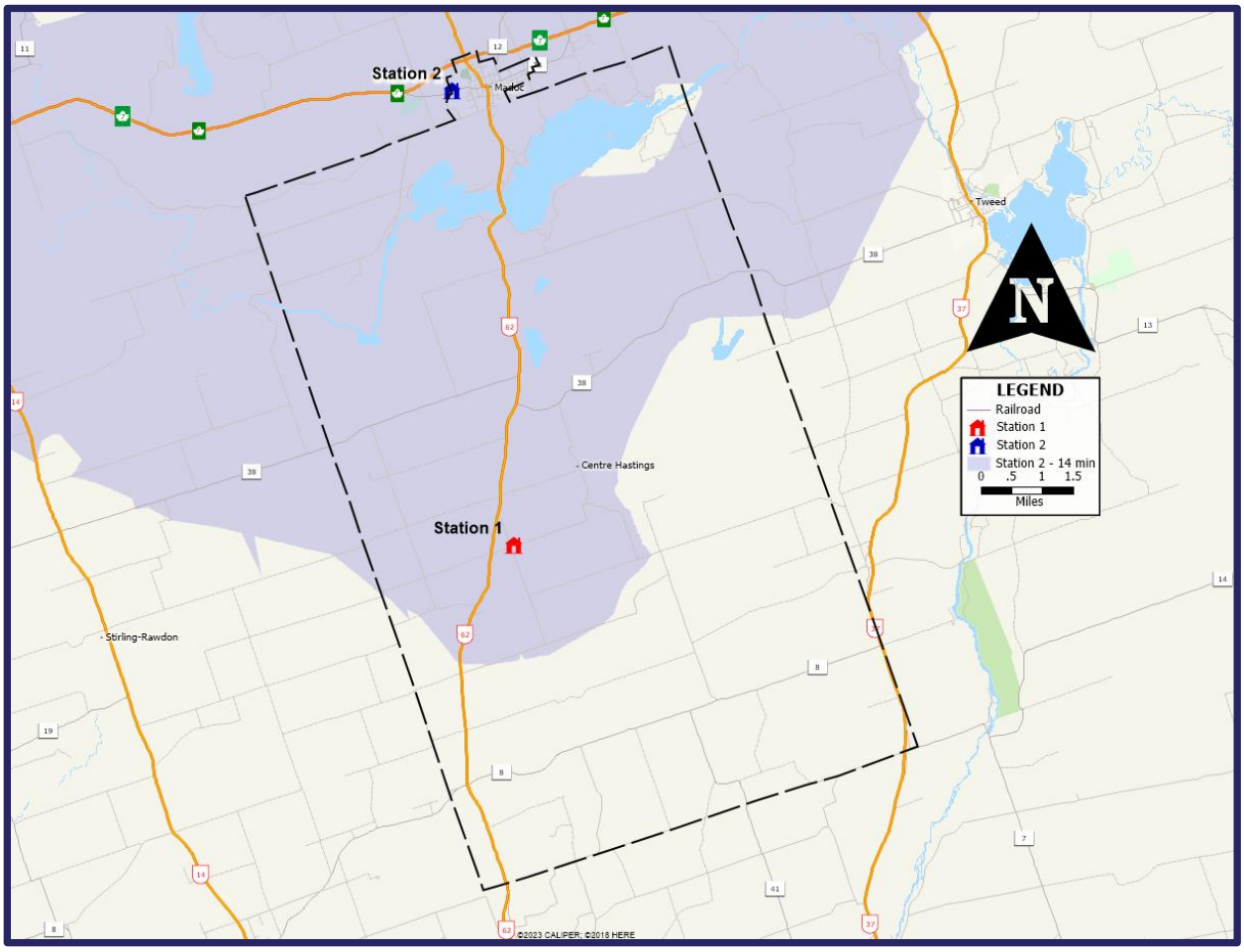
on the recommended 14-minute response time suggested by the NFPA 1720: *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments,* Fire Station 1 and Fire Station 2 overlap considerably in their coverage zone (Figure #11). The analysis supports a review of the current two-station CHFD model in consideration to the proposed one station model.

FIGURE #11 - FIRE STATIONS 1 & 2 14-MINUTE RESPONSE TIME AND CALL CLUSTER



The most southerly portion of the Municipality of Centre Hastings is approximately 22 kilometers away from Fire Station 2. As recommended by the NFPA 1720, the demand zone for the southern portion of the Municipality would fall under the *Remote Area demand zone* (travel distance greater than 12.87 km). Based strictly on response time, a one-station model based on keeping the CHFD Fire Station 2 would be justifiable and responsible with respect to the CHFD providing adequate response to emergency calls and the maintenance of quality fire protection services to the community (figure #12). Fire Station 2 is also strategically important to maintain the automatic Aid agreement with the Township of Madoc.

FIGURE #12 - PROPOSED CHFD ONE STATION MODEL USING FIRE STATION 2



Regarding automatic aid agreement, If the Municipality of Centre Hastings is not comfortable with the elevated response time recommended by the NFPA 1720 for R*emote Areas*, when considering moving to a "One-Station Model", EMG recommends that the Municipality evaluate the option of entering into an automatic aid agreement with the Municipality of Stirling-Rawdon to provide fire protection services to the south end of the Municipality.

The Stirling-Rawdon FD – Springbrook Fire Station (Station 2) is reasonably located to provide adequate response to maintain the current level of fire protection services for the residents of the south end of the Municipality. Furthermore, the Stirling-Rawdon FD is a member of the same Mutual Aid Agreement as the CHFD and the department has historically reciprocated on mutual aid emergency calls.

While analytics shows that consideration for a "one station CHFD model" would not negatively impact the quality of service, the model would also show economic benefits, including less repairs and maintenance costs for facilities, less apparatuses requirement, a reduction in equipment needs, as well as a saving with respect to paid-on-call wages and salaries. Furthermore, the "one station CHFD model" addresses the pre-amalgamation gap where the Centre Hastings FD is still operated as a "two fire departments model". The one station model will promote a "ONE DEPARTMENT" culture.

After careful consideration, EMG recommends that the Municipality of Centre Hastings consider a fire station study for the CHFD. The CHFD has the option of operating as a "one station model," a fire station location feasibility study would provide an analysis of fire services delivered by the Municipality of Centre Hastings. The information would guide the Municipality in meeting the challenges of providing efficient, cost-effective fire protection services based on response capability and fire protection service levels provided to meet the current and future needs of the Municipality.

3.2 Fire Apparatus

The reliability of a fire apparatus is critical to the successful operation of a fire service. Over the long term, delaying the replacement of a vehicle is inadvisable as it will add to the overall maintenance costs and the lack of reliability. The lack of current and reliable apparatus can influence insurance costs based on the emergency service's FUS rating.

Overall, the CHFD is well-equipped with fire apparatus (Pumper/Tankers, Tankers, and Rescues, apparatus) required for primary response to calls within the Municipality of Centre Hastings. All the vehicles have been identified in the CHFD capital replacement plan.

Fire Station 1 boasts a fleet that includes a first line duty pumper/tanker, two tankers, and a rescue van. Fire Station 2's fleet includes a first line duty pumper/tanker, a quint apparatus, a heavy rescue vehicle, and a second line duty pumper/tanker.

When assessing an emergency service's ability to respond and meet the community's needs, in the absence of a corporate policy on the subject, the Fire Underwriters Survey (FUS) provides some guidance in considering the age of a fire truck as one of its guiding assessment criteria.

The small communities and rural centres section (outlined in the following chart in blue) is the recommendation for vehicle replacement for communities the size of Centre Hastings. This allows for up to a 25-year replacement cycle, in which the fire vehicle can be utilized as 2nd Line response status or up to 30 years for a reserve apparatus, with the exceptions that age status may be considered when the apparatus condition is acceptable, and the apparatus successfully passes required testing. Al listed fire apparatuses older than 20 years of age that are service tested annually are eligible for grading recognition. The CHFD should endeavour to maintain accurate service testing record.

Apparatus Age	Major Cities [3]	Medium Sized Cities [4] or Communities Where Risk is Significant	Small Communities [5, 6] 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

[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 areas conditionally, when the apparatus condition is acceptable, and the apparatus successfully passes required testing.

[3] **Major cities** are defined as communities that have: A total population of 100,000 or greater within the fire protection jurisdiction.

[4] **Medium-Sized Communities** are defined as communities that have: a total population of 30,000 – 99,999 within the fire protection jurisdiction.

[5] **Small Communities** are defined as are defined as communities that have: a total population of 1,000 – 29,999 within the fire protection jurisdiction.

[6] **Rural Communities** are defined as are defined as communities that have: a total population of less than 1,000 within the fire protection jurisdiction.

- It is important to note that the FUS definition of First Line Duty, 2nd Line Duty, and Reserve is as follows:
- 1st line is the first fire truck utilized for response at the fire station.
- 2nd line is the next truck to be used if the 1st line unit is tied up at a call, and
- Reserve is the vehicle kept in the fleet to be put into service if a 1st line or 2nd line vehicle is out of service.

Provided that the CHFD adheres to the recommended replacement timelines through an approved capital replacement schedule, the CHFD should retain its current municipal "grading" rate. By ensuring that the vehicles are being replaced on a regular schedule, the CHFD is also demonstrating due diligence toward ensuring a dependable response fleet for the community it serves through its vehicle replacement schedule. Currently, the CHFD utilizes a 20-year replacement for its 1st line fire apparatus and a 25-year schedule for its 2nd line fire apparatus schedule (Figure #13). The CHFD replacement schedule adheres to the NFPA and FUS for small communities and rural centres.

FIGURE #13 - CHFD FLEET REPLACEMENT SCHEDULE

Description	Station	Estimated Costs								
		2026	2027	2028	2029	2030	2031	2032	2033	2034
Pumper Tanker #204 North (2008 Spartan)	Station 2			500,000						
Pumper Tanker #201 North (2023 Freightliner)	Station 2									
Aerial Unit #202 North (1994 Simon)	Station 2									
Rescue Van #203 North (1992 Spartan Van)	Station 2					375,000				

Description	Station	Estimated Costs								
		2026	2027	2028	2029	2030	2031	2032	2033	2034
Pumper Tanker #101 South (2016 Asphodel)	Station 1						650,000			
Tanker #102 South (2016 Freightliner)	Station 1									
Tanker #103 South (1999 GMC 8500)	Station 1									
Rescue Van #104 South (1997 Ford Van)	Station 1		200,000							

The NFPA 1910: *Standard for Inspection, Maintenance, Refurbishment, Testing, Retirement of In-Service Emergency Vehicles, and Requirements for Marine Firefighting Vessels* also supports a regular replacement schedule for fire vehicles. This standard includes guidance on retirement criteria for fire apparatus. NFPA 1910 recommends that all front-run vehicles are replaced on a 15 to 20-year cycle, depending on the community size.

For emergency services that are considering refurbishing their vehicles to extend the in-service life, reference should be made to the NFPA 1910.

NFPA and FUS both recommend the replacement of front-run units after 20 years. This same vehicle can then be put into a secondary role. As such, all front-run units should be scheduled for replacement at the 20-year stage with the backup/ secondary units being replaced at 25 years. Reserved pumper truck may have a replacement date up to 30 years, when demonstrating a maintenance schedule.

Although EMG applauds the CHFD and the Municipality of Centre Hastings's initiative to adhere to a replacement schedule, EMG recommends that the Council formally adopt a CHFD-specific vehicle replacement policy based on the NFPA and FUS standards. EMG's review of the CHFD replacement schedule indicated inconsistency in replacement schedule. For instance, Pumper/Tanker 204's replacement schedule is based on a 20-year timeframe, whereas Pumper/Tanker 101's replacement schedule is set at 15 years. Furthermore, the CHFD's rescue vans have a 30- and 38- year replacement dates.

Adopting a 20-year replacement schedule for First Line Duty, a 25-year replacement for 2nd Line Duty, and a 30-year replacement for reserve apparatus, would greatly benefit the Municipality and the CHFD.

3.2.1 CHFD Fleet

The CHFD is equipped with a variety of modern fire apparatuses that make up its fleet. The following chart illustrates the current type and age, as well as scheduled replacement year, of all large fire apparatus operated by the department based on information provided by the CHFD. Adhering to a 20-year replacement for First Line Duty, a 25-year for Second Line Duty, and a 30-Year for Reserve, EMG noted the recommended replacement year in red in the following chart

Truck Designation	Year Purchased	Type	Current Age	Replacement
 #101	2016	Pumper/ Tanker	9 years	2031 (2036)
 #102	2016	Tanker	9 years	2036
 #103	1999	Tanker	26 years	2025 (2029)
 #104	1997	Rescue	28 years	2027 (2017)

Truck Designation	Year Purchased	Type	Current Age	Replacement
 #201	2023	Pumper/ Tanker	2 years	2043
 #202	1994	Aerial	31 years	No Replacement Date
 #203	1993	Rescue	32	2030 (2013)
 #204	2008	Pumper/ Tanker	17	2028

As previously noted, the replacement schedule reflects inconsistently a15-year or 20-year replacement for same type of apparatus, such as First Line Duty pumper/tanker 101 and pumper/tanker 201, respectively. As recommended, the replacement schedule should adhere to FUS/NFPA recommended replacement schedule.

The CHFD has an aerial apparatus. As a reserve designation and given the excellent condition of the apparatus, as well as the robust maintenance and annual testing, the aerial meets the recommended replacement practices of FUS and NFPA.

3.2.1.1 Rapid Response Vehicle

Between 2019-2022, 34.7% of all calls for service were medical type calls for service. Medical and social service type calls are on the rise. Using an engine or truck to answer medical calls is inefficient, ineffective, and unsustainable in the long-term. Currently, the CHFD utilizes its heavy rescue #202 apparatus in response to medical type calls for service. EMG's investigation revealed that the size of the vehicle is often awkward to manoeuvre in tight places. Research on the matter suggested that the practice of responding to medical calls with full-size fire apparatus was an expansive and inappropriate use of equipment35.

One deployment concept that appears to be regaining significant traction as an option for the fire service to meet both a decrease in budget and an increase in the demand for organizational efficiency is the transition from full-size fire apparatus to smaller rapid-response vehicles (RRVs). This concept can be used by the CHFD to deploy personnel to the scene of a medical emergency and work in conjunction with other apparatus on fire suppression incidents.

With a tanker (Tanker # 103) scheduled to be replace in 2025, EMG believes that the tanker ought to be replaced with an RRV. All the CHFD fleet pumpers and the aerial are equipped with tanks (to transport water). Having two tankers is somewhat overachieving and not necessarily essential to the CHFD's fleet to meet the water management needs of the community in areas not served by hydrants. The acquisition of an RRV would better serve the CHFD instead of acquiring a tanker.

EMG recommends that the CHFD transitions from a full-size apparatus to the acquisition of a smaller rapid-response vehicle (RRV) to respond to medical calls and fire in support role, when required.

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35 Petrillo, Alan, *Departments Measure Effectiveness of Rapid Response Vehicle Programs* retrieved from www.fireapparatusmagazine.com/fire-apparatus/ladder-trucks/departments-measure-effectiveness-of-rapid-response-vehicle-programs/

3.2.2 Fleet Maintenance

Planned and annual maintenance work for the CHFD fleet is currently conducted by Cannifton Garage 2000 Ltd. By all accounts, the current arrangement is proving to be satisfactory for both parties.

It would be advantageous for the CHFD to closely monitor the annual and ongoing maintenance and repair costs associated with each vehicle so that future procurement decisions can be fully informed, and this is followed as a recommendation.

NFPA 1910, *Standard for the Inspection, Maintenance, Refurbishment, Testing, and Retirement of In-Service Emergency Vehicles and marine Firefighting Vessels,* is particularly relevant for fleet maintenance of the CHFD. Furthermore, Ontario Fire Truck is the third-party contactor who performs annual pump tests and aerial ladder tests, as well as ground ladder tests, for the CHFD apparatuses.

3.2.3 Future Fleet Needs / Replacement Schedule

The replacement of fire service vehicles has become an increasingly complex undertaking for all fire departments. The current post-Pandemic fire apparatus manufacturing environment has caused several notable changes in how trucks are being purchased with today's market conditions. These include the following:

- Fire apparatus manufacturers are commonly quoting two to three-year delivery times for new, built-to-specification apparatus.
- Apparatus acquisition costs over the past several years have risen dramatically due to supply chain and labour shortage issues for virtually all manufacturers.
- Vendors are now reluctant to quote firm pricing on vehicles that won't be delivered until two years hence – the fluctuating value of both parts from OEMs and the value of the Canadian dollar vs. the U.S. dollar being the two most often cited reasons. Many departments are now building "contingency" funds into apparatus purchasing project/budget lines.

For these reasons, EMG recommends that the monetary value in the "Estimated Costs" columns of the CHFD Apparatus Replacement Schedule should be increased significantly for each vehicle identified (to $1M for each new Engine/Pumper/Rescue/Tanker apparatuses).

In addition, while drawing the specifications of a new apparatus, an Apparatus Committee (the Committee) should be organized, including establishing its Terms of Reference. Members of the

Committee should include the Fire Chief, officers, and firefighters who may have a vested interest in the specifications.

By having a committee, all aspects of the specifications will be considered, including the purpose and function of the apparatus, the power plant, pump size, compartment sizes, ancillary equipment, hose loads, chassis safety features, including airbags, and health and safety concerns such as clean cab technologies and enhanced chassis stabilization to lessen the risk of a rollover.

Some municipalities in Ontario are choosing to lease some of their fleet vehicles, such as cars, vans, and pick-up trucks. Lease payments can be more manageable and less impactful on their budgets. At the end of the lease agreement, they return the vehicle and pick up a new replacement. Taxes are paid monthly on the cost of the lease instead of paying a lump sum at the time of delivery. Maintenance costs are lower as the vehicle comes with a minimum of a three-year warranty, which impacts the budget to a lesser degree.

In the United States, departments have turned to leasing their fire apparatus on a five to ten-year agreement when they are replaced by new apparatus at the end of the lease. This practice reduces costly repairs of aging equipment and one-time capital costs. Several Canadian fire services are exploring lease options.

3.2.4 Damage of Salt Brine

Over the last few years, municipalities have been using salt brine on the roads in the winter to reduce the adhesion of snow and ice to road surfaces. This mixture is causing significant damage to the fire apparatus and advancing the rusting of the vehicle's body. Once the frame rail of an apparatus begins eroding, it may split in time, creating costly repairs and sometimes making the vehicle un-roadworthy. The CHFD should wash the underbody of every fire apparatus each spring, spray the body with an anti-rusting agent, clean electrical connections on the pump panel, and apply corrosion inhibitors to slow the rusting process and reduce the repair costs associated with this issue.

3.3 Equipment & Maintenance

During the review, a program was in place for small equipment testing and evaluation. All equipment, such as ladders, breathing apparatus, small engines, ropes, and hoses, are tested annually or based on manufacturers' recommendations. As a result of the NFPA Emergency Response and Responder Safety Document Consolidation Plan as approved by the NFPA Standards Council, several equipment related NFPA standards are being combined into a single document, namely the *NFPA 1930: Standard on Fire and Emergency Service Use of Thermal Imagers, Two-Way Portable RF Voice Communication Devices, Ground Ladders, and Fire Hose,*

and Fire Hose Appliances. Although the CHFD is demonstrating diligence with respect to maintenance and testing, using third-party contractors to conduct annual testing and regular maintenance, EMG recommends, as best practice, that the CHFD develop policies and procedures with respect to inspection, testing, and maintenance based on the NFPA 1930.

The CHFD is diligent and does an excellent job of ensuring that testing, inspections, and maintenance are carried out for the safety of personnel while ensuring the equipment is in a state of readiness. EMG applauds, the CHFD creation of several equipment-related SOPs. However, the SOPs should be updated to reflect the NFPA 1930 and current Section 21 Guidance Notes to ensure a robust maintenance and inspection system.

Tracking the completion of annual testing in the asset management program should be a fire department's priority to ensure equipment functionality for the front lines. Tracking allows the fire department to confirm that apparatus and equipment testing schedules get completed while minimizing the unavailability of equipment and/or frontline apparatuses.

3.3.1 Turnout Extractor – PPE Washer

Ever-increasing numbers of firefighters are diagnosed with cancer yearly. A contributing factor to their illness is the contaminants that adhere to the bunker gear during firefighting operations. The CHFD has acquired a fire department PPE extractor to clean their PPE after calls for emergency. The units are housed in Station 2.

Station 2 is the only station with specialized washing machines for this cleaning. During this time, the firefighter requires replacement bunker gear until their gear returns from cleaning. The CHFD has a good stock of spare gear for firefighters in various sizes. Ensuring that cleaning the ensemble is a high priority after fires and that firefighters have access to properly fitting bunker gear during the cleaning process assists the CHFD in meeting its goals within its decontamination and hygiene program.

When used for interior structural firefighting, bunker gear has a life span of 10 years as stated in NFPA 1851, *Standard on Selection, Care and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting* (note that this standard will be consolidated into NFPA 1850 in the next edition). The CHFD should ensure that the SOP 4-8, which was last updated in 2014, is current and in adherence to the NFPA 1851 (soon to be NFPA 1850).

3.3.2 Respiratory Program

During EMG's review, it was noted that the CHFD are diligent with a robust testing of their SCBAs and cylinders by a third-party service provider, as well as with fit testing functions. EMG also noted that the CHFD have policies and procedures (SOP 4-9) defining their respiratory program that were updated in 2019. EMG recommends that such respiratory program comply with Section 21, Guidance Note 4-9: *Respiratory Protection Program* and O. Reg. 833, made under the Occupational Health and Safety Act, R.S.O. 1990, c. O.1.

In addition to the requirements in O. Reg. 833, a respiratory program should address the following:

- Program administration, documentation and evaluation
- Program administrator training
- Training of persons administering fit testing
- Proper use of Rapid Intervention/Universal Air Connections and other emergency procedures
- Fit testing for all respirators every two years (quantitative fit testing for SCBA)
- Air quality testing prior to filter change and following major service work, modifications or extensive repairs
- Potential use of longer duration SCBA cylinders based on risk assessment of larger and/or complex structures
- Under what conditions do respiratory hazards arise, such as:
    - an unknown atmosphere that is suspected of being hazardous
    - a hazardous atmosphere, such as an overhaul
    - an atmosphere that may rapidly become hazardous, such as wind change
    - working below ground level or inside a confined space (unless the safety of the atmosphere can be established by testing and continuous monitoring)
    - potential exposure to biological hazards

The program should be developed in consultation with the joint health and safety committee or health and safety representative.[36]

3.3.2.1 Face Mask

[36] Section 21 Guidance Note 4-9

The facepiece is a critical component of the SCBA, serving as the interface between the user and the surrounding atmosphere. It is designed to create an airtight seal around the face, preventing the entry of harmful gases, smoke, or particulates.[37] During the EMG's site visit, it was noted that firefighters at Fire Station 1 are issued individual facepiece for the SCBAs, whereas firefighters from Fire Station 2 do not have individualized facepieces. This phenomenon could be attributed to pre-amalgamation fire department practices. Whatever the reasoning, EMG recommends that, for uniformity throughout the CHFD, all firefighters should have their own fit tested facepiece.

3.3.3 Asset Management Program

Fire Administration has an established asset management program and a master equipment life-cycle plan to ensure that equipment replacement is occurring where applicable. It is a common practice to tie this equipment to the parent apparatus. Currently, the CHFD is achieving this function manually through the maintenance of a series of logbooks.

Many pieces of equipment have a predetermined life span as established in the NFPA Standards and/or the OH&S Sections 21 Guidance Notes. When it comes to the end of the life span, the items must be decommissioned, replaced with new equipment, and then disposed of to ensure no other outside interests could use them for liability reasons. The asset management program should operate to trigger notifications when an item is approaching the end-of-life span, and plans should be in place for replacement (i.e., identified in the budget). Some systems do not notify the department when maintenance or testing is required. EMG recommends that the CHFD invest in asset management software or ensure that the CHFD equipment inventory is programmed into the asset management software (*FIREQ)* to ensure an efficient and effective replacement plan.

3.3.4 Breathing Air Containment Fill Station

"The most important part of a firefighter's respiratory system protection is the quality of the air contained in their SCBA cylinder"[38].

Currently, the CHFD do not have a compressor for their "SCBA Fill Station." The CHFD relies on the Tweed Fire Department to refill their cascading refill system. The cascading system is assembled in a cargo trailer for mobile convenience at emergency scenes. However, the CHFD

[37] SCBA: A Guide to Self-Contained Breathing Apparatus — Delta Emergency Support Training accessed March 10, 2025, https://deltaemergency.com/thedeltadispatch/2023/6/19/the-crucial-role-of-scba-in-firefighting-navigating-hazards-with-confidence

[38] FireRescue1, "What to know before buying a fill station", accessed July 2024, https://www.firerescue1.com/fire-products/fire-breathing-apparatus/air-products/articles/what-to-know-before-buying-a-fill-station-yS9Sl2ta0ciNB3LU/

does not have a CHFD apparatus equipped with a proper hitch to transport the cargo trailer. The CHFD currently relies on firefighters' personal vehicles to haul the SCBA Fill Station.

The current arrangement is an unnecessary risk for the CHFD and the Municipality of Centre Hastings. EMG recommends that the CHFD procure a compressor for their fill station. There is ample space at Fire Station 2 to permanently locate an SCBA fill station system, including cascading air cylinders, fill station and compressor, as well as storage of SCBA air cylinders.

A SCBA fill station system includes:

- High-pressure air compressor
- Electrical Motor
- Air-purification system
- Refill station
- Storage system
- All operating controls and appliances

Although parts can be purchased separately, an integrated system advantage is the knowledge that all components will work together, and if repairs are needed, there is only one point of contact. A downside is that the failure of one of the components can render the entire system inoperable. In the case of the CHFD, a separate compressor would be an upside.

At a minimum, the air storage system should consist of four interconnected storage tanks and be designed to fill two SCBA cylinders either independently or simultaneously (cascading system). The fill adapter will match the department cylinders (e.g., 2,216 psi or 4500 psi). The fill hose should have a bleeding valve. The purification system should also use replaceable cartridges. The current CHFD fill station meets all the aforementioned criteria.

With the acquisition of a compressor to complete the CHFD "SCBA Fill Station," the CHFD should develop policies and procedures that should reference NFPA 1989: *Standard on Breathing Air Quality for Emergency Services Respiratory Protection (soon to be consolidated under NFPA 1985)*; the CSA Standard Z180.1: *Compressed Breathing Air and System;* The CSA Standard Z94.4: *Selection, Use and Care of Respirators;* and the NFPA 1500: *Standard on Fire Department Occupational Safety and Health program*.

Section 3: Recommendations

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
58	The Municipality of Centre Hastings consider a fire station study for the CHFD. The CHFD has the option of operating as a "one station model," a fire station location feasibility study would provide an analysis of fire services delivered by the Municipality of Centre Hastings.	Mid-Term (3 to 6 years)	Study approximate cost $50,000.00 One-Station Model would generate substantial savings to the Municipality	While analytics shows that consideration for a "one station CHFD model" would not negatively impact the quality of service, the model would also show economic benefits, including less repairs and maintenance costs for facilities, less apparatuses requirement, a reduction in equipment needs, as well as a saving with respect to paid-on-call wages and salaries.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
59	The CHFD should adopt a 20-year replacement schedule for First Line Duty, a 25-year replacement for 2nd Line Duty, and a 30-year replacement for reserve apparatus, would greatly benefit the Municipality and the CHFD.	Immediate (0 to 1 year)	Costs will vary depending on re-alignment of replacement schedule for CHFD fleet.	Although EMG applauds the CHFD and the Municipality of Centre Hastings's initiative to adhere to a replacement schedule, EMG recommends that the Council formally adopt a CHFD-specific vehicle replacement policy based on the NFPA and FUS standards. EMG's review of the CHFD replacement schedule indicated inconsistency in replacement schedule. For instance, Pumper/Tanker 204's replacement schedule is based on a 20-year timeframe, whereas Pumper/Tanker 101's replacement schedule is set at 15 years. Furthermore, the CHFD's rescue vans have a 30- and 38- year replacement dates.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
60	The CHFD should transition from a full-size apparatus to the acquisition of a smaller rapid-response vehicle (RRV) to respond to medical calls and fire in support role, when required.	Short-Term (1 to 3 years)	RRV cost approximately $150,000.00	Between 2019-2022, 34.7% of all calls for service were medical type calls for service. Medical and social service type calls are on the rise. Using an engine or truck to answer medical calls is inefficient, ineffective, and unsustainable in the long-term. Currently, the CHFD utilizes its heavy rescue #202 apparatus in response to medical type calls for service. EMG's investigation revealed that the size of the vehicle is often awkward to manoeuvre in tight places. Research on the matter suggested that the practice of responding to medical calls with full-size fire apparatus was an expansive and inappropriate use of equipment.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
61	The monetary value in the "Estimated Costs" columns of the CHFD Apparatus Replacement Schedule should be increased significantly for each vehicle identified (to $1M for each Engine/ Pumper/ Rescue/ Tanker apparatuses).	Immediate (0 to 1 year)	Increase in vehicle replacement cost approximately 35 percent	The replacement of fire apparatus has become an increasingly complex undertaking for all fire departments. The current post-pandemic fire apparatus manufacturing environment has caused several notable changes in how trucks are being purchased with today's market conditions.
62	The CHFD respiratory program should comply with Section 21, Guidance Note 4-9: *Respiratory Protection Program* and O. Reg. 833, made under the Occupational Health and Safety Act, R.S.O. 1990, c. O.1.	Immediate (0 to 1 year)	Staff Time	During EMG's review, it was noted that the CHFD are diligent with a robust testing of their SCBAs and cylinders by a third-party service provider, as well as with fit testing functions. EMG also noted that the CHFD have policies and procedures (SOP 4-9) defining their respiratory program that were updated in 2019. However, the SOP is lacking in detail for their Respiratory program, creating unnecessary risks to the CHFD and the Municipality of Centre Hastings.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
63	For uniformity throughout the CHFD, all firefighters should have their own fit tested facepiece.	Immediate (0 to 1 year)	Facepiece cost $1,500.00/each	The facepiece is a critical component of the SCBA, serving as the interface between the user and the surrounding atmosphere. It is designed to create an airtight seal around the face, preventing the entry of harmful gases, smoke, or particulates.[39] During the EMG's site visit, it was noted that firefighters at Fire Station 1 are issued individual facepiece for the SCBAs, whereas firefighters from Fire Station 2 do not have individualized facepieces. This phenomenon could be attributed to pre-amalgamation fire department practices.

[39] SCBA: A Guide to Self-Contained Breathing Apparatus — Delta Emergency Support Training accessed March 10, 2025, https://deltaemergency.com/thedeltadispatch/2023/6/19/the-crucial-role-of-scba-in-firefighting-navigating-hazards-with-confidence

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
64	The CHFD Should invest in asset management software or ensure that the CHFD equipment inventory is programmed into the asset management software (*FIREQ)* to ensure an efficient and effective replacement plan.	Immediate (0 to 1 year)	Staff Time if *FireQ* is used for this purpose	Many pieces of equipment have a predetermined life span as established in the NFPA Standards and/or the OH&S Sections 21 Guidance Notes. When it comes to the end of the life span, the items must be decommissioned, replaced with new equipment, and then disposed of to ensure no other outside interests could use them for liability reasons. The asset management program should operate to trigger notifications when an item is approaching the end-of-life span, and plans should be in place for replacement (i.e., identified in the budget).

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
65	The CHFD should procure a compressor for their breathing air containment fill station.	Short-Term (1 to 3 years)	Fill station cost approximately $40,000.00	Currently, the CHFD do not have a compressor for their "SCBA Fill Station." The CHFD relies on the Tweed Fire Department to refill their cascading refill system. The cascading system is assembled in a cargo trailer for mobile convenience at emergency scenes. However, the CHFD does not have a CHFD apparatus equipped with a proper hitch to transport the cargo trailer. The CHFD currently relies on firefighters' personal vehicles to haul the SCBA Fill Station. The current arrangement is an unnecessary risk for the CHFD and the Municipality of Centre Hastings.

Section 4

Emergency Management

SECTION 4: EMERGENCY MANAGEMENT

4.1 Overview –Emergency Management in Ontario

Emergency management in Ontario is a comprehensive system designed to prepare for, respond to, and recover from emergencies and disasters. It involves coordinated efforts among all levels of government, municipal agencies, and other organizations to ensure the safety and well-being of the public during crisis situations.

The following is an overview of the key elements of emergency management in Ontario:

4.1.1 Legislation and Framework

- Emergency Management and Civil Protection Act (EMCPA)[40]: This is the key legislation that governs emergency management in Ontario. It outlines the responsibilities of municipalities, the provincial government, and other stakeholders in preparing for and responding to emergencies.
- Ontario Regulation 380/04[41]: This establishes specific requirements for municipalities in terms of emergency management programs.

4.1.2 Municipal Responsibilities

- Under the EMCPA, municipalities are required to develop and maintain an Emergency Management Program (EMP). This program includes the creation of a Municipal Emergency Response Plan (MERP) that details the procedures for managing emergencies within the community.
- Municipalities are responsible for responding to local emergencies and ensuring that necessary services are maintained during a crisis. They must also train employees and ensure the public is informed about emergency preparedness.

4.1.3 Provincial Roles

- The Ontario Provincial Police (OPP) and the Ontario Ministry of Health and Long-Term Care are key provincial agencies involved in emergency management.

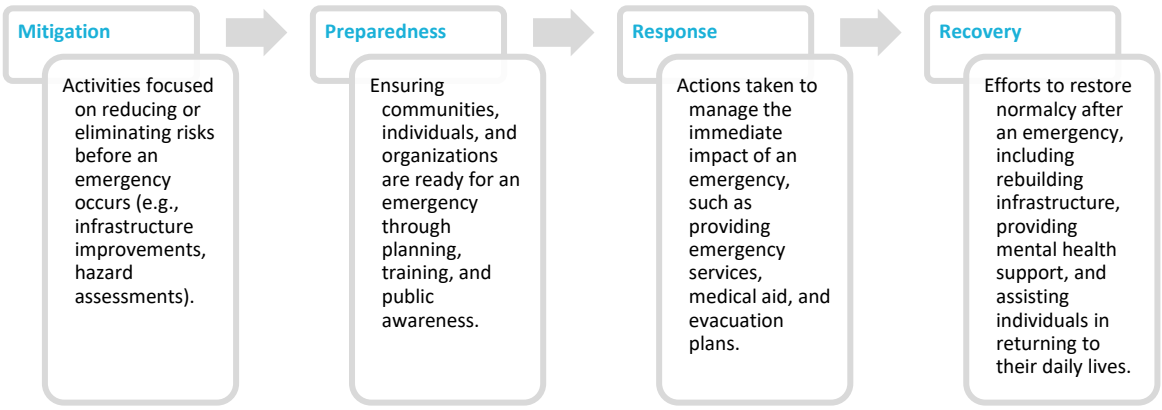
[40] Emergency Management and Civil Protection Act, R.S.O. 1990, c. E.9 | ontario.ca Accessed March 2, 2025, https://www.ontario.ca/laws/statute/90e09

[41] O. Reg. 380/04 STANDARDS | ontario.ca Accessed March 2, 2025, https://www.ontario.ca/laws/regulation/040380

- The Office of the Ontario Fire Marshal also plays a critical role in coordinating fire-related responses and ensuring safety standards.
- The provincial government provides resources, coordination, and support to municipalities during major incidents, often taking the lead in large-scale emergencies that exceed municipal capabilities.

4.1.4 Emergency Management Phases

Ontario's emergency management system operates in four key phases:



4.1.5 Emergency Operations Centers (EOCs)

- Municipalities and the province may activate Emergency Operations Centers to manage and coordinate resources, decisions, and communication during an emergency. These centers serve as command hubs where emergency managers can assess the situation and coordinate responses.

4.1.6 Public Awareness and Communication

- Effective communication is critical during emergencies. Ontario promotes public awareness campaigns and issues alerts through various platforms, including the Ontario Alerts System, social media, and emergency broadcast systems. This ensures that people are informed and can take appropriate actions to protect themselves.

4.1.7 Partnerships and Collaboration

- Emergency management in Ontario relies on collaboration between multiple stakeholders, including municipal governments, provincial agencies, federal organizations, non-profits, and the private sector. For example, the Canadian Red Cross

and Ontario Power Generation might be involved in response efforts, depending on the nature of the emergency.

4.1.8 Training and Exercises

- Regular training and simulation exercises are essential to ensure that emergency responders, officials, and the public are prepared for real emergencies. Ontario encourages municipalities and organizations to participate in joint exercises to improve coordination and readiness.
- Emergency management in Ontario is a multi-faceted, collaborative effort that focuses on proactive preparation, effective response, and recovery after disasters. The system is structured around legislative frameworks, coordinated planning at the municipal and provincial levels, and a commitment to public safety through awareness, training, and communication.

4.2 Legislative Requirements in Ontario

The legislative framework for emergency management in Ontario is primarily built on the Emergency Management and Civil Protection Act (EMCPA), and Ontario Regulation 380/04, which establishes specific requirements for municipalities in terms of emergency management programs.

The Emergency Management and Civil Protection Act (EMCPA), along with Ontario Regulation 380/04, provides a structured and comprehensive legislative framework that outlines the responsibilities and requirements for municipalities in Ontario to prepare for, respond to, and recover from emergencies. The Act ensures that municipalities are well-prepared by requiring the development of emergency plans, the designation of key roles, and regular training and exercises. Additionally, Ontario Regulation 380/04 sets specific requirements for program development, including reporting and plan adoption by municipal councils, and ensuring that municipalities meet provincial standards for emergency management.

These regulations and the broader framework aim to create a unified, organized, and effective emergency management system in Ontario, protecting residents and communities from the impacts of disasters and crises.

Emergency Management Ontario provides guidance to municipalities to support compliance with their legislated responsibilities. This guide provides municipalities with information to assist in meeting these requirements[42]. In addition, each Municipality in Ontario has an

[42] filestream.ashx Accessed March 2, 2025, https://pub-temagami.escribemeetings.com/filestream.ashx?DocumentId=2819

Emergency Management Ontario (EMO) Field Officer assigned to them who can provide advice and assistance, as required, by supporting the development or delivery of any of the components of the required emergency management program.

4.2.1 Emergency Management Program

Municipalities are required to develop and implement an Emergency Management Program that outlines how they will prepare for and respond to emergencies within their jurisdiction. This program must include the development of a Municipal Emergency Plan which lays out the procedures and resources needed to respond to emergencies.

Centre Hastings has satisfied both requirements and has developed and implemented and Emergency Management Program, included as part of this program is the Municipal Emergency Plan for the Municipality.

Centre Hastings emergency management program by-law was adopted by municipal council under the authority of By-law 2004-28.

4.2.2 Municipal Emergency Plan

Municipalities are required to develop an Emergency Plan governing the provision of necessary services during an emergency. The plan should also detail the procedures to be followed by the people who respond to emergencies. Further, this Plan must assign responsibilities to members of the Municipal Emergency Control Group (MECG) who are municipal employees, by position, to implement the Plan. It must also include notification procedures for the MECG members.

Centre Hastings has satisfied this requirement with the plan being adopted by council in 2004 and revised last in 2017 as authorized with By-law 2017-61[43].

4.2.3 Emergency Management Program Committee

Every municipality is required to have an Emergency Management Program Committee (EMPC), which is appointed by the Municipal Council. The purpose of this Committee is to provide strategic direction and advise the Municipal Council on the development and implementation of the municipal emergency management program.

By-law No. 2023-37[44] appoints members to the Emergency Management Program Committee.

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[43] centrehastings.civicweb.net/document/16784/ Accessed March 2, 2025, https://centrehastings.civicweb.net/document/16784/

[44] Centre Hastings - Document Center Accessed June 3, 2025, https://centrehastings.civicweb.net/filepro/documents/49839/?preview=51585

The following representatives are identified as appointed to comprise the Emergency Management Program Committee for the Municipality of Centre Hastings:

- Community Emergency Management Coordinator (CEMC)
- Alternate CEMC
- Chief Administrative Officer
- Deputy Chief Administrative Officer
- Fire Chief
- Director of Public Works
- Mayor (Deputy Mayor in absence of the Mayor)
- Emergency Information Officer
- Representative of the Ontario Provincial Police
- Representative from Hastings County Paramedic Service
- Representative from Hastings Prince Edward Health Unit
- Representative from Hastings County Social Services
- Representative from Emergency Management Ontario

The Community Emergency Management Coordinator (CEMC) is identified as the Chair. In the absence of the CEMC the alternate CEMC will be the chair.

The Committee has been appointed for the term of the Municipal Council ending December 1st, 2026.

4.2.4 Designation of Emergency Management Program Coordinator

Every municipality is required designate an employee of the municipality or a member of the council as its Emergency Management Program Coordinator, otherwise referred to as a Community Emergency Management Coordinator (CEMC).

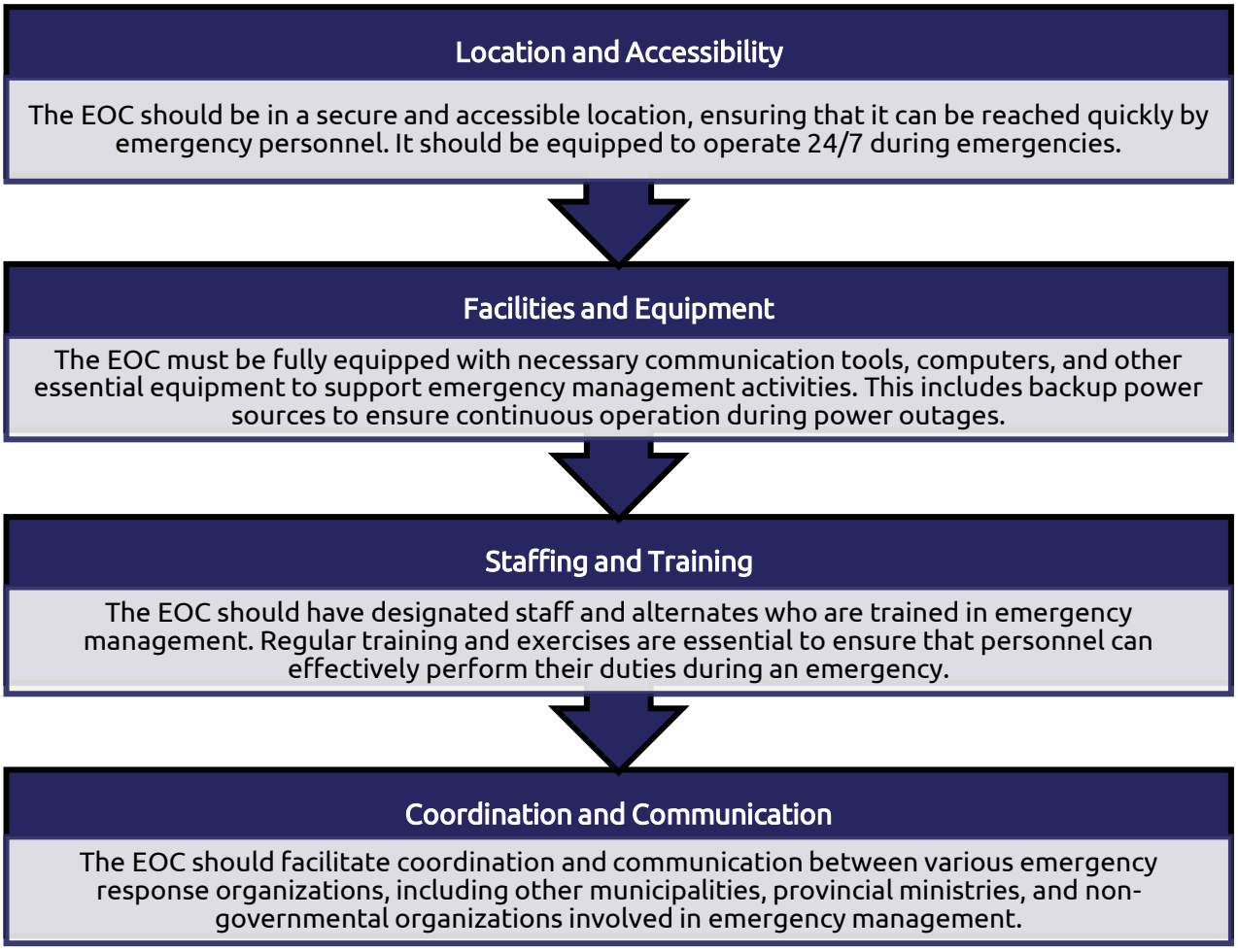
A CEMC is also required to complete the following training within one year of their designation.

- EM 200 – Basic Emergency Management
- EM 300 – Community Emergency Management Coordinator Course
- IMS 100 – Introduction to Incident Management System
- IMS 200 – Basic Incident Management System

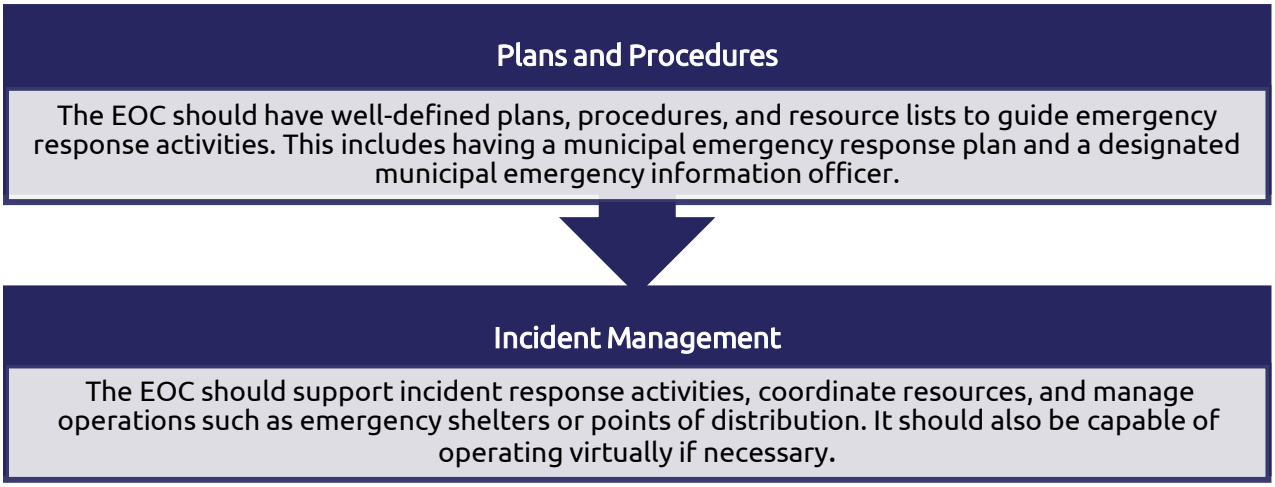
The Emergency Management Program Coordinator will oversee the creation and execution of the municipality's Emergency Management Program. Additionally, they will work to align the municipality's program with those of other municipalities, various Ontario government ministries, and non-governmental organizations involved in emergency management whenever possible. The emergency management program co-ordinator shall report to the municipality's emergency management program committee regarding work in this regard.

4.2.5 Emergency Operations Centre

Every municipality in Ontario is required to establish an Emergency Operations Centre (EOC) to be used by the Municipal Emergency Control Group (MECG) during emergencies. Some key requirements for municipal emergency operations centre (EOC) facilities in Ontario[45] are as follows:



[45] Section 7: Emergency operations centre (EOC) and additional incident management locations | Incident Management System (IMS) Guidance: version 2.0 | ontario.ca Accessed March 3, 2025, https://www.ontario.ca/document/incident-management-system-ims-guidance-version-2/section-7-emergency-operations-centre



These requirements ensure that the EOC can effectively support emergency management activities and respond to emergencies in a coordinated and efficient manner.

There are no specific EOC locations identified in the emergency plan. The Municipal Compliance Report for 2024 identified the location of the primary EOC as being Municipal Office of Centre Hastings. While EMG was not able to identify any formal evaluation documenting that the EOC facility meets the necessary requirements of an EOC, the facility has been reviewed by the OFM Field Officer and has been deemed acceptable by Emergency Management Ontario is meeting the necessary requirements.

EMG recommends that Centre Hastings review the key requirements of EOCs and establish policies and procedures which support the maintanence and operation of the EOC as well as provide direction for the effiecient establishment of the facility for its timely and fully supported operation.

4.2.6 Hazard Identification and Risk Assessment

In Ontario, municipalities are required to conduct a Hazard Identification and Risk Assessment (HIRA)[46] as part of their emergency management programs. The purpose of this process is to identify which hazards should be the focus of emergency management programs at a particular point in time. One of the goals of systematic risk assessments is the benefit of promoting a proactive approach to emergency management. The following are the key requirements of a HIRA[47]:

[46] Emergency management program resources | ontario.ca Accessed March 3, 2025, https://www.ontario.ca/page/emergency-management-program-resources

[47] Hazard Identification & Risk Assessment in Ontario Accessed March 3, 2025, https://oemc.ca/wp-content/uploads/2013/10/HIRA.pdf

- Risk-Based Approach: The HIRA must be risk-based, assessing different types of hazards, including natural, technological, and human-caused hazards.
- Comprehensive Assessment: The HIRA should incorporate both qualitative and quantitative information, using as much scientific data as possible.
- Scalability: The HIRA must be scalable, meaning it can be used at both the provincial and municipal levels.
- Inclusion of New Hazards: The HIRA should allow for the addition of currently unknown and evolving hazards in subsequent revisions.
- Applicability: The HIRA should be applicable to a range of event consequences and frequencies.
- Understandability: The HIRA should be easily understood by a diverse group of people with different professional backgrounds.

Centre Hastings has conducted a HIRA and documented the findings which have been reviewed and approved by EMO.

4.2.7 Critical Infrastructure List

The EMCPA requires that every municipality identify the facilities and other elements of the infrastructure that are at risk of being affected by emergencies as a component of hazard risk assessment and infrastructure identification.

EMG was provided with a Critical Infrastructure (CI) list for the Municipality. This CI list has been created as a component of the broader regional list and is well informed and complete. The list meets the satisfaction of EMO.

4.2.8 Municipal Emergency Control Group

Every municipality is required to have a Municipal Emergency Control Group (MECG) in accordance with Ontario Regulation 380/04. The MECG is an important component of the municipal emergency management program. The key requirements for the MECG are as follows:

- Composition: The MECG must consist of designated municipal officials and alternates who are responsible for coordinating the emergency response. Members typically include the mayor or designated head of council, senior municipal officials, emergency services representatives (e.g., police, fire, EMS), and other key personnel as deemed necessary.

- Roles and Responsibilities: Each member of the MECG must have clearly defined roles and responsibilities. These roles are outlined in the municipality's emergency response plan and include making strategic decisions, allocating resources, and coordinating response efforts.
- Activation and Operation: The MECG must be capable of being activated quickly in response to an emergency. Once activated, the group operates from the municipal Emergency Operations Centre (EOC) and provides leadership and direction throughout the emergency.
- Training and Exercises: Members of the MECG must receive regular training and participate in emergency exercises to ensure they are prepared to effectively manage emergencies. This includes familiarity with emergency plans, procedures, and the use of the EOC.
- Coordination and Communication: The MECG is responsible for coordinating the overall response to an emergency within the municipality. This involves communication and collaboration with other municipalities, provincial ministries, non-governmental organizations, and other stakeholders involved in emergency management.
- Decision-Making: The MECG must be empowered to make critical decisions during an emergency. This includes decisions related to resource allocation, public safety measures, and emergency declarations.

These requirements ensure that the MECG is well-prepared to lead the municipality's response to emergencies, protect public safety, and manage resources effectively.

Ontario's emergency management regulations include requirements for notifying the Municipal Emergency Control Group (MECG) members. Under Ontario Regulation 380/04, municipalities must establish a documented process for notifying MECG members in case of an emergency. This process ensures that the MECG can be activated promptly to coordinate the emergency response.

The regulation also mandates that municipalities designate staff and alternates to form the MECG, maintain a 24/7 emergency response contact point, and have a fully equipped emergency operations center ready for use by the MECG

EMG recommends that a document procedure be established for the efficient notification of MECG members of a requirement for meeting in the EOC.

4.2.9 Annual Training

In accordance with Guidance Note 2018-01-01 issued by Emergency Management Ontario, all members of the MECG, as designated under O Reg 380/04, s. 12, are required to annually demonstrate an adequate level of training in each of the following areas:

- Knowledge of all of the components of the municipal Emergency Management program, including, but not limited to the municipal HIRA and Critical Infrastructure list;
- Knowledge of their municipality's Municipal Emergency Plan, including their roles and responsibilities, and those of organizations which may have a role in response;
- Knowledge of the procedures used to activate and operate under the Municipal Emergency Plan;
- Knowledge of the notification procedures used to notify members of the MECG when the Municipal Emergency Plan is activated; and
- Knowledge of the location, communications infrastructure and technology in their municipal Emergency Operations Centre.

This knowledge can be gained and refreshed with a local training program which ensures that all MECG members participate in training focused on the key features of the local emergency management program.

Emergency Management Ontario offers several different courses in Emergency Management. Several of the courses are available in French as well as via e-learning, self-study, and virtual. The currently available Emergency Management courses can be found on the EMO training website[48]:

- EM 125 - Exercise Programs: An Introduction
- EM 131 - Accessible Customer Service for Emergency Responders
- EM 200 - Basic Emergency Management (BEM)
- EM 225 - Exercise Program Management
- EM 240 - Note Taking
- EM 300 - Community Emergency Management Coordinator (CEMC)

The 2024 Municipal Compliance Report indicates that the Centre Hastings MECG has been conducting annual training to the satisfaction of EMO.

[48] Office of the Fire Marshal and Emergency Management : CourseCatalogue Accessed March 4, 2025, https://training.emergencymanagementontario.ca/GTFlex/GTOnline.dll/CourseCatalogue

4.2.9.1 Incident Management System (IMS) Training

In today's fast-evolving emergency landscape, effective emergency management is more critical than ever. Whether it's a natural disaster, human-caused calamity, or public health crisis like the recent COVID-19 pandemic, having a comprehensive emergency plan and management system can significantly minimize the impact of an incident and facilitate a swift recovery.

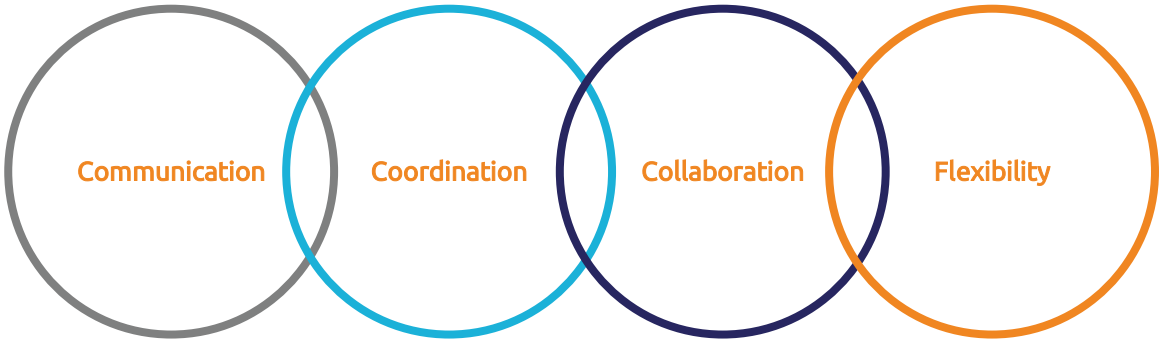
The Incident Management System (IMS) is a standardized system widely used by emergency responders across Canada and the United States to manage emergencies and disasters effectively. It provides a clear chain of command, establishes roles and responsibilities, and ensures effective communication and coordination among responders. IMS is designed to be flexible and scalable, making it suitable for emergencies of any size or complexity.

The benefits of using IMS include:

- Improved communication and coordination: IMS establishes a transparent chain of command, roles, responsibilities, and a common language, ensuring effective communication, coordination, and alignment among responders and community partners, including police, fire, EMS, and other government agencies.
- Enhanced situational awareness: IMS provides a comprehensive framework for emergency response, helping all responders understand the incident and the chain of command, enabling accurate decision-making based on precise information.
- Faster response times: IMS's standardized approach ensures responders can quickly and efficiently address incidents by providing an established structure.
- Improved decision-making: IMS offers a clear decision-making framework, ensuring responders make informed decisions aligned with emergency response objectives.

IMS helps incident responders work together to achieve common objectives. By using IMS, responders can adapt to the specific needs of an incident by using common roles, responsibilities and structures.

The core principles of IMS are:



IMS is be built on the core functions of coordination and command, operations, planning, logistics and finance and administration. IMS also recognizes the importance of communication with the public about an incident and the incident response effort. To address this, public information management is included as a core function of IMS.

The core functions of IMS are:

- coordination and command
- operations
- planning
- logistics
- finance and administration
- public information management

By fully adopting the IMS approach in Centre Hastings and ensuring the Centre Hastings MECG is trained and conversant in IMS, the Hastings County Emergency Plan will seamlessly integrate with the local plan, ensuring a proper chain of command and effective communication between multiple organizations.

Emergency management training on the Incident Management System would provide valuable knowledge and skills to those involved in the municipal emergency management program.

Emergency Management Ontario offers several different courses in IMS. Several of the courses are available in French as well as via e-learning, self-study, and virtual. The currently available IMS courses can be found on the EMO training website[49]:

- IMS 100 - Introduction to Incident Management System
- IMS 101 - Incident Management System Overview (E-Learning)
- IMS 200 - Basic Incident Management System
- IMS 250 - IMS in EOCs
- IMS 300 - Intermediate Incident Management System

EMG recommends that training for MECG members extend beyond the minimum training identified in the Guidance Note to include training in the incident management system (IMS).

[49] Office of the Fire Marshal and Emergency Management : CourseCatalogue Accessed March 4, 2025, https://training.emergencymanagementontario.ca/GTFlex/GTOnline.dll/CourseCatalogue

4.2.10 Annual Exercise

Effective emergency management plans must be regularly exercised. An exercise simulates an emergency, allowing participants to perform actions, functions, and responsibilities as they would in a real emergency. Exercises validate plans and procedures, and practice prevention, mitigation, preparedness, response, and recovery capabilities. They also serve to:

- Train personnel and clarify roles and responsibilities as outlined in plans and procedures
- Improve inter-agency coordination and communication
- Identify gaps in resources and training, and highlight areas for improvement
- Enhance individual and organizational performance through practice
- Demonstrate provincial, community, and organizational commitment to emergency preparedness as part of due diligence.

There are several exercise options available to municipalities ranging from the basic activation of the EOC, to full scale unannounced exercises. Some of the available options when planning an emergency exercise are as follows:

EOC Activation: Primary and alternate MECG members are expected to be prepared, and in the event of an emergency, they are expected to play a critical role in the EOC. This type of exercise plans for the activation of primary and alternate MECG members, whereby the EOC is "stood up" as the result of an emergency or impending emergency. Primary and alternate MECG members are expected to report to the identified EOC location with the necessary resources prepared to participate in the mitigation of the emergency. The person(s) responsible for preparing the EOC is also expected to report and perform this task.

Tabletop Exercise (TTE): A TTE is intended to generate participation among MECG members based on a hypothetical, simulated emergency. The general goal of a TTE is to evaluate the functionality of the MERP against its ability to successfully move the control group members through the response and recovery phases of a simulated incident. These types of exercises can range from basic to complex. In a basic scenario, the emergency will remain constant, and control group members will openly discuss strategies to resolve the incident. In a more complex scenario, the emergency will be dynamic, and control group members will be provided with pre-determined inputs from the exercise organizer. Control group members will be required to provide time compressed solutions during a specified operational cycle.

Command Function Exercises (CFE): CFEs are designed to evaluate capabilities, both individual and cross functional, within the IMS structure. Based on the scenario, participants are given the opportunity to assume the role of Incident Commander or Sector Officer. This type of exercise

can be conducted in a realistic, real-time environment; however, the movement of equipment and personnel is usually simulated. Participants capabilities are evaluated at the command and management level against their ability to enact policies and procedures, and to coordinate, direct, and command the mitigation of the emergency.

Full Scale Exercises (FSE): A FSE is the most resource demanding type of exercise and may involve multiple organizations, agencies and jurisdictions with the goal of evaluating multiple facets of preparedness and response. If conducted on a large enough scale, cooperative systems such as a Unified Command Structure, and a Joint Information Coordinating System as examples can be evaluated. In an FSE, event updates are provided in real time and will generate decisions at the operational level. Personnel and equipment may be deployed to a scene, or multiple scenes where decisions that are made at the tactical and task levels by responders can also be evaluated. The FSE best replicates the reality of a complex, tightly coupled emergency that requires prompt decision making and critical thinking.

The 2024 Municipal Compliance Report indicates that the Centre Hastings MECG has been conducting annual exercises to the satisfaction of EMO.

4.2.11 Emergency Information Officer

Every municipality must designate an employee of the municipality as its Emergency Information Officer (EIO)[50], who acts as the primary media and public contact for the municipality in an emergency.

Although identified by name to the satisfaction of EMO and confirmed in the various annual compliance reports, EMG was not able to identify a by-law which designates this employee to the position. For correctness, EMG recommends that Centre Hastings designate an employee of the municipality as its Emergency Information Officer in a formal manner such as with a by-law or some other formal documentation.

4.2.12 Public Education

The municipal emergency management program must provide emergency management public education through Emergency Preparedness Week and other programming such as how to prepare for an emergency.

[50] filestream.ashx Accessed March 4, 2025, https://pub-temagami.escribemeetings.com/filestream.ashx?DocumentId=2819

Emergency Management Ontario has a range of material available to promote emergency preparedness in the community, including lesson plans, activity sheets, posters, bookmarks, and social media infographics.

These products encourage emergency preparedness in the community by connecting to diverse groups such as children, seniors, and people with disabilities, and can be used to supplement municipal website information on emergency management and preparedness.

Notwithstanding that the 2024 Municipal Compliance Report indicates that Centre Hastings emergency management public education efforts meet the satisfaction of EMO; EMG is recommending that the Centre Hastings CEMC develop an annual Public Education Plan that considers the following:

- Displays or presentations at public events;
- Distribution of flyers or other material through the mail;
- Public Service Announcements on local media;
- Advertisements in local newspapers; and/or
- Information posted on municipal and other websites.

4.2.13 Emergency Management Program Annual Review

As a part of their responsibilities, the Emergency Management Program Committee (EMPC) is required to conduct an annual review of the municipality's emergency management program.

The EMCPA provides a clear definition of what a MEMP contains, and O. Reg. 380/04 states that the EMPC must conduct an annual review of the all the required components to include the following:

- The municipal emergency plan;
- The training conducted by the municipality;
- The exercises conducted by the municipality;
- The public education program;
- The municipal HIRA; and
- The municipal CI.

The 2024 Municipal Compliance Report indicates that the Centre Hastings EMPC has been conducting an annual program review to the satisfaction of EMO.

4.3 Supporting Emergency Plans

Emergency Planning

Reviewing a municipal emergency response plan is essential to ensure it remains effective and comprehensive. Key reasons for conducting such a review and determining if specific plans should be added include:

Identifying Gaps	Regular reviews can uncover unrecognized risks or hazardous conditions that might not have been addressed in the existing plan. This helps in proactively mitigating potential emergencies.
Adapting to Changes	Communities evolve over time, with changes in population, infrastructure, and environmental conditions. A review ensures the plan reflects these changes and remains relevant.
Resource Assessment	Evaluating the plan can highlight deficiencies in resources, such as equipment, trained personnel, or supplies, and address them before an emergency occurs.
Compliance with Regulations	Emergency response plans must align with updated laws, regulations, and best practices. A review ensures compliance and avoids legal or operational issues.
Enhancing Coordination	Adding specific plans can improve coordination among various agencies and stakeholders, ensuring a more unified and efficient response during emergencies.
Promoting Safety Awareness	The review process itself raises awareness about safety and emergency preparedness within the community and among stakeholders.
Learning from Past Incidents	Incorporating lessons learned from recent emergencies or drills can improve the plan's effectiveness and address any shortcomings.

By regularly reviewing and updating the plan, municipalities can ensure they are better prepared to protect their residents and resources during emergencies.

The *Emergency Management and Civil Protection Act* requires all municipalities to develop a plan to describe how they will respond to emergencies within their respective jurisdictions. EMO developed the following tools to assist municipalities when developing municipal emergency response plans:

- Template for the Development of a Municipal Hazard-Specific Plan
- Guideline for the Development of a Municipal Forest Fire Emergency Plan

- Guideline for the Development of a Municipal Severe Weather Emergency Plan
- Guideline for the Development of a Municipal Hazardous Materials Emergency Plan
- Guideline for the Development of a Municipal Flood Emergency Plan

EMG recommends that Centre Hastings review the emergency response plan to determine if there is value in adding specific emergency plans as appendices to the ERP.

4.4 Non-Government Organization Support Agreements

Emergency Management Ontario provides guidance on creating agreements with Non-Government Organizations (NGO) for emergency support. Partnerships and agreements with various organizations, including NGOs, are important to enhance emergency response capacity. Support agreements are part of Ontario's broader emergency management framework, which aims to ensure effective coordination and resource sharing during emergencies.

As an example, one common municipal partner for support during emergencies is the Canadian Red Cross. This organization can provide a wide range of support to those affected by emergencies and disaster, this would include persons requiring shelter after a house fire to assistance in support of disasters relating flood, fire or tornados.

Some of the examples of the assistance available includes:

- Family Reunification: The chaos and confusion that accompany emergencies and natural disasters can separate families when they need each other most. Red Cross helps people re-establish contact with immediate family members after separation due to natural disasters and other humanitarian crises.
- Emergency Lodging: After a disaster or emergency, safe, temporary lodging is provided to persons who cannot return home and cannot find alternate accommodations.
- Reception and Information: The purpose of the reception and information services is to greet evacuees, provide information regarding services provided within the centre and provide access control to the facility.
- Emergency Food: Food is provided to evacuees, emergency workers and disaster volunteers through various means which may include vouchers, meals at a shelter, or referral to another agency.
- Emergency Clothing: We provide evacuees access to basic clothing through various means which may include purchasing, providing vouchers or referral to other agencies.
- Personal Services: Personal services offer first aid, temporary care for unattended children and dependent elderly, provides or arranges for provision of material

assistance, and offers emotional support to people with needs created or aggravated by a disaster.

EMG recommends that Centre Hastings review the emergency response plan to determine if there is value in adding support agreements with any non-government organizations in support of the emergency support plan to prepare for, respond to, and recover from a local disaster or emergency.

Section 4: Recommendations

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
66	That Centre Hastings review the key requirements of EOCs and establish policies and procedures which support the maintenance and operation of the EOC as well as provide direction for the efficient establishment of the facility for its timely and fully supported operation.	Immediate (0 to 1 year)	Staff Time	Ensure the EOC is maintained in a well-supported state of readiness.
67	That training for MECG members extend beyond the minimum training identified in the Guidance Note to include training in the incident management system (IMS).	Immediate (0 to 1 year)	Staff Time	Emergency management training on the Incident Management System would provide valuable knowledge and skills to those involved in the municipal emergency management program.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
68	That Centre Hastings designate an employee of the municipality as its Emergency Information Officer in a formal manner such as with a by-law or some other formal documentation.	Immediate (0 to 1 year)	Staff Time	EMG was not able to identify a by-law which designates this employee to the position
69	That the Centre Hastings CEMC develop an annual Public Education Plan that considers the following: • Displays or presentations at public events; • Distribution of flyers or other material through the mail; • Public Service Announcements on local media; • Advertisements in local newspapers; and/or • Information posted on municipal and other websites.	Immediate (0 to 1 year)	Staff Time	Enhanced public awareness of local emergency preparedness is an effort which can provide valuable benefits with little effort.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
70	That Centre Hastings review the emergency response plan to determine if there is value in adding specific emergency plans as appendices, support agreements with any non-government organizations in support of the emergency support plan to prepare for, respond to, and recover from a local disaster or emergency.	Immediate (0 to 1 year)	Staff Time	To ensure the Emergency Response Plan remains effective and comprehensive.

Section 5

Fire Service Agreements & Mutual Aid Plan

EMG Emergency Management Group

SECTION 5: FIRE SERVICE AGREEMENTS AND MUTUAL AID PLAN

Under the Ontario Fire Protection and Prevention Act (FPPA), municipalities are responsible for providing fire protection services within their jurisdiction. This includes the option to establish fire protection agreements with other municipalities or entities to ensure adequate fire safety measures are in place. These agreements can cover various aspects, such as access to specialized equipment, response capabilities, or mutual aid arrangements.

The FPPA emphasizes that municipalities must assess their local needs and determine the necessary fire protection services to meet those needs. Fire protection agreements are a tool to address gaps in resources or expertise, allowing municipalities to collaborate and enhance their overall fire safety infrastructure.

Fire protection agreements are formal arrangements between municipalities or other entities to provide or receive fire protection services. The agreements are essential for ensuring effective collaboration and resource sharing among municipalities and emergency services. They are governed by the *Fire Protection and Prevention Act, 1997 (FPPA)* and are tailored to meet the specific needs of the parties involved. Most agreements will address the following general concerns:

- Purpose: Fire protection agreements are designed to ensure that fire protection services are available to areas that may not have their own fire department or require additional support.
- Scope of Services: The agreements specify the type of services to be provided, such as fire suppression, rescue operations, public education, and fire prevention.
- Cost and Compensation: They outline the financial terms, including cost-sharing arrangements or fees for services rendered.
- Operational Details: The agreements include details about response times, equipment usage, and personnel deployment.
- Geographic Coverage: They define the areas or properties covered under the agreement, which may include lands outside the territorial limits of a municipality.
- Duration and Termination: The agreements specify the duration and conditions under which they can be terminated or renewed.
- Legal and Liability Considerations: They address liability issues and ensure compliance with relevant laws and regulations.

Fire protection agreements are particularly beneficial for smaller municipalities or rural areas that may lack the resources to maintain a full-time fire department. They promote collaboration and resource sharing, enhancing overall fire safety in the region.

The agreements outline the terms under which one municipality provides fire protection services to another. They typically include details about service levels, response times, cost recovery, and operational protocols.

Relevant Fire Protection Agreements

- Mutual Aid Agreements: These agreements allow neighboring municipalities to assist each other during emergencies when local resources are insufficient. The corresponding Mutual Aid Plan is a coordinated framework that specifies how resources, personnel, and equipment will be shared during large-scale incidents.
- Fire Protection Agreements: Unlike mutual aid, fire protection agreements are tailored to address specific gaps in resources such as specialized skills or equipment. These are not reciprocal and often include cost recovery arrangements or fees for service.
- Automatic Aid Agreements: These agreements involve pre-arranged responses where fire departments automatically assist each other for specific types of incidents or in designated areas, regardless of municipal boundaries.
- Medical Tiered Response Agreements: These agreements define the collaboration between fire departments and paramedic services for medical emergencies. Firefighters may be dispatched to provide initial medical care, especially in cases where they can arrive faster than paramedics.
- Dispatch Agreements: These agreements define how fire departments receive and manage emergency calls, often involving centralized dispatch centers.

5.1 Mutual Aid Plan and Program

Background

The Ontario Mutual Aid Plan[51] is a framework designed to enhance emergency response capabilities across the province. It allows fire departments to collaborate and help one another during emergencies that exceed the capacity of a local department. The plan is reciprocal in nature and operates at no cost to participating agencies. Mutual Aid Plans (MAPs) are an essential component of Ontario's fire service.

[51] Microsoft Word - Ontario Mutual Aid Plan - Final V 08-03-2018 Accessed March 29, 2025, https://pub-newmarket.escribemeetings.com/filestream.ashx?DocumentId=26525

Key Features of Ontario's Mutual Aid Plans

- Reciprocal Assistance: MAPs operate on a reciprocal basis, meaning participating agencies provide response assistance at no cost to each other[52].
- Participants: Municipal fire departments are the primary participants, but First Nations fire departments and other non-municipal fire departments (such as federal-based fire departments, industrial fire brigades, and cross-border fire departments) can also be included to supplement local response capabilities[53].
- Activation: The plan can be activated when an emergency exceeds the resources of a local fire department.
- Fire Coordinator: Each county, district, or region has a fire coordinator appointed by the Fire Marshal to develop and coordinate the local mutual aid plan.
- Resource Sharing: Participating fire departments agree to share resources, including personnel and equipment, as needed during emergencies.
- Training and Standards: Participants must maintain training levels in accordance with their core services and meet minimum conditions for participation.

Some important considerations regarding Mutual Aid Plans include the following:

- Automatic aid agreements and other fire protection agreements are separate from MAPs and may include cost-recovery arrangements.
- Non-municipal fire departments may have different legal and statutory considerations, which must be addressed before participation.
- Liability and workers' compensation issues should be considered when including non-municipal fire departments in MAPs.
- Municipalities can enter into automatic aid agreements to provide or receive initial or supplemental response to fires, rescues, and emergencies.

In rural Ontario, Mutual Aid Plans play a crucial role in enhancing the effectiveness of Ontario's fire service by ensuring that communities can access additional resources during major emergencies, ultimately improving public safety and emergency response capabilities.

[52] Fire Marshal's communiqués from 2024 | ontario.ca Accessed March 29, 2025, https://www.ontario.ca/page/fire-marshals-communiques-2024#section-1

[53] 2024-02.pdf Accessed March 29, 2025, https://www.oafc.on.ca/sites/default/files/OFM/2024-02.pdf

The purpose of a mutual aid agreement is to ensure reciprocity. For example, if one fire department requests tankers from a neighboring fire department to manage a large fire, the expectation is that the receiving department would provide similar assistance when their neighbor requires it. However, when a fire department requests specialized equipment or response capabilities that it lacks and are unique to its neighbor, this scenario falls outside the scope of mutual aid, as it is not reciprocal. In such cases, establishing a response agreement between the two municipalities and their fire departments would be more appropriate.

Current Situation

The Municipality of Centre Hastings has passed By-law 2020-25 which authorizes participation in the Mutual Aid Plan and Program for the County of Hastings & Prince Edward.

Opportunities

The Fire Chief should review the needs of the community to identify areas where the value of participation in the plan, could be enhanced by offering specific emergency services to neighbouring communities on a reciprocal arrangement in keeping with the spirit and intent of the Mutual Aid Plan and Program.

5.2 Fire Protection Agreements

Background

A fire protection agreement is typically established between municipalities or fire departments to provide access to specialized equipment or response skills that one department may lack. These agreements are not reciprocal; they are designed to address specific needs, such as access to hazardous materials response teams or aerial ladder trucks. Often, these agreements include cost-recovery arrangements or fees for service, as the providing department incurs expenses for offering specialized resources.

Current Situation

There are currently no fire protection agreements in place in Centre Hastings.

Opportunities

The Fire Chief should review the calls for service regarding incidents over the previous 5 years which were beyond the skills or equipment of CHFD. Plans should be implemented to provide either the internal capacity to provide sufficient response to these incidents or to establish a protection agreement with another fire service to provide the response assistance as and when required.

5.3 Automatic Aid

Background

Automatic aid agreements involve pre-arranged assistance between fire departments, where resources are dispatched automatically during emergencies without the need for a formal request. These agreements are usually, but not always, reciprocal and aim to enhance response efficiency by ensuring neighboring departments collaborate seamlessly. Automatic aid is typically used for routine emergencies, such as structure fires or medical calls, and does not focus on specialized equipment or skills.

Current Situation

In 2014, under the authority of the *Municipal Act, 2001* and the *Fire Protection and Prevention Act, 1997*, the Corporation of the Municipality of Centre Hastings entered into an Automatic Aid Agreement with the Corporation of Township of Madoc. Under the terms of the agreement the CHFD will, when notified, provide an automatic response to a geographically defined Automatic Aid Fire Area that includes fire protection services that include but are not limited to activities defined in the FPPS and the following:

- fire suppression
- hazardous material response incidents to the Awareness Level
- search and rescue operations
- medical assistance, Code 4 in situations where persons are trapped or endangered and require urgent rescue or medical attention, and defibrillators
- extrication services
- ice-water rescue
- any other responses or incidents to which Madoc Township Fire Department would normally respond pursuant to our current service delivery levels; and
- administrative functions and services related to the provisions of all the foregoing.

For the fire protection services provided by the CHFD in the Automatic Aid Fire Area under the agreement, Madoc Township shall pay a fee of $250.00 per call to the Municipality of Centre Hastings. The rates set out shall remain in effect throughout 2014 and thereafter unless changed in accordance with the provision of the agreement.

Opportunities

The agreement, established in 2014 is dated. The Fire Chief, in cooperation with the municipal Solicitor, should work with representatives from Madoc Township to update the agreement with consideration given to the following:

- Reference to applicable NFPA Standards (i.e., NFPA 1006).
- Reference to Ontario Regulation 343/22 Firefighter Certification.
- Review for any definition changes.
- Review for any service level changes.
- Update the current fee of $250.00 to reflect the current MTO rate, per hour per apparatus; and
- Place a renewal term on the agreement that is acceptable to both parties.

5.4 Tiered Medical Response Agreements

Background

Medical tiered response agreements in Ontario are formal arrangements between emergency services, such as fire departments, paramedic services, and sometimes police, to ensure a coordinated and timely response to medical emergencies. These agreements are designed to improve patient outcomes by leveraging the strengths and proximity of different emergency responders.

Key Features of Medical Tiered Response Agreements

- Purpose
    - The primary goal is to provide rapid medical assistance, especially in life-threatening situations like cardiac arrests, severe trauma, or respiratory distress.
    - Firefighters or police officers, who are often closer to the scene, can provide basic life support until paramedics arrive.
- Roles and Responsibilities
    - Each agency's role is clearly defined, including the types of medical emergencies they respond to and the level of care they provide.
    - Fire departments typically handle initial stabilization, such as CPR or defibrillation, while paramedics provide advanced medical care.

- Activation Criteria
    - Specific medical emergencies trigger a tiered response, such as unconsciousness, choking, or profuse bleeding.
    - The criteria are often based on the severity of the situation and the time-sensitive nature of the required intervention.
- Training and Equipment
    - Responders must be trained in basic medical procedures like first aid, CPR, and the use of automated external defibrillators (AEDs).
    - Agreements may include provisions for shared training sessions and standardized equipment.
- Communication and Dispatch
    - Effective communication protocols are essential to ensure the right resources are dispatched promptly.
    - Dispatch centers play a critical role in coordinating the response and relaying information between agencies.
- Cost and Funding
    - Agreements may outline cost-sharing arrangements or reimbursement for services provided by participating agencies.
- Community Impact
    - These agreements enhance the overall emergency response system, ensuring that communities receive timely and effective care during medical emergencies.

Medical tiered response agreements are a vital component of Ontario's emergency services framework, fostering collaboration and improving outcomes for patients in critical situations.

Current Situation

In 2024, under the authority of the *Municipal Act, 2001* and the *Fire Protection and Prevention Act, 1997*, the Corporation of the Municipality of Centre Hastings entered into a Tiered Emergency Services Response Agreement with Hastings County. Under the terms of the agreement the CHFD will, when notified, provide a response for reported conditions which include the following:

- Absence of Breathing
- Unconscious Patient
- Airway Obstruction

- Vital Signs Absent
- All Motor Vehicle Accidents prioritized as code 4

Opportunities

The Fire Chief should continue to advocate for involvement in medical tiered response and seek ways to provide the greatest value to the community by working with Hastings County Paramedic Service to identify opportunities for enhanced training for Centre Hastings firefighters and to seek ways optimize the response effectiveness of CHFD.

5.5 Dispatch Agreement

Background

Emergency services dispatch agreements in Ontario are arrangements between municipalities, fire departments, or third-party dispatch centers to ensure efficient communication and coordination during emergencies. These agreements outline the responsibilities, protocols, and resources involved in dispatching fire and emergency services.

Key Features of Dispatch Agreements

- Scope of Services
    - Agreements specify the types of emergencies covered, such as fire incidents, medical calls, or hazardous material responses.
    - They may include provisions for simultaneous dispatch of fire and ambulance services to improve response times.
- Technology and Infrastructure
    - Dispatch centers must have reliable communication systems, such as radio networks and computer-aided dispatch (CAD) systems.
    - Agreements often address the maintenance and upgrading of these systems.
- Training and Standards
    - Dispatch personnel must be trained to handle emergency calls and coordinate responses effectively.
    - Standards for call handling, prioritization, and resource allocation are established.
- Cost and Funding
    - Agreements may include cost-sharing arrangements between municipalities or departments for dispatch services.

    - Funding for dispatch centers can come from municipal budgets or provincial grants.
- Liability and Legal Considerations
    - Agreements address liability issues, ensuring that all parties are protected in case of errors or delays in dispatching services.
- Mutual Aid Integration
    - Dispatch agreements often integrate with mutual aid agreements to facilitate resource sharing during large-scale emergencies.

Specific Considerations for Ontario

- Provincial Regulations: Dispatch agreements must comply with Ontario's Fire Protection and Prevention Act and other relevant legislation.
- Geographic Challenges: Rural and remote areas may require specialized agreements to address longer response times and limited resources.
- Language and Accessibility: Dispatch centers must accommodate diverse linguistic needs and ensure accessibility for individuals with disabilities.

These agreements are crucial for ensuring timely and effective emergency responses across Ontario.

Current Situation

In 2020, under the authority of the *Municipal Act, 2001* and the *Fire Protection and Prevention Act, 1997*, the Corporation of the Municipality of Centre Hastings entered into a fire dispatch agreement with the City of St. Catharines. Under the terms of the agreement St. Catharines agrees to provide CHFD with computer aided dispatch (CAD) services twenty-four (24) hours a day, seven (7) days a week.

Opportunities

No issues of concerns were noted with the dispatch agreement.

Section 5: Recommendations

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
71	That the Fire Chief review incident history (5 years) for situations where the nature of incidents extended beyond the CHFD capability. Identified gaps should be addressed by enhancing internal capacity, or entering into fire protection agreements as needed,	Immediate (0 to 1 year)	To be Determined	A fire protection agreement is typically established between municipalities or fire departments to provide access to specialized equipment or response skills that one department may lack. These agreements are not reciprocal; they are designed to address specific needs, such as access to hazardous materials response teams or aerial ladder trucks.
72	That the Fire Chief, in cooperation with the municipal Solicitor, should work with representatives from Madoc Township the update the Automatic Aid Agreement	Immediate (0 to 1 year)	Staff Time	This agreement has not been updated since it was entered into in 2014.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
73	That the Fire Chief continue to advocate for involvement in medical tiered response and seek ways to provide the greatest value to the community.	Immediate (0 to 1 year)	Staff Time	Medical tiered response agreements are a vital component of Ontario's emergency services framework, fostering collaboration and improving outcomes for patients in critical situations.

Section 6

Emergency Management Group

Finance

SECTION 6: FINANCE, BUDGETING, FEES, & COST RECOVERY MECHANISMS

6.1 Finance

EMG thoroughly reviewed various documents in preparation for assessing the CHFD finances concerning the delivery of fire protection services, training, apparatus, equipment, and facilities. The review incorporated Statistics Canada data along with information gathered from other Ontario municipalities through the 2023 BMA Management Consulting's consolidated data initiative. While Centre Hastings did not participate in the BMA initiative, comparison data was provided by the Centre Hastings Director of Finance/Deputy CAO.

Although there is no formal, Council-approved budget mandate or established guidelines for staff, the Municipality's approach to developing operating and capital budgets is generally consistent with other Ontario municipalities. Department heads are responsible for creating budgets based on needs and the prior year's budget variances. Once the full municipal budget is compiled, the Director of Finance/Deputy CAO and CAO meet with department heads to review reasons for budget increases and identify potential measures to mitigate overall tax levy increases. The aim of this process is to present a balanced and reasonable budget to Council for approval. Each year, the Director of Finance/Deputy CAO submits a budget timetable to Council for their approval.

While the COVID-19 pandemic has subsided and inflation rates are beginning to stabilize, municipalities continue to face the effects of rising Consumer Price Index (CPI) rates that have exceeded the norms most citizens were accustomed to in recent years. The sharp rise in CPI and inflation has significantly increased the cost of goods and services. For example, the price of a custom-built fire pumper has nearly doubled since the pandemic began, with prices now reaching around one million dollars in Ontario.

As a result of these escalating costs, municipalities that previously relied on modest budget increases of 1-3% have recently been forced to approve larger tax levy hikes, draw more heavily on reserve funds, or reduce services in order to manage the impact of rising CPI and inflation rates.

The tables below illustrate the CPI and inflation rates as published by Statistics Canada for the years 2018 – 2024.

TABLE #21: CANADIAN CONSUMER PRICE INDEX (2018 – 2025)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2025	161.3	163.0											
2024	158.3	158.8	159.8	160.6	161.5	161.4	162.1	161.8	161.1	161.8	161.8	161.2	160.9
2023	153.9	154.5	155.3	156.4	157.0	157.2	158.1	158.7	158.5	158.6	158.8	158.3	157.1
2022	145.3	146.8	148.9	149.8	151.9	152.9	153.1	152.6	152.7	153.8	154.0	153.1	151.2
2021	138.2	138.9	139.6	140.3	141.0	141.4	142.3	142.6	142.9	143.9	144.2	144.0	141.6
2020	136.8	137.4	136.6	135.7	136.1	137.2	137.2	137.0	136.9	137.5	137.7	137.4	137.0
2019	133.6	134.5	135.4	136.0	136.6	136.3	137.0	136.8	136.2	136.6	136.4	136.4	136.0
2018	131.7	132.5	132.9	133.3	133.4	133.6	134.3	134.2	133.7	134.1	133.5	133.4	133.4

TABLE #22: CANADIAN INFLATION RATE (2018 – 2025)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2025	1.9%	2.6%											
2024	2.9%	2.8%	2.9%	2.7%	2.9%	2.7%	2.5%	2.0%	1.6%	2.0%	1.9%	1.8%	2.4%
2023	5.9%	5.2%	4.3%	4.4%	3.4%	2.8%	3.3%	4.0%	3.8%	3.1%	3.1%	3.4%	3.9%
2022	5.1%	5.7%	6.7%	6.8%	7.7%	8.1%	7.6%	7.0%	6.9%	6.9%	6.8%	6.3%	6.8%
2021	1.0%	1.1%	2.2%	3.4%	3.6%	3.1%	3.7%	4.1%	4.4%	4.7%	4.7%	4.8%	3.4%
2020	2.4%	2.2%	0.9%	-0.2%	-0.4%	0.7%	0.1%	0.1%	0.5%	0.7%	1.0%	0.7%	0.7%
2019	1.4%	1.5%	1.9%	2.0%	2.4%	2.0%	2.0%	1.9%	1.9%	1.9%	2.2%	2.2%	1.9%
2018	1.7%	2.2%	2.3%	2.2%	2.2%	2.5%	3.0%	2.8%	2.2%	2.4%	1.7%	2.0%	2.3%

The 2023 BMA Management Consulting Inc. Municipal Study identified the cost per capita (excluding amortization) for fire departments in municipalities with populations of 15,000 or fewer. Based on the information provided by Centre Hastings, Table #23 presents a comparison of fire service costs per capita. The net cost per capita for Centre Hastings is $125.00.

TABLE #23: 2023 FIRE DEPARTMENT COST PER CAPITA COMPARISON IN MUNICIPALITIES WITH POPULATIONS OF 15,000 OR LESS

Municipality	Net Costs Per Capita Excluding Amortization
Mapleton	$56
Meaford	$59
Wellington North	$56
Grey Highlands	$61
Hanover	$62
Georgian Bluffs	$67
Espanola	$69
Erin	$71
Lambton Shores	$71
Guelph-Eramosa	$73
Ingersoll	$74
Brock	$75
Hamilton Tp	$84
Aylmer	$86
Wellesley	$91
Kincardine	$95
Gravenhurst	$95
Parry Sound	$97
Tiny	$98
Puslinch	$106
Minto	$106
Ramara	$107
Central Elgin	$118
Centre Hastings	**$125**
Dryden	$156
Elliot Lake	$158
Greenstone	$186
The Blue Mountains	$247

According to the BMA data, Centre Hastings is on the higher end of cost per capita fire service costs.

6.1.1 Potential Impacts of Tariffs on Fire Department Budgets

When writing this report, United States of America (USA) tariffs and any retaliatory tariffs imposed by the Canadian government remained a fluid situation. Emergency Management Group Inc. recognizes the potential for significant negative impacts that a trade war with the USA could have on the Canadian economy but also on municipal budgets.

Heightened American and Canadian tariffs could negatively affect Canadian fire department budgets in several indirect yet substantial ways, particularly in terms of rising costs for equipment, materials, and operational expenses. Below are key areas where American imposed tariffs may influence the financial planning and spending of Canadian fire departments:

- Increased Costs for Imported Firefighting Equipment and Gear
    - Impact: Fire departments often rely on imported equipment, including fire trucks, personal protective equipment (like turnout gear, helmets, and gloves), hoses, and other specialized tools. If tariffs are imposed on these products, their cost could rise.
    - Budget Implication: The increased in cost for essential firefighting equipment could strain fire department budgets, especially if they need to replace or upgrade gear and apparatus. Municipalities may face the choice of delaying purchases, reducing scope, or reallocating funds from other areas to cover these higher costs.
- Higher Construction Costs for Fire Stations and Facilities
    - Impact: Tariffs on materials such as steel, aluminum and construction equipment could lead to higher costs for building and renovating fire stations and training facilities. Many municipalities rely on imported materials for these construction projects.
    - Budget Implications: Fire departments might experience increased cost for capital projects, potentially leading to delays or scaling back on planned infrastructure improvements. Additional funds may need to be allocated to meet the higher costs of building and maintaining facilities.
- Rising Vehicle and Maintenance Costs
    - Impact: Fire departments often rely on imported apparatus, or apparatus that is comprised of imported components, which may become more expensive if tariffs on apparatus or parts are increased. Additionally, ongoing maintenance of

these vehicles could also become costlier if replacement parts from the US are subject to higher tariffs.

    - Budget Implications: Increased apparatus costs could impact the fire department's ability to maintain or replace its fleet on schedule. This could lead to increased operating expenses or delayed vehicle replacement programs, potentially affecting the efficiency and reliability of emergency response.

- Inflationary Pressure Across Services
    - Impact: Tariffs can contribute to broader inflationary pressures that affect the cost of goods and services in general. This can lead to rising prices for materials, supplies, and services that fire departments rely on.
    - Budget Implications: Inflationary pressure could push up costs across the board, forcing fire departments to adjust their budgets, possibly leading to cuts in other areas or the need to seek additional funding sources to cover these rising costs
- Potential for Delayed or Limited Procurement
    - Impact: The uncertainty created by tariffs could lead to delays in procurement processes, as fire departments may wait to see how tariffs affect pricing or availability of goods. This could cause delays in acquiring critical equipment, potentially affecting operational readiness.
    - Budget Implications: Procurement delays could lead to missed opportunities for cost savings or cause budget overruns if the department needs to make an urgent purchase at higher prices later.

Extending the Life of Aging Fire Trucks – Risks and Realities

Due to rising costs, many municipalities may choose to extend the lifespan of their current fire trucks. While this may provide short-term budget relief, it presents significant operational, financial, and safety risks, including:

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

Refurbishment of existing apparatus may serve as a short-term solution, but it is not sustainable for maintaining an effective emergency response system in the long run.

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, though with recognition of long-term limitations.
- Adjusting municipal budgets and seeking additional government funding to maintain fire department readiness.
- Leasing or financing vehicles to spread out costs and preserve capital for other priorities.

American tariffs can have several direct and indirect impacts on Canadian fire department budgets. The most immediate effects would likely come from higher costs for imported equipment, vehicles, materials, and supplies. Additionally, tariffs may contribute to broader economic disruptions that could lead to reduced municipal revenues, further challenging fire departments to balance their budgets. Fire departments will need to plan for these potential cost increases by either adjusting their operational strategies, seeking alternative suppliers, or lobbying for additional funding from local governments.

6.1.2 Operating Budget

The CHFD operating budget consists of a Fire General Fund and a Community Emergency Measures General Fund. For the purpose of this analysis, the focus will be on the Fire General Fund, while Emergency Management is addressed in Section 4 of the report.

The 2024 operating budget, after revenue adjustments, is set at $623,763, reflecting an approximate 4.2% increase over the 2023 budget. On a per capita basis, the 2024 fire department budget equates to an annual cost of $127.43, or $10.62 per month.

TABLE #24: APPROVED BUDGET/YEAR END ACTUAL/VARIANCE

Year	Approved Budget	Year End Actual	Variance
2022	$575,025	$534,948	$40,077
2023	$597,618	$578,951	$18,667
2024	$623,763	$628,185	-$4,422
2025	$660,975		

In 2024, personnel costs for the CHFD account for approximately 52% of the budget, which is typical for a volunteer (paid-on-call) fire service. In contrast, full-time or career-based departments typically see personnel costs ranging from 90% to 95%, primarily due to contractual salary obligations.

With positive variances reported in 2022 and 2023, and a projected negative variance for 2024, the CHFD has effectively managed its operating budget. However, a comprehensive financial analysis of each general ledger account should be conducted annually. To enhance reliability and transparency, it is recommended to involve the Director of Finance in this process as a best practice.

A preliminary review of the CHFD operating budget suggests that a thorough analysis and possible revisions to certain general ledger accounts are currently necessary. The following table (Table #24) provides further details, comparing approved budget amounts to actual expenditures for various CHFD account centers.

TABLE #25: CHFD APPROVED BUDGET AMOUNTS VS. ACTUAL EXPENDITURES

Account Center	2022	2022	2023	2023	2024	Year to Date
	Budget	Actual	Budget	Actual	Budget	Sept. 30
Vehicle Repairs	$20,000	$30,262	$22,000	$34,911	$25,000	**$38,145**
Contracts Including Snow Plowing	$2,500	$3,854	$2,500	$3,784	$2,500	**$2,328**
Mileage	$3,747	$3,500	$3,500	$5,875	$3,500	**$1,609**
Medical Supply Replacement	$4,000	$6,180	$5,000	$8,356	$5,000	**$1,089**

Account Center	2022	2022	2023	2023	2024	Year to Date
	Budget	Actual	Budget	Actual	Budget	Sept. 30
Air Bottle Maintenance	$500	$0	$500	$0	$500	**$0**
Extrication Equipment Service	$1,000	$0	$1,000	$0	$1,000	**$0**
Ice/Water Rescue	$500	$0	$500	$0	$500	**$0**

Annually analyzing expenditures, and adjusting operating general ledger accounts to most accurately reflect anticipated expenditures based on historical averages will ensure an effective and efficient delivery of service that is appropriately funded in all aspects of its operation. A high-level goal of any operating budget should be to achieve an overall net zero position or positive variance at the end of the year. However, allowing year over year operating expenditures to exceed budgeted amounts, while reducing funding in other, potentially more critical areas such as training, is not a sound approach to fiscal management.

To provide several examples, general ledger accounts such as Vehicle Repairs and Medical Supply Replacement, which have historically been overspent, should be adjusted to reflect the five-year rolling average of expenditures. Additionally, the cost centres for Air Bottle Maintenance, Extrication Equipment Service, and Ice/Water Rescue should be consolidated into a single Equipment Maintenance Account, based on an anticipated service schedule for specific equipment. Currently, the three referenced accounts have budgeted amounts for the years 2022, 2023, and 2024, but show no corresponding expenditures.

6.1.3 Capital Budget

The multi-year capital budget forecast for the CHFD projects expenditures for apparatus and equipment needs through 2034. As previously mentioned, the costs of fire service apparatus and equipment have risen significantly in recent years. This trend is creating increased fiscal pressure on smaller municipalities, making it more difficult to replace fire apparatus and equipment in a timely manner. To address these challenges, many jurisdictions are exploring alternative options for apparatus replacement. These options include, but are not limited to, leasing, refurbishing existing apparatus, purchasing used equipment, and increasing development charge allocations for equipment and apparatus replacement. Given these challenges, EMG focused particularly on the five-year horizon during the review of the forecast.

- The anticipated replacement of the 1999 GMC Tanker, originally scheduled for 2025, has been deferred to the 2026 budget. By the time the procurement, construction, and delivery process are completed, this apparatus will be approximately 27 years old, which exceeds the industry standard replacement recommendations. Detailed information on apparatus replacement and maintenance programs can be found in Section 3 of this report. It is also important to note that the proposed $250,000 budget allocation will be significantly insufficient to cover the cost of purchasing a new apparatus. During EMG's research, it was noted that the CHFD is considering a refurbishing option to address the age of this apparatus.
- The CHFD plans to replace the 2008 Spartan Pumper Tanker in 2028, which will be 20 years old at the time of the budget approval. Based on current replacement costs, the proposed budget of $500,000 will be inadequate to purchase a new apparatus. The anticipated replacement of the 2016 Asphodel Pumper Tanker in 2031, with a projected budget of $650,000, will see the apparatus reach 15 years of age at the time of budget approval. Based on the guidance provided by the Fire Underwriters Survey (FUS) for apparatus replacement in Section 3.2 of this report, the replacement timeline aligns with the recommended schedule. However, the projected budget will fall short of the funds required to procure a new apparatus.

When considering apparatus replacement timelines, municipalities must assess industry standards such as the FUS replacement recommendations, and the NFPA 1911 Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles, against the associated risk of not replacing apparatus according to industry recommended timelines.

An aging fleet, coupled with rising mechanical issues, the absence of a defined replacement program, and insufficient funding resources, presents common challenges for municipal fire services, particularly smaller ones. However, these challenges can be addressed by implementing a fleet management program that regularly evaluates the condition and maintenance costs of the fleet, exploring alternative funding options, and ensuring the availability of reliable reserve apparatus for use. Furthermore, if Centre Hastings chooses to adopt a one-station fire model, the increased budget flexibility could better support meeting the financial requirements of the apparatus replacement schedule.

6.2 Revenue Opportunities – Development Charges and User Fees By-Law

The Development Charges Act, 1997 allows municipalities to pass by-laws authorizing the implementation of development charges on land within the municipality where land development increases the demand for municipal services.

New construction and redevelopment attract people to live and work in the area. As a result of this growth, municipalities often need to undertake new infrastructure projects, such as roads, recreation facilities, sewer and water lines, and, in some cases, fire stations, to ensure an adequate level of service for residents.

The funds collected from development charges help municipalities cover a portion of the costs associated with these necessary infrastructure improvements. Some examples of capital projects development charges could help to fund that are specific to fire services include:

- Purchasing a new fire apparatus.
- Building a new or renovating an existing fire station.
- Replacing Self-Contained Breathing Apparatus (SCBA).

Municipal councils regularly approve capital projects each year during the annual budget process and allocate development charges to fund growth-related projects that benefit the entire municipality. Without development charges, the municipality would need to cover the costs of growth-related capital projects through property taxes or another source of revenue.

Table #26 details the 2025 CHFD portion of development charges by Unit Type.

TABLE #26: CENTRE HASTINGS DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge by Unit Type (2025)		
	Single & Semi Detached	Multiples	Apartments
Library	$449	$310	$207
Parks and Recreation	$937	$646	$431
Fire Protection Services	$1,780	$1,229	$819
Development Related Studies	$984	$679	$453
Services Related to Highway			
Public Works	$1,614	$1,114	$743
Roads and Related	$2,479	$1,711	$1,141
Total Residential Rural Charge by Unit Type	**$8,243**	**$5,689**	**$3,7942,670**

Aside from raising tax rates and collecting fees for services, municipalities have limited options for generating additional revenue to minimize tax increases. The assessment of development charges on new residential, commercial, and industrial developments is one of the few other revenue-generating methods. In this case, the goal is for the developer to cover the additional costs and increased demands on existing services created by the growth they are facilitating.

According to the Municipality of Centre Hastings 2025 Municipal Budget Draft v2, Fire Protection Services showed a negative balance of -$81,161.01 as of December 31, 2024. During the same year, Single and Semi-detached development generated $25,068.57 in revenue which equates to 21.6% of all development charges revenue, leaving a negative balance, after interest (-$3,475.86) of -$81,161.01 as of December 31, 2024.

To address the concerns that have been noted regarding the necessary funding for future apparatus replacement, during the next Development Charge review process, Council should assess the CHFD allocation against the future cost of asset replacement.

6.2.1 User Fees and Charges

EMG also conducted a review of Schedule "D" of the User Fees and Charges By-law (2024-25) and note the following comments and additional revenue or cost recovery options:

Hazardous Materials Response - There is currently no specific fee stipulated for the response to a hazardous materials incident (such as a fuel spill, or the inadvertent release of natural gas due to a supply line rupture). A suitable fee in line with other response costs based on time committed should be assessed to the property owner (preferred) or contractor creating the hazard.

Orders Under the OFC - There is currently no fee stipulated to the recovery of costs such as may be necessary when the fire department issues an order under the OFC (i.e., immediate threat to life situation where the Department has to facilitate short-term accommodations for persons displaced by their order). Cost recovery should be assessed to the property owner.

File Searches and Requests for Written Reports – File searches that are requested for the purpose of mortgage clearing/ownership change, should include an additional charge based on the timing of the request from real estate agencies or lawyers. The following is an example:

- Requests made ten or more working days prior to the date the report is required and;
- An increased charge for requests that are made less than ten days prior to the date the report is required.

In many instances, as a matter of diligence, the prospective purchaser of a property or the real estate agent will request a written report from the fire service to determine if outstanding fire code violations exist or if the property has experienced a fire in the past. If the real estate agent requests, the costs may be transferred to the property owner through the transaction. In some instances, these types of requests are made shortly before the closing date, and additional pressure is placed on the fire service to produce the report. Requests for file searches such as this are not mandated under the FPPA; they take time and resources to accomplish, and therefore, a reasonable fee for the service should be applied based on the urgency of the request.

Burning Permits – The Municipality of Centre Hastings, thorough By-law 2014-31, regulates the setting of open fires and outlines general provisions applicable to all properties. This By-law specifies the rules for open-air fires and establishes a fee, based on the Ministry of Transportation (MTO) rate, for each instance when the Fire Department responds to a fire on a property.

Currently, there is no proactive process in place to protect residents from the negative effects of excessive smoke, odors, airborne sparks, or embers that could lead to health issues, increase fire risk, disrupt the enjoyment of neighboring properties, or cause false fire alarms. Presently, enforcement relies on voluntary compliance, with inspections being conducted only in response to complaints.

To better understand and mitigate the risks associated with open-air burning, By-law 2014-31 should be amended authorizing the Fire Chief to implement an open-air burning application process. This process would allow property owners or tenants (with the property owner's written consent) to obtain approval for open-air fires, subject to a satisfactory site inspection by the CHFD. Additionally, and annual fee should be introduced as part of a cost recover measure. Additionally, the individual responsible for the fire would be required to sign a formal document confirming their agreement to comply with all provisions of the application process.

The Fire Chief should also engage with local Indigenous leaders and groups to collaboratively develop safe practices for ceremonial fires. This process should include an educational component for the public to raise awareness about the cultural significance of these fires.

Generally, Schedule "D" has limited scope and should be compared with similar fire service user fee schedules to determine appropriate fee adjustments. EMG offers the following additional revenue or cost recovery options for considered by Council.

FIGURE #14 – ADDITIONAL SCHEDULE "D" SERVICE CHARGES

Municipality of Centre Hastings Schedule "D" Fire Protection Services of By-law 2024-25 - Other Relevant Service Charges from Comparable Municipalities.
Commercial Permits and Inspections Fees
Single occupancy less than 20,000 sq. Ft
Single occupancy greater than 20,000 sq. ft
Fireworks & Pyrotechnics Display Inspection - annual
Residential Permits and Inspection Fees
Multi-unit Residential (up to and including 12 units)
Multi-unit Residential (over 12 units)
Other Inspections
Liquor Licence
Day Car, Foster Care and Group Homes
Business License Inspection
Fire Code Inspection by Request
Follow up Fire Code Inspection by Request
Shows, Exhibitions, Special Events by Request
Technical Rescue/Hazardous Materials Incidents
Technical Rescue when other services are requested to aid in mitigation of the incident (i.e., ice/water rescue, confined space rescue, high angle rescue, machinery rescue, trench rescue etc.)
Response to Hazardous Materials incidents when other services are requested to aid in the mitigation of the incident.
Miscellaneous Fees
Annual Burning Permit Fee
Review and approval of Risk and Safety Management Plans submitted by propane operators related to the storage and handling of propane.
Gas line strikes by residents or contractors when locates through Ontario One Call have not been obtained.
All costs associated with retaining private contractors, or renting special equipment not normally carried on a fire apparatus too determine fire origin and cause, suppress or extinguish a fire, preserve property, prevent the spread of fire, make a property safe or demolish a structure.

6.3 Reserves

Ensuring sufficient annual contributions for the replacement of vehicles and equipment is crucial for maintaining service continuity. While there are various ways to fund a lifecycle plan, there may be instances where additional funding is needed. This can be addressed through a reserve fund, which is often financed through the operating budget. Once a comprehensive lifecycle plan is established, including the identified funding sources and amounts, it will become clear if any additional reserve funds are required over and above what is already part of the annual operating budget allocation.

The CHFD has three reserves. The first is a "special reserve" that houses donated funds and was created as part of a scholarship program in memory of volunteer firefighters. This reserve fund is replenished by donations and/or contributions from the volunteer firefighters. The Municipal Council could consider establishing a formal process for the use of this Special Reserve.

The second reserve is for the replacement of Self-Contained Breathing Apparatus (SCBA) and Apparatus replacement. This reserve receives an annual tax dollar allocation. The operating/surplus potion of the reserve will start 2025 with a balance of $65,663. The SCBA and Apparatus portions of the reserve will begin 2025 with balances of $144,000 and $119,000, respectively.

The third reserve is an Emergency Management reserve and his been established to address the future replacement of the standby generator at the Emergency Operations Centre (EOC). The reserve will start 2025 with a balance of $46,510.

EMG recommends the allocation of additional budgeted transfers to reserves to support apparatus and equipment replacement schedules.

6.4 Finance Conclusion

Council's future decisions on the recommendations in this report will have operating and capital financial implications. The Fire Chief should carefully evaluate these recommendations to ensure they align with ongoing capital and operating budget requests.

Section 6: Recommendations

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
74	The CHFD conduct a detailed cost centre analysis in partnership with Finance and align implementation of this report's recommendations with capital and operating budgets.	Immediate (0 to 1 year)	Staff Time	A preliminary review of the CHFD operating budget indicates that a detailed analysis and potential adjustments to specific account centers are needed at this time. Council's future decisions on the recommendations in this report will have operating and capital financial implications.
75	That the general ledger accounts for Air Bottle Maintenance, Extrication Equipment Service, and Ice/Water Rescue should be consolidated into a single Equipment Maintenance Account	Immediate (0 to 1 year)	Staff Time	Currently, the three referenced accounts have budgeted amounts for the years 2022, 2023, and 2024, but show no corresponding expenditures.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
76	That Council assess the CHFD Development Charges allocation against the future cost of asset replacement and consider a more robust fiscal use of reserve fund strategies to support the asset management strategy associated with replacement of apparatuses and equipment be implemented.	Immediate (0 to 1 year)	Staff Time	According to the Municipality of Centre Hastings 2025 Municipal Budget Draft v2, Fire Protection Services showed a negative balance of -$81,161.01 as of December 31, 2024. During the same year, Single and Semi-detached development generated $25,068.57 in revenue which equates to 21.6% of all development charges revenue, leaving a negative balance, after interest (-$3,475.86) of -$81,161.01 as of December 31, 2024. While there are various ways to fund a lifecycle plan, there may be instances where additional funding is needed. This can be addressed through a reserve fund, which is often financed through the operating budget. Once a comprehensive lifecycle plan is established, including the identified funding sources and amounts, it will become clear if any additional reserve funds are required.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
77	That the CHFD institute a fee in Schedule "D" of the User Fees and Charges By-law for the following: • Orders issued under the Ontario Fire Code for immediately dangerous to life situations. • file searches that are requested for the purpose of mortgage clearing/ownership change, and an additional charge should be included based on the timing of the request from real estate agencies or lawyers. • an open-air burning application process, and with an associated burning permit fee. • a suitable fee, for Hazardous Materials response, in line with other response costs based on time committed should be assessed to the property owner (preferred) or contractor creating the hazard.	Short-Term (1 to 3 years)	Staff Time and any associated revenue.	There are currently no fees stipulated to the recovery of costs for these fire department activities.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
78	That the Fire Chief engage with local Indigenous leaders and groups to collaboratively develop safe practices for ceremonial fires. This process should include an educational component for the public to raise awareness about the cultural significance of these fires.	Immediate (0 to 1 year)	Staff Time	Indigenous led fore practices recognize the interrelationship and interdependence of fire, land, people and place. The use of fire is not a time-sensitive, specific event.

Section 7

Overview of Stakeholder Surveys and Interviews

SECTION 7: OVERVIEW OF STAKEHOLDER SURVEYS AND INTERVIEWS

7.1 External Survey, Internal Survey, Council/CAO Survey

To gain a comprehensive understanding of how well the CHFD is serving the community and its volunteer firefighters, EMG gathered anonymous feedback through Survey Monkey from the public, CHFD personnel, the Mayor, Municipal Council, and the CAO. The insights collected from these surveys were crucial in shaping the recommendations in this report, which will support the Council in making informed strategic decisions regarding the fire service in the future.

External Survey

The external survey included ten questions and was open to the public for approximately three weeks. It featured five ranking-style questions, two yes/no questions, and three open-ended questions that allowed respondents to share their experiences and offer suggestions for improvement. Overall, the survey provided EMG with valuable insights into constituents' general perceptions of the fire department and highlighted the challenges they believe the service faces.

Internal Survey

The internal survey consisted of twelve questions and was made available to all members of the CHFD.

Council/CAO Survey

This survey included eight questions aimed at gathering opinions on topics such as value for money, whether the community is adequately protected by the current fire service structure, the impact of community growth on the service, and the top risks currently facing the service, among others. EMG was able to gather valuable insights from the target audience, whose extensive knowledge of the CHFD, the Municipality, and their constituents provided a comprehensive perspective. The responses were collected, compiled, and analyzed solely by EMG staff to maintain confidentiality.

7.2 Survey Results

7.2.1 External Survey

Generally, the responses to all the external surveys consistently portrayed a positive view of the CHFD. As a result, the survey findings from the sample population are considered valid and reliable, as they accurately represent the opinions of the broader community. EMG is confident that the external survey results largely reflect the views of the general population of Centre Hastings., and therefore, the results of the survey from the sample population can be determined to be valid and reliable as they represent the opinion of the overall population. EMG is confident that the external survey results can, for the most part, be reflective of the general population of Centre Hastings.

What is your general impression of the CHFD concerning to its level of professionalism, community safety, education, and fire prevention awareness programs?

When asked this question, 43 respondents provided input. Of these, just over 77% expressed a positive impression, rating the CHFD as excellent to good.

Has the CHFD staff approached you concerning their Smoke Alarm Program? If yes, how did you find the interaction?

When asked this question, 43 people provided input. Of the respondents, 21% reported having been contacted about the CHFD Smoke Alarm Program, while 79% stated they had not. These results highlight an opportunity to enhance public fire safety education, particularly regarding the legislative requirement for smoke alarms in residential buildings. Among those who reported being contacted, 54% described their interaction with CHFD personnel as excellent.

Respondents' opinion pertaining to the CHFD's general performance, public interaction and visibility, equipment, training and cost of the service:

Question 4 assessed citizen opinions on specific aspects of the CHFD fire protection service functions. The results are a snapshot of the public's opinion on the ability of the CHFD to provide the expected level of service based on the needs and circumstances of the community. The question also considered the importance of the cost of the service to the taxpayer. Based on the responses received from constituents, the following four areas are listed in order of importance:

1. How quickly the CHFD gets to me if I have an emergency.
2. CHFD has continued and relevant training.
3. Timeliness to any request for services or assistance from the CHFD.

4. CHFD purchase and maintain new and applicable equipment.

When asked how important the cost of the fire service is, the largest number of respondents, 16 or 38%, took a neutral position, indicating the overall cost of the service is important. On the opposing ends of the scale, 13 people or 31% said the cost is extremely important, while one respondent or 2.4% said that cost is not important at all. With the highest weighted average of 3.16, respondents viewed whether the CHFD will visit their home to provide safety advice or fire smoke alarms, as important, to not important at all.

Based on your knowledge/understanding of the fire department, what do you think are the top three issues facing our fire service today (i.e., barriers to providing service)

Based on the respondents' knowledge and understanding of the CHFD, 42 people answered the question asking them to identify the top three issues facing the service today. The top three issues identified are as follows:

1. Recruitment and retention of volunteers (83%).
2. Funding and resource constraints (57%)
3. Training and professional development (50%)

The CHFD delivers 27 core services. Which services are most important to you?

When asked to rank the 27 core services of the CHFD in order of priority, from extremely important to not important at all, respondents identified firefighting, vehicle collision and extrication, grass, brush, and forestry firefighting, and emergency medical intervention as the most important services provided by the department.

Are there any additional services that you believe should be provided? If so, please specify.

After analyzing all the responses, EMG found that no consistent additional service emerged. Several respondents mentioned services that were already covered in the ten core services listed in question 5. The most common theme among the answers was a desire for enhanced levels of community interaction.

Over the next 10 years, if you could recommend/implement up to three things to improve how the CHFD provide the current services, what would those things be?

The answers to this question did not reveal an overwhelmingly common theme. However, some of the more popular responses include the following:

- Maintain and enhance firefighter training.

- Maintain and upgrade equipment and apparatus.
- Increase funding.
- Build a new modern fire station with appropriate space and that meets AODA requirements.
- More community interaction with school aged children.
- Enhanced response to fire prevention and property inspection activity.
- More volunteer firefighters.

Have you directly received service from the CHFD?

When asked this question, 41 people responded. Of these, 14 individuals indicated that they had directly received service from the CHFD, while 27 people stated they had not.

Could you share some details about your experience and any recommendations for improvements to the Fire Department?

As a follow-up to question nine, respondents were asked to share details of their experience and any recommendations for improvement regarding the fire department. Twelve experiences were shared, with the majority of comments being positive and complimentary about the fire department's timely response and the professionalism of its staff. Areas for improvement included the need for enhanced public fire safety education. Several comments mentioned concerns about firefighters arriving at emergency scenes without the appropriate level of PPE, and one respondent noted being dismissed when reporting a potential fire hazard.

7.2.2 Internal Survey

A total of 12 internal surveys were completed by CHFD personnel, representing 28% of the staff, or 12 out of 43 members, including the Fire Chief, and Deputy Chief. This represents approximately one-third of the CHFD. Eight respondents are assigned to Station 2 – North Hall, while four are assigned to Station 1 – South Hall. When assessing the years of service of the respondents with the CHFD, the results are as follows:

TABLE #27: FIREFIGHTER YEARS OF SERVICE

Years of Service	Responses %	Responses #
1 to 5 years	58.33%	7
6 to 10 years	8.33%	1
11 to 15 years	0.00%	0
16 to 20 years	0.00%	0
Over 20 years	33.33%	4
Total	100%	12

What are the things that make you most proud of the CHFD?

The majority of respondents (75%) cited the department's strong focus on training and development as their top source of pride. Commitment to community service followed closely, noted by 67%. Safety—for both firefighters and the public—was the third most common point of pride. These responses reflect a deep respect for the department's professionalism, dedication, and continual improvement.

How do you think most people living in the community perceive the Fire Department, and why?

Most respondents (58%) believe the community sees the fire department as good, with another 33% rating it as excellent. About 8% felt the perception was satisfactory. These results indicate a positive reputation, with some opportunity to strengthen public image further.

Based on your experience with the Fire Department, what would you say are the top three issues facing the department today?

The most pressing issue, identified by 75% of respondents, is recruiting and retaining firefighters. Funding and limited resources came next (58%), followed by training, professional development, and leadership succession planning (each cited by 33%).

Commonly suggested solutions include:

- Strengthening volunteer recruitment and ensuring commitment.
- Enhancing training programs.
- Promoting fairness in leadership development.
- Increasing funding to match inflation.
- Offering retention incentives that support work-life balance and mental health.

- Prioritizing firefighter safety and well-being.

Which services to you believe are most valued by the community?

Respondents placed the highest value on well-maintained equipment and apparatus, along with well-trained personnel (both with a weighted average of 1.17). Rapid emergency response followed closely (1.25). In contrast, the cost of services received the lowest value rating (3.0), particularly among internal respondents—though external responses showed more concern about cost.

The CHFD delivers 27 core services. Which services are most important to you?

The top four services identified were:

- Structural Firefighting
- Vehicle Extrication
- Vehicle Firefighting
- Grass, Brush, and Forest Firefighting

These priorities were also reflected in the external survey.

Are there any other services that you believe the Fire Department should provide, or increase the level of a present service? Why and what would be the outcome/benefit?

When asked this open-ended question, three respondents provided comments, and they are as follows:

Three suggestions were made:

- DZ (driver's license) training
- Increased public education
- Large animal rescue

Each was seen as a way to expand the department's capabilities and support the community further

What improvements, if any, could the CHFD implement to make it better? What do you believe would be the outcome of implementing these changes?

Eight respondents provided feedback, with the most consistent themes being increased funding and improved training. Other suggestions included:

- A progressive fitness program to support both physical and mental health.
- Better incentives for recruitment and retention.
- Enhanced public education, especially for youth.

If it were up to you, what would the fire department be like in 5 to 10 years from today, and why? How do you propose we get there?

Respondents expressed strong support for the Fire Chief and optimism about the department's direction. They envision a future where increased and sustainable funding supports training, equipment, and deeper community engagement.

Are there any other comments or suggestions that you would like to add that would help improve the services the CHFD delivers to the community?

Two comments were received. One expressed appreciation for the Chief and department personnel, while the other emphasized the need for improved internal communication across all levels.

7.2.3 Council and CAO Survey

The Municipality of Centre Hastings is governed by an elected council consisting of five members: a Mayor, Deputy Mayor, and three Councillors. Together, they represent all constituents in the municipality. The Chief Administrative Officer (CAO) and Deputy CAO were also given the opportunity to complete the survey. Out of the municipal representatives who had access to the survey, five completed it.

Do you think the residents are getting fair value for their tax dollar in relation to the fire services provided? If so why, if not why?

All respondents agreed that residents are receiving fair value for their tax dollars. One respondent noted the strong collaboration between the two fire stations, which contributes to effective coverage.

Do you believe the number of fire stations and apparatus adequately protects the community?

Four respondents felt that the current coverage is sufficient. One suggested that placing a spare apparatus in Moira, once available, could enhance response capabilities.

What do you believe are the greatest strengths of the CHFD?

The top strengths identified include:

- Commitment to public safety and service.
- Professionalism and conduct.
- Response time and efficiency.
- Teamwork and collaboration.

What are the top risks/issues facing the CHFD?

The majority (80%) identified recruitment and retention of volunteers as the most pressing issue. Funding and resource limitations were the second most common concern. Notably, no respondents mentioned response times or diversity and inclusion as current issues, indicating positive performance in those areas.

How would you like to see the CHFD in the next 5 to 10 years in relation to serving the community, keeping in mind growth of the community?

Respondents emphasized the importance of evolving with the community's growth. Suggestions included:

- Establishing a smaller station in the south end of the Municipality
- Reviewing service levels, particularly for specialized needs like ice/water rescue
- Addressing emerging social issues within the community
- Responding to hoarding concerns
- Improving alignment between emergency services and social supports

Can you share any input received from your constituents and/or staff in relation to the CHFD, whether they are cost related, service related, or fire safety and education related?

Three comments were shared. One reflected positive feedback from a resident, another noted minimal concerns raised, and a third referenced conversations with neighboring communities about shared service opportunities.

What are the top three challenges facing the Municipality now and in the future?

The leading challenges identified were:

- Budget pressures and financial sustainability
- Housing affordability and availability
- Managing population growth
- Aging infrastructure was also highlighted by 40% of respondents as a significant future concern.

7.2.4 Stakeholder Interviews

In addition to the three stakeholder surveys as previously detailed, EMG conducted numerous stakeholder discussions. Over the course of the information gathering process, stakeholder discussions were held with Centre Hastings Firefighters, and members of Municipal Council.

In order to maintain a level of consistency, the representatives participating in the meetings were all asked to approach the discussion from a strength, weaknesses, opportunities, threats (challenges) (SWOT) perspective as related to the CHFD both today and into the future (5 to 10 years).

Additionally, continuous and ongoing discussions with the Fire Chief, Director of Finance/Deputy CAO and the CAO took place throughout the development of this MFP process and included, but were not limited to formal bi-weekly project team meetings.

Consistently, the information obtained in the face-to-face meetings with the stakeholders referenced above supported the information derived from the surveys. During these meetings, the following themes emerged:

- There is broad support for the Fire Chief and the department as a whole.
- The fire service consists of dedicated personnel, including a solid core of younger firefighters.
- There is strong internal support for training within the department.
- Under the current Fire Chief, the service has seen notable improvements, particularly in training, fire prevention, and public engagement.
- Concerns were raised about the process used for deploying firefighters to tiered medical calls, many of which are later canceled, leading to associated costs.
- The relationship between the two fire stations has significantly improved.

- The cost of replacing apparatus and equipment remains a challenge, particularly without further increasing taxes.
- Anticipated growth within the municipality is viewed positively.
- There may be a future need for additional full-time or part-time staff, such as firefighters, a Training Officer, a Public Fire Life Safety Educator, and/or a Deputy Fire Chief.
- The prospect of municipal amalgamation was discussed, although no concrete plans are in place for this in the foreseeable future.
- The CHFD is one of the few fire departments that does not have uniformed clothing for its personnel.
- Firefighters feel they are not fully supported by Council. There is a belief that both the fire department's training budget and the fire prevention budget should be increased.

Section 7: Recommendations

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
79	That the Fire Chief thoroughly assess the survey results to identify areas for operational improvement.	Immediate (0 to 1 year)	Staff Time	The insights collected from these surveys were crucial in shaping the recommendations in this report, which will support the Council in making informed strategic decisions regarding the fire service in the future.

Section 8

Conclusion and Recommendations

SECTION 8: CONCLUSION AND RECOMMENDATIONS

8.1 Conclusion

During the review conducted by EMG, it became evident that the volunteer firefighters of Centre Hastings are deeply committed to their roles and take great pride in serving their community. The Council, Chief Administrative Officer, and Fire Chief have demonstrated a shared dedication to ensuring the safety and well-being of both residents and fire personnel.

Given the current staffing levels, apparatus, equipment, and station locations, the Centre Hastings Fire Department is striving to deliver the most efficient and effective service possible. The adoption of this Master Fire Plan (MFP) reflects the Municipality's commitment to enhancing service delivery and operational performance.

As with many municipalities experiencing limited growth and facing ongoing fiscal constraints, Centre Hastings must make strategic choices about future investments.

All cost projections and implementation timelines presented in this report are approximate and should be addressed through coordinated prioritization by the Fire Chief, CAO, and Council.

This Master Fire Plan serves as a long-term planning framework. It is recommended that the plan be reviewed and updated annually, with a comprehensive review conducted at the five-year mark.

8.2 Recommendations, Estimated Costs, and Rational

This chart offers a comprehensive summary of the recommendations outlined in the report, including estimated costs and proposed timelines for implementation.

This MFP document is a culmination of 79 recommendations.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
Section 1 – Community & Fire Department Overview				
1	The CHFD Establishing & Regulating By-law should be updated giving consideration to the requirements as detailed in Section 1.3.1 of this report.	Immediate (0 to 1 year)	Staff Time	Best practice recommends that by-laws affecting fire department operations be reviewed annually or whenever significant changes occur in the community. This approach ensures that the Fire Chief can align with the Council's direction on service levels, performance expectations, and authority, while adapting to the evolving needs and circumstances of the community.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
2	By-law 2014-31 should be amended to restrict the types of materials that are permitted for burning and be further amended to place a prohibition on the use of flying lanterns.	Immediate (0 to 1 year)	Staff Time	The By-law, as currently written, allows the burning of materials such as rubbish, garbage, and other combustibles. However, with growing concerns about global warming due to Carbon Monoxide (CO) emissions, along with the rising health risks associated with burning non-organic materials, it is advisable to consider amending the By-law to restrict the types of materials that are permitted for burning. Sky lanterns pose a serious fire safety hazard, and so much so that their use has been prohibited by the National Fire Protection Association code requirements.
3	If identified as a concern by the Fire Chief, By-law 2007-14 should be amended to include a process for enforcing ongoing maintenance once a permit has been approved.	Immediate (0 to 1 year)	Staff Time	While the By-law effectively ensures compliance with the referenced construction standards for use as a Multiple Access Road, EMG could not identify a process for enforcing ongoing maintenance once a permit has been approved.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
Section 2 – Fire Department Divisions				
4	That the Fire Chief continue to evaluate the need for additional administrative support, such as an Administrative Assistant or a full-time Deputy Fire Chief and present any such requests to Council.	Short-Term (1 to 3 years)	To be determined based on the need	The implementation of this MFP, ensuring compliance with O. Reg. 343/22 Firefighter Certification, reviewing and updating Standard Operating Procedures, enhancing public life fire safety education programs, and addressing the impact of municipal growth on the fire department's level of service are just a few examples of tasks that will increase the Fire Chief's workload. Additionally, the transition of the Community Emergency Management Coordinator position, which is currently held by the Chief Administrative Officer (CAO), to the Fire Chief will only add to the workload.
5	That the CHFD have input into the plans review process or update their E & R By-law to reflect that the Chief Building Official is the person responsible for all plans review.	Immediate (0 to 1 year)	Staff Time	The E & R By-law states the fire department shall ensure through plan examination and inspection, that required fire protective equipment is installed and maintained within buildings

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
6	That the CHFD develop and maintain a more robust Fire Prevention program.	Immediate (0 to 1 year)	Staff Time	The present fire prevention plan is lacking in several different areas including inspection, education, and other programs the department does or does not do.
7	That the Municipality explore the option of making the part-time Fire Prevention Officer (FPO) position a full-time certified position including the role of Public Fire Life Safety Educator (PFLSE).	Immediate (0 to 1 year)	$85,000 to $95,000 annually according to experience	The effort required to implement a successful Fire Prevention program exceeds the capacity of a part-time employee.
8	The CHFD develop a smoke alarm policy where they go from house to house to identify residences that do not have smoke detectors.	Immediate (0 to 1 year)	Staff Time	The CHFD does not currently promote going door to door identifying residences that do not have smoke alarms.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
9	That the CHFD start promoting the benefits of residential sprinkler installation in all new construction for residential and commercial buildings.	Immediate (0 to 1 year)	Staff Time	When the Fire Education Group attends events, they should have pamphlets and literature that highlight the benefits of having residential sprinklers installed.
10	Establish a digital records system for fire prevention and public education, including inspection tracking.	Immediate (0 to 1 year)	Staff Time	Currently, records are not being maintained regarding the status of inspections, including violations found, required remedial actions, orders issued, or outcomes. To gauge the success of any fire prevention or public education program, accurate records must be kept.
11	Establish a smoke alarm policy with a tracking and compliance process.	Short-Term (1 to 3 years)	Staff Time	The law mandates that every residence has a working smoke alarm on every level, and outside of all sleeping areas.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
12	Establish inspection frequencies that extend beyond vulnerable occupancies, taking into account the inspection frequency recommendations provided by FUS.	Immediate (0 to 1 year)	Staff Time (With the addition of a full-time FPO)	Currently, only vulnerable occupancies and complaint driven inspections are being completed. Inspection frequencies for other occupancy types should be performed based on the FUS recommendations.
13	That the CHFD develop a preplan program with written guidelines to direct the program.	Immediate (0 to 1 year)	Staff Time	The CHFD currently lacks a pre-plan program. Implementing one would help firefighters become familiar with structures, improving response during emergencies.
14	That the CHFD establish a policy outlining the steps the department must follow when conducting a fire investigation.	Immediate (0 to 1 year)	Staff Time	Currently, there is no policy in place that provides direction regarding conducting a fire investigation.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
15	The current job description for firefighter should be reviewed and updated to identify more succinct job duties and conditions of employment.	Short-Term (1 to 3 years)	Staff Time	The job description does not detail the types of activities firefighters are expected to be able to perform; It also does not identify any conditions of employment such as pre-employment physical and mental screening and the ability to obtain clear criminal records and vulnerable sector checks.
16	Establish a structured recruit, selection, and training program.	Short-Term (1 to 3 years)	Negligible costs	The recruit selection process does not identify any objective minimum requirements for the position of firefighter and involves only an interview with unknown criteria for the determination of suitability. There is no formal or written recruit training program or syllabus that is currently in use.
17	Ensure all new firefighters attend an Ontario Fire College regional training centre and achieve NFPA 1001 Certification.	Short-Term (1 to 3 years)	Costs dependent on number of attendees and number of training courses	This would improve efficiency by balancing any increased cost with vastly improved timelines for providing the necessary training. In additions this would provide access to valuable fire ground resources for a more complete training experience.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
18	CHFD should consider the preparation and implementation of an annual training program for firefighters. The program should provide the necessary skills and knowledge to ensure that firefighters can safely and effectively provide the community with the services identified in the establishing and regulating by-law and the medical tiered response agreement.	Short-Term (1 to 3 years)	Staff Time	EMG did not identify an annual training program to ensure that each firefighter completes documented participation in an annual training program or syllabus of training to ensure proficient skills and knowledge are maintained.
19	CHFD should consider a program which ensures that all firefighters are provided with firefighter survival and self rescue training.	Immediate (0 to 1 year)	Staff Time	EMG did not identify a program in the CHFD on firefighter survival and self rescue as identified in *Section 21 Guidance Note 7-4 Firefighter survival and self-rescue training.*
20	The Fire Chief should ensure that training plans are developed in accordance with Health and Safety Advisory Committee Guidance Notes for each training course and subject covered to ensure safe and consistent training.	Immediate (0 to 1 year)	Staff Time	EMG did not identify training plans which have been developed for each training course and subject in accordance with *Section 21 Guidance Note 7-3 Training Plans* and which would aid in supporting safe and consistent training.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
21	The Fire Chief should review and update all policies and procedures to ensure that they support a safe, timely and effective response.	Immediate (0 to 1 year)	Staff Time	The current CHFD policies and procedures provide limited guidance for dealing with technical rescue situations which fall within the scope of the current training and offer no guidance for dealing with technical rescue situations outside of the scope of the current training.
22	The Fire Chief should identify any technical rescue training needs for the fire department and make the necessary plans to support and implement any necessary training.	Short-Term (1 to 3 years)	Dependent on change in level of response	EMG did not identify a review of past events or existing risks which will assist in identifying the technical rescue training and skills required by CHFD firefighters.
23	In support of any response needs identified by the Fire Chief, which are beyond the training, certification, and equipment of CHFD, the Fire Chief should ensure that an approved automatic aid agreement is put in place to address support for response.	Short-Term (1 to 3 years)	Dependent upon response support required.	Support for hazardous materials response or technical rescue, which is beyond the abilities of CHFD, can be provided by securing these services from a neighbouring community in the form of a mutual aid agreement or an automatic aid agreement.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
24	CHFD should provide the NFPA online training course - Alternative Fuel Vehicles Training Program for Emergency Responders, to all firefighters.	Short-Term (1 to 3 years)	Staff Time	Electric and electrified vehicles propose unique risks to firefighters during an emergency response.
25	CHFD should review and update any current ICS policies or procedures to ensure they reflect a system which is effective, safe and compatible with all mutual aid partners and the local Police and EMS partners. Policies should be established that ensure only incident command trained and competent supervisors are appointed at an emergency incident.	Immediate (0 to 1 year)	Staff Time	The current SOPs do not address all types of emergency incidents the fire department responds to; they do not address all key features of a functional and effective ICS. Emergency scene safety is the single most important component to incident command, as indicated in *NFPA 1561 - Standard on Emergency Services Incident Management System and Command Safety*.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
26	CHFD should establish a formal ICS training program which ensures that all staff are trained in incident command and conversant in the incident command system. Consideration should be given to adopting a well-established ICS training program such as the Blue Card ICS.	Short-Term (1 to 3 years)	Approximately $7500 for a Train-the-Trainer Program	The ICS is designed to enhance coordination, improve resource management, and ensure a clear chain of command during emergency responses.
27	CHFD should begin the process of certification for all personnel who may be assigned the role of incident safety officer as a normal part of their duties.	Short-Term (1 to 3 years)	Dependent upon number of staff and type of course used	In Ontario, Incident Safety Officer certification is required for identified firefighters who's regular and expected assignment at an emergency incident could be incident Safety Officer.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
28	CHFD should establish a policy which ensures that all firefighters participate in live fire training on a periodic basis. Consideration should be given to the use of the OFM Mobile Live Training Unit for conducting live fire training within the community.	Short-Term (1 to 3 years)	Staff Time	The participation in live fire training ensures that all firefighters are prepared and proficient to safely participate as a member of a team in the dangerous activity of operating in an environment which is immediately dangerous to life and health (IDLH) while they use self contained breathing apparatus and conduct fire fighting, ventilations, and search and rescue activities in limited visibility.
29	CHFD should establish a policy which ensures that the training structures or props are compliant with the NFPA standards for live fire training evolutions (both internal and external).	Short-Term (1 to 3 years)	Staff Time	It is important to ensure that live fire training and the facilities, training aids, or props are compliant with the relevant NFPA standards.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
30	CHFD should establish policies and procedures to ensure live fire training is conducted in compliance with relevant NFPA standards and Section 21 Guidance Notes.	Immediate (0 to 1 year)	Staff Time	All training activities should be supported by policies, procedures and personnel which ensure compliance with relevant NFPA standards and Section 21 Guidance Notes relating to live fire training.
31	CHFD should establish an officer development program to ensure compliance with occupational health and safety requirements, ensure efficient and effective emergency responses, prepare future fire department leaders, and support a well-functioning fire department organizational culture.	Short-Term (1 to 3 years)	Staff Time	There is currently no formal officer development program in place in the CHFD. Fire Officer training is made available to members to ensure compliance with Ontario fire training certification requirements but not as part of a program to develop incident commanders, emergency scene supervisors and future fire department leaders.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
32	CHFD should revise the current promotional process to include more criteria to ensure the best candidates are being supported and promoted to positions of leadership in the organization.	Short-Term (1 to 3 years)	Staff Time	There are no formal officer selection or promotion criteria established. Promotions are made with a discussion at officer's meetings with no set criteria.
33	CHFD should provide fire service fatigues and dress uniforms to all members which identify names and ranks. The wearing of uniforms should be compulsory for all fire department activities and should be supported by standard operating procedures.	Short-Term (1 to 3 years)	Under $10,000	As a paramilitary organization, the fire service utilizes a rank structure for its members to assign roles and responsibilities within the organization. Members wear uniforms which both identifies them as fire service members to the public and identifies and distinguishes those in supervisor and leadership positions. They are a source of pride to members.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
34	Ensure the fire prevention officer is fully trained in inspection, enforcement, investigation, and plan reviews, in compliance with NFPA 1033/1035 and OFM standards.	Short-Term (1 to 3 years)	$0 - $5,000 per year	The officer currently assigned as Fire Prevention Officer has recently been assigned the role and is still in training.
35	The fire prevention officer should be trained in the Ontario fire code requirements regarding retrofit inspections.	Short-Term (1 to 3 years)	In accordance with annual fire prevention training budget	To ensure that buildings which are required to be in compliance with fire code retrofit requirements are competently inspected. No current staff members are trained to conduct these inspections, limiting the ability of CHFD to be in compliance with the requirement to inspect properties for request and complaint in accordance with FPPA.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
36	The fire prevention officer should be trained to conduct fire code enforcement activities in accordance with OFM doctrine and the Provincial Offences Act.	Short-Term (1 to 3 years)	In accordance with annual fire prevention training budget	Knowledge of fire code enforcement in accordance with accepted practice in Ontario and Office of the Fire Marshal technical guideline OFM- TG-01-2012 is essential to every fire prevention program.
37	The fire prevention officer should be trained to conduct fire protection system reviews of new plans for new building permit approvals.	Mid-term (4 to 6 years)	In accordance with annual fire prevention training budget	It is common for building officials to collaborate with the fire service to ensure building plans include the necessary fire protection systems.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
38	The fire prevention officer should be trained to conduct inspections of commercial cooking equipment in accordance with the Ontario fire code and *NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*.	Mid-term (4 to 6 years)	In accordance with annual fire prevention training budget	The Ontario Fire Code requires commercial cooking equipment to be installed, operated and maintained in accordance with NFPA standards.
39	The fire prevention officer should be qualified to *NFPA 1035 - Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist and Youth Firesetter Program Manager Professional Qualifications*	Short-Term (1 to 3 years)	In accordance with annual fire prevention training budget	No CHFD member has been trained or qualified as a public education officer. Centre Hastings is required to provide fire and life safety education in the community.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
40	The Fire Chief should ensure that lesson plans and training plans are developed in accordance with Section 21 Guidance Note 7-1 Safe Training, for each training course and subject covered to ensure safe and consistent training.	Immediate (0 to 1 year)	Staff Time	To ensure consistent and safe training in compliance with Provincial safe training doctrine.
41	The Fire Chief should ensure that all fire service training facilities which are used for training firefighters in skills such as fire suppression techniques, search and rescue, confined space and other related procedures are compliant with Section 21 Guidance Note 7- 6 Training Centres and *NFPA 1402 – Standard on Facilities for Fire Training and Associated Props, and NFPA 1403 – Standard on Training for Emergency Scene Operations.*	Immediate (0 to 1 year)	Staff Time	To ensure safe training in compliance with Provincial safe training doctrine.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
42	The Fire Chief should review and update policy #211 Training Policy to identify the role of training officers, and ensure that adequate members of the department are provided with Training Officer Certification (NFPA 1041) training. in the department and provide updates references to the contemporary training curriculum.	Immediate (0 to 1 year)	Staff Time	Firefighter training and certification standards have changed since the implementation of this policy, and the most common and important activity of a fire department is training. More qualified personnel are required to provide effective training within the organization.
43	The senior training division officer and any chief officer with responsibility for the training division should be certified to Training Officer Level II. In accordance with *NFPA 1041 – Standard for Fire and Emergency Services Instructor Professional Qualifications.*	Short-Term (1 to 3 years)	Dependent upon number of staff requiring certification	It is important, in a small organization, for the senior officers to play a role in the training of all members.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
44	That the CHFD implement digital training records and online learning platform (RMS) that is in compliance with NFPA 1401.	Short-Term (1 to 3 years)	$4000 and up depending on capabilities	The current record keeping practice does not comply with NFPA standards. Records are neither sufficiently complete nor readily accessible and secure. Due to the nature of a volunteer fire service, providing the easiest and least intrusive means to provide training to members is essential.
45	The Fire Chief should establish a committee of senior fire service members, including the senior training officer, to review and revise and draft new procedures for approval by the Fire Chief. This committee should be permanent and meet on a periodic basis.	Immediate (0 to 1 year)	Staff Time	The CHFD list of operating guidelines, policies, and procedures (SOPs) shows that many require review and updating. The use of a committee of senior members will provide an efficient means to address the concern.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
46	CHFD should establish a policy to ensure that training records, which meet the requirements of NFPA standards, are maintained.	Immediate (0 to 1 year)	Staff Time	There is no policy in place which considers the relevant standards and best practices to ensure a robust training records system.
47	The Fire Chief should work in consultation with the joint occupational health and safety committee or other health and safety representatives to develop and implement a respiratory protection program which complies with the requirements identified in Section 21 Committee Guidance Note 4-9 Respiratory Protection Program.	Immediate (0 to 1 year)	Staff Time	CHFD does not have a respiratory protection program in place which is compliant with provincial doctrine.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
48	That the CHFD update its Superior Tanker Shuttle Accreditation.	Immediate (0 to 1 year)	Staff Time	As part of the FUS it could help with lowering insurance premiums for the citizens of Centre Hastings.
49	That the department develop a consistent policy directing firefighters to respond to emergencies in fire apparatus from each of its two fire stations.	Immediate (0 to 1 year)	Staff Time	Currently, there is no clear policy in place providing direction for response to emergency incidents via either personal vehicles or from Station 1 or Station 2 in fire apparatus.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
50	That the CHFD develop a policy that details the type of apparatus that will respond to various incident types and begin tracking response time data using the first fire apparatus on the scene.	Immediate (0 to 1 year)	Staff Time	This will provide direction to personnel regarding the type of apparatus to respond with depending on the nature of the incident, track on scene time by using the fires fire apparatus on the scene.
51	That the CHFD consult with the medical director to assess whether allowing firefighters to use medical equipment not provided by the department poses any legal or liability risks.	Immediate (0 to 1 year)	Staff Time	Firefighters using medical equipment that is not provided by the fire department may pose a liability to the Town.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
52	That the CHFD establish a response agreement with the City of Peterborough, allowing their Hazmat team to respond to and mitigate emergencies that exceed the CHFD's certification and include full cost recovery mechanisms in the Fees and Charges By-law.	Immediate (0 to 1 year)	TBD	A written agreement should be established to mitigate Hazardous Materials incidents that are beyond the capability of the CHFD including mechanisms for full cost recovery.
53	It is recommended that the department develop plans for the recruitment and retention of firefighters.	Immediate (0 to 1 year)	Staff Time	A formal recruitment and retention policy should be developed to be prepared for the future needs of the department.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
54	That all policies, procedures, and guidelines be reviewed annually and include the date of review and signature of the reviewer.	Immediate (0 to 1 year)	Staff Time	Some of the policies, procedures, and guidelines are old and need reviewing. It appears none include a signature associated with the review process.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
55	That the CHFD develop a department specific PTSD Prevention Plan to be submitted to the Ministry of Labour, a Cancer Screening Program, and a Physical Fitness Program	Immediate (0 to 1 year)	Staff Time	The Ministry of Labour requires the development of PTSD Prevention Plans. Ontario Fire Departments should have internal PTSD Prevention Plan. The fire department does not have a cancer screening program in place. The Municipality has a cancer screening program for its employees and it would be beneficial for firefighters to be included in this program. Firefighters have a very strenuous job that involves working for a long period of time while wearing heavy equipment and using heavy tools. Sustained physical fitness is an important aspect of ensuring firefighters are prepared to effectively perform their duties.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
56	During the next review of the Emergency Communication Services Agreement, the sections referencing to NFPA 1221 and NFPA 1061 should be updated to reflect the NFPA Emergency Response and Responder Safety Document Consolidation Plan combining the NFPA 1221 and 1061 into NFPA 1225	Immediate (0 to 1 year)	Staff Time	Section 10 of the Emergency Communication Services Agreement refers to NFPA standards 1061 and 1221 that have been consolidated into NFPA 1225, as of the 2022 Edition.
57	Should the planned transition to a fully digital regional radio system be delayed, The Municipality of Centre Hastings should consider conducting a thorough audit of the CHFD communications system.	Short-Term (1 to 3 years)	Staff Time for Internal Audit External Audit through a third-party consulting firm could cost more than $10K	The regional transition to a digital radio system is the next logical infrastructure improvement that should be made. Should this transition be delayed, it is vital to assess the CHFD communications system to ensure it continues to function as intended. Under section 9 of the Emergency Communication Agreement, it is the responsibility of the Municipality to provide existing or compatible radio systems and hardware to receive transmittals from St. Catharines and to maintain all required equipment owned by the Municipality.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
Section 3 – Facilities, Vehicles, and Equipment				
58	The Municipality of Centre Hastings consider a fire station study for the CHFD. The CHFD has the option of operating as a "one station model," a fire station location feasibility study would provide an analysis of fire services delivered by the Municipality of Centre Hastings.	Mid-Term (3 to 6 years)	Study approximate cost $50,000.00 One-Station Model would generate substantial savings to the Municipality	While analytics shows that consideration for a "one station CHFD model" would not negatively impact the quality of service, the model would also show economic benefits, including less repairs and maintenance costs for facilities, less apparatuses requirement, a reduction in equipment needs, as well as a saving with respect to paid-on-call wages and salaries.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
59	The CHFD should adopt a 20-year replacement schedule for First Line Duty, a 25-year replacement for 2nd Line Duty, and a 30-year replacement for reserve apparatus, would greatly benefit the Municipality and the CHFD.	Immediate (0 to 1 year)	Costs will vary depending on re-alignment of replacement schedule for CHFD fleet.	Although EMG applauds the CHFD and the Municipality of Centre Hastings's initiative to adhere to a replacement schedule, EMG recommends that the Council formally adopt a CHFD-specific vehicle replacement policy based on the NFPA and FUS standards. EMG's review of the CHFD replacement schedule indicated inconsistency in replacement schedule. For instance, Pumper/Tanker 204's replacement schedule is based on a 20-year timeframe, whereas Pumper/Tanker 101's replacement schedule is set at 15 years. Furthermore, the CHFD's rescue vans have a 30- and 38- year replacement dates.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
60	The CHFD should transition from a full-size apparatus to the acquisition of a smaller rapid-response vehicle (RRV) to respond to medical calls and fire in support role, when required.	Short-Term (1 to 3 years)	RRV cost approximately $150,000.00	Between 2019-2022, 34.7% of all calls for service were medical type calls for service. Medical and social service type calls are on the rise. Using an engine or truck to answer medical calls is inefficient, ineffective, and unsustainable in the long-term. Currently, the CHFD utilizes its heavy rescue #202 apparatus in response to medical type calls for service. EMG's investigation revealed that the size of the vehicle is often awkward to manoeuvre in tight places. Research on the matter suggested that the practice of responding to medical calls with full-size fire apparatus was an expansive and inappropriate use of equipment.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
61	The monetary value in the "Estimated Costs" columns of the CHFD Apparatus Replacement Schedule should be increased significantly for each vehicle identified (to $1M for each Engine/Pumper/Rescue/Tanker apparatuses).	Immediate (0 to 1 year)	Increase in vehicle replacement cost approximately 35 percent	The replacement of fire apparatus has become an increasingly complex undertaking for all fire departments. The current post-pandemic fire apparatus manufacturing environment has caused several notable changes in how trucks are being purchased with today's market conditions.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
62	The CHFD respiratory program should comply with Section 21, Guidance Note 4-9: *Respiratory Protection Program* and O. Reg. 833, made under the Occupational Health and Safety Act, R.S.O. 1990, c. O.1.	Immediate (0 to 1 year)	Staff Time	During EMG's review, it was noted that the CHFD are diligent with a robust testing of their SCBAs and cylinders by a third-party service provider, as well as with fit testing functions. EMG also noted that the CHFD have policies and procedures (SOP 4-9) defining their respiratory program that were updated in 2019. However, the SOP is lacking in detail for their Respiratory program, creating unnecessary risks to the CHFD and the Municipality of Centre Hastings.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
63	For uniformity throughout the CHFD, all firefighters should have their own fit tested facepiece.	Immediate (0 to 1 year)	Facepiece cost $1,500.00/each	The facepiece is a critical component of the SCBA, serving as the interface between the user and the surrounding atmosphere. It is designed to create an airtight seal around the face, preventing the entry of harmful gases, smoke, or particulates.[54] During the EMG's site visit, it was noted that firefighters at Fire Station 1 are issued individual facepiece for the SCBAs, whereas firefighters from Fire Station 2 do not have individualized facepieces. This phenomenon could be attributed to pre-amalgamation fire department practices.

[54] SCBA: A Guide to Self-Contained Breathing Apparatus — Delta Emergency Support Training accessed March 10, 2025

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
64	The CHFD Should invest in asset management software or ensure that the CHFD equipment inventory is programmed into the asset management software (*FIREQ)* to ensure an efficient and effective replacement plan.	Immediate (0 to 1 year)	Staff Time if *FireQ* is used for this purpose	Many pieces of equipment have a predetermined life span as established in the NFPA Standards and/or the OH&S Sections 21 Guidance Notes. When it comes to the end of the life span, the items must be decommissioned, replaced with new equipment, and then disposed of to ensure no other outside interests could use them for liability reasons. The asset management program should operate to trigger notifications when an item is approaching the end-of-life span, and plans should be in place for replacement (i.e., identified in the budget).

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
65	The CHFD should procure a compressor for their breathing air containment fill station.	Short - Term (1 to 3 years)	Fill station cost approximately $40,000.00	Currently, the CHFD do not have a compressor for their "SCBA Fill Station." The CHFD relies on the Tweed Fire Department to refill their cascading refill system. The cascading system is assembled in a cargo trailer for mobile convenience at emergency scenes. However, the CHFD does not have a CHFD apparatus equipped with a proper hitch to transport the cargo trailer. The CHFD currently relies on firefighters' personal vehicles to haul the SCBA Fill Station. The current arrangement is an unnecessary risk for the CHFD and the Municipality of Centre Hastings.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
Section 4 – Emergency Management				
66	That Centre Hastings review the key requirements of EOCs and establish policies and procedures which support the maintenance and operation of the EOC as well as provide direction for the efficient establishment of the facility for its timely and fully supported operation.	Immediate (0 to 1 year)	Staff Time	Ensure the EOC is maintained in a well-supported state of readiness.
67	That training for MECG members extend beyond the minimum training identified in the Guidance Note to include training in the incident management system (IMS).	Immediate (0 to 1 year)	Staff Time	Emergency management training on the Incident Management System would provide valuable knowledge and skills to those involved in the municipal emergency management program.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
68	That Centre Hastings designate an employee of the municipality as its Emergency Information Officer in a formal manner such as with a by-law or some other formal documentation.	Immediate (0 to 1 year)	Staff Time	EMG was not able to identify a by-law which designates this employee to the position
69	That the Centre Hastings CEMC develop an annual Public Education Plan that considers the following: • Displays or presentations at public events; • Distribution of flyers or other material through the mail; • Public Service Announcements on local media; • Advertisements in local newspapers; and/or • Information posted on municipal and other websites.	Immediate (0 to 1 year)	Staff Time	Enhanced public awareness of local emergency preparedness is an effort which can provide valuable benefits with little effort.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
70	That Centre Hastings review the emergency response plan to determine if there is value in adding specific emergency plans as appendices, support agreements with any non-government organizations in support of the emergency support plan to prepare for, respond to, and recover from a local disaster or emergency.	Immediate (0 to 1 year)	Staff Time	To ensure the Emergency Response Plan remains effective and comprehensive.
Section 5- Fire Service Agreements and Mutual Aid Plan				
71	That the Fire Chief review incident history (5 years) for situations where the nature of incidents extended beyond the CHFD capability. Identified gaps should be addressed by enhancing internal capacity, or entering into fire protection agreements as needed,	Immediate (0 to 1 year)	To be Determined	A fire protection agreement is typically established between municipalities or fire departments to provide access to specialized equipment or response skills that one department may lack. These agreements are not reciprocal; they are designed to address specific needs, such as access to hazardous materials response teams or aerial ladder trucks.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
72	That the Fire Chief, in cooperation with the municipal Solicitor, should work with representatives from Madoc Township the update the Automatic Aid Agreement	Immediate (0 to 1 year)	Staff Time	This agreement has not been updated since it was entered into in 2014.
73	That the Fire Chief continue to advocate for involvement in medical tiered response and seek ways to provide the greatest value to the community.	Immediate (0 to 1 year)	Staff Time	Medical tiered response agreements are a vital component of Ontario's emergency services framework, fostering collaboration and improving outcomes for patients in critical situations.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
Section 6 – Finance				
74	The CHFD conduct a detailed cost centre analysis in partnership with Finance and align implementation of this report's recommendations with capital and operating budgets.	Immediate (0 to 1 year)	Staff Time	A preliminary review of the CHFD operating budget indicates that a detailed analysis and potential adjustments to specific account centers are needed at this time. Council's future decisions on the recommendations in this report will have operating and capital financial implications.
75	That the general ledger accounts for Air Bottle Maintenance, Extrication Equipment Service, and Ice/Water Rescue should be consolidated into a single Equipment Maintenance Account,	Immediate (0 to 1 year)	Staff Time	Currently, the three referenced accounts have budgeted amounts for the years 2022, 2023, and 2024, but show no corresponding expenditures.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
76	That Council assess the CHFD Development Charges allocation against the future cost of asset replacement and consider a more robust fiscal use of reserve fund strategies to support the asset management strategy associated with replacement of apparatuses and equipment be implemented.	Immediate (0 to 1 year)	Staff Time	According to the Municipality of Centre Hastings 2025 Municipal Budget Draft v2, Fire Protection Services showed a negative balance of -$81,161.01 as of December 31, 2024. During the same year, Single and Semi-detached development generated $25,068.57 in revenue which equates to 21.6% of all development charges revenue, leaving a negative balance, after interest (-$3,475.86) of -$81,161.01 as of December 31, 2024. While there are various ways to fund a lifecycle plan, there may be instances where additional funding is needed. This can be addressed through a reserve fund, which is often financed through the operating budget. Once a comprehensive lifecycle plan is established, including the identified funding sources and amounts, it will become clear if any additional reserve funds are required.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
77	That the CHFD institute a fee in Schedule "D" of the User Fees and Charges By-law for the following: • Orders issued under the Ontario Fire Code for immediately dangerous to life situations. • file searches that are requested for the purpose of mortgage clearing/ownership change, and an additional charge should be included based on the timing of the request from real estate agencies or lawyers. • an open-air burning application process, and with an associated burning permit fee. • a suitable fee, for Hazardous Materials response, in line with other response costs based on time committed should be assessed to the property owner (preferred) or contractor creating the hazard.	Short-Term (1 to 3 years)	Staff Time and any associated revenue.	There are currently no fees stipulated to the recovery of costs for these fire department activities.

Rec #	Recommendation	Suggested Timeline for Implementation	Estimated Costs	Rationale
78	The Fire Chief should engage with local Indigenous leaders and groups to collaboratively develop safe practices for ceremonial fires. This process should include an educational component for the public to raise awareness about the cultural significance of these fires.	Immediate (0 to 1 year)	Staff Time	Indigenous led fore practices recognize the interrelationship and interdependence of fire, land, people and place. The use of fire is not a time-sensitive, specific event.
Section 8– Stakeholder Surveys				
79	That the Fire Chief thoroughly assess the survey results to identify areas for operational improvement.	Immediate (0 to 1 year)	Staff Time	The insights collected from these surveys were crucial in shaping the recommendations in this report, which will support the Council in making informed strategic decisions regarding the fire service in the future.

Emergency Management Group

Appendices

Appendix A – Five Step Staffing Process

Appendix B - FUS Technical Document on Elevated Devices

Appendix 'A'
Five Step Staffing Process

Emergency Management Group

APPENDIX A: FIVE-STEP STAFFING PROCESS

Step 1: Scope of Service, Duties, and Desired Outputs

Identify the services and duties that are performed within the scope of the organization. Outputs should be specific, measurable, reproducible, and time limited. Among the elements can be 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:

- Development/preparation
- Service
- Evaluation

- Commute
- Prioritization

Step 4: Personnel Availability and Adjustment Factor

Average personnel availability should be calculated, taking into account the following:

- Holiday
- Jury duty
- Military leave
- Annual leave/vacation
- Training
- Sick leave
- Fatigue/delays/other

Example: Average personnel availability is calculated for holiday, annual, and sick leave per personnel member (see Table C.2.4).

Step 5: Calculate Total Personnel Required

Branch of the unassigned personnel hours by the adjustment factor will determine the amount of personnel (persons/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

More information on this staffing equation can be found within the National Fire Protection Association 1730 standard. 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’

FUS Technical Bulletin

APPENDIX B: FUS TECHNICAL BULLETIN

Fire Underwriters Survey™

TECHNICAL BULLETIN

FIRE UNDERWRITERS SURVEY™

A Service to Insurers and Municipalities

LADDERS AND AERIALS: WHEN ARE THEY REQUIRED OR NEEDED?

Numerous standards are used to determine the need for aerial apparatus and ladder equipment within communities. This type of apparatus is typically needed to provide a reasonable level of response within a community when buildings of an increased risk profile (fire) are permitted to be constructed within the community.

Please find the following information regarding the requirements for aerial apparatus/ladder companies from the Fire Underwriters Survey Classification Standard for Public Fire Protection.

Fire Underwriters Survey

Ladder/Service company operations are normally intended to provide primary property protection operations of

1.) Forcible entry;
2.) Utility shut-off;
3.) Ladder placement;
4.) Ventilation;
5.) Salvage and Overhaul;
6.) Lighting.

Response areas with 5 buildings that are 3 stories or 10.7 metres (35 feet) or more in height, or districts that have a Basic Fire Flow greater than 15,000 LPM (3,300 IGPM), or any combination of these criteria, should have a ladder company. The height of all buildings in the community, including those protected by automatic sprinklers, is considered when determining the number of needed ladder companies.
When no individual response area/district alone needs a ladder company, at least one ladder company is needed if the sum of buildings in the fire protection area meets the above criteria."

The needed length of an aerial ladder, an elevating platform and an elevating stream device shall be determined by the height of the tallest building in the ladder/service district (fire protection area) used to determine the need for a ladder company. One storey normally equals at least 3 metres (10 feet). Building setback is not to be considered in the height determination. An allowance is built into the ladder design for normal access. The maximum height needed for grading purposes shall be 30.5 metres (100 feet).

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Eastern region 1-800-263-5361 optaintel.ca

Exception: When the height of the tallest building is 15.2 metres (50 feet) or less no credit shall be given for an aerial ladder, elevating platform or elevating stream device that has a length less than 15.2 metres (50 feet). This provision is necessary to ensure that the water stream from an elevating stream device has additional "reach" for large area, low height buildings, and the aerial ladder or elevating platform may be extended to compensate for possible topographical conditions that may exist. See Fire Underwriters Survey - Table of Effective Response (attached).

Furthermore, please find the following information regarding communities' need for aerial apparatus/ladder companies within the National Fire Protection Association.

NFPA

Response Capabilities: The fire department should be prepared to provide the necessary response of apparatus, equipment and staffing to control the anticipated routine fire load for its community.

NFPA ***Fire Protection Handbook, 20th Edition*** cites the following apparatus response for each designated condition:

HIGH-HAZARD OCCUPANCIES (schools, hospitals, nursing homes, explosive plants, refineries, high-rise buildings, and other high-risk or large fire potential occupancies):

*At least four pumpers, **two ladder trucks** (or combination apparatus with equivalent capabilities), two chief officers, and other specialized apparatus as may be needed to cope with the combustible involved; not fewer than 24 firefighters and two chief officers.*

MEDIUM-HAZARD OCCUPANCIES (apartments, offices, mercantile and industrial occupancies not normally requiring extensive rescue or firefighting forces):

*At least three pumpers, **one ladder truck** (or combination apparatus with equivalent capabilities), one chief officer, and other specialized apparatus as may be needed or available; not fewer than 16 firefighters and one chief officer.*

LOW-HAZARD OCCUPANCIES (one-, two-, or three-family dwellings and scattered small businesses and industrial occupancies):

At least two pumpers, one ladder truck (or combination apparatus with equivalent capabilities), one chief officer, and other specialized apparatus as may be needed or available; not fewer than 12 firefighters and one chief officer.

In addition to the previous references, the following excerpt from the 2006 BC Building Code is also important to consider when selecting the appropriate level of fire department response capacity and building design requirements with regard to built-in protection levels (passive and active fire protection systems).

Excerpt: National Building Code 2012

A-3 Application of Part 3.

In applying the requirements of this Part, it is intended that they be applied with discretion to buildings of unusual configuration that do not clearly conform to the specific requirements, or to buildings in which processes are carried out which make compliance with particular requirements in this Part impracticable. The definition of "building" as it applies to this Code is general and encompasses most structures, including those which would not normally be considered as buildings in the layman's sense. This occurs more often in industrial uses, particularly those involving manufacturing facilities and equipment that require specialized design that may make it impracticable to follow the specific requirements of this Part. Steel mills, aluminum plants, refining, power generation and liquid storage facilities are examples. A water tank or an oil refinery, for example, has no floor area, so it is obvious that requirements for exits from floor areas would not apply. Requirements for structural fire protection in large steel mills and pulp and paper mills, particularly in certain portions, may not be practicable to achieve in terms of the construction normally used and the operations for which the space is to be used. In other portions of the same building, however, it may be quite reasonable to require that the provisions of this Part be applied (e.g., the office portions). Similarly, areas of industrial occupancy which may be occupied only periodically by service staff, such as equipment penthouses, normally would not need to have the same type of exit facility as floor areas occupied on a continuing basis. It is expected that judgment will be exercised in evaluating the application of a requirement in those cases when extenuating circumstances require special consideration, provided the occupants' safety is not endangered.

The provisions in this Part for fire protection features installed in buildings are intended to provide a minimum acceptable level of public safety. It is intended that all fire protection features of a building, whether required or not, will be designed in conformance with good fire protection engineering practice and will meet the appropriate installation requirements in relevant standards. Good design is necessary to ensure that the level of public safety established by the Code requirements will not be reduced by a voluntary installation.

Firefighting Assumptions

The requirements of this Part are based on the assumption that firefighting capabilities are available in the event of a fire emergency. These firefighting capabilities may take the form of a paid or volunteer public fire department or in some cases a private fire brigade. If these firefighting capabilities are not available, additional fire safety measures may be required.

Firefighting capability can vary from municipality to municipality. Generally, larger municipalities have greater firefighting capability than smaller ones. Similarly, older, well established municipalities may have better firefighting facilities than newly formed or rapidly growing ones. The level of municipal fire protection considered to be adequate will normally depend on both the size of the municipality (i.e., the number of buildings to be protected) and the size of buildings within that municipality. Since larger buildings tend to be located in larger municipalities, they are generally, but not always, favoured with a higher level of municipal protection.

Although it is reasonable to consider that some level of municipal firefighting capability was assumed in developing the fire safety provisions in Part 3, this was not done on a consistent or defined basis. The requirements in the Code, while developed in the light of commonly prevailing municipal fire protection levels, do not attempt to relate the size of building to the level of municipal protection. **The responsibility for controlling the maximum size of building to be permitted in a municipality in relation to local firefighting capability rests with the municipality. If a proposed building is too large, either in terms of floor area or building height, to receive reasonable protection from the municipal fire department, fire protection requirements in addition to those prescribed in this Code, may be necessary to compensate for this deficiency.** Automatic sprinkler protection may be one option to be considered.

Alternatively, the municipality may, in light of its firefighting capability, elect to introduce zoning restrictions to ensure that the maximum building size is related to available municipal fire protection facilities. This is, by necessity, a somewhat arbitrary decision and should be made in consultation with the local firefighting service, who should have an appreciation of their capability to fight fires.

The requirements of Subsection 3.2.3. are intended to prevent fire spread from thermal radiation assuming there is adequate firefighting available. It has been found that periods of from 10 to 30 minutes usually elapse between the outbreak of fire in a building that is not protected with an automatic sprinkler system and the attainment of high radiation levels. During this period, the specified spatial separations should prove adequate to inhibit ignition of an exposed building face or the interior of an adjacent building by radiation. Subsequently, however, reduction of the fire intensity by firefighting and the protective wetting of the exposed building face will often be necessary as supplementary measures to inhibit fire spread.

In the case of a building that is sprinklered throughout, the automatic sprinkler system should control the fire to an extent that radiation to neighbouring buildings should be minimal. Although there will be some radiation effect on a sprinklered building from a fire in a neighbouring building, the internal sprinkler system should control any fires that might be ignited in the building and thereby minimize the possibility of the fire spreading into the exposed building. NFPA 80A, "Protection of Buildings from Exterior Fire Exposures," provides additional information on the possibility of fire spread at building exteriors.

The water supply requirements for fire protection installations depend on the requirements of any automatic sprinkler installations and also on the number of fire streams that may be needed at any fire, having regard to the length of time the streams will have to be used. Both these factors are largely influenced by the conditions at the building to be equipped, and the quantity and pressure of water needed for the protection of both the interior and exterior of the building must be ascertained before the water supply is decided upon. Acceptable water supplies may be a public waterworks system that has adequate pressure and discharge capacity, automatic fire pumps, pressure tanks, manually controlled fire pumps in combination with pressure tanks, gravity tanks, and manually controlled fire pumps operated by remote control devices at each hose station.

For further information regarding the acceptability of emergency apparatus for fire insurance grading purposes, please contact:

Western Canada	Quebec	Ontario	Atlantic Canada
Fire Underwriters Survey	Fire Underwriters Survey	Fire Underwriters Survey	Fire Underwriters Survey
3999 Henning Drive	255, boul. Crémazie E	175 Commerce Valley Drive, West	238 Brownlow Avenue, Suite 300
Burnaby, BC V5C 6P9	Montreal, Quebec H2M 1M2	Markham, Ontario L3T 7P6	Dartmouth, Nova Scotia B3B 1Y2
1-800-665-5661	1-800-263-5361	1-800- 268-8080	1-877-634-8564