



Township of Centre Wellington FIRE MASTER PLAN

Final Report
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Preface

This document serves as the Fire Master Plan for the Township of Centre Wellington, providing strategic direction for long-term protection of life and property. It is informed by a comprehensive Community Risk Assessment and aligned with public safety priorities, organizational goals, and a Council-approved budgetary framework. In addition, this plan is designed as a strategic tool for assessing and anticipating the community's evolving emergency service needs.

Acknowledgements

Behr would like to specifically acknowledge the leadership, diligence and continuous improvement Fire Chief Jason Benn, and recently retired Fire Chief Tom Mulvey. The fire services' leadership and firefighters are dedicated and engaged in all facets of their community. Their pride in the department and their service is clear.

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ACRONYMS

AHJ	Authority Having Jurisdiction	MDS	Minimum Duty Strength
ASP	Area Structure Plan	NBC	National Building Code of Canada
CAD	Computer Aided Dispatch	NFPA	National Fire Protection Associations
CRA	Community Risk Assessment	OBC	Ontario Building Code
CSA	Canadian Standards Association	OFM	Office of the Ontario Fire Marshal
CWFR	Centre Wellington Fire Rescue	OHS	Occupational Health & Safety
COF	Consequence of Failure	POC	Paid On-Call
EMS	Emergency Medical Services	PPE	Personal Protective Equipment
ERF	Effective Response Force	POF	Probability of Failure
EVT	Emergency Vehicle Technician	PSAP	Public Safety Answering Point
FF	Firefighter	PT	Part-time
FMP	Fire Master Plan	RMS	Records Management System
FT	Full-time	SCO	Safety Codes Officer
FTE	Fulltime Equivalent	SOC	Standards Of Cover
FUS	Fire Underwriters Survey	SOG	Standard Operating Guidelines
GPM	Gallons Per Minute	SOP	Standard Operating Procedures
KPI	Key Performance Indicators	WSIB	Workplace Safety and Insurance Board
KSA	Knowledge, Skills, Abilities	WUI	Wildland Urban Interface
MVC	Motor Vehicle Collisions		

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EXECUTIVE SUMMARY

Introduction

Fire and emergency services are continuously evolving to meet the demands of a rapidly changing environment. Services face persistent challenges such as budget limitations, population growth, rising call volumes, and increasingly complex and unconventional risks, all while being expected to deliver more with fewer resources. These pressures have expanded the scope of emergency response and management, prompting a shift in roles and the diversification of services.

To manage these demands effectively, emergency services leadership must possess a clear understanding of community risk and the capacity to implement appropriate mitigation strategies. Failure to recognize and address these challenges can leave both the community and its responders exposed and vulnerable.

Modern fire, rescue and emergency services have evolved into a critical component of a community's social safety net. Whereas early fire services were established specifically to combat structure fires that, at the time, were often devastating. Today's fire services are also called upon to respond to medical emergencies, rescues of varying types, motor vehicle collisions/incidents, dangerous goods releases, wildland fires, and natural disasters. As a result, fire services must be adequately resourced and equipped to provide these situations safely, efficiently, effectively and with a great deal of competency.

The goal of developing this Fire Master Plan (FMP) is to provide strategic direction for Township of Centre Wellington Fire Rescue (CWFR). This plan will provide a systematic and comprehensive approach to evaluate current response capabilities by identifying and mitigating risks through a community risk assessment. This plan will also assist in formulating and communicating strategic directions for the fire service while highlighting opportunities for improved service delivery. This plan can also be used to convey information to the public, staff, and municipal council about what to expect in the municipality's approach to fire and emergency service planning, service delivery model, policy, and development.

Ultimately, this plan determines options for an optimum service delivery model and serves as a blueprint for the municipality to develop more effective and efficient fire and emergency services in the face of current and future challenges.

Strategic Goals and Objectives

This FMP utilizes the 2023 Township of Centre Wellington Community Risk Assessment (CRA) to identify the fire safety risks within Centre Wellington to inform the development of goals and objectives for the delivery of fire protection and emergency response provided. Optimizing the methodology of the three lines of defense (**Public Education, Fire Prevention and Code Enforcement, and Emergency Response**) will allow CWFR to provide a comprehensive fire protection program.

To support the strategic priorities CWFR has defined, a series of program-specific goals to guide the development, delivery, and continuous improvement of fire protection services. The following strategic objectives are the foundational principles that will inform future resource allocations, policy development and operational enhancements:

Strategic Objective #1: Administration

Establish the strategic direction for CWFR in support of Corporate priorities and emergency service needs of the community. Maintain an effective and sustainable administrative framework that supports CWFR operations and programs.

Administrative systems and resources will enable coordinated service delivery, sound governance, fiscal responsibility, and long-term organizational stability.

Strategic Objective #2: Public Fire Safety Education

Support a safe community by reducing the incidence and impact of fire through proactive public education. Deliver comprehensive and targeted fire safety education programs that address fire-related behaviours and risks identified through the CRA, with an emphasis on prevention, awareness, and community engagement.

Strategic Objective #3: Fire Prevention and Code Enforcement

Enhance community safety through the delivery of a consistent, collaborative, and risk-informed fire prevention and code enforcement program. CWFR will continue to promote compliance with applicable legislation, regulations, and standards while adapting prevention strategies to reflect community risk, development patterns, and best practices.

Strategic Objective #4: Emergency Response and Operations

Deliver emergency response services that are aligned with Centre Wellington's risk profile, growth trends, and community needs. Operations will be conducted in a manner that prioritizes firefighter health and safety, reflects recognized industry best practices, and ensures efficient and effective use of available resources.

Strategic Objective #5: Training & Professional Development

Maintain a high-quality, structured, and sustainable training program that supports the safe and effective delivery of emergency services. Training will remain aligned with the services authorized under the E&R By-law and will reflect current firefighting practices, safety standards, and emerging service demands to ensure personnel are prepared to perform their duties competently and safely.

Strategic Objective #6: Emergency Communications and Dispatch

Ensure reliable, resilient, and technologically appropriate emergency communications through continued collaboration with a qualified third-party service provider. By leveraging shared expertise, standardized dispatch protocols, and scalable technologies, CWFR will support timely and accurate emergency communications that enhance firefighter safety, inter-agency coordination, and effective service delivery.

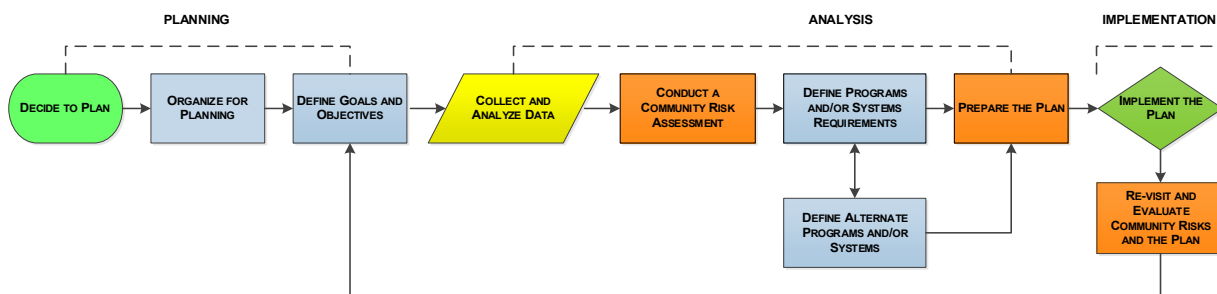
Strategic Objective #7: Capital Assets

Provide and maintain fire stations, apparatus, and equipment that support operational readiness and effective emergency response. Through sound asset management and lifecycle planning, CWFR will ensure infrastructure and equipment continue to meet service delivery requirements and community expectations.

Fire Services Master Plan Process

The diagram below illustrates the methodology used to develop this plan. A Fire Service Master Plan, often described as a “road map” for the future, provides strategic direction for current and future departmental leaders and decision makers.

Figure 1: Fire Services Master Plan Process



As highlighted in the implementation section, the plan should be reviewed and assessed at least annually. Regular evaluation ensures it remains aligned with evolving community needs, especially during periods of population growth or expanding residential and industrial development, all of which can significantly influence community risk.

When possible, a third-party review is recommended at the five-year mark. An independent evaluation introduces an unbiased perspective, strengthens the credibility of the process, and helps ensure the plan continues to reflect best practices and operational realities.

Project Approach and Consultative Process

While risks are the basis for prompting response decisions, our analysis also investigated the needs of the community and will provide a point of reference upon which future decisions and priorities can be evaluated and implemented. This includes identifying priorities, challenges, and opportunities for improvement in the delivery of emergency services to the community and overall public safety.

Along with risks, this plan also considers applicable legislation, industry-leading best practices, and standards to provide unbiased analysis and evidence-based recommendations. Targeted interviews were conducted with fire service leadership and various Centre Wellington department managers to gather relevant data and insights. An interview guide was used to conduct the interviews to promote open dialogue about the community, its risks, and general concerns related to municipal operations.

Three key aspects in the development of this Fire Master Plan included a community and station tour, and targeted stakeholder interviews. The community tour focused on the overall footprint, topography, transportation infrastructure of the municipality and the various response zones for the current fire service stations. Visiting the stations provided an opportunity to assess the general condition and operational functionality.

Community Comparative Analysis

An industry peer comparative analysis¹ of CWFR was conducted as a method of benchmarking the performance of CWFR alongside similar municipalities. These benchmarks include budgets, performance, effectiveness, and efficiencies.

Although fire and emergency services have the same goal of ultimately protecting life, property and the environment, each community has its unique features in how to accomplish their goals. Our main criteria for the comparative analysis are indicators of effectiveness and efficiencies for risk and mitigation amongst the communities.

The communities who participated, along with the Township of Centre Wellington, include:

- Township of Woolwich
- Town of Lincoln
- Town of New Tecumseh
- Town of Halton Hills

¹ Please see Section 1.8, *Municipal Comparative Analysis*, Page 8

In 2025, the five municipalities included in the community comparison reported operating budgets ranging from \$29M to \$105M. Centre Wellington ranks in the middle, (third out of six), in terms of annual operating budget at \$41.3M. The annual operating budget for CWFR is the lowest among the municipalities included in the comparison. For 2025, department budgets ranged from \$2.2M to \$11M, with CWFR operating at \$2.2M. In 2025, the operational costs of CWFS represented 5.3% of municipality's total operating budget. This is the second lowest among the comparable municipalities. Additionally, CWFR's operational budget translates into the lowest cost per capital among the included municipalities at \$69.81 per person, with the average per capita expenditure being \$123.40.

Note: *There is no standard for categorizing incidents so it must be understood that these statistics are broadly based and are only general reference when comparing fire departments. The community comparative analysis can only be interpreted from an indirect basic level due to the disparity from each of the surveyed communities' organizational structure, core services and levels, emergency response categorization, and financial systems. Direct comparison is strongly discouraged.*

Community Overview

Located in the heart of Wellington County in southwestern Ontario, Centre Wellington spans approximately 410 km² along the Grand River and encompasses the historic communities of Fergus and Elora. Its strategic location just north of the Greater Golden Horseshoe and proximity to major transportation corridors, including Highways 6, 7, and 401, provides convenient access to regional centres such as Guelph, Kitchener-Waterloo, and the Greater Toronto Area.

Home to a population of roughly 31,000 residents, Centre Wellington is one of the fastest-growing communities in Wellington County, with steady population and employment expansion anticipated through 2051. Residential development in both Fergus and Elora continues to attract families, professionals, and retirees, while the preservation of agricultural lands and open spaces sustains Centre Wellington's rural character.

Centre Wellington's economy is anchored by manufacturing, agriculture, tourism, and health care sectors, and benefits from a strong entrepreneurial base and proximity to post-secondary institutions including the University of Guelph and Conestoga College.

Major employers such as Groves Memorial Community Hospital and local manufacturing firms support a stable employment environment, while Centre Wellington's downtowns and tourism assets, highlighted by the Elora Gorge, Elora Mill, and Grand River Raceway, draw visitors from across Ontario and beyond.

Surrounded by the municipalities of Guelph-Eramosa, Mapleton, Wellington North, and Woolwich, Centre Wellington functions as a complete community offering regional services, shopping, education, and recreation to neighbouring rural areas. Centre Wellington is recognized for its heritage conservation, cultural festivals, and extensive parks and trails network, which together reinforce its reputation as a desirable place to live, work, and visit.

Community Risk Assessment

Community Risk Assessments are mandated under Ontario Regulation 378/18 and serve as a foundational tool for fire departments to identify, analyze, and prioritize public safety risks. These assessments enable informed decision-making regarding the types and levels of fire protection services provided, ensuring alignment with local risk profiles and community needs. Specifically, the following nine (9) profiles were reviewed:

- | | |
|------------------------------------|--|
| 1. Geographic profile | 6. Public safety response profile |
| 2. Building stock profile | 7. Community services profile |
| 3. Critical infrastructure profile | 8. Economic profile |
| 4. Demographic profile | 9. Past loss and event history profile |
| 5. Hazard profile | |

The CRA identified several high-priority risks requiring strategic attention. Chief among these is the predominance of residential occupancies (Group C), which account for 95.2% of Centre Wellington's building stock. Single-detached dwellings represent 76% of all residential structures, significantly higher than the provincial average of 55.6%. Historical data from the Office of the Fire Marshal (OFM) indicates that fires in single-detached dwellings account for nearly two-thirds of all residential fires, with detached homes representing approximately 85% of all single-family dwelling fire incidents.

Centre Wellington also has an aging residential building stock, with 49.7% of residential buildings constructed prior to the adoption of the 1981 Ontario Building Code. The downtown core areas of Elora and Fergus present elevated fire risk due to the age of the buildings, many of which were constructed in the 1800s, as well as their wood-frame construction, combustible materials, and limited spatial separation between structures. In addition, the increasing prevalence of Additional Dwelling Units (ADUs) introduces greater occupancy complexity, often without reliable identification or tracking systems for emergency responders.

Other significant risks include high angle rescues, motor vehicle collisions including hazmat transportation incidents along major transportation corridors, the presence of high-fuel-load industrial properties and large-footprint buildings, vulnerable occupancies such as long-term care homes, demographic risk factors associated with seniors and newcomers, and extended response times and limited water supply in rural areas. Collectively, these findings emphasize the importance of prevention, education, infrastructure planning, and operational readiness.

The top fire & rescue-related risks identified in Centre Wellington's CRA:

- Residential structure fires in Group C occupancies (predominant source of fatalities, injuries, and loss).
- Aging and higher-risk buildings constructed prior to modern building and fire codes.
- Transportation-related emergencies, particularly motor vehicle collisions and dangerous goods incidents along highways and rail.
- High angle rescues in the gorge.
- Industrial and large-footprint buildings with high fuel loads creating disproportionate fire risk.
- Vulnerable occupancies (e.g., long-term care) with complex evacuation needs.
- Demographic risk factors, including higher proportions of seniors and newcomers requiring tailored public education.
- Geographic response challenges in rural areas, including extended travel times and limited water supply.

Department Overview

CWFR is a volunteer/paid-on-call fire service that was established in 1999, following the amalgamation of the former Fergus Fire Department and Elora Fire Department during the creation of Centre Wellington. At full operational strength, the department maintains approximately 66 paid-on-call officers and firefighters, as well as full-time administrative and command staff including the Fire Chief, Deputy Fire Chiefs, Administrative Clerk, Fire Prevention Officer, and shared County Training Officer.

Services approved under the E&R By-law include fire suppression, auto extrication, medical response, high-angle rope rescue, water and ice rescue, hazardous and all-hazards emergency response, fire prevention and code enforcement, and public education and outreach programs. CWFR firefighters are trained to NFPA standards, with new recruits completing extensive initial training and ongoing annual certification to ensure operational readiness.

CWFR responds to rural and urban areas of Centre Wellington from two strategically located fire stations:

- Fergus Station – 250 Queen Street West, Fergus
- Elora Station – 72 Wellington Road 7, Elora

Overview of Recommendations

The following recommendations are drawn from findings presented throughout the report. They are grouped into categories according to priorities: critical, short term, intermediate and long term.

A timeframe has been assigned to each recommendation, with the understanding that the start and completion of any recommendation is based on the criticality of the recommendation combined with staff capacity, annual corporate priorities, and Council-approved budget allocations.

Some recommendations presented in this report are achievable using existing staff or members' time and will therefore not pose any additional costs to the community. Other recommendations regarding staffing, equipment and infrastructure will likely have associated costs. Costs are based on order of magnitude estimates only and will require further investigation.

Cost 'neutral' refers to the use of internal staff through a normal work schedule. Undertaking of these cost neutral recommendations are also contingent upon staff availability.

A timeframe within 1 – 120 months (1 – 10 years) has been assigned to each recommendation, recognizing that the start and completion of any recommendation is based on annual corporate priorities and council approved budget allocations.

Note: Recommendations are numbered based on how they appear in the report.

Recommendation #1a: Update the existing Fire Department E&R By-law to list all services provided including elevator rescue, medical response level, rescues including trench, building collapse, confined space, heavy auto-extrication, and the associated NFPA service levels (awareness, operations, technician). Furthermore, remove the names of the incumbents in Appendix A of the by-law.

Suggested completion: 1-12 months

Recommendation #1b: Develop a comprehensive Standard of Cover policy to complement the revised E&R By-law. This policy should establish formal performance benchmarks (90th percentile) for alarm processing, turnout, travel, total response time, ERF assembly, fire prevention inspection frequencies, and training frequencies, ensuring alignment with best practices, community risk profiles, and Council-approved service levels.

Strategic Objective: #1 Administration

Suggested completion: 12-24 months

Cost: Neutral – staff time

(Reference: Section 3.2 Governance, Page 50)

Recommendation #2: CWFR undertake a formal review of senior administrative roles and responsibilities with the objective of re-balancing executive portfolios to ensure equitable workload distribution, improved strategic capacity, and enhanced cross-functional leadership exposure.

Strategic Objective: #1 Administration

Suggested completion: 12 – 24 months

Cost: Neutral – staff time

(Reference: Section 3.3.3.1 Department Leadership and Operations, Page 60)

Recommendation #3: Incorporate into its multi-year financial and staffing plan the addition of a part-time administrative support position within the next 3–5 years, increasing total administrative capacity to 1.5 FTEs.

Strategic Objective: #1 Administration

Suggested completion: 36-60 months

Cost: \$40,000 Annual total compensation per 0.5 FTE

(Reference: Section 3.3.3.2 Administrative Support, Page 63)

Recommendation #4: Continue to recruit and select the most qualified applicants based on established operational requirements and hiring criteria, while partnering with Human Resources and Communications to broaden recruitment outreach and encourage qualified candidates from groups currently under-represented within CWFR to consider volunteer firefighting opportunities.

Strategic Objective: #1 Administration

Suggested completion: 36 - 72 months

Cost: Neutral

(Reference: Section 3.3.5.1 Volunteer Firefighter Recruitment Process, Page 67)

Recommendation #5: Work with Human Resources to implement a CWFR-specific leadership development and succession planning program that identifies and prepares future leaders across all divisions through career pathing, mentorship, targeted training, leadership shadowing, and temporary secondment opportunities aligned with departmental growth and Fire Master Plan implementation.

Strategic Objective: #1 Administration

Suggested completion: 36 – 72 months

Cost: Neutral

(Reference: Section 3.3.8 Succession Planning, Page 70)

Recommendation #6a: Continue to trial CWFR’s representation within the restructured Community Services Joint Health and Safety Committee and establish a formal process for monitoring the effectiveness of this model in addressing fire service health and safety matters. As part of the trial, CWFR should work with Human Resources and the committee to develop and communicate fire service-specific procedures for reporting, reviewing, and following up on near misses, injuries, occupational illnesses, and exposures.

Recommendation #6b: The effectiveness of the committee structure should be reviewed following an appropriate trial period, with consideration given to firefighter participation, the timely resolution of identified hazards, the completion of workplace inspections, and the committee’s ability to address operational fire service risks. A separate fire department JHSC should only be considered if the existing structure is found to be insufficient, subject to consultation with the Ministry of Labour, Immigration, Training and Skills Development.

Strategic Objective: #1 Administration

Suggested completion: 12-24 months

Cost: Certification training costs \$1,000 to \$1,500 per person

(Reference: Section 3.3.9 Health and Wellness, Page 72)

Recommendation #7: Undertake a structured review and reorganization of all existing Standard Operating Guidelines, separating content into three clearly defined categories that include Policies, Operating Guidelines, and Directives.

Strategic Objective: #1 Administration

Suggested completion: 36-72 months

Cost: Neutral – to be completed internally

(Reference: 3.3.10 Policies, Guidelines and Directives Page 75)

Recommendation #8: Continue prioritizing residential fire risk reduction through prevention, public education, inspections, and targeted response planning, while undertaking a comprehensive inventory and risk profiling of higher-risk occupancies (Groups A, D, E, and F). Integrate this data into the CRA, pre-incident planning, and inspection prioritization, including refining “Not Classified” properties where feasible, to enhance risk modeling, operational readiness, and resource allocation.

Strategic Objective: #2 Public Fire Safety Education

Suggested completion: 36-72 months

Cost: Neutral

(Reference: Section 3.4 Public Fire Safety Education, Page 77)

Recommendation #9: Implement a records management system (RMS) to provide detailed tracking, analysis, and reporting of all public education activities undertaken by CWFR staff in order to support evidence-based program evaluation, community risk analysis, and strategic allocation of public education resources.

Strategic Objective: #2 Public Fire Safety Education

Suggested Completion: 36-72 months

Cost: \$35,000 initial implementation cost, \$25,000 annual maintenance, and program costs.

(Reference: Section 3.4 Public Fire Safety Education, Page 77)

Recommendation #10: Add one additional Fire Prevention/Public Education Officer to support inspection frequencies, public education delivery, complaint investigations, and data-driven community risk reduction initiatives. Following implementation, develop an annual risk-based public education and inspection strategy informed by incident trends, demographic analysis, and CRA findings.

Strategic Objective: #3 Fire Prevention and Code Enforcement.

Suggested completion: 12-36 months

Cost: \$120,000 – Total compensation. Additional costs associated with uniforms, equipment and vehicle needs as required.

(Reference: Section 3.5.2 Fire Code Inspection Services, Page 82)

Recommendation #11: Utilize a modern comprehensive RMS system to support digital inspection management, occupancy tracking, enforcement documentation, data analytics, and integration with CWFR's broader community risk reduction and operational planning initiatives.

Strategic Objective: #3 Fire Prevention and Code Enforcement

Suggested completion: 1-12 months

Cost: The project is being conducted as part of a separate corporate initiative and costs associated to that project.

(Reference: Section 3.5.2 Fire Code Inspection Services, Page 82)

Recommendation #12: Collaborate with the Chief Building Official and Building Division to review opportunities to formalize CWFR's participation in new construction and significant renovations related to fire protection and life safety systems.

Strategic Objective: #3 Fire Prevention and Code Enforcement

Suggested completion: 12-24 months

Cost: Approximately \$5,000 for the courses and the provincial exams

(Reference: Section 3.5.3 New Developments Plans Review, Page 88)

Recommendation #13: Discontinue the use of N95 masks for fire investigation activities and equip fire investigators with appropriate respiratory protection, such as a full-face Powered Air Purifying Respirator (PAPR) or Self-Contained Breathing Apparatus (SCBA), supported by continuous atmospheric monitoring equipment capable of detecting oxygen levels, carbon monoxide, and volatile organic compounds (VOCs).

Strategic Objective: #3 Fire Prevention and Code Enforcement

Suggested completion: 1-12 months

Cost: Approximately \$5,000 initial capital cost plus annual maintenance and replacement costs.

(Reference: Section 3.5.4 Fire Cause and Origin Services, Page 89)

Recommendation #14: Ensure the Fire Chief maintains as a member of Municipal Emergency Control Group.

Strategic Objective: #1 Administration

Suggested completion: Ongoing

Cost: Neutral

(Reference: Section 3.6 Emergency Management Program, Page 91)

Recommendation #15: Develop a municipal-wide BCP framework aligned with the Emergency Management Program, requiring all departments to maintain and regularly update plans for critical services and operational risks.

Strategic Objective: #1 Administration

Suggested completion: 36 -72 months

Cost: \$40,000–\$100,000 for third-party support, depending on scope. Cost neutral if developed internally. Ongoing plan maintenance, training, and exercises may require approximately \$5,000–\$15,000 annually.

(Reference: Section 3.6 Emergency Management Program, Page 91)

Recommendation #16: Implement a systematic process to monitor and analyze fire incident trends related to multi-unit residential occupancies, including response frequency, nature of incidents, and resource deployment per event.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months

Cost: Neutral

(Reference: Section 3.7.2 High-Rise and Multi-Unit Residential Firefighting Operations, Page 98)

Recommendation #17: Continue to regularly review and update the tiered medical response framework in collaboration with Wellington County Paramedic Services, CACC, and the CWFR medical oversight provider to refine response protocols, ensure alignment with MPDS, and clarify the clinical scope of practice for First Responders. This review should also include an assessment of impacts on volunteer firefighter availability, response reliability, and overall system sustainability.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 1-12 months then ongoing.

Cost: Neutral

(Reference: Section 3.7.3 Medical Assist, Page 101)

Recommendation #18a: Continue collaborating with the BESS proponent to complete site-specific pre-incident planning, confirm water supply and exposure-protection requirements, provide facility-specific LFP battery fire and hazardous materials training, and establish appropriate response protocols before the facility is commissioned.

Recommendation #18b: Formalize access to technician-level hazardous materials and technical support through fire protection services agreement, specialized response partnership, or other suitable service arrangement.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months.

Cost: Neutral. Agreement with facility to pay training and response costs.

\$20k-\$50k (training and planning) or \$35k-\$90k (annual hazmat retainer). Depending on agreement, costs could vary from a pay as you use arrangement, to annual retainer, to the facility paying for the costs.

(Reference: Section 3.7.4 Hazardous Materials/Dangerous Goods Response, Page 105)

Recommendation #19: Formally define CWFR's machine rescue service level and provide awareness or operations-level training supported by operational guidelines to ensure safe and consistent response to machinery entrapment incidents.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months

Cost: Approximately \$10,000 to \$25,000 for training, props, and equipment.

(Reference: Section 3.7.9 Machine Rescue Operations, Page 115)

Recommendation #20a: Formalize written fire protection agreements with neighbouring municipalities or other third-party provider capable of providing technician-level confined space and trench rescue services.

Recommendation #20b: Develop and adopt a dedicated Standard Operating Guideline outlining CWFR's awareness-level operational boundaries, entry prohibitions, isolation requirements, and automatic activation triggers for technician-level resources.

Strategic Objective: #4 Emergency Operations and Response

Suggested completion: 12-24 months.

Cost: Approximately \$5,000-\$30,000, depending on response expectations and coverage agreements.

(Reference: Section 3.7.10 Confined Space and Technical Rescue, Page 118)

Recommendation #21a: Develop and implement a formal pre-incident planning program that identifies and documents high-risk and complex occupancies within Central Wellington. Pre-fire planning program to include all buildings identified as risks within the CRA, ensuring complete coverage of high-priority and high-hazard occupancies.

Recommendation #21b: Digitize all pre-plans and integrate them into CAD/GIS systems to allow mobile access for operational staff, with standardized data fields covering standpipes, key boxes, electric vehicle charging stations, photovoltaic arrays, and other critical building information, along with detailed tactical considerations such as attack stair locations, refuge floors, and smoke control systems.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 36-72 months

Cost 21a: Neutral - using existing systems and internal resources.

Cost 21b: Up to \$150,000 where external data collection, specialized software, or CAD/GIS integration is required. Ongoing maintenance and licensing may cost \$5,000-\$15,000 annually.

(Reference: Section 3.7.12 Pre-Emergency Planning, Page 123)

Recommendation #22: Develop and implement a multi-year Training Master Plan that aligns with authorized service levels and community risk, forecasts certification and instructor resource needs, formalizes regional partnerships, and evaluates long-term facility requirements to ensure sustainable training delivery.

Strategic Objective: # 5 Training & Professional Development

Suggested completion: 12-24 months

Cost: Neutral

(Reference: Section 3.8.1 Training Overview, Page 127)

Recommendation #23: Undertake a feasibility assessment, in collaboration with the County of Wellington and interested regional or third-party partners, to explore the development or shared use of a live fire training facility. The assessment should evaluate governance models, capital and operating costs, potential funding opportunities, location considerations, usage demand, and long-term sustainability.

Strategic Objective: #5 Training and Professional Development

Suggested completion: 1-36 months

Cost: \$50,000 for feasibility study, with potential for partner contributions. Depending on scope, third-party consultant involvement, environmental/site review requirements, and partnership complexity. If pursued beyond the feasibility stage, development of a shared live fire training facility could involve capital costs ranging from approximately \$1 million–\$5 million or more depending on the facility type, land requirements, props, servicing, and governance model.

(Reference: Section 3.8.2 Industry Recommended Qualifications: Page 130)

Recommendation #24: Establish a dedicated full-time Training Officer reporting to the Deputy Chief responsible for Operations and Training to coordinate CWFR’s training, certification, competency management, instructor development, recruit and officer development, specialty training, and training records. The position should maintain a flexible schedule that supports daytime, evening, and weekend programming, be supported by a structured cadre of internal part-time instructors.

Strategic Objective: #5 Training and Professional Development

Suggested completion: 24-36 months

Cost: \$160,000 total compensation annually, plus potential first-year implementation costs

(Reference: 3.8.3 Training Support, Page 135)

Recommendation #25: Collaborate with the Guelph Fire Department to develop, formalize, and document clear dispatch performance benchmarks and service-level expectations within a written agreement.

Strategic Objective: #6 Emergency Communications and Dispatch

Suggested completion: 1-12 months

Cost: Neutral - (primarily administrative; potential future cost implications if enhanced service levels or technology upgrades are required).

(Reference: Section 3.9 Emergency Communications and Dispatch, Page 143)

Recommendation #26: Proceed with the planned functional building assessment of both fire stations to evaluate safe and operational conditions, compliance with applicable codes and standards, and alignment with current and future service delivery requirements.

Strategic Objective: # 7 Capital Assets

Suggested completion: 12-24 months.

Cost: Estimated at \$30,000–\$75,000 for a third-party assessment of both stations; up to \$100,000 where specialized testing, engineering, conceptual design, and preliminary capital costing are included. Facility improvements would be subject to separate capital approval.

(Reference: Section 3.10.1.1 Fire Stations Overview and Assessment, Page 147)

Recommendation #27: Establish a formal frontline firefighting equipment maintenance and repair program using qualified paid-on-call firefighters as part-time equipment technicians.

Strategic Objective: #7 Capital Assets

Suggested completion: 1-12 months.

Cost: Annual cost to be determined based on the number of designated technicians, scheduled maintenance hours, applicable hourly or premium rate, required training, tools, and replacement parts. Specialized repairs and certified testing would continue to generate additional external vendor costs.

(Reference: Section 3.10.2.4 Fire Apparatus and Equipment Maintenance and Repair, Page 156)

Recommendation #28: Proceed with the purchase of a mini-pumper fire apparatus as part of the vehicle replacement already identified in the capital budget. The unit should be configured to support the proposed daytime staffing model and equipped with medical equipment, light vehicle-extrication tools, traffic-control and incident-support equipment, and a compressed-air foam system with a limited onboard water supply for small fires and initial fire knockdown, while operating in conjunction with CWFR's full-size apparatus for incidents requiring additional personnel, equipment, pumping capacity, or water supply.

Strategic Objective: #7 Capital Assets

Suggested completion: 24-48 months.

Cost: Minimum capital allowance of \$800,000 (currently funded)

(Reference: Section 3.10.2.6 Fire Apparatus and Emergency Vehicle Fleet Inventory, Page 163)

Recommendation #29: Establish an urban response performance objective consistent with NFPA 1720 to assemble a minimum Effective Response Force (ERF) of 10 firefighters within 10 minutes total response time, 80% of the time, within the urban settlement areas of Fergus and Elora.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months – reviewed annually

Cost: Neutral

(Reference: Section 4.8.2.1 Urban Response Performance (240-360 Seconds Page 217)

Recommendation #30: Establish a rural response performance objective consistent with NFPA 1720 to assemble a minimum ERF of 6 firefighters within 14 minutes total response time, 80% of the time, within designated rural response areas.

Strategic Objective: # 4 Emergency Response and Operations

Suggested completion: 12-24 months – reviewed annually

Cost: Neutral

(Reference: Section 4.8.2.2 Rural Response Performance (600-720 Seconds), Page 220)

Recommendation #31: Establish a third fire station in the north/east area of Fergus (Gartshore St & Gregson Ct area).

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-60 months

Cost: Preliminary order-of-magnitude estimate of \$18 million to \$30 million in 2026 dollars, depending on land acquisition, site servicing, station size, apparatus bays, operational features, sustainability requirements, and future staffing accommodations.

(Reference: Section 4.10.4.3 Coverage Modeling Summary, Page 236)

Recommendation #32: Relocate the existing Fergus Station in the south-southwest Fergus area, near 2nd Line and Guelph Road.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 120 months and beyond

Cost: Preliminary order-of-magnitude estimate of \$18 million to \$30 million in 2026 dollars, depending on land acquisition, site servicing, station size, apparatus bays, operational features, sustainability requirements, and future staffing accommodations and decommissioning of the existing station. The estimate should be refined through site selection and design, with potential proceeds from the existing station property identified separately; apparatus, staffing, and ongoing operating costs are excluded.

(Reference: Section 4.10.4.3 Coverage Modeling Summary, Page 236)

Recommendation #33: Implement a phased staffing transition beginning with enhanced daytime staffing and progressing toward a full four-person 24/7 crew as growth and response-performance triggers warrant. *(See costing in Table 51, pg.242)*

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 72-120 months (projected 10-year review)

Cost: \$160,000 total compensation per FTE. Cost estimate to be refined through annual operating budgets, staffing-factor analysis, collective agreement considerations, employee benefit costs, shift schedules, and station deployment planning

(Reference: Section 4.10.7.1 Operational Implications, Page 243)

Summary of Recommendations

Collectively, these recommendations focus on strengthening Centre Wellington Fire Rescue's governance, administration, public safety programs, emergency response capabilities, training systems, emergency communications, workforce sustainability, and long-term capital planning. Common themes include establishing Council-approved service levels and performance objectives, enhancing organizational capacity, expanding risk-based prevention and pre-incident planning programs, improving data management, and training oversight, addressing future growth and daytime response pressures, and making strategic investments in staffing, facilities, apparatus, and infrastructure.

1. Governance, Service Levels, and Accountability

Recommendations 1a, 1b, 29, and 30 emphasize the need to clearly define and formalize the services provided by CWFR, establish Council-approved standards of cover, and adopt measurable response performance objectives. These measures include documenting all emergency services and associated NFPA service levels within the Emergency and Rescue By-law, developing a comprehensive Standard of Cover policy, and establishing urban and rural Effective Response Force (ERF) performance objectives consistent with NFPA 1720. Together, these initiatives provide a framework for accountability, performance measurement, and continuous improvement aligned with community risk and service expectations.

2. Administration, Leadership, and Organizational Sustainability

Recommendations 2 to 5, 14, and 15 focus on strengthening administrative capacity, leadership development, and long-term organizational resilience. These recommendations include reviewing senior leadership portfolios, adding administrative support resources, broadening firefighter recruitment efforts, establishing a leadership development and succession planning program, formalizing emergency management leadership responsibilities, and implementing a Township-wide Business Continuity Planning framework. Together, these actions support organizational sustainability, improved strategic capacity, and effective succession management as the department and community continue to grow.

3. Firefighter Health, Safety, and Operational Governance

Recommendations 6a, 6b, 7, and 13 focus on firefighter health, safety, and operational consistency. Key initiatives include evaluating the effectiveness of the Joint Health and Safety Committee structure, improving processes for reporting, and managing firefighter exposures and occupational injuries, reorganizing policies, and operational guidance into a more structured framework, and enhancing firefighter safety during fire investigations through appropriate respiratory protection and atmospheric monitoring equipment. These recommendations support regulatory compliance, risk reduction, and firefighter wellness.

4. Public Education, Prevention, Inspection, and Community Risk Reduction

Recommendations 8 to 12 focus on strengthening risk-based public education, fire prevention, and code enforcement programs. The recommendations call for enhanced occupancy risk profiling, improved public education tracking and analytics, additional fire prevention staffing, implementation of a comprehensive records management system for prevention activities, and increased participation in building plans review. Together, these initiatives support evidence-based community risk reduction, improved regulatory compliance, and more effective allocation of prevention resources.

5. Emergency Response Capabilities and Specialized Services

Recommendations 16 to 21 address emergency response readiness and specialized service delivery. They include monitoring emerging risks associated with multi-unit residential occupancies, reviewing medical response protocols, preparing for battery energy storage system (BESS) risks, formalizing hazardous materials support arrangements, defining machinery rescue service levels, establishing technician-level confined space and trench rescue support agreements, and implementing a comprehensive pre-incident planning program. These recommendations ensure that service capabilities remain aligned with evolving community risks and operational demands.

6. Training, Professional Development, and Information Management

Recommendations 9, 11, 22, 23, and 24 strengthen CWFR's training, competency management, and information systems. They include implementing enhanced records management capabilities, developing a multi-year Training Master Plan, assessing opportunities for regional live-fire training facilities, and establishing a full-time Training Officer position. These initiatives support consistent training delivery, improved certification management, stronger regional partnerships, and the use of reliable data to inform decision-making and departmental planning.

7. Emergency Communications and Dispatch Performance

Recommendation 25 focuses on formalizing emergency communications and dispatch performance expectations through a written agreement with the Guelph Fire Department. The recommendation supports the development of dispatch benchmarks, service-level expectations, and performance accountability measures that improve communications reliability and response performance monitoring.

8. Capital Assets, Facilities, Apparatus, and Growth Planning

Recommendations 26 to 28, 31, and 32 address long-term capital asset management and infrastructure planning. These recommendations include conducting functional assessments of existing stations, establishing a structured equipment maintenance program, acquiring a mini-pumper apparatus to support future staffing models, adding a third station based on response modelling, and protecting lands for an existing Fergus Station relocation in south/southwest Fergus. Together, these initiatives ensure that facilities, fleet, and equipment remain aligned with future service delivery requirements and community growth.

9. Response Performance, Deployment, and Future Staffing Models

Recommendation 33 focuses on addressing projected service demand growth and daytime response pressures through a phased hybrid staffing model. Analysis indicates that future incident growth will be concentrated during daytime hours when volunteer firefighter availability is most constrained. The recommendation calls for a gradual transition beginning with dedicated daytime career staffing and progressing, as warranted by community growth, incident volume, response performance, and Effective Response Force requirements, toward a full four-person 24/7 staffing model. The approach preserves the volunteer firefighter system while improving daytime response reliability, operational readiness, and long-term sustainability.

Overall Implementation Priorities

Short-term (1–3 years):

- Update governance documents, establish Council-approved service levels and response performance objectives, strengthen firefighter health and safety processes, improve records management, and formalize dispatch performance expectations.

Medium-term (3–6 years):

- Expand administrative and prevention capacity, implement leadership development and succession planning, enhance specialized rescue capabilities, strengthen pre-incident planning, and establish formal training oversight.

Long-term (6–10+ years):

- Implement the phased hybrid staffing model, undertake station and deployment projects, invest in apparatus and facilities, and align future service delivery with growth, response performance requirements, and community risk.

Financial Considerations:

- While many recommendations can be implemented using existing resources, significant future investments will be required for staffing, training, technology, apparatus replacement, station projects, and long-term growth-related infrastructure.

Recommendations Implementation Schedule

Level	Timeline	Description
Critical	1–12 months	Immediate safety/compliance/operational risk; must act fast.
High	12–36 months	Important improvements: delay increases exposure.
Medium	36–72 months	Enhances performance; flexible timing.
Low	72–120 months	Long-term planning items; low immediate impact.

Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #1 Administration														
1a	Update the existing Fire Department E&R By-law to list all services provided including elevator rescue, medical response level, rescues including trench, building collapse, confined space, heavy auto-extrication, and the associated NFPA service levels (awareness, operations, technician). Furthermore, remove the names of the incumbents in Appendix A of the by-law.												Neutral - Staff Time	(Reference: Section 3.2 Governance, Page 50)
1b	Develop a comprehensive Standard of Cover policy to complement the revised E&R By-law. This policy should establish formal performance benchmarks (90th percentile) for alarm processing, turnout, travel, total response time, ERF assembly, fire prevention inspection frequencies, and training frequencies, ensuring alignment with best practices, community risk profiles, and Council-approved service levels.													
2	CWFR undertake a formal review of senior administrative roles and responsibilities of re-balancing executive portfolios to ensure equitable workload distribution, improved strategic capacity, and enhanced cross-functional leadership exposure.												Neutral - Staff Time	(Reference: Section 3.3.3.1 Department Leadership and Operations, Page 60)
3	Incorporate the addition of a part-time administrative support position into the multi-year budget within the next 3–5 years, increasing total administrative capacity to 1.5 FTEs.												\$40,000.00	Annual cost per 0.5 FTE (based on current municipal compensation rates) plus benefits
4	Continue to recruit and select the most qualified applicants based on established operational requirements and hiring criteria, while partnering with Human Resources and Communications to broaden recruitment outreach and encourage qualified candidates from groups currently under-represented within CWFR to consider volunteer firefighting opportunities.												Neutral - Staff Time	(Reference: Section 3.3.5.1 Volunteer Firefighter Recruitment Process, Page 67)

Recommendations		Implementation Timeline (Months)										Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120	
Strategic Objective: #1 Administration													
5	Work with Human Resources to implement a CWFR-specific leadership development and succession planning program that identifies and prepares future leaders across all divisions through career pathing, mentorship, targeted training, leadership shadowing, and temporary secondment opportunities aligned with departmental growth and Fire Master Plan implementation.											Neutral	(Reference: Section 3.3.8 Succession Planning, Page 70)
6a	Continue to trial CWFR’s representation within the restructured Community Services Joint Health and Safety Committee and establish a formal process for monitoring the effectiveness of this model in addressing fire service health and safety matters. As part of the trial, CWFR should work with Human Resources and the committee to develop and communicate fire service-specific procedures for reporting, reviewing, and following up on near misses, injuries, occupational illnesses, and exposures.											\$1,000 to \$1,500 Certification training costs per person	(Reference: Section 3.3.9 Health and Wellness, Page 72)
6b	The effectiveness of the committee structure should be reviewed following an appropriate trial period, with consideration given to firefighter participation, the timely resolution of identified hazards, the completion of workplace inspections, and the committee’s ability to address operational fire service risks. A separate fire department JHSC, including members to attend training and certification courses should only be considered if the existing structure is found to be insufficient, subject to consultation with the Ministry of Labour, Immigration, Training and Skills Development.												
7	Undertake a structured review and reorganization of all existing Standard Operating Guidelines, separating content into three clearly defined categories that include Policies, Operating Guidelines, and Directives.											Neutral, to be completed internally	(Reference: 3.3.10 Policies, Guidelines and Directives Page 75)

Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #1 Administration														
14	Ensure the Fire Chief maintains as a member of Municipal Emergency Control Group.												Neutral	(Reference: Section 3.6 Emergency Management Program, Page 91)
15	Develop municipal-wide BCP framework aligned with the Emergency Management Program, requiring all departments to maintain and regularly update plans for critical services and operational risks.												\$40,000-\$100,000	External support; lower if developed internally. Ongoing plan maintenance, training and exercises may require approximately \$5,000-\$15,000 annually. (Reference: Section 3.6 Emergency Management Program, Page 91)



Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #2 Public Fire Safety Education														
8	Continue prioritizing residential fire risk reduction through prevention, public education, inspections, and targeted response planning, while undertaking a comprehensive inventory and risk profiling of higher-risk occupancies (Groups A, D, E, and F). Integrate this data into the CRA, pre-incident planning, and inspection prioritization, including refining “Not Classified” properties where feasible, to enhance risk modeling, operational readiness, and resource allocation.												Neutral	(Reference: Section 3.4 Public Fire Safety Education, Page 77)
9	Implement a records management system (RMS) to provide detailed tracking, analysis, and reporting of all public education activities undertaken by CWFR staff in order to support evidence-based program evaluation, community risk analysis, and strategic allocation of public education resources.												\$35,000 Annual cost \$25,000	More consistent excel tracking can be implemented short term while other RMS solutions are researched. (Reference: Section 3.4 Public Fire Safety Education, Page 77)

Recommendations		Implementation Timeline (Months)										Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120	
Strategic Objective: #3 Fire Prevention and Code Enforcement													
10	Add one additional Fire Prevention/Public Education Officer to support inspection frequencies, public education delivery, complaint investigations, and data-driven community risk reduction initiatives. Following implementation, develop an annual risk-based public education and inspection strategy informed by incident trends, demographic analysis, and CRA findings.											\$120,000	Total compensation. Additional costs associated with uniforms, equipment and vehicle needs as required. (Reference: Section 3.5.2 Fire Code Inspection Services, Page 82)
11	Utilize a modern comprehensive RMS system to support digital inspection management, occupancy tracking, enforcement documentation, data analytics, and integration with CWFR’s broader community risk reduction and operational planning initiatives.												This project is being conducted as part of a separate corporate initiative and costs associated to that project. (Reference: Section 3.5.2 Fire Code Inspection Services, Page 82)
12	Collaborate with the Chief Building Official and Building Division to review opportunities to formalize CWFR’s participation in new construction and significant renovations related to fire protection and life safety systems.											Approximately \$5,000 for the courses and the provincial exams, if warranted.	(Reference: Section 3.5.3 New Developments Plans Review, Page 88)

Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #3 Fire Prevention and Code Enforcement														
13	Discontinue the use of N95 masks for fire investigation activities and equip fire investigators with appropriate respiratory protection, such as a full-face Powered Air Purifying Respirator (PAPR) or Self-Contained Breathing Apparatus (SCBA), supported by continuous atmospheric monitoring equipment capable of detecting oxygen levels, carbon monoxide, and volatile organic compounds (VOCs).												Approx. \$2,500 for two PAPR	Initial capital cost plus annual maintenance and replacement. (Reference: Section 3.5.4 Fire Cause and Origin Services, Page 89)
Strategic Objective: #4 Emergency Response and Operations														
16	Implement a systematic process to monitor and analyze fire incident trends related to multi-unit residential occupancies, including response frequency, nature of incidents, and resource deployment per event.												Neutral	(Reference: Section 3.7.2 High-Rise and Multi-Unit Residential Firefighting Operations, Page 98)
17	Continue to regularly review and update the tiered medical response framework in collaboration with Wellington County Paramedic Services, CACC, and the CWFR medical oversight provider to refine response protocols, ensure alignment with MPDS, and clarify the clinical scope of practice for First Responders. This review should also include an assessment of impacts on volunteer firefighter availability, response reliability, and overall system sustainability.												Neutral	(Reference: Section 3.7.3 Medical Assist, Page 101)
18a	Continue collaborating with the BESS proponent to complete site-specific pre-incident planning, confirm water supply and exposure-protection requirements, provide facility-specific LFP battery fire and hazardous materials training, and establish appropriate response protocols before the facility is commissioned.												Neutral - Agreement with facility to pay training and response costs	\$20k - \$30K (training and planning) or \$35k - \$90k (annual hazmat retainer). Depending on agreement, costs could vary from a pay as you use arrangement, to annual retainer, to the facility paying for the costs
18b	Formalize access to technician-level hazardous materials and technical support through fire protection services agreement, specialized response partnership, or other suitable service arrangement.													

Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #4 Emergency Response and Operations														
19	Formally define CWFR’s machine rescue service level and provide awareness or operations-level training supported by operational guidelines to ensure safe and consistent response to machinery entrapment incidents.												Approx. \$10,000 to \$25,000	Costs for training, props, and equipment. (Reference: Section 3.7.9 Machine Rescue Operations, Page 115)
20a	Formalize written fire protection agreements with neighbouring municipalities or other third-party provider capable of providing technician-level confined space and trench rescue services.												\$5,000 - \$30,000	Cost dependant on response expectations and coverage agreements.
20b	Develop and adopt a dedicated Standard Operating Guideline outlining CWFR’s awareness-level operational boundaries, entry prohibitions, isolation requirements, and automatic activation triggers for technician-level resources.													
21a	Develop and implement a formal pre-incident planning program that identifies and documents high-risk and complex occupancies within Central Wellington. Pre-fire planning program to include all buildings identified as risks within the CRA, ensuring complete coverage of high-priority and high-hazard occupancies.												Neutral	Using existing systems and internal resources

Recommendations		Implementation Timeline (Months)										Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120	
Strategic Objective: #4 Emergency Response and Operations													
21b	Digitize all pre-plans and integrate them into CAD/GIS systems to allow mobile access for operational staff, with standardized data fields covering standpipes, key boxes, electric vehicle charging stations, photovoltaic arrays, and other critical building information, along with detailed tactical considerations such as attack stair locations, refuge floors, and smoke control systems.											Corporate & Legislative Services Budget	Up to \$150,000 where external data collection, specialized software, or CAD/GIS integration is required. Ongoing maintenance and licensing may cost \$5,000 - \$15,000 annually. (Reference: Section 3.7.12 Pre-Emergency Planning, Page 123)
29	Establish an urban response performance objective consistent with NFPA 1720 to assemble a minimum Effective Response Force (ERF) of 10 firefighters within 10 minutes total response time, 80% of the time, within the urban settlement areas of Fergus and Elora.											Neutral	(Reference: Section 4.8.2.1 Urban Response Performance (240-360 Seconds Page 217))
30	Establish a rural response performance objective consistent with NFPA 1720 to assemble a minimum ERF of 6 firefighters within 14 minutes total response time, 80% of the time, within designated rural response areas.											Neutral	(Reference: Section 4.8.2.2 Rural Response Performance (600-720 Seconds, Page 220))



Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #4 Emergency Response and Operations														
31	Establish a third fire station in the northeast Fergus area (Gartshore St & Gregson Ct area)												Preliminary order-of-magnitude estimate of \$18 million to \$30 million dollars in 2026	Costs dependant on land acquisition, site servicing, station size, apparatus bays, operational features, sustainability requirements, and future staffing accommodations. (Reference: Section 4.10.4.3 Coverage Modeling Summary, Page 236)



Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #4 Emergency Response and Operations														
32	Relocate the existing Fergus station in the south-southwest Fergus area, generally near 2nd Line and Guelph Road.												Preliminary order-of-magnitude estimate of \$18 million to \$30 million dollars in 2026	Costs dependant on land acquisition, site servicing, station size, apparatus bays, operational features, sustainability requirements, and future staffing accommodations. The estimate should be refined through site selection and design, with potential proceeds from the existing station property identified separately; apparatus, staffing, and ongoing operating costs are excluded. (Reference: Section 4.10.4.3 Coverage Modeling Summary, Page 236)



Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #4 Emergency Response and Operations														
33	Implement a phased staffing transition beginning with enhanced daytime staffing and progressing toward a full four-person 24/7 crew as growth and response-performance triggers warrant. (See costing in Table 51, pg.242)												\$160,000 total compensation per 1 FTE x 6	Cost estimate to be refined through annual operating budgets, staffing-factor analysis, collective agreement considerations, employee benefit costs, shift schedules, and station deployment planning. (Reference: Section 4.10.7.1 Operational Implications, Page 243)

Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #5 Training and Professional Development														
22	Develop and implement a multi-year Training Master Plan that aligns with authorized service levels and community risk, forecasts certification and instructor resource needs, formalizes regional partnerships, and evaluates long-term facility requirements to ensure sustainable training delivery.												Neutral	(Reference: Section 3.8.1 Training Overview, Page 127)
23	Undertake a feasibility assessment, in collaboration with the County of Wellington and interested regional or third-party partners, to explore the development or shared use of a live fire training facility. The assessment should evaluate governance models, capital and operating costs, potential funding opportunities, location considerations, usage demand, and long-term sustainability.												\$50,000 for Feasibility Study, with potential for Partner Contributions	Depending on scope, third-party consultant involvement, environmental/site review requirements, and partnership complexity. If pursued beyond the feasibility stage, development of a shared live fire training facility could involve capital costs ranging from approximately \$1 million–\$5 million or more depending on the facility type, land requirements, props, servicing, and governance model. (Reference: Section 3.8.2 Industry Recommended Qualifications: Page 130)

Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #5 Training and Professional Development														
24	Establish a dedicated full-time Training Officer reporting to the Deputy Chief responsible for Operations and Training to coordinate CWFR’s training, certification, competency management, instructor development, recruit and officer development, specialty training, and training records. The position should maintain a flexible schedule that supports daytime, evening, and weekend programming, be supported by a structured cadre of internal part-time instructors.												\$160,000 total compensation	Plus, potential first-year implementation costs. (Reference: 3.8.3 Training Support, Page 135)
Strategic Objective: #6 Emergency Communications and Dispatch														
25	Collaborate with the Guelph Fire Department to develop, formalize, and document clear dispatch performance benchmarks and service-level expectations within a written agreement.												Neutral	Primarily administrative; potential future cost implications if enhanced service levels or technology upgrades are required. (Reference: Section 3.8.3 Emergency Communications and Dispatch, Page 143)



Recommendations		Implementation Timeline (Months)											Cost	Notes
		1	12	24	36	48	60	72	84	96	108	120		
Strategic Objective: #7 Capital Assets														
26	Proceed with the planned functional building assessment of both fire stations to evaluate safe and operational conditions, compliance with applicable codes and standards, and alignment with current and future service delivery requirements.												Building and Properties Budget	\$30,000–\$75,000 for a third-party assessment of both stations. Up to \$100,000 where specialized testing, engineering, conceptual design, and preliminary capital costing are included. Facility improvements would be subject to separate capital approval. (Reference: Section 3.10.1.1 Fire Stations Overview and Assessment, Page 147)



Recommendations		Implementation Timeline (Months)											Cost	Notes	
		1	12	24	36	48	60	72	84	96	108	120			
Strategic Objective: #7 Capital Assets															
27	Establish a formal frontline firefighting equipment maintenance and repair program using qualified Paid-On-Call firefighters as part-time equipment technicians.													Neutral	Annual cost to be determined based on the number of designated technicians, scheduled maintenance hours, applicable hourly or premium rate, required training, tools, and replacement parts. Specialized repairs and certified testing would continue to generate additional external vendor costs. (Reference: Section 3.10.2.4 Fire Apparatus and Equipment Maintenance and Repair, Page 156)
28	Proceed with the purchase of a mini-pumper fire apparatus as part of the vehicle replacement already identified in the capital budget. The unit should be configured to support the proposed daytime staffing model and equipped with medical equipment, light vehicle-extrication tools, traffic-control and incident-support equipment, and a compressed-air foam system with a limited onboard water supply for small fires and initial fire knockdown, while operating in conjunction with CWFR’s full-size apparatus for incidents requiring additional personnel, equipment, pumping capacity, water supply.													Funding already allocated	Minimum capital allowance of \$800,000 (Reference: Section 3.10.1.1 Fire Stations Overview and Assessment, Page 147)"

Conclusion

This Fire Master Plan provides a strategic framework to guide the continued development of Centre Wellington Fire Rescue (CWFR) over the next decade and beyond. Informed by the Community Risk Assessment, response performance analysis, growth projections, and a comprehensive review of governance, operations, staffing, training, prevention, infrastructure, and resource deployment, the Plan establishes a risk-based approach to ensuring that fire protection and emergency services remain aligned with community needs, legislative requirements, and municipal priorities.

The assessment confirms that CWFR is a professional, dedicated, and community-focused organization that provides an effective level of fire protection and emergency response services to the residents, businesses, and visitors of Centre Wellington. The Department benefits from strong leadership, committed career and volunteer personnel, and an established culture of public service that has enabled it to effectively meet current operational demands while fulfilling its legislative responsibilities.

At the same time, Centre Wellington continues to experience population growth, residential and commercial development, increasing call volumes, and evolving community risks. The analysis indicates that future service demands will continue to rise, particularly during daytime hours when volunteer firefighter availability is most constrained. These trends present both challenges and opportunities and underscore the importance of proactive planning, evidence-based decision-making, and strategic investment in service delivery.

The recommendations contained within this Plan are intended to guide decision-making over the coming years and provide a structured approach to managing growth, emerging risks, and changing service demands. Collectively, they support operational effectiveness, firefighter health and safety, community risk reduction, organizational sustainability, and long-term infrastructure planning while building upon the strengths of CWFR's current service delivery model.

Successful implementation will require ongoing collaboration among Council, municipal administration, fire department leadership, staff, volunteer firefighters, and community partners. Equally important will be a commitment to continuous improvement, regular performance monitoring, and periodic review of community risks, response performance, staffing pressures, and growth trends. These efforts will help ensure that future investments remain aligned with demonstrated need, fiscal capacity, and desired service outcomes.

This Fire Master Plan should be viewed as a living document. As development patterns, community expectations, legislation, and operational demands evolve, the Plan should be reviewed and updated to ensure its recommendations remain relevant, practical, and responsive to changing conditions.

Ultimately, this Fire Master Plan positions the Township of Centre Wellington and CWFR to manage future growth and service demands through a balanced, sustainable, and fiscally responsible approach. By strengthening governance, supporting its volunteer firefighting foundation, enhancing operational capabilities, investing strategically in people, facilities, and equipment, and maintaining a strong focus on community risk reduction, CWFR will be well positioned to continue providing safe, effective, and reliable fire and emergency services for years to come. The professionalism, dedication, and commitment demonstrated by the members of Centre Wellington Fire Rescue provide a strong foundation for achieving the vision and objectives outlined in this Plan.

While recommended implementation timelines have been established, this Master Plan should be viewed as a living document. Regular monitoring, periodic review, and updates will be necessary to ensure that its recommendations remain relevant and responsive to changing operational conditions, emerging risks, development patterns, and municipal priorities. Flexibility in implementation will allow the Township to align future investments with demonstrated need, financial capacity, and measurable service outcomes.

SECTION 1

INTRODUCTION

1.1 Background and Significance

Across Canada, community leaders are continually seeking innovative strategies to enhance the efficiency and effectiveness of public service delivery. Effectiveness refers to the ability to achieve desired outcomes, while efficiency focuses on maximizing the use of available resources, such as time, money, or effort. In practical terms, efficiency is often described as ‘doing more with less’ or delivering ‘value for money.’

Elected officials, Chief Administrative Officers (CAOs), city managers and departmental leaders face the ongoing challenge of designing service delivery models that are both effective and fiscally responsible. Public safety consistently ranks among the highest priorities for municipalities, yet it also represents one of the most significant financial investments. Services such as police, fire, EMS, and emergency management are foundational to a community’s social safety net, making their effectiveness non-negotiable.

At the same time, the need for fiscal prudence and operational review remains critical. Municipal leaders must remain vigilant in identifying sustainable, forward-thinking practices that balance service levels with financial realities. The goal is to ensure that residents receive high-quality services that are both responsive and cost-effective, delivering true value for every dollar spent.

1.2 Project Scope

This Fire Master Plan (FMP) will serve as a comprehensive, strategic framework to guide the delivery and evolution of fire and emergency services over the next 10 years. Its primary objective is to develop a comprehensive plan to reduce risk and optimize community safety through aligning services with community risk profiles, projected population growth, legislative requirements, and recognized best practices in the fire service industry.

This plan is informed by an in-depth assessment of current response capabilities, utilizing insights from the Community Risk Assessment (CRA) to evaluate the department’s ability to meet present and future service demands. Historical response data, performance trends, and compliance with industry standards will be closely examined to ensure that services are not only responsive but also proactive in mitigating risk and protecting life, property, and the environment.

This strategic roadmap will serve as a foundational tool for Council and senior leadership in prioritizing service enhancements and achieving long-term public safety goals.

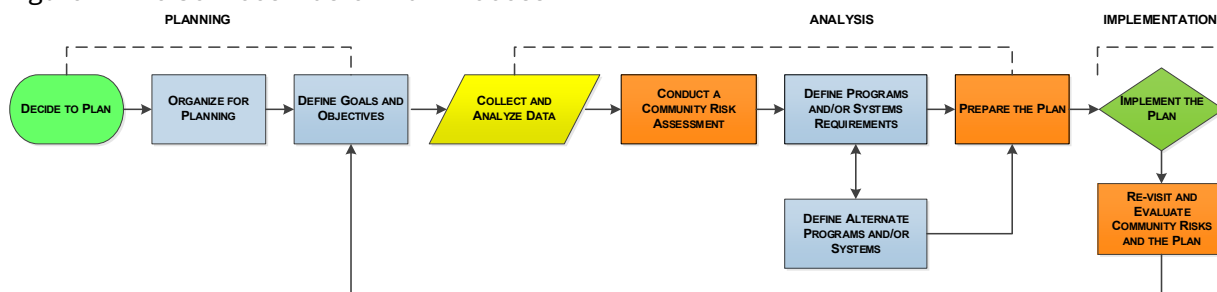
Key components of this FMP include:

- **Demand Zone Analysis:** Evaluate emergency service coverage, response times, and geographic demand to identify gaps and optimize station locations.
- **Comprehensive Service and Program Review:** Assess the effectiveness and efficiency of all fire service divisions, including operations, fire prevention, public education, training, and administration.
- **Staffing Model Evaluation:** Review current staffing levels and deployment strategies to ensure appropriate and safe 24/7 coverage aligned with community needs and legislative requirements.
- **Resource Alignment:** Identify opportunities to better align personnel, apparatus, and facilities with current and future service demands.
- **Cost Efficiency and Avoidance Measures:** Explore strategies to reduce operational costs, defer capital expenditures, and enhance financial sustainability without compromising service quality.
- **Evidence-Based Recommendations:** Develop actionable, data-driven recommendations grounded in industry standards, best practices, and community risk to guide strategic decision-making and resource planning.
- **Strategic Investment Planning:** Support long-term capital and operating planning by identifying service improvement priorities and critical infrastructure or staffing needs.
- **Governance and Policy Alignment:** Ensure recommendations aligned with applicable legislation, municipal priorities, and long-range planning frameworks.

1.3 Fire Master Plan Process

The diagram below illustrates the methodology used to develop this plan. A Fire Service Master Plan, often described as a “road map” for the future, provides strategic direction for current and future departmental leaders and decision makers.

Figure 2: Fire Services Master Plan Process



As highlighted in the implementation section, the plan should be reviewed and assessed at least annually. Regular evaluation ensures it remains aligned with evolving community needs, especially during periods of population growth or expanding residential and industrial development, all of which can significantly influence community risk.

When possible, a third-party review is recommended at the five-year mark. An independent evaluation introduces an unbiased perspective, strengthens the credibility of the process, and helps ensure the plan continues to reflect best practices and operational realities.

1.4 Study Considerations

Community-Specific Considerations

- Population and future growth
- Community risk factors
- Community demographic information
- Development and area structure plans
- Multi-jurisdictional requirements and cooperation
- Current and future development impact on risks and response
- Financial resources and constraints
- Impacts of government legislation
- Bylaws
- Economic factors
- Tourism
- Construction
- Industrial activity
- Utilities
- Retail businesses and other services
- Agriculture
- Buildings and structures concentrating on high-risk demands
- Municipal emergency management plans

Department-Specific Considerations

- Geographic and physical boundaries for response
- Fire service focused reports previously conducted
- Standards of cover
- Budgets
- Current staff rosters with qualifications
- Fire station locations and other infrastructure
- Department structure
- Service delivery models
- Apparatus and equipment inventory, and future needs
- Building space requirements
- Frontline staffing and administration
- Bylaw, policies, and procedures
- Fire prevention & public education
- Emergency core service response
- Health and wellness
- Training and recruitment standards
- Succession planning
- Fire prevention programs
- Records and data management
- Standard operating guidelines and procedures

1.5 Strategic Priorities

The primary objective of developing this FMP is to establish a strategic framework for Centre Wellington Fire Rescue (CWFR) by incorporating a comprehensive CRA and evaluating the department's current capabilities and capacity. This plan provides a structured and methodical approach to assessing response capabilities, identifying, and mitigating risks, and guiding the development of strategic priorities for the fire service while highlighting opportunities for improved service delivery and ensuring the department remains responsive to community growth and evolving risks.

While risks are the basis for triggering response decisions, our analysis also investigated the needs of the community, providing a point of reference upon which future decisions and priorities can be evaluated and implemented. This includes identifying priorities, challenges, and opportunities for the improvement of the delivery of emergency services to the community, businesses, and overall public safety. This plan also considers applicable legislation, industry-leading practices, and standards along with current and anticipated risks to provide unbiased analysis and evidence-based recommendations.

Beyond risk analysis, the FMP considers the broader needs of the community, offering a foundation for future decision-making and priority setting. This includes identifying key challenges, service gaps, and opportunities for improvement in the delivery of emergency services to residents, businesses, and visitors. The plan is informed by relevant legislation, industry best practices, and recognized standards, integrating both current and anticipated risks to ensure that recommendations are objective, evidence-based, and consistent with Centre Wellington's strategic direction.

The FMP will consider and achieve the following benefits:

- Enhanced firefighter safety
- Improved cost control and containment
- Increased efficiency and effectiveness
- Identification of a right-sized service model to meet the current and future needs of the community

Ultimately, this FMP determines options towards an optimum service delivery model and serves as a 'blueprint' for the municipality to be more effective and efficient in the delivery of emergency services through current and future challenges.

1.6 Strategic Goals and Objectives

This FMP is designed to serve as a strategic roadmap for Centre Wellington, guiding Council, and senior administration in making informed decisions about fire protection services over the next 5-10-year planning horizon. The planning framework outlined in this document is grounded in legislative compliance, operational analysis, and recognized best practices in the fire service sector.

A key component of this FMP is the identification of strategic objectives, foundational principles that will inform future resource allocation, policy development, and operational enhancements. These strategic objectives are intended to align fire protection services with community risk, support long-term sustainability, and deliver maximum public value.

Strategic Objective #1: Administration

Establish the strategic direction for CWFR in support of Corporate priorities and emergency service needs of the community. Maintain an effective and sustainable administrative framework that supports CWFR operations and programs. Administrative systems and resources will enable coordinated service delivery, sound governance, fiscal responsibility, and long-term organizational stability.

Strategic Objective #2: Public Fire Safety Education

Support a safe community by reducing the incidence and impact of fire through proactive public education. Deliver comprehensive and targeted fire safety education programs that address fire-related behaviours and risks identified through the CRA, with an emphasis on prevention, awareness, and community engagement.

Strategic Objective #3: Fire Prevention and Code Enforcement

Enhance community safety through the delivery of a consistent, collaborative, and risk-informed fire prevention and code enforcement program. CWFR will continue to promote compliance with applicable legislation, regulations, and standards while adapting prevention strategies to reflect community risk, development patterns, and best practices.

Strategic Objective #4: Emergency Response and Operations

Deliver emergency response services that are aligned with Centre Wellington's risk profile, growth trends, and community needs. Operations will be conducted in a manner that prioritizes firefighter health and safety, reflects recognized industry best practices, and ensures efficient and effective use of available resources.

Strategic Objective #5: Training & Professional Development

Maintain a high-quality, structured, and sustainable training program that supports the safe and effective delivery of emergency services. Training will remain aligned with the services authorized under the E&R By-law and will reflect current firefighting practices, safety standards, and emerging service demands to ensure personnel are prepared to perform their duties competently and safely.

Strategic Objective #6: Emergency Communications and Dispatch

Ensure reliable, resilient, and technologically appropriate emergency communications through continued collaboration with a qualified third-party service provider. By leveraging shared expertise, standardized dispatch protocols, and scalable technologies, CWFR will support timely and accurate emergency communications that enhance firefighter safety, inter-agency coordination, and effective service delivery.

Strategic Objective #7: Capital Assets

Provide and maintain fire stations, apparatus, and equipment that support operational readiness and effective emergency response. Through sound asset management and lifecycle planning, CWFR will ensure infrastructure and equipment continue to meet service delivery requirements and community expectations.

1.6.1 Alignment with Township of Centre Wellington Strategic Priorities

The Strategic Objectives for CWFR are aligned with Centre Wellington's corporate strategic priorities and support Council's commitment to good governance, community safety, service excellence, fiscal responsibility, and long-term sustainability.

Objectives related to Administration, Training, and Capital Assets reinforce effective governance, workforce readiness, asset management, and responsible stewardship of municipal resources. Public Education and Fire Prevention and Code Enforcement advance community well-being through prevention-focused, risk-informed programs that promote compliance and reduce fire-related risk. The Operations objective ensures emergency response services remain aligned with Centre Wellington's evolving risk profile, growth patterns, and community expectations, while prioritizing firefighter health and safety. The Communications objective supports reliable, coordinated, and resilient emergency communications through collaborative and cost-effective service delivery.

Collectively, these objectives position CWFR as an integrated municipal service that supports Corporate priorities and delivers safe, effective, and sustainable emergency services to the community.

1.7 Standards and References

This plan considers the following references and standards:

- Township of Centre Wellington Community Risk Assessment
- Township of Centre Wellington Fire Department Establishing and Regulating Bylaw
- County of Wellington Official Plan
- Township of Centre Wellington 2025 Asset Management Plan
- Township of Centre Wellington Budget Documents
- Township of Centre Wellington 2023-2026 Strategic Plan
- Commission on Fire Accreditation International
- Canadian Standards Association (CSA)
- Fire Underwriters Survey (FUS)
- Ontario Emergency Management and Civil Protection
- Ontario Fire Protection and Prevention Act
 - O. Reg. 213/07: Ontario Fire Code
 - O. Reg. 378/18: Community Risk Assessments
 - O. Reg. 364/13: Mandatory Inspection – Fire Drill in Vulnerable Occupancy
 - O. Reg. 365/13: Mandatory Assessment of Complaints and Requests for Approval
 - O. Reg. 343/22: Firefighter Certification
- Fire Marshal Directives
- National Fire Protection Association (NFPA)
- Ontario Occupational Health and Safety Act
- Ontario Building Code
- Underwriters Laboratories (UL/ULC)

1.8 Consultative Process

1.8.1 Community and Fire Station Tour

The community and station tours focused on the overall footprint, topography, transportation infrastructure of the municipality and the various response zones. Touring the stations provided an opportunity to conduct a general condition and operational functionality assessment on each station.

1.8.2 Targeted Interviews

As part of the FMP development process, interviews were conducted with members of Council, senior administration, fire service leadership, and key internal stakeholders. The purpose of these discussions was to gather perspectives on current service delivery, emerging risks, organizational strengths, and future priorities.

Overall, there was strong alignment among participants regarding the importance of maintaining a proactive, fiscally responsible, and community-focused fire service that evolves alongside Centre Wellington's growth.

Table 1: Targeted Interview List

No.	Name	Job Title
1	Dan Wilson	Chief Administrative Officer
2	Shawn Watters	Mayor
3	Lisa MacDonald	Ward 1 Councillor
4	Kimberley Jefferson	Ward 2 Councillor
5	Barbara Lustgarten-Evoy	Ward 3 Councillor
6	Jennifer Adams	Ward 4 Councillor
7	Bronwynne Wilton	Ward 5 Councillor
8	Denis Craddock	Ward 6 Councillor
9	Tom Mulvey	Fire Chief (retired)
10	Jason Benn	Fire Chief
11	Jonathan Karn	Deputy Fire Chief
12	Adam McNabb	Managing Director of Corporate Services
13	Brett Salmon	Managing Director of Planning and Development
14	Rashid Hasan	Chief Human Resources Officer
15	Karen Lindsay	Administrative Assistant
16	Craig Cunningham	Training Officer
17	Chris Paluch	Fire Prevention Officer
18	Ken Boys	District Chief – Station 60

1.8.2.1 Summary of Interviews

Growth and Community Change

A consistent theme throughout the interviews was the impact of growth and demographic change. While Centre Wellington is not experiencing the same scale of high-density urban growth as larger municipalities, stakeholders acknowledged:

- Continued residential expansion in Fergus and Elora
- Intensification within settlement areas
- Increased traffic volumes and transportation-related risk
- Growth in seniors and aging-in-place populations
- Expansion of commercial and light industrial development

Participants emphasized the importance of planning ahead of growth rather than reacting to it. There was recognition that staffing models, station locations, and apparatus deployment must be evaluated regularly to ensure alignment with evolving risk.

Service Levels and Response Expectations

Interviewees expressed strong support for maintaining reliable response times and effective emergency coverage across the municipality's urban and rural areas.

Key themes included:

- Ensuring consistent daytime response reliability within a composite/volunteer model
- Maintaining an adequate Effective Response Force (ERF) for structure fires
- Balancing fiscal sustainability with service expectations
- Monitoring call volume trends and complexity of incidents

There was acknowledgement that call types are becoming more diverse and complex, including medical assist calls, motor vehicle collisions, technical rescues, and weather-related incidents.

Volunteer/Composite Model Sustainability

The sustainability of the composite model was a significant discussion point. Participants noted:

- Recruitment and retention challenges, particularly for daytime availability
- Increasing training requirements and time commitments for volunteer firefighters
- The importance of supporting volunteer engagement and succession planning

There was general consensus that the model remains important and appropriate for Centre Wellington at this time; however, it will require proactive management, investment in training, and periodic evaluation to ensure long-term viability.

Fire Prevention and Public Education

Stakeholders consistently emphasized the importance of prevention and education as cost-effective strategies for risk reduction.

Themes included:

- Proactive fire inspections in commercial and multi-residential occupancies
- Public education targeted to seniors and vulnerable populations
- Collaboration with building, planning, and by-law departments
- Leveraging the CRA to guide inspection priorities

There was recognition that as building stock ages, particularly in historic downtown cores such as Fergus and Elora, inspection and code enforcement remain critical to mitigating fire risk.

Infrastructure, Apparatus, and Facilities

Interviewees noted the importance of maintaining facilities and apparatus in a state of good repair. While current infrastructure is generally functional, participants acknowledged:

- The need for long-term capital forecasting
- Monitoring station capacity in relation to future growth areas
- Ensuring apparatus replacement planning remains predictable and sustainable

There was support for a structured asset management approach integrated with municipal financial planning.

Organizational Culture and Leadership

Participants described CWFR as a professional, dedicated, and community-oriented organization.

Strengths identified include:

- Strong community relationships
- High level of firefighter commitment
- Effective leadership within the department
- Positive working relationships with Council and administration

There was encouragement to continue investing in officer development, succession planning, and leadership training to support organizational continuity.

Fiscal Responsibility and Governance

Council and administrative stakeholders emphasized the importance of balancing service enhancement with tax impact considerations.

Key expectations include:

- Clear justification for staffing or capital increases
- Alignment with municipal strategic priorities
- Transparent reporting on performance metrics
- Long-term financial forecasting

There was strong support for data-driven decision-making and measurable service standards.

Overall Interview Findings

Across all interviews, there was broad consensus that CWFR is providing a valued and effective service to the community. The department is viewed as professional, responsive, and aligned with community expectations. However, stakeholders recognize that incremental growth, demographic shifts, evolving risk profiles, and volunteer model pressures will require strategic planning and phased adjustments over the life of this Fire Master Plan.

The collective feedback supports:

- A proactive, risk-informed planning approach
- Continued investment in prevention and training
- Careful monitoring of volunteer sustainability
- Long-term capital and staffing forecasting
- Maintaining strong alignment with municipal strategic priorities

Overall, the interviews reinforce the need for a balanced, forward-looking Fire Master Plan that preserves Centre Wellington's strong service culture while preparing the organization for measured and sustainable growth over the next 5 - 10 years.

1.8.3 Online Firefighter Survey

To obtain balanced input, we also employed an online firefighter survey. It offered an opportunity to gather opinions from an entire group as opposed to a limited sample of opinions from a select few.

Invitations to participate in the survey were emailed to 63 staff members, and 49 participated in the survey, which represents 77.77% of staff. More than three quarters of the survey respondents (77.55%) agreed that the community received adequate fire protection, while 14.29% were neutral, and 8.16% disagreed.

Nearly all (95.92%) agreed that the demand for fire and emergency services would increase in the future, however, only 51.02% agreed that currently the response model is adequately staffed, while 22.45% were neutral and 26.53% disagreed.

The majority (57.14%) were neutral or agreed that the current level of live fire training was adequate. Furthermore, 53.06% agreed that the amount of leadership training was adequate, 16.33% were neutral, and 30.61% felt that it was inadequate.

The majority of staff (53.06%) agreed that the stations are currently located to provide adequate coverage, while only 20.41% disagreed. 14.29% of the staff were neutral on the functionality of the stations to meet operational needs. A high majority of staff (77.55%) agreed that small equipment is adequate, and 65.3% agreed that the equipment and apparatus are well maintained.

1.9 Municipal Comparative Analysis

An industry peer comparative analysis was conducted as a method of benchmarking the performance of CWFR alongside similar municipalities. The benchmarks encompass budgets, performance, effectiveness, and efficiencies. While fire and emergency services share the common goal of protecting life and property, each community has unique features influencing how they achieve this objective. The primary criteria for the community comparative analysis revolve around indicators of effectiveness and efficiencies in risk management and mitigation.

The communities who participated, along with Centre Wellington, included:

- Township of Woolwich
- Town of New Tecumseth
- Town of Lincoln
- Town of Halton Hills

To develop this municipal comparison review, we used budgetary data from 2025 and response data from 2021-2025 collected from each of the participating communities. Recognizing each municipality has unique attributes, such as risk factors, historical decisions, and community profiles, comparing CWFR to that of similar community remains an effective way to identify relative service levels, costs, and trends.

The community comparative analysis provides a reference, rather than an operational model, focusing on several benchmarks including budgets, service areas, service, levels, and staffing levels.

Our main criteria for collecting information are:

- Population – Utilizing 2021 Census data for consistency
- Budgets – 2025 reported budgets from municipal websites
- Department size
- Department Type (full-time, part-time or combination)
- Department Staffing

Additional information includes:

- Number of fire stations
- Call volume
- Call types

See Appendix C: Community Comparative Analysis Results

Comparative Limitations

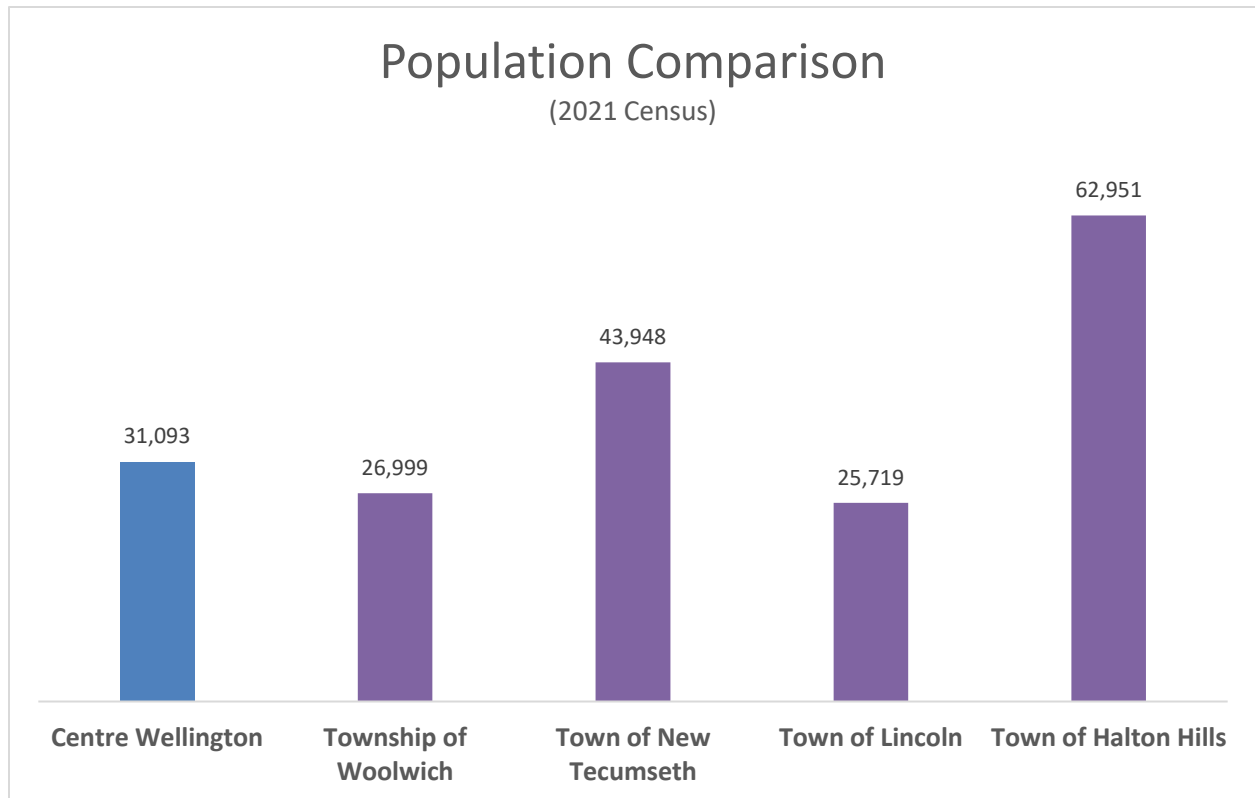
It is important to note that no standardized framework exists for categorizing fire service incidents. As such, these statistics should be interpreted as general reference points rather than precise comparisons. Variations in organizational structure, service levels, incident classification, and financial systems across municipalities limit the accuracy of direct comparisons. Therefore, this analysis should be viewed as a high-level overview, and direct equivalency is strongly discouraged.

Table 2: Participating in Community Comparatives

Community	Population (2021 Census)	Land Area (km ²)	Area of Response (km ²)
Township of Centre Wellington	31,093	409.41	409.41
Township of Woolwich	26,999	319.12	350
Town of New Tecumseth	43,948	273.87	240
Town of Lincoln	25,719	162.74	162.74
Town of Halton Hills	62,951	276.81	276.81

Note: 2021 Census information was used as a common basis for comparison.

Image 1: Population Comparisons (2021 Census)



1.9.1 Staffing Model Capacity

CWFR operates with a lean volunteer staffing model, particularly in suppression, fire prevention, and training. The service includes:

- 65 volunteer suppression staff across two stations
- One full-time fire prevention officer
- Training staff as part of the volunteer suppression staff
- One support staff member
- A shared county Training Officer

In contrast, composite services such as New Tecumseth and Lincoln rely on 118 volunteer suppression staff across their respective three and four station departments. Furthermore, Centre Welling Fire Rescue operates at a cost per-capita of \$69.81, representing 5.26% of the municipality's annual operating budget in 2025. Neighbouring Woolwich Township operates at a cost per-capita of \$135.33, representing 12.52% of the municipality's annual operating budget. Centre Wellington's staffing approach emphasizes efficiency but may face constraints in sustaining service levels as community demands and risk profiles evolve.

1.9.2 Call-Volume and Service Capacity

CWFR's total call volume has increased from 491 in 2021 to 603 in 2025, with a peak of 737 total calls in 2024. This marks a 23% rise in total call volume over five years. Based on this growth, CWFR's call volume remains among the average of the compared municipalities. While the population of the communities included in this study are similar, CWFR's total call volume is higher than Woolwich and similar to Lincoln. Of the communities included in this study, Halton and New Tecumseth reported higher total call volume (1,262 and 1,057 in 2025 respectively). CWFR's call volume has evenly matched the annual volume and growth of the comparable municipalities.

Notably, 87% of CWFR's calls in 2025 were fire related. This matches the average of the municipalities included in this study but remains high when compared to other municipalities where EMS calls typically dominate (70–80% of total volume). This discrepancy may be attributed to differences in tiered medical response protocols or incident classification practices.

CWFR responded to 79 EMS-related calls in 2025, compared to Lincoln (186) and Halton (179). CWFR's EMS call volume is like that of Woolwich, at 82 in 2025. Of the departments included in this analysis, Centre Wellington, Woolwich, and New Tecumseth saw a significant decrease in EMS-related calls because of changing tiered response protocols. The ongoing engagement in EMS-related calls, however, reflects CWFR's ongoing demand from a full-tiered medical response model.

1.9.3 Community Comparative Analysis Summary

In 2025, the five municipalities included in the comparative analysis reported total municipal operating budgets ranging from \$29 million to \$105 million. Centre Wellington's operating budget of \$41.3 million which ranks third out of five municipalities, placing it in the middle of the comparison group.

Across the comparison group, fire department budgets ranged from \$2.2 million to \$11 million. Centre Wellington's 2025 CWFR operating budget was \$2.2 million, the lowest among the municipalities reviewed. CWFR's operating budget represents 5.3% of Centre Wellington's total municipal operating budget, the second-lowest proportion among the comparable municipalities.

On a per-capita basis, CWFR has the lowest operating cost in the comparison group at \$69.81 per resident, compared to the average per-capita expenditure of \$123.40 across the five municipalities.

SECTION 2

COMMUNITY PROFILE

2.1 Community Overview

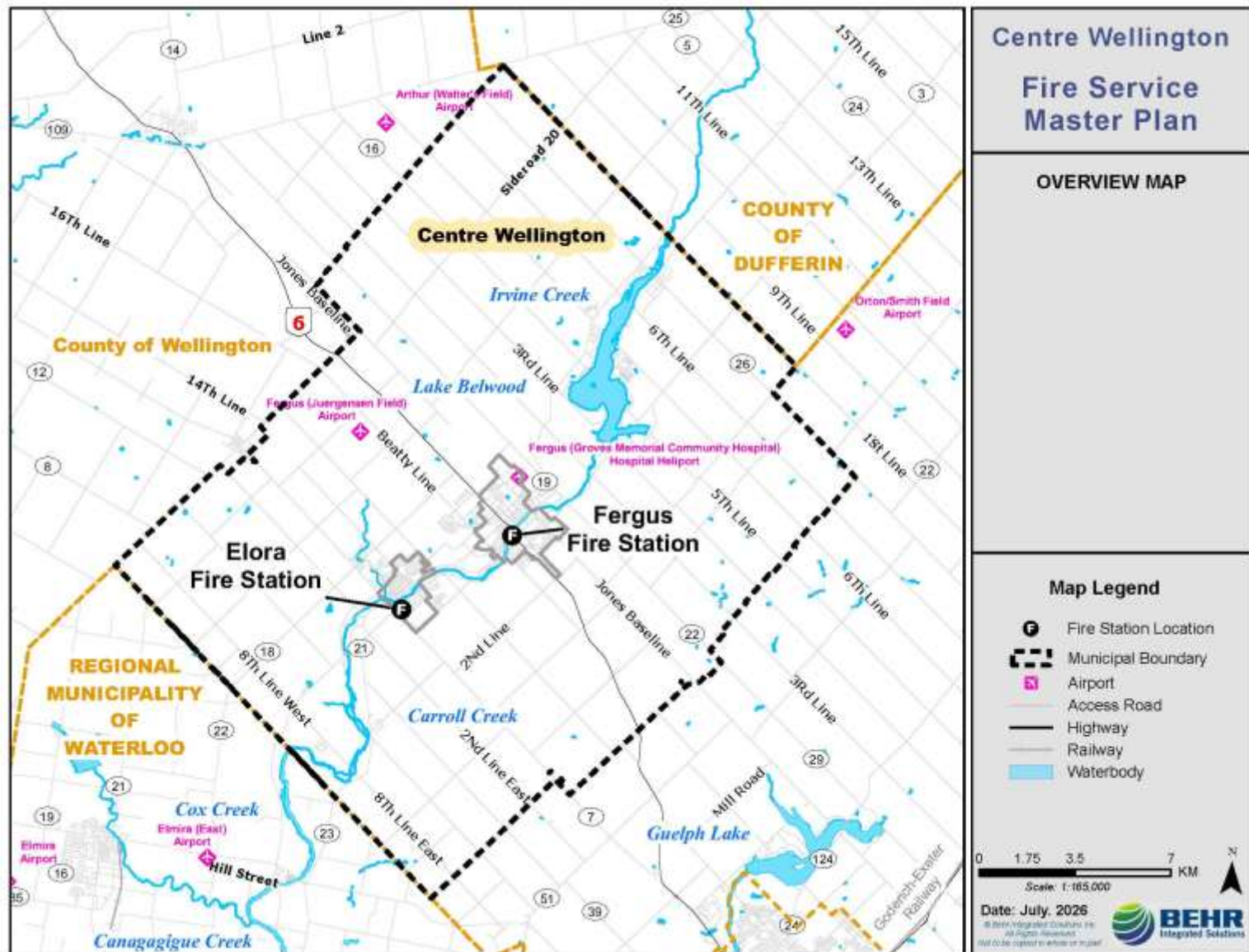
Located in the heart of Wellington County in Southwestern Ontario, the Township of Centre Wellington serves as a dynamic regional hub that combines small-town charm with a growing urban economy. Encompassing the historic communities of Fergus and Elora, as well as several rural settlements, Centre Wellington spans approximately 410 km² along the scenic Grand River. Its strategic location just north of the Greater Golden Horseshoe and proximity to major transportation corridors, including Highways 6, 7, and 401, provides convenient access to regional centres such as Guelph, Kitchener-Waterloo, and the Greater Toronto Area.

Home to a population of approximately 35,000 residents, Centre Wellington is one of the fastest-growing communities in Wellington County, with steady population and employment expansion anticipated through 2051. Centre Wellington's appeal is driven by its exceptional quality of life, strong community identity, and balance between urban amenities and rural landscapes. Residential development in both Fergus and Elora continues to attract families, professionals, and retirees, while the preservation of agricultural lands and open spaces sustains Centre Wellington's rural character.

Centre Wellington's economy is diverse and resilient, anchored by sectors such as advanced manufacturing, agriculture, tourism, and health care. The community also benefits from a strong entrepreneurial base and proximity to post-secondary institutions including the University of Guelph and Conestoga College. Major employers such as Groves Memorial Community Hospital and local manufacturing firms support a stable employment environment, while Centre Wellington's vibrant downtowns and tourism assets, highlighted by the Elora Gorge, Elora Mill, and Grand River Raceway, draw visitors from across Ontario and beyond.

Surrounded by the municipalities of Guelph-Eramosa, Mapleton, Wellington North, and Woolwich, Centre Wellington functions as a complete community offering regional services, shopping, education, and recreation to neighbouring rural areas. Centre Wellington is recognized for its heritage conservation, cultural festivals, and extensive parks and trails network, which together reinforce its reputation as a desirable place to live, work, and visit. As growth continues, Centre Wellington remains committed to sustainable development and strategic infrastructure investment that preserves its natural and cultural assets while supporting its role as the primary urban centre within Wellington County.

Map 1:
Township of
Centre
Wellington
Overview Map



2.2 Economic Indicators

Centre Wellington's economy is diverse, resilient, and reflective of its balanced mix of rural, small-town, and urban characteristics. As part of Wellington County and the broader Guelph–Kitchener–Waterloo economic corridor, Centre Wellington benefits from its proximity to major urban centres while maintaining a strong local employment base. With a population of approximately 35,000 residents, Centre Wellington serves as both a regional employment hub and a desirable residential community for those working in neighbouring municipalities.

Centre Wellington's economic structure is not dependent on a single industry or major employer, offering stability against sector-specific downturns. According to the 2021 Census, the largest employment sectors include Manufacturing (15.5%), Health Care and Social Assistance (11.0%), Retail Trade (9.7%), Educational Services (9.6%), and Construction (8.8%). Together, these sectors account for more than half of all local jobs and provide a well-rounded foundation for economic resilience.

While manufacturing and construction involve moderate to higher levels of fire risk due to material storage, mechanical operations, and equipment use, the service-oriented sectors, such as education, retail, and health care, are generally considered low to moderate risk from a fire protection standpoint. Centre Wellington's economy is anchored by a blend of public- and private-sector employers. Major public-sector employers include Groves Memorial Community Hospital, the Upper Grand District School Board, and Centre Wellington itself.

The private sector includes a broad range of small and medium-sized businesses engaged in manufacturing, agriculture and agri-food, construction, professional services, retail, hospitality, and tourism, alongside several larger employers, including Jefferson Elora Corporation, Nexans Canada, Polycorp Ltd., and Elements Casino Grand River.

Centre Wellington's tourism economy, supported by its historic downtowns, cultural assets, and natural attractions along the Grand River, also plays an important role in supporting accommodations, restaurants, retail businesses, and visitor services throughout Fergus and Elora.

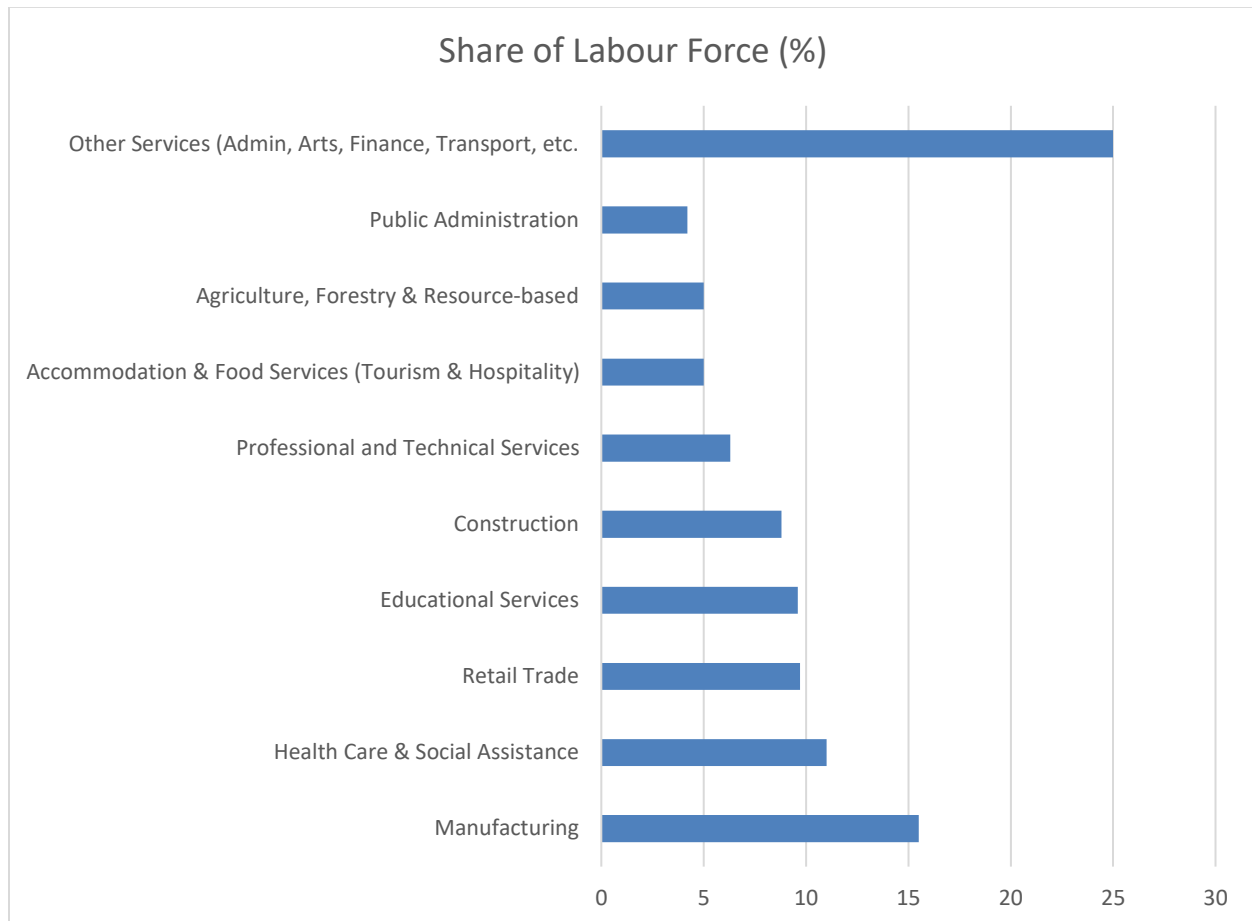
Overall, Centre Wellington's diverse economic base, coupled with ongoing residential and commercial growth, contributes to a stable and sustainable local economy. Continued attention to fire safety education, inspections, and business continuity planning will help mitigate risks to both employers and the broader community, ensuring long-term economic resilience. Centre Wellington's major employers are summarized in Table 3.

Table 3: Centre Wellington's Major Employers (From CRA)

Company	Employee Size	Group	Sector
Jefferson Elora Corp.	400	F	Manufacturing
Wellington Terrace	280	B	Health Care
Groves Memorial Hospital	276	B	Health Care
Twp. of Centre Wellington	240	A/D	Government
Nexans Canada Inc.	215	F	Manufacturing
Zehrs Markets - Fergus	186	E	Retail
Polycorp Ltd	160	F	Manufacturing
RR Donnelly	140	D	Business Forms Printing
A.O. Smith	125	F	Warehousing
Centre Wellington District High School	120	A	Education
Grand River Raceway	110	A	Equestrian/Spectator Sport
OLG Slots	110	A	Casino
Elora Mill Hotel & Spa	100	A	Hotel
Caressant Care	95	B	Health Care
Canadian Tire	80	E	Mercantile
MacDonalds	87	E	Mercantile
Hunter Amenities International Ltd.	77	F	Manufacturing
FreshCo	63	E	Mercantile
Gund Co. Canada	60	F	Manufacturing
Belwood Lodge & Camp	60	A	Recreational Camp

Note: The economic sectors that contribute to the economic base of Centre Wellington are summarized in Figure 3.

Figure 3: Economic Sectors (2021)



Data Source: Statistics Canada, 2021 Census

2.3 Population and Growth Projections

2.3.1 Population Growth

Table 4: Population growth (2016-2021)²

2021	2016	% Change
31,093	28,191	10.3%

Centre Wellington experienced a moderate population increase of about 10.3% between the 2016 and 2021 censuses, significantly outperforming the Ontario provincial growth rate of 5.8% over the same period.

2.3.2 Average & Median Age

Table 5: Average and Median Age 2021³

	Total	Male	Female
Average Age	45.2	44	46.4
Median Age	46.0	45	47

Centre Wellington's median and average ages are higher than younger urban centres, reflecting a relatively older community profile.

2.3.3 Population Distribution

Table 6: Population Distribution 2021⁴

Age Range	Total	Male	Female
0 to 14 Years	31,980	16,375	15,600
15 to 64 Years	87,770	43,655	44,120
65+ Years	13,225	6,045	7,185

²<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?DGUIDlist=2021A00053524009&GENDERlist=1%2C2%2C3&Lang=E&STATISTIClist=1>

³<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?DGUIDlist=2021A00053524009&GENDERlist=1%2C2%2C3&Lang=E&STATISTIClist=1>

⁴<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?DGUIDlist=2021A00053524009&GENDERlist=1%2C2%2C3&Lang=E&STATISTIClist=1>

2.3.4 Age Distribution in Percentages

Table 7: Age distribution percentage 2021⁵

Age Range	Total	Male	Female
0 to 14 Years	17.2%	18.4	16
15 to 64 Years	60.5%	60.8	60.2
65+ Years	22.3%	20.8	23.8

Compared to the provincial average, Centre Wellington has a higher proportion of older adults, with seniors forming over one-fifth of the population, a factor that can influence service needs such as healthcare demand and emergency response patterns.

2.4 Community Planning and Development

The municipality's land-use planning framework is established through its Official Plan and complementary secondary planning documents, which collectively manage the form, function, and direction of growth to the 2051 planning horizon. These plans align with the Regional Official Plan to ensure coordinated development across housing, employment, transportation, and natural heritage systems. Together, they provide the foundation for sustainable community development, supporting compact urban form, economic diversity, and environmental resilience.

2.4.1 Overview of Urban Growth Strategy

Centre Wellington is experiencing steady, policy-driven growth shaped by provincial growth management requirements, Wellington County's Municipal Comprehensive Review (MCR), and Centre Wellington's Official Plan. Growth is strategically directed to the primary urban settlement areas of Fergus and Elora-Salem, where full municipal water and wastewater services exist or are planned. Large portions of Centre Wellington's rural area are protected for agricultural use, natural heritage, and environmental functions, and are not intended for significant urban development.

⁵<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/details/page.cfm?DGUIDlist=2021A00053524009&GENDERlist=1%2C2%2C3&Lang=E&STATISTIClist=1>

Centre Wellington's growth strategy emphasizes a balanced approach combining modest intensification within existing built-up areas and planned greenfield expansion through urban boundary adjustments identified under County Official Plan Amendment 126 (OPA 126). This approach supports efficient infrastructure investment, protects prime agricultural lands, and ensures growth is accommodated in a manner consistent with long-term servicing, transportation, and emergency service capacity. Growth projections extend to the 2051 planning horizon, aligning with provincial policy and County allocations.

Overall, Centre Wellington is expected to transition from a historically low-density community to a more complete, compact urban form, with increased housing diversity, employment lands, and community infrastructure concentrated within designated settlement areas.

2.4.2 Secondary Plan and Urban Expansion Areas

Future growth in Centre Wellington will be accommodated through a combination of approved secondary plans, emerging planning areas, and urban boundary expansions identified through the County MCR.

While Centre Wellington does not have the same scale of multiple large secondary plans as larger urban municipalities, its growth areas are clearly defined and strategically sequenced. Growth phasing is expected to prioritize areas that can be serviced efficiently, ensuring that development proceeds in an orderly manner and aligns with infrastructure, transportation, and emergency response planning.

Table 8: Growth Areas

Growth Area	Status	Target Horizon	Estimated Growth	Key Milestones	Estimated Completion
South Fergus Urban Expansion	Under County OP approval (OPA 126)	2031–2051	~7,000–9,000 residents / local employment	Secondary planning, servicing strategies, subdivision approvals	Mid-2030s to 2040s
Fergus Built-Up Area Intensification	Ongoing	2025–2041	Incremental residential and mixed-use growth	Infill redevelopment, zoning updates	Continuous
Elora–Salem Urban Area	Established with limited expansion	2031+	~2,000–3,000 residents	Local OP conformity, servicing capacity	Post-2031
Employment Lands (Fergus)	Designated	Long-term	Light industrial and commercial jobs	Site servicing, market absorption	Ongoing

2.4.3 Key Strategic Directions (Based on Centre Wellington’s Official Plan)

Complete and Compact Communities

Growth is directed toward established settlement areas, strategic growth nodes, and intensification corridors to optimize the use of existing infrastructure, promote mixed-use development, and reduce outward expansion into agricultural or environmentally sensitive lands.

Housing Diversity and Affordability

Centre Wellington is committed to expanding its housing supply through a mix of low, medium, and high-density residential options, including gentle intensification and purpose-built rental housing. This approach aligns with the municipality’s housing pledge and the region’s population and dwelling unit allocations to 2051.

Land-Use Compatibility and Urban Design

Policies emphasize a high standard of urban design and appropriate transition between residential, commercial, and employment uses. Enhanced public realm design and active street frontages are encouraged in downtowns, nodes, and along transit corridors.

Natural Heritage and Environmental Systems

The municipality prioritizes the conservation, enhancement, and connectivity of natural heritage features and watershed systems. Development is guided by low-impact design principles and climate adaptation measures to mitigate flood risk and maintain ecosystem health.

Cultural and Built Heritage

Heritage resources are identified and protected through adaptive re-use, design integration, and heritage conservation policies that preserve community character while supporting appropriate redevelopment.

Employment and Economic Lands

Employment areas are protected and strategically expanded to support a balanced tax base and local job growth. Future employment nodes will accommodate a mix of industrial, logistics, and office-based uses consistent with regional economic objectives.

Integrated Mobility and Transportation

Land-use planning is supported by multimodal transportation strategies, emphasizing complete streets, active transportation, and transit-supportive densities near major corridors and transit stations.

Public Engagement And Implementation

The municipality continues to update its Official Plan through periodic reviews and targeted amendments to maintain conformity with regional and provincial policy. Public and stakeholder consultation is a Centre component of the review process.

2.4.4 Secondary and Area Planning**Downtown and Intensification Areas**

The downtown area is designated as a primary mixed-use node with policies promoting mid-rise and high-rise development, active transportation infrastructure, and public realm enhancements to reinforce its role as a civic and cultural hub.

Employment Area Secondary Plans

Designated employment areas are being updated through detailed secondary plans to accommodate prestige industrial, logistics, and advanced manufacturing uses while ensuring compatibility with adjacent land uses.

Greenfield Community Areas

New residential communities are planned through comprehensive secondary plans that integrate schools, parks, trails, and community facilities. Servicing availability, particularly water, wastewater, and electrical infrastructure, will continue to influence the phasing and pace of greenfield development.

2.4.5 Building Types and Associated Risks

As Centre Wellington continues to grow, the evolving building stock introduces new and increasingly complex fire and emergency service risks. While low-density residential development will remain prevalent, growth areas are expected to include higher-density housing forms, mixed-use buildings, institutional uses, and employment-related structures.

These changes necessitate enhanced pre-incident planning, training, apparatus planning, and community risk reduction efforts to maintain effective emergency response outcomes.

Table 9: Typical Building Types and Emergency Risk Considerations

Growth Area	Typical Building Types	Primary Risks	Special Considerations
South Fergus Expansion	Low- to mid-density residential, schools, neighbourhood commercial	Residential fires, increased medical calls, traffic incidents	Hydrant spacing, road connectivity, response time impacts
Fergus Intensification Areas	Townhouses, low-rise apartments, mixed-use buildings	Higher occupant loads, vertical fire spread	Access for aerial apparatus, fire separations
Elora-Salem	Low-density residential, tourism-related commercial, institutional	Seasonal population surges, wildfire interface risk	Water supply reliability, tourism event planning
Employment Areas	Light industrial, warehousing, service commercial	Industrial fires, hazardous materials, vehicle incidents	Pre-incident planning, mutual aid coordination

Table 10: Population and Private Dwellings Change (2001 to 2021) (Statistics Canada Census)

Year	Population	% Change	Total Private Dwellings	% Change
2001	24,260	—	8,500	—
2006	26,049	7.4%	9,300	9.4%
2011	26,693	2.5%	10,600	14.0%
2016	28,191	5.6%	11,800	11.3%
2021	31,093	10.3%	12,900	9.3%

This steady growth pattern differs from the rapid expansion seen in larger urban centers but presents cumulative impacts on service demand, including emergency response, infrastructure maintenance, and community facilities.

Table 11: Township of Centre Wellington – Long-Range Population Forecast

Year	Population	% Change	Total Private Dwellings	% Change
2021	31,093	—	12,900	—
2026	34,500	11.3%	14,500	12.4%
2031	38,500	11.6%	16,300	12.4%
2036	42,500	10.4%	18,000	10.4%
2041	46,500	9.4%	19,800	10.0%
2051	51,000	9.7%	22,500	13.6%

While Centre Wellington’s growth rate is moderate compared to rapidly urbanizing municipalities, the incremental increase in population, housing units, and employment will place sustained pressure on emergency services. Proactive planning is required to ensure fire station coverage, staffing models, apparatus deployment, and response standards remain aligned with Centre Wellington’s evolving risk profile.

2.4.6 Strategic Alignment

Centre Wellington’s Community Strategic Plan (2023–2026) reinforces these planning objectives by emphasizing responsible growth management, mobility choice, climate resilience, and local economic vitality. Progress is monitored through annual reporting and ongoing coordination with regional partners to ensure that land-use planning continues to support the municipality’s broader vision for a complete and sustainable community.

2.5 Community Risk Assessment

Risk can be managed by either accepting the risk, insuring against damages, or investing in risk prevention and mitigation strategies. Local governments typically employ a combination of these approaches. In general, the risks and management strategies of a community are relative to a municipality's financial capacity, geography, population demographics, fixed assets, critical infrastructure, and overall service delivery.

Conducting a risk assessment is the first step towards establishing a strategic plan to manage community risks based upon local fire department response capabilities. The results are used to assist the municipality in making informed decisions regarding the allocation of limited fire prevention and fire response resources.

Image 2: Risk Management Cycle Process



CRA's are mandated under Ontario Regulation 378/18 and serve as a foundational tool for fire departments to identify, analyze, and prioritize public safety risks. These assessments enable informed decision-making regarding the types and levels of fire protection services provided, ensuring alignment with local risk profiles and community needs.

Specifically, the following nine (9) profiles reviewed:

- | | |
|------------------------------------|--|
| 1. Geographic profile | 6. Public safety response profile |
| 2. Building stock profile | 7. Community services profile |
| 3. Critical infrastructure profile | 8. Economic profile |
| 4. Demographic profile | 9. Past loss and event history profile |
| 5. Hazard profile | |

The information and data gathered to address each of the profiles will assist in determining and prioritizing risks to public safety in the community and determining the fire protection services to be provided by municipalities to address those risks.

CWFR has utilized seven of nine profiles. Public Safety Response and Community Services profiles were not included in the 2023 CRA. These profiles should be included in future revisions of the CRA. Risks were identified in the 2023 CRA using historical response data, hazard risk vulnerability assessments to develop a risk profile for the community. The evaluation of fire and rescue risks considers both the probability and consequence of emergency event types.

The probability of an event is quantified by analyzing historical, current, and projected data. The consequence of the event type or risk is based on an informed assessment of the potential impact on a community should the event occur.

The CRA must consider the following:

- The format is approved by the Ontario Fire Marshal by reviewing the nine mandatory profiles.
- The Technical Guideline TG-02-2019: Community Risk Assessment Guideline will be used as guidance in formatting the risk assessment.
- Utilization of the charts as provided in the technical guideline or as a minimum, all the points outlined in the guideline.
- The CRA document will be made readily available if the Ontario Fire Marshal conducts a review of the municipality under the FPPA(Part III, 9. (1)(a)).

2.5.1 Factors Contributing to Risk

As mentioned, every municipality has unique challenges and characteristics contributing to the overall risk profile of the community. Examples of community risks include:

- | | |
|---|---------------------------------|
| • Fire/rescue service model and response capacity | • Rate of development |
| • Population and demographics | • Transportation corridor types |
| • Population growth rate | • Typography |
| • Industry types | • Weather |
| • Economy | • Historical response data |

2.5.2 Risk Management

All communities require a process to identify and actively manage high-priority risks. The focus of the CRA is to identify and discuss specific risks and unique community characteristics that contribute to risk, typically managed through fire and life safety education, fire prevention and code enforcement, or fire department response. Image 2 describes the risk management cycle.

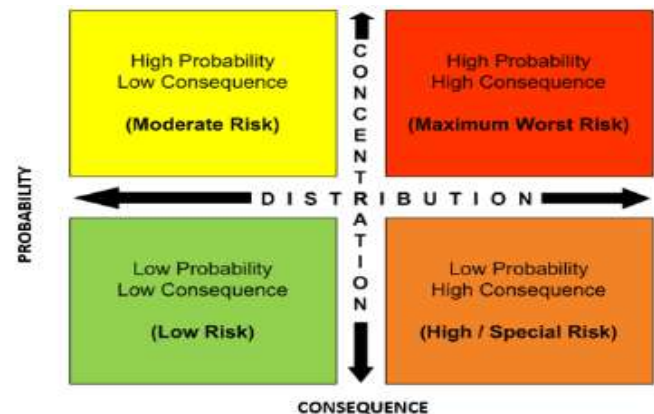
The first step in the risk management process includes the assessment of the probability and consequence of specific risks. The next step is to identify key risks, which are then evaluated against the current prevention or response strategy to identify potential service gaps. The third step in this cycle includes adjusting fire prevention and response service levels to manage the resources necessary to pre-emptively mitigate or respond as determined by approved service levels. The last step in the cycle is to measure, and report results to key policymakers. This cycle should be repeated periodically to address changes in the risk profile and make thoughtful and informed decisions regarding strategies to manage any changes.

In Canada, local governments are charged with delivering fire and rescue response services for their citizens. Elected officials are the 'Authority Having Jurisdiction' (AHJ), who determine the level of service required to manage fire and rescue risks to an acceptable level. The challenge for elected officials lies in determining the best balance between investing in adequate emergency services and accepting a certain level of risk.

2.5.3 Risk Evaluation vs. Service Levels

The evaluation of fire or rescue risks considers both the probability and consequence of emergency event types. The probability of an event is quantified by analyzing historical, current, and projected data. The consequence of the event type or risk is based on an informed assessment of the potential impact on a community should the event occur.

Figure 4: Risk Evaluation Matrix



Probability – The probability of a risk, or event type, is the determined likelihood that an event will occur within a given time. The probability is quantified by considering the frequency of event type data.

An event that occurs daily is highly probable and, therefore, higher risk. An event that occurs only once in a century is assessed as a lower risk as it may never occur.

Consequence – There are three types of consequences when considering fire/rescue response requirements:

- **Life safety impact:** Life safety risk for victims and responding emergency personnel are the highest order of consequence when considering the risk associated with specific event types.

Events with a high likelihood of injury/death occurring and even a moderate probability of occurring require close examination to ensure adequate resources required to safely rescue or protect the lives of occupants from life-threatening are accessible to respond. Incidents that risk life safety include motor vehicle accidents, extreme weather, flooding, fire, release of hazardous materials, medical emergencies, and all types of rescue situations.

- **Economic impact:** Events with high negative impacts on the local economy are devastating to a municipality. For example, recovering from the fire loss of a large employer's property or key public infrastructure in smaller municipalities can be difficult. Therefore, providing adequate response capacity necessary to manage these types of events must be considered.
- **Environmental impact:** Negative environmental consequences resulting in irreversible or long-term damage to the environment must also be considered in the analysis. Events with risk of negatively impacting water, soil and air quality are also likely to impact life safety as well as the economy and therefore must be considered.

Social and cultural impacts, as experienced with the loss of historic buildings, recreation facilities or non-critical community infrastructure, are considered but do not typically affect how fire department resources are deployed. As discussed, the risk evaluation process is used to identify high-priority risks and the appropriate risk management strategy.

Where a fire department response is determined to be the most appropriate management strategy, the appropriate services and service levels should be established to manage the risks safely. Elected officials are responsible for determining which services are delivered and setting service level goals. The service level goals determine the necessary concentration and distribution of either fire prevention or emergency response resources to manage the identified risks.

Distribution refers to the number of fixed resources, such as fire stations, and where they are placed throughout the community. Distribution varies depending on factors related to the number of incidents and types of calls for service in the defined area.

Concentration refers to the assembling of resources, such as a specialized workforce and equipment, needed to effectively respond to an incident in each area within the community. It must also identify the availability of additional response resources, including the reliability and time of arrival of a secondary responding unit.

The risk evaluation matrix can be divided into four levels of risk based on the probability and consequence, each with specific implications for the concentration and distribution of resources. It is provided as a reference and context to quantify fire response risks in any municipality. Different quadrants of the risk matrix need different response requirements, which offers examples of categories of types of structural fires and general hazards commonly found in communities. As described above, these risks are categorized by considering the probability and consequence of the fire or hazard. This qualitative analysis is based on experience and expertise and should be completed with input from fire, building and emergency management officials. Every community will have a unique risk inventory contributing to its risk profile.

2.5.4 Assigning Risk Level

Once probability and consequence are determined, the level of risk is calculated by multiplying the numerical values for probability and consequence. The relationship between probability and consequence as it pertains to risk levels can be illustrated in a risk matrix (below). In a risk matrix, probability and consequence are defined on separate scales with varying descriptors providing direction on how to assign the probability and consequence of an event.

Probability is the likelihood of the hazard occurring and it is often ranked on a five-point scale.

Table 12: Risk Level Probabilities

Description	Level	Definition
Rare	1	- May occur in exceptional circumstances - No Incidents in the past 15 year
Unlikely	2	- Could occur at some time, especially if circumstances change - 5 to 15 years since last incident
Possible	3	- Might occur under current circumstances - 1 incident in the past 5 years
Likely	15	- Will probably occur at some time under current circumstances - Multiple or reoccurring incidents in the past 5 years
Almost Certain	30	- Expected to occur in most circumstances unless circumstances change - Multiple or reoccurring incidents in the past year

Consequence criteria included within an assessment is not always as detailed as it is presented within the matrix but considering the impact of a risk across multiple areas of Centre Wellington is a best practice approach.

Table 13: Fire Risk Consequence levels

Description	Level	Definition
Insignificant	1	- Negligible consequences with minimal injuries or property damage - Little or no disruption to occupants, businesses, or surrounding community.
Minor	10	- Minor injuries, localized property damage, or short-term disruption - Impacts generally confined to single property and can be managed using normal fire department resources - Recovery is expected to be relatively quick
Moderate	100	- Potential for serious injury, significant property damage, temporary displacement of persons, or disruption of a business or community service - Additional fire department resources or mutual aid may be required, and environmental impacts are manageable but may require coordinated recovery activities
Major	1,000	- An event that could result in fatality, multiple serious injuries, extensive property loss, or significant disruption to critical infrastructure, or community activities. - May require substantial mutual aid, specialized resources, or extended, coordinated multi-agency response. - Recovery may take several months or longer
Catastrophic	10,000	- Potential for multiple fatalities, mass casualties, destruction of multiple properties or critical infrastructure, widespread evacuation or displacement of persons, and prolonged disruption to community or local economy. - Exceeds local response capacity and requires significant regional, provincial, or federal assistance. - Long-term environmental, social, or economic impacts likely to occur

A risk assessment matrix is the basis for measuring potential risks based on two intersecting factors: the likelihood (or probability) of a security risk-based event occurring, and the consequence (or impact) of its impact to an entity if it did. Image 3 shows the risk matrix utilized in the updated CRA. The purpose of assigning a risk level is to assist in the prioritization of the range of risks that are identified in the CRA. Where possible, quantitative data was used to inform the risk assignment as described in the rationale in the table below.

Image 3: Risk Assessment Matrix

		CONSEQUENCES				
		What is the Maximum Reasonable Consequence				
		Insignificant	Minor	Moderate	Major	Catastrophic
LIKELIHOOD Rating	Almost Certain	Medium	Medium	High	Extreme	Extreme
	Likely	Low	Medium	Medium	High	Extreme
	Possible	Low	Low	Medium	High	High
	Unlikely	Low	Low	Low	Medium	High
	Rare	Low	Low	Low	Low	Medium

It is important to recognize that with the availability of new or updated data, the probability levels could change or be refined. It should also be recognized that, as identified in OFM T.G.-02-2019, *“professional judgment based on experience should also be exercised in combination with historical information to estimate probability levels.”* Similarly, OFM T.G.-02-2019 acknowledges the role of professional judgment and reviews of past occurrences in determining consequence levels.

The rationale provided for both probability and consequence consider information from the CRA’s nine profiles, as OFM T.G.-02-2019 supports consideration of the profiles together to inform decision-making about the provision of fire protection services in the specific municipality/community.

2.5.5 Structural Fire Risk Analysis

It is critical to use careful planning and consider alternative solutions when managing risk because the ability to increase the distribution of resources and add capacity is always limited. Spending substantial amounts of time and resources to manage a risk with low frequency/low consequences will have limited impact and make a minimal improvement to community safety.

When planning for fire department response, the planning process includes a detailed review of the frequency of events and their potential consequence(s), to ensure prevention and response efforts maximize life safety and minimize negative consequences for high-priority events. The Office of the Fire Marshal (OFM) has developed guidelines to assist municipalities with conducting community risk assessments to inform decisions about the provision of fire protection services, in accordance with Ontario Regulation 378/18 and the Fire Protection Act 1997 (FPPA).

As referenced in O. Reg. 378/18, the building stock profile assessment includes an analysis of the types and uses of building stock in a municipality. Important considerations include the number of buildings of each type, the number of buildings of each use and any building related risks known to the fire department. There is potential fire risks associated with different types and uses of buildings given the presence or absence of fire safety systems and equipment at the time of construction and maintenance thereafter.

2.6 Ontario Building Code Occupancy Classifications: Building Stock Profile

The Ontario Building Code (OBC) categorizes buildings by their major occupancy classifications. Each classification has definitions that distinguish it from other occupancy classifications.

Using the OBC as the source for defining the occupancy classifications provides a recognized definition and baseline for developing the community risk profile. The OBC major classification groups and divisions are presented in the following table.

Table 14: OBC Major Occupancy Classification

Group	Division	Description
A	1	Assembly occupancies intended for the production and viewing of the performing arts
A	2	Assembly occupancies not elsewhere classified in Group A
A	3	Assembly occupancies of the arena type
A	4	Assembly occupancies in which occupants gather in the open air
B	1	Detention occupancies
B	2	Care and treatment occupancies
B	3	Care occupancies
C	--	Residential occupancies
D	--	Business and personal services occupancies
E	--	Mercantile occupancies
F	1	High hazard industrial occupancies
F	2	Medium hazard industrial occupancies
F	3	Low hazard industrial occupancies

2.7 OFM Fire Risk Sub-Model Occupancy Classifications

The Fire Risk Sub-Model developed by the OFM utilizes the major building occupancy classifications (i.e., Group A, B, C, D, E and F) but does not use the detailed division classifications as included in the OBC. This strategy provides the opportunity for further analysis of a specific occupancy group. Subject to any site-specific hazards or concerns, occupancies within a group can be assessed individually and included where required within the scope of the broader community risk assessment.

Analyzing structural fire risk begins by developing an exhaustive inventory of existing building stock and monitoring changes to the inventory. This process should include staff from the planning and development departments, as well as building and fire prevention officers. This provides the fire service with an opportunity to evaluate the Ontario Fire Code requirements in the design, construction, and operation phases of the building.

The building inventory database becomes the foundation of assessing fire risk in the community. This inventory provides a count of all property types, including single and multi-family residential, assembly (including schools, churches, hospitals, personal care homes, etc.), mercantile, commercial, and industrial properties.

Once the inventory is assembled, the fire department response capability is measured against the identified property risks. This simple identification of the high numbers of specific high-risk property types may identify gaps in the current response model, resulting in the reorganization or addition of fire department resources. As building stocks increase, fire departments should continue to monitor response capability and capacity to ensure service levels are maintained.

2.8 Centre Wellington's Existing Major Building Classification Summary

An analysis of Centre Wellington's major building occupancy types was conducted using data provided by the Municipal Property Assessment Corporation (MPAC), and information provided by CWFR. Table 15 summarizes Centre Wellington's existing major building occupancy classifications.

The majority of Centre Wellington's existing property stock excluding occupancies "Not Classified in the OBC" is comprised of Group C - Residential Occupancies (94.99%), representing 11,970 residential units. The second largest occupancy type within Centre Wellington is Group E – Mercantile Occupancies, accounting for 1.99 % of Centre Wellington's property stock. Occupancies "Not Classified in the OBC" represent 45.41% of all occupancy classification.

Consistent with most other municipalities in Canada, Group C - Residential Occupancies represent the most prominent type of building occupancy type in Centre Wellington at 51.85%. Standard incident reporting from the OFM⁶ indicates that 66% of structure fires loss over the five-year period from January 1, 2020, to December 31, 2024, occurred within Group C - Residential Occupancies.

⁶ Centre Wellington SIR- Municipal Fires: Overview Property Class, Injuries, Cause, Ignition Source (2020-2024)

Table 15: Township of Centre Wellington Total Existing Property Stock⁷

OBC Occupancy Classification	OFM Fire Risk Sub-Model Major Building Classifications	Number of Occupancies	Percentage of Occupancies
Group A	Assembly Occupancies	145	.63%
Group B	Care or Detention Occupancies	6	.03%
Group C	Residential Occupancies - Total	11,970	51.85%
	<i>Single-detached</i>	8,700	37.69%
	<i>Semi-detached</i>	570	2.47%
	<i>Row</i>	740	3.21%
	<i>Apartment < 5 Storeys</i>	1750	7.58 %
	<i>Apartment > 5 Storeys</i>	110	.48%
	<i>Movable Dwellings</i>	100	.43%
Group D	Business & Personal Services	411	1.78%
Group E	Mercantile	470	1.99%
Group F (all divisions)	Industrial Occupancies	69	.30%
Other	Not classified in OBC- Farm	10,484	45.41%
Other	Not classified in OBC - Government		0.00%
Total		23,555	100.00%

2.9 Potential High-Fire Risk Occupancies

Potential high fire risk occupancy is another factor for consideration within Centre Wellington's building stock. High fire risk can be linked to a combination of factors such as building density (exposures), building age, and construction. Fuel load typically refers to the amount and nature of combustible content and materials within a building. This can include combustible contents, interior finishes as well as structural materials.

Combustible content tends to create the greatest potential fire loss risk.

Higher fuel loads result in increased fire loss risk due to increased opportunity for ignition and increased fire severity. In many communities, large amounts of fuel load can be contained within a single occupancy, such as a building supply business, within a large multi-unit residential building, or within a historic downtown core.

⁷ Difference between MPAC and Census occupancy totals is related to MPAC classifications vs Census Groupings

2.9.1 Fuel Load Concerns

While the Centre Wellington's building stock is overwhelmingly residential in nature, a smaller but important proportion of properties fall within industrial (0.30 %), assembly (.63%), mercantile (1.99%), and business and personal services (1.78%). Although there are a smaller number of these occupancies, they typically represent higher fuel load concerns, higher number of ignition sources, and higher occupant densities.

Examples of such occupancies may include big-box retail stores, supermarkets, shopping centres, warehouses and distribution centres, manufacturing plants, arenas, theatres, restaurants, and places of worship. Although these occupancies account for only 4.7% of Centre Wellington's total property stock, their risk potential is disproportionately high compared to their prevalence in the community.

CWFR should undertake a more detailed review to identify and catalogue specific high fuel load buildings within these categories. This inventory should be integrated into the CRA process, supporting pre-incident planning, targeted inspections, and risk-reduction strategies. Proactive identification of these occupancies will allow the fire service to better prioritize inspection resources, develop tactical response plans, and reduce the community's overall vulnerability to large-loss fire events.

2.10 Occupancies with Potential High Fire Life-Safety Risk

Fire risk does not affect all people equally. Those who are at an increased risk of fire injury or fatality are known as vulnerable individuals. In the event of a fire, these individuals may be unable to self-evacuate and/or require assistance in their evacuation efforts.

Identifying the location and number of vulnerable individuals or occupancies within the community provides insight into the magnitude of this demographic within a community.

2.10.1 Registered Vulnerable Occupancies

From an occupancy perspective, vulnerable occupancies contain vulnerable individuals who may require assistance to evacuate in the event of an emergency due to cognitive or physical limitations, representing a potential high-life safety risk. As part of its registry of vulnerable occupancies, the OFM defines a vulnerable occupancy as any care occupancy, care and treatment occupancy, or retirement home regulated under the Retirement Homes Act.

These occupancies house individuals such as seniors or people requiring specialized care. It is important to note, however, that not all vulnerable individuals live in vulnerable occupancies; for example, some seniors who are vulnerable due to physical limitations can live on their own or in subsidized housing, making them a key demographic to reach.

Ontario Regulation 150/13: Fire Code identifies vulnerable occupancies as care, care and treatment and retirement homes. This includes hospitals, certain group homes, seniors' residences, and long-term care facilities. The regulation requires fire services to perform annual inspections, approve and witness fire drill scenarios and file certain information regarding the occupancy with the Fire Marshal's office. A list of the 6 vulnerable occupancies in Centre Wellington is presented in Table 16. These include care occupancies, care and treatment occupancies and retirement homes. Centre Wellington also has 12 schools and 4 daycare centers that may contain vulnerable occupants requiring specialized assistance to evacuate.

Table 16: Vulnerable Occupancies – Care and Long-Term Care Facilities

Property Name	Occupancy Type	Address	Total Beds
Caressant Care	Care	450 Queen Street E., Fergus	129
Highland Manor Ret/Nurse	Care	110 Belsyde Ave. E., Fergus	120
Wellington Terrace	Care	474 Wellington Cr. Rd 18, Fergus	176
Heritage River Retirement	Care	25 Wellington Drive, Elora	114
Kerry's Place – Home or Autistic	Care	6871 Fifth Line, Fergus	10
Groves Memorial Hospital	Care	131 Frederick Campbell St. Fergus	44

Table 17: Vulnerable Occupancies – Schools and Daycares

Property Name	Occupancy Type	Address	Total Students
Ponsonby Public School	Assembly	5923 Wellington Rd 7, Guelph	163
Elora Public School	Assembly	288 Mill St E, Elora	496
James McQueen Public School	Assembly	365 St. George Street West, Fergus	250
St. Mary's Catholic School	Assembly	251 Irvine Street, Elora	280
St. Joseph's Catholic School	Assembly	150 Strathallan Street, Fergus	400
Maranatha Christian School	Assembly	8037 Wellington 19, Fergus	120
Victoria Terrace Public School	Assembly	500 Victoria Terrace, Fergus	200
John Black Public School	Assembly	150 Lamond Street, Fergus	371
J.D. Hograth School	Assembly	360 Belsyde Avenue East, Fergus	610
Little Angels Development Fergus	Assembly	10 Sideroad 18, Fergus	40
J.D. Hograth Before & After School	Assembly	360 Belsyde Avenue East, Fergus	43
Elora Public Before & After School	Assembly	288 Mill Street East, Elora	42
Centre Wellington District H.S.	Assembly	905 Scotland Street South, Fergus	1350
Emmanuel Christian H.S.	Assembly	680 Tower Street South, Fergus	180
Elora Co-Operative Pre-School Inc	Assembly	75 Geddes Street, Elora	27
Salem Public School	Assembly	23 Woolwich Street East, Elora	280

2.11 Community Risk Analysis Overview

The CRA for Centre Wellington has identified a series of high-priority risks and key findings that require strategic planning and mitigation through the FMP. The FMP responds to these findings by providing Centre Wellington with a data-driven, risk-informed framework that supports proactive decision-making. Through clearly defined goals and strategic recommendations, the Plan guides improvements in resource deployment, public education, fire prevention, and operational readiness to ensure the fire service remains aligned with the community's evolving needs and risk profile.

One of the most significant challenges facing CWFR is the predominance of residential (Group C) occupancies, which comprise over 90% of building stock excluding “Not Classified by OBC – Farm). Residential Building stock accounts for the largest number of fires with 66% occurring in Group C, 10% in Group F, and 2% in Group B between 2020 and 2024. Contributing factors include a concerning rate of absent or malfunctioning smoke alarms and an aging housing stock, with over 16.5% of structures built prior to the implementation of modern building and fire codes.

Centre Wellington also faces elevated risk levels due to the Grand River, which runs through the urban areas of Fergus and Elora. The size and depth of this waterway creates a significant hazard, including the potential for recreational accidents, injuries, water rescues, emergency response events, and flooding. In addition, the Irvine River merges with the Grand River, and Centre Wellington contains three conservation areas that attract both residents and tourists for recreational activities such as camping, boating, and water sports. There are 84 bridges crossing these waterways, including 72 in rural areas and 12 within Fergus and Elora.

Centre Wellington is also serviced by one major highway and eight county roads. Highway 6, in particular, is a key transportation route and presents an increased risk of motor vehicle collisions and transportation-related incidents, including potential spills requiring hazardous materials (hazmat) response.

Additionally, the six vulnerable occupancies, and 12 schools and daycare centers, require close monitoring due to increased risk to life safety and challenges in evacuation. Heritage properties and high-rise developments also present unique fire suppression challenges due to their design, occupancy, and age.

Demographic trends further influence Centre Wellington’s risk profile. The 2023 CRA for Centre Wellington indicates a slightly higher proportion of seniors over the Provincial average (2.8% higher), and children under 14 (0.9% higher). Both are considered higher fire risk groups. Centre Wellington has also experienced an increase in residents whose principle language is not English. This warrants the production of public education messaging in multiple languages.

The development in the Derry Green Corporate Business Park and broader residential expansion has been a contributor to the increase in emergency call volume experienced in Centre Wellington in the past five years.

Centre Wellington's Hazard Identified Risk Assessment (HIRA) was updated in 2023. As a component of the risk assessment and risk analysis process, the top risks in Centre Wellington were identified. The HIRA assigned likelihood and consequence levels to a list of hazards based on the potential for impacts to people, property, and the environment.

As a result of this analysis, the top hazards in Centre Wellington include the following:

- Severe Weather
- Winter power failure
- Flood
- Transportation Incident
- Hazardous transportation incident
- Energy emergency
- Water emergency
- Human health emergency

In addition to the overall highest risks to the community, certain events pose an increased risk specific to firefighting. The risk to firefighting responders to the most hazardous events are identified below, as well as the most hazardous events they may encounter that pose a specific risk to them and their ability to respond.

2.12 Impacts of Hazards on Fire Protection Services

To better understand the risks of hazards as they pertain to fire protection services, the hazards have been assessed to identify possible impacts on fire protection services (excluding fire/explosion). Many of the potential impacts are not unique to a jurisdiction. The results of this review, as they pertain to the hazards in Centre Wellington, are presented in the following table.

Table 18: Impacts of Hazards on Fire Protection Services

Hazard	Possible Impact
Severe Weather	Overall Impact Sever Storms (wind, lightning, hail, heavy rain, tornado conditions) can damage homes and infrastructure, block roads, interrupt services, and cause injuries or evacuations. Fire Services Increased call volume for downed trees/powerlines, damaged structures, alarms, medical assists, rescues, and support to evacuations/shelters, Access issues and multiple simultaneous incidents are common
Winter Power Failure	Overall Impact Extended outages in cold weather can result in loss of heat, frozen pipes, reduced access to communications, and increased reliance on alternate heating sources. Vulnerable residents may require sheltering support. Fire Services Higher risk of residential fires from space heaters, fireplaces, and generators; increased carbon monoxide (CO) incidents; added demand for welfare checks, warming centres, and coordination with utilities and emergency management.
Flood	Overall Impact Flooding can damage homes, roads, bridges, and utilities, disrupt travel, and create health/sanitation concerns. River flooding can affect both residents and tourists in conservation/recreation areas. Fire Services Increased need for water rescues, evacuations, and public safety control (road closures, hazard zones). Response times may be affected if roads/bridges are impassable. Additional support may be required for pumping and emergency conditions.
Transportation Incident	Overall Impact Collisions and roadway incidents can cause injuries or fatalities, traffic disruptions, and secondary collisions, especially on major routes like Highway 6 and county roads. Fire Services Increased demand for extrication, medical support, traffic control assistance, fire suppression (vehicle fires), and scene stabilization. Longer incidents can tie up crews and apparatus.

Hazard	Possible Impact
Hazardous Transportation Incident	Overall Impact Spills or releases involving fuel, chemicals, or other dangerous goods can threaten public health, contaminate land/water, and require evacuations or shelter-in-place orders. Fire Services Requires specialized hazmat response: scene isolation, identification, containment, decontamination, air monitoring, and coordination with police/EMS/environmental agencies. Incidents may be prolonged and resource-intensive, with responder safety risks.
Energy Emergency	Overall Impact Disruptions to electricity, natural gas, or fuel supply can affect heating/cooling, communications, businesses, critical infrastructure, and residents' ability to remain safely housed. Fire Services Increased risk of fire and CO exposure from alternative heating and generators. Fire Services may be required to support emergency shelters, critical infrastructure checks, and standby operations during prolonged events.
Water Emergency	Overall Impact Includes watermain breaks, loss of potable water, contamination/boil-water advisories, and waterway emergencies. These can affect public health, business operations, and community services. Fire Services Reduced hydrant reliability and water supply affects firefighting operations and may require tanker shuttles or alternative water sources. Fire Services may also respond to water rescues and assist with public notifications and facility support.
Human Health Emergency	Overall Impact Includes outbreaks, extreme heat/cold impacts, mass casualty events, and public health crises affecting community wellbeing and healthcare capacity. Fire Services Increased medical assist calls, welfare checks, and operational strain due to staffing impacts, PPE requirements, decontamination procedures, and extended response demands. Fire Services may support logistics, shelters, and community reach.

2.13 Water Infrastructure

Water supply is a critical infrastructure that is an essential component for firefighting. Centre Wellington's water distribution system is owned and operated by the Centre Wellington Water Department and supported by the Upper Grand District Water System, under the management of Centre Wellington's Infrastructure Services Division. The system supplies treated water drawn primarily from a combination of groundwater wells located throughout Fergus and Elora, with multiple production wells, reservoirs, and booster stations ensuring service continuity and system pressure. Unlike many urban municipalities that draw surface water from large lakes, Centre Wellington's reliance on groundwater underscores the importance of source protection, aquifer management, and system redundancy to maintain service reliability.

Water for firefighting purposes is distributed through a municipal network of watermains and hydrants located primarily within the serviced settlement areas of Fergus, Elora, and portions of Salem. These areas are characterized by looped watermain configurations and hydrant spacing that generally meet or exceed Centre Wellington's engineering design standards and the Ontario Building Code requirements for fire flow. Within these urban service areas, the system provides reliable pressure and flow for structural firefighting operations, enabling CWFR to achieve effective suppression capability.

Outside the urban service boundaries, however, much of Centre Wellington remains unserved by municipal water infrastructure, including extensive rural, agricultural, and hamlet areas. In these locations, firefighting operations depend on alternative water supply methods, such as tanker shuttle operations, drafting from natural or constructed water sources, and the use of dry hydrants where feasible. The department maintains portable tanks and tanker apparatus at each station to establish sustained water supply during rural incidents, supported by mutual and automatic aid agreements with neighbouring municipalities to supplement water delivery capacity.

To ensure the long-term adequacy and resilience of the water supply for firefighting operations, Centre Wellington should continue to monitor and evaluate system performance under both normal and emergency conditions. A comprehensive fire flow assessment, incorporating hydrant spacing, main sizing, system pressure, and redundancy, would assist in identifying areas where improvements or strategic investments may be required.

Future planning for growth areas and secondary plan developments should also include coordinated review between fire services and engineering staff to confirm that new infrastructure provides sufficient flow capacity for projected land uses and building types. By maintaining an integrated approach to water system planning and emergency response readiness, Centre Wellington can ensure that its water infrastructure continues to support effective firefighting operations across both urban and rural contexts.

SECTION 3

DEPARTMENT PROFILE

3.1 Introduction

Modern fire departments have evolved into an essential component of a municipality's overall community safety framework. While early fire brigades were primarily formed to combat structure fires that posed significant risk to growing communities, today's fire services respond to a much broader and more complex range of emergencies. In addition to fire suppression, departments now provide medical response, technical rescue, hazardous materials response, and public assistance, often working collaboratively with police, paramedic services, and other allied agencies. Fire services also play a critical role in prevention through public education, fire inspections, and enforcement of the Ontario Fire Code. To meet these expanding responsibilities, fire departments must be appropriately structured, resourced, trained, and equipped to deliver services safely, efficiently, and effectively.

3.2 Governance

Established through the Township's governing bylaw under the authority of the Fire Protection and Prevention Act, CWFR operates as a composite fire service, combining full-time and paid-on-call firefighters to provide emergency coverage across a geographically diverse municipality. CWFR operates from two strategically located fire stations, delivering service to both established historic urban areas and expanding residential and rural communities.

Centre Wellington's Fire Department E&R By-law No. 2006-083, enacted in 2006, serves as the legislative foundation for CWFR. Enacted under the authority of the Fire Protection and Prevention Act, 1997 (FPPA) and the Municipal Act, 2001, the by-law formally establishes the fire department, defines its structure and authorized complement, and delegates authority to the Fire Chief for the administration and delivery of fire protection services within Centre Wellington.

The by-law outlines the scope of services provided by CWFR as follows:

“Fire protection services includes fire suppression, fire prevention, fire safety education, communication, auto extrication, high and low angle rope rescue, fire service level first aid including automatic defibrillator, ice rescue, fast water rescue, in-water rescue (with boats), investigation and mitigation of hazardous materials and dangerous conditions, training of person involved in the provision of fire protection services, rescue and emergency services and the delivery of those services”.

It further authorizes the Fire Chief to implement mutual aid and Council approved automatic aid agreements, enabling coordinated regional response and resource sharing across Wellington County and neighbouring municipalities. Collectively, these provisions ensure that CWFR meets the statutory obligations of the FPPA and provides a clear governance framework for the delivery of fire protection services.

While the by-law establishes a compliant and functional framework, it reflects an earlier governance model that predates many of the contemporary performance expectations and operational complexities of a modern, risk-informed fire service. Since its adoption, Centre Wellington has experienced significant population growth, increased development intensity, and diversification of risk factors that have expanded both the demand and complexity of fire service delivery.

There are no explicitly defined measurable performance standards or accountability mechanisms related to service delivery, which limits Council's ability to evaluate system effectiveness or to align service levels with Centre Wellington's evolving community risk profile. To enhance transparency and evidence-based governance, Centre Wellington should consider updating the E&R By-law to incorporate formalized service levels and performance objectives consistent with the CRA and FMP. This should include measurable response time benchmarks, such as alarm handling, turnout, travel, and total response times, expressed as 90th percentile targets, in alignment with recognized industry standards. It should also include performance expectations for a pro-active Fire Prevention Division including frequency of inspections to reduce community risk. The inclusion of such metrics would provide Council with clear performance expectations, strengthen accountability, and support strategic resource allocation decisions based on community risk and growth patterns.

The existing by-law does not list all services that the fire service could be expected to respond to. These services should be added to the list within the definition of fire protection services in the bylaw (building collapse, confined space, trench, elevator rescue, heavy auto extrication, etc., along with the level of service currently being provided). The bylaw's service definitions should also be expanded to differentiate service levels between urban, suburban, and rural response zones, reflecting CWFR's composite service model and local risk conditions.

The inclusion of an incident type within the E&R By-law indicates that CWFR may be dispatched to and provide an initial response to that type of emergency; it does not imply that the department is trained, equipped, or authorized to perform technician-level intervention or achieve full incident mitigation. The by-law should clearly identify the Council-approved level of service for each response discipline, such as awareness, operations, or technician, and, where applicable, any differences between urban, suburban, and rural response zones.

At a minimum, CWFR personnel should receive awareness-level training for any incident type to which they may reasonably be dispatched, with incidents exceeding the department's approved capabilities managed through defensive actions, scene stabilization, and pre-arranged mutual aid, automatic aid, or specialized external resources.

Finally, modernization of the by-law should include enhanced governance and reporting provisions. The Fire Chief's reporting requirements could be broadened to include annual performance indicators such as response time compliance, inspection and enforcement activity, firefighter training and certification in accordance with Ontario Regulation 343/22: Firefighter Certification, and the outcomes of public education and risk reduction programs. A provision requiring periodic Council review, ideally once per term or following the adoption of a new FMP, would ensure that service levels remain current and reflective of community growth, emerging risks, and available resources.

CWFR E&R By-law provides a sound statutory foundation for the delivery of fire protection services. However, updating the by-law to embed measurable performance objectives, risk-based service definitions, and enhanced accountability mechanisms would align CWFR with provincial best practices and support Council in maintaining effective, efficient, and equitable fire protection services for Centre Wellington's growing and diverse community.

Observation

Observation #1: Centre Wellington's Fire Department E&R By-law 2006-083 provides the required legislative authority for the establishment and operation of CWFR in accordance with the Fire Protection and Prevention Act, 1997 and the Municipal Act, 2001. While the by-law establishes a compliant governance framework, it reflects the service model and community profile that existed at the time of its adoption in 2006. Since then, Centre Wellington has experienced population growth, increased development intensity, diversification of risk, and expanded service expectations. The current by-law does not incorporate all services that may potentially be provided, measurable performance objectives, defined service levels by response zone, or structured reporting requirements aligned with contemporary risk-based fire service delivery. As a result, Council's ability to evaluate service effectiveness, ensure alignment with the CRA, and support long-term strategic planning is limited.

Recommendation

Recommendation #1a: Update the existing Fire Department E&R By-law to list all services provided including elevator rescue, medical response level, rescues including trench, building collapse, confined space, heavy auto-extrication, and the associated NFPA service levels (awareness, operations, technician). Furthermore, remove the names of the incumbents in Appendix A of the by-law.

Suggested completion: 1-12 months

Recommendation #1b: Develop a comprehensive Standard of Cover policy to complement the revised E&R By-law. This policy should establish formal performance benchmarks (90th percentile) for alarm processing, turnout, travel, total response time, ERF assembly, fire prevention inspection frequencies, and training frequencies, ensuring alignment with best practices, community risk profiles, and Council-approved service levels.

Strategic Objective: #1 Administration

Suggested completion: 12-24 months

Cost: Neutral – staff time

Rationale: Modernizing the E&R By-law will strengthen governance, transparency, and accountability by clearly defining what services are provided, at what level, and with what measurable performance expectations. Embedding response time objectives and risk-based service definitions within the bylaw will ensure consistency between Council policy, operational practice, and community expectations. Enhanced reporting provisions will provide Council with objective performance data to support evidence-based decision-making, resource allocation, and long-term financial planning. Regular review requirements will ensure that fire protection services remain aligned with growth, emerging risks, and evolving provincial standards, positioning CWFR to deliver effective, efficient, and equitable service to Centre Wellington's growing and diverse community.

3.3 Department Overview

CWFR has a longstanding history of protecting the communities of Fergus, Elora, Belwood, and the surrounding rural areas. The present-day department was formally established on January 1, 1999, following the provincial amalgamation that created the Township of Centre Wellington through the consolidation of the Town of Fergus, the Village of Elora, and the Townships of Nichol and Pilkington. At that time, the previously separate fire departments were unified under a single municipal governance and administrative structure, forming one integrated fire service for the new municipality.

Today, CWFR provides a comprehensive range of emergency and non-emergency services, including fire suppression, emergency medical response support, technical rescue, water and ice rescue, hazardous materials response, fire prevention and inspection services, public education programming, and emergency management support. Mutual aid and automatic aid agreements with neighbouring municipalities enhance operational capacity and help ensure effective response during large-scale or concurrent incidents.

Centre Wellington has established a Corporate Strategic Plan that guides municipal priorities and service delivery. Centre Wellington's vision emphasizes building a complete, welcoming, and resilient community that balances growth with heritage preservation, environmental stewardship, and quality of life. Corporate priorities focus on responsible growth management, infrastructure investment, organizational excellence, environmental sustainability, and community well-being.

These corporate priorities provide the framework within which CWFR aligns its operational and strategic objectives. Fire protection services play a direct role in supporting safe and sustainable growth, protecting critical infrastructure, preserving heritage downtown areas, enhancing emergency preparedness, and contributing to overall community resilience.

This FMP has been developed to support and advance Centre Wellington's strategic priorities through a comprehensive and risk-informed approach to fire protection and emergency services. The recommendations contained within this FMP focus on workforce sustainability, training and professional development, station and apparatus planning, technological modernization, asset management, prevention and inspection capacity, and long-term financial sustainability. This FMP also addresses the operational impacts of planned residential and employment growth areas, changing risk profiles, and evolving service expectations.

The following Centre Wellington strategic priorities have direct relevance to CWFR and are reflected throughout this FMP:

1. Organizational Excellence and People-Focused Service Delivery

- Develop and maintain a skilled, resilient, and sustainable composite workforce.
- Align staffing models and training programs with community risk, growth trends, and service expectations.
- Promote leadership development, succession planning, and employee wellness.

2. Infrastructure Investment and Asset Management

- Plan for the timely replacement and expansion of fire stations and apparatus.
- Implement lifecycle asset management strategies to ensure long-term sustainability.
- Optimize station locations and deployment models to maintain effective response coverage.

3. Responsible Growth and Community Planning

- Align fire protection infrastructure with approved secondary plans and future development areas.
- Ensure emergency response capabilities support increased density, mixed-use development, and heritage conservation districts.
- Integrate fire service input into development review and long-range planning processes.

4. Innovation, Technology, and Continuous Improvement

- Modernize operational systems, communications, records management, and training platforms.
- Utilize data-driven performance measurement to guide service level decisions.
- Enhance interoperability and coordination with partner agencies.

Through alignment with these priorities, CWFR will continue to evolve in step with Centre Wellington's growth and community expectations. This FMP establishes a clear roadmap to ensure that fire protection and emergency response services remain sustainable, responsive, and positioned to protect life, property, and the environment—both today and into the future.

3.3.1 Mission, Vision, and Values Statement Framework

An MVV Statement Framework (Mission, Vision, and Values) is a foundational model that defines an organization's purpose, direction, and guiding principles. It serves as a strategic anchor for decision-making, culture, and long-term planning. Most fire departments have three levels of organizational direction:

1. **Mission Statement** outlines the organizations core purpose and primary functions. Why the organization exists, who it serves, and what it seeks to accomplish.
2. **Vision Statement** describe the desired future state of the organization that motivates members, guides strategic priorities, and assists with long-term planning.

- 3. Values Statement** represent the principals and standards that guide behaviour, decision making and interactions within the organization and within the community.

While CWFR does not have formal standalone mission, vision, or values statements, it does have a clear statement of purpose:

Centre Wellington Fire Rescue is a Volunteer Fire Department that is committed to providing timely professional and emergency responses. Our Department takes pride in protecting the community from fire, life-threatening emergencies, and dangerous conditions, as well as fire safety education.

In essence, this statement serves as CWFRs Mission statement, emphasizing responsiveness, protection, and education.

The CWFR statement of purpose ties in nicely with Centre Wellington's MVV framework:

Township of Centre Wellington Mission Statement

We are an active, caring, innovative, safe, and connected community.

Township of Centre Wellington Vision Statement

The community to experience life along the Grand River.

Township of Centre Wellington Values

- *Integrity – acting with honesty, ethics, and transparency*
- *Collaboration – working cooperatively with staff, residents, communities, and partners to achieve goals*
- *Innovation – embracing creativity, new ideas, and continuous improvement*
- *Equity, Diversity, and Inclusion – fostering and equitable community that values diversity and ensure everyone can participate and feel included.*

Council has established five strategic goals to guide its priorities from 2023 to 2026:

1. Economic Prosperity — Creating conditions for local economic growth
 2. Activity, Health & Wellness — Enhancing community fitness, recreation, and well-being
 3. Managing Growth — Guiding development while preserving Centre Wellington's unique character
 4. Environmental Stewardship— Protecting and sustaining natural resources
 5. Governance — Delivering innovative, inclusive, and sustainable governance
- CWFR's future development is determined by the department's master plan, which provides a strategic planning framework to guide their priorities and objectives.

3.3.2 Command Structure

Effective emergency services operations rely on a clearly defined command structure to ensure safe, coordinated, and efficient incident management. A recognized incident command system supports the following outcomes:

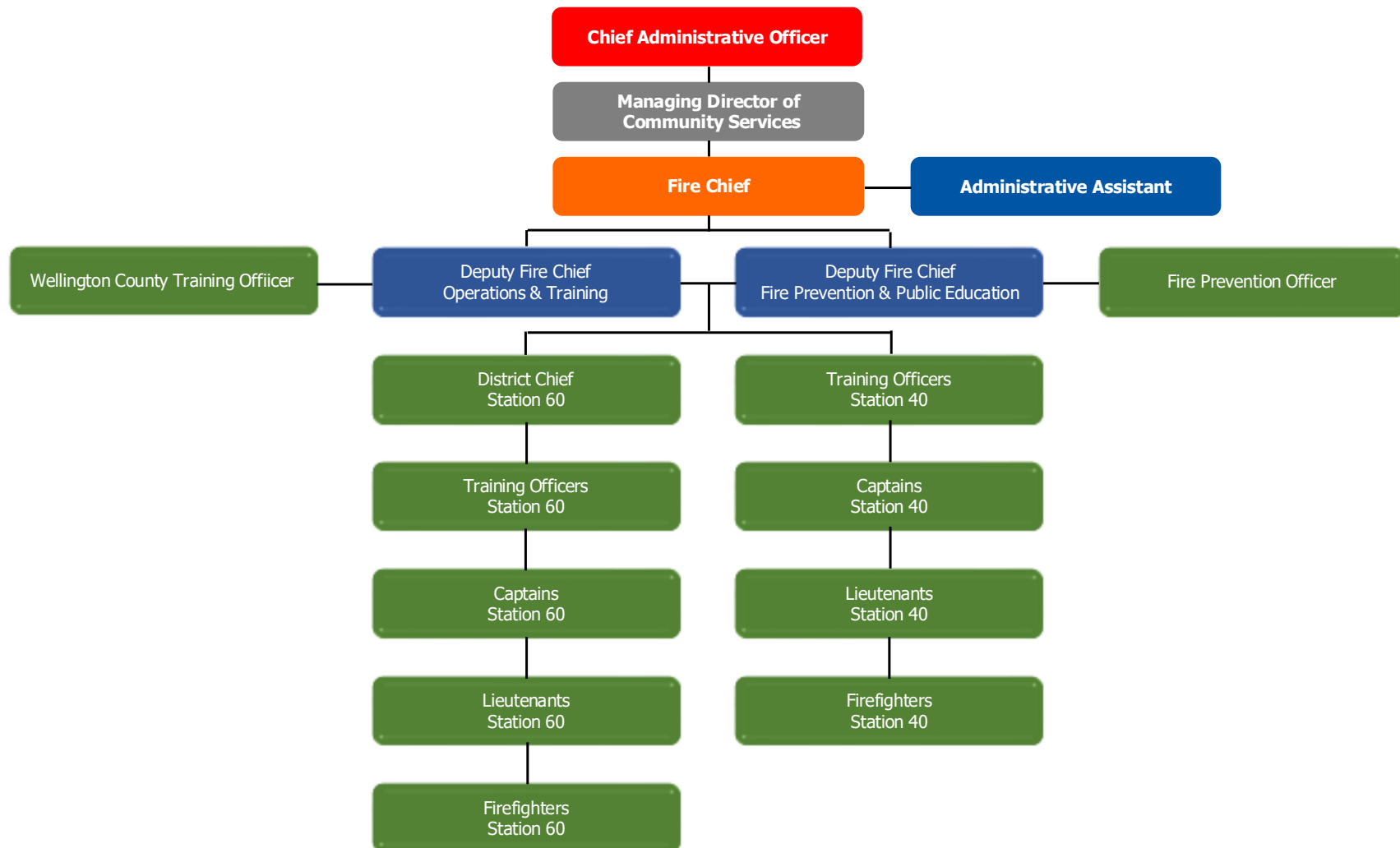
- Clear identification of the lead agency (fire, police, EMS, or other)
- Maintenance of appropriate span-of-control over all resources
- Interoperability with allied and responding agencies
- Defined tactical objectives and operational benchmarks
- Standardized communication protocols
- Enhanced situational awareness and overall scene safety

CWFR employs the Blue Card Command System, an industry-recognized incident command framework that aligns with *NFPA 1561 Standard on Emergency Services Incident Management System and Command Safety*. All CWFR suppression staff receive training in the principles of the Incident Command system (ICS), which provides a scalable and adaptable approach to managing all-hazards emergency responses.

The system is fully implemented across the organization and is applied at all incidents, supporting seamless expansion or contraction of command roles based on the size and complexity of the event. The Blue Card system also ensures compatibility with unified command structures and facilitates integration with external emergency management agencies when required.

Figure 5 demonstrates that CWFR's organizational structure generally aligns with the scale and complexity of the department's current service delivery model. The Fire Chief retains overall responsibility for fire department administration and service delivery in accordance with the Fire Protection and Prevention Act (FPPA) and Centre Wellington's E&R By-law, while Deputy Chiefs provide operational and administrative support through delegated authority. This framework allows for division-level oversight while maintaining centralized strategic leadership and operational consistency across the department.

Figure 5: Centre Wellington Fire Rescue Organization Chart



3.3.3 Administration

Strategic Objective #1: Administration

Establish the strategic direction for CWFR in support of Corporate priorities and emergency service needs of the community. Maintain an effective and sustainable administrative framework that supports CWFR operations and programs.

Administrative systems and resources will enable coordinated service delivery, sound governance, fiscal responsibility, and long-term organizational stability.

A fire department's employees are its most valuable asset. Emergency services are often delivered under difficult and stressful circumstances, with little room for error. Fire departments must be adequately resourced with staff, equipment, and training to be effective in delivering highly technical services to achieve service excellence. As a result, considerable effort is warranted to ensure that only highly committed, team-oriented, and physically able employees are recruited, trained, retained, and supported.

An effective organizational structure must promote and support strong, effective leadership, sound business management and continuity, and effective communication with opportunities for staff development. Centre Wellington's Human Resources Department (HR) partners with the municipality's departments to assist with achieving their human resources goals and objectives. Functions provided include:

- Employee Relations
- Recruitment
- Disability Management
- Training & Development
- Employee & Family Assistance Program
- Compensation & Benefits
- Health and Safety and Wellness
- Return to Work Program

The HR staff are responsible for the legality of all departments in the corporation and work together with the CWFR administration team to assist with providing consistent delivery of fire services, including:

- Benefits administration
- Association Agreement oversight and compliance
- Workplace WSIB requirements
- Respectful workplace compliance
- Other corporate responsibilities relating to corporate employees

In addition to these core responsibilities, the HR staff play a vital role in facilitating ongoing communication among departments, ensuring that all policies, procedures, and compliance standards are not only met, but also clearly understood across the organization. Impacts of corporate policies and labour decisions on all departments should be considered, including the fire services. This collaborative approach fosters an environment where staff at every level are empowered to work safely and productively, with a strong emphasis on mutual respect and support.

3.3.3.1 Department Leadership, Management and Operations

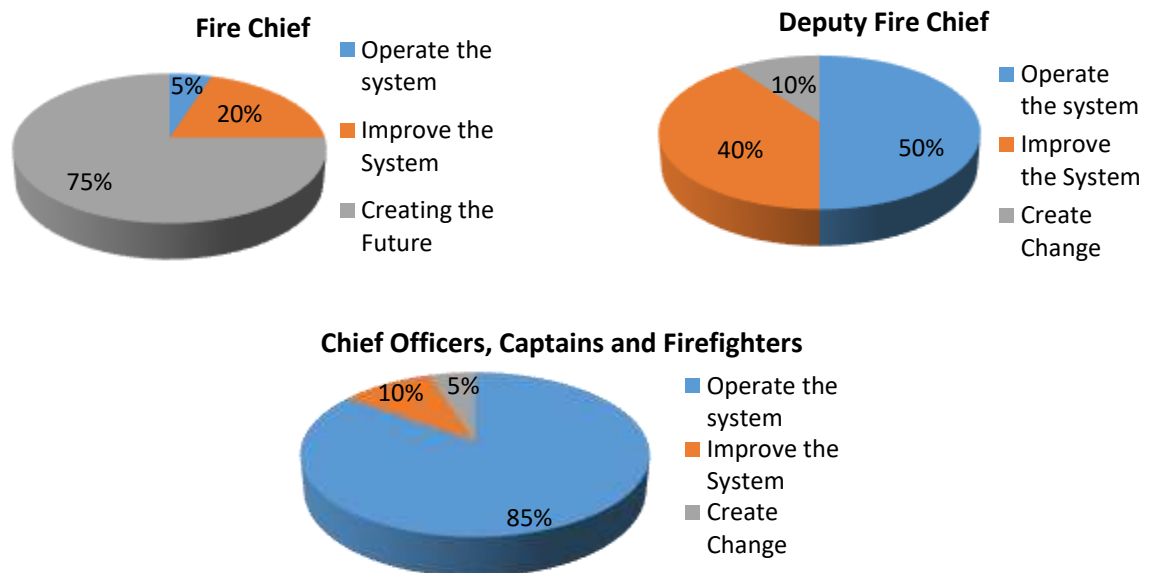
CWFR maintains an established leadership and management structure that supports the delivery of fire protection services across Centre Wellington. Administrative oversight is provided through the Fire Chief, two Deputy Fire Chiefs, and supervisory officers, as illustrated in Figure 6. This structure establishes clear lines of authority, accountability, and operational responsibility throughout the organization.

Effective leadership at all levels is essential to maintaining a safe, professional, and adaptable fire service capable of responding to evolving community needs, operational risks, and legislative requirements. As municipal growth, service expectations, and operational complexity continue to increase, fire service leadership must increasingly balance day-to-day operational responsibilities with long-term strategic planning, performance monitoring, policy development, and organizational improvement initiatives.

Modern fire service administration requires a business-oriented approach that emphasizes measurable performance objectives, continuous evaluation of service delivery, accountability, and value for service. This includes establishing performance benchmarks related to emergency response, fire prevention, public education, training, and health and safety while ensuring resources are allocated effectively and sustainably.

Figure 6 illustrates the importance of allocating leadership capacity across operational management, organizational improvement, and strategic planning functions. The figure is an example and highlights that senior leadership positions within CWFR must retain sufficient time and organizational capacity to identify emerging risks, implement system improvements, manage growth pressures, and guide long-term departmental planning. Without sufficient strategic capacity, leadership resources can become increasingly consumed by day-to-day operational demands, limiting the organization's ability to proactively adapt to future service challenges.

Figure 6: Fire Service Time Management Examples



Based on the information reviewed, CWFR's leadership team appears appropriately structured and professionally positioned to support the department's current operational requirements. The existing management framework provides a solid foundation for service delivery, organizational oversight, and strategic decision-making. Continued emphasis on leadership development, succession planning, performance management, and administrative capacity will help ensure CWFR remains responsive to future growth, evolving community risks, and increasing expectations associated with modern fire and emergency service delivery.

Observation

Observation #2: The current administrative structure of CWFR assigns a broad and operationally intensive portfolio to the Deputy Chief of Operations and Training, including suppression/operations oversight, training, asset management (apparatus, equipment, gear, and station maintenance), fire-related purchasing, and communications/dispatch. In contrast, the Deputy Chief of Fire Prevention and Public Education oversee fire prevention and public education functions with one Fire Prevention Inspector reporting directly to him and continues to operate partially at the task level, including conducting inspections such as those involving vulnerable occupancies.

As Centre Wellington continues to grow and service demands increase, the current distribution of responsibilities creates an imbalance in executive workload and limits strategic capacity. The concentration of operational, logistical, and technical functions under one Deputy Chief reduces redundancy at the senior leadership level and limits cross-functional exposure. Additionally, the existing structure may constrain succession planning opportunities and leadership development, as each Deputy Chief has limited engagement outside their primary functional silos.

Recommendation

Recommendation #2: CWFR undertake a formal review of senior administrative roles and responsibilities with the objective of re-balancing executive portfolios to ensure equitable workload distribution, improved strategic capacity, and enhanced cross-functional leadership exposure.

Strategic Objective: #1 Administration

Suggested completion: 12-24 months

Cost: Neutral – staff time

Rationale: *A structured review of senior administrative responsibilities will allow the department to align leadership functions with the increasing complexity of service delivery in a growing community. Re-balancing portfolios can improve strategic oversight, reduce dependency on single executive roles for multiple critical functions, and ensure appropriate focus on core operational readiness, prevention, and organizational sustainability.*

Broadening cross-functional exposure at the Deputy Chief level strengthens succession planning, enhances organizational continuity, and supports leadership development. This approach promotes long-term stability, improves governance effectiveness, and aligns the administrative structure with modern fire service management best practices.

Leadership is a function of all members of CWFR. Chief officers to firefighters contribute to the leadership required to achieve service excellence in a fire department. These positions play a critical role in leading, managing, and mentoring CWFR staff. These roles are crucial in ensuring all services are aligned with department policy, as well as being the critical link in the chain of command between staff and administration. Within the current CWFR organizational structure, it is imperative that the Administration group continues to work closely to provide direction and support while allowing for engagement, including constructive feedback.

CWFR officers, fire prevention staff and firefighters are responsible for the delivery of most front-line operational services. They are the primary point of interaction between a fire department and the public. Their leadership is exhibited by their professionalism and commitment to service excellence. Although their influence may be limited to their immediate coworkers, their role in forming public perceptions regarding the value and support of their services is critical.

The importance of maintaining a team atmosphere across the department and commitment to common goals cannot be overstated. Fire officers, fire prevention and training staff, and firefighters, often work in isolation from the administration. This heightens the need for leadership positions, including all chiefs and officers, to communicate frequently and to bridge perceived gaps regarding commitment to mission and service excellence. Despite the varying roles and responsibilities assigned to administration, officer ranks, and the most junior staff, the characteristics of a successful team should be promoted at every level in the organization.

3.3.3.2 Administrative Support

As CWFR continues to expand its service delivery model, the administrative demands on the organization will continue to grow. Program areas such as fire prevention, training, communications, emergency planning, and dispatch are increasingly complex, and data driven. New technologies, including digital inspection systems, computer-aided dispatch (CAD), and learning management platforms, also generate additional administrative workload. The composite nature of the department, with an exclusively part-time firefighter component, adds further scheduling, payroll, and documentation responsibilities that require consistent and dedicated support.

Observation

Observation #3: CWFR currently operates with 1.0 full-time equivalent (FTE) administrative support staff. While this staffing level has been sufficient to support the department's historical size and service model, continued community growth, program expansion, regulatory compliance requirements, and increasing reporting expectations are placing greater administrative demands on the organization.

As divisional responsibilities expand, including training documentation under Ontario Regulation 343/22, inspection tracking, asset management records, performance reporting, payroll coordination, scheduling, and internal communications, administrative workload will continue to increase. In the absence of additional support, uniformed officers and senior leadership are required to absorb routine administrative functions. This reduces organizational efficiency, diverts focus from strategic leadership and operational oversight, and may delay program implementation or compliance reporting. Over time, insufficient administrative capacity can constrain service modernization efforts and impact overall organizational effectiveness.

Recommendation

Recommendation #3: Incorporate into its multi-year financial and staffing plan the addition of a part-time administrative support position within the next 3–5 years, increasing total administrative capacity to 1.5 FTEs.

Strategic Objective: #1 Administration

Suggested completion: 36-60 months

Cost: \$40,000 annual total compensation per 0.5 FTE

Rationale: *Incrementally increasing administrative capacity will support sustainable organizational growth and improve overall operational efficiency. Dedicated administrative support allows uniformed officers and senior leadership to focus on strategic planning, performance management, training oversight, and community risk reduction initiatives.*

Proactively planning for this addition within a 3–5-year horizon aligns staffing resources with anticipated growth pressures and prevents reactive restructuring. Strengthening administrative support enhances internal responsiveness, improves data accuracy and compliance tracking, and supports evidence-based reporting to Council. This measured investment will contribute to long-term organizational sustainability and align with modern fire service governance best practices.

3.3.4 Non-Administrative Staff

3.3.4.1 Staffing Complement

CWFR is led by the Fire Chief, who reports to the Managing Director of Community services and is responsible to Council for fire protection services under the FPPA. The administrative team operates out of Station 40 including the Fire Chief, two Deputy Fire Chiefs, and one dedicated Administrative Coordinator who works a standard 35-hour week (Monday to Friday).

Also based at Station 40 are a full-time fire prevention inspector/public education officer, responsible for inspections, code enforcement, public education, and fire investigations, and the county training officer. The county training officer is employed by CWFR, with the position funded by Wellington County, and provides training coordination and support to fire departments across the County. CWFR also maintains its own part-time/paid-on-call training officers, who deliver department-specific training to CWFR personnel and also serve as operational firefighters.

The Operations Division consists of 66 paid-on-call firefighters, including one Division Chief, who respond from Station 40 and Station 60. Firefighters are dispatched through the City of Guelph Fire Services Dispatch Centre and report directly to their assigned stations.

The Deputy Chief of Operations and Training also fulfill the role of logistics officer, overseeing fleet management, equipment, and station maintenance, while serving as the liaison for communications and dispatch. While not a formal requirement of the position, the fire prevention officer also assists with equipment repairs, leveraging their technical expertise.

Emergency communications and dispatch services are provided by the Guelph Fire Department, which supports Guelph, Centre Wellington, Puslinch, Minto, and Guelph-Eramosa. This service is staffed by one division chief, eight full-time communication technicians, and five to eight part-time technicians. The team operates 24/7 and plays a critical role in inter-agency coordination, call triage, and resource deployment.

3.3.4.2 Operations Staffing On-Call Structure

CWFR operates a five-platoon Paid-On-Call staffing model at each station, with firefighters assigned to one week of primary on-call duty every five weeks. During their scheduled on-call week, firefighters are expected to respond to all emergency incidents unless unavailable due to primary employment obligations. Each on-call platoon is typically composed of a Captain and three to four firefighters, with rotations running from Friday morning to the following Friday morning. Platoons are also responsible for completing apparatus and equipment inspections during their assigned weekend to ensure operational readiness.

Outside of their assigned on-call rotation, firefighters are expected to maintain a minimum response participation rate of 20% for emergency incidents. Based on discussions with the CWFR management team, the current staffing model appears to be functioning effectively and providing consistent apparatus staffing levels, with most responding vehicles carrying a minimum crew of four firefighters and often more. The system also provides firefighters with increased scheduling flexibility during non-primary response weeks, supporting work-life balance and contributing positively to member retention and overall participation.

3.3.5 Recruitment

Recruitment is a key function of all emergency service agencies. The community places a tremendous amount of faith in their fire department personnel, trusting them to provide the highest level of service when the public is most vulnerable. As such, the process used to select personnel should be very comprehensive.

Experience within the emergency services industry has shown that relaxing the requirements for entry-level positions is not the answer for recruiting an employee. Instead, most departments have had the greatest success when qualified applicants are encouraged to apply. This process often involves targeted advertising and promotional campaigns aimed at demonstrating the benefits, as well as the personal satisfaction of becoming part of the fire service. The expected requirements for residency, required training, and attendance must be clearly explained early in the process.

CWFR has a tremendous track record of attracting and retaining part-time firefighters. One of the requirements to apply to CWFR is living within 3 kms of a fire station. This obviously limits the candidate pool, and yet each recruitment sees dozens of applicants for only a handful of vacant positions each time.

Furthermore, it is not unusual throughout Ontario for part-time firefighters to resign if they become full-time career firefighters elsewhere. However, in CWFR it is common for part-time firefighters to continue in their roles when they become full-time elsewhere. Of the 66 volunteer firefighters working with CWFR, 19 of them are employed as full-time firefighters in other Fire Departments.

CWFR, like other fire services in North America, trains, maintains, and equips its firefighters and fire prevention/inspection staff to the recognised standards for the services being delivered. As this requires substantial investment in both financial and resource commitments, recruit selection should be and is being carefully managed. The process for recruiting applicants for vacant volunteer firefighter positions with CWFR is well established.

3.3.5.1 Volunteer Firefighter Recruitment Process

CWFR utilizes a structured and competitive recruitment process for Paid-On-Call firefighters designed to evaluate candidate suitability, commitment, and operational readiness. Minimum eligibility requirements include attendance at a mandatory information session, residency within the established 3 km response area for either the Fergus or Elora station, valid First Aid/CPR certification, a valid Ontario Class G driver's licence, and legal eligibility to work in Canada. The mandatory information session provides prospective candidates and their families with an overview of departmental expectations, attendance requirements, policies, and the overall commitment associated with volunteer firefighting. CWFR attracts approximately 60-80 people to attend the information session.

The recruitment process includes application screening, a written aptitude examination, physical testing, application scoring, and panel interviews. Candidates must successfully complete a CPAT-style physical assessment, including ladder climb and confined space evaluations, and achieve a minimum passing grade on the written examination to proceed through the process. Final candidate rankings are determined through a combined scoring matrix incorporating written testing, physical assessment, application review, and interview performance. Vulnerable Sector Checks and Ministry of Transportation driver abstracts are also required prior to appointment.

Successful candidates are enrolled in the Wellington County Recruit Training Program, which delivers NFPA-aligned Firefighter I & II and Hazardous Materials Operations training through a hybrid learning format combining online coursework and practical evolutions.

Recruit training is conducted over several months and includes additional introductory technical rescue awareness training. Recruits do not participate in emergency response or regular station training activities until completion of the program and successful certification testing.

Following graduation, recruit firefighters begin operational response under a structured probationary framework intended to support firefighter safety and operational mentorship. During the first year of service, recruits are visually identified on the fireground, and operational restrictions are maintained regarding apparatus staffing assignments to ensure appropriate supervision and gradual operational integration.

Observation

Observation #4: While CWFR has a proven track record of successfully hiring qualified applicants to fill volunteer firefighter vacancies, it can improve the cultural and gender diversity of its team to better reflect the community it serves. Of the 66 volunteer firefighters in CWFR, there are no visible minority firefighters and three female. According to Statistics Canada, in Centre Wellington 5.2% identify themselves as visible minorities, and 51.2% identify themselves as female.

Recommendation

Recommendation #4: Continue to recruit and select the most qualified applicants based on established operational requirements and hiring criteria, while partnering with Human Resources and Communications to broaden recruitment outreach and encourage qualified candidates from groups currently under-represented within CWFR to consider volunteer firefighting opportunities.

Strategic Objective: #1 Administration

Suggested completion: 36-72 months

Cost: Neutral

Rationale: *As Centre Wellington continues to grow and become increasingly diverse, broader recruitment outreach can help CWFR reach a wider range of qualified candidates and strengthen the overall applicant pool. Maintaining a fair, transparent, and merit-based selection process, while increasing awareness of volunteer firefighting opportunities across the community, will support continued operational effectiveness and help the department remain connected and responsive to the community.*

3.3.6 Remuneration

Centre Wellington is committed to recruiting the best candidates possible. A marketplace scan was recently conducted by the Fire Chief and Human Resources and confirmed that CWFR compensation rates for part-time firefighters are among the highest rates in Ontario.

The municipality maintains an agreement with the Association of part-time firefighters. Most employer-employee issues are handled through discussion with the Fire Chief and then escalated to Human Resources if needed. The CWFR Fire Chiefs' and Deputy Chiefs' working conditions, remuneration and other terms of conditions of employment are determined by the CAO and approved by Council.

3.3.7 Promotions and Advancement

CWFR utilizes a combination of competitive promotional processes and qualification-based advancement pathways to support leadership development and operational competency throughout the organization. Administrative positions are filled through a formal competitive recruitment and appointment process led in accordance with Centre Wellington's policies and Human Resources procedures. This approach helps ensure transparency, consistency, and the selection of qualified candidates for senior leadership and administrative roles.

Advancement from firefighter to Lieutenant within the Paid-On-Call division is based on a combination of minimum qualifications, operational experience, demonstrated participation, and leadership potential. Minimum qualifications currently include NFPA 1001 Firefighter I and II certification, NFPA 1002 Pump Operations, possession of a valid Ontario DZ driver's licence, and a minimum of seven years of service with CWFR. Candidates are also required to attend an information session outlining the expectations of the officer role, submit a resume and cover letter, and participate in an interview process with senior officers. Attendance at training sessions, emergency incidents, and departmental activities are considered as part of the overall evaluation process. Lieutenants are expected to continue developing leadership and technical competencies in preparation for future advancement opportunities.

Promotion from Lieutenant to Captain follows a more advanced competency-based process focused on leadership, incident command, instructional capability, and operational supervision. Minimum qualifications include NFPA 1021 Fire Officer Level I, NFPA 1041 Fire Service Instructor Level I, NFPA 1006 Technical Rescue certifications related to rope and water/ice rescue, NFPA 1002 Pump Operations, and incident command training.

Candidates must also demonstrate successful participation in officer development programs and experience supervising firefighters during emergency operations and training activities. The promotional process includes submission of qualifications, a promotion examination incorporating incident command scenarios, and an interview with senior officers. Participation in training activities, emergency response performance, and seniority within the officer program are also considered during the evaluation process.

The volunteer Training Officer position is similarly filled through a competitive process intended to evaluate instructional capability, leadership potential, and commitment to firefighter development. Interested candidates are required to submit a resume and written statement outlining the importance of training within the fire service. Qualified applicants must then develop and submit a comprehensive training package on a topic assigned by the Deputy Chief of Operations and Training. Training packages are evaluated and followed by an interview process conducted by senior officers.

Full-time Training Officer and Fire Prevention Officer positions are recruited through Centre Wellington's formal hiring process in collaboration with Human Resources. These positions are filled through competitive recruitment processes designed to ensure candidates possess the required technical qualifications, leadership competencies, communication skills, and administrative capabilities necessary to support CWFR's operational, training, prevention, and community risk reduction objectives.

3.3.8 Succession Planning

CWFR has been operating in a period of growth and development for some time in Centre Wellington. As Centre Wellington continues to expand, CWFR should be proactively positioning itself to meet emerging demands by investing in its people and enhancing leadership capacity. The firefighter supervisory roles have been filled through internal promotions, while the full-time leadership roles have been filled both internally and externally. This provides a good balance between understanding the history of the department and its culture with a mixture of new ideas and challenging the status quo.

However, there is an absence of a formal succession or leadership development program within CWFR. A formal succession planning initiative would establish clear pathways for advancement and prepare staff to take on increasingly complex roles within firefighting and non-firefighting divisions. This could include leadership coaching, project management training, exposure to policy development, and mentorship opportunities with senior officers.

Structured development opportunities ensure that as the department grows, both in staffing and scope of services, it can rely on a confident and capable leadership team that reflects CWFR's values, commitment to excellence, and community-focused mission. CWFR has their own performance feedback system for everyone excluding the Fire Chiefs and Deputies who are part of the corporate system. This system could be incorporated nicely into a Succession Planning/Leadership Development program.

Observation

Observation #5: CWFR has been successfully responding to an ever growing and developing community. This is a credit to the current women and men occupying leadership roles in all Divisions. With a full-time fire chief, two full-time deputy fire chiefs, a full-time fire prevention officer, a full-time administration clerk, and a shared county training officer, CWFR is well resourced for the most part to continue to prepare for and respond well to growth.

However, more could be done to equip potential internal leaders to prepare them for future challenges. Development of leadership skills, project management capacity, and confidence in decision-making could be realized through formal training, mentorship, and structured succession pathways. Temporary secondment opportunities and stretch assignments are excellent tools to foster individual growth while benefitting the Department.

Recommendation

Recommendation #5: Work with Human Resources to implement a CWFR-specific leadership development and succession planning program that identifies and prepares future leaders across all divisions through career pathing, mentorship, targeted training, leadership shadowing, and temporary secondment opportunities aligned with departmental growth and Fire Master Plan implementation.

Strategic Objective: #1 Administration

Suggested completion: 36-72 months

Cost: Neutral

Rationale: *A structured succession plan will provide CWFR with the tools to ensure stable and sustainable leadership as the organization expands. By proactively preparing internal candidates for future leadership roles, the department can ensure smoother transitions, maintain service continuity, and enhance confidence among both operational staff and senior leaders. This approach also supports a healthy workplace culture by reducing the stress of reactive promotions and increasing transparency in career progression.*

3.3.9 Health and Wellness

The active pursuit of employee health and wellness is extremely important to an organization. The benefits may include but not limited to:

- Early recognition and treatment of illness
- Reduction in absenteeism due to short/long-term illness
- Decreased injuries during normal duties
- Decreased workers' safety and insurance board (WSIB) premiums
- Increased employee career longevity
- Improved work/life balance

Centre Wellington provides the following wellness benefits and programs for CWFR staff.

Full-time Fire Staff

- Complete benefit package – Manulife
- EAP – Homewood Health
- Township Wellness Packages - ½ price gym memberships at Twp. facility, wellness passes for employee and family use that includes 40 free uses for recreation (gym, pool, pickle ball)

Volunteer Fire Staff

- EAP – Homewood Health
- Township Wellness Packages - ½ price gym memberships at Twp. facility, wellness passes for employee and family use that includes 40 free uses for recreation (gym, pool, pickle ball)

CWFR is represented on the Corporate Joint Occupational Health and Safety Committee (JHSC). There is no dedicated Fire JHSC.

The Fire Chief leads a critical injury investigation with HR and with worker representatives. The workplace injury rate is very low. However, there is some question as to if all near miss/injuries are reported. There have been no presumptive cancer claims other than one from 20 plus years ago.

The mental health of first responders is an issue that has garnered considerable attention over the past 10 years. Firefighters Wellness-Fitness Initiative Manual⁸, “a firefighter’s work is characterized by long hours, disruptions in sleep patterns, sporadic high intensity situations, strong emotional involvement, life and death decisions and exposure to extreme human suffering.” Over time, this type of work can impose considerable stress on some individuals.

CWFR has a peer support group to address mental health concerns of its personnel. They have utilized programs at Homewood Health Care Centre and continue to have access for personnel as needed.

CWFR recently offered a mental health program for the life partners of its firefighters, and it was well attended. The department also has plans to partner with Wounded Warriors Canada to offer additional support and programs to its personnel.

Recognizing the unique challenges and programs available for the mental and physical wellbeing of firefighters, an industry-specific health and wellness program implemented and available to all firefighters is an important component within the core services of the department. There are many new opportunities provided at a provincial level, including programs like Warrior Health⁹ that allow for low cost/ no cost services to be accessed by a fire service.

Observation

Observation #6: Centre Wellington has recently restructured its Joint Health and Safety Committee framework, with CWFR now represented through the Community Services committee. This revised structure provides an opportunity to address fire service health and safety matters within the existing corporate framework while allowing the municipality to assess whether the new model provides sufficient focus on the specialized hazards associated with emergency response.

Although Centre Wellington’s Human Resources and health and safety policies apply to firefighters, CWFR does not currently maintain a clearly documented, department-specific procedure for reporting and reviewing workplace near misses, injuries, illnesses, and occupational exposures. Given the unique risks associated with fireground operations, technical rescue, hazardous materials incidents, training activities, and potential contaminant exposure, reporting expectations should be clearly communicated and consistently applied within the operational fire service environment.

⁸ Joint Labor Management Wellness-Fitness Initiative, 4th Edition, p.48

⁹ <http://warriorhealth.ca/>

Recommendation

Recommendation #6a: Continue to trial CWFR's representation within the restructured Community Services Joint Health and Safety Committee and establish a formal process for monitoring the effectiveness of this model in addressing fire service health and safety matters. As part of the trial, CWFR should work with Human Resources and the committee to develop and communicate fire service-specific procedures for reporting, reviewing, and following up on near misses, injuries, occupational illnesses, and exposures.

Recommendation #6b: The effectiveness of the committee structure should be reviewed following an appropriate trial period, with consideration given to firefighter participation, the timely resolution of identified hazards, the completion of workplace inspections, and the committee's ability to address operational fire service risks. A separate fire department JHSC should only be considered if the existing structure is found to be insufficient, subject to consultation with the Ministry of Labour, Immigration, Training and Skills Development.

Strategic Objective: #1 Administration

Suggested completion: 12-24 months

Cost: Certification training costs \$1,000 to \$1,500 per person

Rationale: *The revised Community Services JHSC structure should be provided with an opportunity to demonstrate that it can effectively represent CWFR and address the specialized health and safety risks associated with emergency response operations. Continuing with the current model avoids unnecessary duplication while supporting an integrated municipal approach to occupational health and safety.*

Clearly defined fire service reporting and review procedures will help ensure that near misses, injuries, illnesses, and occupational exposures are documented consistently and communicated to the appropriate supervisors, Human Resources staff, and committee representatives. Regular monitoring of the new committee structure will allow Centre Wellington to determine whether fire service concerns are receiving appropriate attention and whether hazards and corrective actions are being addressed in a timely manner.

This approach supports continuous improvement within the Internal Responsibility System while preserving the flexibility to consider alternative committee arrangements in the future should the trial identify unresolved gaps in firefighter representation, hazard assessment, or occupational health and safety oversight. .

3.3.10 Policies, Guidelines and Directives

A critical tool in the employer's scope of responsibility is the establishment of approved policies, guidelines, and instructions. All these documents must be appropriate for the situation, vetted, approved, and documented. It is the employer's responsibility to develop, institute and establish compliance. The employees have a right to know about potential hazards in the workplace, a right to participate, and in certain circumstances, a right of refusal.

Emergency responses are dynamic, where split-second decisions are made to protect the lives of the public and their fellow responders. Therefore, the safe and effective operation of the fire service must have a clear industry-specific set of Policies, Guidelines, and Directives.

- Policies are mandatory direction that must be followed. They are formal policies that specify a course of action, thereby ensuring efficiency, predictability, consistency, and safety for all staff, including firefighters operating on the fireground.
- Guidelines represent recommended best practices but may be adjusted based on circumstances. During emergencies, flexibility is essential to ensure the safety of both the public and responders.
- Directives are operational instructions that tell staff *how* to carry out a policy or guideline or achieve a required outcome. They may be several pages long, include pictures and diagrams, and are commonly used during training scenarios.

Ultimately, the Ontario OHSA is the foundational document by which a strong internal responsibility system is established in the workforce. The employer has the ultimate responsibility for the health and safety of all workers in the workplace; however, every employee has the responsibility to adhere to policies, guidelines, and directives that are meant to keep them, their coworkers, and the worksite safe.

Observation

Observation #7: CWFR currently maintains a suite of Standard Operating Guidelines (SOGs) that contain a mixture of mandatory policy direction, operational best practice guidelines, and procedural ‘how-to’ directives contained within single documents. In several instances, language such as “shall” is used within SOGs that are otherwise described as guidelines or best practices. This blending of policy, guideline, and directive content creates ambiguity regarding what is mandatory versus discretionary. The absence of a clearly structured document hierarchy increases the risk of inconsistent interpretation, uneven application, and potential liability exposure. From a health and safety perspective, unclear direction may place firefighters at risk if mandatory requirements are not easily distinguishable from recommended practices.

Recommendation

Recommendation #7: Undertake a structured review and reorganization of all existing Standard Operating Guidelines, separating content into three clearly defined categories that include Policies, Operating Guidelines, and Directives.

Strategic Objective: #1 Administration

Suggested completion: 36-72 months

Cost: Neutral – to be completed internally

***Rationale:** A clearly defined policy framework strengthens governance, operational consistency, and legal defensibility. Distinguishing between mandatory policy direction and operational guidance reduces ambiguity and ensures that firefighters understand which requirements are compulsory under legislation, regulation, or departmental authority.*

This structure supports compliance with the Occupational Health and Safety Act, reinforces the Internal Responsibility System, and reduces organizational liability. Separating instructional materials from policy documents also improves usability, training alignment, and document control, allowing operational practices to evolve without requiring formal policy amendments. Implementing a standardized document hierarchy reflects best practices in fire service governance and supports a safer, more accountable, and professionally managed organization.

3.4 Public Fire Safety Education

Strategic Objective #2: Public Fire Safety Education

Support a safe community by reducing the incidence and impact of fire through proactive public education. Deliver comprehensive and targeted fire safety education programs that address fire-related behaviours and risks identified through the CRA, with an emphasis on prevention, awareness, and community engagement.

The *Fire Protection and Prevention Act* require, at minimum, that fire services “establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention” and “provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.”

In section 2.15, Community Risk Assessment, the following observations were made following a data review that clearly identify Centre Wellington’s fire-related needs and circumstances:

One of the most significant challenges facing CWFR is the predominance of residential (Group C) occupancies, which comprise over 90% of building stock excluding “Not Classified by OBC – Farm). Residential Building stock account for the vast majority of fire-related injuries, fatalities, and property loss. In Centre Wellington, 100% of fire-related fatalities and 85.71% of fire-related injuries occurred in Group C buildings between 2018 and 2022. Contributing factors include a concerning rate of absent or malfunctioning smoke alarms and an aging housing stock, with over 16.5% of structures built prior to the implementation of modern building and fire codes.

Additionally, the 20 vulnerable occupancies, including schools, daycares, and long-term care facilities, require close monitoring due to increased risk to life safety and challenges in evacuation. Heritage properties and high-rise developments also present unique fire suppression challenges due to their design, occupancy, and age.

Demographic and economic trends further influence Centre Wellington’s risk profile. The 2023 CRA for Centre Wellington indicates a slightly higher proportion of seniors (2.8%) over the Province and children under 14 (16.50%) compared to the Province at 15.60%, both considered higher-risk groups in fire safety.

Centre Wellington has also experienced an increase in newcomer population, with language diversity which would necessitate tailored public education and fire prevention messaging. Centre Wellington has experienced an increase in emergency call volume, driven in part by development in the Derry Green Corporate Business Park and broader residential expansion.

Additional data including ‘heat maps’ showing the geographic location of fires throughout Centre Wellington, an analysis of the causes and frequencies of fires year over year to reveal trends, and the impact of public education programs on fire rates, is not available from CWFR. This information helps to crystalize fire profile targets, maximizing the effectiveness of public education programs, further reducing community fire risk. Much of CWFR’s record keeping is paper based. It is challenging to conduct this type of analysis without digital resources.

CWFR provides a range of fire safety programs in an effort to modify the behaviors and attitudes of individuals regarding fire safety at home, school, and work. Public education programs and active involvement in the community are important efforts that inform and engage citizens to think about fire safety and risk reduction. Fire safety is everyone’s responsibility, which is why it is critical that everyone plays a role in keeping themselves and others safe.

CWFR has identified a number of commercial and residential programs and activities to support fire safety in the community. Many of these programs are designed to address residential fire safety with the goal of preventing structure fires from starting while preparing people for what to do if one starts. Several of these programs are also designed for youth and for seniors, the two age groups in Centre Wellington that are proportionally higher than the provincial average.

Between 2022 and 2025 CWFR delivered 261 public education programs/presentations. The majority of these programs are delivered by the sole Fire Prevention/Public Education Officer. Staffing for these programs is augmented through the use of the Deputy Fire Chief, and volunteer firefighters, the latter delivering the residential smoke and CO alarm program. The Fire Prevention/Public Education Officer is also responsible for conducting all Fire Code building inspections, as well as spending approximately four hours per week servicing and repairing small engine/equipment carried on fire apparatus.

Only a few sections of the Ontario Fire Code apply to private dwellings so there is little for a Fire Prevention Officer to inspect in private dwellings. The Fire Code requires homes to have working smoke alarms and working carbon monoxide alarms. It does not require a fire extinguisher, maintained exits, or fire separations. Therefore, it makes sense that to keep people safe from fire in their own homes, the fire service relies on public education efforts rather than home inspections.

Most fires throughout Ontario are caused by human behaviour and public education's goal is to change human behaviour. Leaving cooking unattended, leaving candles unattended, using electrical cords improperly, not safely discarding smoking materials are a few of the leading causes of home fires in Ontario each year that are caused by human behaviours.

The following table shows how many times each of these programs have been delivered over the past four years.

Table 19: Public Education Events

Public Education Events	2022	2023	2024	2025
Station tours	4	13	9	8
School visits – in class	7	10	8	10
Hazard house events	-	-	-	6
Friendly reminders - seniors	-	4	1	5
Smoke alarm program	-	6	-	-
Community events	1	4	10	9
Open houses	-	-	1	1
Fire extinguisher training	2	12	8	12
Radio and social media	4	14	10	17
After the fire program	-	2	-	2
Learn not to burn	-	2	-	-
Safety trailer	1	2	3	1
Home show display	1	1	1	1
Guest speaker meetings/training	5	6	5	3
Street displays	1	1	1	1
Campgrounds, cottage safety	1	1	2	1
Designing, writing, and producing brochures, visual aids	6	2	2	1
Short-term rental inspections	-	-	-	6
Public Information Officer	-	1	-	2
Totals	33	81	61	86

Observation

Observation #8: Centre Wellington's building stock is primarily residential, representing the largest share of properties and the greatest source of fire-related losses between 2018 and 2022. While other occupancy types make up a small portion of the inventory, they pose higher fire risks due to factors like fuel load and building complexity. A significant share of properties remains unclassified under the Ontario Building Code, limiting a complete assessment of overall fire risk.

Recommendation

Recommendation #8: Continue prioritizing residential fire risk reduction through prevention, public education, inspections, and targeted response planning, while undertaking a comprehensive inventory and risk profiling of higher-risk occupancies (Groups A, D, E, and F). Integrate this data into the CRA, pre-incident planning, and inspection prioritization, including refining 'Not Classified' properties where feasible, to enhance risk modeling, operational readiness, and resource allocation.

Strategic Objective: #2 Public Fire Safety Education

Suggested completion: 36-72 months

Cost: Neutral

Rationale: Residential occupancies represent the greatest overall fire risk in Centre Wellington due to their prevalence and demonstrated history of fire loss. Concentrating prevention and education efforts within this sector offers the greatest potential for reducing fire incidents, injuries, and property damage.

Conversely, although industrial, assembly, and high fuel load occupancies are fewer in number, fires in these buildings have the potential to result in significant property loss, business interruption, environmental impact, and life safety impacts. Proactive identification, inspections, and pre-incident planning for these occupancies will enable more effective tactical decision making and risk mitigation.

Improving the classification and understanding of properties not currently defined under the OBC will further enhance Centre Wellington's ability to accurately assess risk, allocate resources efficiently, and meet provincial CRA requirements under the Fire Protection and Prevention Act.

Observation

Observation #9: CWFR has 19 public education initiatives and many programs designed to change people's fire-related behaviours designed to help reduce community fire risk. However, not all of them are fully delivered due to limited resources. based upon the large number of programs available and the limited resources to deliver them, it may be wise to remove those with the least perceived impact, and to re-invest these hours into those programs tied most closely with community risk. The home smoke alarm program, after the fire program, and friendly reminder for seniors are three examples of programs that are under resourced and could be effectively customized to address Centre Wellington's community risk.

Recommendation

Recommendation #9: Implement a records management system (RMS) to provide detailed tracking, analysis, and reporting of all public education activities undertaken by CWFR staff in order to support evidence-based program evaluation, community risk analysis, and strategic allocation of public education resources.

Strategic Objective: #2 Public Fire Safety Education

Suggested Completion: 36-72 months.

Cost: Estimated at \$35,000 initial implementation costs, \$25,000 annual programming, and maintenance.

Rationale: Utilizing an RMS to track public education activities will allow CWFR to better evaluate program effectiveness and align resources toward initiatives that provide the greatest impact on community fire risk reduction. Improved data collection and reporting will support evidence-based decision-making, identify service gaps, strengthen accountability, and enhance long-term planning and budget justification. This approach will also assist CWFR in prioritizing higher-impact programs such as smoke alarm initiatives, after-the-fire follow-up, and senior-focused risk reduction activity.

3.5 Fire Prevention and Code Enforcement

Strategic Objective #3: Fire Prevention and Code Enforcement

Enhance community safety through the delivery of a consistent, collaborative, and risk-informed fire prevention and code enforcement program. CWFR will continue to promote compliance with applicable legislation, regulations, and standards while adapting prevention strategies to reflect community risk, development patterns, and best practices.

3.5.1 Fire Prevention Services Overview

As departments increase their emphasis on fire prevention activities, communities see a reduction in fire-related losses. In Ontario alone, deaths caused by fire have been reduced over the last 70-75 years from 354 deaths reported in 1956 to 111 deaths reported in 2024. Although difficult to directly measure, effective fire prevention programs reduce fire-related deaths and property loss proportionately to the resources committed. Data collection and analysis will determine the effectiveness of these programs and their impact on the overall reduction of losses.

CWFR relies on the Fire Chief, Deputy Fire Chiefs, and the Fire Prevention Officers as assistants to the Fire Marshal to carry out all directives required within the Fire Protection and Prevention Act, 1997. The FPPA regulations for public education and fire prevention and the projected growth for Centre Wellington emphasize the need to ensure appropriate capacity for fire prevention services.

The ability to meet legislative requirements, service expectations, and public safety requirements, relies on the fire service having adequate resources to meet the needs, circumstances, and requirements. With anticipated growth and a recommended approach to targeted public education, proactive inspection, and code enforcement programs, additional CWFR staff will be required to be phased in.

3.5.2 Fire Code Inspection Services

Modern building codes, including life safety design and operating requirements, are key components of risk management. Cyclical fire inspection programs for high-risk buildings ensure these systems continue to function throughout the life of the building. This is especially important for high occupancy and special purpose buildings such as apartment buildings, hospitals, seniors housing and schools.

While the benefits of an effective fire prevention program are sometimes difficult to fully quantify, the reduction of fire deaths and injuries in Ontario following the implementation and enforcement of modern building and fire codes illustrates the value. These services are fundamental elements of a broader community fire reduction and life safety strategy. Fire inspections are critical services in identifying fire hazards and maintaining life safety systems. CWFR provides inspection services as required under Ontario Regulation 365/13 – Mandatory Assessment of Complaints and Requests for Approval for complaints and requests and Ontario Regulation 364/13 – Mandatory Inspection - Fire Drill in Vulnerable Occupancy.

Fire services should establish service level standards that allow the department to set clear expectations to the public, Council, and staff. Fire prevention and life safety activities and programs industry best practices are outlined in NFPA 1730 and through the Fire Underwriters Survey (FUS). Municipalities should examine these levels based on needs and circumstances and examine the identified risks within the community.

CWFR's current inspection frequency rate, and standards for inspections set out by NFPA and FUS is outlined in Table 20. This table also includes the recommended inspection frequency for Centre Wellington. The current schedule cannot be met with existing staffing. This recommended inspection schedule will require additional resources to be added to the staffing complement of the Fire Prevention Division. Additional resources required are detailed in Appendix F, and included in recommendation #10, below.

Table 20: Fire Prevention Inspections Frequency Levels

OBC Building Class	Building Stock	CWFR Current Frequency Targets (months)	CWFR Current Annual Targets	NFPA 1730 (months)	FUS (months)	Recommend (months)
A	21	12	21	12	6	12
B	5	12	5	12	6	12
C	298	12	298	12	6	12
D	411	36	137	36	12	36
E	470	36	156	36	12	36
F	81	36	27	24	6	24
Total annual targets	1,286		644	657	1,691	657

The amount of time it takes a Fire Prevention Inspector to conduct inspections depends upon many factors including occupancy type, complexity, size, when it was last inspected, owner compliance, and if there have been any renovations, ownership changes, etc. A good rule of thumb for the initial inspection, conducting research, writing reports, administration work, travel time, and subsequent inspections is 3.5 hours from beginning to completion. This of course can vary wildly from 1 hour to 15 or more hours. Applying the 3.5-hour approximation to CWFR's current pro-active inspection frequency schedule of 644 assigned buildings per year results in 2,254 hours. However, due to the Centre Wellington's fire profile, and to support lowering community risk, it is being recommended that the inspection frequency be increased for industrial occupancies from every 36 months to every 24 months. This will result in an additional 13 assigned inspections per year, increasing inspection hours by 49 to an annual total of 2,299.

In addition to these pro-active inspections that target community risk, CWFR is legislatively required in the Fire Protection and Prevention act to conduct inspections of complaints. In 2025 CWFR received 106 fire code inspection requests and complaints totalling equating to 372 inspection hours. The following table shows staffing availability vs demand.

Table 21: Fire Prevention and Public Education programs and associated hours

	FP staff	Deputy	Totals	Net
Hours available	1,540	770	2,310	2,310
Complaints and Requests	298	74	372	1,938
Fire investigations, Building Dept support, prosecutions, other	50	58	108	1,830
Servicing equipment	208	0	208	1,622
Public Education	268	80	348	1,274
Current Pro-active inspection schedule	1,924	330	2,254	(980)
Recommended pro-active inspection schedule	1,969	330	2,299	(1,025)
Total net hours required with Deputy Chief removed from fire investigations, building department support, complaints, requests, public, and pro-active inspections			542	(1,567)

Table 22: Current hours Deputy Fire Chief and the Fire Prevention Staff

Fire Prevention Staff	
Hours scheduled annually based upon 35-hour work week	1820
Vacation, training, education, unplanned absences	(280)
Total hours available	1540
Deputy Chief	
Hours scheduled annually based upon 35-hour work week	1820
Vacation, training, education, sick,	(280)
Primary Deputy Duties (50% of time)	(770)
Total hours available	770

Observation

Observation #10: CWFR does not employ enough Fire Prevention staff to meet the current workload demand, and target inspection performance expectations. If the Deputy Chief is removed from performing task-level inspection-related duties, the deficit of hours available to meet performance demand increases further from a deficit of 1,025 hours to 1,567 hours.

Recommendation

Recommendation #10: Add one additional Fire Prevention/Public Education Officer to support inspection frequencies, public education delivery, complaint investigations, and data-driven community risk reduction initiatives. Following implementation, develop an annual risk-based public education and inspection strategy informed by incident trends, demographic analysis, and CRA findings.

Strategic Objective: #3 Fire Prevention and Code Enforcement.

Suggested completion: 12-36 months

Cost: \$120,000- total compensation. Additional costs associated with uniforms, equipment and vehicle needs as required.

Rationale: Adopting a predictive, risk-based approach to code enforcement aligns with best practices by directing limited inspection resources to where they can have the greatest impact. Unfortunately, CWFR does not have sufficient staff to fully conduct pro-active inspections targeting community risk. Further, the Deputy Chief should not be performing task level work including conducting inspections (recommendation #5) and removing him from these duties further increases the deficit as shown in the table.

Observation

Observation #11: CWFR's Fire Prevention Division currently relies heavily on paper-based processes to administer inspections, file management, enforcement documentation, and public education record keeping. Inspection orders and related documentation are manually completed and issued, while records are maintained primarily through physical filing systems and disconnected tracking methods. This approach creates administrative inefficiencies, limits information accessibility, and increases the time required to complete routine tasks such as record retrieval, inspection tracking, compliance follow-up, and reporting. As call volumes, inspection requirements, and community growth continue to increase, the limitations of a paper-based system will place increasing pressure on staff resources and operational effectiveness.

The current system also limits CWFR's ability to efficiently analyze trends, measure program effectiveness, prioritize inspections based on community risk, and generate meaningful performance metrics to support decision-making and reporting. Modern fire prevention and public education programs increasingly rely on integrated records management systems capable of supporting inspection scheduling, occupancy tracking, enforcement management, public education reporting, mobile field access, and data analytics.

Recommendation

Recommendation #11: Utilize a modern comprehensive RMS system to support digital inspection management, occupancy tracking, enforcement documentation, data analytics, and integration with CWFR's broader community risk reduction and operational planning initiatives.

Strategic Objective: #3 Fire Prevention and Code Enforcement

Suggested completion: 1-12 months

Cost: The project is being conducted as part of a separate corporate initiative and costs are associated to that project.

***Rationale:** Transitioning to a digital records management environment would improve operational efficiency, strengthen data quality and accessibility, enhance legislative documentation practices, and better support risk-informed fire prevention and community risk reduction activities across Centre Wellington. A modern RMS will improve the efficiency, consistency, and accuracy of Fire Prevention Division operations while reducing administrative workload associated with paper-based systems.*

Enhanced data collection and analytics capabilities will support risk-based inspection prioritization, program evaluation, legislative documentation, and evidence-based decision-making. Digitized records will also improve information accessibility for operational personnel, strengthen reporting capabilities, and better position CWFR to manage future growth, increasing service demands, and evolving community risk reduction responsibilities.

3.5.2.1 Additional Residential Units (ARUs)

Additional Residential Unit (ARU), also called an Additional Dwelling Unit (ADU), is a small, fully equipped living space on the same property as the main house. It can be inside the main house, like a basement apartment, or in a separate building on the lot. ARUs can be part of detached houses, semi-detached houses, semi-link houses, or townhouses in Centre Wellington. ARUs are also referred to as additional dwelling units, secondary suites, accessory units, basement apartments, coach houses, laneway houses, garden suites, tiny homes, granny flats, in-law apartments or nanny suites.

ARUs help increase housing options and make homes more affordable. They allow property owners to create extra living spaces for renters or family members. This supports a range of housing needs, including affordable rental housing and multi-generational living.

Centre Wellington Council approved amendments to the Official Plan (OP01/25) and Zoning By-law (2009-045) to permit up to three ARUs on a lot containing a detached house, semi-detached house, or townhouse in the urban areas. As such, up to four residential units in total are now permitted on a residential lot with municipal water and sewage services. The amendments came into effect on November 10, 2025.

When dealing with ARUs, it is essential to consider fire safety measures, particularly related to inspections and fire safety education. The increase in approval of these units may require additional staffing to ensure compliance with fire safety regulations, both at the approval stage and on an ongoing basis. Furthermore, ARUs might necessitate extra resources or considerations during emergency fire suppression responses. Staffing considerations for CWFR related to growth in the approval of ARUs should be reviewed on an ongoing basis.

3.5.3 New Developments Plan Reviews

The Building Division circulates new development, and construction plans to the fire service for review and comments informally on an as needed basis. It appears the relationship between CWFR, and the Building Division is strong and positive.

Observation

Observation #12: Having CWFR formally review new developments and construction plans via a Building by-law would provide CWFR staff with the knowledge of new developments that are planned and details on unique and potential risks with new buildings. Providing comments would align CWFR with their building division counterparts and ensure continuity with OBC and OFC once the building becomes occupied. It is important that CWFR is more involved in these reviews as Centre Wellington grows and develops.

Recommendation

Recommendation #12: Collaborate with the Chief Building Official and Building Division to review opportunities to formalize CWFR's participation in new construction and significant renovations related to fire protection and life safety systems.

Strategic Objective: #3 Fire Prevention and Code Enforcement

Suggested completion: 12-24 months

Cost: Approximately \$5,000 for the courses and the provincial exams, if warranted.

***Rationale:** Once a building is constructed, the ongoing care and maintenance of fire and life safety components are guided by the Fire Protection and Prevention Act (FPPA) and the Ontario Fire Code. Engaging CWFR throughout the design and planning process provides an opportunity to bring operational and fire prevention expertise into the development of these systems and helps support consistent application of the applicable requirements throughout the life of the building.*

Components such as fire alarms, sprinkler systems, standpipes, fire routes, fire hydrants, fire department connections, commercial cooking systems, and other specialized protection systems play an important role in both occupant safety and building protection. Collaboration with CWFR during the design process can help ensure these systems are practical, effective, and aligned with the operational needs of the fire service.

3.5.4 Fire Cause and Origin Services

All fires in Ontario causing injury, death and property loss are to be investigated for origin, cause and circumstances under the Fire Protection and Prevention Act, 1997. The Incident Commander conducts investigations, and if unable to determine cause, contacts the Fire Prevention Officer to conduct the investigation.

Standard operating guideline FP-1202-provides instruction and procedures for managing investigations of a fire incident and maintaining scene security including safe working practices and general duties of fire investigators. CWFR has appropriate guidelines and training/certification for conducting investigations, documentation, notification of appropriate agencies.

Observation

Observation #13: CWFR personnel conducting fire investigations currently utilize N95 masks for respiratory protection. While N95 masks provide limited particulate filtration, they do not protect against hazardous gases, vapours, volatile organic compounds (VOCs), or oxygen-deficient atmospheres commonly present during post-fire investigations. Fire investigators may therefore be exposed to harmful products of combustion and other airborne contaminants that can remain in the environment long after fire suppression activities have concluded, increasing long-term occupational health risks.

Recommendation

Recommendation #13: Discontinue the use of N95 masks for fire investigation activities and equip fire investigators with appropriate respiratory protection, such as a full-face Powered Air Purifying Respirator (PAPR) or Self-Contained Breathing Apparatus (SCBA), supported by continuous atmospheric monitoring equipment capable of detecting oxygen levels, carbon monoxide, and volatile organic compounds (VOCs).

Strategic Objective: #3 Fire Prevention and Code Enforcement

Suggested completion: 1-12 months

Cost: Approximately \$5,000 initial capital cost plus annual maintenance and replacement costs.

Rationale: *Providing respiratory protection specifically designed for post-fire investigation environments will reduce exposure to hazardous airborne contaminants and support firefighter health and safety best practices. Enhanced respiratory protection and atmospheric monitoring will help minimize occupational exposure risks associated with carcinogens, toxic gases, and respiratory irritants commonly encountered during overhaul and investigation activities, while aligning CWFR with modern firefighter cancer prevention and occupational health initiatives.*

3.6 Emergency Management Program

Under the Emergency Management and Civil Protection Act (EMCPA), Centre Wellington is required to maintain a comprehensive emergency management program to protect the health, safety, and welfare of residents and property. Centre Wellington fulfills this obligation through participation in the County of Wellington Emergency Management Plan (2020.04, revised January 2026), which provides a coordinated two-tier framework for the County and all member municipalities. This structure ensures legislative compliance, standardized response procedures, and access to shared resources, while preserving Centre Wellington's authority to manage local emergencies.

Centre Wellington has formally adopted the County Emergency Management Plan by by-law and operates within the governance model established therein. Centre Wellington's Emergency Management Program is administered by the Community Emergency Management Coordinator (CEMC) and overseen by the Municipal Emergency Management Program Committee (MEMPC). The program includes annual plan review, Hazard Identification and Risk Assessment (HIRA) updates, emergency exercises, and mandatory training for Municipal Emergency Control Group (MECG) members, ensuring ongoing readiness and compliance with provincial standards.

Centre Wellington's risk profile reflects both County-wide hazards and localized community exposures. As identified in the County Plan, hazards include severe weather events, flooding, blizzards and ice storms, human health emergencies, hazardous materials incidents, energy disruptions, structural collapse, and water contamination risks. For Centre Wellington specifically, risks associated with the Grand River watershed, historic downtown cores in Fergus and Elora, transportation corridors, rural and agricultural operations, and vulnerable drinking water protection areas require targeted planning and operational readiness.

During an emergency, Centre Wellington activates its Municipal Emergency Control Group (MECG), which provides strategic direction and oversight. The Mayor has the statutory authority to declare or terminate a municipal emergency. The MECG, comprised of the Mayor, CAO (EOC Director), Fire Chief, senior infrastructure and environmental services officials, Treasurer, CEMC, and other designated staff, coordinates resource allocation, establishes priorities, and ensures continuity of essential municipal services. Where incidents impact multiple municipalities or place extraordinary demands on resources, the County Plan provides for the establishment of a Joint MECG/EOC, enabling unified regional coordination.

Emergency response operations are structured under the Provincial Incident Management System (IMS), as outlined in the County Plan. Tactical control is exercised at the incident site through Incident Command, while strategic coordination, resource management, and policy decisions occur through the Emergency Operations Centre (EOC), which may be activated physically or virtually. This structure ensures clear lines of authority, interoperability among agencies, and scalable response capacity for incidents ranging from localized emergencies to complex, multi-jurisdictional events.

Emergency information and public communications are coordinated through designated Emergency Information Officers (EIOs), with Centre Wellington's Manager of Strategic Initiatives and Communications fulfilling this role in alignment with the County framework. Messaging is coordinated with Wellington County Communications and partner agencies to ensure consistent, accurate, and timely public information. During large-scale or County-wide emergencies, a Joint Emergency Information Centre may be established to maintain unified messaging and public confidence.

Emergency evacuations and the provision of Emergency Social Services (ESS) are delivered in partnership with Wellington County Social Services and the Canadian Red Cross, as outlined in the County Plan. Identified reception and shelter facilities within Centre Wellington include the Centre Wellington Community Sportsplex and the Elora District Community Centre. In addition, the County's Debris Management and Recovery frameworks guide post-disaster cleanup, financial tracking, infrastructure restoration, and access to provincial disaster assistance programs. Service continuity planning further supports the maintenance and restoration of critical municipal functions during and after emergencies.

CWFR plays a Centre operational and leadership role within this emergency management structure. The Fire Chief serves on the MECG and provides incident command for fire-related emergencies, hazardous materials events, technical rescues, and flood coordination with Conservation Authorities. CWFR ensures activation of mutual aid agreements, liaison with provincial agencies, and participation in multi-agency training and exercises. As a 24/7 essential service, CWFR is fundamental to both emergency response and broader municipal resilience, ensuring that Centre Wellington remains prepared to mitigate, respond to, and recover from emergencies of varying scale and complexity.

Observation

Observation #14: Centre Wellington's emergency management program is already closely connected to the operational responsibilities of CWFR. Centre Wellington participates in the County of Wellington Emergency Management Plan, maintains a CEMC-administered emergency management program, and relies on the Municipal Emergency Control Group, EOC structure, annual training, HIRA updates, emergency exercises, and coordinated response procedures to meet its obligations under the EMCPA. Within this framework, the Fire Chief already serves on the MCECG and provides operational leadership for fire-related emergencies, hazardous materials incidents, technical rescues, flood coordination, mutual aid activation, provincial agency liaison, and multi-agency training. As a 24/7 essential service, CWFR is central to Centre Wellington's emergency preparedness, response, and resilience capacity.

Recommendation

Recommendation #14: Ensure the Fire Chief maintains as a member of Municipal Emergency Control Group.

Strategic Objective: #1 Administration

Suggested completion: Ongoing

Cost: Neutral

Rationale: Maintaining the Fire Chief as a member of the Municipal Emergency Control Group (MECG) ensures that fire and emergency response expertise remain directly integrated into municipal emergency decision-making. As the senior operational leader for CWFR, the Fire Chief provides critical expertise related to incident command, emergency response, risk assessment, mutual aid, and inter-agency coordination. Continued participation on the MECG will support effective coordination between municipal emergency management and field operations and strengthen Centre Wellington's overall preparedness, response, and recovery capabilities.

Observation

Observation #15: As Centre Wellington grows and municipal services become increasingly reliant on integrated systems, digital infrastructure, and interdepartmental coordination, Centre Wellington does not currently have a formal, Township-wide Business Continuity Planning (BCP) framework requiring division-specific continuity plans. While Centre Wellington operates under the County Emergency Management Plan and maintains EOC procedures, the absence of structured departmental continuity plans may result in service disruptions, delayed recovery, or operational gaps during events such as cyber incidents, infrastructure failures, severe weather, or prolonged staffing shortages.

Recommendation

Recommendation #15: Develop municipal-wide BCP framework aligned with the Emergency Management Program, requiring all departments to maintain and regularly update plans for critical services and operational risks.

Strategic Objective: #1 Administration

Suggested completion: 36-72 months

Cost: Estimated at \$40,000–\$100,000 for third-party support, depending on scope. Cost neutral if developed internally. Ongoing plan maintenance, training, and exercises may require approximately \$5,000–\$15,000 annually.

Rationale: *Establishing a formal BCP framework will improve organizational resilience, minimize service disruptions during emergencies, and support Centre Wellington's ability to protect residents, staff, infrastructure, and critical information. Divisional-level plans ensure that each department proactively identifies its essential services, critical staff roles, technology dependencies, and recovery strategies in the face of unplanned events.*

For CWFR and other first-response departments, continuity planning is essential to sustaining life safety operations, communications, and incident command functions during prolonged or complex emergencies. A coordinated municipal BCP framework also aligns with public sector best practices and provincial emergency management expectations, reinforcing Centre Wellington's capacity to recover quickly and effectively while maintaining public trust.

3.7 Emergency Response and Operations

Strategic Objective #4: Emergency Response and Operations

Deliver emergency response services that are aligned with Centre Wellington's risk profile, growth trends, and community needs. Operations will be conducted in a manner that prioritizes firefighter health and safety, reflects recognized industry best practices, and ensures efficient and effective use of available resources.

Fire operations within Centre Wellington encompass the full range of emergency response activities delivered by CWFR to protect life, property, and the environment. These services are provided across a geographically diverse municipality that include urban settlement areas, rural landscapes, agricultural operations, river systems, and transportation corridors. Fire operations are designed to respond effectively to both routine and complex emergencies, recognizing that risk profiles, response demands, and resource requirements vary significantly across Centre Wellington.

CWFR provides 24/7 emergency response to a broad range of incidents, including structural fires, motor vehicle collisions, medical assistance calls, technical rescue incidents, hazardous materials events, and other public safety emergencies. Structural firefighting remains a core operational responsibility, particularly within residential occupancies, which represent the predominant building stock across Centre Wellington. In addition to fire suppression, CWFR personnel are routinely engaged in complex life safety operations, including technical rescues within the gorge, water and ice rescues on local rivers and bodies of water, patient care support, scene stabilization, and hazard mitigation, often under time-critical and high-risk conditions.

Fire operations within Centre Wellington are delivered through a part-time, volunteer service model, with trained volunteer firefighters responding from multiple fire stations strategically located to provide coverage across Centre Wellington's diverse geography. This model relies on the availability and timely response of volunteer personnel to assemble emergency resources and deliver frontline services. Emergency incidents are managed through an established incident command system and supported by mutual aid plan where appropriate, allowing CWFR to supplement local response capabilities and assemble an Effective Response Force (ERF) capable of performing multiple critical fireground and rescue tasks concurrently, in alignment with recognized best practices and applicable industry standards.

Centre Wellington's fire operations must account for unique and elevated risk factors that influence response planning and operational readiness. These include older and mixed-use building stock in established settlement areas, agricultural and industrial occupancies, rail lines and major transportation corridors, and significant natural features such as the gorge and multiple waterways. The presence of these natural features introduces a higher frequency and complexity of technical rescue incidents, requiring specialized training, equipment, and coordinated multi-agency response.

Seasonal conditions, tourism activity, and population fluctuations further impact emergency response demands, particularly in areas associated with recreation, water access, and natural terrain. As land use patterns evolve and development continues within and adjacent to higher-risk areas, CWFR's operational strategies must remain adaptable and informed by community risk to ensure timely, effective, and safe emergency response across all incident types.

This emergency response and operations section of the FMP evaluates CWFR's current emergency response capabilities and identifies future operational needs in the context of community growth, changing risk profiles, and evolving service expectations. The analysis is intended to support informed decision-making related to staffing, volunteer sustainability, station coverage, apparatus, training, and operational policies, ensuring that CWFR remains capable of delivering effective, safe, and sustainable emergency response services now and into the future.

3.7.1 Structural Firefighting

Fire services resources must be aligned with the most probable and consequential risks present within a community. Structural fire suppression encompasses a coordinated set of tactics used to control and extinguish fires originating from sources such as electrical failures, cooking activities, heating equipment, and deliberate ignition. Within Centre Wellington, low-rise residential occupancies, particularly single-family dwellings, constitute the predominant building stock and represent the most frequent form of structural fire risk. Although fires in these occupancies are typically limited to one or two structures and are generally categorized as low to moderate in overall community risk, residential fires continue to account for a significant proportion of fire-related fatalities, injuries, and property loss.

Structural fire incidents comprise a relatively small portion of CWFR's overall emergency response activity; however, they require a disproportionately high level of operational readiness. These incidents demand rapid coordination, adequate personnel, and specialized apparatus to support effective fire suppression, rescue operations, and firefighter safety. All suppression personnel are trained to *NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) Level I and II Standards* in accordance with provincial requirements, ensuring that firefighters possess the core competencies necessary to safely conduct structural firefighting operations.

Structural firefighting is inherently complex and time critical. Incidents involving interior fire attack or occupant rescue require multiple essential tasks, such as fire attack, search and rescue, ventilation, water supply, and incident command, be performed concurrently. Industry standards have established best-practice benchmarks for the number of personnel and apparatus required to safely and effectively manage these operations. In Centre Wellington, achieving an ERF often depends on the coordinated response of volunteer firefighters from multiple stations, reflecting both the geographic scale of the community and the nature of the service delivery model.

If sufficient personnel are not available early in an incident, critical life safety and fire control activities may be delayed, increasing risk to occupants, and responding firefighters. This risk is further influenced by factors such as response distance, volunteer availability, and time of day, all of which must be considered when evaluating structural firefighting capability within Centre Wellington.

To support structural firefighting operations, CWFR maintains a fleet of fire suppression apparatus distributed across its stations and deploys resources based on closest-station response, supplemented as needed to assemble the required ERF. As Centre Wellington continues to evolve through residential growth, changes in land use, and increasing service expectations, continued investment in training, staffing capacity, and suppression resources will be necessary to ensure CWFR can maintain effective and safe structural firefighting operations aligned with community risk and recognized industry standards.

3.7.2 High-Rise and Multi-Unit Residential Firefighting Operations

Fire suppression operations in multi-unit residential buildings present distinct challenges for CWFR, even in the absence of true high-rise development. Centre Wellington does not currently contain buildings that meet the Ontario Building Code (OBC) and Ontario Fire Code (OFC) definition of a high-rise structure, typically characterized by occupied floor levels exceeding 18 metres above grade. However, the presence and gradual increase of low-rise multi-unit residential buildings, including apartments, mixed-use occupancies, stacked townhouses, and converted dwellings, introduce operational complexities that differ significantly from single-family residential firefighting.

These challenges are particularly evident within the historic downtown cores of Fergus and Elora, where older, mixed-use buildings often combine residential units above commercial occupancies. Many of these structures were constructed prior to modern building and fire code requirements and may feature legacy construction methods, limited fire separations, interconnected floor assemblies, and constrained access for fire apparatus. Narrow streets, shared walls, and minimal setbacks can further complicate suppression operations and increase the potential for fire spread beyond the unit or building of origin.

Fire incidents in these occupancies frequently require firefighters to manage multiple critical tasks simultaneously, including fire attack, search and rescue, ventilation, exposure protection, and occupant evacuation or shelter-in-place strategies. The recent structural fire in the downtown Elora area highlights the elevated risk profile associated with historic, multi-unit buildings and underscores the operational demands placed on CWFR during such incidents. Fires in these settings can escalate rapidly, require extended operational periods, and place significant demands on staffing, water supply, and incident coordination.

Evacuation and occupant management in multi-unit and mixed-use buildings also present added complexity. Occupants may have varying levels of familiarity with emergency procedures, and some buildings rely on compartmentation and shelter-in-place approaches rather than full evacuation. The effectiveness of these strategies depends heavily on the presence, functionality, and maintenance of critical life safety systems, including fire separations, smoke alarms, sprinkler systems, standpipes, and emergency lighting. In older buildings, these systems may be absent, modified, or non-compliant, reinforcing the importance of proactive inspection, enforcement, and public education. Centre Wellington's building stock remains predominantly low-rise and residential in nature, with over 90 percent of occupancies classified as Group C – Residential.

Single-detached dwellings represent the majority of these structures, while multi-unit residential buildings are primarily low-rise apartments, townhouses, and seniors' residences concentrated in Fergus and Elora. At present, Centre Wellington has limited mid-rise development and no high-rise (7+ storey) buildings; however, recent construction activity indicates a gradual increase in mid-rise (4–6 storey) apartment and mixed-use residential buildings within settlement areas.

Centre Wellington's Official Plan directs future population growth to Fergus and Elora through intensification, infill, and redevelopment within designated built-up areas and mixed-use corridors. Provincial housing initiatives and local growth targets are expected to increase housing density and diversify built form, resulting in a greater number of multi-unit residential occupancies over the planning horizon. Intensification within historic downtown cores, where older combustible construction, limited spatial separation, and constrained access are present, introduces additional operational considerations as new multi-storey developments integrate with legacy structures.

Although Centre Wellington does not currently experience true high-rise firefighting demands, the anticipated increase in mid-rise and higher-density residential development will elevate life safety and operational complexity. Multi-unit buildings involve greater occupant loads, vertical fire spread potential, reliance on fire protection systems, and more complex evacuation and incident command requirements. As growth continues, CWFR must proactively align training, pre-incident planning, apparatus capability, and fire prevention oversight with evolving development patterns to ensure continued safe and effective response within an intensifying-built environment.

To address these trends, CWFR must continue to invest in firefighter training, inspection and enforcement programs, pre-incident planning, and fire prevention initiatives tailored to low-rise and multi-unit residential occupancies, particularly within historic downtown areas. Strengthening coordination with property owners, developers, and building managers, while ensuring consistent compliance with the Ontario Fire Code, will be critical in reducing risk and improving life safety outcomes.

As Centre Wellington experiences continued growth, redevelopment, and gradual residential intensification, aligning operational capabilities with Centre Wellington's evolving residential profile will be essential to maintaining effective emergency response. A proactive, risk-informed approach will ensure that CWFR remains prepared to manage the increasing complexity of multi-unit residential firefighting and protect public safety in the years ahead.

Observation

Observation #16: Centre Wellington is experiencing gradual residential intensification, including an increase in low-rise multi-unit and mixed-use buildings, particularly within the historic downtown cores of Fergus and Elora. Many of these structures feature legacy construction, limited fire separations, and constrained access, which can complicate fireground operations, increase the risk of fire spread, and challenge evacuation efforts. As development continues and mid-rise buildings emerge, these complexities are expected to grow; however, CWFR currently lacks a formal system to track and analyze incidents specific to these occupancies, limiting visibility into emerging risks and operational impacts.

Recommendation

Recommendation #16: Implement a systematic process to monitor and analyze fire incident trends related to multi-unit residential occupancies, including response frequency, nature of incidents, and resource deployment per event.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months

Cost: Neutral

Rationale: *Implementing a structured monitoring process will enable CWFR to better understand incident trends, operational demands, and risks associated with multi-unit residential buildings. This data-driven approach will support informed decision-making related to training, staffing, deployment, and fire prevention, while allowing the department to proactively address recurring challenges and align resources with evolving community risk.*

This information should be integrated into annual operations reviews, training programs, apparatus and staffing planning, and targeted fire prevention and public education initiatives.

3.7.3 Medical Assist

Medical assistance forms an important component of CWFR all-hazards emergency response model. Although fire suppression remains the department's primary mandate, modern fire services frequently respond to medical emergencies where rapid intervention can significantly improve patient outcomes. CWFR responds to medical-related incidents in support of Wellington County Paramedic Services under a formal Tiered Response Agreement administered through the Cambridge Centre Ambulance Communications Centre (CACC). From 2021 to 2025, medical-related incidents accounted for approximately 24% of the department's total call volume, reflecting an ongoing need for fire-based medical response within Centre Wellington.

Under the Tiered Response Agreement, CWFR apparatus are dispatched by CACC to specific high-acuity medical incidents identified through the Medical Priority Dispatch System (MPDS). The MPDS system applies medically validated triage algorithms during 9-1-1 calls to determine call severity and dispatch the appropriate emergency resources. CWFR is typically dispatched within approximately 60 seconds of call entry into the dispatch system when the incident meets the established tiered response criteria. This structured dispatch model ensures that fire department resources are deployed primarily to time-sensitive and life-threatening emergencies, while reducing unnecessary responses to lower acuity medical calls and maintaining fire service operational capacity.

Tiered medical responses typically include incidents involving cardiac arrest, unconscious patients, respiratory compromise, seizures, severe allergic reactions (anaphylaxis), opioid overdose, and other life-threatening medical conditions where early intervention can significantly influence survival outcomes. Because CWFR stations are strategically located throughout Centre Wellington, firefighters can often arrive ahead of paramedic units and initiate critical patient care during the first few minutes of an emergency. Early interventions such as cardiopulmonary resuscitation (CPR), defibrillation, airway management, oxygen administration, and hemorrhage control can significantly improve patient survivability prior to the arrival of advanced life support personnel.

CWFR firefighters maintain Emergency Medical Responder (EMR) level qualifications, enabling them to deliver structured pre-hospital care consistent with nationally recognized medical training standards. EMR training equips firefighters with the knowledge and skills required to perform patient assessments, manage airways, support breathing and circulation, control bleeding, and stabilize patients until care can be transferred to paramedic services. Maintaining EMR-level certification ensures that fire personnel can provide safe and effective medical interventions during the critical early stages of an emergency.

Frontline CWFR apparatus are equipped with automated external defibrillators (AEDs), oxygen delivery systems, and basic trauma care equipment to support these responses. Firefighters routinely provide CPR and early defibrillation during cardiac arrest events, which remain among the most time-sensitive medical emergencies. The ability to initiate rapid defibrillation prior to the arrival of paramedics significantly improves the likelihood of survival in cases of sudden cardiac arrest.

CWFR also operates under a medical delegation and clinical oversight program through the Centre for Paramedic Education and Research (CPER), which serves as the regional Base Hospital authority. Through this program, firefighters are authorized to perform specific delegated medical interventions under physician oversight. One example includes the administration of epinephrine through an EpiPen for severe anaphylactic reactions, enabling firefighters to rapidly treat life-threatening allergic responses when minutes matter most. Medical delegation ensures that these interventions are delivered in accordance with established clinical protocols, documentation standards, and quality assurance processes.

From 2021 to 2025, CWFR personnel administered CPR approximately 36 times, utilized AED defibrillation in three incidents, and delivered oxygen therapy in approximately four calls, demonstrating the role firefighters play in supporting the local emergency medical system. While medical calls represent only a portion of overall incident activity, the time-critical nature of these responses means that early fire department intervention can have a profound impact on patient survival and recovery.

The Tiered Response Agreement also recognizes that fire suppression and life safety related to fire incidents remain the department's primary operational priority, and CWFR resources may be reassigned if fire emergencies occur simultaneously. This ensures that the fire service can continue to fulfill its legislated responsibilities under the Fire Protection and Prevention Act while still contributing meaningfully to the regional emergency medical response system.

As Centre Wellington continues to grow, particularly within the urban communities of Fergus and Elora, the demand for fire-based medical response is expected to evolve alongside broader emergency service needs. Maintaining EMR-level training, medical delegation programs, and strong coordination with Wellington County Paramedic Services and CACC will ensure that CWFR continues to provide timely and effective life-saving care while balancing its broader fire suppression, rescue, and public safety responsibilities.

Observation

Observation #17: CWFR plays a critical role in the delivery of frontline medical care as part of its all-hazards response model, providing rapid intervention in support of Wellington County Paramedic Services through a formal Tiered Response Agreement coordinated by the Cambridge Centre Ambulance Communications Centre (CACC). CWFR is dispatched to high-acuity, time-sensitive medical incidents through the Medical Priority Dispatch System (MPDS), allowing firefighters, trained to the Emergency Medical Responder (EMR) level, to initiate life-saving care such as CPR, defibrillation, airway management, and epinephrine administration prior to paramedic arrival.

As call volumes and community growth continue to evolve, fire-based medical response is expected to place increasing demands on CWFR, particularly within a composite staffing model that relies on volunteer firefighters. The time-sensitive and unpredictable nature of medical calls can impact volunteer availability, daytime response capacity, and overall operational readiness. While the current tiered response framework ensures appropriate deployment to high-acuity incidents, ongoing changes to MPDS protocols and local response trends necessitate regular review to ensure alignment with clinical oversight, system efficiency, and the sustainable use of volunteer resources.

Recommendation

Recommendation #17: Continue to regularly review and update the tiered medical response framework in collaboration with Wellington County Paramedic Services, CACC, and the CWFR medical oversight provider to refine response protocols, ensure alignment with MPDS, and clarify the clinical scope of practice for First Responders. This review should also include an assessment of impacts on volunteer firefighter availability, response reliability, and overall system sustainability.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 1-12 months then ongoing.

Cost: Neutral

***Rationale:** Regularly updating the tiered medical response framework ensures that CWFR remains aligned with evolving dispatch protocols, clinical standards, and community needs. As MPDS continues to refine call triage and prioritization, clear and evidence-based response criteria are required to ensure fire resources are deployed where they provide measurable benefit to patient outcomes, while avoiding unnecessary strain on operations. Collaboration with paramedic services and medical oversight will support appropriate adjustments to response types, training requirements, and delegated medical interventions.*

In addition, evaluating the impact of medical response on volunteer staffing is critical to maintaining a sustainable service model. Frequent or prolonged medical calls can affect volunteer availability, particularly during daytime hours, and may influence response times to other emergency incidents. By incorporating staffing impact analysis into the review process, CWFR can better balance medical response commitments with its core fire suppression responsibilities, ensuring continued operational effectiveness and high-quality patient care.

3.7.4 Hazardous Materials/Dangerous Goods Response

Hazardous materials (hazmat) incidents, including spills involving dangerous goods, present complex and potentially high-risk challenges to emergency responders, the public, and the environment. These events may range from minor fuel or hydraulic fluid spills to transportation-related incidents involving larger quantities of hazardous substances. While large-scale events are infrequent within Centre Wellington, the potential consequences, particularly along transportation corridors, within agricultural operations, near waterways, and in industrial or commercial settings, necessitate a clearly defined and disciplined response capability.

Centre Wellington's risk profile includes provincial highways, rail corridors, rural roadways, bulk fuel storage, agricultural chemicals, and light industrial occupancies. Transportation routes moving through Fergus and Elora, as well as rural concessions, create the potential for dangerous goods incidents that may impact residential neighbourhoods, environmentally sensitive lands, and watercourses. As such, CWFR must maintain response capabilities that reflect both the community's hazard exposure and the department's established operational limits.

Response procedures for hazardous materials incidents are governed internally by SOG 621 – *Spills (Hazardous Material Incidents)*. The SOG establishes a standardized approach focused on scene safety, incident command, defensive control actions, and coordination with external agencies. All spills are treated as hazardous materials incidents until the substance is identified, and personnel are directed not to exceed the department's level of training.

CWFR operates at the Operations Level for hazardous materials incidents. At this level, firefighters are trained to:

- Recognize hazardous materials and associated risks
- Establish and maintain scene control, including isolation and protective perimeters
- Position apparatus uphill, upwind, and at safe distances until product identification is confirmed
- Implement defensive containment measures such as damming, diking, diverting, and controlling runoff where safe to do so
- Support patient stabilization only when the area is confirmed safe for entry
- Coordinate traffic control, evacuation, and scene stabilization in collaboration with police and paramedic services

Consistent with SOG 621 – *Spills (Hazardous Material Incidents)*, CWFR personnel do not perform offensive or technician-level interventions, and entry into areas presenting vapour clouds, explosion risk, chemical contact hazards, or other immediately dangerous to life or health (IDLH) conditions is prohibited. The department does not maintain specialized chemical protective suits for hot zone entry, nor does it conduct product neutralization or advanced leak control operations. Interior firefighting gear is worn as protective clothing; however, this equipment does not provide the chemical protection associated with technician-level response.

Where the incident exceeds CWFR's operational capability, the Incident Commander will request additional resources through dispatch, including mutual aid departments, specialized hazardous materials teams, environmental contractors, or provincial resources as appropriate. A Senior Officer response is required in circumstances involving significant property damage, loss of life, large-scale environmental impact, or escalation beyond first alarm conditions.

Recent incident trends indicate that most hazardous materials responses within Centre Wellington involve smaller-scale events such as fuel spills from motor vehicle collisions, propane system leaks, carbon monoxide investigations, natural gas leaks, and hydro-related hazards. While typically limited in scope, these incidents reinforce the importance of maintaining strong scene management practices, regular training at the operations level, and effective inter-agency coordination.

CWFR's current hazardous materials service level represents a measured and responsible approach aligned with its risk profile, training standards, and available resources. By focusing on defensive containment, scene stabilization, and timely activation of specialized external resources, the department ensures firefighter safety while providing appropriate protection to residents, property, and the natural environment.

Centre Wellington is anticipating the development of a Battery Energy Storage System (BESS) facility within the municipality, introducing a new and emerging risk profile for the community. Although lithium iron phosphate batteries are generally more thermally stable than several other lithium-ion chemistries, a utility-scale LFP battery storage facility continues to present hazards associated with thermal runaway, flammable and toxic gas production, deflagration, energized equipment, fire propagation, re-ignition, prolonged incident operations, air-quality impacts, and potentially contaminated runoff.

Effective risk management will depend on system-specific testing, appropriate facility design, reliable detection and isolation systems, adequate water supply and exposure protection, pre-incident planning, firefighter training, environmental controls, and access to qualified technical support. CWFR has worked collaboratively with the facility proponent throughout the planning and development process to address these risks, including confirming the provision of an adequate and reliable water supply for cooling and exposure protection and establishing commitments for facility-specific training to be provided to CWFR personnel before the facility becomes operational.

Table 23: Public Hazard Incidents 2021-2025

Public Hazard	2021	2022	2023	2024	2025	Total	%
CO incident, CO present	5	16	6	9	7	43	22.75%
Gas Leak - Miscellaneous	3	6	3	1	1	14	7.41%
Gas Leak - Natural Gas	4	4	5	8	9	30	15.87%
Gas Leak - Propane	0	1	1	0	0	2	1.06%
Gas Leak - Refrigeration	1	0	0	0	0	1	0.53%
Other Public Hazard	1	1	1	0	3	6	3.17%
Power Lines Down, Arcing	10	15	8	10	25	68	35.98%
Public Hazard call false alarm	0	0	0	0	2	2	1.06%
Public Hazard no action required	2	1	1	1	0	5	2.65%
Ruptured Water, Steam Pipe	0	3	1	0	0	4	2.12%
Spill- Gasoline or Fuel	0	0	2	2	0	4	2.12%
Spill - Miscellaneous	0	0	2	3	1	6	3.17%
Spill - Toxic Chemical	0	0	1	1	0	2	1.06%
Suspicious Substance	0	0	1	0	0	1	0.53%

CWFR has worked collaboratively with the BESS proponent during the planning and development process to address these risks, including confirming that an adequate and reliable water supply will be provided and establishing commitments for facility-specific training before commissioning. As CWFR currently provides operations-level hazardous materials response and does not undertake technician-level hot-zone interventions, continued pre-incident planning, development of site-specific response procedures, and access to external technical and hazardous materials resources will be required to support safe and effective incident management.

CWFR operates at the Operations Level for hazardous materials response and does not undertake technician-level hot-zone interventions, continued pre-incident planning, development of site-specific response procedures, assessment of specialized equipment needs, and coordination with external hazardous materials and technical resources will remain important to supporting firefighter safety and effective incident management.

Observation

Observation #18: Centre Wellington is anticipating the development of a Battery Energy Storage System (BESS) facility within the municipality. Although lithium iron phosphate (LFP) batteries are generally more thermally stable than several other lithium-ion chemistries, a utility-scale facility continues to present specialized and potentially high-consequence hazards, including thermal runaway, toxic and flammable gas release, deflagration, fire propagation, re-ignition, energized equipment, significant cooling and exposure-protection requirements, air-quality impacts, and potentially contaminated runoff. These incidents can be prolonged, technically complex, and resource intensive.

Recommendation

Recommendation #18a: Continue collaborating with the BESS proponent to complete site-specific pre-incident planning, confirm water supply and exposure-protection requirements, provide facility-specific LFP battery fire and hazardous materials training, and establish appropriate response protocols before the facility is commissioned.

Recommendation #18b: *Formalize access to technician-level hazardous materials and technical support through an automatic aid agreement, fire protection agreement, specialized response partnership, or other suitable service arrangement.*

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months.

Cost: \$20k-\$50k (training and planning) or \$35k-\$90k (annual hazmat retainer)

Rationale: *BESS incidents represent an emerging and technically complex risk that requires facility-specific knowledge, reliable water, and exposure-protection capabilities, clearly defined operating procedures, environmental controls, and access to qualified technical support. Continued collaboration with the proponent will help ensure that system design information, emergency shutdown procedures, training, water supply, technical contacts, and response considerations are incorporated into departmental planning before the facility becomes operational.*

Given CWFR's Operations-Level hazardous materials capability, its role during a significant BESS incident would appropriately focus on scene isolation, defensive firefighting, exposure protection, air monitoring, public safety, and coordination with facility representatives and technical specialists. Formalizing external support arrangements in advance will reduce firefighter risk, improve operational decision-making, and provide assurance that the municipality is appropriately prepared to manage this evolving hazard. .

3.7.5 Technical Rescue Services

Technical rescue operations are typically low frequency but high-risk events requiring specialized knowledge, equipment, and ongoing training to ensure responder safety and successful outcomes. These incidents may include motor vehicle extrications, confined space emergencies, industrial entrapments, high-angle rope rescues, and water or ice rescues. Due to their complexity and infrequency, fire departments must maintain structured training programs, routine equipment inspection and maintenance schedules, and defined certification processes to sustain operational readiness. Maintaining competency in these disciplines requires deliberate and sustained investment, even when call volumes remain modest.

CWFR is responsible for delivering a range of technical rescue services within the Centre Wellington. As a composite fire service operating from multiple stations with a combination of full-time and volunteer personnel, CWFR must carefully balance service expectations with available training time, staffing capacity, and fiscal resources. Currently, CWFR provides:

- Awareness-level response: Confined Space, Trench Rescue
- Operational-level response: Hazardous Material, Motor Vehicle Rescue,
- Technician-level response: High Angle, Water/ Ice Rescue

Between 2021 and 2025, CWFR responded to approximately 577 rescue-related incidents. Of these, approximately 481 were motor vehicle collisions, with 33 requiring vehicle extrication. Additional responses included 2 elevator incidents, 17 rope rescues (low- and high-angle), and 32 water or ice rescue events. These figures indicate that the majority of CWFR's technical rescue activity is associated with motor vehicle collisions and related extrication services, which remain the most frequent and resource-intensive rescue discipline.

While higher-complexity rescue events occur infrequently, Centre Wellington's evolving risk profile, including growth in industrial and commercial occupancies, continued development pressures, transportation corridors, and recreational water use along the Grand River, introduces the potential for machinery entrapments, confined space emergencies, and water-related incidents. These scenarios may challenge existing capacity without continued investment in specialized training and equipment.

Specialized technical rescue training generally requires a minimum of 40 hours of hands-on instruction for initial certification, followed by annual skills verification and ongoing scenario-based training to maintain competency. For a composite service, this commitment must be carefully managed to ensure adequate participation, instructor availability, and operational coverage. Any future enhancement or expansion of technical rescue capabilities should therefore follow a phased and risk-informed implementation strategy, prioritizing disciplines with the greatest community risk exposure relative to frequency.

To support long-term service sustainability, CWFR should continue strengthening inter-agency coordination and mutual aid agreements with neighbouring municipalities and regional partners capable of providing technician-level or specialized team response for rare, high-consequence incidents.

While CWFR is positioned to meet Centre Wellington’s current technical rescue needs, continued monitoring of incident trends, industrial development, and training capacity will be necessary to ensure alignment between service levels, risk, and resources. Clear operational guidelines, sustained investment in training and equipment, and ongoing alignment with applicable NFPA standards will help ensure that CWFR continues to deliver safe, effective, and scalable technical rescue services as the community grows.

Table 24: 2021-2025 Rescue response incidents:

Call Type	2021	2022	2023	2024	2025	Total	Total %
Rescue	108	98	125	118	128	577	
Building Collapse	0	0	0	0	1	1	0.17%
High Angle Rescue	4	0	2	1	0	7	1.21%
Home/Residential Accident	1	0	1	0	0	2	0.35%
Low Angle Rescue	2	3	2	3	0	10	1.73%
Other Rescue	2	1	2	0	2	7	1.21%
Persons Trapped in Elevator	0	0	2	0	0	2	0.35%
Rescue No Action Required	0	1	0	0	1	2	0.35%
Vehicle Collision	83	81	105	102	110	481	83.36%
Vehicle Extrication	7	7	3	9	7	33	5.72%
Water Ice Rescue	0	2	0	0	0	2	0.35%
Water Rescue	9	3	8	3	7	30	5.20%

3.7.6 Motor Vehicle Rescue

Motor vehicle collisions (MVCs) continue to be a significant incident type requiring a comprehensive and coordinated emergency response. These incidents can involve complex hazards to both victims and responders, including entrapment, fire, hazardous materials, and unstable vehicle conditions. Vehicle extrication is a specialized technical operation that requires extensive training, specialized equipment, and precise coordination with police and ambulance services to ensure safe and effective incident management. External factors such as weather conditions, traffic volume, and roadway design further influence the severity of these incidents and the ability of responders to manage the scene safely.

Modern vehicles introduce new risks that increase the complexity of MVC response. Firefighters must consider features such as multiple-stage airbags, high-voltage battery systems in electric and hybrid vehicles, fuel cells, and advanced structural reinforcements that can impede extrication efforts. Additionally, incidents involving commercial vehicles or transport trucks may include dangerous goods, increasing the risk to responders and requiring advanced hazard assessment, containment, and potential decontamination efforts. As such, all CWFR personnel receive training in accordance with NFPA 1001 and NFPA 1006 standards to safely and effectively manage MVC and extrication scenarios.

Over the five-year period from 2021 to 2025, CWFR responded to 481 vehicle collisions, accounting for 83.36% of all rescue-related calls. An additional 33 calls (5.72%) were classified as vehicle extrications, requiring specialized stabilization, and cutting tools. These incidents are categorized under the broader “Rescue” incident type, which collectively represented 577 total responses, or 23.65% of the department’s total call volume. High-speed regional and provincial roadways that run through and around Centre Wellington, including Highway 6 and key arterial corridors, create zones of elevated risk and require rapid response and resource deployment. MVCs on these roadways can present hazardous conditions for all responders due to traffic, visibility, and environmental conditions.

CWFR responds to motor vehicle collisions (MVCs) in accordance with established SOGs governing apparatus deployment, emergency vehicle operations, and roadway safety. Under SOG 508 – *Apparatus Response Orders to Alarms*, MVCs generate a structured response that includes a Rescue and Pumper, with a Tanker assigned to support scene safety and protection. Where extrication is required, additional apparatus is dispatched to support technical rescue operations.

In accordance with SOG 509 – *Tanker response/ Use at any Motor Vehicle Collision or Similar Type Incident*, the Tanker responds as the third vehicle to roadway incidents and is strategically positioned to create a protected work zone for responders and patients. Emergency vehicle operations are further governed by SOG 503 – *Emergency Response*, and SOG 504 – *Intersections*, which require compliance with the Highway Traffic Act, use of warning devices, strict intersection control, and defensive driving practices to reduce the risk of secondary collisions.

MVC incidents are dynamic and may involve scene command, hazard control, vehicle stabilization, mechanical extrication, and coordination with the Ontario Provincial Police and Wellington-Dufferin-Guelph Paramedic Services.

As traffic volumes and development increase within Centre Wellington, maintaining disciplined response practices, roadway safety measures, and ongoing extrication training will remain essential to ensuring safe, effective, and coordinated emergency response.

3.7.7 Surface Ice and Water Rescue

CWFR currently delivers surface water and ice rescue services at the technician level in accordance with *NFPA 1006 - Standard for Technical Rescue Personnel Professional Qualifications (2021)* and *NFPA 1670 - Standard on Operations and Training for Technical Search and Rescue Incidents (2017)*, as formally authorized within its E&R By-law. These technical rescue disciplines are inherently high-risk and low-frequency, requiring specialized training, strict operational controls, appropriate personal protective equipment (PPE), and clearly defined incident management structures to ensure firefighter and public safety.

The importance of maintaining rigorous safety protocols was reinforced following the May 2017 Coroner's Inquest into the death of a firefighter during an ice rescue training exercise. Subsequent direction from the Ontario Office of the Fire Marshal and Emergency Management (OFMEM), including Communiqué 2017-06, required municipalities to review specialized rescue services and confirm alignment with approved service levels and operational safeguards. In response, CWFR formalized its water and ice rescue provisions within its E&R By-law and updated its operational guidelines accordingly.

Under SOG 1501 – *In Water Rescue Response Protocol*, water rescues are designated as a two-station response, with both Fergus and Elora stations dispatched for all water rescue incidents. When required, two rescue boats shall be deployed at all times, consistent with the department's "2-boat policy," which may include powered Zodiac vessels and/or inflatable Rapid Intervention Team (RIT) crafts. Zodiacs operate with a minimum three-member crew, while RIT crafts operate with two personnel. Each boat must have at least one portable radio, a designated person in charge, and personnel who are appropriately trained in boat rescue operations.

All personnel operating within a boat are required to wear approved personal flotation devices (PFDs) and rescue helmets (firefighting helmets are not permitted), and water rescue suits are mandatory when there is a possibility of entering the water. The operational structure further aligns with CWFR's Ice/Water Tactical Forms, which establish formalized incident command, rescue sector designation, accountability, safety sector oversight, RIT deployment, and adherence to the recognized rescue sequence of Talk, Reach, Throw, Row, Go, progressing from lowest to highest risk.

CWFR provides surface water, ice rescue, and swift water rescue services. These capabilities enable trained personnel to respond to incidents involving moving water environments, including rivers, streams, and flood conditions where elevated current and water velocity may present additional hazards. Operational activities are carried out in accordance with the department's approved service level, established training competencies, available equipment, and overall community risk profile. All rescue operations are conducted within an established Incident Management System (IMS), with defined safety controls, accountability measures, and clearly assigned roles including Incident Command, Rescue Sector Officer, Primary and Secondary Rescuers, Safety Sector, and RIT functions.

Through adherence to these updated protocols, CWFR ensures that water and ice rescue operations are conducted with a structured, risk-based, and safety-focused approach consistent with provincial guidance and industry best practices.

3.7.8 High/ Low Angle Rope Rescue

CWFR provides high- and low-angle rope rescue services at the technician level, consistent with the competencies outlined in *NFPA 1670 - Standard on Operations and Training for Technical Search and Rescue Incidents (Chapter 5 – Rope Rescue Operations)* and *NFPA 1006 - Standard for Technical Rescue Personnel Professional Qualifications (2021) (Chapter 5 – Rope Rescue Technician)*. Operationally, rope and gorge rescue responses are governed by *SOG 617 – Gorge Rescue*, which establishes a standardized approach to response, command, scene stabilization, and rescue operations.

In accordance with *SOG 617 – Gorge Rescue*, both stations respond to gorge rescue incidents as per *SOG 508 – Apparatus Response Order to Alarms*. The first arriving officer establishes Incident Command, conducts a scene evaluation, and assigns sector responsibilities. Apparatus is positioned at a safe distance from the edge of the gorge, and strict safety controls are implemented, including mandatory tie-offs within 10 feet of the edge and designated safety oversight for personnel operating on rope systems. A minimum crew configuration is required for apparatus response, reinforcing safe and effective staffing for technical operations.

Centre Wellington's CRA identifies the Elora Gorge and surrounding conservation areas as significant rope rescue risk zones. These areas attract high volumes of residents and visitors engaging in hiking, climbing, and water-related activities, increasing the likelihood of incidents involving steep terrain, embankments, and vertical drops. Historical response data (2021–2025) indicates that CWFR responded to 12 rope rescue-related incidents, with senior staff confirming that many occurred in escarpment or gorge terrain, validating the continued need for technician-level capability.

Given Centre Wellington's geography and recreational use patterns, maintaining technician-level rope rescue capability remains operationally justified. CWFR should continue to ensure that personnel assigned to rope rescue functions are trained, evaluated, and certified in accordance with applicable NFPA standards and that recurring, scenario-based training is conducted to sustain competency. As development and tourism activity continue, this capability remains essential to protecting life and ensuring safe, coordinated rescue operations in high-risk vertical environments.

3.7.9 Machine Rescue Operations

CWFR does not currently maintain technician or operation-level certification for machinery rescue operations as defined under *NFPA 1006 Technical Rescuer Professional Qualifications (2021)* or *NFPA 1670 Standard on Operations and Training for Technical Search and Rescue Incidents (2017)*. Despite the absence of formal technical level certification in this discipline, CWFR personnel may still respond to machinery-related entrapment incidents as part of their broader emergency response mandate. In these situations, firefighters apply general rescue principles, scene stabilization practices, and patient access techniques while coordinating with specialized resources when required.

Machinery rescue involves the disentanglement and extrication of individuals who have become trapped in or under mechanical equipment. These incidents may involve agricultural machinery, conveyor systems, powered equipment, industrial tools, or other mechanical devices used in commercial, industrial, or rural settings. Within Centre Wellington, potential machinery rescue scenarios may arise from agricultural operations, small-scale manufacturing, construction activities, or equipment used in service and maintenance environments.

Examples of machinery-related incidents can include victims trapped in augers, balers, conveyor belts, compacting equipment, or mechanical lifting devices. Although these incidents are relatively low in frequency, they often present complex hazards, including mechanical movement, stored energy, pinch points, and severe entanglement. These conditions can result in significant trauma or life-threatening injuries, and responders must carefully manage scene safety while attempting to provide patient access and stabilization.

While CWFR has not formally adopted technical-level machinery rescue training under *NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021) (Level 1)*, many of the skills used during these incidents overlap with competencies already maintained by the department, including vehicle extrication, lifting and stabilization techniques, hazard recognition, and patient packaging. These foundational rescue capabilities allow firefighters to initiate scene management, secure equipment where possible, and provide initial assistance until the patient can be safely extricated or additional specialized resources are requested if required.

Given the presence of agricultural operations, construction activities, and small industrial facilities within Centre Wellington, machinery-related incidents remain a potential operational risk. CWFR should continue to ensure personnel maintain strong core rescue competencies through regular training in extrication, stabilization, and scene safety. Where appropriate, the department may also consider targeted awareness or operations-level training related to machinery entrapment hazards to further strengthen responder safety and operational effectiveness without necessarily adopting full technician-level certification.

Observation

Observation #19: CWFR does not currently maintain technician-level certification for machinery rescue as defined under *NFPA 1006 – Technical Rescue Personnel Professional Qualifications (2021)* and *NFPA 1670 Standard on Operations and Training for Technical Search and Rescue Incidents (2017)*. While machinery entrapment incidents are relatively infrequent, they can occur in a variety of settings within Centre Wellington, including agricultural operations, construction sites, maintenance facilities, and small industrial or commercial workplaces where mechanical equipment is in use. In these situations, CWFR personnel still respond as the primary emergency service and are responsible for initial scene assessment, hazard control, and patient care.

Although the department does not provide formal technician-level machinery rescue services, firefighters rely on existing competencies such as vehicle extrication, stabilization techniques, and hazard recognition to manage these incidents until the patient can be safely extricated or additional resources are requested if required. However, the absence of a defined service level, training standard, or operational guideline specific to machinery rescue may create uncertainty regarding responder capabilities, expectations, and safe operating procedures when these incidents occur.

Recommendation

Recommendation #19: Formally define CWFR's machinery rescue service level and provide awareness or operations-level training supported by operational guidelines to ensure safe and consistent response to machinery entrapment incidents.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months

Cost: Approximately \$10,000 to \$25,000 for training, props, and equipment

Rationale: *Machinery entrapment incidents present unique hazards, including moving parts, stored mechanical energy, hydraulic pressure, and complex entanglement scenarios that can significantly increase risk to both victims and responders. Even when a department does not provide technician-level rescue, personnel must still be capable of recognizing hazards, securing equipment where possible, establishing scene control, and providing patient access and stabilization.*

Providing awareness or operations-level training represents a practical and cost-effective approach for CWFR. This level of training focuses on hazard identification, scene management, equipment isolation, and support of specialized resources if required, while building on the extrication and stabilization skills firefighters already maintain. Clearly defining the department's capabilities will improve operational clarity, support responder safety, and ensure CWFR remains ready to manage machinery-related emergencies.

3.7.10 Confined Space and Trench Rescue

Under Ontario Regulation 632/05 – *Confined Spaces*, made under the *Occupational Health and Safety Act*, a confined space is defined as a fully or partially enclosed space not designed for continuous human occupancy and where atmospheric hazards may occur due to its design, contents, or associated work.

The regulation places specific obligations on employers, including the requirement to establish on-site rescue procedures when workers are exposed to confined space risks. Importantly, there is no provincial mandate for municipalities in Ontario to deliver confined space or trench rescue services through their fire departments. However, fire services like CWFR are often the first to arrive at such emergencies and must be prepared to assess, secure, and stabilize these complex and hazardous scenes.

Although confined space and trench rescues are low-frequency events, they are extremely high-risk due to factors such as limited access, hazardous atmospheres, the potential for secondary collapse, and specialized equipment needs. With the increased growth in the industrial and construction sectors, including residential subdivisions, commercial facilities, and public infrastructure, the risk of encountering these scenarios increases. Trench rescues, which involve collapsed excavations or ditches, often overlap in hazard profile with confined spaces, particularly when atmospheric risks or structural instability are involved.

Currently, CWFR maintains awareness-level capability for confined space incidents. This ensures that all frontline personnel are trained to recognize confined space hazards, establish scene control, isolate the area, conduct atmospheric monitoring where appropriate, and prevent unauthorized entry. Awareness-level training emphasizes hazard identification, risk assessment, initial incident stabilization, and timely notification of specialized resources. This approach aligns with the awareness-tier requirements of *NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021)* and *NFPA 1670 Standard on Operations and Training for Technical Search and Rescue Incidents (2017)*.

Under this service level, CWFR personnel do not enter confined spaces to conduct rescue operations. Instead, crews secure the perimeter, support patient communication where possible from a safe position, manage ventilation or utility isolation if appropriate, and coordinate incoming technician-level teams. This model reflects industry best practice for departments with low incident frequency or limited exposure to high-risk confined space environments.

To ensure a scalable and sustainable response capability, CWFR should ensure a formal mutual aid and automatic aid agreements with neighbouring municipalities is established that has capabilities of providing technician-level confined space rescue. This type of partnership-based approach allows CWFR to deliver safe initial response and scene stabilization while ensuring access to advanced technical rescue resources when required, without incurring the significant training, equipment, and ongoing competency maintenance costs associated with maintaining an in-house technician-level team.

CWFR currently maintains an awareness-level service capability for confined space and trench rescue incidents. This approach ensures that frontline personnel are trained to recognize hazards, establish scene control, conduct risk assessments, isolate the area, and prevent unauthorized entry, while requesting technician-level resources for specialized rescue operations. Although confined space and trench incidents are low-frequency events within the municipality, they present extremely high life-safety risks due to atmospheric hazards, structural instability, limited access and egress, and the potential for secondary collapse.

Observation

Observation #20: As industrial, infrastructure, and residential construction activity continues to expand within Centre Wellington, the likelihood of encountering excavation and confined space environments will incrementally increase. At present, reliance on external technician-level rescue resources is appropriate; however, formalized agreements and clearly documented operational procedures are essential to ensure consistent, timely, and safe escalation beyond CWFR's established awareness-level boundaries.

Recommendation

Recommendation #20a: Formalize written fire protection agreements with neighbouring municipalities or other third-party provider capable of providing technician-level confined space and trench rescue services.

Recommendation #20b: Develop and adopt a dedicated Standard Operating Guideline outlining CWFR's awareness-level operational boundaries, entry prohibitions, isolation requirements, and automatic activation triggers for technician-level resources.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months.

Cost: Approximately \$5,000-\$30,000, depending on response expectations and coverage agreements

Rationale: *Formalizing technician-level support agreements ensures predictable access to specialized rescue capabilities, reduces response delays, clarifies liability and cost considerations, and strengthens inter-agency coordination during high-risk incidents. Simultaneously, establishing a clear confined space and trench rescue SOG reinforces operational discipline, prevents scope creep under emergency conditions, and protects firefighter safety by clearly defining no-entry parameters consistent with CWFR's service level.*

Together, these measures support a scalable, partnership-based response model that aligns with industry best practice, maintains regulatory compliance under the Occupational Health and Safety Act framework, and ensures CWFR can safely stabilize incidents while securing advanced technical rescue resources when required.

3.7.11 Structural Collapse Response

In the event of a structural collapse CWFR will most likely be the first emergency service on scene. As such, the department must be prepared to secure the site, assess hazards, initiate scene control, and implement appropriate life-safety measures while awaiting specialized resources. Structural collapses may result from explosions, natural disasters, building failures, or construction-related incidents. While not considered high-frequency events, they are high-impact and can require extensive coordination and technical capabilities to manage effectively.

Over the past decade, several Ontario municipalities including Mississauga, Caledon, London, and Hamilton, have experienced structural collapse incidents that required extended operations and specialized resources. In these cases, support was provided through the Ontario Heavy Urban Search and Rescue (HUSAR) program, operated by the OFM. The increase in complex urban infrastructure and vertical growth in Ontario communities has prompted fire services to revisit their response capabilities for structural collapse scenarios.

Given the low probability but high consequence nature of these events, it is recommended that CWFR maintain an awareness-level capability for structural collapse response, in accordance with *NFPA 1670 Standard on Operations and Training for Technical Search and Rescue Incidents (2017), Chapter 6: Structural Collapse Rescue Operations*, and that all suppression personnel be trained to the awareness level as defined in *NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021) Chapter 6: Structural Collapse Rescue*.

This training equips responders to identify collapse risks, secure perimeters, manage hazards, support evacuation and initial triage, and recognize when higher-level response resources are required. Awareness-level training ensures a safe and effective initial response while allowing for rapid transition to more advanced operations when necessary.

In alignment with Fire Marshal's Communiqué 2016-05, CWFR should also pursue fire service agreements or memorandums of understanding with neighbouring departments or regional partners that offer operations- or technician-level collapse response. Additionally, CWFR should maintain formal awareness of and access to the provincial HUSAR program coordinated through the Provincial Emergency Operations Centre (PEOC). When necessary, access to HUSAR resources can be coordinated through the local fire coordinator under the Mutual Aid Plan, ensuring rapid deployment of technical rescue support in the event of a large-scale structural failure.

As Centre Wellington continues to grow in population and density, including the development of multi-unit residential and commercial structures, the likelihood and potential complexity of structural collapse incidents may increase. CWFR's current approach, grounded in awareness-level readiness and provincial coordination, provides a practical, scalable, and fiscally responsible model for ensuring community protection from this type of high-risk emergency. Ongoing training, scenario-based exercises, and inter-agency planning will support operational readiness and alignment with provincial best practices.

3.7.12 Pre-Emergency Planning

Pre-fire planning is a cornerstone of operational readiness. It improves size-up, accelerates decision-making, and reduces risk to both civilians and firefighters by providing crews with building-specific intelligence before they arrive on scene. Pre-incident planning programs typically collect and maintain key information such as building layout, construction features, fire protection systems, access points, and tactical considerations. This information supports effective incident management, enhances firefighter safety, and allows responding crews to implement strategic and coordinated operations upon arrival.

At present, CWFR does not maintain a formal, structured pre-incident planning program. Operational familiarity with buildings and hazards within the community is largely developed through experience, historical knowledge, and informal crew familiarization activities. While firefighters possess a strong understanding of many occupancies within their response districts, the absence of a standardized program means that building-specific intelligence is not consistently documented, reviewed, or updated in a centralized format. As a result, valuable knowledge may remain with individual firefighters rather than being captured as an organizational resource that can be accessed by all personnel.

An exception exists for certain technical rescue environments, where limited pre-planning information has been developed. For example, known anchor points and access locations used during high-angle rescue operations, as well as entry and access points associated with water and ice rescue incidents, have been documented to support operational response. These details are intended to assist crews with rapid deployment in locations where terrain, riverbanks, or structures may require specialized rescue techniques.

Currently, this information is maintained in paper format within binders stored on frontline apparatus. While this provides crews with immediate physical access during incidents, the approach presents limitations related to consistency, version control, ease of updating, and accessibility across the department.

As the community continues to evolve, with new developments, changing building stock, and increased complexity in the built environment, the absence of a comprehensive and digitized pre-incident planning program may limit CWFR's ability to systematically capture and share critical operational intelligence.

Observation

Observation #21: CWFR does not currently maintain a formalized pre-incident planning program. While firefighters develop operational familiarity with buildings and hazards within their response districts through experience and informal station-level familiarization activities, there is no standardized process to document, review, and maintain building-specific tactical information. As a result, much of the operational knowledge regarding building layouts, fire protection systems, access points, and potential hazards remains informal and may vary depending on individual firefighter experience rather than being consistently captured and shared across the organization.

Limited pre-planning does exist for certain technical rescue environments. Known anchor points and access locations used for high-angle rescue operations, as well as entry and access points associated with water and ice rescue incidents, have been identified and documented to support operational response. However, this information is currently maintained in paper format within binders stored on frontline apparatus. While this provides crews with some level of reference during incidents, the approach presents challenges related to version control, accessibility, and ensuring information remains current as the community and built environment evolve.

Recommendation

Recommendation #21a: Develop and implement a formal pre-incident planning program that identifies and documents high-risk and complex occupancies within Central Wellington. Pre-fire planning program to include all buildings identified as risks within the CRA, ensuring complete coverage of high-priority and high-hazard occupancies.

Recommendation #21b: Digitize all pre-plans and integrate them into CAD/GIS systems to allow mobile access for operational staff, with standardized data fields covering standpipes, key boxes, electric vehicle charging stations, photovoltaic arrays, and other critical building information, along with detailed tactical considerations such as attack stair locations, refuge floors, and smoke control systems.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 36-72 months

Cost 21a: Neutral - using existing systems and internal resources.

Cost 21b: Up to \$150,000 where external data collection, specialized software, or CAD/GIS integration is required. Ongoing maintenance and licensing may cost \$5,000–\$15,000 annually.

Rationale: *A structured pre-incident planning program improves operational readiness by providing firefighters with reliable building intelligence prior to and during emergency response. Documented information such as building construction features, fire protection systems, access points, utilities, hazardous materials, and tactical considerations allows crews to perform more accurate size-ups, deploy resources more effectively, and reduce risks to both firefighters and occupants. Capturing this information in a standardized format also ensures that critical knowledge is shared across the department rather than relying on individual experience or historical familiarity.*

As Centre Wellington continues to experience residential and commercial growth, building complexity will increase and operational environments will become more challenging. Establishing a formal program supported by digital recordkeeping will allow CWFR to systematically identify priority occupancies, maintain current information, and make pre-plan data readily accessible to crews when needed. Over time, integrating pre-incident planning with training, fire prevention inspections, and dispatch systems will further strengthen situational awareness and enhance the department's ability to safely and effectively manage incidents within the community.

3.7.13 Mutual Aid and Other Service Agreements

Fire departments across Ontario, including CWFR, recognize that large-scale or complex emergencies can quickly exceed the capabilities of a single municipality, particularly within a composite service model with finite staffing and apparatus. While CWFR is equipped to manage a wide range of incidents, low-frequency, high-consequence events, such as multiple-alarm structure fires, hazardous materials incidents, or complex rescues, require access to additional external resources. As a result, mutual aid and automatic aid agreements are critical components of CWFR's emergency response framework, ensuring scalable support and continuity of operations during significant or concurrent incidents.

In Ontario, the OFM administers a provincial Mutual Aid Plan (MAP) to promote consistency and coordination among municipal fire services. Each geographic area is supported by a fire coordinator responsible for maintaining the plan and facilitating resource sharing during emergencies. CWFR is an active participant in the Wellington County MAP, which enables the department to request additional personnel, apparatus, or specialized resources on an as-needed basis when incidents exceed local capacity. This system provides a structured and scalable approach to inter-agency cooperation, helping to minimize impacts to life, property, and the environment.

Complementing this, CWFR maintains automatic aid agreements with neighbouring municipalities, including the Townships of Woolwich and Mapleton. Unlike mutual aid, these agreements provide for predetermined, closest-station response into defined boundary areas, ensuring that the nearest available resources, regardless of jurisdiction, are dispatched simultaneously through the Guelph Fire dispatch system. These agreements enhance response times in rural and boundary areas, improve initial fireground effectiveness, and ensure more consistent service coverage. They also establish clear expectations related to command, operational integration, and cost recovery.

Together, these mutual and automatic aid frameworks create a coordinated, tiered response system that strengthens regional collaboration, optimizes resource deployment, and ensures that CWFR can effectively manage both routine and large-scale emergencies as the community continues to grow and evolve.

3.8 Training & Professional Development

Strategic Objective #5: Training & Professional Development

Maintain a high-quality, structured, and sustainable training program that supports the safe and effective delivery of emergency services. Training will remain aligned with the services authorized under the E&R By-law and will reflect current firefighting practices, safety standards, and emerging service demands to ensure personnel are prepared to perform their duties competently and safely.

3.8.1 Training Overview

Training and competency development are essential and continuous functions within CWFR. A well-prepared and competent workforce reduces operational risk, enhances firefighter safety, and ensures the effective delivery of authorized emergency services. As a composite fire service operating in both urban and rural environments, CWFR must maintain a structured training framework that supports volunteer sustainability, regulatory compliance, and operational readiness.

CWFR delivers training in alignment with the E&R By-law, the CRA, and the Ontario Firefighter Certification Regulation (O. Reg. 343/22). The introduction of mandatory minimum certification standards by the Province has increased training documentation, competency verification, and curriculum alignment requirements. Compliance with these standards ensures consistent firefighter qualifications across the province while reinforcing public and firefighter safety.

Training activities are developed based on the Knowledge, Skills, and Abilities (KSAs) required for firefighters to perform their assigned duties safely and effectively. These competencies are directly tied to CWFR's SOGs, operational policies, and identified community risks, including:

- Structure fire suppression in residential, commercial, and historic downtown occupancies (Fergus and Elora)
- water supply operations
- Rural Motor vehicle collisions and transportation corridor incidents
- Technical rescue and water/ice rescue operations
- Medical assist and public service calls
- Hazard and weather-related emergency response

Training is delivered through a combination of methods to ensure both theoretical understanding and practical proficiency, including:

- Classroom-based instruction
- Online learning modules and certification programs
- Practical evolutions and scenario-based training
- Multi-company drills
- Regional training partnerships

Consistent with provincial trends following the closure of the Ontario Fire College campus, CWFR participates in regional training opportunities and collaborative delivery models supported by the Office of the Fire Marshal. These partnerships are particularly important for specialized and live fire training evolutions that cannot be delivered internally.

Live fire training and certain advanced certification programs require access to external facilities. Continued reliance on regional training centres will remain necessary to ensure compliance with certification standards and safe, realistic training environments.

Through the interview process, stakeholders expressed confidence in the quality and professionalism of training delivered by CWFR. However, increasing regulatory requirements, evolving service demands, and the pressures associated with sustaining a composite staffing model present ongoing challenges.

In particular:

- Volunteer firefighter availability for training continues to require careful scheduling and flexibility.
- Certification standards have increased time commitments for both recruits and incumbent members.
- Administrative tracking and documentation requirements have grown significantly.
- Training facility limitations may constrain expanded or specialized programming in the future.

Meeting the training needs of a volunteer fire service is a demanding responsibility. Scheduling instructors, facilities, and participants must be balanced carefully to maintain operational coverage while ensuring consistent competency development. As call complexity increases and demographic shifts introduce new service pressures, particularly related to aging populations and traffic growth, training demands will continue to evolve.

To remain aligned with *Strategic Objective #6 Communications*, CWFR must:

- Maintain a structured, multi-year training plan tied to authorized service levels and risk assessments.
- Continue strengthening regional training partnerships.
- Ensure certification compliance and documentation processes remain current.
- Monitor instructor capacity and administrative support requirements.
- Evaluate long-term facility needs to support expanded training demands.

Overall, CWFR's training program is viewed as professional, risk-informed, and aligned with community expectations. Sustaining this standard will require continued investment, structured planning, and periodic evaluation to ensure personnel remain prepared to perform their duties competently and safely as Centre Wellington grows and evolves over the life of this FMP.

Observation

Observation #22: CWFR does not currently have a formal, multi-year Training Master Plan to guide training priorities, certification requirements, instructor development, facility needs, and alignment with future service demands. As regulatory requirements, community risk, operational complexity, and growth-related pressures continue to evolve, the absence of a structured long-term training framework may limit CWFR's ability to proactively plan resources, maintain consistent competency standards, and ensure training delivery remains sustainable.

Recommendation

Recommendation #22: Develop and implement a multi-year Training Master Plan that aligns with authorized service levels and community risk, forecasts certification and instructor resource needs, formalizes regional partnerships, and evaluates long-term facility requirements to ensure sustainable training delivery.

Strategic Objective: # 5 Training & Professional Development

Suggested completion: 12-24 months

Cost: Neutral

Rationale: *A Training Master Plan will provide CWFR with a structured framework to prioritize training needs, support compliance with applicable standards, and ensure personnel are prepared to meet current and future operational demands. By identifying instructor capacity, certification obligations, partnership opportunities, and facility requirements in advance, CWFR can improve accountability, support long-term financial and resource planning, reduce organizational risk, and strengthen firefighter safety and service reliability.*

3.8.2 Industry Recommended Qualifications

NFPA certification standards represent industry best practices. Position profiles and associated KSAs should prepare staff to competently provide the services necessary to address the risks in their community.

Many of the NFPA standards have been incorporated as mandatory in *O. Reg 343/22 Firefighter Certification*, enforced under the Fire Protection and Prevention Act, 1997. The regulation requires every municipality and every fire department to ensure that its firefighters, including all staff, perform the duties defined in the regulation.

Further, organizational size and structure will often change the breadth of tasks and competencies required by specific positions. For example, large career fire departments tend to have a higher degree of specialization for senior positions and less need for senior officers to be directly involved in fire suppression or rescue operations. In contrast, smaller volunteer POC or paid-per-call volunteer department senior officers will lead or be directly involved in fire suppression and rescue operations.

The following NFPA standards are provided as general guidelines for professional qualification standards aligned with CWFR positions. All positions within CWFR meet or exceed the NFPA training standards based on the level of service provided.

Fire Chief, Deputy Chiefs, Assistant Chiefs

- NFPA 472, Standard for Competence of Responders to Hazardous Material/Weapons of Mass Destruction Incidents (2018)
- NFPA 1001, Standard for Fire Fighter Professional Qualifications (2019) (Level 2)
- NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NFPA 1021 Standard for Fire Officer Professional Qualifications (2020) (Level 2)
- NFPA 1041 Standard for Fire and Emergency Services Instructor Professional Qualifications (2019) (Level 1)
- NFPA 1403 Standard on Live Fire Training Evolutions (2018)
- NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications (2020)

Captains and Lieutenants

- NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2018)
- NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) (Level 2)
- NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NFPA 1021 Standard for Fire Officer Professional Qualifications (2020) (Level 1)
- NFPA 1041 Standard for Fire and Emergency Services Instructor Professional Qualifications (2019) (Level 1)
- NFPA 1403 Standard on Live Fire Training Evolutions (2018)
- NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications (2020)

Safety Officer

- NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications (2020)

Firefighter

- NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2018)
- NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) (Level 1)
- NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021) (Level 1)

Pump Operator

- NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (2018)
- NFPA 1001 Standard for Fire Fighter Professional Qualifications (2019) (Level 1)
- NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications (2017)
- NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications (2021) (Level 1)

Training Officer

- NFPA 1041 Standard for Fire and Emergency Services Instructor Professional Qualifications (2019) (Level 1)
- NFPA 1403 Standard on Live Fire Training Evolutions (2018)

Fire Inspector/Fire Investigator

- NFPA 1031 Standard for Professional Qualifications for Fire Inspector and Plan Examiner (2014)
- NFPA 1033 Standard for Professional Qualifications for Fire Investigator (2022)
- NFPA 1035 Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist, and Youth Firesetter Program Manager Professional Qualifications (2015)

The Office of the Fire Marshal (OFM) provides provincial leadership and oversight on fire safety and firefighter training in Ontario. Through the implementation of Ontario Regulation 343/22 (Firefighter Certification), the OFM has established mandatory minimum certification standards that align firefighter qualifications with the fire protection services authorized and delivered by municipalities.

These standards ensure consistency, competency, and public safety across the province. A summary of the required qualifications and compliance timelines applicable to CWFR is provided in Appendix F.

CWFR's ability to effectively deliver required training to both incumbent firefighters and new recruits rely on structured planning, coordinated delivery, and continuous evaluation. Training must align with the services authorized under the E&R By-law, the CRA, and the evolving risk profile of the municipality, including residential growth in Fergus and Elora, increased transportation-related incidents, and a growing aging population.

Training planning is conducted in coordination with fire service leadership and station officers to identify operational needs, certification gaps, and future requirements. Increasing regulatory expectations and documentation requirements under the provincial certification framework have significantly expanded the administrative and scheduling components of training delivery.

Currently, training delivery is coordinated by part-time/volunteer Training Officers under the direction of the Deputy Chief of Operations and Training, who establishes the annual schedule. Regular training occurs weekly, with sessions held Monday evenings in Elora and Wednesday evenings in Fergus. Firefighters who are unable to attend their assigned station night may attend the alternate station to maintain participation and competency. In addition to weekly core training (typically three nights per month, approximately two hours per session), weekend sessions are scheduled for specialty and technical disciplines that require a greater time commitment, such as rope rescue (technical level), water/ice rescue (surface water operations), auto extrication, and other certification-based programs.

While this model provides consistency across both stations, attendance at weekend technical training can be inconsistent, particularly where mandatory certification requirements increase time demands on volunteer members. Recruit training is described as structured and adequate, supported by a variety of instructors and mandatory participation requirements. However, periods of recruit training place additional pressure on the available volunteer instructor cadre.

Live fire training is currently supported through use of the Guelph Fire Department training trailer, as CWFR does not have access to a dedicated Class A burn facility for consistent live fire evolutions. The department has been successful in securing acquired structures for training purposes, although these are not typically used for live fire scenarios.

Training records are presently tracked through sign-in sheets and officer verification. While specialty teams maintain individual Job Performance Requirements (JPRs), there is an acknowledged need to strengthen individual competency tracking, reporting, and documentation, potentially through enhancements to the Records Management System (RMS) and improved emergency response (ER) reporting integration. There is a general assumption that attendance equates to competency, and further refinement of individual performance verification would improve accountability and certification compliance.

Overall, both stations demonstrate consistency in delivering core topics, including SCBA, medical response (EMR, First Aid, Narcan/Epi integration), hazardous materials operations (non-entry level), and awareness-level confined space/trench rescue. However, as noted during discussions, while most required subject areas are covered, competency depth may vary among members, reinforcing the importance of continued focus on structured evaluation, attendance management, and instructor capacity planning to ensure consistent skill proficiency across the composite service.

Observation

Observation #23: CWFR currently relies on external partners, including mobile training assets, to deliver live fire training evolutions. While this approach provides access to required certification training, it limits scheduling flexibility and does not provide consistent access to a dedicated Class A burn facility. As certification standards, firefighter safety expectations, and training frequency requirements continue to increase, reliance on third-party availability may constrain CWFR's ability to deliver consistent, timely, and scenario-based live fire training. There may be an opportunity to explore a shared live fire training facility in partnership with the County of Wellington, neighbouring municipalities, or other public-sector or institutional partners to improve access, cost efficiency, and regional training collaboration.

Recommendation

Recommendation #23: Undertake a feasibility assessment, in collaboration with the County of Wellington and interested regional or third-party partners, to explore the development or shared use of a live fire training facility. The assessment should evaluate governance models, capital and operating costs, potential funding opportunities, location considerations, usage demand, and long-term sustainability.

Strategic Objective: #5 Training and Professional Development

Suggested completion: 24-36 months

Cost: \$50,000 for feasibility study, with potential for partner contributions. Depending on scope, third-party consultant involvement, environmental/site review requirements, and partnership complexity. If pursued beyond the feasibility stage, development of a shared live fire training facility could involve capital costs ranging from approximately \$1 million–\$5 million or more depending on the facility type, land requirements, props, servicing, and governance model.

Rationale: *A shared live fire training facility would improve scheduling flexibility, enhance firefighter competency through more consistent and realistic training opportunities, and support compliance with provincial certification requirements. Regional collaboration could distribute capital and operating costs, improve utilization rates, and strengthen inter-municipal training relationships. Proactively evaluating this opportunity supports long-term training sustainability, risk reduction, and firefighter safety while aligning with CWFR's commitment to structured, high-quality training delivery.*

3.8.3 Training Support

CWFR currently coordinates training through part-time/volunteer training officers under the direction of the Deputy Chief of Operations and Training. This includes weekly station training, recruit programming, weekend technical rescue sessions, certification coordination, instructor scheduling, live fire training arrangements, and training documentation. While the existing model has supported consistent programming at both stations, increasing certification, competency verification, recordkeeping, and program administration requirements are placing greater demands on the available leadership and volunteer instructor capacity.

The introduction of mandatory provincial certification requirements has increased the need for formal curriculum alignment, individual competency evaluation, job performance requirement documentation, certification tracking, and auditable training records. At the same time, CWFR must continue delivering regular training in a manner that accommodates volunteer availability, maintains operational coverage, and supports specialized disciplines such as technical rescue, water and ice rescue, auto extrication, rural water supply, and live fire operations.

As the municipality grows and emergency response demands become more complex, additional dedicated training capacity should be considered. A full-time training officer would provide greater continuity, accountability, and administrative support while reducing reliance on the Deputy Chief and volunteer instructors for routine program coordination. Several organizational and implementation models are available.

Option 1: Dedicated Full-Time CWFR Training Officer

Under this option, CWFR would establish a permanent full-time Training Officer reporting to the Deputy Chief responsible for Operations and Training. The position would be primarily dedicated to training planning, coordination, delivery, evaluation, certification compliance, instructor development, and training records.

The position's responsibilities could include:

- Coordinating implementation and ongoing maintenance of the multi-year Training Master Plan.
- Developing an annual training calendar for Fergus and Elora stations.
- Coordinating weekly, weekend, recruit, officer, certification, and specialty-team training.
- Maintaining an individual certification and competency matrix for all members.
- Developing and maintaining standardized lesson plans, skills sheets, JPRs, and evaluation criteria.
- Coordinating Office of the Fire Marshal certification courses, examinations, and documentation.
- Supporting and supervising station instructors and subject-matter experts.
- Monitoring training attendance and coordinating make-up training opportunities.
- Administering training records through the department's RMS.
- Coordinating live fire, acquired-structure, regional, and external-facility training.
- Incorporating lessons from emergency incidents, post-incident reviews, near misses, and health and safety investigations into future training.

- Supporting officer development, succession planning, and instructor development.
- Preparing annual training budgets, work plans, and performance reports.

This model would provide CWFR with the greatest level of control, continuity, and accountability. It would also allow the department to tailor programming directly to the risks identified through the CRA and the services authorized by the E&R By-law.

The primary consideration is the permanent annual operating cost. Clear role definition would also be required to ensure the position remains focused on training and is not routinely redirected to unrelated administrative work or operational staffing shortages.

Option 2: Shared County or Regional Training Officer

Under this option, Centre Wellington could partner with the County of Wellington, neighbouring municipalities, or other regional fire services to establish a shared full-time Training Officer. Salary, benefits, technology, equipment, and administrative costs would be distributed among participating municipalities through a formal service agreement.

A shared Training Officer could coordinate:

- Regional recruit programs.
- Common certification courses.
- Live fire training.
- Technical rescue programming.
- Instructor development.
- Officer development.
- Common lesson plans and evaluation processes.
- Regional training-facility use.
- Joint training exercises.
- Shared training props and equipment.
- Regional certification and course documentation.

This approach could reduce the direct cost to Centre Wellington while improving regional consistency and interoperability. It may also support the business case for a shared live fire training facility and expand access to specialized instructors and training resources.

However, a regional position would have to balance the priorities of multiple municipalities. Competing schedules, travel requirements, governance arrangements, and differences in authorized service levels could limit the position's availability for CWFR's weekly station training and individual competency-management needs.

A shared Training Officer may therefore be most effective for recruit, certification, specialty, officer-development, and live fire programs, rather than as a complete replacement for local training coordination.

Option 3: Operationally Qualified Full-Time Training Officer

Under this model, the Training Officer would remain operationally qualified and could respond to significant emergency incidents as a Safety Officer, command-support resource, technical rescue specialist, or additional operational officer.

This approach would allow the Training Officer to observe operational performance directly, identify competency gaps, and incorporate lessons from actual incidents into future training. It could also provide additional daytime command and safety capacity during complex incidents.

The position should not, however, be routinely counted toward minimum apparatus staffing or used as regular operational backfill. Regular reliance on the Training Officer for emergency coverage would interrupt scheduled training activities and gradually erode the intended purpose of the position.

If this model is selected, the position description should clearly establish that:

- Training is the primary responsibility.
- Emergency response is secondary.
- The position is not routinely assigned to minimum staffing.
- Operational responses are generally limited to significant, complex, or specialized incidents.
- Time lost to emergency response is monitored and considered when assessing workload.

This option could be incorporated into the dedicated CWFR Training Officer model rather than being implemented as a separate position.

Option 4 — Internal Secondment and Pilot Program

CWFR could temporarily second a qualified existing officer or firefighter into a full-time Training Officer role for approximately 18 to 24 months. The pilot period would allow the department to evaluate workload, responsibilities, outcomes, and organizational benefits before establishing a permanent position.

The pilot could be used to:

- Implement the Training Master Plan.
- Complete a department-wide certification and competency-gap analysis.
- Develop an individual competency matrix.
- Standardize lesson plans, JPRs, and evaluation processes.
- Improve RMS-based training records.
- Formalize the internal instructor cadre.
- Coordinate upcoming recruit and certification programs.
- Establish training performance measures.
- Quantify the administrative workload currently carried by senior officers and volunteer instructors.
- Determine whether a permanent municipal or shared regional model is most appropriate.

This approach would provide an opportunity to test the position and demonstrate measurable outcomes before making a permanent staffing commitment. It would also create an internal professional-development and succession opportunity.

The primary challenge would be replacing or redistributing the seconded member's existing responsibilities. Depending on the individual selected, this could result in backfill, overtime, or operational coverage costs.

Option 5: Fixed-Term Contract Training Officer

CWFR could engage an experienced training officer through a fixed-term employment contract, generally for a period of 12 to 24 months. Unlike a consultant engaged to deliver individual courses, the contract training officer would be integrated into the department and work regular full-time-equivalent hours.

The contract mandate could focus on:

- Developing or implementing the Training Master Plan.
- Establishing the certification and competency-tracking system.
- Standardizing training documentation.

- Developing internal instructors.
- Coordinating a recruit program.
- Improving RMS training records.
- Establishing quality assurance and audit processes.
- Preparing the permanent Training Officer job description and annual work plan.

This model could provide relatively rapid access to specialized experience and allow the municipality to connect the position to defined deliverables. It would also provide time to evaluate the preferred long-term organizational model.

The principal limitations are continuity and knowledge retention. A temporary employee may leave once the initial systems have been developed, requiring CWFR to transfer responsibility to another employee or return elements of the program to the existing volunteer instructor structure. A fixed-term contract may also cost as much as, or more than, a permanent position when recruitment, contract premiums, and limited-term employment conditions are considered.

Table 25: Full-time Comparison of Options

Option	CWFR Control	Relative Cost to CWFR	Continuity	Principal Consideration
Dedicated Full-Time CWFR Training Officer	High	High	High	Permanent annual operating impact
Shared County or Regional Training Officer	Moderate	Moderate	Moderate-High	Competing regional priorities and scheduling
Operationally Qualified Training Officer	High	High	High	Training responsibilities may be displaced by emergency response
Internal Secondment and Pilot	High	Moderate-High	Temporary	Existing responsibilities require backfill or redistribution
Fixed-Term Contract Training Officer	Moderate-High	Moderate-High	Temporary	Loss of continuity when the contract concludes

Preferred Strategy

The preferred long-term model is the establishment of a dedicated, permanent, full-time CWFR Training Officer reporting to the Deputy Chief responsible for Operations and Training. The Training Officer should coordinate and oversee the training program but should not replace CWFR's existing station instructors and subject-matter experts.

Instead, the current instructor group should be formalized as an internal instructor cadre working under the coordination of the full-time Training Officer. This would retain operational knowledge, provide sufficient instructors for practical evolutions, create professional-development opportunities, and reduce dependence on a single individual.

The position should remain operationally qualified and may respond to significant incidents as a Safety Officer, command-support resource, or technical specialist. The position should not be routinely counted toward minimum apparatus staffing or used as regular operational backfill.

Where Council is not prepared to immediately approve a permanent position, CWFR could implement the role through an 18-to-24-month internal secondment or fixed-term pilot. The pilot should have defined responsibilities, deliverables, performance measures, and an evaluation process. Upon completion, the Fire Chief would report back on workload, program outcomes, organizational benefits, and the recommended permanent model.

Scheduling Considerations

A conventional Monday-to-Friday daytime schedule would not fully support CWFR's current training model. Regular training is delivered on Monday evenings in Elora and Wednesday evenings in Fergus, with specialty, technical, recruit, and certification programs frequently requiring weekend participation.

The Training Officer's schedule should therefore provide sufficient flexibility to include:

- Daytime hours for planning, administration, meetings, curriculum development, and records management.
- Regular evening attendance at both station training nights.
- Scheduled weekend availability for recruit, specialty, certification, and practical training.
- Flex-time or lieu-time provisions to manage evening and weekend commitments.
- Periodic attendance at regional courses and external training facilities.
- Availability for instructor meetings and post-incident reviews.

The position should not be expected to routinely work daytime, evening, and weekend hours without an appropriate flexible scheduling arrangement.

The final schedule should be developed in consultation with Human Resources and reflect the position's classification and employment conditions.

Financial Implications

A preliminary planning allowance for a full-time Training Officer is approximately **\$125,000 to \$165,000 annually**, including salary, employer pension contributions, benefits, statutory costs, and other payroll-related expenses.

First-year implementation costs may be higher depending on:

- Recruitment and onboarding.
- Computer and communications equipment.
- PPE and uniforms.
- Training resources and instructional materials.
- Office accommodation.
- Access to a municipal vehicle.
- RMS configuration or software enhancements.
- Required instructor or officer certifications.

This range is intended for preliminary planning only. The final cost should be established through Centre Wellington's job-evaluation, compensation, pay-equity, classification, and annual budget processes.

Observation

Observation #24: CWFR currently relies on part-time/volunteer Training Officers, station officers, internal instructors, and the Deputy Chief responsible for Operations and Training to coordinate weekly station training, recruit development, specialty programs, certification requirements, instructor scheduling, competency evaluation, and training documentation. While this model has supported a professional and consistent training program, increasing provincial certification requirements, growing administrative and competency-verification obligations, evolving community risks, and continued pressures on volunteer instructor availability are expanding the time and expertise required to manage the training function. Without additional dedicated capacity, training planning, individual competency evaluation, recordkeeping, instructor development, and long-term program improvement may become increasingly difficult to sustain.

Recommendation

Recommendation #24: Establish a dedicated full-time Training Officer reporting to the Deputy Chief responsible for Operations and Training to coordinate CWFR's training, certification, competency management, instructor development, recruit and officer development, specialty training, and training records. The position should maintain a flexible schedule that supports daytime, evening, and weekend programming, be supported by a structured cadre of internal part-time instructors.

Strategic Objective: #5 Training and Professional Development

Suggested completion: 24-36 months

Cost: Approximately \$160,000 total compensation annually, plus potential first-year implementation costs

Rationale: *A full-time Training Officer would provide the dedicated capacity required to manage increasingly complex certification, competency, documentation, recruit-training, instructor-development, and specialty-training obligations. The position would improve consistency between stations, strengthen individual performance verification, support regulatory compliance, reduce reliance on the Deputy Chief and volunteer officers for administrative coordination, and enhance firefighter safety and operational readiness. Maintaining an internal instructor cadre alongside the full-time position would preserve local knowledge and member involvement while improving coordination, succession planning, quality assurance, and the long-term sustainability of CWFR's training program.*

3.9 Emergency Communications and Dispatch

Strategic Objective #6: Emergency Communications and Dispatch

Ensure reliable, resilient, and technologically appropriate emergency communications through continued collaboration with a qualified third-party service provider. By leveraging shared expertise, standardized dispatch protocols, and scalable technologies, CWFR will support timely and accurate emergency communications that enhance firefighter safety, inter-agency coordination, and effective service delivery.

The Public Safety Answering Point (PSAP) for Centre Wellington is provided by the Ontario Provincial Police (OPP). All 9-1-1 calls originating within Centre Wellington are initially received and screened by the OPP Communications Centre. Fire-related calls are then transferred to the Guelph Fire Department (GFD), which serves as the contracted Fire Communications Provider for CWFR.

GFD is responsible for fire dispatch services, including call-taking (upon transfer), dispatching apparatus, and providing the associated information and communications technology systems that support emergency response. Calls are dispatched to CWFR personnel through paging systems and mobile notification platforms, ensuring timely notification of paid-on-call and full-time staff.

The current dispatch service arrangement with GFD should be supported through a clearly defined and formalized agreement that establishes service expectations, performance standards, roles, and responsibilities, reporting requirements, quality assurance processes, and cost structures.

Based on the analysis referenced in Section 4.4.1, over the four-year period (2022–2025), GFD met the NFPA 64-second alarm processing time at the 90th percentile in 38% of fire incidents and 59% of all incidents combined. While this provides a baseline indication of performance, it highlights the need for clearly defined and measurable performance benchmarks. Key metrics, such as call answer time, call processing time, turnout notification time, and system redundancy standards, should be formally established, documented, and routinely monitored to ensure consistent service delivery and accountability.

Dedicated dispatch and incident communications functions are a critical component of the emergency response system. Reliable, timely, and accurate communications directly support incident command, firefighter safety, resource deployment, and overall operational effectiveness.

As Centre Wellington continues to evaluate long-term service delivery models, CWFR should consider:

- The full cost of dispatch service provision
- Defined and measurable service level/performance standards
- Technology integration and redundancy requirements
- Business continuity and backup communications capabilities
- A formalized service agreement clearly outlining expectations, governance, liability, and accountability mechanisms.

Establishing and maintaining a comprehensive, performance-based dispatch agreement will ensure communications services remain aligned with operational needs, industry best practices, and Centre Wellington’s community risk profile. While GFD provides the dispatch function, the current service arrangement should be supported by a clearly defined and formalized agreement outlining service levels, performance expectations, reporting requirements, and accountability measures.

Industry best practice benchmarks, including those identified within NFPA 1225 Standard for Emergency Services Communications, reference a 90th percentile call processing time target of 64 seconds or less for fire calls. The absence of formally documented performance standards limits CWFR's ability to evaluate dispatch efficiency, identify system improvements, and ensure alignment with overall response time objectives and firefighter safety priorities.

Observation

Observation #25: CWFR relies on the Ontario Provincial Police (OPP) as the Public Safety Answering Point (PSAP), with fire-related calls subsequently transferred to the Guelph Fire Department (GFD), which serves as the Fire Communications Provider. Dispatch notifications are transmitted to CWFR personnel through paging systems, mobile responder applications, and in-station alerting interfaces to support both full-time and POC response models.

Recommendation

Recommendation #25: Collaborate with the Guelph Fire Department to develop, formalize, and document clear dispatch performance benchmarks and service-level expectations within a written agreement.

Strategic Objective: #6 Emergency Communications and Dispatch

Suggested completion: 1-12 months

Cost: Neutral - (primarily administrative; potential future cost implications if enhanced service levels or technology upgrades are required)

Rationale: *Formalizing dispatch performance benchmarks will provide CWFR with measurable standards to evaluate alarm handling, call transfer, and dispatch notification times across the communications chain, from call receipt to apparatus dispatch. Establishing clear key performance indicators (KPIs), including call answer time, transfer time, alarm processing time, and quality assurance reporting, will strengthen accountability, transparency, and alignment with industry standards and firefighter safety objectives.*

A written agreement outlining roles, responsibilities, governance, and performance monitoring processes will support continuous improvement and ensure communications services remain aligned with CWFR's response time objectives and community risk profile. Defined benchmarks will also enable ongoing evaluation of service effectiveness and cost-efficiency, ensuring reliable emergency communications as a foundational component of safe and effective operations.

3.10 Capital Assets

Strategic Objective #7: Capital Assets

Provide and maintain fire stations, apparatus, and equipment that support operational readiness and effective emergency response. Through sound asset management and lifecycle planning, CWFR will ensure infrastructure and equipment continue to meet service delivery requirements and community expectations.

3.10.1 Fire Stations

Fire stations have a long history going back to the late 17th century when fire services were first organized. Typically, early fire stations housed simple fire pumps, facilities for the horses that pulled the fire pumps and living quarters for firefighters. Today's fire stations are typically used to store modern firefighting apparatus and equipment as well as living quarters for firefighters in many cases for 24 hours a day, 7 days a week.

Modern fire stations are designed with functionality, efficiency, and health and safety in mind. These facilities are strategically located to ensure optimal emergency response times and are built to accommodate larger and heavier fire apparatus. In addition to operational needs, contemporary fire stations integrate environmental and occupational health considerations into their design, including dedicated decontamination areas, separate zones for contaminated gear (hot zones) and clean areas (cold zones), proper ventilation systems, and wellness amenities to support firefighter health and resilience.

3.10.1.1 Fire Stations Overview and Assessments

Centre Wellington operates two fire stations. These stations are strategically located to serve both urban and rural areas of the community. An overview of the CWFR fire stations and an assessment of what are considered necessary amenities for a fully functional fire station are detailed.

Station 60			
Address:	72 Wellington Road, Elora	Year Built:	1987
Use:	Fire & Rescue Response		
Bays:	2	Units:	5
Response Units	Pump 61	Aerial 64	
	Support R65B	Tanker 67	
	Boat EB1	Parade Bickle Pumper (non-response)	



Table 26: Station 60 Overview

Item	Description	Yes	No	Comments
1	Site security	✓		
2	Adequate parking for staff and visitors	✓		
3	Internet and intranet connectivity	✓		
4	Adequate space for training – training props, hydrant	✓		
5	Back-up power supply	✓		
6	Fire Chiefs' office		✓	See Station 40
7	Deputy's Chief's offices		✓	See Station 40
8	Emergency management office		✓	N/A
9	Administrative support office/space	✓		
10	Training room / meeting room	✓		
11	Office security	✓		
12	Dorm rooms		✓	N/A
13	Day use area	✓		
14	Kitchen	✓		
15	Fitness / wellness area		✓	
16	Firefighter men's and ladies' bathrooms (no showers)	✓		
17	Space to safely garage and do minor maintenance on vehicles	✓		
18	Hose drying area	✓		
19	Small equipment storage and maintenance room	✓		
20	Air filling station room complete with proper ventilation		✓	Only at the Fergus Station
21	Industrial washer and dryer rack room	✓		
22	Bunker gear storage room complete with exhaust fan and heater	✓		
23	Consumables storage room	✓		
24	Sufficient workstations	✓		
25	Sufficient supervisor space	✓		
26	Breakout or quiet room		✓	
27	Public and Staff Washrooms	✓		
28	Locker room	✓		Female and Male
29	Proper interior Lighting	✓		

Station 40			
Address:	250 Queen Street West, Fergus	Year Built:	1974
Use:	Fire & Rescue, Administration, Training staff, Fire Prevention		
Bays:	3	Units	6
Response Units:	Pump 40	Pumper 42	
	Pump 41	Rescue 45	
	Tanker 47	Argo	
	Boat FB1	Reserve Pump 41	
	Support 45B		



Table 27: Station 40 Overview

Item	Description	Yes	No	Comments
1	Site security	✓		
2	Adequate parking for staff and visitors	✓		
3	Internet and intranet connectivity	✓		
4	Adequate space for training – training props, hydrant	✓		
5	Back-up power supply	✓		
6	Fire Chiefs' office	✓		
7	Deputy's Chief's offices	✓		
8	Emergency management office		✓	N/A
9	Administrative support office/space	✓		
10	Training room / meeting room	✓		
11	Office security	✓		
12	Dorm rooms		✓	N/A
13	Day use area	✓		
14	Kitchen	✓		
15	Fitness / wellness area		✓	
16	Firefighter men's and ladies' bathrooms (no showers)	✓		
17	Space to safely garage and do minor maintenance on vehicles	✓		Limited – Space located in additional building on-site
18	Hose drying area	✓		Tower
19	Small equipment storage and maintenance room	✓		
20	Air filling station room complete with exhaust out of wall	✓		
21	Industrial washer room and dryer rack	✓		
22	Bunker gear storage area		✓	Off bay floor and open to the administration area without proper ventilation
23	Consumables storage room	✓		
24	Sufficient workstations	✓		
25	Sufficient supervisor space	✓		
26	Breakout or quiet room		✓	
27	Public and Staff Washrooms	✓		
28	Locker room	✓		Female and Male
29	Proper interior Lighting	✓		

Observation

Observation #26: Site visits to both CWFR fire stations identified several functional and operational deficiencies that should be assessed through a firefighter health and safety and contamination-control lens. Observed concerns include inadequate separation and ventilation of bunker gear storage areas from administrative and occupied spaces, limited clean/contaminated space separation, and insufficient decontamination facilities including inadequate shower capacity for male and female personnel following incident response. These conditions are inconsistent with the intent of Ontario Fire Service Section 21 Guidance Notes, particularly Guidance Note 6-1: Hygiene and Decontamination, which identifies the need for procedures for showering and changing clothes upon return to the station, areas within the station where contaminated equipment should not enter, and designated areas for clean bunker gear, PPE, and fire equipment. The Township has plans to conduct building assessments on all township buildings including the two fire stations.

Recommendation

Recommendation #26: Proceed with the planned functional building assessment of both fire stations to evaluate safe and operational conditions, compliance with applicable codes and standards, and alignment with current and future service delivery requirements.

Strategic Objective: # 7 Capital Assets

Suggested completion: 12-24 months.

Cost: Estimated at \$30,000–\$75,000 for a third-party assessment of both stations; up to \$100,000 where specialized testing, engineering, conceptual design, and preliminary capital costing are included. Facility improvements would be subject to separate capital approval.

Rationale: *The Ontario Fire Service Section 21 Guidance Notes are intended to support fire service employers and workers in identifying fire service-specific hazards and preventing firefighter injury or illness. The Section 21 Committee develops and maintains guidance material and recommended best practices for workplace parties in Ontario's fire service, consistent with the intent of the Occupational Health and Safety Act and related regulations. As such, a functional assessment of CWFR's existing stations should consider how each facility supports or limits accepted practices related to firefighter hygiene, decontamination, PPE storage, and contamination control.*

Modern fire station design increasingly requires clear separation between contaminated, transitional, and clean areas to reduce the movement of contaminants from apparatus bays, PPE storage, and decontamination areas into offices, training rooms, living areas, and other occupied spaces. Section 21 guidance related to PPE care and maintenance reinforces that contaminated PPE should not be brought into fire station living quarters and should be handled, transported, and cleaned in a manner that limits cross-contamination.

Incorporating these principles into the building assessment will help CWFR identify practical short-term improvements, inform future capital planning, and ensure that existing and future facilities better support firefighter health, operational efficiency, accessibility, privacy, and long-term adaptability.

3.10.2 Fire Apparatus and Equipment

Fire apparatus and emergency vehicles are typically the largest asset expenditures for any fire department. Purchasing and managing these assets requires strong fiscal responsibility to endure public and local government scrutiny. Currently, CWFR has considerable monies invested in vehicles and equipment.

3.10.2.1 NFPA Standards for Fire Apparatus

NFPA has developed standards to assist a fire service with the design, maintenance, inspection, testing, life cycling, and dispersal for their fire apparatus. Fire departments may choose to adopt these standards or utilize them as a reference in their own standards and practices.

The *NFPA 1901 Standard for Automotive Fire Apparatus* (2016) defines the requirements for new automotive fire apparatus and trailers, designed to be used under emergency conditions to transport personnel and equipment and to support the suppression of fires and mitigation of hazardous conditions. This standard recommends that fire apparatus should respond to first alarms for the first 15 years of service, with the expectation that they perform as designed 95% of the time. For the next five years, it should be held in reserve for use at large fires or used as a temporary replacement for-of-service first line apparatus.

The *NFPA 1911 Standard for the Inspection, Maintenance, Testing and Retirement of In-Service Emergency Vehicles* (2017) standard defines the minimum requirements for establishing an inspection, maintenance, and testing program. Also included are guidelines for emergency vehicle refurbishment and retirement.

The Underwriters Laboratory of Canada (ULC) utilizes many of the provisions within these NFPA standards which are referenced by Fire Underwriters Survey (FUS) for determining fire insurance ratings for a community.

For example, it follows the life cycle program with the exception that it may award full credit for a fire apparatus older than 15 years, but not more than 20 years, in remote locations only if the piece of equipment is deemed in excellent condition and all necessary upgrades are done. The value of the additional credit in this case, which is only a portion of the total grading for a final FUS rating, may well be overshadowed by the cost of maintaining an older unit.

In addition, the *NFPA 1901 Standard for Automotive Fire Apparatus* (2016) recommends the following:

D.1 General

To maximize firefighter capabilities and minimize the risk of injuries, it is important that fire apparatuses be equipped with the latest safety features and operating capabilities.

In the last 10 to 15 years, much progress has been made in upgrading functional capabilities and improving the safety features of fire apparatus. Apparatuses more than 15 years old might include only a few of the safety upgrades required by the recent editions of the NFPA fire department apparatus standards or the equivalent Underwriters Laboratories of Canada (ULC) standards. Because the changes, upgrades, and fine-tuning to NFPA 1901 Standard for the Inspection, Maintenance, Testing and Retirement of In-Service Emergency Vehicles (2017) have been truly significant, especially in safety, fire departments should seriously consider the value (or risk) to firefighters of keeping fire apparatus more than 15 years old in first line service. It is recommended that apparatus more than 15 years old that have been properly maintained and that are still in serviceable condition be placed in reserve status; be upgraded in accordance with NFPA 1910 - Standard for Inspection, Maintenance, Refurbishment, Testing, Retirement of In-Service Emergency Vehicles, and Requirements for Marine Firefighting Vessels (2024); and incorporate as many features as possible of the current fire apparatus standard (See Section D3 of Standard). This will ensure that, while the apparatus might not totally comply with the current editions of the automotive fire apparatus standards, many of the improvements and upgrades required by the current editions of the standards are available to the firefighters who use the apparatus. Apparatuses that were not manufactured to the applicable NFPA fire apparatus standards or that are over 25 years old should be replaced.

3.10.2.2 Underwriters Laboratories of Canada

Current Underwriters Laboratories of Canada (ULC¹⁰) and *NFPA 1901 Standard for Automobile Firefighting Apparatus* (2016) recommend using apparatus on the front line for up to 15 years, then as a backup for another four to five years.

¹⁰ Underwriters Laboratories of Canada (ULC) is an independent product safety testing, certification, and inspection organization. www.canada.ul.com

Of course, this timeline is dependent on the frequency of use, scheduled maintenance, and budgets. As indicated in Table 28, some emergency vehicles' life cycles can be extended due to low usage or serviceable condition.

A leading practice is to have a complete condition survey conducted to determine if there is usable life cycle remaining. This condition survey must consider the NPFA and FUS standards along with the maintenance and cost records of the respective vehicle.

Table 28: Fire Apparatus Service Schedule (Fire Insurance Grading)

Apparatus Age (Yrs.)	Major Cities ³	Medium Sized Cities ⁴	Small Communities ⁵ and Rural Centres
0 – 15	First Line Duty	First Line Duty	First Line Duty
16-20	Reserve	2 nd Line Duty	First Line Duty
20-25 ¹	No Credit in Grading	No Credit in Grading or Reserve ²	No Credit in Grading or 2 nd Line Duty ²
26-29 ¹	No Credit in Grading	No Credit in Grading or Reserve ²	No Credit in Grading or Reserve ²
30+	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 recognized testing agency on an annual basis to be eligible for grading recognition (NFPA 1071).			
² Exceptions to age status may be considered in a small to medium sized communities and rural centers conditionally, when apparatus condition is acceptable, and apparatus successfully passes required testing.			
³ Major Cities are defined as an incorporated or unincorporated community that has: a populated area (or multiple areas) with a density of at least 400 people per square kilometer; AND a total population of 100,000 or greater.			
⁴ Medium Communities are defined as an incorporated or unincorporated community that has: a populated area (or multiple areas) with a density of at least 200 people per square kilometer; and/or a total population of 1,000 or greater.			
⁵ Small Communities are defined as an incorporated or unincorporated community that has: no populated areas with densities that exceed 200 people per square kilometer; AND does not have a total population of more than 1,000.			

3.10.2.3 Fire Apparatus Design and Procurement

Fire apparatus for Centre Wellington and CWFR are designed and procured to meet the operational requirements of CWFR, and the specific risks and service demands present within the community.

The apparatus specification process considers local building types, roadway networks, response profiles, staffing models, and the operational roles that each apparatus must fulfill within the fire suppression and emergency response system.

The design, tendering, and procurement of fire apparatus is a lengthy and complex process, typically requiring two to three years or more from initial specification development to final delivery. As a result, apparatus planning must consider both current operational requirements and anticipated future needs associated with population growth, urban development, and evolving community risk.

Given that fire apparatus generally has service life cycles of 20 years or longer, procurement decisions must be made with a long-term perspective to ensure that vehicles remain operationally relevant, cost-effective, and capable of supporting the service delivery model throughout their lifecycle. Careful planning and alignment with long-term infrastructure and growth strategies are therefore essential to ensure that apparatus investments continue to meet the needs of the CWFR over time.

3.10.2.4 Fire Apparatus and Equipment Maintenance and Repair

In Ontario, all fire apparatus with a gross weight, registered gross weight, or manufacturer's gross vehicle weight rating exceeding 4,500 kilograms must undergo an annual inspection in accordance with regulations established under the Highway Traffic Act. Upon successful completion of the inspection, vehicles are required to display a valid inspection sticker as proof of compliance. While the Act also requires daily driver inspections for commercial vehicles, fire apparatus is exempt from this requirement. Despite this exemption, most fire departments in Ontario implement internal policies requiring routine vehicle inspections, typically conducted at the beginning of a shift, or following apparatus use, to ensure operational readiness and safety.

A structured preventative maintenance program is a critical component of effective fleet management. Such programs help ensure that apparatus operate safely and reliably while supporting the achievement of expected service life cycles.

Inadequate maintenance practices or missed inspections can lead to equipment failures, vehicle breakdowns, and increased risk to personnel and the public. A comprehensive apparatus maintenance program typically includes routine trip inspections (daily, pre-trip, or post-trip), scheduled preventative maintenance servicing, and an annual comprehensive preventative maintenance review.

Maintaining emergency response apparatus also requires specialized inspection, testing, and repair services. To support these needs, third-party service providers with the appropriate technical expertise are utilized. One contracted provider employs certified Emergency Vehicle Technicians (EVTs) who are responsible for servicing the emergency response components of the fleet, including pumps, aerial devices, electrical systems, and other specialized firefighting equipment. This provider also conducts required testing and certification of critical components such as fire pumps and aerial ladders in accordance with applicable standards and manufacturer specifications.

Routine mechanical repairs and maintenance related to the truck chassis, drivetrain, and general automotive systems are performed by a separate local service provider. Utilizing multiple service providers allows emergency equipment and vehicle systems to be maintained by technicians with the most relevant expertise. Coordination and oversight of these contracted maintenance services are managed by the Deputy Chief of Operations, who ensures inspections, preventative maintenance schedules, and required certifications are completed in a timely manner to maintain apparatus readiness and regulatory compliance.

A more structured equipment maintenance and repair program is required to ensure that frontline equipment is inspected, serviced, documented, and returned to service in a timely manner. The program should establish clear responsibilities, maintenance schedules, documentation requirements, service standards, and processes for escalating repairs that require specialized expertise. This would improve equipment reliability while limiting the use of already heavily tasked Fire Prevention staff for functions outside their primary area of responsibility.

Observation

Observation #27: CWFR does not currently have a formally assigned resource or structured program for preventative maintenance, servicing, and minor repair of frontline firefighting equipment. These responsibilities are currently performed primarily by the Fire Prevention Officer due to the incumbent's technical expertise and mechanical aptitude. While this informal arrangement has helped maintain equipment readiness, it results in approximately four hours per week, or 200 hours per year being redirected from Fire Prevention and Public Education activities.

Option 1: External Third-Party Service Provider: CWFR could retain a qualified third-party provider to complete scheduled preventative maintenance, testing, servicing, and minor repairs of frontline firefighting equipment under defined service standards and documentation requirements. Firefighters would continue routine operational checks, while specialized, certified, warranty, and major repairs would be completed by appropriately qualified vendors.

Option 2 (Preferred): Internal Part-Time Equipment Technicians: CWFR could assign qualified Paid-On-Call firefighters to scheduled part-time equipment technician duties, with compensation provided through an appropriate technician rate or premium recognizing the additional responsibility and required qualifications. Designated members would complete routine maintenance, inspections, inventory control, and minor repairs, while specialized or certified work would continue to be outsourced.

Recommendation

Recommendation #27: Establish a formal frontline firefighting equipment maintenance and repair program using qualified Paid-On-Call firefighters as part-time equipment technicians.

Strategic Objective: #7 Capital Assets

Suggested completion: 1-12 months.

Cost: Annual cost to be determined based on the number of designated technicians, scheduled maintenance hours, applicable hourly or premium rate, required training, tools, and replacement parts.

Rationale: Frontline firefighting equipment must be maintained in a state of operational readiness to support firefighter safety, reliable emergency response, and continuity of service. Establishing a formal maintenance and repair program would replace the current informal arrangement with defined responsibilities, scheduled work, appropriate documentation, and clearer accountability for equipment condition and repair status. These members would complete scheduled preventative maintenance, inspections, inventory control, recordkeeping, and minor repairs at an appropriate technician rate or premium, with specialized or certified work outsourced and current equipment-related duties transitioned from the Fire Prevention Officer.

The CWFR reports identify increasing workload pressures associated with inspections, enforcement, public education, and broader community risk reduction activities. Continued community growth and increasing regulatory and service demands will require the Fire Prevention Officer to focus available capacity on these core responsibilities. The ongoing use of prevention staff for equipment maintenance is not sustainable and may contribute to inspection backlogs, reduced public education capacity, and difficulty achieving departmental service objectives.

Transitioning routine equipment servicing and repair away from the Fire Prevention Officer would return approximately four working hours per week, or 200 hours per year to inspections, enforcement, public education, and community risk reduction activities. This additional capacity would help CWFR respond to increasing workload pressures, improve inspection frequency, support Ontario Fire Code compliance, and expand prevention programming as the community continues to grow.

Both options provide a more appropriate alignment of responsibilities. A third-party model offers access to external expertise and reduces internal administration, while an internal part-time technician model builds departmental capacity and may provide greater flexibility and responsiveness. Under either option, specialized or certified repairs should continue to be completed by qualified external providers where required.

3.10.2.5 Fire Apparatus Replacement and Dispersal

Centre Wellington operates a fleet of emergency response apparatus and support vehicles that support fire protection services across Fergus, Elora, and the surrounding rural areas. Apparatus is strategically distributed between Station 40 and Station 60 to ensure appropriate response capability for structural firefighting, water supply, rescue operations, and specialized incidents such as marine or off-road emergencies. Apparatus assignments reflect operational risks, geographic coverage requirements, and anticipated incident types within each response district.

To maintain operational reliability, Centre Wellington follows a structured lifecycle replacement strategy. Heavy apparatus, including pumpers, aerial devices, rescues, and tankers, are assigned a 20-year replacement lifecycle, which aligns with common municipal practices. Light and support vehicles follow a 10-year lifecycle, reflecting their operational use and lower acquisition cost. Establishing defined lifecycle expectations allows Centre Wellington to forecast capital requirements and maintain a safe and dependable emergency response fleet.

A review of the current fleet indicates that several apparatus are approaching or exceeding their expected lifecycle and should be prioritized within capital planning.

The pumper assigned to Station 40 (P40), built in 2008, is nearing the end of its anticipated service life, while P42 (2005) has exceeded the 20-year lifecycle and should be considered for replacement as soon as feasible. At Station 60, the aerial apparatus (A64), built in 2002, represents the oldest heavy apparatus in the fleet and should remain a priority within the capital replacement program given the critical role aerial devices play in fire suppression and rescue operations.

Other heavy apparatus remains within acceptable lifecycle ranges but will require replacement over the next decade. Maintaining a staggered replacement schedule allows Centre Wellington to distribute capital expenditures and avoid significant budget spikes associated with replacing multiple units simultaneously.

Support and specialty vehicles, including command units, support trucks, boats, and the all-terrain vehicle, are replaced on a 10-year lifecycle. Several of these assets will reach the end of their service life between 2027 and 2030, including Boat 49 (2012), Boat 69 (2013), and the ATV (2015). Command and administrative vehicles are scheduled for replacement between 2029 and 2033.

Where operationally feasible, apparatus removed from frontline service may be retained for a limited period as reserve units, provided they remain mechanically reliable and compliant with safety standards. Maintaining reserve apparatus supports operational continuity during maintenance periods, mechanical failures, or major incidents.

Long-term fleet sustainability is supported through alignment with Centre Wellington's asset management program. Lifecycle costing, maintenance history, operational workload, and projected replacement costs should continue to guide apparatus planning, supported by consistent annual contributions to the apparatus reserve fund.

3.10.2.5.1 Replacement Planning Considerations

Apparatus replacement planning incorporates several financial and lifecycle assumptions to ensure sufficient reserve funding is available when required. Annual reserve contributions are informed by:

- Identified lifecycle of the asset
- Forecasted inflation and industry cost escalation
- Depreciation trends and declining market value
- Estimated salvage or trade-in value

Industry guidance such as NFPA standards and Fire Underwriters Survey (FUS) provides general lifecycle benchmarks; however, replacement timing may vary depending on apparatus condition, operational workload, and emerging safety or technology requirements.

3.10.2.5.2 Evaluating Apparatus for Replacement

Determining the optimal replacement year requires evaluating several operational and financial indicators, including:

- Age of the unit
- Kilometers and engine hours
- Maintenance history and overall condition
- Certification status and pump/aerial testing results
- Operational reliability and downtime
- Ability to meet current and future service demands

A comparative analysis is conducted between the depreciated value of the existing apparatus and the projected replacement cost, accounting for inflation and market pricing trends. Estimated salvage or trade-in value is also considered based on condition, age, and certification results.

The lifecycle cost projection shown in Table 29 and Figure 7 demonstrates how replacement costs increase over time due to inflation while asset value declines through depreciation. Delaying apparatus replacement beyond the optimal period can therefore increase long-term costs.

Table 29: Fire Apparatus Life Cycle Cost Projection (Example)

Period	Year	*Replacement cost	Estimated Inflation %	Diff. between original vs replacement	Depreciated value
0	2021	\$642,619.79		\$0.00	\$642,619.79
1	2022	\$706,881.77	10.0%	\$64,261.98	\$514,095.84
2	2023	\$770,501.13	9.0%	\$127,881.34	\$411,276.67
3	2024	\$832,141.22	8.0%	\$189,521.43	\$329,021.33
4	2025	\$890,391.11	7.0%	\$247,771.32	\$263,217.07
5	2026	\$948,266.53	6.5%	\$305,646.74	\$210,573.65
6	2027	\$1,009,903.86	6.5%	\$367,284.06	\$168,458.92
7	2028	\$1,075,547.61	6.5%	\$432,927.81	\$134,767.14
8	2029	\$1,145,458.20	6.5%	\$502,838.41	\$107,813.71
9	2030	\$1,219,912.99	6.5%	\$577,293.19	\$86,250.97
10	2031	\$1,299,207.33	6.5%	\$656,587.53	\$69,000.78
11	2032	\$1,383,655.81	6.5%	\$741,036.01	\$55,200.62
12	2033	\$1,473,593.43	6.5%	\$830,973.64	\$44,160.50
13	2034	\$1,569,377.01	6.5%	\$926,757.21	\$35,328.40
14	2035	\$1,671,386.51	6.5%	\$1,028,766.72	\$28,262.72
15	2036	\$1,780,026.63	6.5%	\$1,137,406.84	\$22,610.17
16	2037	\$1,895,728.37	6.5%	\$1,253,108.57	\$18,088.14
17	2038	\$2,018,950.71	6.5%	\$1,376,330.92	\$14,470.51
18	2039	\$2,150,182.51	6.5%	\$1,507,562.71	\$11,576.41
19	2040	\$2,289,944.37	6.5%	\$1,647,324.57	\$10,000.00
20	2041	\$2,438,790.75	6.5%	\$1,796,170.96	\$10,000.00

*Estimated average cost for a custom municipal pumper

Figure 7: Fire Apparatus Life Cycle Cost Projection (Example Only)

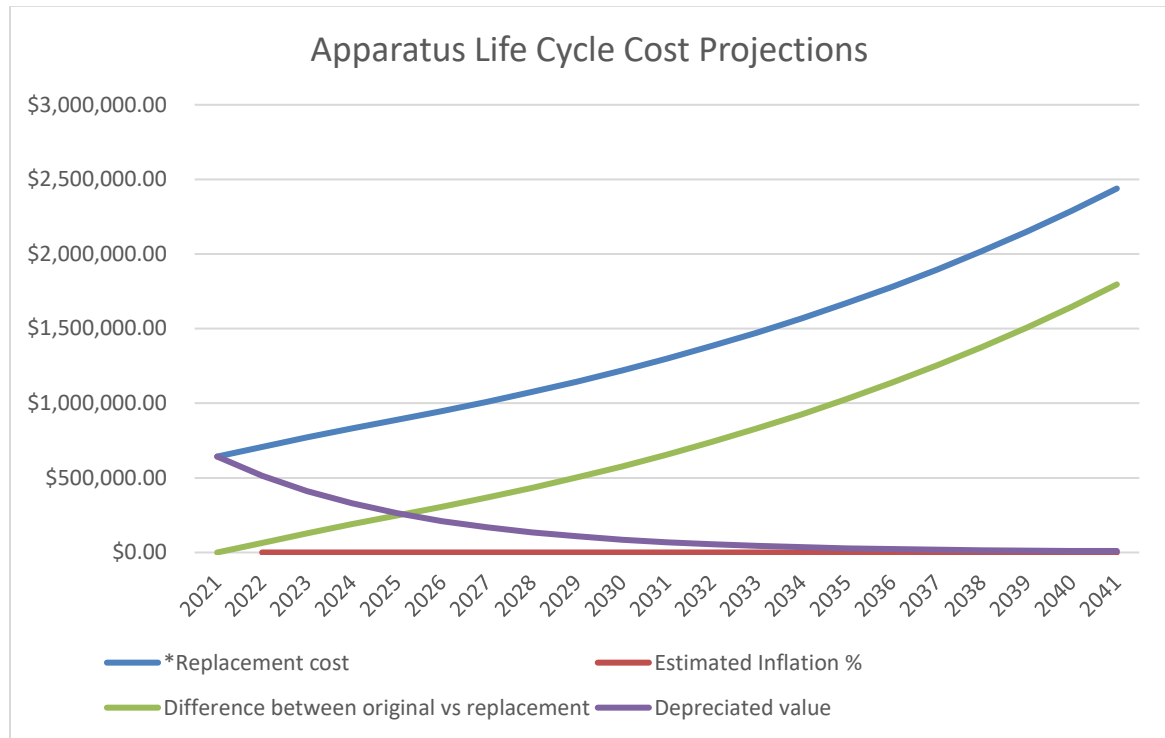


Table 29 and Figure 7 illustrate the increasing replacement costs and decreasing value of a new pumper vehicle purchased in 2021, over a 20-year period. As depicted, the five-year increase in the projected replacement cost is \$658,764.12 for apparatus aged 15 to 20 years, which is also the time period when escalating maintenance costs can be expected, suggesting earlier replacement should be considered. Analyzing local operating conditions when determining the optimal replacement timing for each major piece of apparatus will help ensure that sufficient funds are available when replacements are required.

3.10.2.6 Fire Apparatus and Emergency Vehicle Fleet Inventory

Centre Wellington owns and maintains a fleet of heavy apparatus and light emergency vehicles that support the operational requirements of CWFR. Heavy apparatus, including pumpers, rescues, tankers, and the aerial unit, are primarily housed at Stations 40 and 60 and deployed based on the operational risks within each response area. Light vehicles support command, training, fire prevention, and administrative functions.

The apparatus fleet is modern and well maintained. The current apparatus inventory and projected lifecycle replacement schedule are summarized in Table 30.

Table 30: CWRs Apparatus and Planned Life Cycle

No.	Unit Location	Unit No.	Unit Type	Year Built	Replacement (Est.)
1	Station 40	P40	Pumper	2008	2025
2	Station 40	P41	Pumper	2024	2042
3	Station 40	P42	Pumper	2005	
4	Station 40	R45	Rescue	2017	2037
5	Station 40	T47	Tanker	2021	2039
6	Station 40	45B	Support	2021	2030
7	Station 40	Argo 48	ATV	2015	2030
8	Station 40	B49	Boat	2012	2027
9	Station 40	C1	Light vehicle	2022	2033
10	Station 40	C2	Light vehicle	2019	2030
11	Station 40	C3	Light Vehicle	2022	2033
12	Station 40	C4	Light vehicle	2022	2033
13	Station 40	C5	Light Vehicle	2020	2029
14	Station 60	P61	Pumper	2012	2029
15	Station 60	A64	Aerial	2002	2031
16	Station 60	R65	Rescue	2018	2036
17	Station 60	T67	Tanker	2014	2034
18	Station 60	65B	Support	2021	2030
19	Station 60	B69	Boat	2013	2028

Observation

Observation #28: The proposed daytime staffing model creates an opportunity to align the assigned response vehicle with the size of the on-duty crew and the types of incidents most frequently attended by CWFR. Deploying a full-size pumper or rescue apparatus to every medical call, public hazard, minor vehicle incident, or other lower-complexity response may not always be the most efficient use of the heavy fleet and can contribute to unnecessary fuel consumption, wear, and reduced apparatus availability.

A vehicle replacement is already identified within the capital budget, providing an opportunity to consider a compact mini-pumper fire apparatus or multi-purpose rapid-response vehicle. Properly configured, the vehicle could carry medical equipment, traffic-control equipment, basic forcible-entry tools, light vehicle-extrication equipment, and a compressed-air foam system with a limited onboard water supply for small fires and initial fire knockdown. The vehicle would complement, rather than replace, CWFR's full-size pumpers, rescue vehicles, and tankers.

Recommendation

Recommendation #28: Proceed with the purchase of a mini-pumper fire apparatus as part of the vehicle replacement already identified in the capital budget. The unit should be configured to support the proposed daytime staffing model and equipped with medical equipment, light vehicle-extrication tools, traffic-control and incident-support equipment, and a compressed-air foam system with a limited onboard water supply for small fires and initial fire knockdown, while operating in conjunction with CWFR's full-size apparatus for incidents requiring additional personnel, equipment, pumping capacity, or water supply.

Strategic Objective: #7 Capital Assets

Suggested completion: 24-48 months.

Cost: Minimum capital allowance of \$800,000 (currently funded)

Rationale: *If purchased in 2026, costs, and wear on heavy apparatus, and allow full-size units to remain available for higher-risk incidents. Equipping the vehicle with medical equipment, light extrication capability, and a compressed-air foam system with limited water would also provide the daytime crew with meaningful initial-response capability.*

The unit could begin patient care, stabilize minor incidents, address small fires, and undertake initial fire-control actions while additional personnel and apparatus are responding. Integrating the vehicle into CWFR's response protocols would support the phased staffing transition while ensuring that it is not treated as a substitute for the personnel, pumping capacity, water supply, equipment, or Effective Response Force required for more complex emergencies.

3.10.3 Ancillary Equipment

CWFR maintains a comprehensive inventory of ancillary equipment that is critical to frontline operations. This includes vehicle extrication tools, hand tools, ventilation equipment, portable lighting, forcible entry tools, medical response equipment, water rescue gear, and other specialized support devices utilized across a broad range of incident types. The equipment currently in service is appropriate to CWFR's operational profile and aligned with the core services established under the department's E&R By-law. Each component plays an important role in ensuring safe, efficient, and effective emergency response across the municipality's urban and rural environments.

CWFR maintains its ancillary equipment through a structured inspection, testing, maintenance, and lifecycle replacement program to ensure operational readiness, reliability, and compliance with applicable standards. Replacement timelines vary depending on usage patterns, manufacturer recommendations, condition assessments, and technological advancements. Continued investment in modern equipment supports firefighter safety, enhances operational performance, and ensures the department can meet established response objectives and service expectations.

As Centre Wellington continues to experience residential growth in Fergus and Elora, along with ongoing rural service demands, CWFR must regularly evaluate its ancillary equipment inventory to ensure alignment with emerging risks, evolving service levels, and changing operational requirements. Future development, potential facility expansion, and adjustments to apparatus deployment models may necessitate incremental increases in equipment inventories to maintain effective response capabilities and sustain service delivery standards across the community.

3.10.4 Personal Protective Equipment

CWFR provides its personnel with personal protective equipment (PPE) that meets or exceeds applicable NFPA, Canadian Standards Association (CSA), and National Institute for Occupational Safety and Health (NIOSH) standards. Issued equipment includes structural firefighting ensembles, helmets, gloves, boots, self-contained breathing apparatus (SCBA), and specialized protective gear required for technical rescue, hazardous materials response, water and ice rescue, and medical response operations. All PPE is selected, issued, and maintained in accordance with current industry standards to ensure optimal protection, durability, and operational performance across the diverse response environments within Centre Wellington.

CWFR utilizes certified third-party service providers for the cleaning, inspection, testing, and repair of structural firefighting ensembles in compliance with *NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting* (2018) and *NFPA 1851 Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting* (2020). These processes support firefighter health and safety by ensuring that gear is routinely evaluated for wear, damage, and potential contamination. The department maintains comprehensive inventory controls and lifecycle tracking systems to ensure PPE remains within prescribed service life limits and is replaced proactively before performance or safety is compromised.

Overall, the PPE provided to CWFR personnel is current, appropriate for the community's risk profile, and aligned with the department's operational and safety objectives. Ongoing adherence to recognized standards, combined with structured replacement planning and professional decontamination practices, ensures that firefighters are equipped with reliable, modern protective equipment that supports safe, effective, and compliant emergency response operations.

3.10.5 Specialized Operations Equipment

Effective emergency response in Centre Wellington requires access to specialized equipment capable of addressing the municipality's diverse risk profile, including motor vehicle collisions on rural roadways and arterial routes, technical rescue incidents, hazardous materials events, and water and ice emergencies along the Grand River and surrounding water bodies. CWFR maintains a range of specialty tools and equipment to support these response types. Equipment is strategically assigned to frontline apparatus or housed within stations based on geographic coverage, historical call patterns, and identified community risks. Ensuring that the appropriate equipment is readily available, operationally ready, and properly maintained is fundamental to firefighter safety and effective service delivery.

Overall, CWFR's current inventory of specialized operational equipment is meeting existing service demands and aligns with the risks identified in the CRA. Assets such as hydraulic extrication tools, vehicle stabilization systems, high angle rescue equipment, surface water and ice rescue equipment, and hazardous materials response resources are maintained in good working order, subject to regular inspection and testing, and replaced through planned lifecycle management processes.

As Centre Wellington continues to experience infill growth in Fergus and Elora, and greenfield expansion, alongside sustained rural service demands, ensuring adequate quantities of specialized equipment for both frontline and reserve apparatus will become increasingly important. Strengthening equipment redundancies, expanding spare inventories, and aligning future procurement with apparatus replacement planning and staffing models will enhance operational resilience and ensure uninterrupted service delivery during both planned and unplanned fleet downtime.

3.10.6 Asset Management

Centre Wellington relies on a diverse and operationally critical portfolio of municipal assets, including fire stations, frontline and reserve apparatus, fleet vehicles, operational equipment, and related site infrastructure, to deliver safe, timely, and effective emergency services across Centre Wellington.

Consistent with the Centre Wellington's 2025 Asset Management Plan (AMP), CWFR assets are managed using a structured, lifecycle-based, and risk-informed approach that supports operational readiness, regulatory compliance, financial sustainability, and long-term community growth.

Fire stations represent one of the most essential components of CWFR's asset base and are classified within Centre Wellington's Facility Assets portfolio. These facilities support 24/7 emergency response operations and directly influence response times, firefighter safety, and service continuity. Centre Wellington completed a comprehensive Building Condition Audit in 2021, which assessed facilities on a component-by-component basis, recognizing that building elements such as roofs, HVAC systems, structural components, mechanical systems, and building envelopes each have distinct useful lives and renewal cycles.

Facility condition is evaluated based on the intervention year of individual building components, enabling proactive capital planning before deterioration impacts operational functionality. As assets age, the risk of service disruption increases, making scheduled reinvestment in station infrastructure essential. With Centre Wellington's population projected to grow to approximately 58,200 residents by 2051, future facility planning must address both the renewal of existing stations and the potential expansion of fire infrastructure required to support increased service demand.

Fire apparatus and related fleet vehicles form another Centre component of CWFR's asset base and are managed within Centre Wellington's Vehicle Assets category. The AMP confirms that Centre Wellington maintains a robust asset inventory with replacement values reflective of current market conditions. In the absence of a formal mechanical condition index, asset age is used as a proxy for condition, supplemented by operational data such as mileage, usage, and maintenance history to inform replacement decisions.

Annual investment requirements are calculated based on remaining useful life to ensure funding is available for lifecycle interventions before failure occurs. Risk exposure is evaluated using a standardized Probability of Failure (PoF) and Consequence of Failure (CoF) matrix, allowing high-criticality assets, such as fire apparatus, to be prioritized for renewal. Given the high consequence of apparatus failure and extended procurement lead times for emergency vehicles, predictable replacement cycles and adequate reserve funding are critical to maintaining operational reliability.

In addition to facilities and fleet, CWFR maintains a substantial inventory of operational equipment and specialty response tools, which are categorized under Centre Wellington's Equipment Assets class. The AMP identifies an annual lifecycle investment requirement of approximately \$151,782 for Fire Department equipment (based on useful life). This allocation supports the planned rehabilitation and replacement of operational tools, specialty rescue equipment, and related assets in alignment with lifecycle projections. Centre Wellington's lifecycle costing framework enables staff to identify high-investment periods, develop financing strategies, and evaluate annual budget decisions related to risk and service impacts, ensuring that equipment remains reliable and compliant with safety standards.

Certain fire-related site assets, including training grounds, parking areas, fencing, and lighting infrastructure, are captured under Centre Wellington's Land Improvements category. The AMP identifies an annual lifecycle investment allocation of approximately \$18,273 for fire-related land improvements. Condition for these assets is assessed based on remaining useful life, and risk is evaluated using Centre Wellington's standardized PoF/CoF risk matrix. Maintaining these supporting assets is important to ensure safe training environments and functional station sites.

Across all asset groups, CWFR participates in Centre Wellington's broader corporate asset management framework, which integrates lifecycle forecasting, condition-based assessments, and risk modeling into long-term capital planning. Centre Wellington's practices comply with Ontario Regulation 588/17 – *Asset Management Planning for Municipal Infrastructure*, and oversight is provided through an internal Asset Management Committee with representation from all departments. The AMP is treated as a living document, with comprehensive updates at least every five years and annual reporting to Council aligned with the municipal budget process.

Looking forward, CWFR's asset planning must account for projected population and employment growth, increased apparatus utilization, potential expansion of station capacity, and the impacts of climate change on infrastructure durability and service demand.

Lifecycle forecasting tools allow Centre Wellington to model these pressures, anticipate reinvestment needs, and align financial strategies accordingly. CWFR's asset management approach is designed to ensure that fire stations, apparatus, equipment, and supporting infrastructure remain safe, reliable, and aligned with operational requirements. By combining long-term lifecycle planning with risk-based prioritization and integration into Centre Wellington's capital program, CWFR is positioned to maintain high-quality emergency service delivery while proactively planning for growth and managing the long-term cost of its critical infrastructure.

SECTION 4

RESPONSE PERFORMANCE AND CAPABILITIES

4.1 Response Performance

CWFR provides emergency response across a geographically diverse municipality that includes populated urban neighbourhoods, suburban corridors, and expansive rural and agricultural lands. This variability in development patterns, road infrastructure, and risk types requires CWFR to adopt a differentiated approach to response performance standards—one that is realistic, risk-informed, and service-level appropriate across all zones.

Response performance is commonly measured in three key phases: dispatch handling time, firefighter assembly time, and travel time to the incident location. The ability to meet performance benchmarks is influenced by multiple local factors including station proximity, traffic conditions, road connectivity, volunteer firefighters travel to fire station, apparatus availability, and water supply infrastructure. Recognizing that a one-size-fits-all model does not reflect the operational realities in Centre Wellington, CWFR must consider separate urban and rural performance standards that align with industry best practices and the unique risks of each service area.

This section provides an overview of relevant industry standards and provincial legislation related to fire department response performance in Ontario. This section also includes a detailed analysis of the trends in incident types occurring within CWFR's response performance.

4.2 Industry Leading Practices and Standards

4.2.1 National Fire Protection Association (NFPA) Standards

The most widely accepted standards for the fire service are developed by the NFPA. Established in 1986, "the NFPA is a self-funded non-profit organization devoted to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards" (NFPA, 2021)." The NFPA has developed over 300 consensus-based codes and standards designed to improve fire department effectiveness and firefighter safety. NFPA research is applied in establishing industry benchmarks for fire department operations, training, and equipment. Many of these standards form the basis of and are referenced throughout the Ontario Fire Protection and Prevention Act, 1997, and related firefighting regulations and guidelines under the Ontario Occupational Health and Safety Act, R.S.O. 1990.

The NFPA has conducted considerable research in developing standards that reflect the primary value of life-safety in emergency response for responders and victims. The standard addressing fire department operational performance and service levels for volunteer fire departments is *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 (2020)*. This standard provides the framework for fire department emergency response performance analysis, which will be discussed further in this section. Additionally, *NFPA 1201 Standard for Providing Fire and Emergency Services to the Public (2020)* outlines several practices for establishing and managing an effective and efficient fire service, including governance, organizational structure, planning, and resource deployment.

4.2.2 Ontario Regulatory Framework Regarding Community Fire Safety

Ontario municipalities are required to provide a public education and fire safety program, but they may or may not elect to do so by establishing a fire department. The *Fire Protection and Prevention Act, 1997, S.O. 1997, c. 4* states the following:

“Municipal responsibilities

2(1) Every municipality shall,

(a) establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention; and

(b) provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.

Methods of providing services

(2) In discharging its responsibilities under subsection (1), a municipality shall,

(a) appoint a community fire safety officer or a community fire safety team; or

(b) establish a fire department.”

If a fire department is established, municipalities are required to meet the numerous requirements regarding fire department equipment, training and certification standards identified in the regulations of this act and the *Occupational Health and Safety Act, R.S.O. 1990*. Many of these requirements are based on NFPA standards. However, municipalities are not required to provide specific services or meet the service level standards identified in *NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (2020)*.

The response time goals and the number of required firefighters to respond, as identified in NFPA 1710, are considered industry-leading practices but are not mandated.

Establishing service types and associated service levels is the responsibility of the authority having jurisdiction (AHJ). For most municipalities, the AHJ is the municipal council. Formalizing service types and service levels in policy is also considered a best practice. Fire department service types and service levels are typically established to mitigate identified community risks. However, service levels should also be achievable and affordable.

The Centre for Public Safety Excellence and the International Association of Fire Chiefs developed a "standard of cover" framework to support the process of establishing fire department service types and service levels. It is a comprehensive process for identifying community risks, assessing fire department capability, and establishing appropriate emergency response service levels to mitigate community risks. The outcome of this process results in a standard of cover policy, including service level recommendations for approval by the AHJ.

4.3 Incident Types and Frequency Analysis

Fire and rescue services typically have access to large amounts of incident and response data. Incident data can be used and reported for several purposes. Incident type and frequency data are used to analyze department activity levels and identify trends in demand for fire services. The breadth of services provided by modern fire services is often surprising. Fire departments have evolved from responding primarily to fires to responding to a broad range of public service and emergency incidents, becoming a critical component of a community's social safety net.

Incidents are commonly evaluated at two different times during an emergency. First, the 911 call taker evaluates the information provided by the caller to categorize the incident to be dispatched. This category can determine the initial number of resources assigned to the incident, including firefighters, apparatus, and automatic aid from neighboring fire stations. A second categorization occurs after the incident is resolved, based on what was occurring on the scene or the actions taken. In Ontario, Incident Response Types must be reported through the provincial Standard Incident Reporting (SIR) system using predetermined codes and reporting procedures. These SIR Response Types are further grouped into common descriptors and subtotaled to provide aggregated fire data provincially. These types and categories are particularly useful when examining compliance with NFPA standards, the total number of resources on scene, and community risks.

Five years of SIR response data provided by the CWFR was analyzed. The data includes all incidents from January 2021 to December 2025. Incident data is aggregated into broader categories and more specific incident categories. For example, all types of fire incidents, including structural, vehicle, and non-structural/garbage fires, are combined into a single category. This differentiation is made to provide varying levels of information, as stakeholder reporting, and information needs vary depending on their level of interest in CWFR activities.

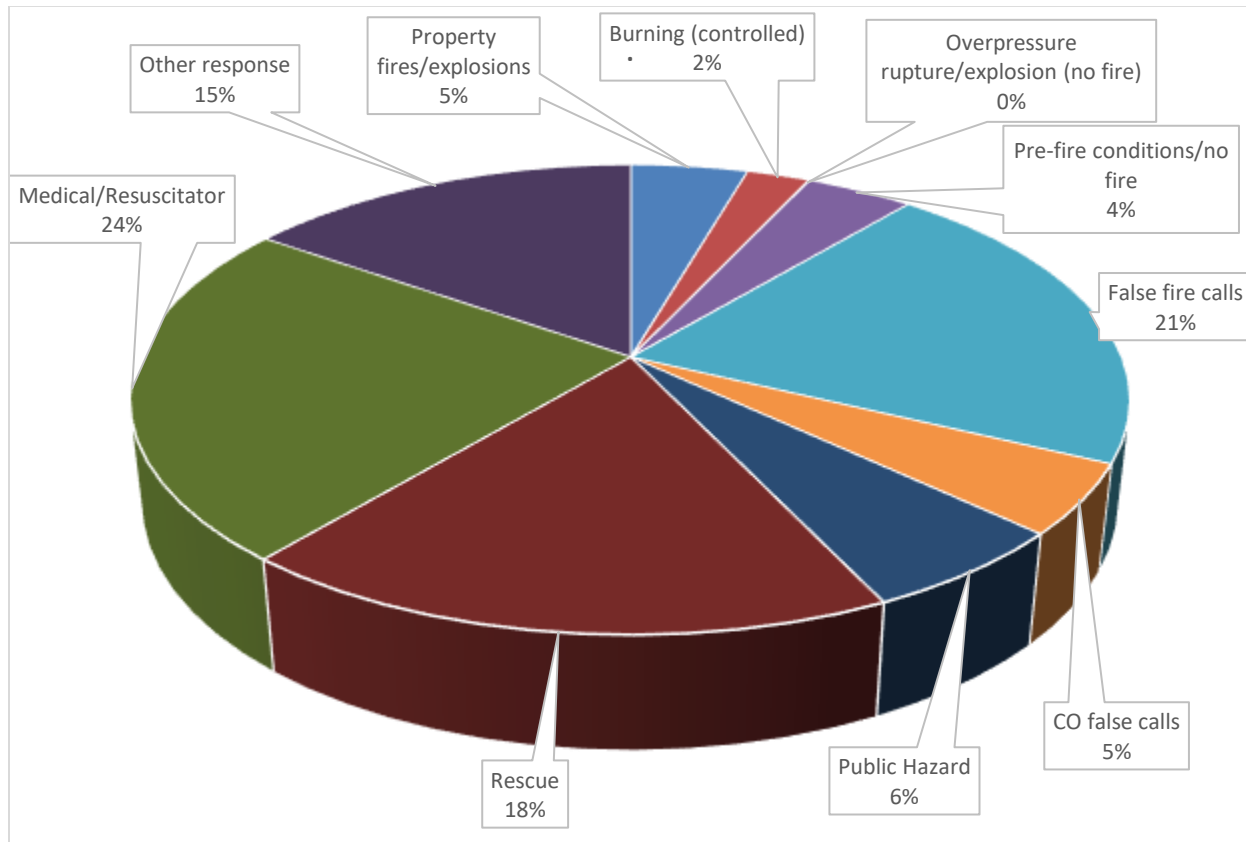
4.3.1 Unique Incidents

Table 31 identifies all unique incidents that occurred within the municipal boundary, categorized by their SIR Response Type. This analysis provides an overview of the types of emergencies that the fire department responded to, along with the reported incident types and their respective frequencies.

Table 31: Unique Response Types (2021 to 2025)

Incident Subcategory	2021	2022	2023	2024	2025	Total	Total %
Property fires/explosions	21	30	26	37	29	143	4.50%
Burning (controlled)	19	7	21	9	21	77	2.42%
Overpressure rupture/explosion (no fire)	0	0	0	1	0	1	0.03%
Pre-fire conditions/no fire	23	21	30	31	27	132	4.16%
False fire calls	104	128	133	147	156	668	21.03%
CO false calls	40	26	24	34	29	153	4.82%
Public Hazard	28	47	32	34	48	189	5.95%
Rescue	108	98	125	118	128	577	18.17%
Medical/Resuscitator	73	162	198	239	79	751	23.65%
Other response	75	122	115	87	86	485	15.27%
Total	491	641	704	737	603	3176	

Figure 8: Percent of Incidents by Subcategory (2021 to 2025)



4.3.2 Unique Incidents by Sub-Category

Table 32 identifies all unique incidents listed by sub-category. This analysis provides a specific overview of the types of emergencies that the fire department was dispatched to and their respective frequency.

Table 32: Incidents by sub-categories (2021-2025)

Call Type	2021	2022	2023	2024	2025	Total	Total %
A. Structure Fire	10	9	9	13	8	49	1.54%
B. Other Fire	0	3	2	4	2	11	0.35%
C. Vehicle Fire	3	2	1	6	7	19	0.60%
D. No Loss Fire	0	4	1	0	0	5	0.16%
E. No Loss Fire (Excluded)	8	12	13	14	12	59	1.86%
F. Non-Fire Call	470	611	678	700	574	3033	95.50%
Total	491	641	704	737	603	3176	
F. Non-Fire Call Breakdown							
Burning Controlled	19	7	21	9	21	77	
Authorized controlled burning complaint	7	0	3	1	5	16	20.78%
Open Air Burning/unauthorized controlled burning	12	7	18	8	16	61	79.22%
CO False Fire Calls	40	26	24	34	29	153	
CO false alarm - equipment malfunction	36	19	14	27	22	118	77.12%
CO false alarm - perceived emergency	4	7	10	7	7	35	22.88%
False Fire Calls	104	128	133	147	156	668	
Alarm System Equipment Accidental Activation	24	35	44	38	39	180	26.95%
Alarm System Equipment Malfunction	43	63	61	78	77	322	48.20%
Human - Accidental	17	6	6	5	9	43	6.44%
Human - Malicious	10	7	2	5	2	26	3.89%
Human - Perceived Emergency	9	14	18	18	29	88	13.17%
Other False Fire Call	1	3	2	3	0	9	1.35%

4.3.3 Unique Incidents – Medical/Resuscitator Calls

Table 33 identifies all medical/resuscitator incidents occurring within the municipal boundary listed by sub-category. This analysis provides a specific overview of the types of medical/resuscitator emergencies that the fire department was dispatched to and their respective frequency.

Table 33: Non-Fire Call Breakdown by Sub-Category - Medical (2021 to 2025)

Call Type	2021	2022	2023	2024	2025	Total	Total %
Medical/Resuscitator Call	73	162	198	239	79	751	
Accident or illness	8	25	28	44	13	118	15.71%
Alcohol or Drug Related	1	5	5	8	1	20	2.66%
Asphyxia, respiratory Condition	1	6	7	12	5	31	4.13%
Burns	1	1	0	0	1	3	0.40%
Chest Pains or Suspected Heart Attack	1	10	7	4	0	22	2.93%
CPR administered	20	6	0	6	4	36	4.79%
Defibrillator Used	1	0	1	0	1	3	0.40%
Electric Shock	0	0	0	1	1	2	0.27%
Medical aid not required on arrival	6	26	28	44	10	114	15.18%
Medical Resuscitator call no action required	2	3	4	4	2	15	2.00%
Other Medical Resuscitator Call	6	46	74	82	18	226	30.09%
Oxygen Administered	0	2	2	0	0	4	0.53%
Seizure	1	15	12	14	0	42	5.59%
Traumatic Shock	0	0	0	1	0	1	0.13%
Vital Signs Absent, DOA	25	17	30	19	23	114	15.18%

4.3.4 Unique Incidents – Other Response/Overpressure & Rupture Calls

Table 34 identifies all other response incidents listed by sub-category. This analysis provides a specific overview of the types of other emergencies and overpressure/rupture incidents that the fire department was dispatched to and their respective frequency.

Table 34: Non-Fire Call Breakdown by Sub-Category – Other Response/Overpressure (2021 to 2025)

Call Type	2021	2022	2023	2024	2025	Total	Total %
Other Response	75	122	115	87	86	485	
Assistance not required by other agencies	15	19	26	12	3	75	15.46%
Assist other agencies	28	38	35	19	28	148	30.52%
Assistance to Police	0	2	1	2	0	5	1.03%
Assisting other Fire Department (Mutual Aid)	1	6	1	2	3	13	2.68%
Cancelled on Route	16	39	43	34	33	165	34.02%
Incident Not Found	4	1	4	4	5	18	3.71%
Other Public Service	4	16	3	14	13	50	10.31%
Other Response	3	0	1	0	1	5	1.03%
Overpressure Rupture/explosion (no fire)	0	0	0	1	0	1	
Overpressure-gas pipe (no fire)	0	0	0	1	0	1	100.00%

4.3.5 Unique Incidents – Pre-Fire Conditions/Public Hazard Calls

Table 35 identifies all pre-fire conditions and public hazard incidents listed by sub-category. This analysis provides a specific overview of the types of pre-fire conditions and public hazard emergencies that the fire department was dispatched to and their respective frequency.

Table 35: Non-Fire Call Breakdown by Sub-Category – Pre-Fire Condition/Public Hazard (2021 to 2025)

Call Type	2021	2022	2023	2024	2025	Total	Total %
Pre-Fire Conditions (no fire)	23	21	30	31	27	132	
Fireworks (no fire)	1	1	3	0	0	5	3.79%
Other (cooking, toasting, smoke, steam)	7	12	7	9	16	51	38.64%
Other pre-fire conditions (no fire)	2	2	5	5	1	15	11.36%
Overheat (no fire- mechanical devices)	8	2	8	10	5	33	25.00%
Pot on Stove	5	4	7	7	5	28	21.21%
Public Hazard	28	47	32	34	48	189	
CO incident, CO present	5	16	6	9	7	43	22.75%
Gas Leak - Miscellaneous	3	6	3	1	1	14	7.41%
Gas Leak - Natural Gas	4	4	5	8	9	30	15.87%
Gas Leak - Propane	0	1	1	0	0	2	1.06%
Gas Leak - Refrigeration	1	0	0	0	0	1	0.53%
Other Public Hazard	1	1	1	0	3	6	3.17%
Power Lines Down, Arcing	10	15	8	10	25	68	35.98%
Public Hazard call false alarm	0	0	0	0	2	2	1.06%
Public Hazard no action required	2	1	1	1	0	5	2.65%
Ruptured Water, Steam Pipe	0	3	1	0	0	4	2.12%
Spill- Gasoline or Fuel	0	0	2	2	0	4	2.12%
Spill - Miscellaneous	0	0	2	3	1	6	3.17%
Spill - Toxic Chemical	0	0	1	1	0	2	1.06%
Suspicious substance	0	0	1	0	0	1	0.53%

4.3.6 Unique Incidents – Rescue Calls

Table 36 identifies all rescue incidents listed by sub-category. This analysis provides a specific overview of the types of rescue emergencies that the fire department was dispatched to and their respective frequency.

Table 36: Non-Fire Call Breakdown by Sub-Category - Rescue (2021 to 2025)

Call Type	2021	2022	2023	2024	2025	Total	Total %
Rescue	108	98	125	118	128	577	
Building Collapse	0	0	0	0	1	1	0.17%
High Angle Rescue	4	0	2	1	0	7	1.21%
Home/Residential Accident	1	0	1	0	0	2	0.35%
Low Angle Rescue	2	3	2	3	0	10	1.73%
Other Rescue	2	1	2	0	2	7	1.21%
Persons Trapped in Elevator	0	0	2	0	0	2	0.35%
Rescue No Action Required	0	1	0	0	1	2	0.35%
Vehicle Collision	83	81	105	102	110	481	83.36%
Vehicle Extrication	7	7	3	9	7	33	5.72%
Water Ice Rescue	0	2	0	0	0	2	0.35%
Water Rescue	9	3	8	3	7	30	5.20%

4.3.7 Incident Types Analysis

The following observations regarding incident types within CWFR were noted.

Call Volume Trend:

- Incident volume increased from 491 calls in 2021 to a peak of 737 calls in 2024, representing an overall growth of approximately 50%, before declining to 603 calls in 2025.

Top 3 Incident Types:

- Medical/Resuscitator (23.7%) – largest single category and primary driver of demand.
- False Fire Calls (21.0%) – significant proportion of total workload.
- Rescue (18.2%) – consistent and high-volume category driven by motor vehicle collisions.

Emerging Trends:

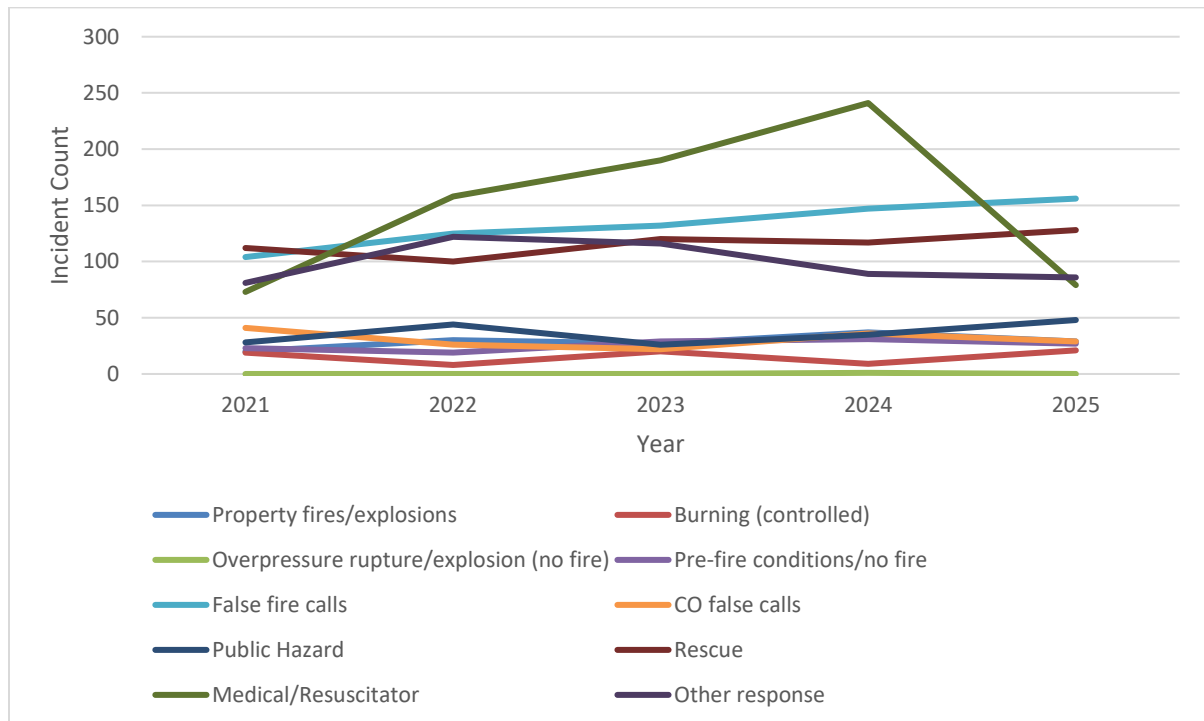
- Medical/resuscitator calls increased significantly, rising from 73 incidents in 2021 to 239 in 2024, indicating expanding reliance on fire services for medical response.
- False fire calls continue to trend upward, increasing annually and placing sustained demand on resources.
- Rescue incidents remain consistently high, with steady year-over-year volumes tied primarily to transportation-related risks.
- Public hazard incidents show moderate growth, particularly in later years, reflecting increased infrastructure-related risks and reporting.

Key Observations:

- False Fire Calls totaled 668 incidents, with the largest contributors being alarm system malfunctions (322 calls, 48.2%) and accidental activations (180 calls, 27.0%), while human-related causes, including perceived emergencies (88), accidental (43), and malicious (26), accounted for approximately 23% combined, highlighting the need for continued alarm management, enforcement, and public education initiatives.
- Rescue incidents totaled 577 calls, with motor vehicle collisions accounting for approximately 83% of all rescue responses, followed by vehicle extrications (5.7%) and water-related rescues (5.2%), while all other specialized rescue types occur infrequently.

- Other Response incidents totaled 485 calls, with a significant proportion consisting of cancelled en route calls (34.0%), assists to other agencies (30.5%), and assistance not required (15.5%), indicating a high volume of low-acuity or non-essential responses and opportunities to improve dispatch screening and response efficiency.
- Pre-Fire Conditions and Public Hazard incidents totaled 321 calls combined, with leading subcategories including cooking-related smoke/steam (51 calls), power line hazards (68 calls), CO incidents (43 calls), and mechanical overheating (33 calls). Gas leaks and other hazards represent smaller proportions, highlighting opportunities for targeted prevention, public education, and inter-agency coordination.
- Medical/Resuscitator incidents totaled 751 calls, with key subcategories including other medical calls (30.1%), accident/illness (15.7%), and DOA/vital signs absent (15.2%), along with a notable proportion of no-action or no-aid-required calls (17%), indicating an expanding medical response role with both high-acuity demand and lower-acuity system pressures.

Figure 9: Unique Incidents by Incident Type (2021 to 2025)



4.4 Incident Frequency Analysis

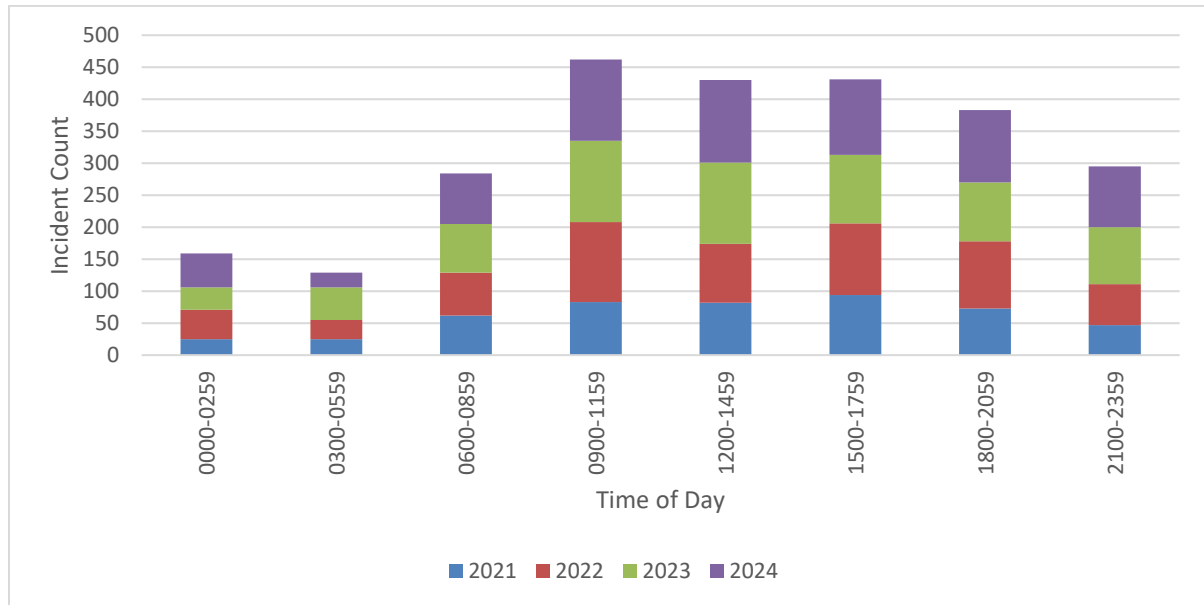
Analyzing the frequency of fire incidents by time of day and day of the week is essential for optimizing operational readiness and improving public safety outcomes. Understanding when incidents most commonly occur enables fire services to strategically allocate resources and staff to meet demand. For instance, identifying peak periods, such as evenings or weekends, allows departments to adjust shift schedules, ensure adequate apparatus availability, and reduce response times. This analysis also supports data-driven decisions around pre-positioning resources in anticipation of high-call volumes, enhancing the department's ability to respond quickly and effectively.

Beyond operations, temporal analysis of fire incidents informs prevention and education strategies. Recognizing patterns, such as increased residential fires during early morning cooking hours or late-night fires linked to smoking or alcohol use, enables targeted outreach efforts tailored to specific times and behaviors. It also contributes to predictive risk modeling, helping identify periods of elevated danger and proactively reduce fire occurrence. Moreover, data on timing trends can be used to justify budget requests, inform policy changes, and guide long-term planning, making it a critical component of both reactive and preventative fire service strategies.

4.4.1 Incidents by Time of Day

The time incidents occur is useful in identifying periods of peak and lower demand for services. Typically, demand for emergency services is lowest in the early hours of the morning. The horizontal axis in Figure 10 begins with 0 hours (12 a.m. – 02:59 a.m.) and ends at 23 hours (9 p.m. to 11:59 p.m.).

Figure 10: Incidents by Time of Day (2021 to 2024)



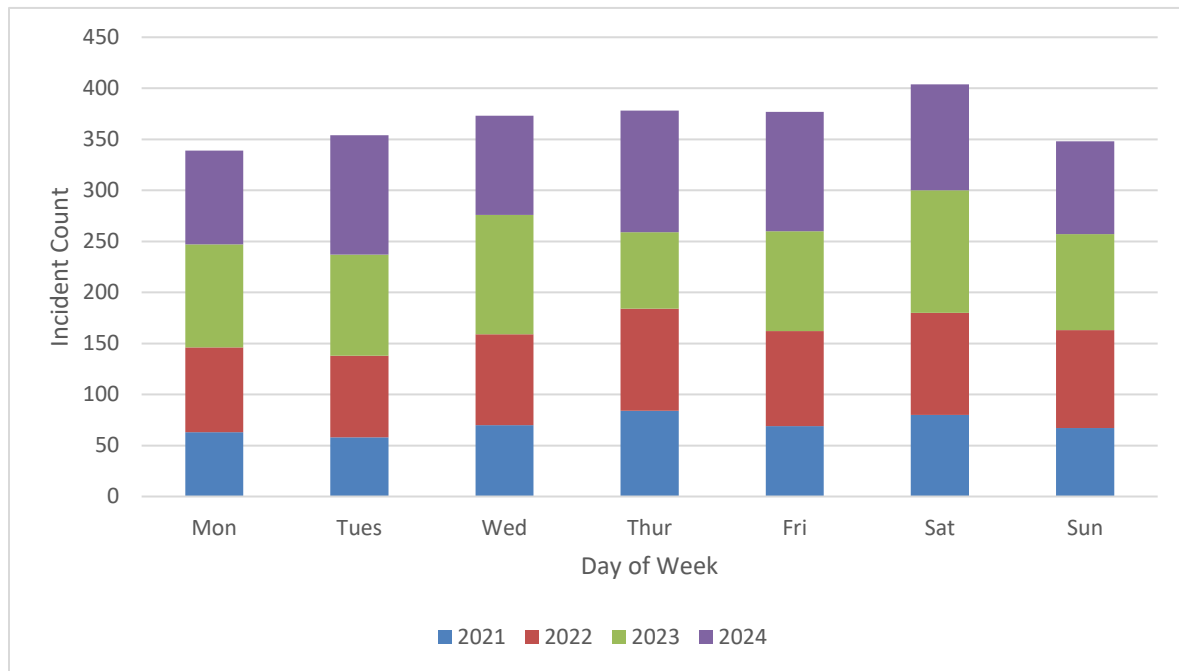
The following observations regarding the time incidents occurred were noted:

- Incident volume begins to increase significantly after 06:00, with a sharp rise into the morning period (06:00–12:00) as community activity intensifies.
- The highest concentration of incidents occurs between 09:00 and 17:59, with peak demand typically observed in the late morning to mid-afternoon hours.
- Incident activity remains consistently elevated through the afternoon (12:00–18:00), indicating a sustained period of operational demand rather than a single peak hour.
- The lowest call volumes occur overnight (00:00–06:00), with minimal activity in the early morning hours before demand begins to rise.

4.4.2 Incidents by Day of the Week

Analyzing the frequency of incidents on different days can reveal patterns that may indicate periods of increased demand or potential strain on CWFR. Figure 11 presents the incident data from 2021 to 2025.

Figure 11: Incidents by Day of the Week (2021 to 2024)



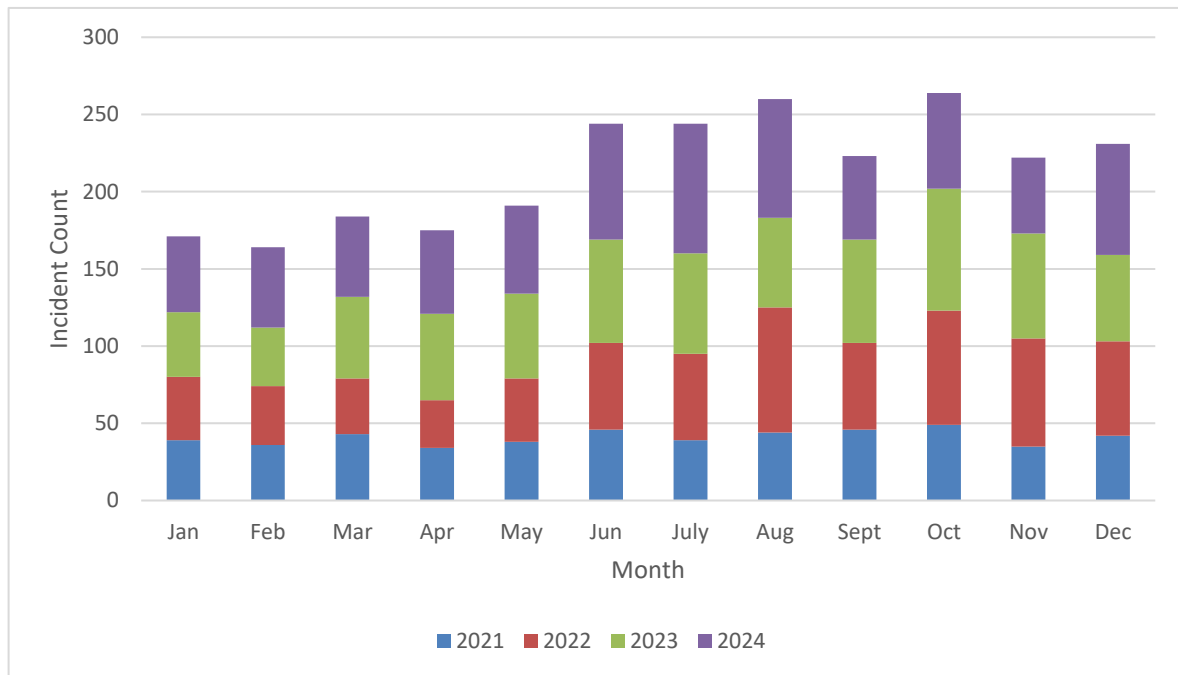
The following observations were noted in service demands for different days of the week:

- Incident volumes are relatively consistent throughout the week, indicating steady demand with no significant drop-off on any single day.
- Saturday experiences the highest call volume, reflecting increased weekend activity, travel, and social events.
- Mid-week (Wednesday to Friday) shows elevated and consistent demand, suggesting a gradual build-up in activity leading into the weekend.
- Monday and Sunday are slightly lower in volume, though still moderately active, indicating that demand remains present across all days of the week.

4.4.3 Incidents by Month of the Year

Understanding which months see higher or lower incident volumes can help the CWFR optimize resource allocation and preparedness. Figure 12 presents the incident data from 2021 to 2025.

Figure 12: Incidents by Month of the Year (2021 to 2024)



The following observations were noted in service demands for different months of the year:

- Incident volumes increase steadily from winter into summer, with a noticeable rise beginning in May and continuing through August.
- August and October show the highest overall call volumes, indicating peak demand periods extending beyond the traditional summer months.
- June through October represents a sustained high-demand period, rather than a short seasonal spike, reflecting prolonged community activity and associated risks.
- January and February have the lowest incident volumes, with reduced activity levels before demand begins to build through the spring months.

4.5 Response Performance

The following sections provide an analysis of the response performance of CWFR. The response performance goals applied in the analysis are identified in the NFPA 1720 standard. Five years of consistent response data provided by CWFR were analyzed, covering all incidents from January 2021 to December 2025. Incident data is aggregated into broader categories and more specific incident categories. For example, all types of fire incidents, including structural, vehicle, and non-structural/garbage fires, are combined into a single category. This differentiation is made to provide varying levels of information, as stakeholder reporting, and information needs vary depending on their level of interest in CWFR activities.

4.5.1 Intervention Time

Total intervention time is the elapsed time between the incident occurring and when incident management begins. This includes the discovery of the incident and the initiation of the emergency response system, typically by calling 911. From a community perspective, this time segment can be partially managed by implementing cyclical life-safety system inspections and promoting residential fire alarms and sprinkler systems.

Once the 911 call is made, the emergency response system is engaged to manage the incident and minimize its impact. Simplified, the system is composed of an emergency dispatching center and the first responding agency. Although many of the requests for service may not require urgent intervention, when it does, the main purpose of this system is to respond and manage the incident as quickly and safely as possible. As a result, the time taken to gather relevant caller and incident information (alarm processing time), notify first responders, prepare them for response (assembly time), and drive to the incident (travel time) are all critical elements of an effective response. These time segments are the focus of this section and are key indicators of total response time performance.

Total response time is the best indicator of how the entire system is functioning. It also reflects the experience of the person making the 911 call. System performance can be managed and improved by implementing best practices and supporting technologies. As a result, total response time performance should be monitored and reported to the authority having jurisdiction (AHJ) regularly. The causes of significant changes in response time performance should be identified and discussed with the AHJ.

Incident management time is variable and depends on the type of incident and the resources required to manage it safely. Fire department resource availability is determined by the concentration (how many and what types of resources there are in one station) and distribution (where those resources are located relative to the incident) of fire department equipment and firefighters. Resource requirements are based on community risks.

An adequately resourced response system should provide an effective response force (ERF) to safely manage commonly known risks as effectively and efficiently as possible. It is important to note that in rural response zones, travel times are inherently longer due to distance and limited road networks, while the overall call volume is typically lower than in urban and suburban areas. This creates a different service delivery dynamic, where longer travel times must be factored into planning, and response strategies may require adaptation to ensure that life safety and property conservation objectives are achieved.

Figure 13 provides an overview of the incident intervention timeline taken from NFPA. The definitions and descriptions of the actions taken in each time segment are provided below. It should be noted that the continuum will see increased travel times for Rural areas of the municipality.

Figure 13: Incident Intervention Continuum

Notification	Intervention Time			
Incident Discovery and 911 Call	Alarm Processing	Turnout Time (Enroute)	Travel Time	On-Scene Time (First-Unit)
<i>Time unknown (time varies with every incident)</i>	<i>Alarm answered and processed, including dispatch of response unit resources</i>	<i>Time from dispatch to unit leaving station</i>	<i>Time from unit leaving the station to arrival on scene</i>	<i>Time from arrival on scene to the initiation of initial full alarm assignment</i>
Time indirectly manageable	Time directly manageable			
Time Values				

Discovery: The time between the start of the emergency incident and when a person or an engineered system detects the incident.

Emergency 911 Call: The time taken to dial 911 and notify the 911 call center of the need for emergency services.

Alarm Answering: This time segment begins when the 911 call is dialed and ends when the call is answered by the 911 call center.

Alarm Processing: This time segment begins when the 911 call is answered and ends with the notification of firefighters. It is the time taken to extract the necessary information from the 911 caller to allow the proper response to be initiated.

Assembly Time: This time segment begins when dispatch notifies the firefighters and ends when the vehicle leaves the station for response. Time is required for firefighters to dress in proper personal protective equipment (PPE) and safely egress the station.

Travel Time: This time segment begins when an apparatus leaves the station or otherwise begins the response to the scene of the emergency and ends when the assigned vehicle arrives on scene and is a function of distance and the speed traveled.

Total Response Time (Common Definition): This time segment begins when the 911 call is answered and ends when the first apparatus capable of commencing incident management arrives.

Total Response Time (NFPA Definition): This time segment begins when the 911 call is answered and ends when the first apparatus capable of commencing incident management arrives and initiates action to control the incident. Identified as Intervention Time in Figure 13.

Setup Time: The time it takes (on-site) to evaluate the necessary actions, position the required resources, and commence the intervention. In the case of a fire, completing size-up, assigning the necessary tasks, and deploying resources can provide delays on the scene. A well-trained crew can minimize these delays while providing a safe, successful response.

4.5.2 Performance Standards

Recognizing that volunteer fire departments serve a variety of community types with varying population densities and geography, NFPA developed response time and staffing standards relative to regional and individual demand zone conditions. NFPA 1720 response standards are lowered as population density decreases, and travel distances increase within a demand zone increase. For example, the response goal for urban areas is to respond within nine minutes 90% of the time with 15 firefighters whereas the rural response standard is within 14 minutes 80% of the time with six firefighters.

It is important to note that depending on the geography of a fire department's total response area and demand zone(s), levels of service may vary across demand zones for a fire department. Additionally, the response standards identified in NFPA 1720 are based on a structure fire of a single residence and are considered a leading practice and not a legislated requirement.

Table 37: NFPA 1720 Staffing and Response Time Standards

Demand Zone ^a	Demographics	Minimum Staff to Respond ^b	Response Time (minutes) ^c	Meets Objective (%)
Urban area	>1000 people/2.6 km ²	15	9	90
Suburban area	500-1000 people/2.6 km ²	10	10	80
Rural area	<500 people/2.6 km ²	6	14	80
Remote area	Travel distance ≥ 12.87 km	4	Directly dependent on travel distance	90
Special risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90

^a A jurisdiction can have more than one demand zone.

^b Minimum staffing includes members responding from the AHJs department and automatic aid

^c Response time begins upon completion of the dispatch notification and ends at the time interval shown in the table.

Centre Wellington has a population of approximately 30,000 residents and encompasses a geographic area of roughly 407 km², resulting in an overall population density of approximately 74 persons per km². Based on this density, Centre Wellington as a whole falls within the NFPA 1720 rural category (less than 193 persons per km² / 500 persons per square mile). Under this classification, the recommended performance objective is the assembly of a minimum of six (6) firefighters within 14 minutes, 80% of the time, measured from the time of dispatch.

However, population distribution within Centre Wellington is not uniform. The built-up settlement areas of Fergus (approximately 13,000 residents within roughly 6 km²) reflect a density of approximately 2,100 persons per km², while Elora (approximately 8,000 residents within roughly 3 km²) reflects a density of approximately 2,600 persons per km². These densities significantly exceed the NFPA 1720 rural threshold and are more consistent with the urban category (greater than 1,000 persons per square mile / 386 persons per km²).

Under the NFPA 1720 urban classification, the performance objective increases to a minimum of fifteen (15) firefighters within 9 minutes, 90% of the time. Accordingly, Centre Wellington represents a mixed deployment environment, consisting of rural areas with lower density performance benchmarks and urbanized settlement areas in Fergus and Elora where higher response force and time objectives are more appropriate given building density, development patterns, and life safety risk.

These aggressive timelines intend to minimize intervention time. Intervention time is defined as the time between the fire department receiving notification of an emergency and commencing assistance at the scene of the emergency. It is the best reflection of the elapsed time from identifying an emergency to having the fire department arrive and engage in managing the incident.

Increased intervention time can have the following important impacts on a property owner:

- Decreased survivability for trapped victims
- Increased loss in the event of an emergency
- Building design restrictions
- Higher property insurance premiums
- Economic impacts

There are two elements of total intervention time for career models that should be assessed. The first is the initial response time taken for the initial arrival of an apparatus capable of initiating an intervention. The second is the time taken to assemble the full alarm assignment. The time taken to assemble a full alarm assignment reflects a fire department's total capacity and responsiveness. A full alarm assignment is comprised of the appropriate fire apparatus and number of firefighters, or an ERF, to safely manage the incident. Response performance and the ability to assemble an ERF are assessed in the following section.

4.6 Emergency Response Performance Analysis

The time segments identified in Section 4.6 are derived from the current Records Management System (RMS), which captures individual response timestamps throughout an incident. These timestamps are recorded by the dispatching agency and compiled within the RMS to provide a detailed history for all responding emergency vehicles assigned to each incident.

Examples of typical incident timestamps include:

- Incident begins
- Station or firefighter notification
- Apparatus responding
- Apparatus arrived
- Loss stopped
- Leaving scene
- Returned to station

The response performance analysis for CWFR is based on available RMS data from 2022 to 2025. The current RMS is limited to capturing discrete individual timestamps and does not support the calculation of detailed response time components (e.g., alarm processing, turnout, and travel times) in a fully integrated manner. As a result, the analysis focuses on performance reliability, specifically the percentage of incidents in which established benchmarks were achieved at the 80th and 90th percentile levels.

Emergency response performance information can be used by the Fire Chief and senior administration for several purposes, including but not limited to:

- Monitoring response efficiency and effectiveness
- Reporting response performance to the community and elected officials
- Evaluating effectiveness and compliance with national and provincial standards
- Evaluating effectiveness and compliance with Council policies and local bylaws
- Identifying improvement strategies
- Developing or modifying service level standards
- Planning for future resource needs (operational and capital)

Historically, fire departments have reported average response performance; however, averages can be misleading, as they are only achieved approximately 50% of the time and can be skewed by outliers, particularly in smaller data sets. Contemporary fire and emergency services instead report performance using the 80th or 90th percentile, providing a more accurate reflection of response reliability, depending on whether the service is primarily volunteer, or career based.

Emergency response time analyses typically begin with the timestamp identifying when a 911 call is received by the Primary Service Answering Point (PSAP). In this case, the Ontario Provincial Police (OPP) serve as the PSAP, with fire-related calls subsequently transferred to the Guelph Fire Department (GFD) dispatch centre. All requests for service for CWFR are dispatched by the GFD communications team. However, as PSAP call receipt times are not captured within the current RMS dataset, the analysis begins with the timestamp marking the initiation of alarm processing by the GFD dispatch centre.

4.6.1 Alarm Handling

Alarm handling time is typically the cumulative time taken for alarm answering and alarm processing in the dispatching process. The initial timestamp available for identifying the alarm answering time in the PSAP was not available. Therefore, only alarm processing was analyzed. Alarm processing time begins when the alarm is answered, and call evaluation begins, ending when the fire department is dispatched.

Industry standards state that alarm answering shall be completed within 15 seconds and alarm processing within 64 seconds, both 90% of the time for the highest priority events where significant property loss or imminent threat to life exists. Alarm handling performance is manageable by implementing best practice processes, supporting technologies, and continuous improvement programs.

This benchmark should be monitored to ensure alarm handling is as efficient as possible to achieve optimal total response time performance. However, non-emergency requests for service, identifying rural addressing and remote locations, and callers requiring language translation, TTY, or Text-To-911 services may delay the interrogation time required to gather the appropriate information for first responders. Standards allow for additional time and set a 90-second target for these situations. No data was available to identify these scenarios as part of the analysis.

Table 38 provides a summary of alarm processing times, including analysis at the 90th percentiles and compliance percentage to industry standards for both Fires/Explosions and All Incidents.

Table 38: Alarm Processing Times (90th percentile)

Alarm Processing	2022	2023	2024	2025	4-Year
64 second at 90th compliance for fire /explosion calls	41%	29%	32%	56%	38%
64 second at 90th compliance for all incidents	61%	61%	60%	51%	59%

The alarm processing performance data identifies several trends over the four-year period.

Fire/Explosion Calls (64 seconds at 90th percentile): Performance for fire and explosion incidents varies across the analysis period. Compliance decreased from 41% in 2022 to 29% in 2023, followed by a slight increase to 32% in 2024 and a more noticeable improvement to 56% in 2025. The four-year average of 38% indicates that the 90th percentile target is not consistently achieved for these more complex incident types, although the increase in 2025 suggests some improvement in performance.

All Incidents (64 seconds at 90th percentile): Performance across all incident types remained relatively consistent between 2022 and 2024, with compliance levels of 61%, 61%, and 60%, respectively. In 2025, performance declined to 51%. The four-year average of 59% reflects moderate consistency, although results remain below the 90th percentile target.

Key observations:

- Alarm processing performance remains below the 90th percentile target across all years for both categories.
- Fire/explosion incidents consistently show lower compliance compared to overall incident performance.
- There is an upward trend in fire/explosion call performance in 2025 following lower results in prior years.
- Overall incident performance shows stability through 2024, with a decrease observed in 2025.

4.6.2 Assembly Time

Assembly time is measured from the point of fire department notification until the first responding fire/rescue apparatus has responded. For volunteer or part-time staff, assembly time is typically longer as it involves firefighters traveling to the appropriate fire stations, putting on their bunker gear, and getting into the vehicle.

The assembly (turnout) time performance data provides a clear picture of response reliability across multiple time benchmarks. It is important to note that the 80th percentile assembly time for fire calls is 240 seconds (4 minutes); however, the analysis below evaluates performance for both fire calls and all incidents at extended time thresholds (5 & 8 minutes) to understand overall turnout reliability under varying conditions.

Table 39: Assembly time performance at 5 minutes (300 seconds)

Turnout	Station	2022	2023	2024	2025	4-Year
300 sec 80th compliance for fire /explosion calls	All stations	83%	96%	81%	79%	84%
	Fergus	86%	100%	91%	93%	82%
	Elora	79%	91%	67%	67%	75%
300 sec 80th compliance for all incidents	All stations	45%	46%	44%	54%	47%
	Fergus	45%	47%	44%	55%	47%
	Elora	43%	46%	44%	52%	46%

Key observations:

- Fire/Explosion Calls:

Performance for fire and explosion incidents at the 5-minute benchmark is generally strong, with a four-year average of 84% across all stations. Results peaked in 2023 (96%) but declined to 79% in 2025.

Fergus consistently performs at a higher level, maintaining strong compliance (4-year average 82%) and reaching as high as 100% in 2023.

Elora shows more variability, with a lower four-year average of 75% and a noticeable decline in 2024 and 2025 (67% in both years).

- All Incidents:

Performance for all incidents at the 5-minute level is lower, with a four-year average of 47%. Results remained relatively consistent from 2022 to 2024 before improving to 54% in 2025. Both Fergus and Elora show similar performance patterns, with only modest variation between stations.

Table 40: Assembly time performance at 8 minute (480 seconds)

Turnout	Station	2022	2023	2024	2025	4-Year
480 sec 80th compliance for fire /explosion calls	All stations	97%	100%	100%	93%	96%
	Fergus	100%	100%	95%	100%	97%
	Elora	92%	100%	93%	87%	95%
480 sec 80th compliance for all incidents	All stations	80%	82%	77%	76%	70%
	Fergus	75%	77%	72%	70%	74%
	Elora	90%	95%	89%	88%	90%

Key observations:

- Fire/Explosion Calls:

Performance is very strong at this benchmark, with a four-year average of 96% across all stations. Compliance reached 100% in both 2023 and 2024 before a slight decrease to 93% in 2025. Fergus demonstrates consistently high reliability (97% average), while Elora also performs well, though with slightly more variation (95% average).

- All Incidents:

Performance for all incidents is moderate, with a four-year average of 70%. Results remained relatively stable, ranging from 76% to 82% across the years. Elora consistently outperforms Fergus at this benchmark (90% vs. 74% four-year averages), indicating stronger turnout reliability for broader call types in that station area.

The assembly (turnout) time analysis demonstrates a consistent pattern of increasing reliability as the allowable response time threshold increases. This is typical within volunteer-based fire services, where turnout times are influenced by travel time to the station and crew assembly requirements. It is important to note that the actual 80th percentile assembly time is 240 seconds (4 minutes).

Performance for fire/explosion incidents is consistently stronger than for all incidents across both time benchmarks. This reflects the prioritization of higher-risk calls and indicates that personnel are responding more quickly and reliably when the perceived urgency is greatest. At the 8-minute benchmark, performance is near universal, with compliance levels approaching or exceeding 95% across all stations and years.

At the 5-minute benchmark, performance is more variable. While fire/explosion calls maintain relatively strong compliance (84% four-year average), there is some fluctuation year over year, particularly at the Elora station. For all incidents, compliance remains below 50% overall, though there is a modest improvement observed in 2025. This suggests that turnout times for lower-priority or routine calls are generally longer and less consistent.

Station-level analysis highlights some differences in performance patterns. Fergus demonstrates strong and consistent turnout performance for fire/explosion calls across both time thresholds. Elora, while more variable at the 5-minute benchmark, performs comparably, and in some cases more strongly, at the 8-minute benchmark, particularly for all incident types.

Overall, the data illustrates that while early-stage turnout (closer to the 4-minute target) presents challenges, the majority of responses are assembled within 8 minutes, indicating a high level of reliability within the operational model.

The assembly time performance data reflects a generally reliable turnout capability, particularly for higher-priority incidents and when measured at extended time thresholds. While performance at shorter benchmarks shows some variability, especially for all incident types, the system demonstrates strong overall response capacity, with most incidents achieving effective crew assembly within 8 minutes. These results are consistent with expectations for a composite fire service and provide a solid foundation for continued monitoring and incremental improvement in turnout performance.

4.6.3 Travel Time Performance

Travel time is measured from the point a fire/rescue apparatus leaves the fire station until it arrives at the incident location. Travel time is influenced primarily by the distance between the station and the incident, road network configuration, traffic conditions, and allowable travel speeds. In larger municipalities with multiple stations and defined response zones, travel time can be optimized through strategic station placement and dynamic deployment of resources.

Industry standards for career fire departments, such as NFPA 1710, typically identify a first-arriving travel time objective of 240 seconds (4 minutes), 90% of the time, which is most applicable to densely populated urban environments. However, CWFR's operational environment is more appropriately aligned with NFPA 1720, which establishes performance benchmarks for volunteer and composite fire services based on population density and geographic context. For CWFR, travel time must be considered within the context of a predominantly volunteer-based service model, serving a mix of suburban and rural areas.

As per NFPA 1720:

- Suburban areas (500–1,000 people per square mile) target a total response time of 10 minutes, 80% of the time.
- Rural areas (<500 people per square mile) target a total response time of 14 minutes, 80% of the time.

These benchmarks incorporate both turnout and travel time components and recognize the additional time required for firefighter assembly and travel over larger geographic areas.

Travel time should be monitored over time to assess whether fire station locations, response boundaries, and resource deployment continue to meet desired service levels as the community grows and changes. For this analysis, travel time performance was extracted from the Records Management System (RMS) for the first-arriving suppression apparatus (excluding command vehicles).

Table 41: Travel Performance at 4 minutes (240 seconds)

Travel Time	Station	2022	2023	2024	2025	4-Year
240 sec 80th compliance for fire /explosion calls	All stations	27%	43%	36%	33%	29%
	Fergus	36%	62%	40%	50%	29%
	Elora	20%	13%	25%	25%	12.70%
240 sec 80th compliance for all incidents	All stations	12%	13%	13%	13%	13%
	Fergus	12%	13%	14%	14%	13%
	Elora	12%	12%	12%	12%	12%

Table 42: Travel Performance at 10 minutes (600 seconds)

Travel Time		2022	2023	2024	2025	4-Year
600 sec 80th compliance for fire /explosion calls	All stations	76%	63%	62%	67%	65%
	Fergus	85%	80%	67%	75%	71%
	Elora	71%	40%	54%	50%	56%
600 sec 80th compliance for all incidents	All stations	55%	54%	50%	46%	51%
	Fergus	52%	51%	45%	41%	60%
	Elora	61%	62%	63%	55%	47%

Key observations:

The travel time analysis reflects the geographic and operational realities of CWFR's service area, which includes a mix of suburban and rural response environments. It is important to note that the actual 80th percentile travel time is approximately 670 seconds (11 minutes, 10 seconds), which aligns more closely with NFPA 1720 expectations for composite and rural fire services than with urban-based benchmarks.

4-Minute Benchmark (240 seconds – 80th percentile):

- Compliance at the 4-minute benchmark is consistently low across all years and both incident types.
- For fire/explosion calls, performance ranges from 27% to 43%, with a four-year average of 29% across all stations. Fergus demonstrates stronger performance than Elora, although results remain below 50% in all years.

- For all incidents, compliance is stable but limited, remaining at approximately 12–13% across all years and both stations.
- These results indicate that the 4-minute travel time benchmark, typically associated with dense urban environments, is not reflective of CWFR's geographic context or response model.

10-Minute Benchmark (600 seconds – 80th percentile):

- Performance improves significantly at the 10-minute benchmark, with a four-year average of 65% for fire/explosion calls and 51% for all incidents.
- Fergus consistently achieves higher compliance for fire/explosion calls, with a four-year average of 71%, while Elora shows more variability (56% average).
- For all incidents, performance is more moderate, with a gradual decline observed over the four-year period across all stations.
- Elora demonstrates relatively stronger performance for all incidents compared to Fergus, particularly in earlier years.

Overall Trends:

- Travel time performance improves as the allowable time threshold increases, reflecting the influence of travel distance and road network characteristics within a mixed suburban and rural service area.
- Fire/explosion incidents consistently achieve higher compliance than all incidents, indicating prioritization and potentially more direct routing or urgency in response.
- Station-level differences suggest that geographic coverage areas and travel distances have a measurable impact on performance outcomes.

Overall, the travel time data indicates that while shorter urban-based benchmarks (e.g., 4 minutes) are challenging to achieve, CWFR's performance is more appropriately understood in the context of its service area. The observed 80th percentile travel time of approximately 11 minutes (670 seconds) is consistent with expectations for a composite fire service operating across suburban and rural environments. The results support continued monitoring of travel performance in relation to growth, development patterns, and long-term station location planning.

4.6.4 Total Response Time

Total response time is measured from the point at which the emergency call is received and processed by dispatch to the point at which the first arriving fire suppression apparatus reaches the incident location. Total response time is comprised of three primary components: alarm processing time, assembly (turnout) time, and travel time.

While industry best practices for career fire departments (NFPA 1710) identify a total response time objective of approximately 384 seconds (6 minutes, excluding call handling), these benchmarks are intended for dense urban environments with full-time staffing models. For CWFR, a composite and predominantly volunteer-based service operating within a mix of suburban and rural areas, total response time performance is more appropriately evaluated in alignment with NFPA 1720.

NFPA 1720 establishes response performance objectives based on population density, recognizing longer response times in areas where firefighters must travel to stations and where incident locations are more dispersed. For suburban and rural environments, total response time targets typically range between 10, and 14 minutes (80% of the time) depending on density and required staffing levels. As such, the following analysis evaluates total response performance at extended time benchmarks of 10, 12, and 15 minutes to reflect CWFR's operational context.

Table 43: 80th percentile Total Response Performance at 10 minutes (600 seconds)

Travel Time	Station	2022	2023	2024	2025	4-Year
600 sec 80th compliance for fire /explosion calls	All stations	36%	33%	32%	21%	26%
	Fergus	44%	36%	42%	27%	29%
	Elora	33%	30%	26%	14%	25%
600 sec 80th compliance for all incidents	All stations	32%	32%	27%	19%	28%
	Fergus	29%	28%	22%	14%	24%
	Elora	40%	40%	41%	29%	37%

Table 44: 80th percentile Total Response Performance at 12 minutes (720 seconds)

Travel Time	Station	2022	2023	2024	2025	4-Year
720 sec 80th compliance for fire /explosion calls	All stations	50%	52%	54%	57%	44%
	Fergus	62%	57%	50%	50%	45%
	Elora	43%	46%	55%	61%	46%
720 sec 80th compliance for all incidents	All stations	53%	51%	52%	39%	49%
	Fergus	50%	46%	47%	32%	44%
	Elora	62%	63%	63%	54%	61%

Table 45: 80th percentile Total Response Performance at 15 minutes (900 seconds)

Total Response	Station	2022	2023	2024	2025	4-Year
900 sec 80th compliance for fire /explosion calls	All stations	67%	85%	68%	77%	68%
	Fergus	71%	91%	68%	82%	68%
	Elora	68%	80%	67%	73%	69%
900 sec 80th compliance for all incidents	All stations	76%	76%	74%	64%	73%
	Fergus	75%	75%	69%	58%	69%
	Elora	80%	75%	85%	76%	81%

The following observations regarding CWFR emergency response performance were noted:

10-Minute Benchmark (600 seconds – 80th percentile):

- Compliance at the 10-minute benchmark is limited across all years, with a four-year average of 26% for fire/explosion calls and 28% for all incidents.
- Performance shows a gradual decline over the study period, particularly in 2025.
- Fergus generally performs slightly higher than Elora for fire/explosion calls, while Elora demonstrates stronger performance for all incidents.
- These results indicate that achieving a 10-minute total response time is challenging within CWFR's service area, particularly given the influence of turnout and travel distances.

12-Minute Benchmark (720 seconds – 80th percentile):

- Performance improves at the 12-minute level, with four-year averages of 44% for fire/explosion calls and 49% for all incidents.
- Fire/explosion call performance shows a gradual upward trend, reaching 57% in 2025.
- Elora demonstrates consistent improvement over time, particularly for fire/explosion calls, eventually surpassing Fergus in 2025.
- Performance for all incidents remains relatively stable through 2024, with a decrease observed in 2025.

15-Minute Benchmark (900 seconds – 80th percentile):

- Compliance improves significantly at the 15-minute benchmark, with four-year averages of 68% for fire/explosion calls and 73% for all incidents.
- Fire/explosion performance shows variability year to year but remains consistently higher than at shorter thresholds.
- Performance for all incidents remains strong overall, although a decline is noted in 2025.
- Elora demonstrates strong and consistent performance at this benchmark, particularly for all incidents (81% four-year average), while Fergus shows slightly lower but comparable results.

Overall Trends:

- Total response time reliability increases as the allowable time threshold increases, reflecting the combined impact of turnout and travel time in a geographically dispersed service area.
- Fire/explosion incidents do not consistently outperform all incidents, indicating that while prioritization occurs, total response time is largely influenced by structural factors such as station location, travel distance, and crew assembly time.
- Station-level differences highlight the influence of geographic coverage areas, with variations in travel distance and response demand affecting overall performance.
- The 10-minute benchmark presents the greatest challenge, while performance improves progressively at the 12- and 15-minute thresholds, demonstrating increased system reliability at extended response times.
- The actual 80th percentile total response time is approximately 980 seconds (16 minutes, 20 seconds), which aligns with expectations for a composite fire service operating across suburban and rural environments under NFPA 1720. This reinforces that longer response times are a function of both turnout and travel distances inherent to the service area.

The total response time analysis indicates that performance improves steadily across extended time thresholds, aligning with the expectations outlined in NFPA 1720 for suburban and rural fire services. While shorter response time benchmarks are more difficult to achieve consistently, CWFR demonstrates increasing reliability at 12- and 15-minute thresholds. These findings reflect the realities of a composite response model and support the need for continued monitoring of response performance in relation to growth, development patterns, and long-term resource planning.

4.7 Effective Response Force

Effective Response Force (ERF) refers to the assembly of sufficient personnel, apparatus, and equipment at an emergency scene to complete the critical fire ground tasks required to safely and effectively manage an incident. ERF requirements are informed by fire response research completed by organizations such as NFPA and NIST, including research that identifies more than 22 critical tasks at a typical single-family dwelling fire.

CWFR operates under a volunteer firefighter response model. As such, ERF performance should be assessed within the context of NFPA 1720, which establishes response benchmarks for volunteer and combination fire departments based on demand zone, population density, travel distance, and staffing availability.

CWFR's ability to assemble an ERF is influenced by volunteer availability, time of day, distance from the station, turnout time, travel time, incident location, and concurrent emergency activity.

Under NFPA 1720, the expected number of firefighters and response time varies depending on the community's demand zone, including urban, suburban, rural, and remote areas. Therefore, ERF expectations for CWFR should be evaluated against the applicable NFPA 1720 demand-zone benchmarks and the department's demonstrated ability to assemble an appropriate number of firefighters for the risks present in each response area.

CWFR's current response model relies on volunteer firefighters responding to the station, assembling crews, and deploying apparatus to the incident scene. While this model provides broad geographic coverage and supports response to a wide range of incidents, it also creates variability in the number of firefighters arriving within the initial response window. Due to limitations in the current records management system, reliable historical data confirming the actual number of firefighters on scene for past incidents was not readily available. As a result, ERF analysis could not be completed using confirmed historical staffing counts and should be interpreted using station locations, apparatus deployment patterns, volunteer response assumptions, and applicable NFPA 1720 guidance.

This data limitation is important because apparatus arrival times alone do not confirm whether sufficient personnel were present to complete critical fire ground tasks safely and effectively. For a typical residential structure fire, CWFR must assemble enough firefighters to establish command, conduct initial fire attack, secure water supply, support search and rescue, provide ventilation, protect exposures, maintain accountability, and support rapid intervention needs. Depending on incident complexity, building size, occupancy, fire conditions, and life safety risk, the required staffing complement may exceed the initial arriving crew and require additional volunteer firefighters, multiple station responses, mutual aid, or delayed secondary apparatus.

Given the volunteer response model, CWFR's current station distribution should be understood as a geographic coverage model rather than a guaranteed ERF overlap model. The existing two-station configuration supports community-wide response coverage, but the ability to assemble a full complement of firefighters within NFPA 1720 timeframes will vary across the municipality. Areas closer to the Elora and Fergus stations are expected to have stronger initial response performance, while fringe growth areas, rural areas, and locations farther from the stations may experience longer assembly and travel times before sufficient firefighters arrive.

As Centre Wellington continues to grow, demand on the volunteer response model is expected to increase due to new development, increased call volume, traffic congestion, and the potential for more concurrent incidents. To support future ERF planning, CWFR should enhance records management and incident reporting practices to capture firefighter response numbers, arrival times by unit and personnel, staffing levels per apparatus, and total personnel on scene at key incident benchmarks. This information should be used to evaluate performance against NFPA 1720, strengthen volunteer availability planning, define response assignments by incident type and risk level, and ensure station location, apparatus deployment, and operational guidelines continue to align with community growth and risk.

4.8 Response Coverage Mapping

This section provides mapping of the response coverage for CWFR. The methodology used to calculate the theoretical travel time, and area coverage was based on the following formula:

The following map indicates incident density (heat map). An incident heat map provides valuable insight into the historical occurrence of incidents, offering a visual representation of zones with higher demand for services. When combined with response coverage mapping, these maps help ensure that areas of highest demand are, whenever possible, situated closest to a fire station.

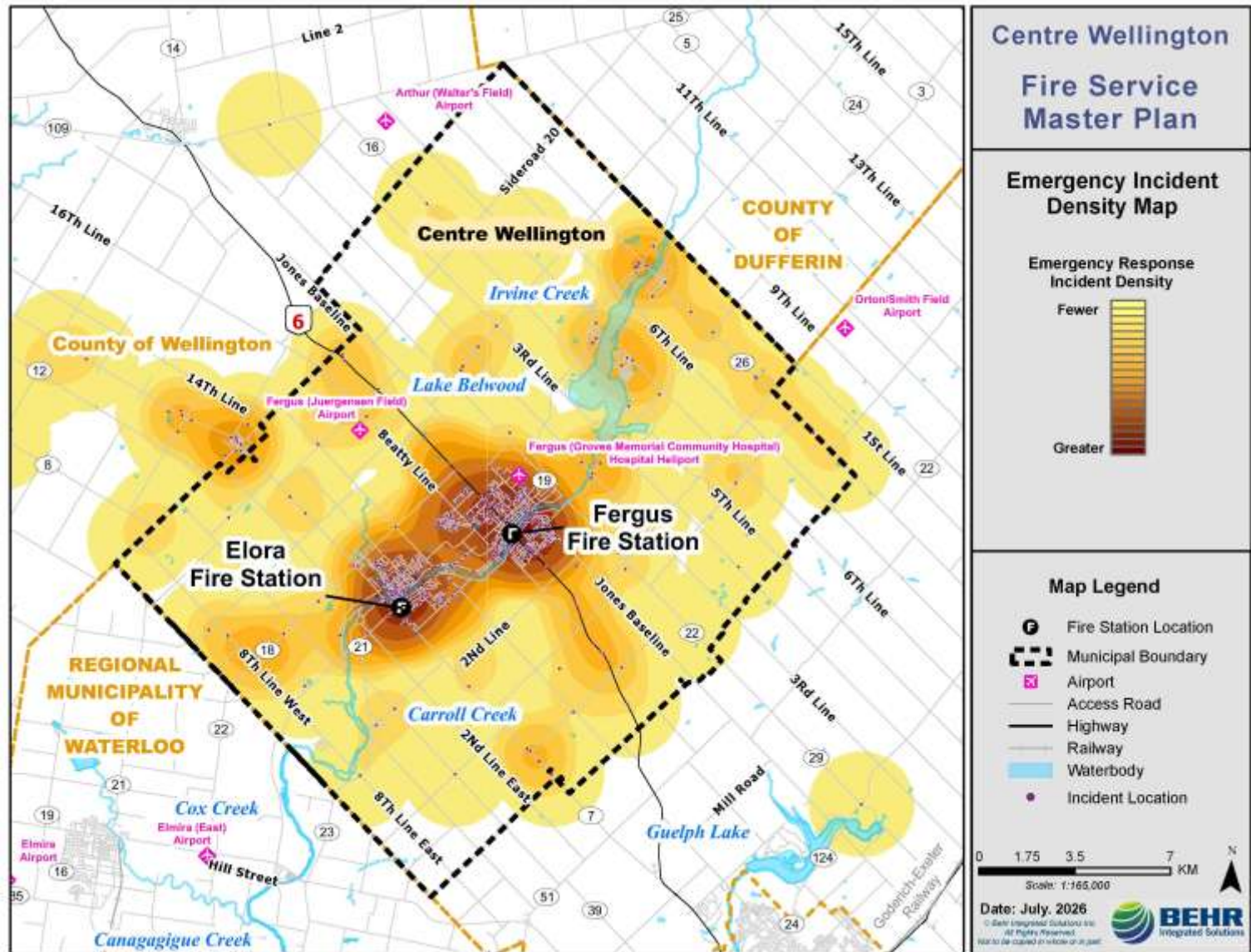
Note: *The data extracted from the current records management system reflects density based on 2025 incident activity only.*

The following observations regarding CWFR emergency incident locations were noted:

- The highest call density is concentrated in the urban cores of Fergus and Elora, with the most significant clustering centered around Fergus, indicating it as the primary demand area.
- Call density radiates outward from these cores, gradually decreasing into the surrounding rural areas, where activity levels are notably lower and more dispersed.
- The Fergus Fire Hall is positioned within the area of highest demand, while the Elora Fire Hall is located slightly offset from the peak density, though still within a moderate activity zone.
- Secondary pockets of moderate activity appear along key transportation corridors and near notable infrastructure, suggesting correlation with traffic flow and service hubs.
- Large portions of the municipality, particularly in outlying rural areas, show minimal activity, highlighting the service area's broad geographic coverage with relatively low call frequency outside the urban centres.

Map 2: Emergency
Call Density Map

Emergency
Call Density
Map –
Visualizes the
density of
historical
incidents.



4.8.1 Travel Time Response Coverage

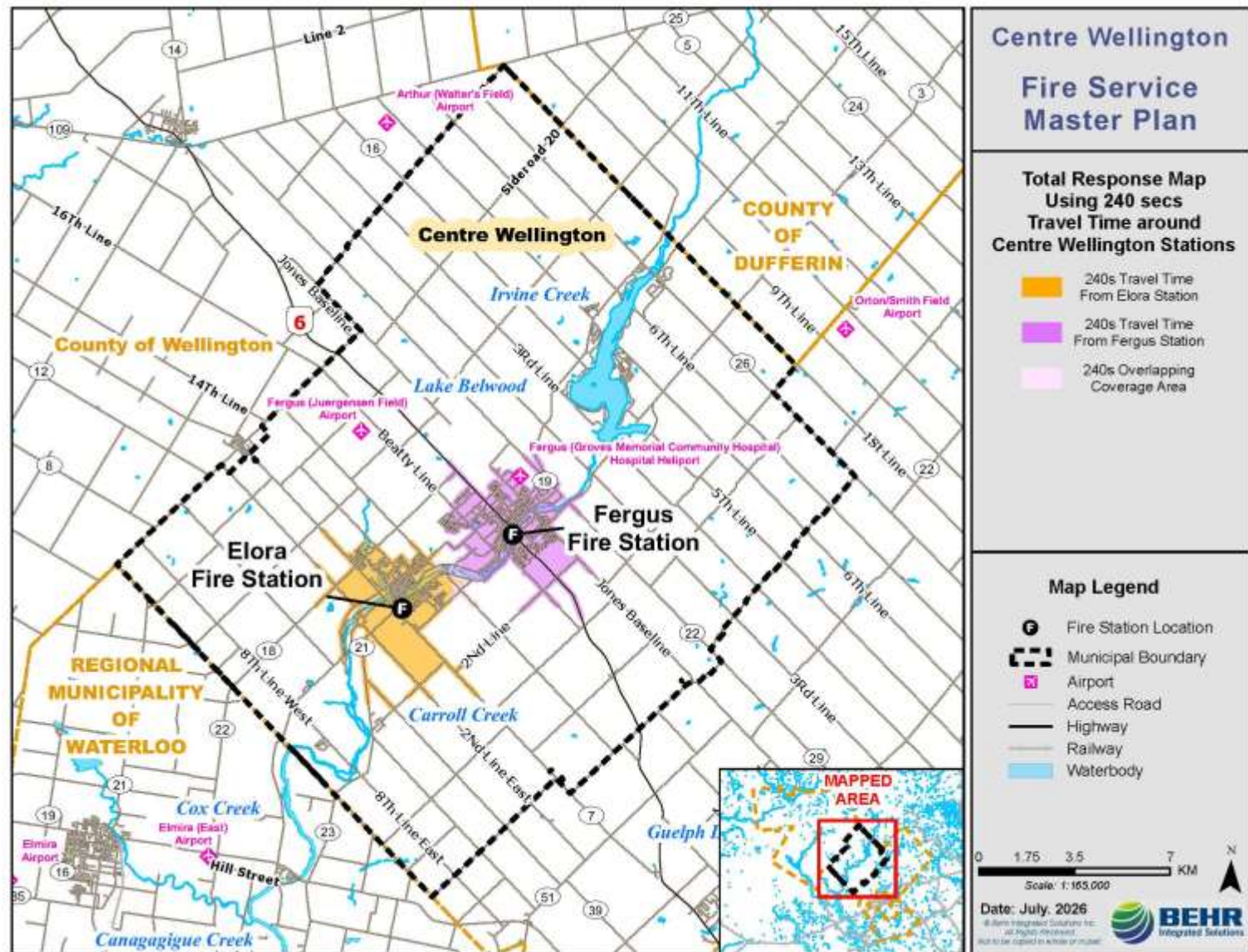
A travel time analysis was completed to evaluate the response performance of Centre Wellington Fire Rescue Services from the existing stations in Fergus and Elora.

Response coverage was mapped at 240, 300, 360, and 720 seconds (4, 5, 6, and 12 minutes) to illustrate both initial response capability and overall system reach.

This analysis provides insight into:

- First-due response performance
- Redundancy between stations
- Rural versus urban service levels
- Areas of potential coverage deficiency

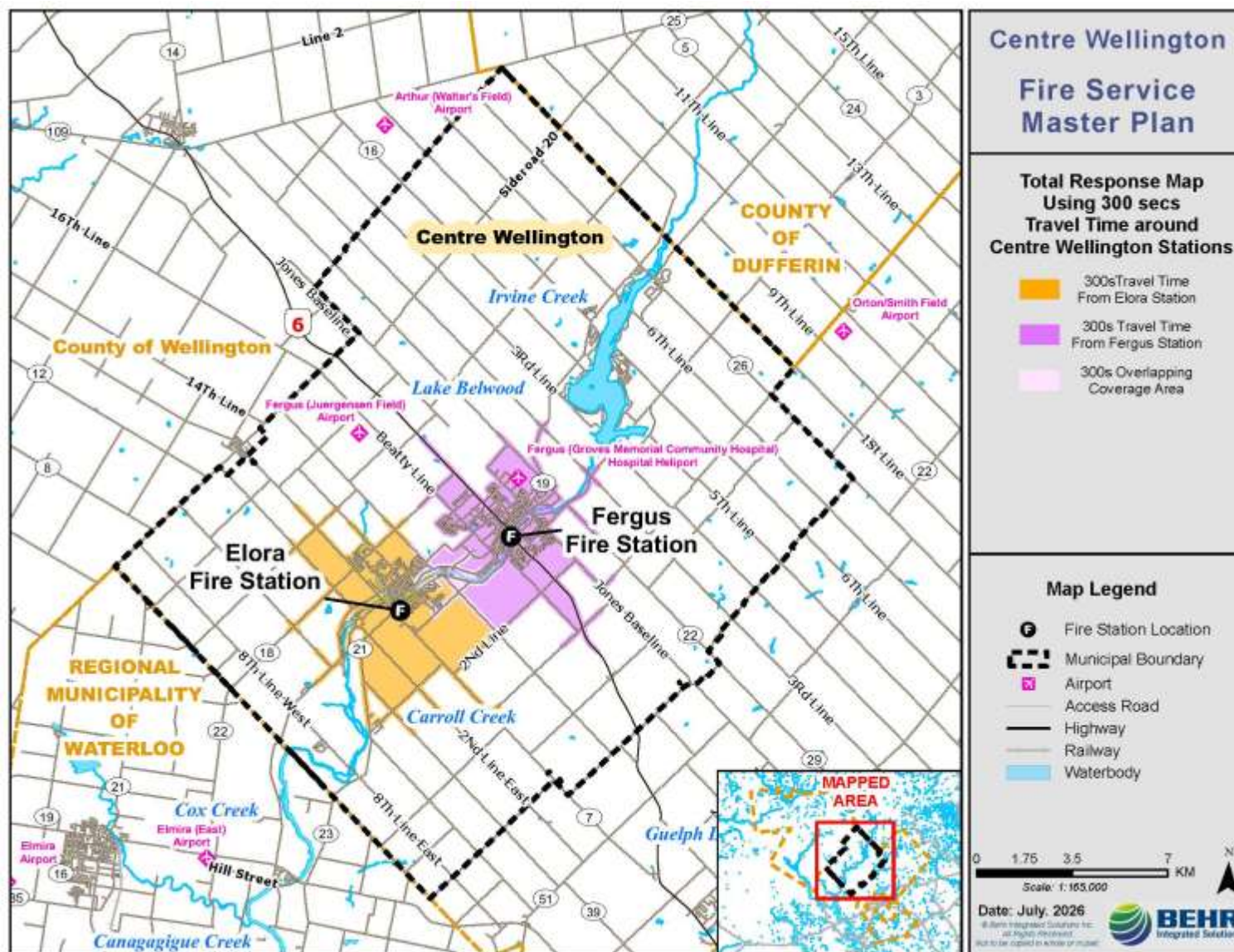
Map 3: 240
Second Travel
Time Coverage
(Urban Area)



The following are the observations for the 240-Second (4-Minute) response coverage area:

- The 4-minute travel time represents the critical initial response window, particularly for fire suppression and life safety.
- Coverage is highly concentrated around each station
- Fergus Fire Hall provides the most effective coverage, encompassing the majority of the Fergus urban area
- Elora Fire Hall coverage is limited to the immediate urban core and a narrow southwest corridor
- Overlap between stations is minimal, indicating limited redundancy
- Large portions of the municipality, particularly rural areas north of Lake Belwood, as well as eastern and southern sectors, are outside the 4-minute response range.
- Effective rapid response is largely confined to the urban settlement areas, with rural areas dependent on extended response times.

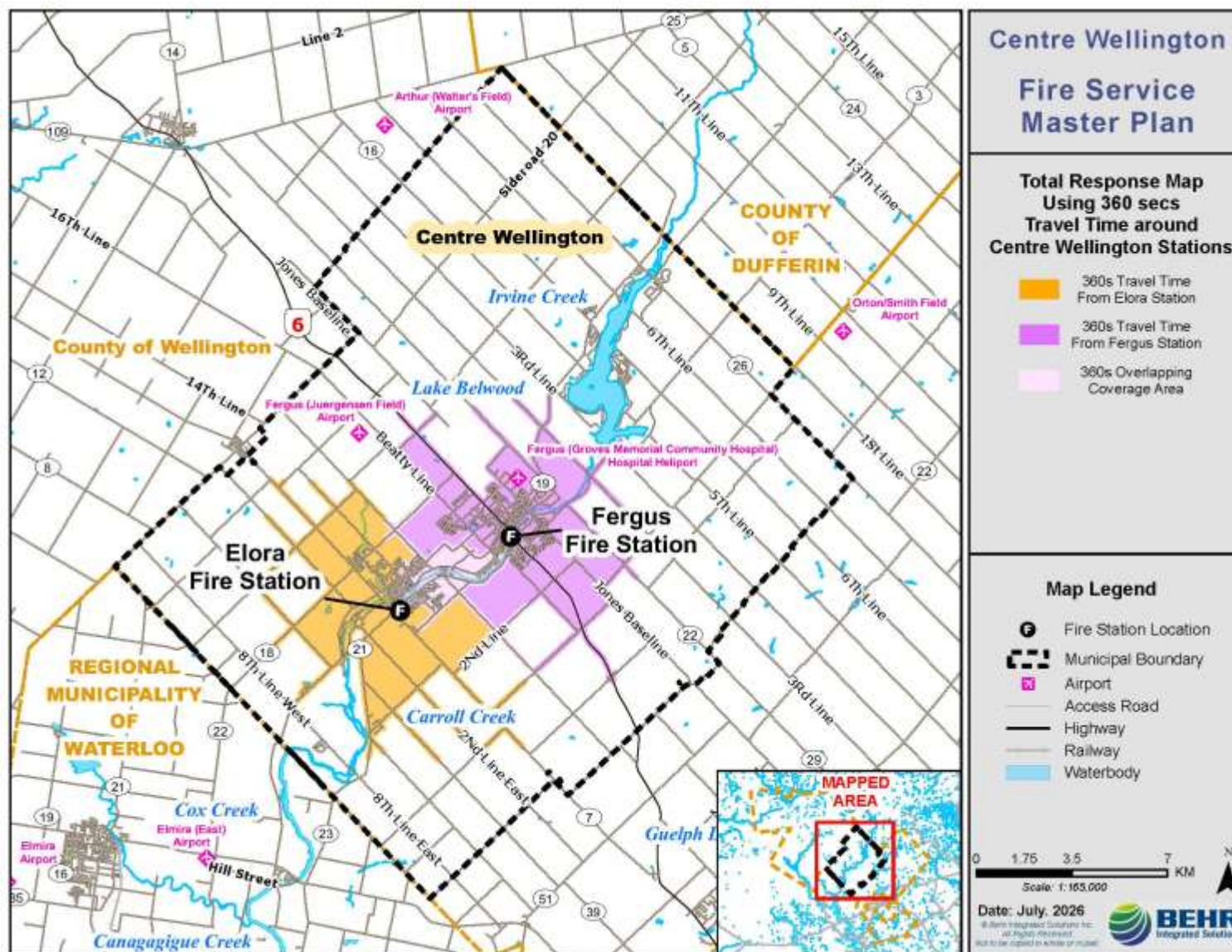
Map 4: 300
Second Travel
Time
Coverage
(Urban Area)



The following are the observations for the 300-Second (5-Minute) response coverage area:

- Coverage expands modestly outward from both stations
- Fergus continues to provide broader and more effective coverage, particularly toward the north and east
- Elora coverage improves slightly, extending further west and southwest
- A limited overlap zone emerges between the two stations in the urban interface
- Significant coverage gaps persist, especially in the northeast and southeast rural areas
- Much of the municipality (rural) remains beyond a 5-minute response threshold
- The additional minute results in incremental gains but does not substantially improve overall system coverage or redundancy.

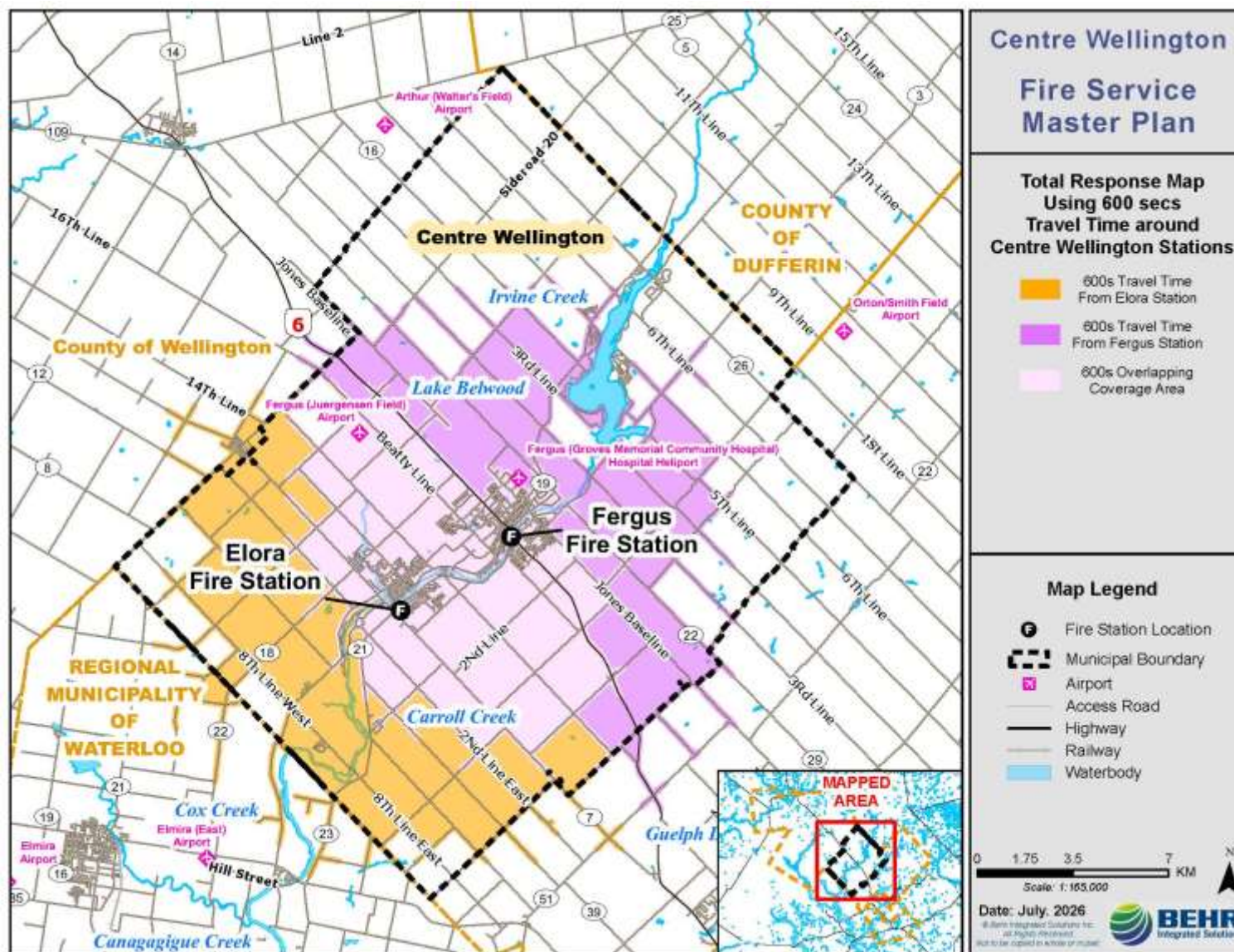
Map 5: 360
Second Travel
Time Coverage
(Urban Area)



The following are the observations for the 360-Second (6-Minute) response coverage area:

- Coverage begins to connect between Fergus and Elora, improving system continuity
- Overlap areas become more pronounced, allowing for enhanced depth of response in the urban corridor
- Fergus coverage extends further into rural areas north and east
- Elora coverage expands south and west, with modest gains toward the municipal centre
- Gaps remain evident in the northeast and outer rural areas
- Some portions of the municipality still fall outside this response threshold
- The 6-minute travel time represents the minimum threshold at which system integration and meaningful redundancy begin to occur.

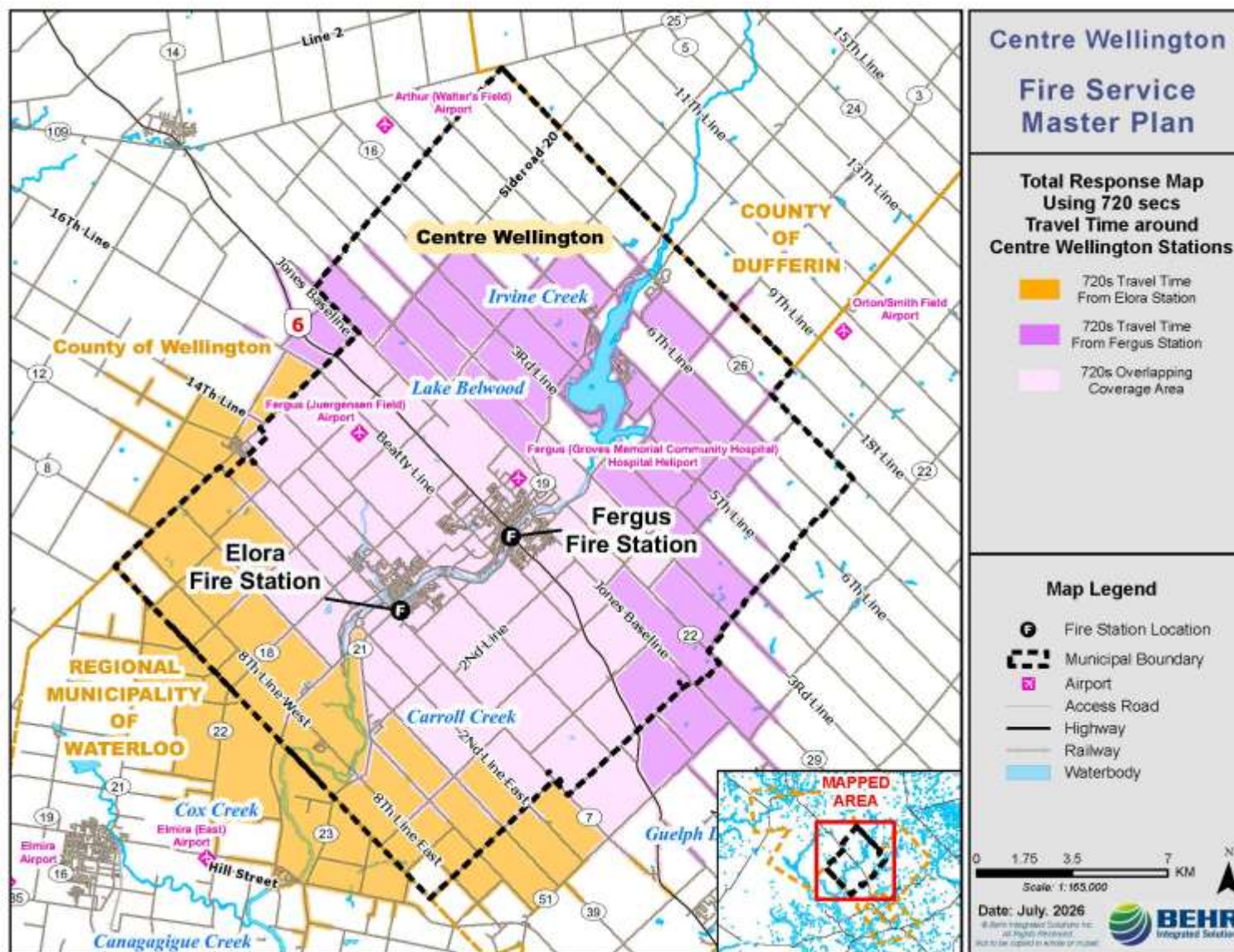
Map 6: 600
Second Travel
Time Coverage
(Rural Area)



The following are the observations for the 600-Second (10-Minute) response coverage area:

- Coverage expands significantly across the municipality
- Most of the central and developed areas are fully covered
- A large portion of the municipality benefits from overlapping coverage between Fergus and Elora
- Fergus Fire Hall: Provides extensive coverage north, east, and into central rural areas
- Elora Fire Hall: Expands substantially west and south
- The overlap zone becomes broad and continuous, particularly:
 - Between Elora and Fergus
 - Across the central portion of the municipality
- This indicates improved depth of response and backup capability
- Some peripheral areas remain at the edge of coverage, including:
 - Far northeast boundary
 - Isolated rural pockets in the southeast
- At 10 minutes, the system achieves functional municipal-wide coverage with strong redundancy in core areas, though outer limits remain marginal.

Map 7: 720
Second Travel
Time Coverage
(Rural Area)



The following are the observations for the 600-Second (10-Minute) response coverage area:

- Coverage becomes near complete across the entire municipality.
- Both stations contribute to a comprehensive and continuous response footprint.
- Extensive overlap dominates the coverage area.
- Most of the municipality falls within a dual-station response zone.
- Fergus Fire Hall: Effectively reaches all northern, eastern, and central areas.
- Elora Fire Hall: Fully extends across western and southern areas, contributing significantly to system balance.
- Only minor fringe areas remain at the extreme boundaries.
- These areas are limited and typical of large rural municipalities.
- The 12-minute travel time demonstrates that the current system can geographically service nearly the entire municipality, albeit at extended response times.

4.8.2 System-Level Implications and Response Optimization

Strategy Current Model

The travel time analysis across 240, 300, 360, 600, and 720 seconds highlights a clear distinction between urban response performance and rural service reach within Centre Wellington. The findings demonstrate a system that performs effectively in core settlement areas but becomes increasingly reliant on extended travel times to achieve full municipal coverage.

This section outlines the system-level implications of these findings and identifies strategic considerations to improve both urban response effectiveness and rural service delivery.

4.8.2.1 Urban Response Performance (240–360 Seconds)

System Implications:

The 4, 5, and 6-minute travel time maps represent the critical window for emergency intervention, particularly for:

- Fire suppression and flashover prevention
- Time-sensitive medical response
- Effective Response Force (ERF) assembly

The analysis indicates:

1. Strong Core Coverage with Limited Reach
 - Both Fergus and Elora urban areas are well covered within 300 and 360 seconds
 - However, coverage is highly localized, with sharp drop-off beyond settlement boundaries
2. Delayed System Integration
 - Minimal overlap at 240 seconds indicates that:
 - Initial response is typically single-station dependent
 - Meaningful overlap does not occur until approximately 360 seconds, indicating:
 - Delayed arrival of a second apparatus or crew
 - Potential delays in assembling full ERF
3. Edge-of-Urban Performance Gaps
 - Areas on the periphery of Fergus and Elora fall outside:
 - 4-minute response
 - In some cases, even 5-minute response
 - These areas are typically:
 - Growth zones
 - Transition areas between urban and rural land uses

Observation

Observation #29: The travel time analysis demonstrates that Centre Wellington Fire Rescue achieves strong initial response performance within the urban cores of Fergus and Elora, with most built-up areas accessible within the 300 to 360 second travel time benchmark. However, the analysis also identifies a highly localized response profile, where service effectiveness declines rapidly beyond established settlement boundaries. Limited station overlap within the first 240 seconds indicates that emergency response operations remain heavily dependent on a single-station model during the critical early stages of an incident. Meaningful multi-unit response capability and Effective Response Force (ERF) assembly do not consistently occur until approximately 360 seconds or later. In addition, several growth and transition areas located on the edges of Fergus and Elora fall outside the optimal 4 to 5-minute travel time thresholds, creating emerging urban performance gaps as development expands outward.

Recommendation

Recommendation #29: Establish an urban response performance objective consistent with NFPA 1720 to assemble a minimum Effective Response Force (ERF) of 10 firefighters within 10 minutes total response time, 80% of the time, within the urban settlement areas of Fergus and Elora.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-24 months – reviewed annually

Cost: Neutral

Rationale: NFPA 1720 identifies the importance of achieving rapid initial response and assembling an adequate Effective Response Force within defined timeframes to support firefighter safety, rescue operations, fire control, and incident stabilization. The current travel time analysis confirms that Centre Wellington's urban areas generally perform well under current demand conditions; however, the limited early overlap between stations and expanding development patterns create increasing pressure on the existing deployment model.

As urban growth continues along the periphery of Fergus and Elora, travel times will naturally increase unless deployment strategies evolve concurrently with development. Reliance on delayed secondary unit arrival can affect operational effectiveness during time-critical incidents, including structure fires, rescues, and medical emergencies. By proactively optimizing urban response performance, the municipality can better sustain NFPA 1720-aligned service objectives, strengthen operational resiliency, improve firefighter safety through earlier ERF assembly, and maintain acceptable response performance as Centre Wellington continues to grow.

4.8.2.2 Rural Response Performance (600–720 Seconds)

System Implications:

The 10- and 12-minute travel time maps reflect practical service reach across a large rural municipality.

1. Full Geographic Coverage Achieved at Extended Times
 - Near-complete municipal coverage is achieved at:
 - 600 seconds (10 minutes) for most areas
 - 720 seconds (12 minutes) for virtually all areas
 - This confirms:
 - The current system is geographically capable, but time-limited
2. Delayed Primary Intervention
 - Rural areas are:
 - Outside the critical 4–6-minute response window
 - Dependent on delayed initial attack
 - This increases:
 - Fire growth potential
 - Property loss risk
 - Exposure to non-contained incidents
3. Strong Redundancy at Later Intervals
 - Significant overlap at 600–720 seconds indicates:
 - Good depth of response
 - Ability to assemble ERF across much of the municipality
4. Structural Limitation of Two-Station Model
 - The current system reflects a typical rural response model:
 - Centralized stations
 - Large response catchments
 - This inherently results in:
 - Extended travel distances
 - Inconsistent service levels across geography

Observation

Observation #30: The rural travel time analysis demonstrates that CWFR is capable of achieving near-complete municipal coverage within 10 to 12 minutes; however, this coverage is achieved at extended travel times that fall outside the critical intervention window for fire suppression and other time-sensitive emergencies. Rural areas remain heavily dependent on delayed initial attack due to large response catchments and extended travel distances associated with the current two-station deployment model. While the system demonstrates strong response depth and the ability to assemble an ERF at later intervals through significant overlap at 600 to 720 seconds, service levels across the municipality remain inherently variable due to geography and travel distance limitations.

Recommendation

Recommendation #30: Establish a rural response performance objective consistent with NFPA 1720 to assemble a minimum ERF of 6 firefighters within 14 minutes total response time, 80% of the time, within designated rural response areas.

Strategic Objective: # 4 Emergency Response and Operations

Suggested completion: 12-24 months – reviewed annually

Cost: Neutral

Rationale: *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 (2020), recognizes that rural fire departments operating within low-density and geographically dispersed environments require longer response time benchmarks than urban systems due to travel distance constraints and resource distribution realities. The current analysis confirms that Centre Wellington's rural response system provides broad geographic coverage and strong later-stage response redundancy; however, delayed arrival of initial resources increases the potential for fire growth, property loss, and incident escalation prior to intervention. Establishing a formal rural performance objective aligned with NFPA 1720 provides a realistic and measurable service standard while supporting operational planning, resource allocation, and long-term sustainability of rural emergency response operations.*

4.9 Critical Task Analysis

A critical task analysis for common incident types illustrates the resources required to achieve tactical objectives based on resource availability. The rationale for completing a critical task analysis is to identify whether response policies and guidelines align with available resources. In other words, are enough firefighters typically responding to complete the critical tasks on emergency scenes in a safe and timely manner?

However, the optimal number of firefighters is not always available. Response policies and guidelines should identify critical task assignments and tactical objectives based on available resources. The optimal number of firefighters to manage larger and more complex incidents may not be dispatched initially due to the availability of firefighters. As a result, tactical objectives should be scaled to reflect these limitations. For example, an interior fire attack or rescue may not be possible with a single pumper company and a limited water supply. Response policies or guidelines should also identify a contingency plan to call in off-duty firefighters or initiate mutual aid/automatic aid for larger or more complex incidents.

The following tables provide examples of critical task analyses that should be embedded in fire department standard operating guidelines or policies. The purpose of completing a critical task analysis is to establish the ERF response requirements and embed task assignments in standard operating guidelines. The **examples** provided are intended to illustrate leading practices with respect to the ERF required to safely manage commonly occurring emergency incidents. They are provided as a guide and are not intended to specifically represent CWFR response capacity or apparatus.

Table 46: Low Risk: Small Fire (No Exposures): Garbage, Vehicle – Private, Grass, Investigate (External), Monitoring Alarm (W/O Confirmation), Medical

Low Risk Incident	
Command and Safety	1
Driver/ Pump Operator	1
Incident responders	2
Total Personnel	4

Table 47: Moderate Risk: Attached Garage, Single Family Residential (Detached/Duplex)

Moderate Risk Incident	
Command	1
Safety	1
Pump Operator	1
attack line/ search and rescue	6
Water supply	1
Rapid Intervention Crew	3
Ventilation/ Utilities	2
Total Personnel	15

Table 48: Moderate Risk: Motor Vehicle Crash (1-3 Private Vehicles)

MVC	
Command and Safety	1
Driver/ Pump Operator	1
Incident responders	5
Blocker vehicle driver	1
Total Personnel	8

Table 49: Moderate Risk: Technical Rescue

Technical Rescue	
Command	1
Safety	1
Rescue Sector Officer	1
Rescue specialists	7
support	3
Total Personnel	13

Table 50: High Risk: Commercial, Seniors' Home, Industrial, Strip Mall, Mid-Rise Residential

High Risk Incident	
Command	1
Safety	1
Pump Operator	1
Initial Attack Line	2
Back up line	2
Search and rescue	4
Water supply	1
Rapid Intervention Crew	4
Suppression Support	6
Ventilation/ Utilities	4
Total Personnel	26

4.10 Fire Station Location Analysis

4.10.1 Strategic Role of Station Location in Service Delivery

The location of fire stations is a critical determinant of emergency response effectiveness within Centre Wellington. The current station network in Fergus and Elora is generally aligned with historical development patterns and existing service demand; however, the Centre Wellington is entering a period of sustained and geographically shifting growth. As identified through OPA 126, future development will extend beyond the traditional urban cores, particularly toward north and east Fergus, as well as select areas in south Fergus and the Elora/Salem interface. In this context, strategic fire station planning must ensure that deployment continues to align with response time performance targets, evolving community risk profiles, and planned infrastructure expansion.

Fire stations are not static assets; they must evolve in response to population growth, land use change, and transportation network development. A well-positioned fire station can significantly reduce response times, improve fire suppression effectiveness, enhance medical outcomes, and reduce overall community risk. As growth areas build out over time, failure to adapt station locations accordingly can result in increased travel distances, reduced compliance with response performance benchmarks, and delays in assembling an ERF. Accordingly, fire station planning represents both a core public safety function and a long-term risk mitigation strategy.

CWFR currently operates a two-station model, with facilities located in Fergus and Elora, supported by a volunteer staffing model. While this configuration is effective in addressing current demand, projected growth will introduce new service pressures and geographic coverage challenges. In particular, the outward expansion of residential areas and the introduction of new population centres will require a reassessment of station distribution to maintain equitable service delivery and operational effectiveness across the municipality.

This section outlines the strategic considerations, planning rationale, and anticipated timing for future fire station development within Centre Wellington. It reflects the need to align station infrastructure with long-term growth projections, service demand trends, and performance objectives, ensuring that the fire service remains responsive, efficient, and capable of supporting Centre Wellington's continued growth.

4.10.2 Principles of Station Location Planning

When determining future fire station locations in Centre Wellington, several key criteria must be considered to ensure optimal service delivery:

1. Emergency Response Demand and Risk Concentrations

- Station locations must respond to both historical service demand and projected growth-related increases in call volume.
- Spatial analysis identifies concentration areas within Fergus and Elora, with future demand expected to expand into designated growth areas.
- Consideration must also be given to higher-risk occupancies, transportation corridors, and areas of increased population density.

2. Travel Time Performance

- Station siting must support the achievement of response time performance targets, including first-due apparatus travel time and Effective Response Force (ERF) assembly.
- These benchmarks are critical for time-sensitive incidents such as structure fires, medical emergencies, and rescues.
- Travel time is influenced by road network configuration, distance, and seasonal or environmental factors typical of a mixed urban-rural municipality.

3. Road Network Access and Coverage Efficiency

- Stations should be located with efficient access to primary transportation routes, minimizing response delays.
- In Centre Wellington, this includes key corridors such as Highway 6 and major concession roads.
- Consideration of river crossings, rail lines, and rural road networks is essential in ensuring consistent access across the municipality.

4. Land Availability and Suitability

- Suitable parcels should accommodate station construction, apparatus movement, parking, and future expansion.
- Opportunities to secure municipally owned or strategically located lands in advance of development are critical to maintaining cost efficiency and optimal siting.
- Early land acquisition or land banking is particularly important in emerging growth areas.

5. Alignment with Official Plan and Growth Forecasts

- Station planning must align with OPA 126 and Centre Wellington's long-term growth framework.
- Understanding the 10–20-year development trajectory ensures that stations are located to serve both current and future populations effectively.
- Phased growth and infrastructure servicing will influence the timing and prioritization of new station development.

Determining the location of a fire station is a critical decision for a growing municipality. Stations must be strategically positioned to optimize response times, maximize coverage, and ensure efficient use of resources. Geographic Information Systems (GIS) mapping plays a central role in evaluating coverage areas, travel times, and proximity to risk and growth areas. Integrating fire station planning into Centre Wellington's long-range growth strategy is essential to maintaining service levels and meeting response objectives over the lifecycle of the community.

4.10.3 Growth Factors Driving the review for station locations

The future siting and configuration of fire stations within Centre Wellington must be informed by both current service demand and the long-term growth framework established through Official Plan Amendment (OPA) 126. While the existing station network in Fergus and Elora is generally aligned with historical development patterns and present-day call distribution, Centre Wellington is entering a period of sustained growth that will gradually shift population, risk, and service demand beyond traditional urban cores. As such, a forward-looking approach to station planning is required to ensure that emergency response capabilities remain effective, equitable, and resilient over time.

OPA 126 establishes the land supply necessary to accommodate growth to the year 2051, including the expansion of settlement boundaries and the designation of new residential and employment areas. However, it does not prescribe a fixed or linear build-out schedule. Instead, development will occur in a phased manner, guided by infrastructure availability, market conditions, and municipal growth management strategies currently under development. This introduces a level of uncertainty in timing, but provides sufficient clarity in terms of the direction, scale, and concentration of future growth, particularly in the north and east Fergus areas, as well as portions of south Fergus and the Elora/Salem interface.

In the near term, growth is expected to continue within existing serviced areas through intensification and the completion of draft-approved subdivisions. Over the medium to long term, expansion into designated greenfield areas will result in a gradual outward shift in population density and associated emergency service demand. This transition is anticipated to create new demand nodes beyond the current effective coverage areas of existing stations, increasing travel distances, impacting response time performance, and placing additional pressure on Effective Response Force (ERF) assembly.

Accordingly, the review of fire station locations must consider not only current performance metrics, but also the spatial implications of planned growth under OPA 126. This includes evaluating when and where additional station infrastructure will be required to maintain response time objectives and service levels. By aligning station planning with projected development patterns and infrastructure phasing, CWFR can proactively position its resources to support safe, efficient, and sustainable community growth.

4.10.4 Three-Station Deployment Model – Fergus relocation and future north Fergus station

The three-station deployment model for Centre Wellington is based on maintaining the existing Elora station, relocating the Fergus station farther south/ southwest within Fergus, and establishing a future third station in the northeast Fergus area. This model is intended to improve geographic balance, support planned growth, strengthen response-time performance, and create greater operational redundancy between the Elora and Fergus urban areas.

The new third Fergus station is proposed within the 36–60-month timeframe, subject to final site selection, land availability, capital planning, and confirmation through updated response-time modelling.

The proposed relocation of the existing Fergus station in the south Fergus area is proposed within the 120-month timeframe, subject to growth, call-volume increases, development phasing, road network completion, and Council approval through the long-range capital planning process.

This phased approach recognizes that Centre Wellington’s immediate response pressure is related to the need to improve Fergus-area coverage and station functionality, while the longer-term requirement for a third station will be driven by continued residential growth, increased call volumes, and urban expansion to the south and southwest of Fergus.

4.10.4.1 New Third Fergus Station – North Fergus

Adding an additional third station to a strategic site in north Fergus would improve access to the northern, central, and eastern portions of the Fergus response area. A northern Fergus location improves response positioning along key corridors, including Highway 6/St. David Street, and provide improved access to growth areas north and east of the existing urban core.

Objectives and Benefits:

The addition of a third station would:

- Improve 300-second and 360-second travel-time coverage to north and central Fergus.
- Strengthen response capability along the Highway 6/St. David Street corridor.
- Improve access to future northern and eastern growth areas.

- Provide better station functionality, operational layout, apparatus access, and firefighter safety.
- Maintain effective overlap with the Elora station to the west.
- Establish a stronger first-due position for northern Fergus while preserving future flexibility for a relocation of the current Fergus station in south Fergus.
- Support future composite staffing options as call volume and community risk increase.

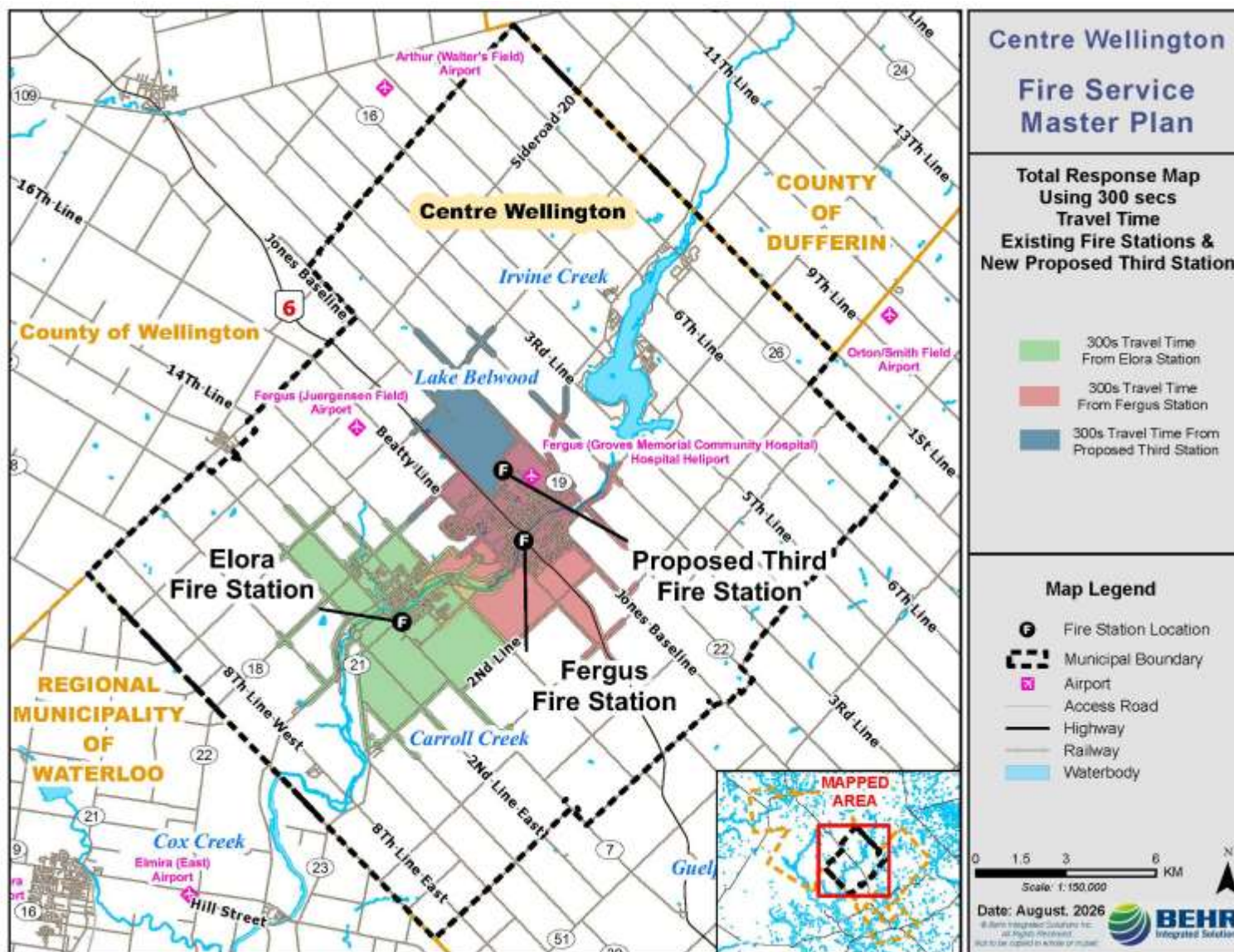
Additional Planning Considerations:

The additional third station should be planned as a long-term emergency services asset. Site selection should consider:

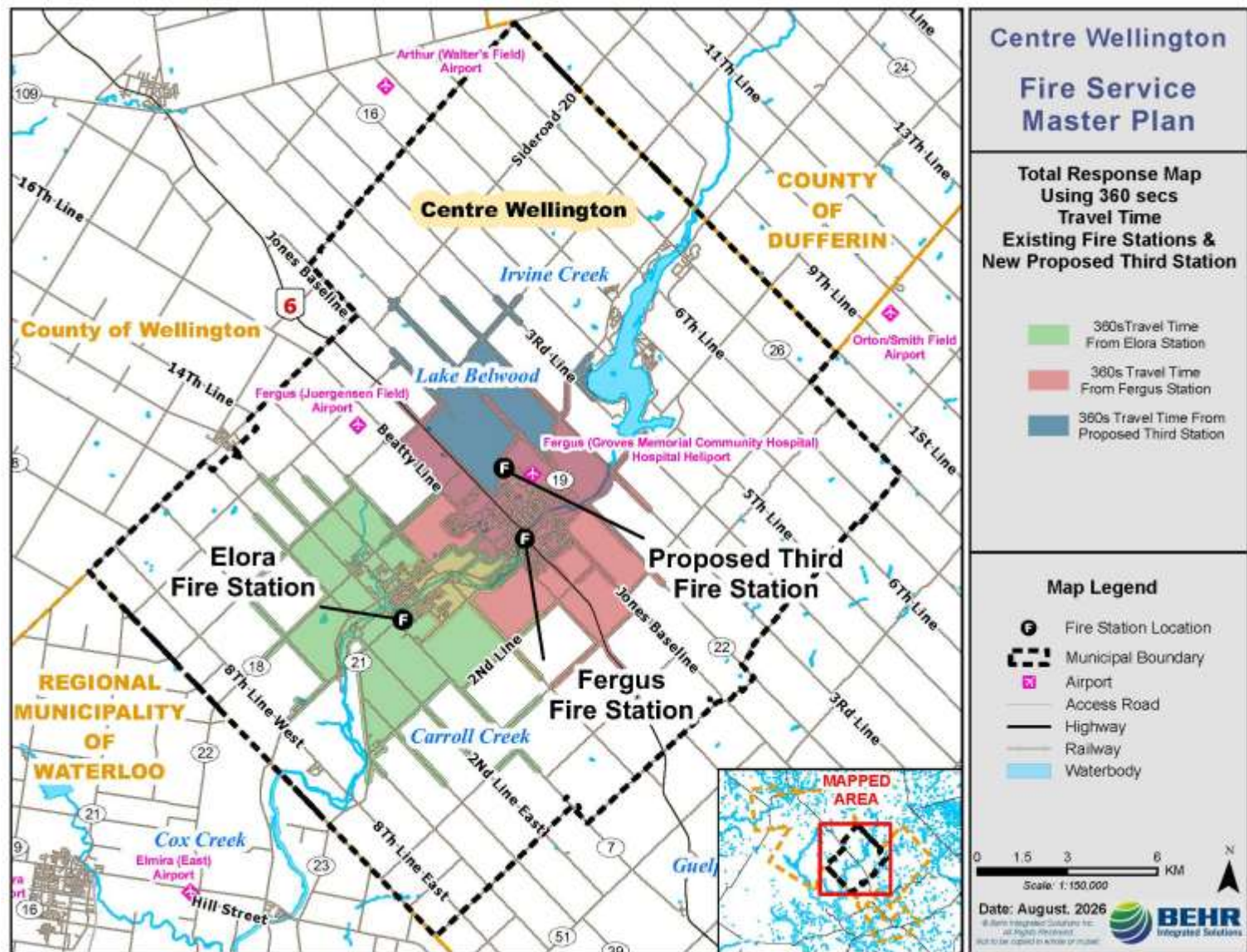
- Direct access to major road corridors and arterial routes.
- Sufficient land for apparatus bays, staff parking, visitor parking, training areas, and future expansion.
- Safe ingress and egress for emergency vehicles.
- Proximity to existing and planned growth areas.
- Ability to accommodate future staffing changes, including potential composite or full-time staffing models.
- Space for emergency management, training, equipment storage, decontamination, and administrative support functions.
- Sustainable building design, including energy-efficient systems and opportunities for solar, geothermal, or other low-carbon infrastructure.

Note: *Unshaded portions of these maps reflect areas with incomplete road networks. As development proceeds, modeling should be refreshed.*

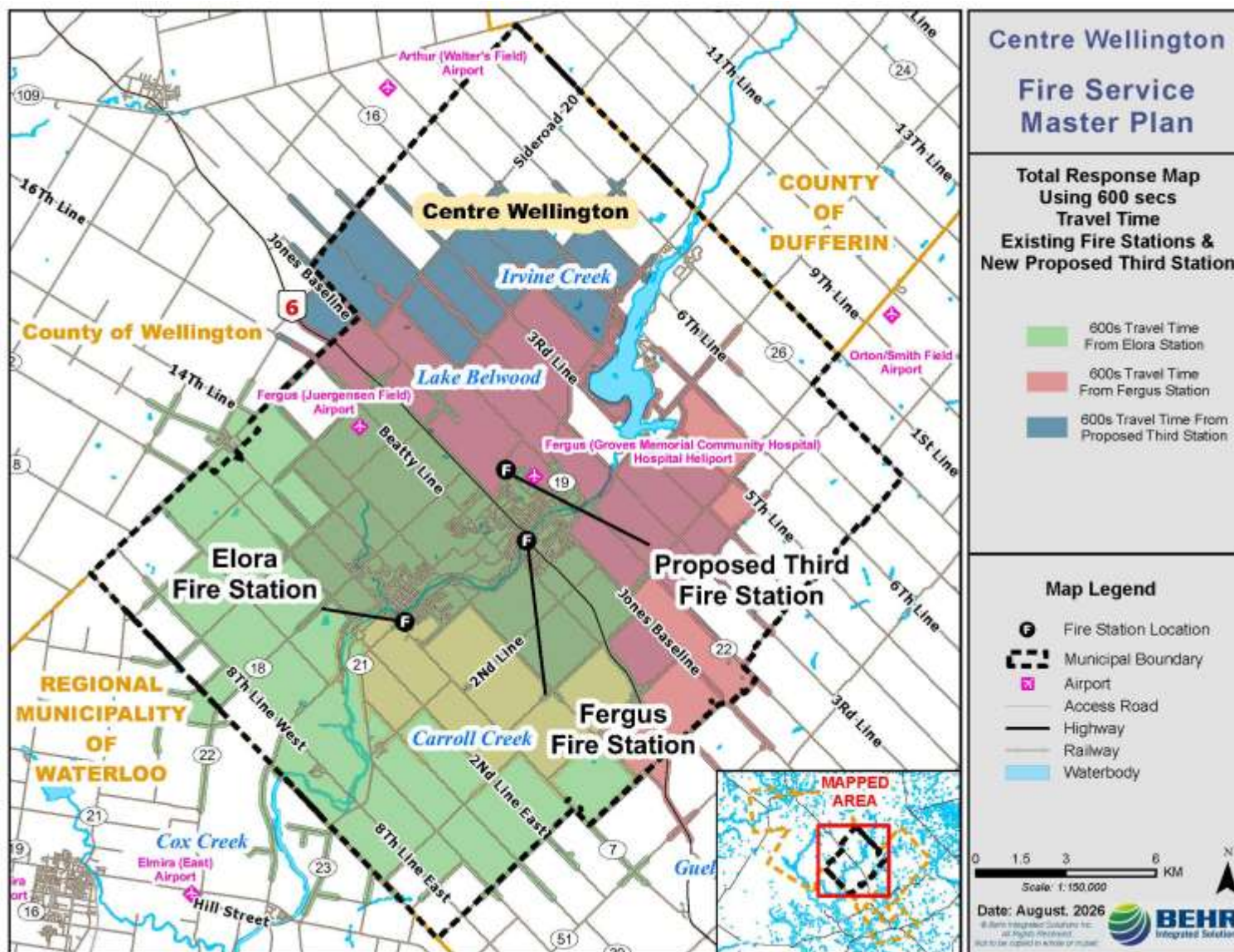
Map 8: 300
Second Travel
Time –
Proposed 3
Station



Map 9: 360
Second Travel
Time –
Proposed Third
Station



Map 10: 600
Second Travel
Time –
Proposed Third
Station



4.10.4.2 Relocation of Existing Fergus Station – South/Southwest Fergus

The relocation of the existing Fergus Station is proposed for the south/southwest Fergus area, with the precise location to be determined through growth monitoring, land-use planning, call-volume analysis, and updated response-time modelling. This station is intended to address future development pressure and provide improved coverage to the southern growth areas that may not be adequately served by Elora or a future northern Fergus station over the long term.

The relocation should be considered a growth-related investment rather than an immediate operational requirement. Its timing should be linked to measurable growth indicators, including population increase, call-volume growth, development build-out, road network completion, and evidence of declining response-time reliability in south Fergus.

Objectives and Benefits

The relocation of the Fergus station would:

- Extend 300-second and 360-second travel-time coverage into south and southwest Fergus.
- Improve response to future residential growth areas, community facilities, and mixed-use development.
- Reduce reliance on the relocated Fergus station for southern-area calls. Improve second-due and backup response into central Fergus.
- Create meaningful overlap between Elora, new Fergus, and south Fergus stations.
- Improve operational resiliency during simultaneous incidents.
- Support Effective Response Force assembly for structure fires, motor vehicle collisions, and complex incidents.
- Provide a future platform for composite staffing as service demand increases.

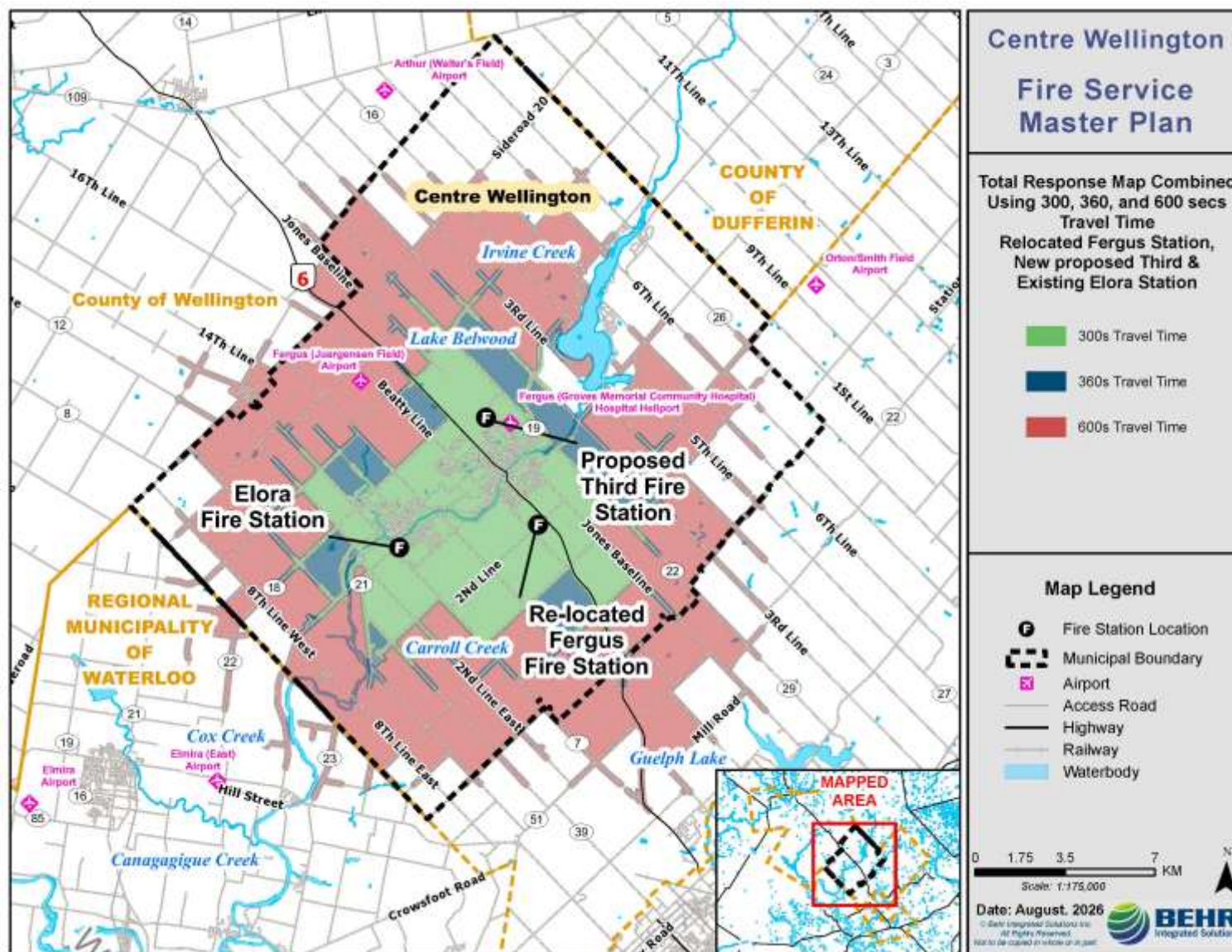
Additional Planning Considerations

Planning for the relocated station should consider:

- Location relative to planned south and southwest Fergus growth areas.
- Access to future arterial roads and completed collector road networks.
- Ability to serve both the urban growth area and surrounding rural fringe.
- Land availability through development planning or municipal acquisition.
- Opportunities to secure a site in advance of full station construction.
- Potential for a phased station design, allowing future expansion as staffing and apparatus needs evolve.
- Integration with long-term capital planning, development charges, and growth-related infrastructure

Note: *Unshaded portions of these maps reflect areas with incomplete road networks. As development proceeds, modeling should be refreshed.*

Map 11: 300,
360, and 600
Second Travel
Time –
Relocated
Fergus Station
and Added New
proposed
Fergus Station



4.10.4.3 Coverage Modelling Summary

Based on the three-station model, the proposed deployment pattern would provide improved geographic balance across the municipality:

- **Elora Station** would continue to serve as the western response anchor, providing primary coverage to Elora, Salem, the heritage core, tourism areas, and western rural areas.
- **New North Fergus Station (Station 3)** would provide improved first-due coverage to north, central, and eastern Fergus.
- **Relocated Fergus Station** would provide long-term coverage to south and southwest Fergus growth areas and improve backup response into the broader Fergus and Elora urban areas.

The model demonstrates that the strongest benefit occurs when the relocated Fergus station and future north Fergus station are considered together. Adding an additional station in north Fergus improves coverage to the northern and eastern portions of the community, while the future relocation of the existing Fergus station further south offsets potential coverage gaps in the southern growth area.

Response-Time Considerations

The map identifies travel-time coverage using **300-second, 360-second, and 600-second response bands**.

Response Band	Interpretation	Planning Relevance
300 seconds	5-minute travel time	Represents the strongest first-due coverage area and should be prioritized for urban and higher-risk areas.
360 seconds	6-minute travel time	Provides a broader practical response envelope and helps assess overlap between stations.
600 seconds	10-minute travel time	Reflects extended coverage to rural and fringe areas but should not be considered equivalent to urban response capability.

The three-station model appears to create a more continuous 300- and 360-second response envelope across Elora, Fergus, and the future south Fergus growth area. The 600-second band provides broader municipal coverage but does not eliminate the need for appropriate station placement in urban growth areas.

Operational Impacts

The relocation of the Fergus station and the future development of a south Fergus station would result in the following operational improvements:

- Improved first-due response coverage in north, central, and south Fergus.
- Better geographic balance between Elora and Fergus response areas.
- Reduced travel-time pressure on the existing Fergus station location.
- Improved ability to respond to future growth in south and southwest Fergus.
- Greater overlap between stations, improving resilience during concurrent incidents.
- Improved ability to assemble an Effective Response Force within the urban response area.
- Stronger foundation for future composite staffing and daytime coverage models.
- Reduced risk of service degradation as population, traffic, and call volumes increases.

Observation

Observation #31: Centre Wellington's existing Fergus station provides foundational coverage to the Fergus urban area; however, continued growth, particularly in north and east Fergus, is expanding response demand beyond the area efficiently served by the current two-station model. Establishing a new third fire station in the north/east Fergus area would improve first-due coverage, station overlap, concurrent incident capacity, and Effective Response Force (ERF) assembly while complementing the existing Fergus and Elora stations

Recommendation

Recommendation #31: Establish a third fire station in the north/east area of Fergus (Gartshore St & Gregson Ct area).

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 12-60 months

Cost: Preliminary order-of-magnitude estimate of \$18 million to \$30 million in 2026 dollars, depending on land acquisition, site servicing, station size, apparatus bays, operational features, sustainability requirements, and future staffing accommodations.

Rationale: Establishing a new third fire station in the Gartshore Street and Gregson Court area within 36–60 months would position Centre Wellington to address continued growth and increasing call demand proactively. The station would improve coverage to north, central, and eastern Fergus, strengthen operational redundancy and ERF assembly, and provide modern infrastructure capable of supporting future staffing and operational requirements. Site selection should be confirmed through updated travel-time, growth, risk, and ERF modelling.

Observation

Observation #32: Centre Wellington is expected to experience continued growth in south and southwest Fergus, increasing future emergency response demand. Relocating the existing Fergus Station to the south/southwest area would improve first-due coverage to emerging growth areas while maintaining effective overlap with the new north/east Fergus station and Elora Station. The timing and preferred location should be supported by growth, call-volume, travel-time, and ERF modelling.

Recommendation

Recommendation #32: Relocate the existing Fergus Station in the south-southwest Fergus area, near 2nd Line and Guelph Road.

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 120 months and beyond

Cost: Preliminary order-of-magnitude estimate of \$18 million to \$30 million in 2026 dollars, depending on land acquisition, site servicing, station size, apparatus bays, operational features, sustainability requirements, decommissioning of the existing station, and future staffing accommodations.

Rationale: Relocating the existing Fergus Station to the 2nd Line and Guelph Road area in 120 months would position fire service infrastructure to support long-term growth in south and southwest Fergus. The relocation would improve response coverage, station overlap, operational resilience, and ERF assembly while complementing the new north/east Fergus station. Early planning would also allow the municipality to coordinate land acquisition, development, road infrastructure, and long-term capital planning.

4.10.5 Staffing Model and Phased Implementation

To support increasing service demands, declining volunteer availability during daytime hours, and the anticipated growth identified through OPA 126, it is recommended that CWFR implement a phased introduction of four (4) daytime firefighters. This model is intended to enhance initial response reliability, improve turnout times, and stabilize daytime operations within a composite staffing framework.

Recognizing that maintaining four (4) firefighters on duty requires a minimum staffing complement of five (5) personnel to account for leave, training, and absenteeism, this staffing model is designed to be introduced incrementally over a four-year period, beginning at approximately 72 months. This approach balances fiscal responsibility with operational need, allowing Centre Wellington to align staffing increases with observed call volume growth and measured changes in volunteer firefighter availability.

Table 51: Staffing Model and Phased Implementation Plan

Phase	Timeframe (Months)	Staffing Model	Total FF	Primary Purpose	Phased cost	Cumulative Annual Operating Cost
1	72-84	2 firefighters, 5 days/week, daytime	2	Addresses the highest-risk operational gap: weekday daytime response, when call volume is highest and volunteer availability is most constrained.	\$320,000	\$320,000
2	84-108	2 firefighters, 7 days/week, daytime	4	Extends reliable daytime coverage across the full week as growth, tourism, community activity, and weekend call demand increase.	\$320,000	\$640,000
3	108-132	Build toward 4 firefighters on duty during peak daytime periods	8	Aligns directly with the finding that demand is concentrated between 09:00 and 18:00 and supports a more reliable initial response during the busiest operating window.	\$640,000	\$1.28 M
4	132-156	2 firefighters, 24/7, with daytime augmentation maintained as required	12	Establishes continuous first-response capability once call volume, concurrency, or response performance demonstrate the need for all-hours on-duty staffing.	\$640,000	\$1.92 M
5	156-180	Full 4-person crew, 24/7	20	Provides a complete on-duty initial response model once the municipality approaches higher call volumes, increased concurrency, and greater urban growth-related risk.	\$1.28 M	\$3.2 M

Note: This plan should continue to be revisited annual based on volunteer firefighter reliance, incident demand growth and overall growth in the community.

Throughout this phased approach, the volunteer firefighter (VFF) model will continue to play a critical supporting role, providing supplemental response capacity, particularly for second apparatus response, ERF assembly, and coverage during peak or concurrent incidents. The integration of full-time daytime staff is not intended to replace the volunteer model, but rather to enhance its reliability and effectiveness, particularly during periods where volunteer response may be constrained due to workday commitments.

This hybrid staffing strategy reflects a practical and scalable response to evolving service demands, ensuring that CWFR can maintain response performance, support firefighter safety, and adapt to the changing risk profile of the community.

4.10.6 Demand Forecast and Growth Implications

An assessment of historical incident data for CWFR demonstrates a clear upward trend in service demand, increasing from 491 incidents in 2021 to a peak of 737 incidents in 2024, before moderating to 603 incidents in 2025. This represents an overall growth of approximately 50% over the initial three-year period, followed by a partial normalization in 2025.

This trend reflects the combined influence of population expansion, development activity, increased transportation demand, and evolving service expectations, particularly related to medical and non-fire responses. The variation observed in 2025 highlights the importance of using a stabilized baseline for long-term planning, rather than relying solely on peak-year demand.

To support longer-term planning, a 20-year demand forecast has been developed to project future call volumes and guide service delivery decisions.

4.10.6.1 Forecasting Methodology

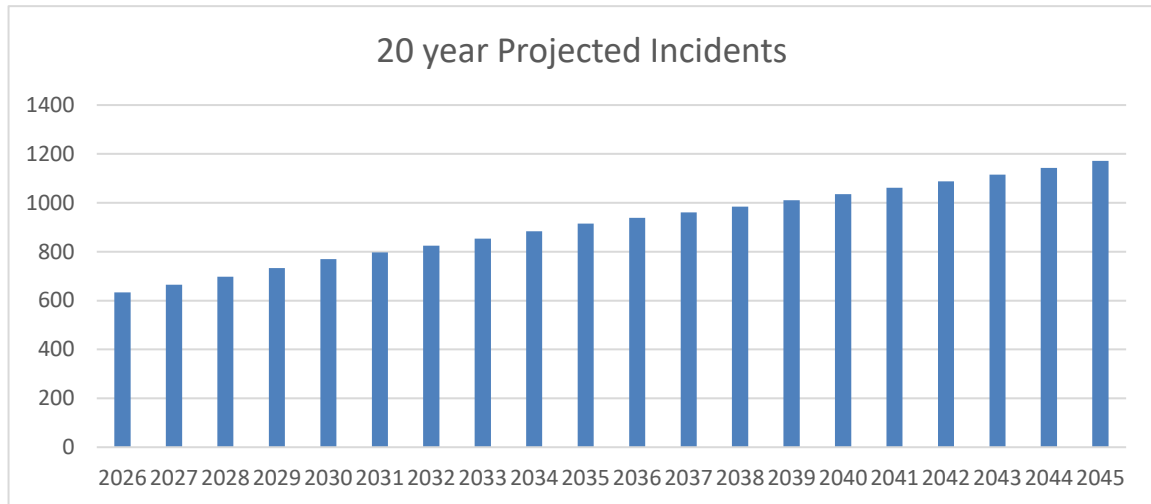
A phased growth model was applied to reflect both the recent period of rapid growth and a transition toward long-term stabilization:

- Years 1–5: 5% annual growth
- Years 6–10: 3.5% annual growth
- Years 11–20: 2.5% annual growth

Base year: 2025 (603 incidents)

This approach reflects the normalization observed in 2025 following a peak in 2024 and provides a more stable and defensible foundation for long-term planning.

Figure 14: 20-year incident growth projection



4.10.6.2 Key Findings

Sustained Growth in Demand

- Incident volume is projected to increase from approximately 603 calls to 1,150–1,200 calls annually, representing an overall increase of approximately 90–95% over 20 years.

Moderated but Ongoing Growth Pressure

- While recent data indicates some normalization following the 2024 peak, the overall trend continues to reflect steady and sustained growth, with the most significant increases expected within the first 10 years, aligned with planned development and population growth.

Shift in Service Demand Profile

- Approximately 95% of incidents are non-fire related, with growth concentrated in:
 - Medical/resuscitator calls
 - Rescue (motor vehicle collisions)
 - Public hazard and service-related calls

Increased Call Concurrency

- As annual call volumes approach and exceed 1,000–1,200 incidents, the likelihood of simultaneous or overlapping calls will increase, placing additional pressure on staffing, apparatus availability, and response performance.

4.10.7 Daytime Demand Pressures

Analysis of incident frequency by time of day indicates that call volume is heavily concentrated during daytime hours, specifically between 09:00 and 18:00, where the majority of incidents occur.

- Incident volume increases sharply after 06:00, with the most significant escalation occurring between 09:00 and 12:00.
- A sustained plateau of high demand exists from late morning through mid-afternoon (09:00–17:59).
- This period represents the highest likelihood of concurrent incidents, particularly as overall call volumes increase.
- Overnight periods (00:00–06:00) remain consistently low in comparison.

Implications of Daytime Demand Growth

As total incident volumes increase, this existing daytime concentration will intensify, resulting in:

- Higher call stacking during peak hours, particularly between late morning and afternoon
- Increased strain on volunteer firefighter availability, as these peak periods align with standard working hours
- Greater risk of delayed turnout times and reduced Effective Response Force (ERF)
- Increased reliance on mutual aid or cross-staffing, particularly during weekday daytime periods

This trend reinforces that demand is not only growing but growing during the most operationally constrained period of the day.

4.10.7.1 Operational Implications

The combined impact of sustained growth and concentrated daytime demand has several critical implications:

Staffing Model Transition

The increasing call volume, combined with peak demand during daytime hours, supports the need for enhanced daytime staffing, including phased implementation of career or composite staffing models.

Volunteer System Sustainability

Daytime response reliability will continue to decline without intervention, as call demand increasingly conflicts with workforce availability.

Station and Deployment Strategy

Station location and apparatus deployment must consider daytime peak demand coverage, in addition to geographic response requirements.

Response Performance Risk

Without adjustments, CWFR may experience:

- Increased response times
- Reduced ERF compliance
- Greater dependence on external resources

Demand Management Opportunities

Given that many daytime calls are:

- Medical
- False alarms
- Low-acuity service calls

There is an opportunity to reduce demand through:

- Prevention programs
- Alarm reduction strategies
- Dispatch triaging improvements.

CWFR is entering a period of sustained and moderate demand growth, with call volumes projected to increase from approximately 600 calls to over 1,150 calls annually over the next 20 years. While this growth is more moderate than short-term historical peaks, it remains operationally significant, particularly as it is concentrated during daytime hours when response capacity is most constrained under the current staffing model. Addressing both overall demand growth and daytime response pressures will be essential to maintaining service levels, meeting response time objectives, and ensuring effective and reliable emergency response capability into the future.

Observation

Observation #33: CWFR is on the verge of experiencing sustained service growth, with incident volume projected to increase from approximately 603 calls in 2025 to 1,150–1,200 calls annually over the next 20 years. While recent demand moderated after the 2024 peak, the long-term trend remains operationally significant, particularly as call volumes approach levels where simultaneous or overlapping incidents become more likely. The findings also show that approximately 95% of incidents are non-fire related, with growth concentrated in medical/resuscitator calls, motor vehicle collisions, public hazards, and service-related calls.

The most immediate staffing pressure is not evenly distributed across the full 24-hour period. Incident demand is concentrated between 09:00 and 18:00, with the sharpest increase occurring between 09:00 and 12:00 and sustained high demand continuing through the afternoon. These peak periods align with the time when volunteer firefighter availability is most constrained due to regular employment and workday commitments. As a result, CWFR's staffing transition should follow a phased, daytime-first model before progressing to 24/7 on-duty coverage as growth, concurrency, response performance, and volunteer availability warrant.

Recommendation

Recommendation #33: Implement a phased staffing transition beginning with enhanced daytime staffing and progressing toward a full four-person 24/7 crew as growth and response-performance triggers warrant. (See costing in Table 51, pg.242)

Strategic Objective: #4 Emergency Response and Operations

Suggested completion: 72-120 months (projected beyond the 10-year review)

Cost: \$160,000 total compensation per FTE. Cost estimate to be refined through annual operating budgets, staffing-factor analysis, collective agreement considerations, employee benefit costs, shift schedules, and station deployment planning.

Rationale: *This phased model aligns staffing investment with the findings by addressing the most clearly demonstrated service pressure first: daytime response reliability. Beginning with two firefighters five days per week and expanding to two firefighters seven days per week improves first apparatus readiness during the highest-demand periods while preserving the volunteer firefighter model. Progressing toward four firefighters during peak daytime periods further strengthens initial response capability, supports safer and more effective fireground operations, and improves operational stability as call volume and concurrency increase.*

The transition to 24/7 staffing should occur only after daytime staffing is established and evidence supports the need for continuous on-duty coverage. Moving first to two firefighters 24/7 provides an around-the-clock response core, while the final transition to a four-person 24/7 crew should be considered a long-term objective beyond the 120-month horizon. This approach is fiscally responsible, supports firefighter safety, maintains volunteer firefighters as a critical part of ERF assembly and surge capacity, and allows CWFR to match staffing growth to measurable increases in community risk, call volume, and response-performance pressure.

Recommendation #33 identifies that CWFR implement a phased hybrid staffing model that introduces full-time career firefighters to address the periods of greatest operational pressure while retaining paid-on-call/volunteer firefighters as an essential component of the department's response system. The transition should begin with two full-time firefighters assigned to weekday daytime coverage and progress, as service demands warrant, toward seven-day daytime staffing, a four-person daytime crew, a two-person 24/7 response core, and ultimately a four-person 24/7 crew.

The timing of each phase should be treated as a planning horizon rather than an automatic implementation date. Advancement should be confirmed through annual monitoring of incident volume, call concurrency, daytime turnout performance, volunteer firefighter availability, response times, Effective Response Force assembly, population growth, and community risk. The position counts, timeframes, and preliminary cost ranges below reflect the phased model presented in the table below of the attached information.

Role of Volunteer Firefighters

The introduction of career staff is not intended to replace CWFR's paid-on-call/volunteer firefighters. Volunteer firefighters would continue to provide essential capacity for:

- Second and subsequent apparatus response
- Effective Response Force assembly
- Concurrent and escalating incidents
- Station and community coverage while career crews are committed
- Tanker operations and rural water supply
- Specialized rescue and support functions
- Major incidents requiring sustained or expanded staffing

The hybrid model provides a predictable initial response capability while retaining the flexibility, depth, and cost-effectiveness of the existing volunteer system.

Costing

The estimates represent a preliminary annual operating allowance of approximately \$160,000 total compensation per FTE. They should be refined through detailed analysis of salary rates, benefits, statutory employer costs, scheduled hours, vacation and leave coverage, overtime, training requirements, collective agreement provisions, uniforms, personal protective equipment, and recruitment costs.

For Phases 1 through 3, the identified complement represents the minimum planned staffing establishment. Additional relief capacity or overtime may be required to maintain scheduled coverage during vacation, training, illness, and other absences. The final staffing factor should therefore be confirmed before each phase is approved.

Table 52: Hybrid Staffing Model Implementation

Phase	Planning Timeframe	Career Positions	Illustrative Shift Arrangement	Operational Trigger and Purpose	Incremental Annual Cost	Cumulative Annual Cost
Phase 1 Weekday daytime coverage	72-84 months	2 total	Two firefighters working a Monday-to-Friday day shift centred on the peak demand period between approximately 09:00 and 18:00. Exact hours would be established through scheduling and collective agreement review.	Implement when weekday daytime volunteer availability, turnout performance, or first-apparatus reliability demonstrates a sustained service gap. Provides a consistent two-person response core during the most constrained period.	\$320,000	\$320,000
Phase 2 Seven-day daytime coverage	84-108 months	4 total = 2 addl.	Two teams of two firefighters operating a rotating daytime schedule, such as a four-days-on/four-days-off arrangement, to provide two firefighters on duty 7 days/week.	Implement as weekend demand, tourism, community activity, and reduced volunteer availability support the need for consistent daytime coverage throughout the week.	\$320,000	\$640,000
Phase 3 Four-person peak daytime crew	108-132 months	8 total = 4 addl.	Two teams of four firefighters operating a rotating daytime schedule, such as four days on/four days off, to maintain four firefighters on duty during the peak daytime period 7 days/week.	Implement when call volume, concurrency, turnout performance, or firefighter safety considerations demonstrate the need for a complete initial apparatus crew during peak periods.	\$640,000	\$1.28 million
Phase 4 Two-person 24/7 response core	132-156 months	12 total = 4 addl.	An illustrative model would include eight firefighter positions assigned as four platoons of two firefighters on a 24-hour rotation or equivalent shift system, four relief positions.	Implement when evening and overnight call volume, concurrency, response performance, or declining volunteer availability demonstrates the need for continuous on-duty coverage. Provides two firefighters on duty at all times.	\$640,000	\$1.92 million
Phase 5 Four-person 24/7 crew	156-180 months	20 total = 8 addl.	16 firefighter positions assigned as four platoons of four firefighters, supported by approximately four relief, training, or leave-coverage positions. A 24 hr. four-platoon rotation or equivalent collectively agreed schedule could be used.	Implement as a long-term objective when sustained call volume, overlapping incidents, urban growth, community risk, and response-performance requirements justify a complete four-person initial response crew at all times.	\$1.28 million	\$3.2 million



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Appendix A: Glossary of Terms

Apparatus	Any vehicle provided with machinery, devices, equipment, or materials of the Fire department for firefighting as well as equipment used to transport firefighters or supplies.
Assembly Time	The time the notification sounds in the fire station until the first vehicle leaves the station. In a full-time department this is expected to be within 80 seconds but for volunteer departments the time to collect a response crew can vary widely depending on location and time of emergency as well as all the factors that impact travel time.
Chute Time	See Assembly Time
Dangerous Goods	This term is synonymous with the terms hazardous materials and restricted articles. The term is used internationally in the transportation industry and includes explosives, and any other article defined as a combustible liquid, corrosive material, infectious substances, flammable compressed gases, oxidizing materials, poisonous articles, radioactive materials, and other restrictive articles.
Discovery	Time between the start of the emergency and when someone or an engineered system has detected the incident.
Dispatch Time	Time required to extract the necessary information from the caller to allow the proper response to be initiated. The dispatcher identifies the correct fire location and initiates the dispatch by paging the appropriate fire station.
Emergency Call	The period between discovery and the actual notification of emergency services.
Emergency Communications Centre (ECC)	A facility dedicated to emergency services to receives calls, processes them, and then dispatches emergency units to the correct location in the appropriate time period.
Emergency Operations Centre (EOC)	The protected sites from which civil officials coordinate, monitor, and direct emergency response activities during an emergency or disaster.
Emergency	Any occasion or instance that warrants action to save lives and to protect property, public health, and safety. A situation is larger in scope and more severe in terms of actual or potential effects.
Fire Suppression	The application of an extinguishing agent to a fire at a level such that an open flame is arrested; however, a deep-seated fire will require additional steps to assure total extinguishment.
Hazard Analysis	A document, which identifies the local hazards that have caused, or possess the potential to adversely affect public health and safety, public and private property, or the environment.

Impact	The effect that each hazard will have on people such as injury and loss, adverse effects on health, property, the environment, and the economy.
Incident	A situation that is limited in scope and potential effects.
Intervention Time	The time from fire reporting to the point where the first arriving pumper, or other apparatus providing comparable functions, arrives at the fire scene and directs an extinguishing agent on the fire.
Mutual Aid Agreement	An agreement between jurisdictions to assist each other during emergencies by responding with available workforce and apparatus.
National Fire Protection Association	The National Fire Protection Association (NFPA) is an internationally recognized trade association established in 1896 that creates and maintains standards and codes for usage and adoption by local governments to reduce the worldwide burden of fire and other hazards. This includes standards and guidelines to which many fire departments utilize to carry on day-to-day operations.
Response	Those measures undertaken immediately after an emergency has occurred, primarily to save human life, treat the injured, and prevent further injury and losses. They include response plan activation, opening and staffing the EOC, mobilization of resources, issuance of warnings and direction, provision of aid, and may include the declaration of a State of Local Emergency.
Risk	The chance or likelihood of an occurrence based on the vulnerability and known circumstances of a community.
Setup Time	This is the time necessary on site to evaluate the necessary actions, position the required resources and commence the intervention. In the case of a fire, completing size-up, assigning the necessary tasks, and deploying resources can provide delays on scene. A well-trained crew can minimize these delays while providing a safe, successful response.
Standard Operating Guidelines (SOG)	A written organizational directive that establishes or prescribes specific operational or administrative methods to be followed routinely, which can be varied due to operational need in the performance of designated operations or actions.
Standard Operating Procedures (SOP)	A written organizational directive that establishes or prescribes specific operational or administrative methods to be followed routinely for the performance of designated operations or actions.
Travel Time	Time period from when the apparatus leaves the station to when it arrives on scene. Factors to consider for travel time are driver skill, weather, traffic, topography, road conditions and vehicle capabilities.

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Appendix C: Community Comparative Analysis

Budgets

Department budgets are of particular importance for most communities. In some instances, fire and emergency services are a considerable portion of a municipality's operating budget. This information was obtained using reported 2025 budgets.

Table 53: Community Comparative Budget Ranking

Community	Municipal Budget 2025	Fire Dept. Operating Budget	% of Municipal Budget	Cost Per Capita
Township of Centre Wellington	\$41,265,107.00	\$2,170,705.00	5.26%	\$69.81
Township of Woolwich	\$29,181,714.00	\$3,653,695.00	12.52%	\$135.33
Town of New Tecumseth	\$105,841,732.00	\$4,884,650.00	4.62%	\$111.15
Town of Lincoln	\$34,147,000.00	\$3,232,754.00	9.47%	\$125.70
Town of Halton Hills	\$76,613,332.00	\$11,018,700.00	14.38%	\$175.04
Per Capita Net Expenditure Fire (Centre Wellington): \$69.81				
Average Per Capita Net Expenditure Fire: \$123.40				

Image 4: Fire Department 2025 Budget Comparison

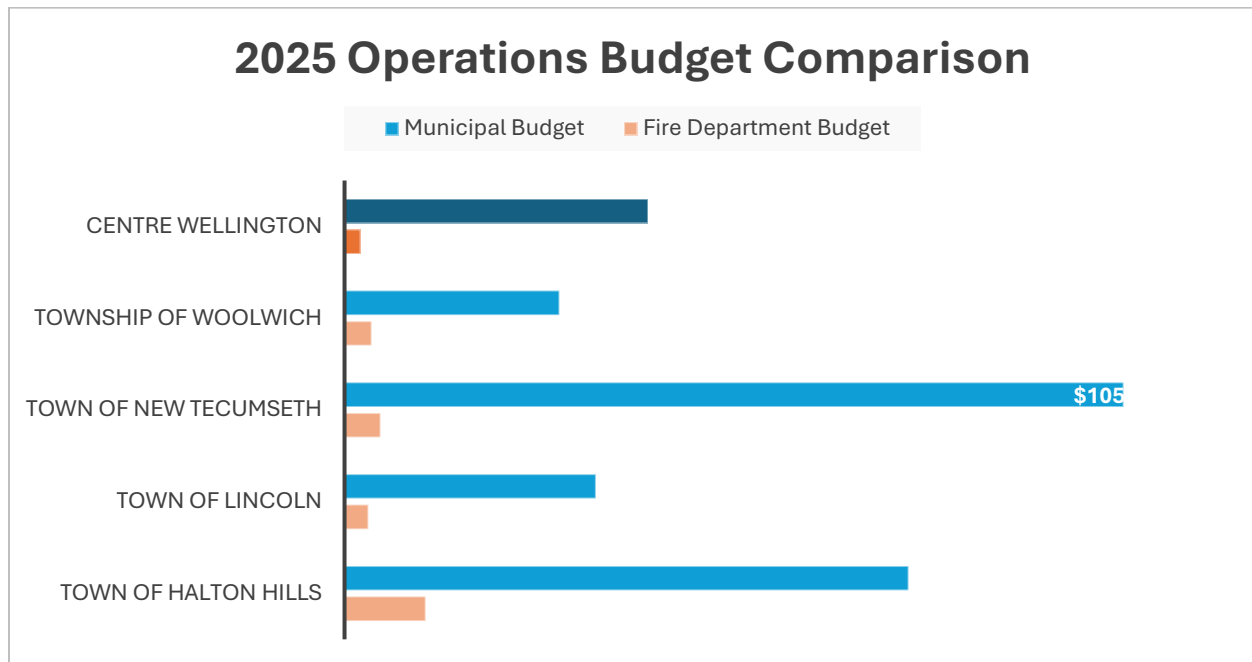
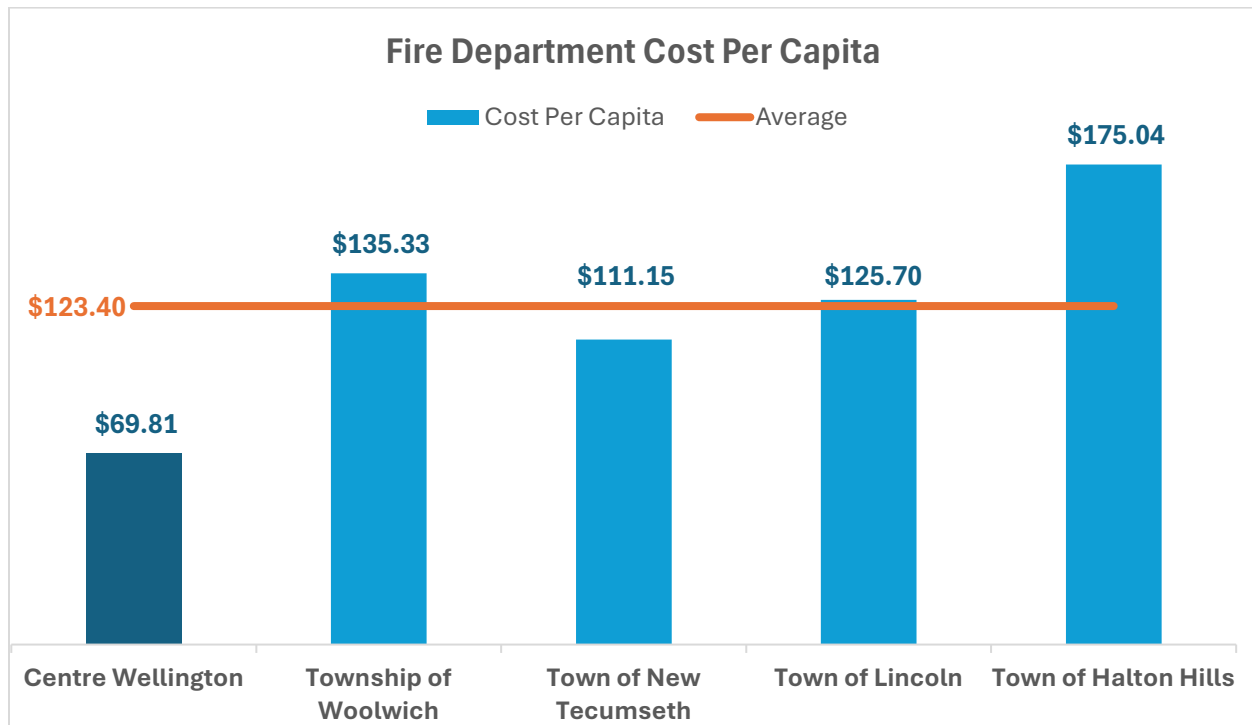


Image 5: Cost Per Capita Comparison



Industry Standards

Table 54: Community Comparative Standard of Cover

Community	Standard of Cover	Council Approved	Standard based on a leading practice. i.e., NFPA, OHS, etc.
Township of Centre Wellington	No	No	No
Township of Woolwich	Yes	Yes	Yes
Town of New Tecumseth	Yes	Yes	Yes
Town of Lincoln	No	No	No
Town of Halton Hills	No	No	No

Note: *Standard of Cover is written policies and procedures that establish the response expectations, requirements, and resources, including initial response and effective response force, for fire services to address identified incident types and risks in their community.*

Department Profile

Department profiles, staffing models and levels of service are based on community risk, risk tolerance and the ability of a community to pay for and sustain desired service levels.

Table 55: Community Comparative Departments' Profile

Community	Centre Wellington	Township of Woolwich	Town of New Tecumseth	Town of Lincoln	Town of Halton Hills
Department Type	Composite	Volunteer	Composite	Composite	Composite
No. of Stations	2	6	3	4	3
Total Staff	71	170	124	136	117
Fire Chief (FT/PT)	1 FT	1 FT	1 FT	1 FT	1 FT
Total Deputy Chief (PT/FT)	2 FT District - POC	1 FT	2 FT	1 FT	2 FT
Total Support Staff (PT/FT)	1 FT	1 Ft 1 PT	1 FT	1 FT	3 FT
Total Suppression Staff (PT/FT)	65 POC	165 POC	118 POC	118 POC 12 Aux.	57 FT 56 PT
Total Fire Prevention Staff (PT/FT)	1 FT	6 POC	1 FT 3 POC	2 FT	2 FT
Total Training Staff (PT / FT)	Part of Suppression	7 POC	1 FT	1 FT	2 FT
Total Dispatch Staff (PT / FT)	0	0	0	0	0
Mechanical	0	0	0	0	1 FT
Other	• Shared TO	0	0	0	0

FT: Fulltime PT: Part-time POC: Paid-On-Call PPC: Paid-per-Call

Response Data

The same 2020–2024 information was used in comparing the response data for each community. Information is shared using two categories: Incident Type and Call Volume. Using these breakdowns allows for the uniqueness of each community to be represented as well as highlighting the areas of similarity for fire and emergency response.

Table 56: Examples of Incident Types for Statistical Analysis

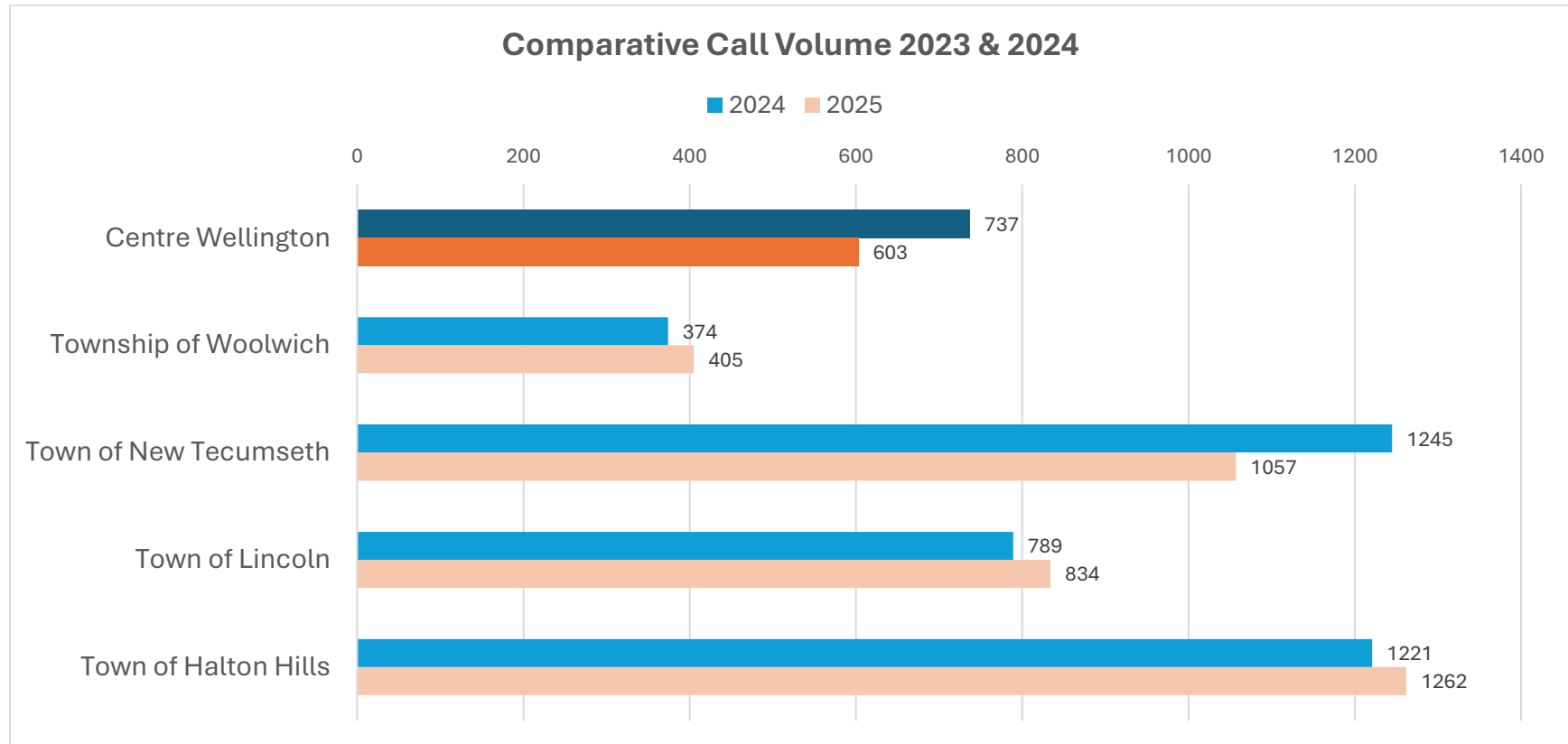
INCIDENTS BY TYPE		
EMS Related Calls		
Call Types	Pre-Hospital Care: Alpha, Bravo Charlie Delta Echo	
	Lift Assist	
	False Alarms	
Fire-Related Calls		
Fire Emergency	Alarm Burning Complaint Structure Fire Minor Fire Smoke	Car Fire Re-check Wildfire – Grass Brush, Outdoor Oven/Pot on stove Explosion
MVI (Motor Vehicle Incident), aka MVC (Motor Vehicle Collision)	Extrication	No Extrication
Rescue	Stalled Elevator Lift/Machine Rescue High Angle	Swift Water Building Collapse Ice
Hazmat/Dangerous Good	Highway Incident Truck Incident	Industrial Incident Resident Incident
Non-Emergency	Carbon Monoxide Gas/Oil Smell/Spill Power/Telephone/Cable Line Down Natural Gas Leak	Aircraft Standby Incident Bomb Threat Hazardous Materials Propane Leak/Smell
Other	Inspection Burning Pile Inspection Assist Other Agency Public Service	Needle Pick-up Flood Assessment Water Problem (in structure)

Note: Description and category names may not be common terminology in all jurisdictions.

Table 57: Municipal Comparative Response Call Volume

Community		Centre Wellington	Township of Woolwich	Town of New Tecumseth	Town of Lincoln	Town of Halton Hills
Total Call Volume	2021	491	447	971	645	925
	2022	641	413	1,077	807	1,071
	2023	704	383	1,149	766	1,058
	2024	737	374	1,245	789	1,221
	2025	603	405	1,057	834	1,262
Fire Related Calls	2021	418	337	586	477	40
	2022	479	327	652	559	26
	2023	506	372	731	595	27
	2024	498	266	812	622	63
	2025	524	323	765	648	41
EMS Related Calls	2021	73	110	385	168	101
	2022	162	86	425	248	126
	2023	198	116	418	171	161
	2024	239	108	433	167	172
	2025	79	82	292	186	179

Image 6: Municipal Comparative Response Call Volume (2024 - 2025)



Appendix D: Response Mapping Methodology

Response travel times are directly influenced by station location and can be varied based upon a cost/risk analysis and the development of performance targets.

Data Formats

Preference of ESRI Shapefiles

Base Data Layers Requested

A. Hydrology

- Supports response planning for water-related incidents (e.g., water rescue units).
- Enables analysis of spill contamination risks and containment strategies, especially in relation to rail networks and overland flow.
- Identifies bridge crossings that may be incident-prone (e.g., MVC/MVA, spills).
- Enhances map completeness and situational awareness.

B. Single-Line Road/Transportation Network

- Used to calculate response times based on road speeds.
- Roads are modeled into a network to support response routing.

C. Railways

- Identifies risk areas where rail infrastructure may impede response times.
- Assists in planning for derailments, chemical spills, and evacuation scenarios.

D. Municipal Boundaries

- Defines mutual aid limits and jurisdictional responsibilities.
- Supports sub-area mapping and regional response zone identification.
- Provides data for gap analysis and future station planning.

E. Parks

- Highlights accessibility challenges and opportunities for station placement.
- Supports locational analysis for new stations based on proximity.
- Includes classification of parks (local, regional, provincial, national).

F. Projection File

- Ensures spatial consistency with client or municipal datasets.
- Enables accurate measurement of distance and time for analysis.

G. Orthophoto (GeoTIFF, Mr.SID)

- Used for ground-truthing and visual verification of locations.
- Not typically included in final maps due to size and transfer limitations.

H. Emergency Services Locations

- Ensures accurate geolocation of facilities beyond address matching.
- Adjustments may be made to align facility points with road networks (typically within 50 meters).

Response Zone Modeling

A. Assumptions

- Average weather conditions (no storms, snow, etc.).
- Roadway segments include nodes/junctions at intersections.
 - If missing, network requires cleaning and fixing.
- Roadways may extend beyond municipal boundaries.
- Emergency responders are trained, and vehicles are operational.
- Roads are dry and in good condition.
- No time penalties for left turns.
- Road speeds provided by client; if unavailable:
 - Speeds are derived from road class tables.
 - Posted speeds are reduced by up to 5%.
- Average traffic volume; assumes free-flowing lanes.
- Rail crossings are unobstructed.
- Time of day modeled between 9 AM – 9 PM.
- Traffic signal pre-emption systems (e.g., Opticoms) are assumed to be present.
- No intersection delays unless specified.
- School zones are adjusted only if identified.

B. Response Time Calculation

- Customized based on input from Emergency Services.
- Includes 80% of typical service calls.
- Based on total drive time using road speed data.
- Adjustments made for known variances or trends.

C. Response Polygons

- Define general response areas based on maximum drive limits.
- Identify mutual aid zones and coverage gaps.
- Support fire zone development and station planning.
- Highlight potential station relocations.

Additional Analysis

A. Out-of-Scope (Subject to Client Discussion)

- Transition from project-based to operational modeling:
 - Time-of-day and seasonal variations
 - Call volume and types
 - Advanced modeling and scripting for batch processing

B. Data Availability

- Client-provided data is used when sufficiently detailed.
- Assumptions are made when data is incomplete.

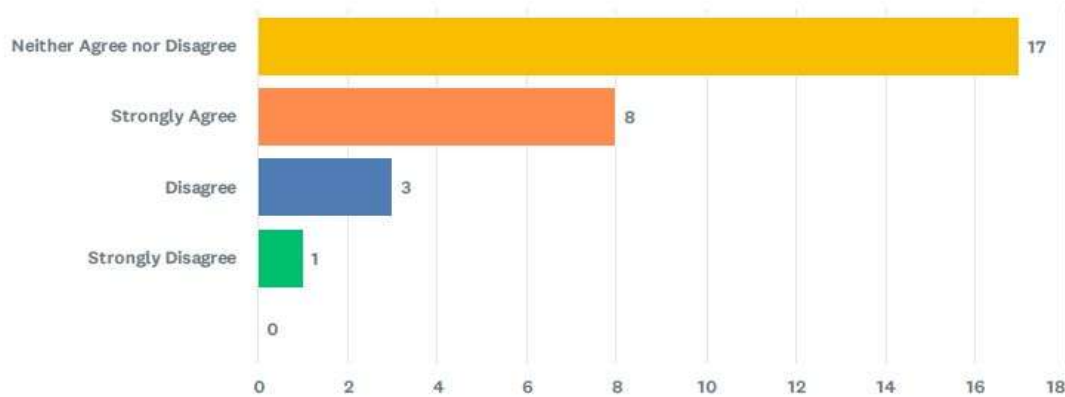
C. Advanced Analysis (Optional)

- Intersection-based speed reductions (e.g., stop signs, traffic lights).
- May be complex and time-intensive due to:
 - Limited client engagement
 - Inaccessible or missing data
 - One-off nature of projects

Appendix E: Firefighter Online Survey

Q1 The public feels they are getting good value for their tax dollars for fire services.

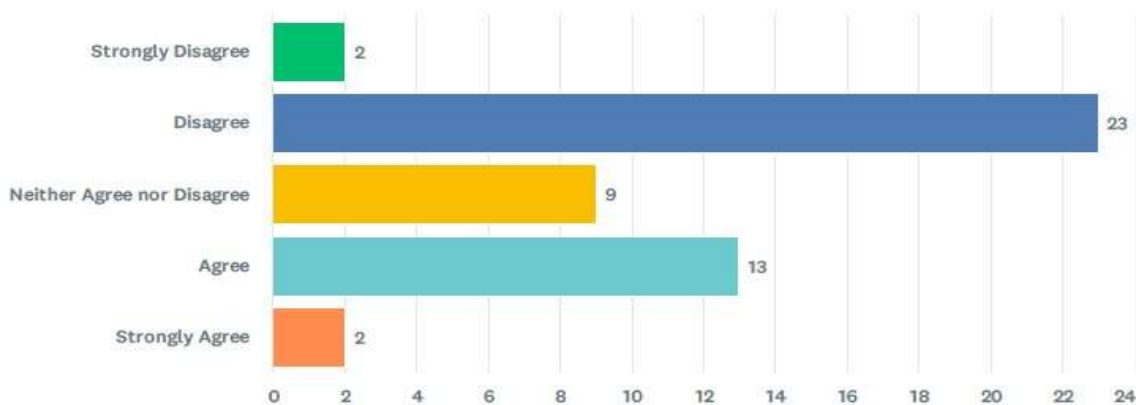
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	3.45% 1	10.34% 3	58.62% 17	27.59% 8	29	0.00

Q2 The public has a good understanding of the fire service and its capabilities.

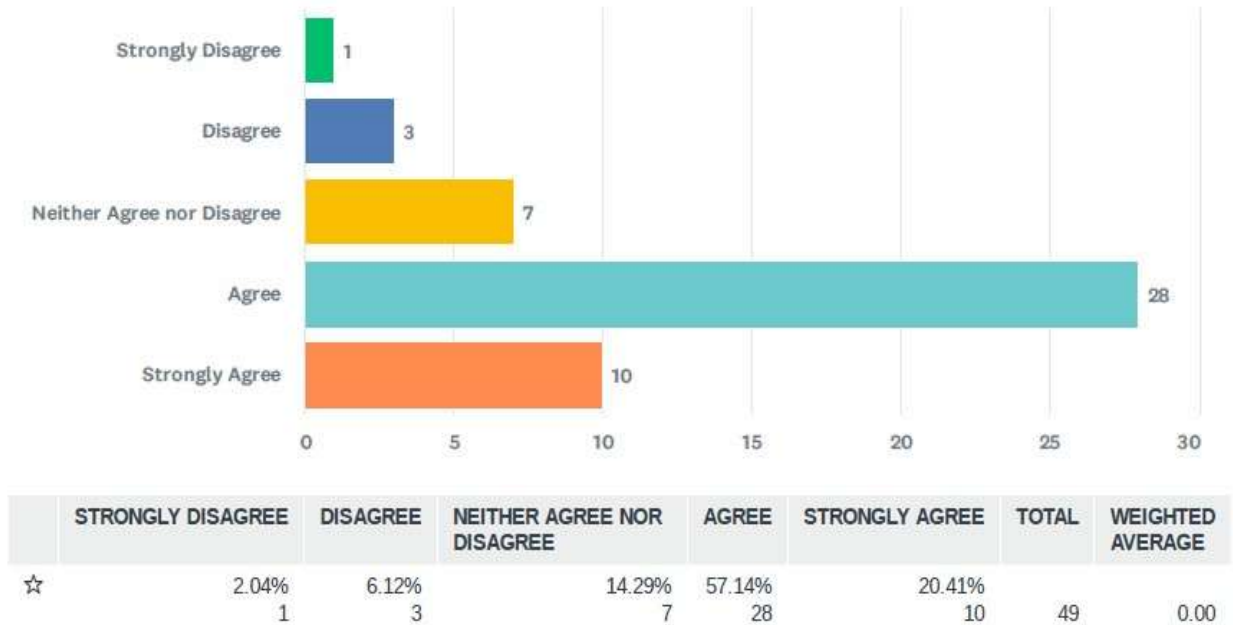
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	4.08% 2	46.94% 23	18.37% 9	26.53% 13	4.08% 2	49	0.00

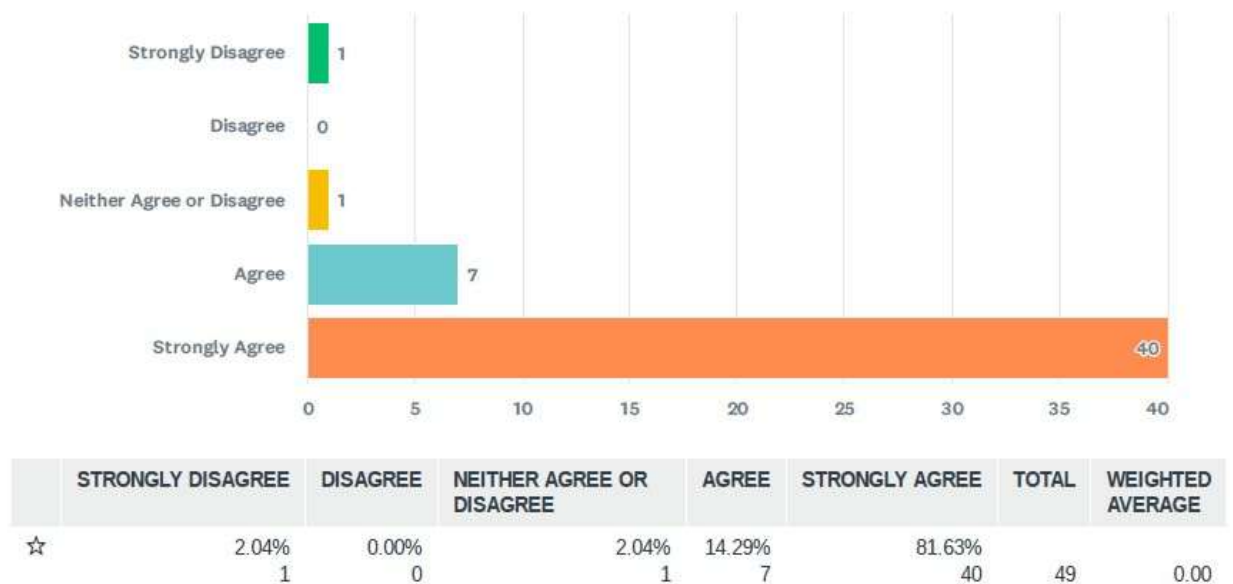
Q3 Your community receives adequate fire/rescue protection.

Answered: 49 Skipped: 0



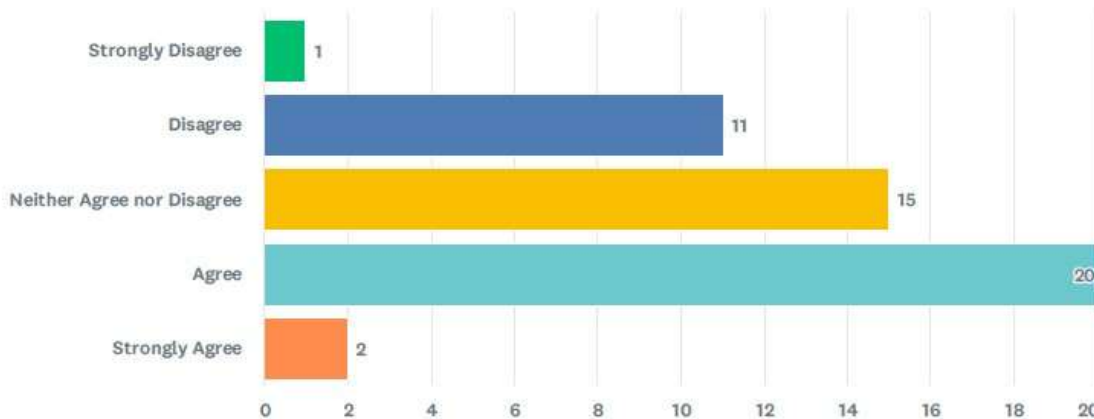
Q4 Based on the rate of community and economic growth, fire service demands will increase in the future.

Answered: 49 Skipped: 0



Q5 The community has adequate alternate fire risk reduction strategies (e.g. residential sprinklers, FireSmart program, public education).

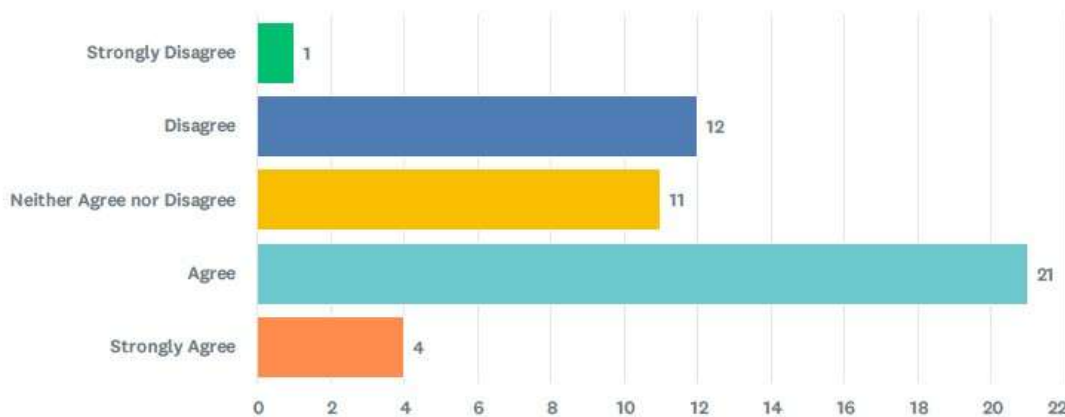
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	2.04%	22.45%	30.61%	40.82%	4.08%	49	0.00
	1	11	15	20	2		

Q6 The fire service's current response model is adequately staffed for fire response.

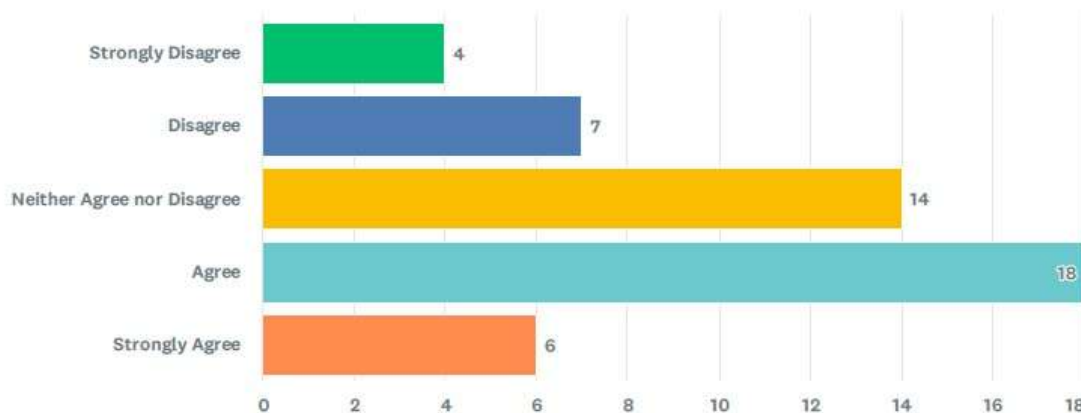
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	2.04%	24.49%	22.45%	42.86%	8.16%	49	0.00
	1	12	11	21	4		

Q7 The fire service's policies/procedures reflect fire/rescue industry best practices.

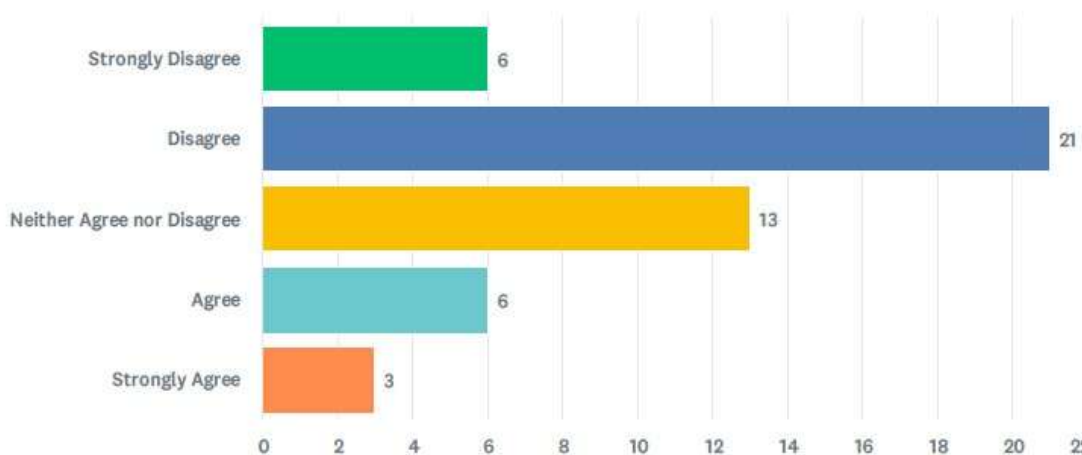
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	8.16%	14.29%	28.57%	36.73%	12.24%	49	0.00
	4	7	14	18	6		

Q8 Medical responses are over tasking the service's response capacity.

Answered: 49 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	12.24%	42.86%	26.53%	12.24%	6.12%	49	0.00
	6	21	13	6	3		

Q9 Your fire service experiences a high rate of turnover.

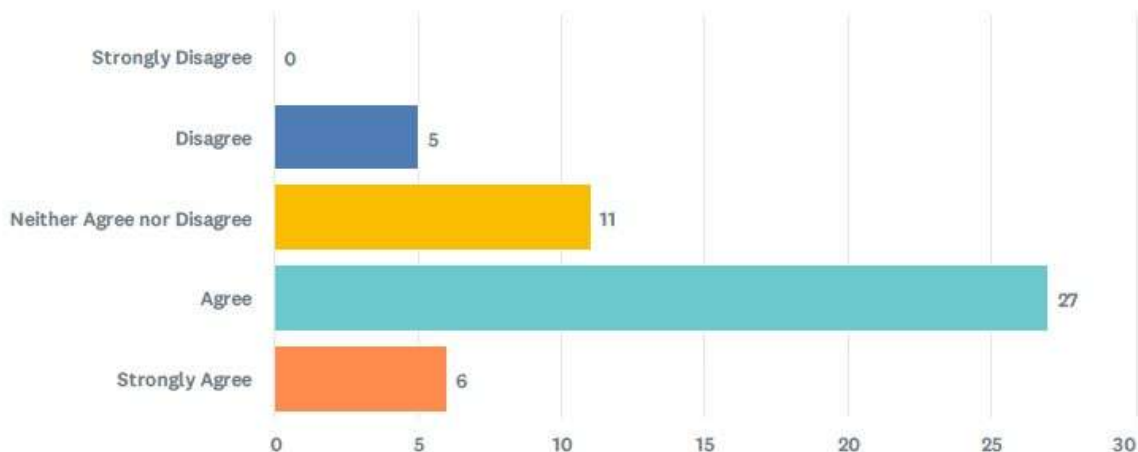
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	14.29% 7	55.10% 27	22.45% 11	6.12% 3	2.04% 1	49	0.00

Q10 Your current recruiting program is effective.

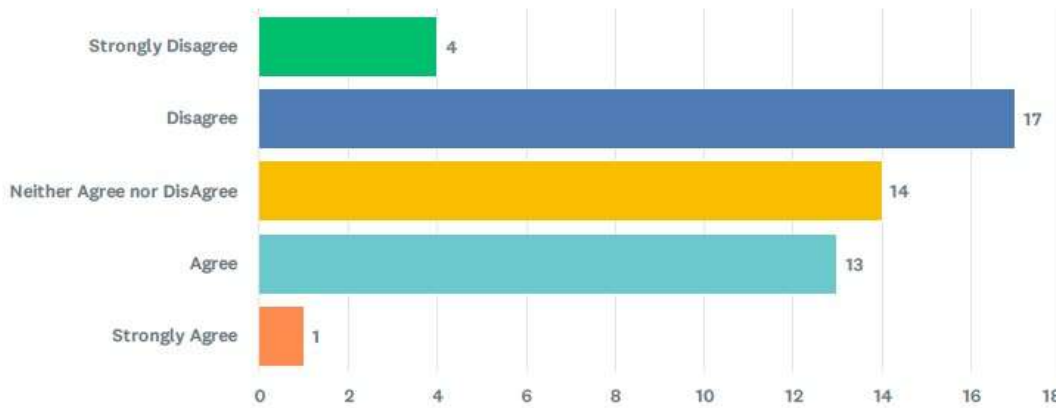
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00% 0	10.20% 5	22.45% 11	55.10% 27	12.24% 6	49	0.00

Q11 The current level of live-fire and specialty team training is adequate for the services provided.

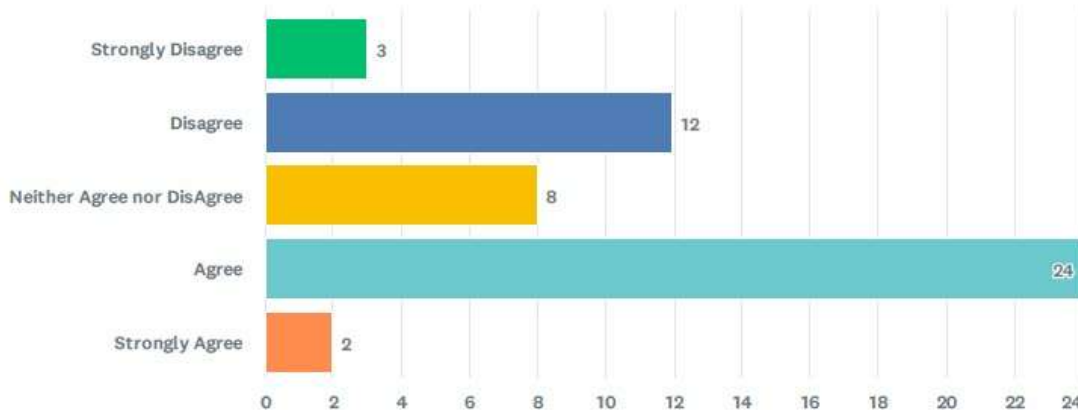
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	8.16% 4	34.69% 17	28.57% 14	26.53% 13	2.04% 1	49	0.00

Q12 The current level of theoretical fire/rescue or leadership training you receive is adequate.

Answered: 49 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	6.12% 3	24.49% 12	16.33% 8	48.98% 24	4.08% 2	49	0.00

Q13 You receive adequate training to maintain competencies and certifications.

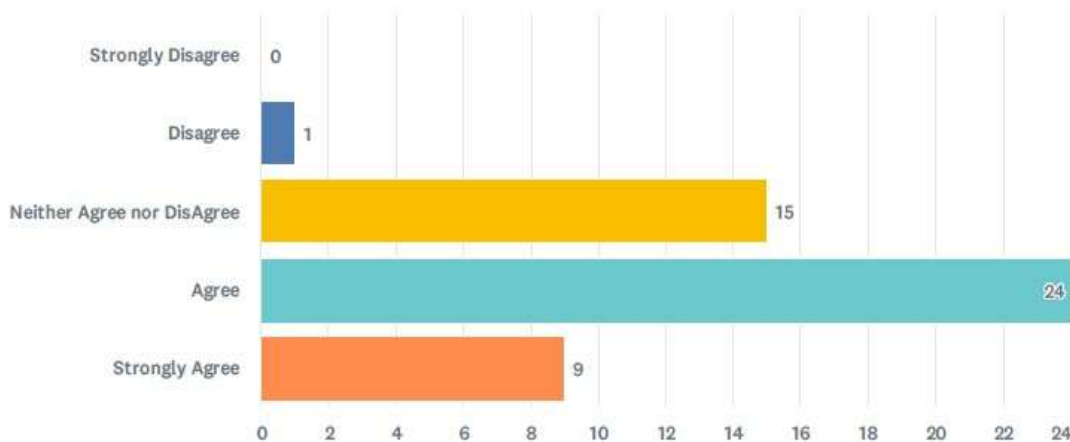
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	2.04%	8.16%	18.37%	61.22%	10.20%	49	0.00
	1	4	9	30	5		

Q14 Recruits are adequately trained before they are assigned to full duty.

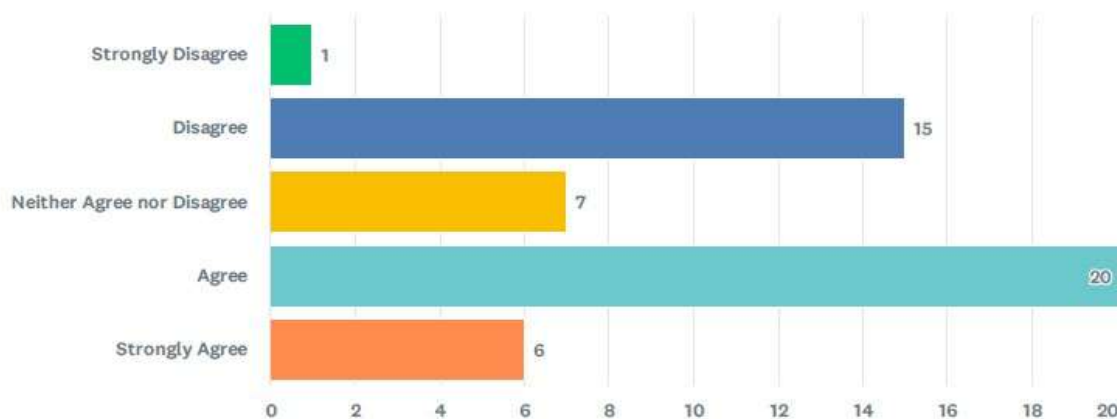
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00%	2.04%	30.61%	48.98%	18.37%	49	0.00
	0	1	15	24	9		

Q15 The current fire station(s) is functional and meet the operational requirements of the department.

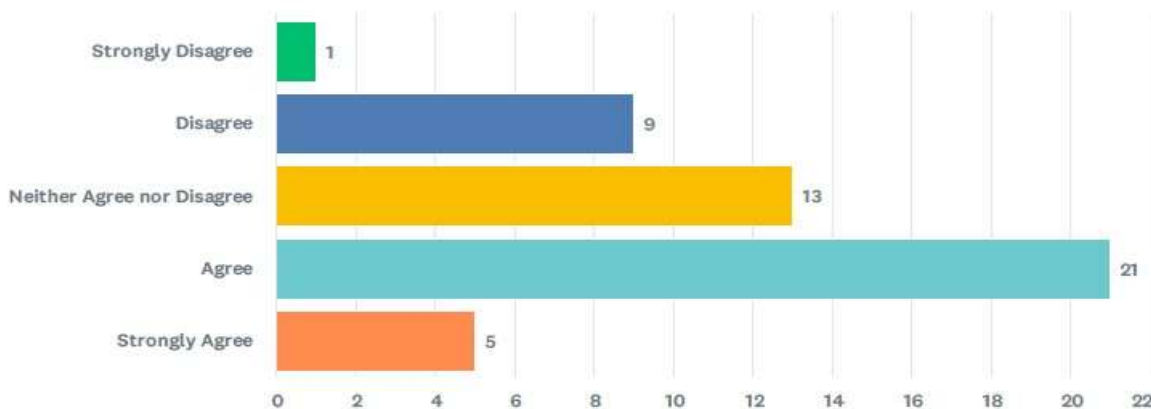
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	2.04%	30.61%	14.29%	40.82%	12.24%	49	0.00
	1	15	7	20	6		

Q16 The current fire station(s) is strategically located for adequate geographic coverage.

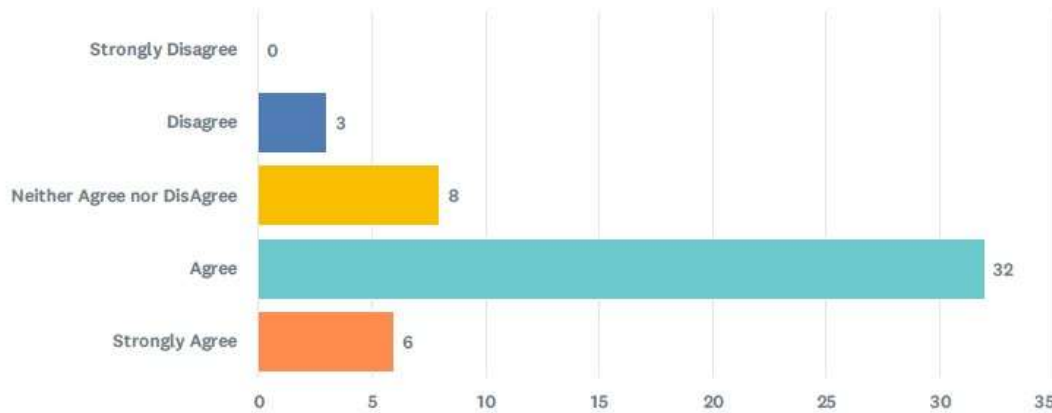
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	2.04%	18.37%	26.53%	42.86%	10.20%	49	0.00
	1	9	13	21	5		

Q17 The service is adequately resourced with small equipment (i.e. SCBA, light duty vehicles, loose equipment and consumables).

Answered: 49 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00%	6.12%	16.33%	65.31%	12.24%	49	0.00
	0	3	8	32	6		

Q18 The current vehicle fleet of fire apparatus provides the capacity/capability necessary to meet the demands and types of responses.

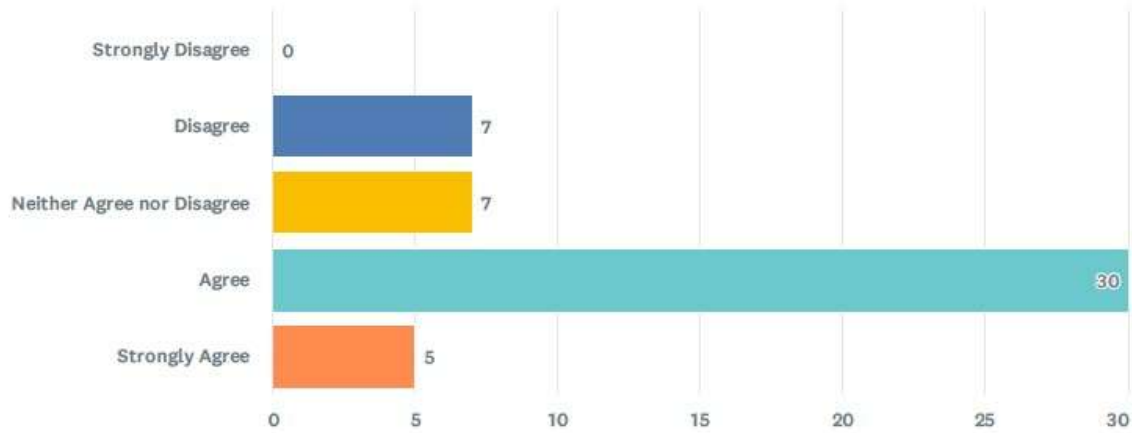
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00%	8.16%	16.33%	61.22%	14.29%	49	0.00
	0	4	8	30	7		

Q19 Fire apparatus are appropriately life-cycled.

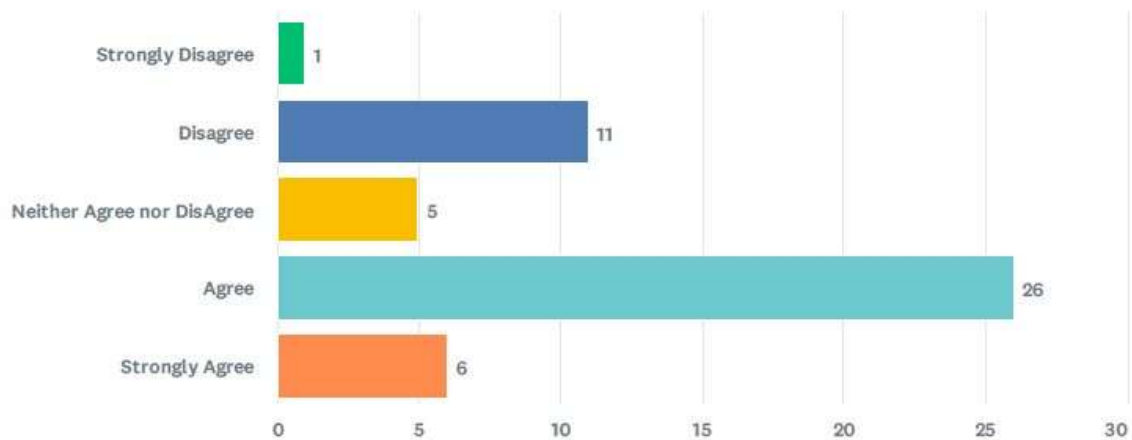
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	0.00%	14.29%	14.29%	61.22%	10.20%	49	0.00
	0	7	7	30	5		

Q20 The maintenance of fire apparatus is adequate.

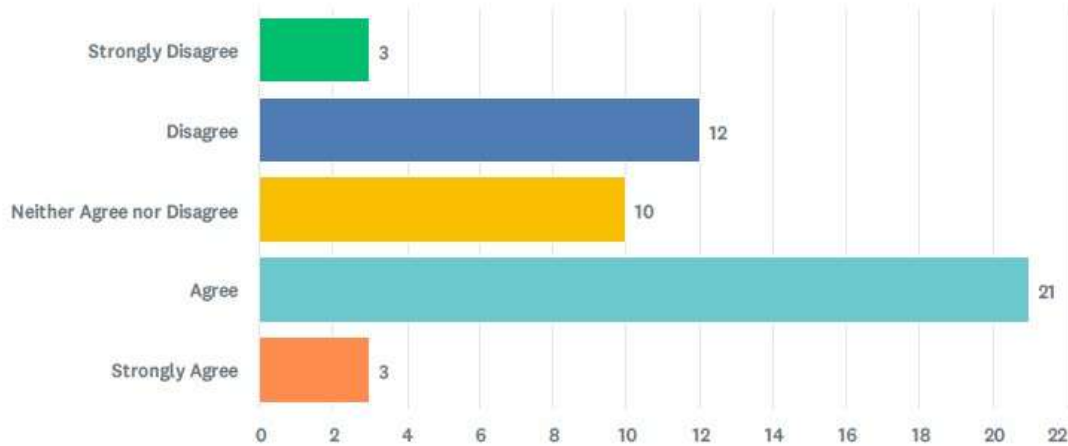
Answered: 49 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	2.04%	22.45%	10.20%	53.06%	12.24%	49	0.00
	1	11	5	26	6		

Q21 The service keeps pace with technology in communications systems.

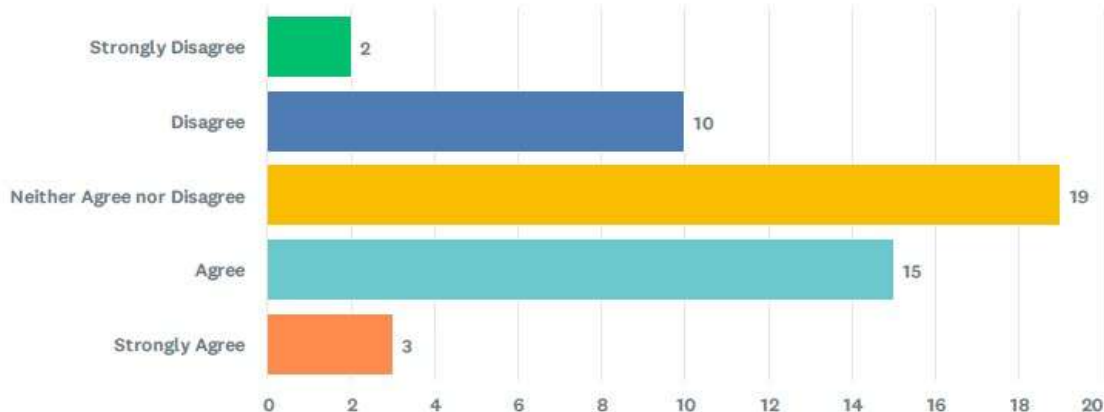
Answered: 49 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	6.12% 3	24.49% 12	20.41% 10	42.86% 21	6.12% 3	49	0.00

Q22 The service keeps pace with technology in records management system and mobile CAD systems.

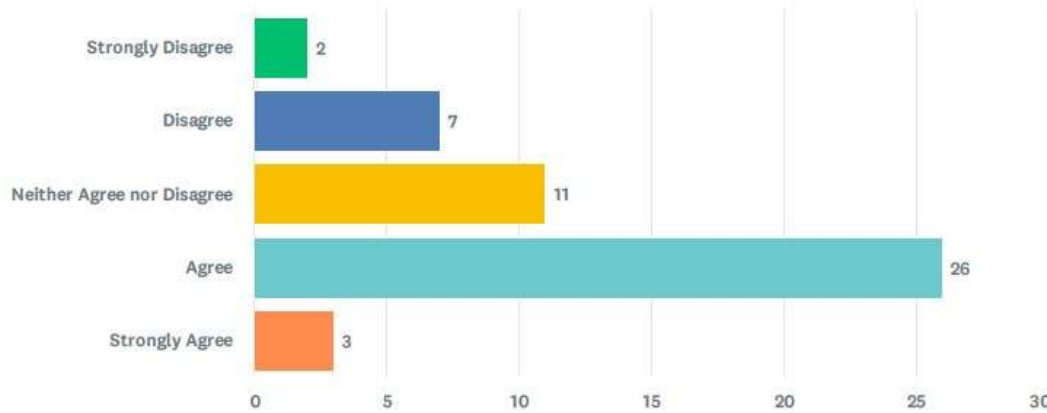
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	4.08% 2	20.41% 10	38.78% 19	30.61% 15	6.12% 3	49	0.00

Q23 The service keeps pace with technology in station alerting and pre-alerting.

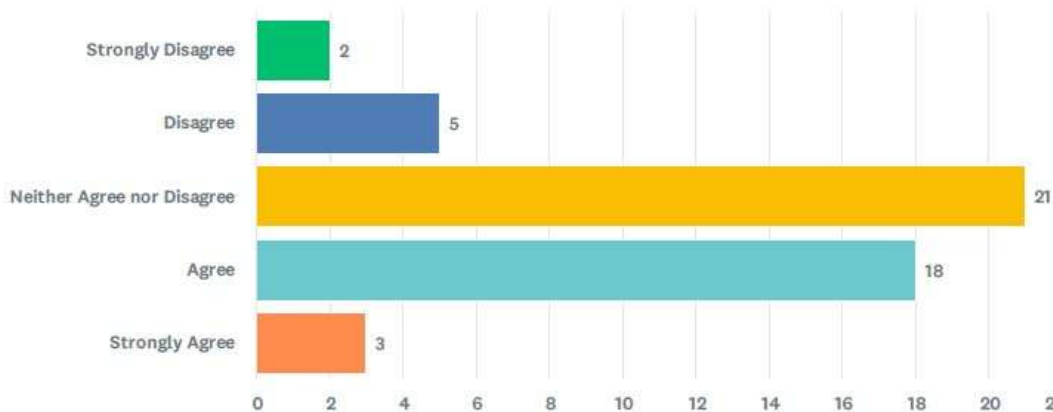
Answered: 49 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	4.08%	14.29%	22.45%	53.06%	6.12%	49	0.00
	2	7	11	26	3		

Q24 The service keeps pace with technology in records management and fire reporting systems.

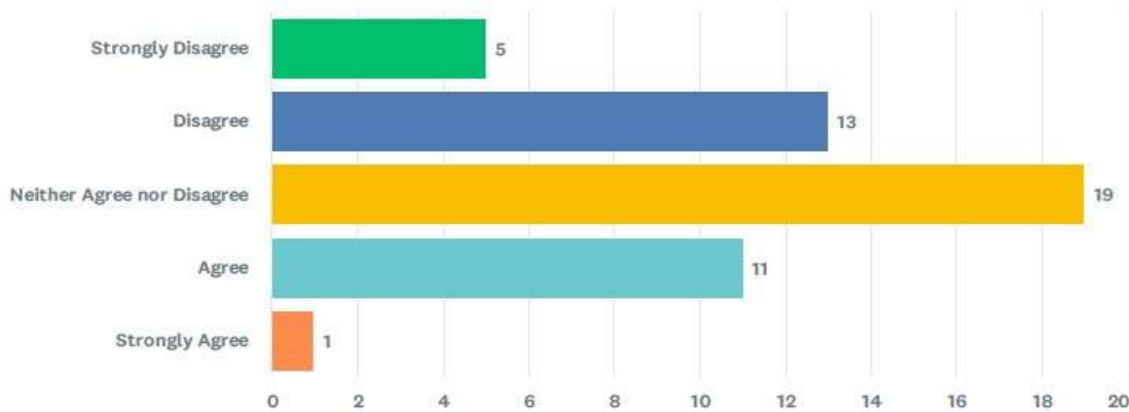
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	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	4.08%	10.20%	42.86%	36.73%	6.12%	49	0.00
	2	5	21	18	3		

Q25 The service keeps pace with technology in online learning management systems (LMS).

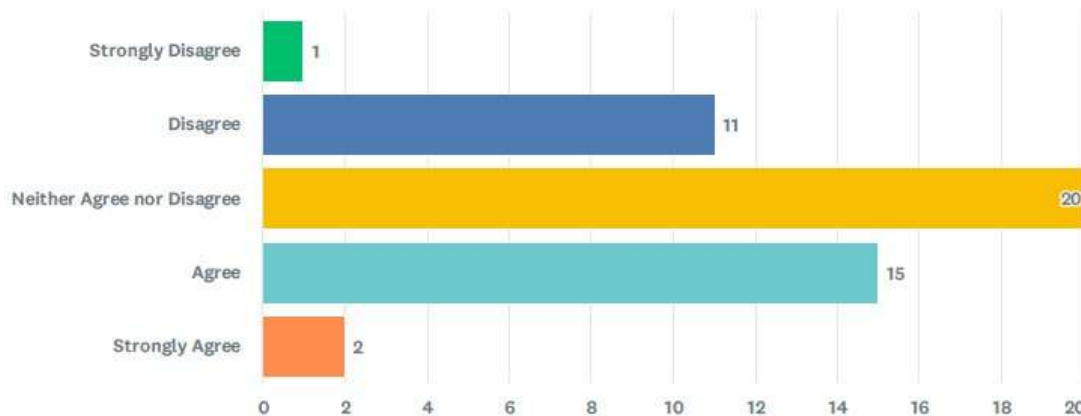
Answered: 49 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	10.20%	26.53%	38.78%	22.45%	2.04%	49	0.00
	5	13	19	11	1		

Q26 The service keeps pace with technology for the traffic pre-emption system.

Answered: 49 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
☆	2.04%	22.45%	40.82%	30.61%	4.08%	49	0.00
	1	11	20	15	2		

Appendix F: Mandatory Certification for Fire Protection Services

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
1	Firefighter Exterior Attack: Fire suppression operations from the exterior of the building only.	The following job performance requirements of NFPA 1001, “Standard for Fire Fighter Professional Qualifications”, 2019 Edition, Chapter 4 (Firefighter I) and Chapter 5 (Firefighter II): 4.1, 4.2, 4.3.1, 4.3.2, 4.3.3, 4.3.6, 4.3.7, 4.3.8, 4.3.10 (A1-A9, B1-B3, B4 (exterior stairway), B5-B10), 4.3.15, 4.3.16, 4.3.17, 4.3.18, 4.3.19, 4.3.20, 4.3.21, 4.5 5.1, 5.2, 5.3.1, 5.3.2 (A1-A4), 5.3.3, 5.3.4, 5.4.2, 5.5.3, 5.5.4, 5.5.5	July 1, 2026
2	Firefighter Exterior Attack and auto extrication: Fire suppression operations from the exterior of the building only and auto extrication rescue.	All job performance requirements in item 1 and the following job performance requirements of NFPA 1001, “Standard for Fire Fighter Professional Qualifications”, 2019 Edition, Chapter 5 (Firefighter II): 5.4.1	July 1, 2026

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
3	Firefighter Exterior Attack and hazardous materials response: Fire suppression operations from the exterior of the building only and Operations-level hazardous materials response.	All job performance requirements in item 1, all job performance requirements of NFPA 1072, “Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications”, 2017 Edition, Chapter 5 (Operations), and the following job performance requirements of Chapter 6 (Operations Mission Specific): 6.2 and 6.6	July 1, 2026
4	Firefighter Exterior Attack, auto extrication, and hazardous materials response: Fire suppression operations from the exterior of the building only, automobile extrication rescue and Operations-level hazardous materials response.	All job performance requirements in items 1, 2 and 3.	July 1, 2026
5	Firefighter Interior Attack: Fire suppression operations that enter the interior of the building and can perform rescue.	All job performance requirements in item 1 and the following job performance requirements of NFPA 1001, “Standard for Fire Fighter Professional Qualifications”, 2019 Edition, Chapter 4 (Firefighter I) and Chapter 5 (Firefighter II): 4.3.4, 4.3.9, 4.3.10 (A10-A11, B4 (interior stairway), B11), 4.3.11, 4.3.12, 4.3.13, 4.3.14 5.3.2 (A5-A9, B1-B6)	July 1, 2026

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
6	Firefighter Interior Attack and auto extrication: Fire suppression operations that enter the interior of the building and can perform rescue and automobile extrication rescue.	All job performance requirements in item 5 and the following job performance requirements of NFPA 1001, “Standard for Fire Fighter Professional Qualifications”, 2019 Edition, Chapter 5 (Firefighter II): 5.4.1	July 1, 2026
7	Firefighter Interior Attack and hazardous materials response: Fire suppression operations that enter the interior of the building and Operations-level hazardous materials response.	All job performance requirements in item 5, all job performance requirements of NFPA 1072, “Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications”, 2017 Edition, Chapter 5 (Operations) and the following job performance requirements of Chapter 6 (Operations Mission Specific): 6.2 and 6.6	July 1, 2026
8	Firefighter Interior Attack, auto extrication, and hazardous materials response: Fire suppression operations that enter the interior of the building and can perform rescue, automobile extrication rescue, and Operations-level hazardous materials response (full-service firefighter).	All job performance requirements of NFPA 1001, “Standard for Fire Fighter Professional Qualifications”, 2019 Edition, Chapter 5 (Firefighter II).	July 1, 2026
9	Team Lead Exterior Attack: Supervision of firefighters that provide fire suppression operations from the exterior of the building only.	All job performance requirements in item 1 and the following job performance requirements of NFPA 1021, “Standard for Fire Officer Professional Qualifications”, 2020 edition, Chapter 4 (Fire Officer I): 4.1.1, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.4.1, 4.4.2, 4.4.4, 4.4.5, 4.5.3, 4.6, 4.7.1, 4.7.3	July 1, 2026

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
10	Team Lead Exterior Attack and auto extrication: Supervision of firefighters that provide fire suppression operations from the exterior of the building only or that provide auto extrication rescue.	All job performance requirements in item 2 and the following job performance requirements of NFPA 1021, “Standard for Fire Officer Professional Qualifications”, 2020 edition, Chapter 4 (Fire Officer I): 4.1.1, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.4.1, 4.4.2, 4.4.4, 4.4.5, 4.5.3, 4.6, 4.7.1, 4.7.3	July 1, 2026
11	Team Lead Exterior Attack and hazardous materials response: Supervision of firefighters that provide fire suppression operations from the exterior of the building only or that provide Operations-level hazardous materials response.	All job performance requirements in item 3 and the following job performance requirements of NFPA 1021, “Standard for Fire Officer Professional Qualifications”, 2020 edition, Chapter 4 (Fire Officer I): 4.1.1, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.4.1, 4.4.2, 4.4.4, 4.4.5, 4.5.3, 4.6, 4.7.1, 4.7.3	July 1, 2026
12	Team Lead Exterior Attack, auto extrication, and hazardous materials: Supervision of firefighters that provide fire suppression operations from the exterior of the building only or that provide automobile extrication rescue or Operations-level hazardous materials response.	All job performance requirements in item 4, and the following job performance requirements of NFPA 1021, “Standard for Fire Officer Professional Qualifications”, 2020 edition, Chapter 4 (Fire Officer I): 4.1.1, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.4.1, 4.4.2, 4.4.4, 4.4.5, 4.5.3, 4.6, 4.7.1, 4.7.3	July 1, 2026

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
13	Team Lead Interior Attack: Supervision of firefighters that provide fire suppression operations from the interior of the building and can perform rescue.	All job performance requirements in item 5 and the following job performance requirements of NFPA 1021, “Standard for Fire Officer Professional Qualifications”, 2020 edition, Chapter 4 (Fire Officer I): 4.1.1, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.4.1, 4.4.2, 4.4.4, 4.4.5, 4.5.3, 4.6, 4.7.1, 4.7.3	July 1, 2026
14	Team Lead Interior Attack and auto extrication: Supervision of firefighters that provide fire suppression operations from the interior of the building and can perform rescue or that provide automobile extrication rescue.	All job performance requirements in item 6 and the following job performance requirements of NFPA 1021, “Standard for Fire Officer Professional Qualifications”, 2020 edition, Chapter 4 (Fire Officer I): 4.1.1, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.4.1, 4.4.2, 4.4.4, 4.4.5, 4.5.3, 4.6, 4.7.1, 4.7.3	July 1, 2026
15	Team Lead Interior Attack and hazardous materials response: Supervision of firefighters that provide fire suppression operations from the interior of the building and can perform rescue or that provide Operations-level hazardous materials response.	All job performance requirements in item 7 and the following job performance requirements of NFPA 1021, “Standard for Fire Officer Professional Qualifications”, 2020 edition, Chapter 4 (Fire Officer I): 4.1.1, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.4.1, 4.4.2, 4.4.4, 4.4.5, 4.5.3, 4.6, 4.7.1, 4.7.3	July 1, 2026

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
16	Team Lead Interior Attack, auto extrication, and hazardous materials response: Supervision of firefighters that provide fire suppression operations from the interior of the building and can perform rescue or that provide automobile extrication rescue or Operations-level hazardous materials response (full-service fire officer).	All job performance requirements of NFPA 1021 “Standard for Fire Officer Professional Qualifications”, 2020 edition, Chapter 4 (Fire Officer I).	July 1, 2026
17	Pump Operations: Operation of a pumper apparatus without driving the apparatus, or where the apparatus does not require a class D licence.	All job performance requirements of NFPA 1002, “Standard for Fire Apparatus Driver/Operator Professional Qualifications”, 2017 Edition, Chapter 5 (Apparatus Equipped with Fire Pump), without pre-requisites in Chapter 4.	July 1, 2026
18	Pump Operations: driver: Driving and operating a pumper apparatus that requires a class D licence.	All job performance requirements in NFPA 1002 “Standard for Fire Apparatus Driver/Operator Professional Qualifications”, 2017 Edition, Chapter 5 (Apparatus Equipped with Fire Pump).	July 1, 2026
19	Fire Prevention/Inspection Level I: conducting fire and life safety inspections.	All job performance requirements of NFPA 1031, “Standard for Professional Qualifications for Fire Inspector and Plan Examiner”, 2014 Edition, Chapter 4 (Fire Inspector I).	July 1, 2026
20	Fire Prevention/Inspection Level II: conducting fire and life safety inspections including in facilities that store, handle or use flammable/combustible liquids.	All job performance requirements in item 19 and NFPA 1031, “Standard for Professional Qualifications for Fire Inspector and Plan Examiner”, 2014 Edition, Chapter 5 (Fire Inspector II).	July 1, 2026
21	Fire Investigator: conducting fire cause and origin investigations.	All job performance requirements of NFPA 1033, “Professional Qualifications for Fire Investigator”, 2014 Edition, Chapter 4 (Fire Investigator).	July 1, 2026

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
22	Fire and Life Safety Educator: providing fire and life safety education.	All job performance requirements of NFPA 1035, “Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist, and Youth Firesetter Program Manager Professional Qualifications”, 2015 Edition, Chapter 4 (Fire and Life Safety Educator I).	July 1, 2026
23	Training Officer Level I: providing training and education to other fire personnel.	All job performance requirements of NFPA 1041, “Standard for Fire and Emergency Services Instructor Professional Qualifications”, 2019 Edition, Chapter 4 (Fire and Emergency Services Instructor I).	July 1, 2026
24	Training Officer Level II: providing training and education to other fire personnel including lead instructor roles at live fire and above or below grades technical rescue practical training.	All job performance requirements in item 23 and NFPA 1041, “Standard for Fire and Emergency Services Instructor Professional Qualifications”, 2019 Edition, Chapter 5 (Fire and Emergency Services Instructor II).	July 1, 2026
25	Emergency Communicators Level I: taking emergency calls.	All job performance requirements of NFPA 1061, “Standard for Public Safety Telecommunications Personnel Professional Qualifications”, 2018 Edition, Chapter 4 (Public Safety Telecommunicator I).	July 1, 2026
26	Emergency Communicators Level II: taking emergency calls and dispatching emergency vehicles.	All job performance requirements in item 25 and NFPA 1061, “Standard for Public Safety Telecommunications Personnel Professional Qualifications”, 2018 Edition, Chapter 5 (Public Safety Telecommunicator II).	July 1, 2026
27	Incident Safety Officers: undertaking the primary role of incident safety officer at emergency calls.	All job performance requirements of NFPA 1521, “Standard for Fire Department Safety Officer Professional Qualifications”, 2020 Edition, Chapter 5 (Incident Safety Officer).	July 1, 2026

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
28	Hazardous Materials Response — Operations Mission Specific Level: responding to emergencies involving hazardous materials at the Operations Mission Specific Level.	All job performance requirements of NFPA 1072, “Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications”, 2017 Edition, Chapter 6 (Operations Mission Specific)	July 1, 2026
29	Hazardous Materials Response — Technician Level: responding to emergencies involving hazardous materials at the Technician Level.	All job performance requirements of NFPA 1072, “Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications”, 2017 Edition, Chapter 7 (Hazardous Materials Technician).	July 1, 2026
30	Rope Rescue — Operations: rope rescue at the Operations Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 5 (Rope Rescue) (Operations): 5.2	July 1, 2028
31	Rope Rescue — Technician: rope rescue at the Technician Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 5 (Rope Rescue) (Technician): 5.3	July 1, 2028
32	Structural Collapse — Operations: structural collapse rescue at the Operations Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 6 (Structural Collapse Rescue) (Operations): 6.2	July 1, 2028



Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
33	Structural Collapse — Technician: structural collapse rescue at the Technician Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 6 (Structural Collapse Rescue) (Technician): 6.3	July 1, 2028
34	Confined Space — Operations: confined space rescue at the Operations Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 7 (Confined Space Rescue) (Operations): 7.2	July 1, 2028
35	Confined Space — Technician: confined space rescue at the Technician Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 7 (Confined Space Rescue) (Technician): 7.3	July 1, 2028
36	Trench Rescue — Operations: trench rescue at the Operations Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 12 (Trench Rescue) (Operations): 12.2	July 1, 2028

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
37	Trench Rescue — Technician: trench rescue at the Technician Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 12 (Trench Rescue) (Technician): 12.3	July 1, 2028
38	Surface Water Rescue — Operations: surface water rescue at the Operations Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 17 (Surface Water Rescue) (Operations): 17.2	July 1, 2028
39	Surface Water Rescue — Technician: surface water rescue at the Technician Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 17 (Surface Water Rescue) (Technician): 17.3	July 1, 2028
40	Swift Water Rescue — Operations: swift water rescue at the Operations Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 18 (Swiftwater Rescue) (Operations): 18.2	July 1, 2028

Item	Fire protection service	Minimum Certification Standard	Compliance Deadline
41	Swift Water Rescue — Technician: swift water rescue at the Technician Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 18 (Swiftwater Rescue) (Technician): 18.3	July 1, 2028
42	Ice Water Rescue — Operations: ice water rescue at the Operations Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 20 (Ice Rescue) (Operations): 20.2	July 1, 2028
43	Ice Water Rescue — Technician: ice water rescue at the Technician Level.	The following job performance requirements of NFPA 1006, “Standard for Technical Rescue Personnel Professional Qualifications”, 2021 Edition, Chapter 20 (Ice Rescue) (Technician): 20.3	July 1, 2028