# Township of Douro-Dummer
# Agenda for a Special Meeting of Council

**Tuesday, October 1, 2024, 4:00 p.m.**
**Council Chambers in the Municipal Building**

**Please note**, that Council may, by general consensus, change the order of the agenda, without prior notification, in order to expedite the efficiency of conducting business

**Hybrid Meetings**

Regular and Special meetings of Council are being held in person and electronically. Regular Meetings are recorded and live-streamed on the Township YouTube channel. Special Meetings will be recorded and live-streamed where feasible.

To watch the meeting live or access a recording please visit the Township's YouTube Channel https://www.youtube.com/channel/UCPpzm-uRBZRDjB89o2X6R_A

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**Pages**

1. **Reason(s) for Special Meeting:**

   To allow sufficient time for the presentation of the Fire Master Plan and Community Risk Assessment.

2. **Land Acknowledgement**

3. **Disclosure of Pecuniary Interest:**

4. **Adoption of Agenda: October 1, 2024**

5. **Delegations, Petitions or Presentations:**

   5.1 **Presentation - Richard Boyes, Brian Durdin, Sue Dawson, Brad Bigrigg from the Emergency Services Strategy and Solutions Inc.- Township of Douro-Dummer Fire Master Plan and Community Risk Assessment** 1

6. **Adjournment**

# Township of Douro-Dummer
# Fire Master Plan

August 30, 2024

ESSSi
Emergency Services Strategy and Solutions Inc.
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Corunna, Ontario N0N1G0
esssi.ca

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## Contents

## Executive Summary

Emergency Services Strategy and Solutions Inc. (ESSSi) conducted a comprehensive Community Risk Assessment (CRA) and Fire Master Plan (FMP) for the Township of Douro-Dummer. While the CRA focuses on identifying fire risks within the community, the FMP serves as its companion document, evaluating Douro-Dummer's current fire services and outlining a strategic vision for future enhancements.

The overarching goal of the Fire Master Plan is to provide a holistic and detailed overview of how the Douro-Dummer Fire Department meets the community's needs. This document addresses both the current and future requirements of the firefighters and the municipality, ensuring a thorough and forward-looking evaluation of existing services.

By formulating the Fire Master Plan, the Township of Douro-Dummer is thoroughly scrutinizing all aspects of its fire service. This comprehensive analysis encompasses all operations, potential enhancements, and strategic recommendations for improvement. Any recommendations from the plan will be addressed during the annual budget cycle, tailored to the municipality's specific needs and circumstances, ensuring a pragmatic and sustainable approach to implementation.

Upon adoption of the plan, the next phase involves the execution of the outlined recommendations, contingent on Douro-Dummer's resources and capacity to proceed. The Fire Master Plan serves as a strategic roadmap for the fire service, guiding efforts to meet the municipality's evolving needs, enhance the safety of residents, and ensure the well-being of visitors.

The ESSSi team, comprised of seasoned experts in fire services, brought extensive knowledge and experience to this project. Their collective expertise ensured a comprehensive and insightful assessment, culminating in a robust plan that positions the Douro-Dummer Fire Department for future success.

ESSSi Team:
Richard Boyes, President, Emergency Services Strategy and Solutions Inc.
A seasoned leader with extensive experience in fire services, Richard Boyes, has a distinguished career marked by strategic vision and operational excellence. His leadership has been instrumental in steering this project to success.

Brian Durdin, Fire Service Project Lead
With a deep understanding of fire service operations and project management, Brian Durdin has been pivotal in leading the project team. His expertise ensures that the strategic recommendations are both practical and impactful.

Sue Dawson, Fire Service Consultant
A highly regarded consultant in fire services, Sue Dawson brings a wealth of knowledge in fire safety, risk assessment, and emergency response strategies. Her insights have significantly enriched the Fire Master Plan.

Brad Bigrigg, Fire Service Consultant
Brad's comprehensive background in fire service consulting adds a critical dimension to the project. His focus on innovative solutions and best practices ensures that the plan is aligned with modern fire service standards.

The Fire Master Plan is a living document designed to evolve with the community it serves. Annual reviews and major assessments every five years will ensure its ongoing relevance, addressing new risks and adapting to changing circumstances. This proactive and dynamic approach will enable Douro-Dummer to maintain high standards of fire protection and emergency response, safeguarding the community for years to come.

# Table of Recommendations Summary by Section

**Policies, Procedures and Guidelines**



**Communications**

**Public Education and Fire Prevention**



**Firefighter Training**

**Succession Planning**



**Suppression**

**Facilities**



**Fleet**

**Respiratory Protection**



**Emergency Management**



# Recommendation Timelines

ESSSi has formulated the following timelines, drawing upon the wealth of information and data collected throughout the FMP process. However, it is essential to underscore that the municipality retains full autonomy to modify these timelines in alignment with the strategic priorities as determined by Council.

In the context provided, short-term denotes a duration spanning one to three years, typically focusing on immediate goals and objectives. Mid-term, on the other hand, encompasses a timeframe extending from three to six years, allowing for more medium-range planning and implementation of strategies. Lastly, long-term refers to periods exceeding six years, affording ample opportunity for comprehensive planning, foresight, and the execution of sustained initiatives aimed at achieving enduring outcomes.

The timeline is shown at the end of each recommendation.

# Acronyms

| | |
|---|---|
| AA | Administrative Assistant |
| APP | Software Application |
| CAO | Chief Administrative Officer |
| CACC | Central Ambulance Communications Centre |
| CEMC | Community Emergency Management Coordinator |
| CO | Carbon Monoxide |
| DC | Deputy Fire Chief |
| E&R Bylaw | Establishing & Regulating Bylaw |
| EOC | Emergency Operations Centre |
| ESSSi | Emergency Services Strategy and Solutions Inc. |
| FF I & II | Firefighter I & II |
| FPPA | Fire Protection and Prevention Act |
| FPPEO | Fire Prevention Public Education Officer |
| FPA | Fire Protection Agreement |
| FMP | Fire Master Plan |
| FTE | Full-Time Equivalent |
| FUS | Fire Underwriters' Survey |
| KPIs | Key Performance Indicators |
| MOH | Ministry of Health |
| MVC | Multiple Vehicle Collision |
| NFPA | National Fire Protection Association |
| NFPA Pro Qual | National Fire Protection Association Professional Qualifications |
| NG911 | Next Generation 911 |
| OBC | Ontario Building Code |
| OFM | Office of the Fire Marshal |
| OH&S | Occupational Health and Safety |
| O'Reg. | Ontario Regulation |
| RMS | Records Management Software |
| SIR | Standard Incident Report |
| SCBA | Self-Contained Breathing Apparatus |
| SOG | Standard Operation Guideline |
| SOP | Standard Operating Procedure |

## Scope

Douro-Dummer, a community steeped in history and natural beauty, has embarked on a transformative journey to bolster its fire services and community safety. Recognized for its idyllic setting amidst rolling hills and vibrant waterways, this rural township has experienced a steady influx of new residents and businesses, driven by its serene environment and the promise of a peaceful lifestyle.

In response to this growth, the Douro-Dummer Council, with a vision for sustainable development and a commitment to resident safety, allocated funds in the 2023 municipal budget for a pivotal project: the creation of a Fire Master Plan and Community Risk Assessment. This strategic initiative reflects the Council's proactive approach to governance and its dedication to enhancing the quality of life within the township.

The development of the Fire Master Plan and the accompanying risk assessment are more than administrative tasks; they are critical steps forward in ensuring that the township's fire services are well-prepared and adequately resourced to meet current and future demands. Through these efforts, Douro-Dummer is not only addressing today's needs but is also laying the groundwork for a future where community safety and resilience are at the forefront, ensuring a safer, more secure environment for all its inhabitants.

Emergency Services Strategy and Solutions Inc. (ESSSi) was commissioned to develop a comprehensive Fire Master Plan (FMP) for the Township of Douro-Dummer. The objective was to assess the current state of their fire services and anticipate future needs, considering the township's growth over the next decade until 2034.
The FMP covered various aspects of the Fire Department, including Administration, Communications, Public Education and Fire Prevention, Training, Suppression, Facilities, and Fleet. Its development involved a multi-streamed approach, integrating insights from the Community Risk Assessment, Ontario Fire Marshal (OFM) guidelines, industry standards, best practices, interviews, and documentation from the Douro-Dummer Fire Department.

# Introduction

Douro-Dummer Township, located in Peterborough County, Ontario, was formed on January 1, 1998, through the amalgamation of the former townships of Douro and Dummer. This merger brought together these historically rich areas into a single administrative unit.

The Township of Douro, originally established as a settlement in the early 19th century, has a history deeply rooted in agriculture and rural development. The area was first settled by Irish immigrants, who named it after the Douro River in Portugal, and over the years, it developed a strong community spirit centred around farming and local commerce.

Dummer Township also has a significant history, with early European settlers arriving in the 1820s. The region was known for its dense forests and challenging terrain, which early settlers gradually transformed into productive farmland.
Today, Douro-Dummer Township spans an area of 458.95 square kilometres and features a mix of rural landscapes and small communities. It maintains a rich heritage and a commitment to preserving its rural character while addressing modern needs and growth.

ESSSi conducted in-person interviews with various stakeholders from Douro-Dummer, including elected officials, municipal staff, and Fire Department personnel. Insights gathered from these interviews, along with surveys and provided documents, helped assess the current state and future needs of fire services, facilities, and equipment.

Throughout the report, ESSSi will present recommendations for Council's consideration and implementation over the duration of the Fire Master Plan (2024 – 2034).

It is essential to highlight the dedication of Douro-Dummer Fire Department staff to their community, as evidenced by the interviews conducted.

During the interviews, it became evident that the current Council and staff could benefit from an educational process regarding their responsibilities in providing fire protection services. ESSSi recommends that the Township of Douro-Dummer request the Ontario Fire Marshal's Office to conduct a Municipal Officials Essentials of Fire Protection Seminar for Council members, Senior Administration, and Fire Management to ensure they understand their obligations and liabilities in delivering public fire protection and ensuring firefighter safety. This seminar aims to educate and familiarize key decision-makers with their responsibilities related to providing fire protection services in the municipality. The training will cover essential aspects of fire safety, prevention, and protection, ensuring that municipal officials are well-informed about their obligations and liabilities in this regard. Regular attendance at such seminars can enhance the understanding of fire protection measures and contribute to effective decision-making at the municipal level.

**Recommendation 1: The Fire Chief of Douro-Dummer should formally request the Ontario Fire Marshal's Office to organize and conduct a Municipal Officials Essentials of Fire Protection Seminar for Council and senior municipal staff. (Short-Term)**

## Administration

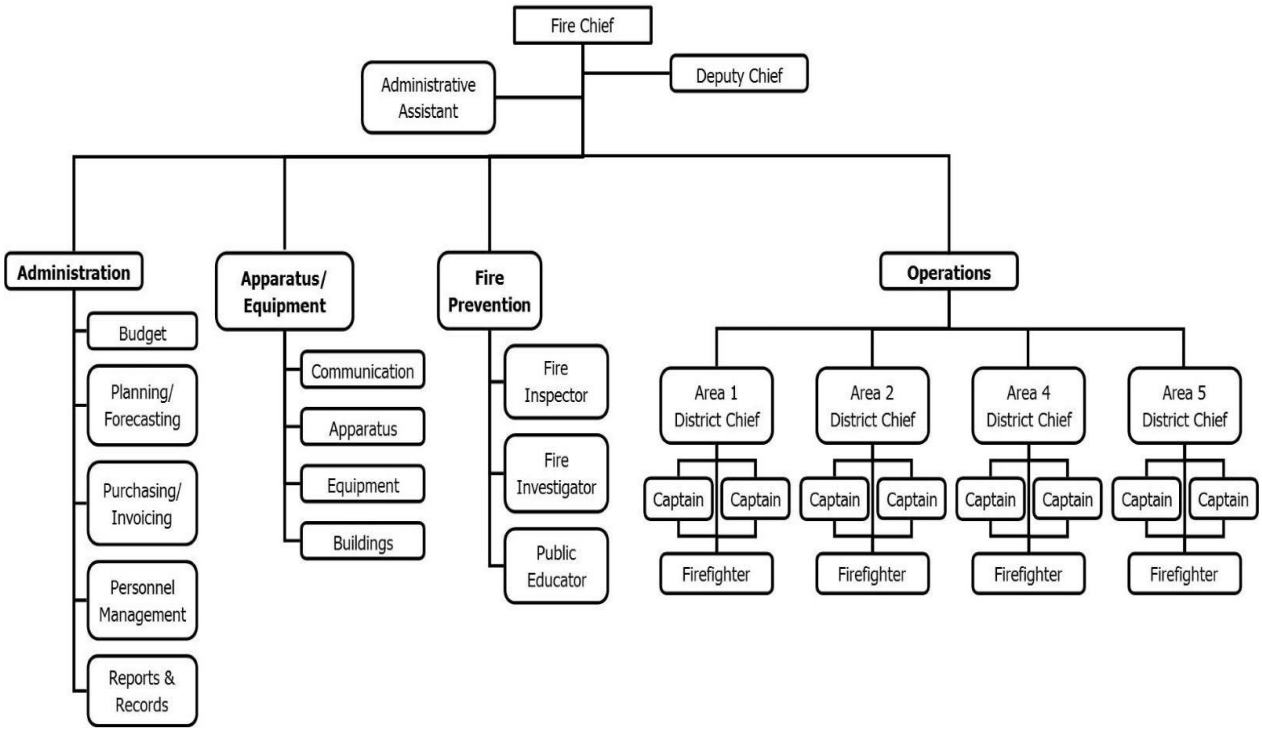
The Douro-Dummer Fire Department is led by a full-time Fire Chief, supported by a volunteer Deputy Fire Chief and an Administrative Assistant. The Fire Chief serves as the Chief Fire Official and holds ultimate accountability to the Council for the department's effective functioning. Within the department, each division operates under the authority of the Fire Chief or a designated representative, with all actions reported to the Fire Chief. Members are expected to adhere to directives issued by the Fire Chief.
The Fire Chief's ultimate responsibility lies with the Council, with reporting channels typically flowing through the Chief Administrative Officer (CAO). Over the past decade, the Province of Ontario has decentralized numerous responsibilities to municipal levels, increasing the accountability and workload for Fire Chiefs. This trend is driven by factors such as the closure of the Ontario Fire College, heightened training and certification requirements, new comprehensive community risk assessments, and the ongoing evolution of Public Fire Safety Guidelines (PFSGs). The provincial government, through the Ontario Fire Marshal's Office, continues to impose additional responsibilities on Fire and Emergency Services.

The Fire Chief bears a substantial workload, as outlined in the 2021 job description. This workload encompasses various responsibilities, including administration and human resources management, emergency response coordination, fire prevention activities including inspections, assistance with enforcement in collaboration with the Chief Building Official (CBO), acting as the County Fire Coordinator, serving as the Community Emergency Management Coordinator (CEMC), overseeing the operation of the County Rescue Team, and participating on the Board of Eastern Ontario Emergency Training Academy. All fire department personnel ultimately report to the Fire Chief, as shown in the Organization Chart below.

Schedule "C"

**Fire Services Organizational Chart**

Fire services roster will aim to maintain 15 firefighters per station including Captains and District Chiefs. Overall roster shall not exceed 67 unless *approved*.




Similarly, the Deputy Chief, as outlined in the 2019 job description, plays a crucial role in assisting with management duties, focusing on training initiatives, and progressing through courses for Fire Prevention certification. In addition to receiving an honorarium and compensation for other duties, the Deputy Chief significantly contributes to the operational effectiveness of the Fire Department.

The Administrative Assistant also shoulders a substantial and varied workload, primarily focused on fire-related tasks as outlined in the 2021 job description. This workload includes providing administrative support to the Fire Chief, managing administrative functions, serving as the Alternate Community Emergency Management Coordinator (CEMC), conducting public education initiatives, performing health and safety inspections, representing the firefighters on the OH&S Committee, and addressing OH&S complaints. Additionally, the Administrative Assistant is available as a firefighter during daytime hours with permission from the Fire Chief.

Consideration should be given to the establishment of a Health & Safety committee within the Fire Department. While firefighters currently perceive the Administrative Assistant (AA) as the management representative for health and safety matters, the creation of a dedicated committee can provide a structured platform for addressing health and safety concerns, conducting regular assessments, and implementing proactive measures to ensure the well-being of firefighters. Additionally, consistent communication and information dissemination regarding health and safety protocols should be facilitated through the establishment of a Health & Safety board within the department. This board

can serve as a centralized resource for accessing relevant information and promoting a culture of safety among firefighters.

Given the continuous transfer of responsibilities and recent changes in the fire service landscape, there is an ongoing need for additional support within the department. This includes addressing the continuing download of responsibilities from the Province of Ontario to the municipality, meeting increased organizational documentation requirements, and ensuring that the Fire Department can effectively manage present and future operations.

To optimize the efficiency and effectiveness of the Fire Chief's role, a review should be conducted to identify tasks that can be delegated to the Deputy Fire Chief. This will allow the Fire Chief to concentrate on core responsibilities, strategic planning, and leadership, ensuring a focused and strategic approach to fire service management. Important decisions regarding the management structure of the department must be made to address these challenges and ensure its continued effectiveness.

**Recommendation 2: The Township of Douro-Dummer should enhance the fire management team by establishing a part-time Deputy Chief position, working defined hours every week. This additional role will provide essential support to the Fire Chief and contribute to the overall effectiveness and efficiency of the Fire Department. (Short-Term)**

**Recommendation 3: The Fire Chief conduct a yearly review of the job functions of the Deputy Chief. Based on this review, additional hours and responsibilities should be considered for the Deputy Chief position as necessary. (Short-Term)**

**Recommendation 4: The Fire Department should establish a Health & Safety committee to address health and safety concerns and promote a culture of safety among firefighters. (Short-Term)**

## Information Management

The administrative responsibilities of modern Fire and Emergency Services have expanded significantly, necessitating an increased reliance on software and electronic record-keeping. Douro-Dummer Fire Department has demonstrated commendable progress by adopting FirePro, a software solution designed to streamline administrative functions and provide customization tailored to the needs of each Fire and Emergency Service.

There are potential opportunities to enhance efficiency further by integrating FirePro with other municipal departments or corporate software. This integration can maximize the effective use of the data collected, thereby improving operational effectiveness and resource allocation.

Maintaining updated and accessible data is crucial for determining the future needs of the Fire and Emergency Services and minimizing liability exposure for the municipality. Adopting best practices, ensuring business continuity, and meeting modern records

management standards involve formally documenting practices, procedures, and information for both administrative and operational processes.

To align with the Township of Douro-Dummer records management practices, it is recommended that documentation be electronically captured in a standardized manner. Regular reviews and amendments of these processes should be conducted annually to ensure that they remain current and effective. Two examples would be to ensure that the fire department's Asset Management Programs (AMP) are in alignment with the municipal AMP as required by the Province and the municipal Record Retention Policies.

Mission-critical tasks integral to the Fire and Emergency Services operation are embedded within administrative procedures, outlining daily, monthly, quarterly, and yearly duties along with their corresponding completion methods.

Currently, the Fire Chief manages these responsibilities with support from the Deputy Chief and Administrative Assistant. However, recognizing the growing complexity of administrative tasks, there is a recognized need for additional assistance to manage these processes and day-to-day tasks effectively.

**Recommendation 5: Establish a formal process for electronically capturing data to meet municipal records management practices. This will ensure efficient data management, enhance organizational effectiveness, and support the long-term operational success of the Douro-Dummer Fire Department. (Short-Term)**

# By-laws

## Establishing & Regulating By-law

Douro-Dummer's E&R By-law is an extensive document covering most aspects of what a modern E&R By-law should reflect for best practice.

However, several significant changes have occurred in the fire service, with the most recent being Ontario Regulation 343/22 (O/Reg. 343/22), which outlines the required training and certification of firefighters for specific disciplines as approved by the Council's levels of service. The E&R By-law should serve as the foundation for establishing service levels for the Fire department's activities. These service levels must be determined based on the municipality's ability to fund the department's training, provide necessary equipment, and perform services based on staffing availability.

The Fire Chief should prepare a comprehensive report for the Council's consideration, conducting a thorough review and update of the Establishing and Regulating (E&R) By-law (2019-28). Currently, the by-law identifies marine firefighting, farm, home, and industrial rescue as not having a specified competency. This update should accurately reflect the type of services and the specific level provided by the Douro-Dummer Fire Department, specifying the department's funded, trained, and certified capabilities. An example would be Confined Space Rescue – Awareness or Trench Rescue – Not provided. Additionally, benchmarking against the National Fire Protection Association

(NFPA) Standard 1720 for emergency response in volunteer departments is advisable to identify areas for improvement and assess whether service level changes are necessary. Regular reviews of the E&R By-law by the Council are crucial to ensure the fire service meets the community's evolving needs and circumstances. These reviews should consider the findings of the Community Risk Assessment and the recommendations outlined in the Fire Master Plan. Adjustments to service levels, if needed, should be based on a thorough analysis of the municipality's risks and capabilities.

**Recommendation 6: Update the Establishing and Regulating (E&R) By-law (2019-28) to reflect the Douro-Dummer Fire Department's capabilities and services accurately. (Short/Mid-Term)**

## User Fee By-law

As the Douro-Dummer Fire Department continues to uphold its commitment to ensuring public safety and efficient emergency response services, it becomes imperative to periodically review and adjust the user fees associated with the utilization of these vital services. The User Fee By-law 2023-62 serves as the cornerstone for outlining the financial obligations incurred by individuals and entities benefiting from the department's assistance. To maintain fairness, transparency, and fiscal responsibility, the Township must undertake a comprehensive examination of the existing fee structure. This review aims to ensure that user fees accurately reflect the operational costs, equipment maintenance expenses, and other relevant factors associated with providing fire and emergency services. By aligning the user fees with the actual costs incurred by the department, Douro-Dummer can uphold its commitment to fiscal prudence while sustaining the high-quality emergency response services essential for the welfare of its residents and stakeholders.

This update should include:

- Annual Fee Review: Conduct a yearly review of existing fees outlined in the by-laws to ensure they accurately reflect changes in operational expenses, equipment maintenance costs, and other relevant factors. Evaluating the appropriateness of the current fee structure and its alignment with the actual costs associated with providing fire and emergency services.
- Comparison with neighbouring municipalities: Comparing the fee structure with similar municipalities of comparable size to ensure competitiveness and consistency within the region. Consider adjustments to fees based on the outcomes of this comparative analysis.
- Expansion of Cost Recovery Fees: Exploring opportunities to expand the scope of cost recovery fees for services provided by the Douro-Dummer Fire Department. Identifying new services or situations where cost recovery fees may be applicable, ensuring that the fees are fair and justifiable.
- Public Consultation: Engaging in a transparent and consultative process with the public when proposing changes to fee structures, ensuring that community members are informed and have the opportunity to provide feedback.

This review will provide a fair, transparent, and sustainable fee structure, providing revenues to offset operating costs effectively.

**Recommendation 7**: **The Fire Chief prepares a comprehensive report for the Council's consideration, outlining an updated User Fees By-law that reflects the current costs associated with fire department services. (Short-Term)**

## Mutual Aid By-law

In an interconnected landscape of emergency management, mutual aid agreements stand as pivotal instruments fostering collaboration and resource sharing among municipalities to effectively address emergencies surpassing individual capacities. Within this framework, the Douro-Dummer Fire Department's participation in the Peterborough County Mutual Aid Plan exemplifies its commitment to bolstering regional resilience and response capabilities. Enshrined in By-law 2000-74, this agreement underscores the collective responsibility shared by participating municipalities to offer assistance and support during times of crisis. The Peterborough County Mutual Aid Plan delineates a structured approach to resource mobilization and coordination, ensuring a unified response to difficult situations. Under the stewardship of Fire Chief William Balfour of the Cavan-Monaghan Fire Department, Chief Pedersen of the Douro-Dummer Fire Department, and Chief Snetsinger of the Peterborough Fire Department, the County MAP remains a vital conduit for collaborative emergency management efforts.

As part of ongoing efforts to enhance emergency response capabilities, the Douro-Dummer Fire Department should conduct periodic reviews of its participation in the Peterborough County Mutual Aid Plan. These reviews should encompass an assessment of operational effectiveness, resource allocation strategies, and alignment with evolving community needs. Additionally, collaborative training exercises and drills with neighbouring municipalities should be prioritized to foster inter-agency coordination and readiness. By fortifying its commitment to mutual aid agreements and proactive engagement in regional emergency preparedness initiatives, the Douro-Dummer Fire Department can further strengthen the resilience of its community and ensure an effective response to emergent challenges.

**Recommendation 8: In addition to enhancing its participation in the Peterborough County Mutual Aid Plan, the Douro-Dummer Fire Department should prioritize the review and update of its Mutual Aid by-law. (Short-Term)**

## Automatic Aid By-law

Douro-Dummer Fire Department has established several agreements for the provision of fire services to designated areas within the Township. These agreements include Automatic Aid Agreements with the Townships of Otonabee-South Monaghan, Asphodel-Norwood, Havelock-Belmont-Methuen, and Selwyn. Each agreement delineates the coverage area and outlines the terms for mutual assistance during emergencies. For instance, the Township of Otonabee-South Monaghan Automatic Aid Agreement, governed by By-law #2000-38, specifies automatic aid coverage by Douro-Dummer into Otonabee-South Monaghan, with associated fees outlined in "Schedule B" of the By-law. Similar arrangements are detailed in the agreements with Asphodel-Norwood, Havelock-Belmont-Methuen, and Selwyn, each providing mutual assistance with defined fee structures. As these agreements are of varying ages, ranging from several years to over

a decade old, it is imperative to conduct periodic reviews to ensure that all provisions remain relevant and applicable. Additionally, updating the fee schedules to align with current operating costs is recommended to maintain fairness and sustainability in the provision of fire services under these agreements. Regular reviews and updates will ensure the continued effectiveness and efficiency of mutual aid arrangements, thereby enhancing emergency response capabilities within Douro-Dummer and its partner municipalities.

**Recommendation 9: Conduct regular reviews of all Automatic Aid Agreements with neighbouring townships to ensure their provisions remain relevant and applicable. Consider updating fee schedules to align with current operating costs, ensuring fairness and sustainability in the provision of fire services. (Short-Term)**

## Borderless Fire Protection Agreement

The Borderless Fire Protection Agreement outlined in the Douro-Dummer By-law 2013-30 stems from the necessity to ensure its continued relevance and effectiveness in facilitating collaborative emergency response among the participating municipalities. Over time, changes in operational practices, legal frameworks, and community needs may necessitate adjustments to the agreement's provisions to maintain its alignment with current standards and requirements. By conducting a thorough assessment and updating the agreement as needed, Douro-Dummer can enhance the efficiency and effectiveness of cross-jurisdictional emergency response efforts, thereby ensuring the safety and well-being of residents across the participating municipalities.

**Recommendation 10: Review and update the Borderless Fire Protection Agreement outlined in the Douro-Dummer By-law 2013-30 to ensure its provisions remain relevant and practical. (Short-Term)**

To bolster emergency response capabilities and promote seamless collaboration among neighbouring municipalities, it is recommended that the existing Automatic Aid Agreements be enhanced by incorporating references to borderless fire protection services. This integration will foster greater collaboration and coordination among participating municipalities during emergency response efforts, ensuring seamless support across jurisdictional boundaries. Additionally, the inclusion of borderless provisions in the Automatic Aid Agreements will align mutual assistance efforts with established protocols, further strengthening the effectiveness and efficiency of emergency response within the region.

This strategic integration aims to streamline mutual assistance efforts and facilitate coordinated responses across jurisdictional boundaries, thereby ensuring efficient support during emergencies. By aligning with established protocols outlined in the Douro-Dummer By-law 2013-30, these updated agreements will reinforce the region's readiness to address a wide range of fire and emergency incidents effectively.

**Recommendation 11: Enhance the Automatic Aid Agreements with neighbouring townships by incorporating references to the borderless fire protection services outlined in the Douro-Dummer By-law 2013-30. (Short-Term)**

## MNR Agreement

In acknowledging the critical role of fire prevention in safeguarding communities, the agreement between the Province of Ontario and the Township of Douro-Dummer stands as a cornerstone for managing grass, brush, and forest fires within the municipality's designated fire district. This agreement delineates the responsibilities and protocols governing fire suppression efforts, underscoring the need for periodic review to uphold its relevance and effectiveness in mitigating fire risks. Initially signed in February 2018, with subsequent updates, this agreement represents a pivotal component of Douro-Dummer's fire management framework. This agreement was updated this year (2024).

**Recommendation 12: Conduct regular reviews of the agreement between the Province of Ontario and the Township of Douro-Dummer to ensure alignment with current regulations and priorities in fire prevention. (Short-Term)**

# Policies, Procedures and Guidelines

Understanding the distinction between Policies, Procedures, and Guidelines is paramount for effective organizational management, particularly within the Fire Department. While Policies set the overarching goals and values, Procedures offer detailed instructions on task execution, and Guidelines provide specific direction for task performance. Currently, Douro-Dummer primarily relies on Guidelines, but there is a pressing need to transition towards a more structured approach with Standard Operating Procedures (SOPs) and Standard Operating Guidelines (SOGs). To achieve this, it's imperative to establish a procedural framework outlining the hierarchy of SOPs and SOGs, coupled with a systematic review process to ensure their currency and relevance. The goal is to ensure that all operational documentation remains current, relevant, and aligned with industry best practices. By implementing this framework, Douro-Dummer can enhance organizational clarity, efficiency, and operational effectiveness. Additionally, relevant training should be provided to ensure that all personnel are adequately informed and prepared to adhere to the updated protocols. This proactive approach will facilitate smooth implementation and promote consistent adherence to established standards across the department.

**Recommendation 13: The Fire Chief initiate the establishment of a procedural framework that clearly delineates the hierarchy of Policies, Standard Operating Procedures (SOPs) and Guidelines (SOGs) within the Douro-Dummer Fire Department. This framework should explain the purpose of each document and incorporate a systematic review process with specific timelines. (Short-Term)**

**Recommendation 14: All revised policies, procedures, guidelines, and best practices within the Douro-Dummer Fire Department should undergo a thorough review by all staff members. (Short-Term)**

## Communications

The Township of Douro-Dummer relies on an agreement with the Corporation of the City of Peterborough for fire dispatch services, which spans from April 1, 2024, to March 31, 2029, involving ten fire departments within Peterborough County.

The inclusion of the Peterborough County Fire Dispatch Centre in the original trial of the EMS TIF project raises questions about its current status and its integration into updated dispatch systems and software. Given the importance of this link with the Central Ambulance Communications Centre, the Fire Chief should actively seek information regarding the project's progress to ensure seamless communication coordination during emergencies.

The costs associated with fire dispatch services are determined based on estimated call volumes outlined in the agreement. Any additional calls beyond the estimated volume specified in the contract will incur extra fees, with a charge of $175.00 per call over the agreed-upon limit.

The agreement specifies that the provision of fire dispatch services will adhere to the standards outlined in NFPA 1221 and 1061. However, it's important to note that NFPA 1221 and 1061 have been consolidated into NFPA 1225. The latest edition of NFPA 1225, incorporating updates up to 2024, provides the most current guidelines and recommendations for fire dispatch operations.

**Recommendation 15: Update the agreement to align with NFPA 1225 standards, ensuring that the fire dispatch services provided adhere to the most current guidelines and recommendations. (Mid-Term)**

Ensuring compliance with operational standards is paramount for effective emergency response services. NFPA 1225 outlines specific compliance goals for call answering and event processing, emphasizing the importance of meeting these standards to uphold the quality of service provided.

NFPA 1225 underscores the importance of distinct alert tones for emergency traffic and evacuation scenarios, which significantly enhance communication and response coordination. Upholding these guidelines and providing proof of compliance to clients is essential for optimizing emergency response capabilities and maintaining operational standards.

To ensure compliance with NFPA 1225 and improve emergency response procedures, it is recommended that Peterborough Dispatch be contacted regarding the availability of specific alert tones for emergency traffic and evacuation. If these tones are available, dispatch should establish Standard Operating Guidelines (SOG) to govern their effective use. Similarly, the Douro-Dummer Fire Department should develop associated SOGs outlining specific steps for staff to follow in response to these alert tones. This proactive approach will promote clearer communication and streamline response protocols during emergency situations.

**Recommendation 16: Implement the recommendation from NFPA 1225 to have dispatch capable of providing specific alert tones for emergency traffic and evacuation, enhancing emergency response capabilities and developing associated SOGs outlining specific steps for staff to follow in response to these alert tones. (Mid-Term)**

Appendix D of the contract outlines operational criteria essential for the effective provision of fire dispatch services between the Township of Douro-Dummer and the Corporation of the City of Peterborough. This section delineates key protocols, reporting mechanisms, and responsibilities that govern the collaboration between the Douro-Dummer Fire Department and the dispatch center. These criteria serve as foundational elements for ensuring seamless communication, efficient response coordination, and adherence to contractual obligations.

To streamline communication and enhance operational efficiency, the Douro-Dummer Fire Department should establish Standard Operating Guidelines (SOG) for situations where the dispatch center limits or alters service levels, as outlined in the contract. Currently, the Douro-Dummer Fire Department receives valuable information after each emergency, including dispatch and response times, as well as daily activity reports. However, dispatch does not provide monthly calculations, though the fire chief can retrieve them from the forms he receives. Given the clause in the contract regarding the dispatch center's authority to modify services under certain circumstances, the Douro-Dummer Fire Department needs to create a structured approach for documenting and managing these situations. By implementing an SOG for handling service-level alterations, the Douro-Dummer Fire Department can ensure clear communication, effective decision-making, and adherence to contractual obligations.

**Recommendation 17: The Douro-Dummer Fire Department should develop a Standard Operating Guideline (SOG) to address situations where the dispatch center limits or alters service levels. This SOG should outline clear procedures and protocols for the Douro-Dummer Fire Department personnel to follow in such scenarios, ensuring effective communication, decision-making, and response coordination during emergencies. (Short-Term)**

**Recommendation 18: Ensure compliance with NFPA 1225 operating procedures, including call answering and event processing, and provide clients with proof of compliance. (Mid-Term)**

## NG911

With the forthcoming implementation of NG 911 technology across Ontario, significant changes are anticipated in communication centers, including dispatch centers. NG 911 will introduce new operating procedures and options for citizens to contact emergency services, necessitating proactive measures from stakeholders to ensure a smooth transition and effective utilization of the updated system. However, the Fire Chief noted recent challenges with the transfer of information on reports due to recent CAD updates in preparation for NG 911.

As municipalities prepare for the rollout of NG 911, coordinated launches and public education campaigns will be essential to mitigate confusion and ensure seamless

integration of the new system. This proactive approach will help educate the community about the changes in emergency communication procedures and ensure a smooth transition to the new system.

**Recommendation 19: The Township of Douro-Dummer should actively participate in public education campaigns to inform residents about the upcoming launch of NG 911 services in their response area. (Short-Term)**

## Medical Priority Dispatch System

With the impending introduction of the new EMS dispatching protocol, MPDS in Peterborough County, Douro-Dummer Fire Department, should actively engage in discussions regarding the types of responses firefighters should attend under the new EMS dispatching protocol. Leveraging insights from other fire departments that have undergone similar transitions will be beneficial in preparing for potential changes. This engagement will ensure that the Douro-Dummer Fire Department remains informed and adequately prepared for any adjustments to emergency response procedures.

**Recommendation 20: The Douro-Dummer Fire Department should proactively participate in discussions regarding any proposed modifications to the types of responses outlined in the new EMS dispatching protocol. (Short-Term)**

Ensuring effective communication is paramount for the Douro-Dummer Fire Department's operational efficiency and firefighter safety. As part of the county radio system, the department relies on three towers, two of which are digital, and the third is awaiting completion. The goal is to have all towers operational to facilitate auto-roaming for optimal signal strength. However, coverage issues persist, particularly in the Station 5 area. Despite the different frequency options available, including repeater and tactical channels, dispatch participation is limited in some channels, necessitating solutions for communication during incidents. On-scene staff must understand the limitations of mobile and portable radio usage, especially when operating with little or no dispatching agency assistance and no voice recording of transmissions.

The department recognizes the need for updated coverage maps and operating procedures, especially in areas with weak or no radio signals. To address these challenges, the Fire Chief should develop comprehensive operating guidelines and training programs for firefighters operating in areas of reduced radio coverage. Additionally, specific radio protocols for Mayday events should be established, ensuring effective communication and swift response in these types of emergency situations. An SOG should be developed to address a Mayday in an area of reduced radio coverage.

**Recommendation 21: The Fire Chief should develop operating guidelines and training programs for firefighters operating in areas of reduced radio coverage. (Short-Term)**

**Recommendation 22: The Fire Chief should establish operating guidelines and training programs specifically for Mayday events in the response area of the Township of Douro-Dummer. (Short-Term)**

## Mobiles and Portables

Ensuring reliable communication equipment is essential for the Douro-Dummer Fire Department's operational readiness and response effectiveness. Currently, the department utilizes Motorola mobiles and portables from Bearcom, a provider located in Peterborough. Bearcom offers services encompassing installation, repairs, and coverage surveys, assuring comprehensive support for the department's communication equipment. Enhancements are anticipated with the completion of digital signalling at the towers, unlocking additional features for portable radios.

When available, features of the digital radio system are thoroughly reviewed and accompanied by the development of operating guidelines and training programs tailored to the new digital radio system.

Concerns have been raised regarding the reliability of the paging system, with firefighters reporting spotty coverage. To address this issue and explore potential solutions, it is recommended that the Douro-Dummer Fire Department continue to lead a county-wide group focused on evaluating paging options. By engaging in collaborative efforts and staying abreast of advancements in paging technology, the department can enhance its communication infrastructure and maintain reliable connectivity for its personnel. A new Bell Agreement for County Wide Paging is being signed with the County municipalities and has a potential implementation date in 2025.

**Recommendation 23: The Douro-Dummer Fire Department continues to lead the county-wide group dedicated to assessing paging options to address concerns about unreliable coverage. (Short-Term)**

## Who's Responding

Who's Responding offers a range of features tailored to the needs of fire departments, including notifications to firefighters, tracking of responders, internal messaging capabilities, and the availability of firefighters. The system can also integrate with computer-aided dispatch systems and provide additional information, such as water sources and hazards, facilitating more efficient emergency response. Screens installed in stations and tablets in response vehicles ensure accessibility to critical information. However, limited cell phone coverage in certain areas restricts the functionality of Who's Responding, leading to inconsistencies in the amount of information provided. Moreover, not all firefighters consistently utilize the system, as its use remains voluntary.

**Recommendation 24: The Douro-Dummer Fire Department conducts training sessions to enhance firefighters' understanding and utilization of the Who's Responding system. Additionally, efforts should be made to address the limitations posed by limited cell phone coverage in certain areas, such as exploring alternative communication methods or enhancing coverage infrastructure where feasible. (Short/Mid-Term)**

## Fire Pro

Fire Pro (FP2) has been a trusted solution in the Canadian fire service landscape for over two decades, offering customizable modules tailored to the specific needs of fire

departments. Douro-Dummer Fire Department has found success in utilizing FirePro, with positive feedback on the system's technical support and benefits from having additional staff trained in its usage. However, to further optimize the utilization of FirePro and ensure comprehensive documentation of fire incidents, it is recommended that the Fire Chief establishes a minimum criterion for the information stored in FirePro and other technology utilized by the Douro-Dummer Fire Department.

The Fire Chief establish clear guidelines outlining the minimum information that should be recorded and stored in FirePro and any other technology platforms used by the Douro-Dummer Fire Department. Examples would be that any information required on the OFM SIR and Officer's notes, fire prevention information collected and staffing be logged in FirePro.

### Data Collection and Benchmarking

Data collection and benchmarking serve as essential tools for tracking and improving business activities within the fire department. By systematically analyzing various metrics such as dispatch time, turn-out time, and road response time, departments can identify areas for improvement and enhance overall performance. Leveraging mapping tools further enhances the effectiveness of response time analysis. To ensure accountability and transparency, it is recommended that the Fire Chief establishes Key Performance Indicators (KPIs) for each division's activities, which should be entered into FirePro and subject to regular review by the Council. This approach enables informed decision-making and provides both the Council and the public with valuable insights into the department's performance. Additionally, the Fire Chief should annually report to the Council on any identified gaps affecting benchmark achievements within the established KPIs. This reporting mechanism fosters a culture of continuous improvement across all divisions of the fire department.

**Recommendation 25: The Fire Chief establish Key Performance Indicators (KPIs) for each division's activities that are entered into FirePro and are subject to yearly Council review to ensure transparency and informed decision-making. (Short-Term)**

## Public Education/Fire Prevention

In compliance with the Fire Prevention and Protection Act (1997), municipalities across Ontario are tasked with establishing robust fire safety programs, ensuring public education, fire code enforcement, and effective emergency response. This process, commonly referred to as the Three Lines of Defence, emphasizes proactive measures to safeguard communities against the risks of fires, injuries, and fatalities. This legislative framework underscores the importance of proactive measures to safeguard communities against the dangers of fires, injuries, and fatalities.

While Douro-Dummer Township has experienced relatively modest growth in recent years, it has consistently added approximately 100 new residents annually from 2015 to 2023, representing a growth rate of 1.6%. However, with no anticipated surge in growth

in the foreseeable future, it becomes imperative to tailor fire safety initiatives to the Township's stable demographic landscape.

## Public Education

Ensuring public education is the cornerstone of fire safety initiatives and the first line of defence in creating a fire-safe community. Douro-Dummer Township is fulfilling the fundamental requirements of the Fire Prevention and Protection Act (FPPA) by actively providing public education programs on fire safety. The Township's dedication to community safety is exemplified by the training of its Administrative Assistant/Firefighter to NFPA Fire and Life Safety Educator Level I & II. Guided by SOP #23.01, the Douro-Dummer Fire Department offers various public education activities, including the Older and Wiser Program, tours of the fire station upon request, and a door-to-door smoke/CO alarm program. From 2015 to 2019, statistics provided by Douro-Dummer indicate that 809 homes were visited as part of this initiative. However, due to the COVID-19 pandemic, these activities were paused from 2020 to 2023, with plans for a resumption in 2024. Additionally, Douro-Dummer actively engages with elementary school programs to educate school-aged children on fire safety and participates in community events to promote fire safety awareness among attendees.

Douro-Dummer Township's adherence to its Municipal Forest Management Agreement with the Province of Ontario is evident in its commitment to fire prevention and education initiatives. The Township has implemented the "Fire Smart" program as a vital component of its Public Education Program, aimed at enhancing fire safety awareness among residents. This program equips homeowners with essential knowledge of wildfires and strategies to safeguard their properties effectively. Additionally, Douro-Dummer has established a robust Open Burning Bylaw and fire permit system, ensuring coordinated control of open burning activities in compliance with the Forest Fires Prevention Act and relevant Ministry of Environment guidelines. While the documentation of public education activities was not readily available during the research for the Fire Master Plan, the Township's proactive measures underscore its dedication to fulfilling the requirements of the agreement and prioritizing community safety.

Douro-Dummer should prioritize the delivery of Public Education programming with a focus on promoting smoke alarms, carbon monoxide alarms, and home fire escape planning for families. Additionally, the Township should maintain public messaging emphasizing the importance of professionally installed and maintained wood-burning appliances, along with regular chimney and flue cleaning before and during the heating season, as per usage requirements. Given the anticipated increase in the number of seniors in Douro-Dummer, the fire department should ensure that public services related to fire safety are readily available to this demographic. This includes providing ongoing public fire safety education to new residents, particularly seniors, through various initiatives led by the fire department, building management, or the real estate industry. Douro-Dummer Fire Department should leverage shared opportunities such as fairs, community events, Fire Prevention Week, and public fire safety education clinics to target seniors. Education efforts should encompass various topics tailored to their specific needs, including ensuring smoke and carbon monoxide alarms are installed and

functioning correctly, developing and practicing a home escape plan, promoting safe cooking practices, providing guidance on extinguishing grease fires, offering instruction on the operation of fire extinguishers, and educating on burn prevention strategies. To enhance fire safety education among youth, the Douro-Dummer Fire Department should utilize platforms such as youth group meetings to deliver essential information and hands-on training. These sessions should emphasize the importance of installing and maintaining smoke and carbon monoxide alarms in their homes, creating and regularly practicing a home escape plan tailored to their living spaces, proper operation of fire extinguishers, and burn prevention techniques, including not moving pans or pots containing burning grease while cooking.

By integrating these topics into youth group meetings, the Douro-Dummer Fire Department can effectively equip young individuals with the knowledge and skills necessary to prevent and respond to fire emergencies, thereby contributing to a safer community for all.

During school visits, the Douro-Dummer Fire Department can deliver comprehensive fire safety education to students by covering various important topics. These sessions should educate students on fire-safe behaviour, emphasizing the importance of avoiding playing with ignition sources and practicing caution around fire-related items. Active participation in fire drills should be encouraged to familiarize students with emergency procedures and evacuation protocols.

Furthermore, students should be educated about the significance of installing and regularly testing smoke and carbon monoxide alarms in their homes to detect potential hazards early. Students should receive training tailored to their age on how to use a fire extinguisher, equipping them with essential firefighting skills. Additionally, it's important to emphasize burn prevention strategies, such as the danger of moving pots or pans with burning grease, to enhance safety awareness in the kitchen.

Moreover, students should be guided in developing and regularly practicing a home escape plan tailored to their living spaces, ensuring they are prepared in the event of a fire. Additionally, organizing a contest for the best digital media fire prevention messaging can encourage students to creatively convey fire safety messages through various digital platforms.

By incorporating these elements into school visits, the Douro-Dummer Fire Department can effectively engage students in fire safety education and empower them to become proactive advocates for fire prevention in their homes and communities.

To ensure the safety of seasonal residents, the Douro-Dummer Fire Department should maintain an ongoing and robust public education campaign focused on key fire safety measures. This campaign should emphasize the importance of smoke and carbon monoxide alarms, home/cottage escape plans, and fire extinguishers. By consistently reinforcing these messages, residents will be reminded to prioritize fire safety and utilize municipal numbers or location-identifying applications in case of emergencies.

Additionally, it is crucial to continue publicly emphasizing the importance of the Three Lines of Defence. Community understanding of the necessity of public education programming is essential, especially considering the potential impact of longer travel distances on Douro-Dummer Fire Department response times.

Furthermore, in anticipation of potential residential growth, the Douro-Dummer Fire Department should proactively engage with area builders annually. These meetings serve as an opportunity to remind builders of the value of residential sprinklers in enhancing fire safety measures for new developments.

Douro-Dummer should document the outcomes of these annual activities. Specifically:

- For the Smoke/CO program, the SOP should detail the locations visited and the outcomes of the annual home smoke alarm program.
- Regarding elementary school visits, the SOP should specify the type of program delivered and the number of students reached.
- For attendance at community events, the SOP should include information about the programs delivered and provide an approximate count of the number of attendees reached.
- Douro-Dummer Fire Department should proactively engage with area builders annually to emphasize the importance of residential sprinklers in enhancing fire safety measures for new developments. This is in alignment with the administrative recommendation to establish Key Performance Indicators (KPIs).

**Recommendation 26: The Fire Chief establishes a Standard Operating Procedure (SOP) to systematically outline and document all public education initiatives offered annually to the community in FirePro. (Short-Term)**

## Fire Prevention

Fire inspections play a vital role in ensuring life and fire safety within a community, serving as a cornerstone in the second line of defence outlined in the “Three Lines of Defence” framework. Mandated by the Fire Prevention and Protection Act (FPPA), these inspections are conducted either “By Complaint” or “Upon Request” in accordance with specified requirements regarding occupancy types and inspection frequencies. The Douro-Dummer Fire Department diligently adheres to these statutory requirements, prioritizing inspections primarily on a request or complaint basis, with additional annual inspections as outlined in the provided in Chart 1**.**

**Chart 1**

| Type of Occupancy | Frequency |
|---|---|
| **Assembly** | |
| Schools | Annually |
| Nursery Daycare Facilities | Annually, Prior To Licensing |
| Licensed Premises | Annually |
| Unlicensed Premises | Annually |
| Churches | Annually |
| **Commercial & Business** | |
| Restaurants | Upon Complaint Or Request, Only |
| Mercantile | Upon Complaint Or Request, Only |
| Business Personal Services | Upon Complaint Or Request, Only |
| Resorts | Upon Complaint Or Request, Only |
| Hotels Motels | Upon Complaint Or Request, Only |
| **Industrial** | |
| Factories Or Complexes | Upon Complaint Or Request, Only |
| Other Industrial | Upon Complaint Or Request, Only |
| **Residential** | |
| Apartments | Initial Inspection Is Required; Additional Inspection Is Only Upon Complaint Or Request. |
| Bed And Breakfast | Upon Complaint Or Request, Only |
| Home Inspection Program | Voluntary |
| Boarding Lodging Group Homes | Annually, Prior To Licensing |

The current Establishing and Regulating Bylaw 2019-28 delineates the fire prevention activities to be administered in Douro-Dummer across two sections: within the main body of the Bylaw under divisional responsibilities and in Schedule A, which outlines the council-approved levels of service. Under the heading of fire prevention services and inspections, the Bylaw offers a general overview, encompassing fire prevention services, public education programs, and fire scene assessment and investigation. Complementing this Bylaw, Douro-Dummer's Standard Operating Guideline (SOG) 23.01, titled "Fire Prevention and Inspections," further details the frequency of inspections to be conducted, ranging from required request and complaint-based minimums to annual inspections, as illustrated in Chart 1 above.

Moreover, SOG 23.01 delineates additional activities falling under the department's purview, including open-air burning, wood stoves, and new construction oversight. Concerning open-air burning, regulations are governed by Douro-Dummer Bylaw #2015-05 (revised 2020-35), which outlines detailed provisions regarding the conditions, locations, and procedures for conducting open-air burning within the Township. Notably, all instances of open-air burning in Douro-Dummer necessitate a permit, whether for annual or occasional burning. Regarding fireplaces and wood stoves, Douro-Dummer does not conduct inspections; instead, property owners are advised to engage a certified WETT inspector for these evaluations. Additionally, for new construction or alterations,

inspections are facilitated by the Fire Chief or designated personnel upon request from the Chief Building Official of the municipality.

A thorough review of the inspection program is imperative to ensure its alignment with the legislative framework's three lines of defence. This review should encompass an evaluation of inspection frequency, coverage, and methodologies employed, encompassing both proactive and reactive measures in response to complaints or requests.

**Recommendation 27: Douro-Dummer should conduct a comprehensive review of the current Establishing and Regulating Bylaw (E&R Bylaw) to identify and clearly define the level of service expected for fire prevention inspections within the municipality. (Mid-Term)**

Our examination of Douro-Dummer Fire Department documents revealed seventeen documented fire inspections conducted between 2019 and 2023. However, it's noteworthy that the COVID-19 pandemic and associated social distancing restrictions in 2020-2021 may have impacted inspection requests or complaints, as well as annual inspections, as indicated in Chart 1. To bolster the effectiveness of Douro-Dummer's inspection program and strengthen the second line of defence, the municipality should align its inspection frequency with the guidelines recommended by the Office of the Fire Marshal. This enhancement not only serves the residents and visitors of Douro-Dummer but also contributes to a more robust and comprehensive fire safety strategy within the municipality.

**Chart 2**

| Type of Occupancy | Frequency |
|---|---|
| **Assembly** | |
| Schools & Churches | Annually |
| Nursery /Daycare Facilities | Annually, Prior To Licensing |
| Licenced Premises | Twice Annually (Once In December) |
| Unlicenced Premises | Annually |
| **Institutional** | |
| Hospitals | Annually |
| Nursing Homes | Annually |
| Homes For Special Care | Annually, Prior To Licensing |
| **Commercial & Business** | |
| In Service Mercantile | Every Other Year |
| Comprehensive Mercantile | Every Third Year |
| Business / Personal Services | Upon Request/Complaint |
| **Industrial** | |
| Factories / Complexes | Annually |
| Industrial Malls | Every Other Year |
| **Residential** | |
| Apartments – Six Units Or More | Annually |
| Single Family Duplexes & Apartments Up To Six Units | Upon Request Or Complaint |
| Home Inspection | Voluntary – Every Third Year |
| Boarding/ Lodging Houses/B&B's | Annually Prior To Licencing |
| Hotel / Motels | Annually |

**Recommendation 28: The Fire Chief draft a report detailing an improved fire inspection program that aligns with the inspection frequency guidelines set forth by the Ontario Fire Marshal (OFM). (Mid-Term)**

## Fire Prevention Staff

In Douro-Dummer, the Fire Chief and three firefighters are currently certified through the grandfathering process to NFPA 1031 for conducting fire inspections. Additionally, the Deputy Chief and a District Chief are undergoing the necessary courses to obtain certification in NFPA 1031 Fire Inspection. Discussions with Douro-Dummer Fire Department staff revealed that the primary responsibility for performing fire inspections rests with the Fire Chief.

Furthermore, recent developments in the fire service, including the introduction of Ontario Regulation 343/22 – Firefighter Certification by the Ministry of the Solicitor General, underscore the importance of adhering to National Fire Protection Association Professional Qualification (NFPA Pro-Qual) standards. Fire Prevention Officers/Inspectors fall under the category of firefighters according to the Fire Prevention and Protection Act (FPPA), necessitating compliance with the stipulated requirements of O'Reg 343/22.

An annual review of fire causes is imperative for developing an effective Public Education program. This practice allows for the identification of trends in fire causes, enabling targeted community education initiatives to mitigate fire risks effectively.
Regarding fire investigation capabilities, presently, the Fire Chief and one District Chief in Douro-Dummer are trained and certified in this discipline, with the Deputy Fire Chief in the process of obtaining the required certifications.

Given the increasing prevalence of lightweight construction in new homes and subdivisions, concerns arise regarding firefighter safety during firefighting operations. To address this, it is recommended that the Chief Building Official provide the Fire Chief with pertinent information regarding buildings falling under the scope of O/Reg. 217. This information should include permit issuance dates, addresses, and descriptions of the floor or roof systems involved. The Chief Building Official should supply the Fire Chief with information regarding buildings subject to O/Reg. 217, including permit issuance dates, addresses, and descriptions of the floor or roof systems.

An annual review of fire causes is imperative for developing an effective Public Education program. This practice allows for the identification of trends in fire causes, enabling targeted community education initiatives to mitigate fire risks effectively.
Regarding fire investigation capabilities, presently, the Fire Chief and one District Chief in Douro-Dummer are trained and certified in this discipline, with the Deputy Fire Chief in the process of obtaining the required certifications.

**Recommendation 29: The Chief Building Official provide the Fire Chief with information regarding buildings subject to O/Reg. 217, including permit issuance dates, addresses, and descriptions of the floor or roof systems. (Short-Term)**

## Firefighter Training

The primary objective of firefighter training in Douro-Dummer is to ensure that firefighters receive adequate instruction and skills to safely and efficiently perform council-approved levels of service, operating in accordance with the Occupational Health and Safety Act (OH&S).

On April 14, 2022, the Ministry of the Solicitor General released O'Reg 343/22, mandating compliance with its standards and certification requirements. Douro-Dummer's approved level of service, as outlined in the E&R By-law as the level of activity for each discipline identified in the by-law, is to be performed in accordance with fire department policies, best practices and guidelines and requires alignment with O'Reg 343/22. The O'Reg identifies two levels of firefighting. An Ontario Seal firefighter is not permitted to carry out interior structural firefighting and is not in command of certain firefighting or rescue operations; they are delegated to certified firefighters and officers.

The fire department currently comprises 66 volunteer firefighters with varying levels of certification. Among them, 15 are grandfathered, 30 are certified, 13 are considered legacy firefighters, and eight are in progress toward certification. Notably, legacy firefighters recognized through the Ontario Seal Legacy process lack certification for interior structural firefighting, indicating a need for further training in this area.

Douro-Dummer's firefighting efforts are guided by legislative requirements, community needs, and training standards. By implementing the recommended strategies, Douro-Dummer aims to maintain skilled and motivated firefighters who are ready to serve the community effectively. Douro-Dummer firefighters are trained according to applicable NFPA standards, with certifications varying based on roles and responsibilities.

| | | |
|---|---|---|
| Fire Suppression Firefighter | NFPA 1001 (Firefighter I & II)<br>NFPA 1002 (Apparatus Equipped with Fire Pump)<br>NFPA 1072 (Hazmat Operations) | July 1, 2026 |
| Fire Suppression - Company Officer | NFPA 1021 (Fire Officer 1)<br>NFPA 1521 (Incident Safety Officers)<br>NFPA 1041 (Fire and Emergency Services Instructor) | July 1, 2026 |
| Vehicle Extrication | NFPA 1001 (Firefighter II) | July 1, 2026, |
| Water Ice Rescue Technician | NFPA 1006 (Ice Water Technician) | July 1, 2028 |
| Vehicle Extrication | NFPA 1006 (Technician) | July 1, 2028 |

In Douro-Dummer, firefighters undergo rigorous training to ensure they are equipped with the necessary skills to respond effectively to emergencies. Medical training is provided up to the first responder level through the Red Cross, covering essential procedures such as oxygen administration, CPR, AED, and Naloxone administration. Additionally,

firefighters tasked with driving fire trucks must possess a valid DZ license to operate the vehicles safely.

In addition to the aforementioned training initiatives, it is noteworthy that Douro-Dummer experiences an average of 7.6 structure fires per year based on data from 2021 to 2023, representing approximately 1.7% of the annual call volume. Despite the relatively low frequency of structure fires, they pose a high-risk scenario for firefighters due to the potential for significant property damage and life-threatening situations.

Given the high-risk nature of structure fires, conducting annual training specifically tailored to address these low-occurrence but high-risk incidents is essential. To this end, Douro-Dummer currently integrates live fire training annually into their training schedule, allowing firefighters to practice and refine their skills in realistic scenarios. Additionally, annual SCBA training is conducted in conjunction with live fire evolutions, ensuring that firefighters are proficient in using self-contained breathing apparatus in potentially hazardous environments.

These training initiatives underscore Douro-Dummer's commitment to preparedness and readiness to address structure fires and other high-risk incidents. By providing regular opportunities for firefighters to practice and enhance their skills in realistic settings, the department aims to mitigate risks and ensure the safety of both firefighters and the community they serve.

In addition to structural firefighting, Douro-Dummer is also mandated to train firefighters for wildland firefighting as per the requirements of the Municipal Forest Management Agreement with the Province of Ontario. Training for wildland firefighting, including Municipal Fire Department Forest Fire Training (SP103) and Air Attack Safety Training Module for Municipal Fire Operations, is conducted annually.

Interviews with firefighters and officers indicate that training programs in Douro-Dummer meet departmental requirements and can adapt to urgent matters fluidly. A firefighter survey identified the top five training priorities, which include medical training, fire attack, pump ops, search and rescue, and SCBA training, aligning closely with the types of emergency calls typically received.

**Recommendation 30: It is recommended that training programs that align with council-approved levels of service and OH&S regulations be prioritized to ensure the safety and effectiveness of firefighting operations. (Short-Term)**

**Recommendation 31: The E&R By-law should be reviewed and updated to reflect the levels of services Douro-Dummer is able to provide in accordance with O'Reg 343/22 and industry best practices. (Short-Term)**

## Recruitment and Retention

Douro-Dummer relies heavily on volunteer firefighters to uphold council-approved levels of service. However, this reliance on volunteer firefighters is not unique to Douro-Dummer; pressures persist across the province to attract and retain volunteer firefighters within the fire service. It's crucial to acknowledge that recruiting volunteer firefighters demands significant investment in terms of training and funding. Personnel lacking NFPA 1001 and 1002 certification are required to undergo training at the Eastern Ontario Emergency Training Academy within their first year of service.

Historically, Douro-Dummer has demonstrated relative success in both recruiting and retaining volunteer firefighters across its four stations. However, as the township experiences continued growth, maintaining a sufficient number of volunteer firefighters becomes increasingly vital. Presently, volunteer firefighters are facing heightened demands on their work-life balance within their families, necessitating proactive measures to address retention challenges.

It is recommended that regular annual meetings be held between the Douro-Dummer leadership and its firefighters. These meetings should provide a platform for open discussions regarding the challenges and pressures associated with volunteering. The goal is to uncover any unspoken concerns and collaboratively identify opportunities for enhancing retention strategies.

The fire department should develop an outreach program focused on Equity, Diversity, and Inclusion (EDI) principles. This program should aim to attract a diverse pool of volunteers from various backgrounds who are interested in pursuing firefighting as a vocation.

**Recommendation 32: The Fire Chief proactively monitor the retirement status of the firefighters to anticipate and address potential succession gaps effectively. (Short-Term)**

**Recommendation 33:Implement regular annual meetings between the Douro-Dummer leadership and its firefighters. (Short-Term)**

**Recommendation 34: Place a strategic emphasis on diversifying the volunteer base by actively recruiting individuals from underrepresented groups and marginalized communities. Prioritize efforts to attract volunteers who bring diverse perspectives and experiences to the firefighting team. (Short-Term)**

Implementing these recommendations can enhance Douro-Dummer's recruitment and retention strategies, ensuring a resilient and diverse volunteer base capable of meeting the evolving needs of the community.

Recruitment and training processes are well-documented, with Douro-Dummer sending recruits to the Eastern Ontario Emergency Training Academy in Norwood, Ontario, to

achieve Firefighter I & II certifications along with Hazmat training. Internal recruit training focuses on Pump Ops certification.

ESSSi recommends the development of a comprehensive recruit training program that outlines the journey from acceptance to receiving their pager. Such a program would provide transparency to recruits, detailing theoretical and practical training aspects, certification requirements, and timelines for achieving milestones, ultimately enhancing the efficiency and effectiveness of the recruitment process.
An example:
Outline for Recruit Firefighters

- Introduction
  - Welcome to the Douro-Dummer Fire Department.
  - Overview of the training program and the journey to becoming a certified firefighter.
- Responsibilities and Duties
- During Training Program
  - Attendance: Mandatory participation in all training sessions, including physical training, classroom sessions, and practical exercises.
  - Punctuality: Arrive on time for all scheduled activities.
  - Preparation: Come prepared with all necessary gear and materials.
  - Active Participation: Engage actively in all training activities and discussions.
  - Safety Compliance: Adhere to all safety protocols and guidelines.
  - Teamwork: Collaborate effectively with fellow recruits and instructors.
- Post-Training Program (Upon Certification)
  - Emergency Response: Respond to fire alarms, emergency medical calls, and other emergency situations as required.
  - Fire Suppression: Perform fire suppression activities to control and extinguish fires.
  - Rescue Operations: Conduct search and rescue operations in various emergency scenarios.
  - Equipment Maintenance: Regularly inspect and maintain firefighting equipment and apparatus.
  - Public Education: Participate in public education and fire prevention programs.
  - Continuous Learning: Engage in ongoing training and professional development activities.
- Behavioural Expectations
  - Professionalism: Maintain a high standard of professionalism in all interactions.

        - Respect: Show respect towards instructors, peers, and the community.
        - Integrity: Demonstrate honesty and ethical behaviour at all times.
        - Accountability: Take responsibility for actions and decisions.
        - Adaptability: Be flexible and adaptable to changing situations and requirements.
        - Physical Fitness: Maintain physical fitness to meet the demands of the job.
        - Emotional Resilience: Develop emotional resilience to handle the stress and trauma associated with emergency response.
    - Certification Requirements
- Qualifications
        - Age: Must be at least 18 years old.
        - Education: High school diploma or equivalent.
        - Driver's License: Valid driver's license with a clean driving record.
        - Background Check: Successful completion of a criminal background check.
- Training Courses
        - Basic Firefighter Training: Completion of a certified firefighter training program, such as NFPA 1001 Firefighter I and II courses.
        - Emergency Medical Training: Certification in First Aid, CPR, and AED. Additional certification as an Emergency Medical Responder (EMR) or higher may be required.
        - Hazardous Materials Training: Training in hazardous materials response (HAZMAT) operations.
- Certifications
        - Firefighter I & II Certification: Certification from a recognized authority such as the OFM.
- -Emergency Medical Responder Certification: Certification from a recognized medical training organization.
        - Driver/Operator Certification: Certification in the operation of fire apparatus and equipment. NFPA 1002
        - Ongoing Education: Commitment to continuous education and recertification as required.
    - Conclusion
        - Summary of expectations and commitment required.
        - Encouragement and support for recruits as they embark on their firefighting career.

This outline provides a clear structure for recruit firefighters, detailing their responsibilities, behavioural expectations, certification requirements and clear timelines. It provides recruits with a roadmap for their training journey and helps track their progress effectively

to ensure they are well-prepared for their roles within the Douro-Dummer Fire Department.

**Recommendation 35: Develop a clear outline detailing the expectations for recruit firefighters. This outline should clarify the responsibilities, duties, training required and behavioural expectations required throughout the training program and beyond. (Short-Term)**

**Recommendation 36: Establish clear timelines for each stage of the recruit training program. This includes deadlines for completing specific training modules, achieving certifications, and progressing through different levels of training. (Short-Term)**

## Succession Planning

An established officer training program is imperative for Douro-Dummer to ensure capable and qualified individuals for advancement into leadership roles within the department. Such a program not only fosters a pool of competent leaders but also boosts morale among firefighters as they see opportunities for career growth and development within the organization.

Currently, Douro-Dummer has 15 firefighters certified to NFPA 1021 through previous OFM Certifications and the grandfathering process. While this is a positive step, it's essential to ensure ongoing training and development opportunities for future leaders to maintain a robust leadership pipeline.

Through interviews with firefighters and officers, it was evident that opportunities for training are encouraged and granted by the department as much as possible within the confines of the annual budget. This proactive approach to training is commendable and should be continued to ensure that firefighters are equipped with the necessary skills and knowledge to excel in their roles.

**Recommendation 37: Douro-Dummer prioritizes the enhancement of its officer training program to provide comprehensive leadership development opportunities. This may include regular workshops, seminars, and mentoring programs to groom potential leaders within the organization. (Short-Term)**

**Recommendation 38: Continue to allocate a dedicated portion of the annual budget specifically for training and development initiatives. By earmarking funds for training, Douro-Dummer can ensure that sufficient resources are available to support the professional growth of its firefighters and officers. (Short-Term)**

**Recommendation 39: Continue to foster a culture that encourages participation in training programs at all levels of the organization. This includes providing incentives for firefighters and officers to pursue additional certifications and qualifications that align with departmental needs and objectives. (Short-Term)**

**Recommendation 40: Proactively identify individuals with leadership potential within the department and provide them with opportunities for mentorship and skill-building. By nurturing talent from within, Douro-Dummer can cultivate a strong cadre of leaders who are well-prepared to take on future leadership roles. (Mid-Term)**

By implementing these recommendations, Douro-Dummer can strengthen its succession planning efforts and ensure the continuity of effective leadership within the organization.

## Suppression

Effective emergency response relies heavily on factors such as travel time and turnout time, both of which significantly impact the level of service provided by a fire department. In developing this Fire Master Plan (FMP), a review of travel times was conducted based on the 8-kilometer travel mapping provided by Douro-Dummer. This review considered the placement of fire stations and the impact of Automatic Aid agreements with neighbouring municipalities on emergency response. Douro-Dummer Township's geographical composition presents unique challenges, with variations in travel times between urban and rural areas. On average, rural areas may experience longer travel times exceeding twelve minutes, emphasizing the need for efficient emergency response strategies.

The Douro-Dummer Fire Department operates from four fire stations located throughout the Township to ensure comprehensive coverage and efficient emergency response. Furthermore, Douro-Dummer Township benefits from automatic aid agreements with neighbouring municipalities, including Asphodel-Norwood, Havelock-Belmont-Methuen, and Selwyn. Additionally, Douro-Dummer participates in a borderless agreement, allowing participating municipalities to respond to emergency calls irrespective of municipal borders until relieved by the jurisdictional fire department.

To gain insights into the effectiveness of these agreements and the department's response capabilities, it is recommended to analyze the number of auto-aid calls received by Douro-Dummer and the associated costs based on the agreement fee structure. Additionally, Douro-Dummer responds to a significant number of automatic aid calls to Otonabee-South Monaghan, generating revenue for the municipality. Moreover, a comprehensive mapping exercise should be conducted, rather than the current 8-kilometre travel radius with auto-aid agreements. This analysis, based on response data from the past five years, will provide valuable insights into Douro-Dummer's actual response capabilities and identify areas for improvement or optimization.

Turnout time, which encompasses the period from the notification of the firefighters to the initiation of movement by responding fire apparatus, is a critical factor in determining total response time. Understanding and optimizing turnout time is essential for efficient emergency response. Additionally, the total response time, comprising turnout time and travel time, should align with standards outlined in NFPA 1720, which delineates best practices for volunteer fire departments. The average turnout time for Douro-Dummer is 4 minutes 27 seconds with an overall time of 10 minutes 56 seconds. These response

times should be monitored annually to ensure an effective emergency response capability and enhance overall operational efficiency.

| Demand Zone | Demographics | Minimum Staff to Respond | Response time in Minutes | Meets objective (%) |
|---|---|---|---|---|
| Urban Area | Greater than 1000 people / 2.59$^2$ Klm | 15 | 9 | 90 |
| Suburban Area | 500-1000 people/ 2.59$^2$ Klm | 10 | 10 | 90 |
| Rural Area | Less than 500 people / 2.59$^2$ Klm | 6 | 14 | 90 |
| Remote Area | Travel Distance Greater than 12.8 Klm | 4 | Dependent on travel distance | 90 |
| Special Risks | Determined by AHJ | Determined by AHJ based on risk | Determined by AHJ | 90 |

The Township of Douro-Dummer is categorized as rural and remote according to NFPA 1720 response best practices. Notably, specific areas in the northeast section of Douro-Dummer, situated south of Fire Station 5 and east of the Warsaw fire station, could be deemed remote. This classification is based on factors such as the locations of the fire halls and the considerable travel distance, compounded by the lack of road network infrastructure in this region.

The existing 8-kilometre mapping method fails to accurately represent the true response capabilities of Douro-Dummer, highlighting the need for a comprehensive mapping exercise to assess and optimize emergency response coverage. Current fire station locations may only cover approximately 50-60% of the Township based on the limitations of the 8-kilometer mapping approach. Moreover, the effectiveness and response times of Auto Aid responses remain uncertain, necessitating further evaluation and clarification. Additionally, the exercise may consider relocating or adding additional stations to further optimize emergency response coverage. Furthermore, collaboration with neighbouring municipalities should be sought to maximize response efficiency and address potential gaps in coverage.

**Recommendation 41: A review of the NFPA 1720 standards on staffing categories for volunteer firefighter response offers valuable guidelines for maintaining effective emergency response capabilities. (Short-Term)**

**Recommendation 42: Analyze the effectiveness of the current Automatic Aid Agreements by comparing the actual response data and costs from the past five years. (Short-Term)**

**Recommendation 43:The Douro-Dummer Fire Department conduct a thorough response area mapping exercise, utilizing actual road networks and travel speeds. This assessment aims to evaluate the placement of existing fire stations, ensuring that the closest station is strategically located to provide the quickest response times. (Short-Term)**

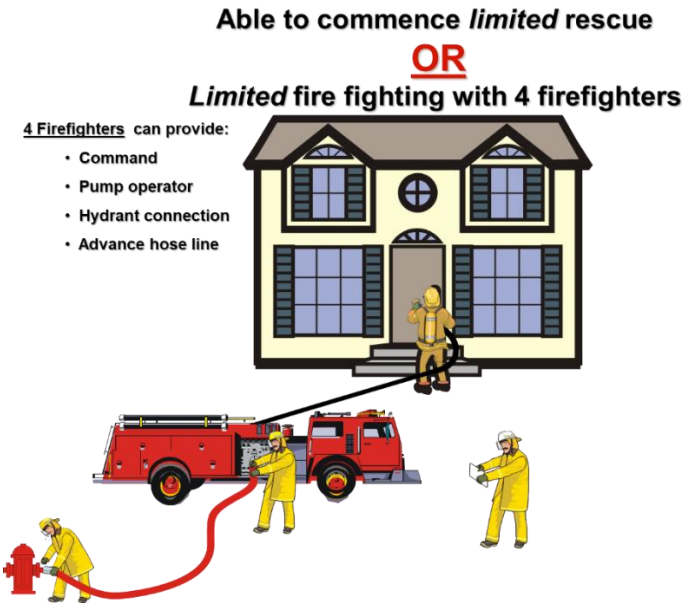
## Fire Ground Effectiveness

The Comprehensive Fire Safety Effectiveness Model, developed by the Office of the Fire Marshal, is a comprehensive framework designed to address various aspects of fire protection services within a community. This model consists of seven sub-models, each focusing on different factors relevant to fire safety. One of these sub-models, known as Fire Ground Effectiveness, deals explicitly with the effectiveness of structural firefighting activities.

The National Fire Protection Association (NFPA) has established standards regarding fire-ground staffing, as outlined in NFPA 1720. This standard provides guidelines for volunteer fire departments concerning response times and the staffing of apparatus. Although not mandatory in Ontario, these standards serve as a benchmark for fire departments striving to optimize their response capabilities and operational efficiency.

In Ontario, municipalities have the autonomy to determine their own “Level of Service” for fire protection, taking into account their unique needs and circumstances. While the province does not mandate specific requirements for structural firefighting operations and rescue services, municipalities are encouraged to follow Public Fire Safety Guidelines provided by the Ontario Fire Marshal. These guidelines assist municipalities in making informed decisions regarding their level of fire protection services, typically based on comprehensive risk assessments conducted within the community. Ultimately, the municipal Council defines the “Level of Service” through an established Establishing and Regulating By-law outlining the scope and extent of the fire department’s responsibilities and services.

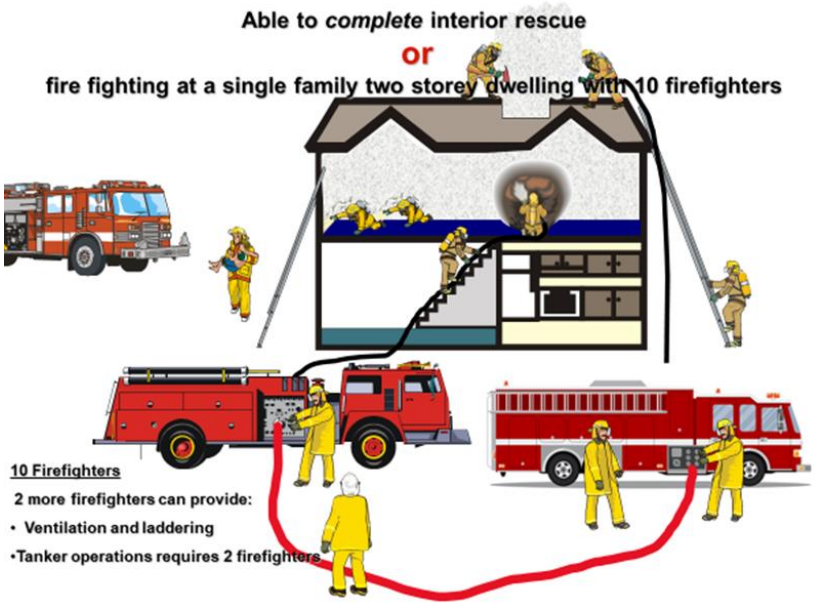
Within the Fire Ground Effectiveness Sub-Model, specific tasks and responsibilities of fire attack teams are outlined. This includes delineating the roles of three-, four-, and five-person crews as they respond to structure fires. Emphasis is placed on the importance of establishing a reliable water supply before engaging in interior firefighting or rescue operations. The sub-model highlights that a crew consisting of only two firefighters entering a building can only perform limited rescue or firefighting tasks, such as initial reconnaissance. For more aggressive interior operations, such as advanced firefighting or extensive rescue efforts, a minimum crew size of four firefighters is typically required. The concept of “Alone Time” is also introduced, representing the time gap between the arrival of successive crews on the scene. Longer Alone Times can pose significant risks to both public safety and property, underscoring the importance of swift and coordinated firefighting efforts.



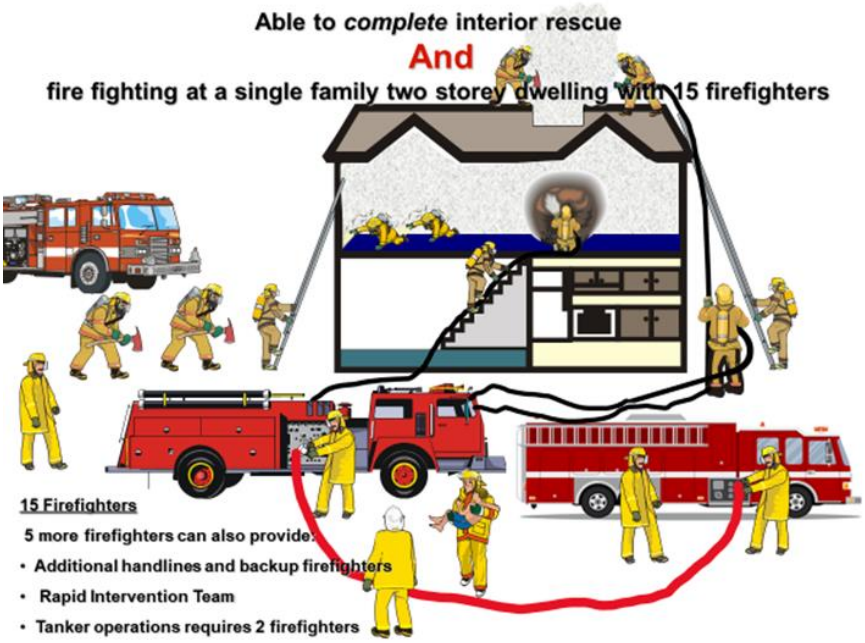

In rural firefighting operations, the deployment of tankers is crucial to ensure an adequate water supply and a tanker shuttle system may be initiated to maintain this supply. Department resources, along with automatic aid from neighbouring departments, can be utilized to supply water to the fire scene effectively.
Once resources arrive and a minimum of eight firefighters are on the scene, interior rescue or firefighting operations can commence. However, it is essential to recognize that, due to resource limitations, only one of these two operations can be performed with the available personnel.

The activities that a team of eight firefighters can undertake are detailed below.

The Office of the Fire Marshal (OFM) has emphasized that a minimum of ten firefighters should be present at the fire scene to carry out either interior rescue or interior firefighting operations effectively. However, it is crucial to acknowledge that even with the assembly of ten firefighters on-scene, the available resources are still insufficient to conduct both activities simultaneously. This underscores the need for careful consideration and strategic planning in prioritizing and executing firefighting and rescue operations based on the available personnel and resources.



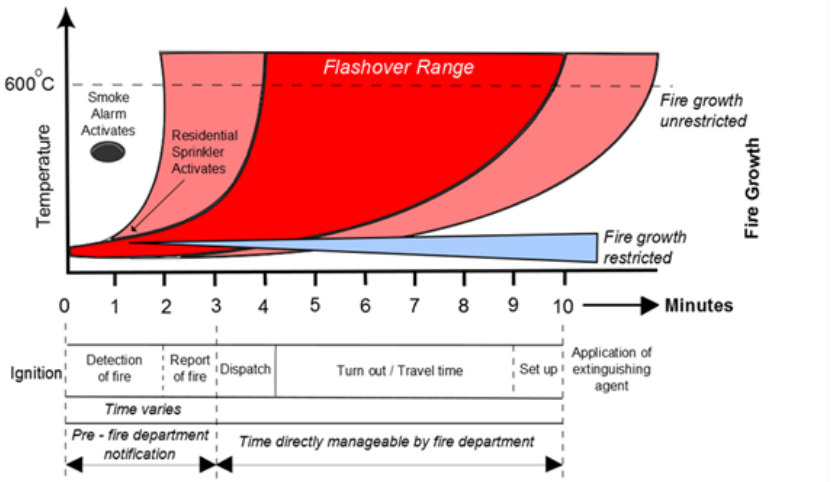

The illustration below outlines NFPA's recommended staffing numbers for responding to a single-family fire. According to these recommendations, a minimum of fourteen to fifteen firefighters should be present at the scene to successfully carry out both rescue and firefighting activities concurrently. This underscores the importance of having an adequately staffed and trained firefighting team to address the multifaceted challenges presented by structural fires, ensuring the safety of both firefighters and the public structural fires.




The critical nature of fire response demands the quick assembly of a fire attack team comprising fourteen or fifteen firefighters at a structure fire in most Ontario fire departments. This ensures effective and safe mitigation of emergencies, allowing for the simultaneous execution of various ground activities. Promptly supplementing the initial crew of four firefighters with additional staff is vital to minimize “Alone Time” and enhance response capabilities. Failing to assemble the required number of firefighters places the first responding crew at a disadvantage, attempting firefighting or rescue operations without adequate resources.

- Our research indicates that Douro-Dummer has an operational guideline that addresses structure fire attack (OG 8.02). While Operational Guideline 8.02,” Structure Fire Attack,” outlines minimum requirements to be in place and operational prior to commencing a direct attack on the fire, the decision on whether to pursue a direct attack does not specifically address the number of firefighters on scene and their qualifications.
- OG 8.02 is dated and should be updated.

However, the existing strategy for making entries in today’s fire environment is considered outdated. Modern fires burn hotter and faster than in previous decades, with a significantly shortened time from ignition to flashover. This accelerated fire behaviour presents an extremely hazardous environment for both victims and firefighters if caught inside a burning structure. Consequently, adapting strategies to reflect the current fire dynamics is crucial for ensuring the safety and effectiveness of firefighting operations.




Source- Fire Underwriters Survey "Alternative Water Supplies for Public Fire Protection: An Informative Reference Guide for Use in Fire Insurance Grading" (May 2009) and NFPA "Fire Protection Handbook" (2001)

Based on available response time data, Emergency Services Strategy and Solutions Inc. has determined that the average response time for the Douro-Dummer Fire Department from initial dispatch to the arrival of the first fire department vehicle at an emergency scene is approximately 10 minutes and 56 seconds. However, there is a significant gap in the data concerning the arrival times of the first responding pumper, additional apparatus, and the assembly of a full fire attack team.

To address this deficiency, it is recommended that the Douro-Dummer Fire Department implement a written procedure that specifies the minimum number of certified firefighters required on the scene to initiate interior structural firefighting in compliance with O. Reg. 343/22. This regulation delineates permissible actions for Ontario Seal-certified firefighters in interior structural firefighting scenarios.

Establishing such a procedure aligns with The Fire Ground Effectiveness Sub-Model and aims to ensure a coordinated and systematic approach to structural firefighting. This will not only enhance the effectiveness of fire suppression efforts but also improve the safety of firefighting personnel by addressing the complexities introduced by modern fire behaviour.
Utilizing the NFPA 1720 standards for benchmarking emergency response is a prudent approach for the Douro-Dummer Fire Department, especially considering its unique geographical and demographic characteristics. By adopting the "rural" and "remote" standards, the department can tailor its response strategies to better suit the specific challenges posed by its jurisdiction.

Adhering to the rural standard, which aims for six firefighters to arrive on the scene within 14 minutes 90% of the time, reflects a proactive approach to ensuring prompt and effective emergency response, particularly in areas with lower population density but

significant geographical spread. This standard aligns with the goal of providing timely assistance to residents and mitigating risks associated with fire incidents.

Similarly, recognizing the remote standard, which acknowledges the longer travel distances and the need for a minimum of four firefighters on scene, underscores the importance of adapting response protocols to address the unique demands of more isolated areas within Douro-Dummer's jurisdiction. By understanding the implications of travel distance on response capabilities, the department can better allocate resources and prioritize interventions where they are most needed.

Overall, integrating the NFPA 1720 standards into the operational framework of the Douro-Dummer Fire Department serves as a valuable tool for enhancing emergency preparedness and optimizing the delivery of fire suppression, medical, and special operations to the community.

Considering these findings, strategic planning and resource allocation should be carefully evaluated to optimize coverage and response times, especially in areas undergoing growth or experiencing unique challenges. This may involve reassessing station locations, adjusting crew distribution, or exploring additional support mechanisms to effectively address the emerging demands within the municipality.

The Township of Douro-Dummer, predominantly rural with most addresses located outside hydrant-protected areas, often requires the fire department to shuttle water from various sources such as hydrants, local ponds, or creeks to address fires effectively. Shuttling water from the nearest available source is a standard practice, and fire departments can attain accreditation in Superior Tanker Shuttle Service through the Fire Underwriters Survey (FUS). This accreditation signifies that the fire department can provide an equivalent level of protection to hydrant-served areas through efficient water shuttling, potentially resulting in reduced insurance premiums for residents in accredited zones.

Douro-Dummer was recently recertified in superior tanker shuttle service through FUS in June 2024; therefore, it is maintaining the accreditation through FUS.

Given controlled growth in Douro-Dummer, building height restrictions have been maintained at three stories, allowing the fire department to function without the use of an aerial apparatus. However, future growth over the next decade will likely create pressure on the municipality from builders to construct larger and potentially taller buildings. Ground ladders will become less effective and potentially unsafe for providing egress from top floors or roofs of taller buildings. Aerial apparatuses have proven effective in dealing with modern lightweight construction methods in residential fires.

To address this potential challenge, it is recommended that Douro-Dummer assess the feasibility of acquiring or accessing an aerial apparatus. A proactive approach involves establishing a fire service agreement with neighbouring municipalities. This agreement would provide Douro-Dummer with the option to use an aerial device when needed, ensuring enhanced firefighting capabilities for structures exceeding current height

limitations. Additionally, such an agreement would pre-emptively address any reimbursement concerns that may arise after multiple mutual aid requests.

**Recommendation 44: The Douro-Dummer Fire Department establish written procedures specifying the required number of certified firefighters to be present and organized on the scene before initiating any interior structural firefighting activities. (Short-Term)**

**Recommendation 45: Douro-Dummer continues to recertify as required to maintain the superior tanker shuttle service accreditation. (Long-Term)**

**Recommendation 46: The Township of Douro-Dummer should initiate discussions to establish a fire service agreement with a neighbouring municipality for the use of their aerial device when needed. (Short-Term)**

## Facilities

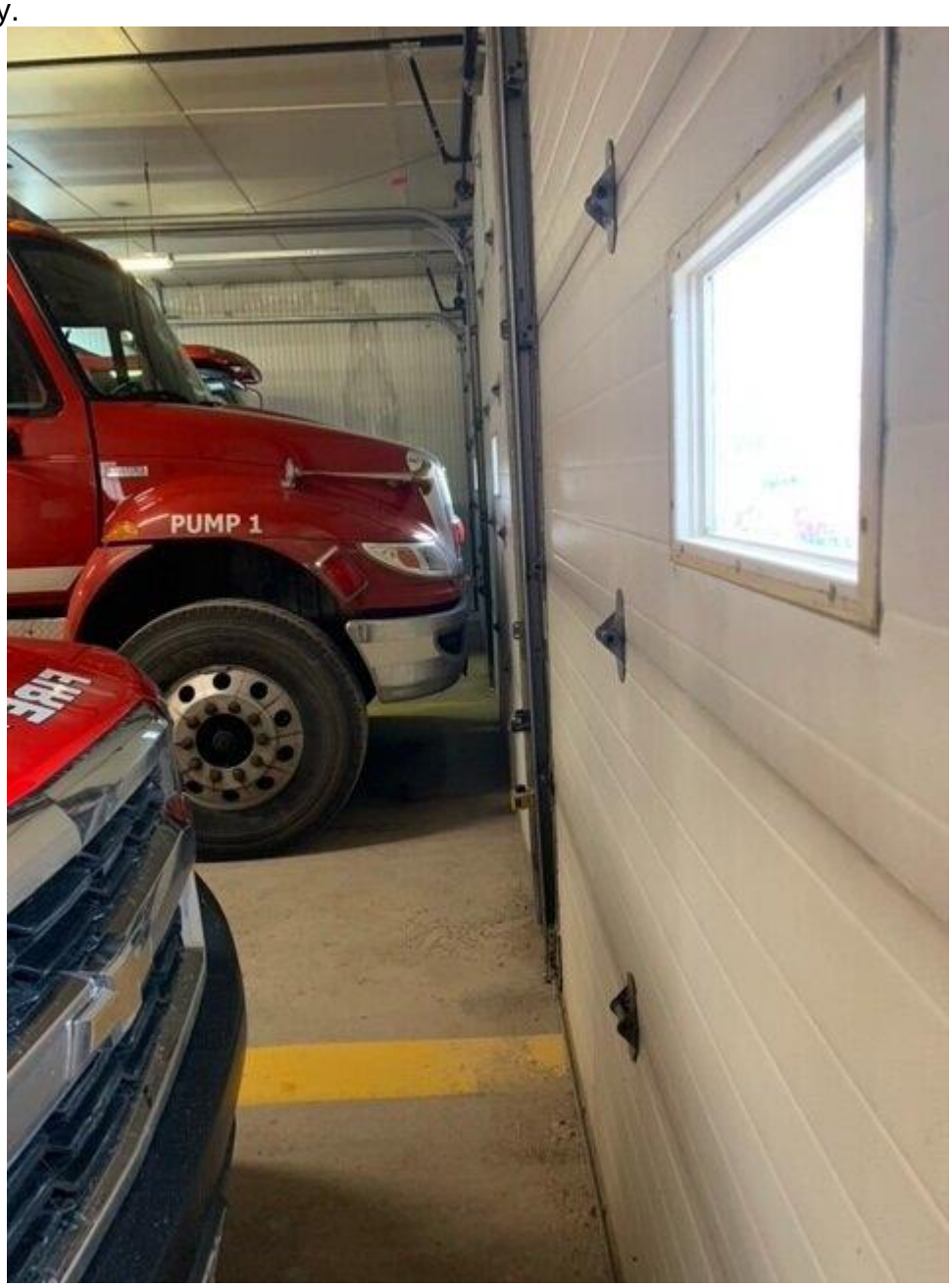
The Douro-Dummer Fire Department operates out of four fire stations, each with unique characteristics and conditions. Building condition assessments conducted in 2019 and 2024 by Greenview Environmental Management provide insights into their current state.

Below are the detailed descriptions of each station:

**Station 1**,


It is located at 812 Daleview Rd in the Hamlet of Donwood and has a rich history of modifications since its initial construction in 1968. Over the years, it has undergone two

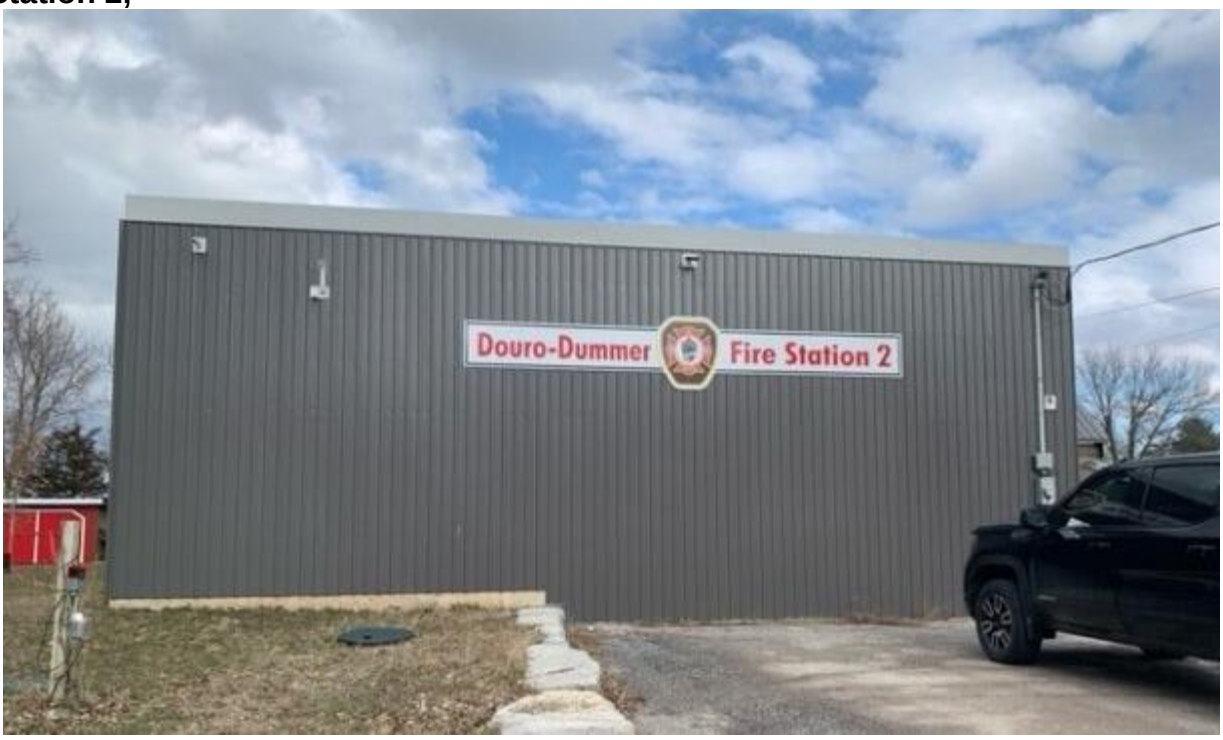
notable additions/renovations, with the most recent occurring to accommodate longer fire apparatus by removing an interior wall. Covering approximately 2900 square feet, this single-story on-grade construction comprises three apparatus bays, a PPE storage room, an equipment maintenance and storage area, a washroom/shower room, an office area, and a small training room. Currently, it houses essential firefighting vehicles, including a pumper, a tanker, and a medical/grass fire unit (pickup truck). While the station boasts a domestic washer for PPE cleaning, it lacks a drying facility, which may impact gear availability.




Additionally, the absence of a diesel exhaust extraction system poses potential health risks to personnel. Notably, the last renovation involved creating a lean-to-style addition

to accommodate new pumpers. However, the apparatus floor remains cramped, with units parked bumper to bumper. This station's apparatus area is severely undersized and limits vehicle maintenance activities. Another concern is the lack of potable water within the building. Despite these challenges, the station is equipped with an auto-backup generator to ensure operational continuity during power outages. As per the Building Condition Assessment, the station is currently evaluated to be in "fair condition," indicating a moderate level of maintenance and upkeep.

**Station 2,**




It is located at 435 Douro Fourth Line Road in the village of Douro and was originally built in 1968 as a single-story on-grade construction with an apparatus bay spanning approximately 570 square feet, primarily utilized for storing equipment. In 2023, the fire department renovated an area of the Works Department building, converting it into the current fire hall, now occupying approximately 2175 square feet. This renovated space comprises two apparatus bays, a PPE storage room, an office, a washroom/shower room, and a lunchroom. Station 2 houses essential firefighting vehicles, including a pumper and a pumper tanker.

The station lacks PPE washing or drying capabilities, posing challenges for maintaining clean gear. The apparatus bay is equipped with a CO/diesel particulate sensor linked to an exhaust fan to mitigate indoor air pollution. In terms of backup power, the station is equipped with a portable generator to be deployed in case of a power failure. It is worth noting that no separate Building Condition Assessment (BCA) was conducted on the newer renovated public works building area now serving as Fire Station 2. Therefore, further evaluation may be necessary to assess its overall condition accurately.

**Station 3**
It was located at 1612 Douro 5th Line and was built in 1968 but is now non-operational.

**Station 4**


It is located at 910 Water St. in the Hamlet of Warsaw and has a rich history. It was initially constructed in 1929 as the Dummer schoolhouse in the community of Warsaw before being repurposed as the fire hall in 1974. This station serves as the central fire station in Douro-Dummer and spans an area of 5180 square feet across two stories. It houses essential firefighting equipment, including a pumper, a tanker, a rescue truck (partially equipped with the Peterborough Regional SRU gear), a medical grass fire unit (pickup truck), and an Argo off-road vehicle with remote Wildland fire and rescue capabilities, all stored on the main floor. Additionally, the main floor hosts PPE storage, an office area, a washroom, a shower, and a domestic washing machine for PPE cleaning.

The second floor comprises a community office for the Police, a large classroom, a kitchen area, and a room containing spare PPE and medical supplies. Unfortunately, the station lacks PPE drying capabilities and diesel exhaust extraction systems, leading to a cramped apparatus floor where all units are bumper to bumper. The building, being quite old, has internal health and safety concerns, and the Council is aware of the issues. Currently, plans are underway to rebuild it as a joint facility with the Works Department just north of the current location. Notably, the station lacks emergency backup power, and its building condition assessment indicates a “poor to fair” condition, necessitating significant remedial work to bring it up to code.

**Station 5**


It is located at 2153 Douro Sixth Line Rd. in North Dummer between Stony Lake and White Lake and is a tall single-story building with two floors on the south side. It was initially built in 1974, with subsequent renovations in 1993 and the most recent renovations in 2019-2020. Covering an area of 3200 square feet, it accommodates a pumper/tanker, mini pumper, and a medical/grass fire unit (pickup truck). The first floor comprises two offices, a PPE storage room, and an apparatus floor. The second floor features a classroom with a fridge and sink, a washroom with a shower (currently non-operational after renovation), and a storage mezzanine.

The station lacks PPE washing or drying capabilities, although the PPE room is equipped with HRV for air circulation. There is no diesel exhaust extraction system installed in the apparatus bays. In terms of backup power, the station relies on a portable generator to be set up in case of a power failure. As for its condition, the Building Condition Assessment indicates that it is “unknown,” necessitating further study to determine the overall assessment.

Regarding diesel exhaust, the International Agency for Research on Cancer has classified diesel exhaust as carcinogenic to humans, posing risks of lung and bladder cancer. OH&S Section 21 Firefighter Guidance outlines employers’ obligations to manage

diesel exhaust. Douro-Dummer Fire Department should incorporate diesel exhaust extraction systems into all their fire stations to enhance safety measures and protect firefighters' health.

Douro-Dummer engage a qualified architect specializing in fire station construction and renovations to review Greenview Environmental Management's recommendations and make recommendations regarding the refurbishment or replacement of the existing stations. The architect will address noted deficiencies in this report, ensure compliance with current legislation and OH&S requirements, and establish a minimum standard for a fire station that accommodates the Fire Department's growth. Upon acceptance of the station model, Douro-Dummer should create a renovation or replacement schedule for all four stations.

**Recommendation 47:Douro-Dummer engage a qualified architect specializing in fire station construction and renovations to review the Greenview Environmental Management recommendations and make recommendations regarding the refurbishment or replacement of the existing stations. (Mid-LongTerm)**

**Recommendation 48: Douro-Dummer conducts an extensive station location study, assessing response times, travel times, and station locations. This evaluation aims to determine the optimal number of fire stations required, adhering to the Council's approved "Level of Service," before any new fire stations are constructed. (Mid-Term)**

**Recommendation 49:For PPE care and maintenance, the department purchase a commercial washer extractor and a PPE dryer to improve and expedite the cleaning process. (Short-Term)**

**Recommendation 50: The inspection, repair, and grading of PPE needs to be conducted by a certified company to ensure compliance with safety standards. (Short-Term)**

**Recommendation 51: Douro-Dummer establishes an SOP for early decontamination, requiring all firefighters to shower at the fire hall before leaving for home or returning to work. This aligns with recognized best practices and enhances overall safety measures for the firefighters. (Short-Term)**

**Recommendation 52:Douro-Dummer installs diesel exhaust gas extraction systems in all fire stations. (Short-Term)**

These recommendations aim to enhance operational efficiency, firefighter safety, and the overall effectiveness of the Douro-Dummer Fire Department.

# Fleet

The Township of Douro-Dummer maintains a modern fleet and inventory of equipment across its four fire stations. This comprehensive report details the current status, maintenance practices, and future recommendations for the Township's emergency response fleet, reflecting the proactive efforts of the Township Council and staff in ensuring operational efficiency and safety.

Furthermore, maintaining equipment readiness is essential to ensure that volunteer responders have access to reliable and well-maintained tools and apparatuses when responding to emergencies. This includes conducting regular inspections, servicing equipment as per manufacturer guidelines, and promptly replacing or repairing any faulty or outdated gear. Adequate funding should be allocated to support the procurement, maintenance, and replacement of firefighting equipment to uphold operational readiness.

## Emergency Response Fleet

The Township's emergency response fleet includes various units, each meticulously tracked for lifespan and replacement schedules. The current status of these units is shown below:

| Asset ID | In-Service Date | Make | Replacement Year |
|---|---|---|---|
| Pump 1 | Oct. 2012 | International | 2032 |
| Tank1 | Dec 2021 | International | 2041 |
| Pump 2 | May 2023 | Freightliner | 2043 |
| Pump 22 | August 2004 | International | 2024 |
| Pump 4 | April 2006 | International | 2026 |
| Tank 4 | Aug 2017 | International | 2037 |
| Rescue 4 | Sept 2001 | Ford | 2021 |
| Pump 5 | April 2021 | Dodge | 2041 |
| Pump 52 | Sept 2008 | International | 2028 |
| Car 1 | Aug 2020 | GMC | 2030 |

The fleet and equipment in Douro-Dummer are generally in excellent condition, reflecting proactive maintenance and management practices. The only notable exception is Rescue 4, which is overdue for replacement and should have been replaced in 2021.

**Pump 1**

**Tanker 1**

**Pump 22**


**Pump 2**

**Pump 4**


**Rescue 4**

**Tanker 4**


**Pump 5**

**Pump 52**


**Support Vehicles**

The small fleet and utility equipment have a shorter lifecycle of 10-15 years. The current status is as follows:

| Asset ID | In-service Date | Make | Replacement Year |
|---|---|---|---|
| Boat 1 | March 2012 | Berkshire | 2023* |
| Boat 2 | March 2012 | Berkshire | 2023* |
| Boat 4 | March 2024 | Whaly 455R | 2034 |
| Medi 1 | March 2016 | Chevrolet | 2031 |
| Medi 4 | July 2014 | Dodge | 2024 |
| Medi 5 | Aug. 2017 | Dodge | 2032 |
| Argo 4 | July 2017 | Argo | 2032 |

Several small fleet items are due for replacement, including Boat 1, Boat 2, and Medi 4.

**Car 1**


**Medi 1**

**Medi 4**


**Medi 5**

**Argo 4**

**Boat 1**

**Boat 2**


**Boat 4**


Industry best practices and the Fire Underwriters Survey recommend that all pumpers and tankers be taken out of service at the 20-year mark. This practice involves removing a pumper from front-line service at the 15-year mark and then operating it in a reserve or backup role for the last five years. Proper maintenance throughout the vehicle's lifecycle is essential. Consequently, all fire pumpers and tankers should be removed from service

at the 20-year mark. Douro-Dummer is currently adhering to these best practices for its large fleet.
The impact of COVID-19 and related supply chain disruptions has affected the fire truck manufacturing industry. It is recommended that Douro-Dummer diligently monitors fluctuations in prices and delivery timeframes for new fire trucks and equipment purchases. The Township should be prepared to make necessary adjustments to its asset replacement program to ensure timely replacements of aging fire apparatus and equipment.

## Asset Management and Reserve Funding

The Township of Douro-Dummer has taken steps to document its large and small firefighting fleet within the asset management program. This includes maintaining a detailed record of firefighting equipment and planning for replacements according to the projected in-service lifespan. To align with best practices and ensure financial preparedness, it is recommended that the Township calculates its reserve funding annually for the replacement of identified assets. This calculation should take into account the predicted useful life of the equipment and the current pricing landscape, particularly given the recent significant increases in firefighting equipment prices.

The Township should continuously monitor the fluctuation in prices and delivery timeframes for new fire trucks and equipment purchases. This includes being prepared to make necessary adjustments to the asset replacement program to ensure the timely replacement of aging fire apparatus and equipment.
The Township should calculate reserve funding on an annual basis for the replacement of identified assets. This proactive measure will ensure the Township is well-prepared for timely replacements and maintain operational efficiency within the fire department.

The Township of Douro-Dummer has demonstrated foresight and management in maintaining its firefighting fleet and equipment. By adhering to industry best practices, monitoring market conditions, and proactively planning for replacements, the Township can continue to ensure the safety and efficiency of its fire department operations. Annual reviews and updated financial planning will further solidify these efforts, ensuring the Township remains prepared for future challenges.

**Recommendation 53: The Township of Douro-Dummer should annually review and update its fleet rationalization schedule to ensure an accurate reflection of replacement costs for vehicles and equipment based on current market conditions. (Short-Term)**

## Respiratory Protection Program

In accordance with Ontario Regulation 833, employers are obligated to safeguard workers exposed to hazardous environments. This is especially critical in the fire service, where Self-Contained Breathing Apparatus (SCBA) is essential. To comply with respiratory protection requirements, a comprehensive respiratory protection program is necessary.

This program includes written procedures addressing the selection, care, and usage of SCBA, as well as the training and instruction of volunteer firefighters in handling and using SCBA. The Occupational Health and Safety Act Section 21 Guidance Note 4-9 outlines the expectations for such a program, along with relevant standards and resources for its development.

During the research conducted for this Fire Master Plan, it was observed that Douro-Dummer Fire Department Standard Operating Guideline (SOG) 1.02 outlines the process for utilizing SCBA. Currently, the department performs fit testing every two years.

Given the critical importance of annual fit testing to ensure firefighters achieve a proper fit for their SCBA masks, it is recommended that SOG 1.02 be updated. The revision should align with the intent of Section 21 Guidance Note 4-9, adhere to other applicable standards, and incorporate the current SCBA manufacturer's recommendations for optimal SCBA usage.

Updating the Douro-Dummer Fire Department SOG 1.02 to require fit testing to align with Section 21 Guidance Note 4-9, relevant standards, and SCBA manufacturer's recommendations will significantly enhance firefighters' safety and protection. This proactive approach will ensure the department meets regulatory requirements and provides the highest level of respiratory protection to its personnel.

**Recommendation 54: Ensure that the updated SOG 1.02 aligns with Section 21 Guidance Note 4-9, which provides detailed insights and expectations for a comprehensive respiratory protection program. (Short-Term)**

## Emergency Management

The COVID-19 pandemic underscored the critical need for robust emergency management capabilities. Over the past two years, the additional responsibilities placed on the Community Emergency Management Coordinator (CEMC) highlighted the importance of having sufficient staff depth during declared emergencies. In Douro-Dummer, the Fire Chief serves as the CEMC, with the Deputy Fire Chief and Administrative Assistant as designated alternates.

The pandemic demonstrated the necessity for adequate staffing to manage emergencies effectively. Douro-Dummer should ensure that sufficient staff is trained and available to support the CEMC during declared emergencies.
The past two years have proven the need for alternate work arrangements and technical requirements to facilitate smooth remote operations.

**Recommendation 55: Douro-Dummer documents and annually reviews processes and necessary technologies for alternate work arrangements. This will ensure a seamless transition during emergencies or remote work situations. (Short-Term)**

Every municipality in Ontario is required to have an approved Emergency Plan as per the Emergency Management and Civil Protection Act. Training on the plan must be provided

annually to ensure all staff are aware of their roles and responsibilities during an emergency. This includes knowing the personnel they will liaise with from other emergency groups, such as the Police, EMS, and community groups.

**Recommendation 56: The Township of Douro-Dummer works with its community partners to organize exercises at the operations level. These exercises will allow front-line staff to practice their roles and responsibilities within the Emergency Plan. (Short-Term)**

## Timeline and Financial Considerations

The Fire Master Plan is a comprehensive and forward-looking document that outlines recommendations for the Douro-Dummer Fire Service. These recommendations are crafted to address current challenges and anticipated issues over a 1-to-10-year timeframe. Recognizing the dynamic nature of community growth, legislative changes, and shifting priorities, the Fire Master Plan is designed as a living document, allowing for adjustments to the implementation strategy as needed.

The report intentionally omits cost estimates due to significant industry-wide increases in building, apparatus, and equipment expenses. Accurate cost projections are challenging due to these fluctuations. Therefore, the report refrains from providing specific cost figures. The responsibility for developing an implementation schedule lies with the Fire Chief, who is tasked with seeking Council approval for the recommendations. In cases where Council approval is required, the Fire Chief will present a business case to justify the implementation. Recommendations necessitating funding will be integrated into the annual budget process, aligning with municipal needs, circumstances, and Council's budget-setting priorities. This approach ensures a flexible and adaptive implementation of the Fire Master Plan, addressing the evolving requirements of the Douro-Dummer Fire Department.

## Conclusion

The primary objective of this Fire Master Plan is to substantially elevate the education, prevention, and emergency response strategies within Douro-Dummer, ensuring a notable enhancement in the safety and well-being of the township’s residents, workers, and visitors. Aligned with the findings of the Community Risk Assessment, this plan is designed to be a dynamic document, adaptable and responsive to the ever-evolving landscape of community needs and safety standards.

Upon garnering council's endorsement of the Fire Master Plan, the Fire Chief will craft an implementation strategy for Council’s approval that will put the Fire Master Plan into motion. This plan is not merely a directive but a strategic blueprint tailored to seamlessly integrate with Council priorities, emphasizing fiscal prudence while ensuring the efficacy of its execution. By fostering an effective and efficient rollout of the recommended measures, the Fire Master Plan is poised to significantly empower Douro-Dummer,

enabling the township to offer a comprehensive spectrum of fire protection services that proactively anticipate and address the community's evolving demands.

In addition, this document is designed to be inherently flexible, capable of adapting and expanding in response to shifts in the township's circumstances. Regular evaluations, slated annually, alongside comprehensive assessments every five years, are scheduled to ensure the plan remains pertinent and effective in meeting the township’s needs.

We at Emergency Services Strategy and Solutions Inc. wish to express our profound gratitude to the Mayor, the Council members, the CAO, the Fire Chief, and all the dedicated officers and firefighters of Douro-Dummer. Your invaluable contributions and unwavering support have been instrumental in the development of this Fire Master Plan. This collaborative endeavour highlights our collective dedication to fortifying community safety and enhancing emergency readiness. We are immensely thankful for your partnership and trust throughout this critical undertaking, which promises to secure a safer, more resilient future for all who call Douro-Dummer home.

End of Report

# Township of Douro-Dummer
# Community Risk Assessment

June 24, 2024

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## Contents

# Executive Summary

This document, prepared by ESSSi for the Township of Douro-Dummer, presents the Community Risk Assessment (CRA) meticulously crafted to comply with Ontario Regulations and align with the Ontario Fire Marshal (OFM) TG-02-2019 Community Risk Assessment guidelines. The CRA serves as a vital tool for fire departments, enabling informed decisions regarding fire protection services based on identified risks.

Risk assessment is crucial for shaping the Master Fire Plan, tailoring fire protection strategies to local needs. By identifying and prioritizing fire and life safety risks, fire departments can develop effective programs for public safety education, Fire Code enforcement, and emergency response.

The Three Lines of Defence framework—public education, fire safety standards enforcement, and emergency response—guides municipalities in fulfilling their obligations under the Fire Protection and Prevention Act 1997.

To meet CRA obligations, municipalities must understand community risks and prioritize them for effective risk treatment and provision of fire protection services.

The methodology adheres to OFM guidelines, ensuring a comprehensive assessment. Ontario Regulation 378/18 mandates municipalities to complete and review a CRA, using it to inform decisions about fire protection services.

This CRA equips Douro-Dummer with valuable insights to enhance public safety and mitigate fire-related risks effectively.

# Community Risk Assessment

## Scope

ESSSi has created this document for the Township of Douro-Dummer to aid in comprehending community risks associated with public fire protection. The Community Risk Assessment (CRA) for the Township of Douro-Dummer has been meticulously crafted to comply with Ontario Regulations, aligning with the methodology and analysis outlined in the Ontario Fire Marshal (OFM) TG-02-2019 Community Risk Assessment guidelines.

Community risk assessments serve as vital tools for fire departments, empowering them to make well-informed decisions regarding the nature and extent of fire protection services they offer based on identified risks. The CRA is instrumental in shaping the development of a Master Fire Plan, a strategic roadmap for fire protection tailored to local needs and circumstances.

Risk, in this context, is defined as the measure of the probability and consequence of adverse effects on health, property, organization, environment, or community resulting from an event, activity, or operation. By meticulously identifying and prioritizing all fire and life safety risks within their community based on probability and impact, fire departments can discern which risks warrant attention and devise optimal strategies to address them. Risk assessments are instrumental in shaping fire departments' level of service, programs, and activities related to public fire safety education, Fire Code inspections and enforcement, and emergency response, ultimately aiding in the prevention and mitigation of risks.

The Fire Protection and Prevention Act, 1997 (FPPA) mandates that every municipality in Ontario establish a program encompassing public education on fire safety, specific components of fire prevention, and other necessary fire protection services in line with local needs and circumstances. These elements are commonly referred to as the Three Lines of Defence, with lines one and two being proactive responses and line three serving as a reactive response.

- Line one: Public Fire Safety Education (Proactive Response)

  - This involves educating residents of the community.

- Line two: Fire Safety Standards and Enforcement (Proactive Response)

  - This involves ensuring that buildings are equipped with the necessary fire protection and life safety systems to minimize the severity of fires.

- Line three: Emergency Response (Reactive Response)

  - This involves providing firefighters who are well-trained and equipped to effectively mitigate emergencies.

To meet the CRA obligations, municipalities must make informed decisions regarding the types and levels of fire protection services they offer. This requires a thorough understanding of community risks, which can be achieved through a community risk

assessment. Once risks are identified, they can be prioritized to guide decisions on risk treatment options and the provision of fire protection services.

Methodology:

The methodology employed in preparing this Community Risk Assessment (CRA) adheres to the OFM Guidelines on Community Risk Assessments.

Legislation:

Ontario Regulation 378/18: Community Risk Assessments requires all municipalities in Ontario to develop a CRA. The CRA assists in making informed decisions about the provisions of fire protection services.

**Ontario Regulation 378/18** states that,

Every municipality and every fire department in a territory without municipal organization must

a. complete and review a community risk assessment as provided by this Regulation and

b. use its Community Risk Assessment to make informed decisions about the provision of fire protection services.

## Introduction

Douro-Dummer is a rural municipality in central Ontario with an approximate population of 7632 (2021) and a surface area of 460 square kilometres. The fire department operates out of four fire stations (812 Daleview Rd., 435 Douro Fourth Line Rd., 910 Water St., and 2153 Douro Sixth Line Rd., North Dummer). Douro-Dummer firefighters are well-trained and are certified, legacy or grandfathered in accordance with O/Reg 343/22. The department regularly responds to fires, rescues, medical emergencies, wildland fires, and other emergency incidents. In addition to these responses, Douro-Dummer firefighters also respond to barn fires, emergency incidents involving machinery rescues, and dangerous goods, such as transportation, fertilizer, pesticide, and insecticide-related incidents.

CRAs allow fire departments to make informed decisions about the types and levels of fire protection services they provide based on identified risks. This document has been prepared to meet the current requirements of Ontario Regulation 378/18. Fire departments must review and revise the community risk assessment annually to accurately reflect the mandatory profiles and fire and emergency risks. Once completed and received by Council, the CRA allows the municipality and the fire service to make reasonable and appropriate decisions regarding the level of fire protection services offered by the municipality through the fire department.

Risk is defined as a measure of the probability of an incident occurring. The consequence is an adverse effect on health, property, organization, environment, or community due to an event, activity, or operation.

By identifying all fire and life-safety risks in the community and prioritizing them based on the probability of occurrence and the impact, fire departments can determine which risks to address and how best to manage them. Risk assessments allow fire departments to ensure their level of service, programs and activities for public fire safety education, fire code inspections and enforcement, and emergency response directly address the identified risks and are most effective at preventing and mitigating them.

The Emergency Management and Civil Protection Act (EMCPA) requires every municipality to conduct an all-hazards risk assessment to maintain a continuous improvement of emergency management programs and improves public safety. A completed Hazard Identification Risk Assessment (HIRA) may provide some of the information/data required to fulfil the needs of a CRA under O. Reg. 378/18. However, specific fire-related information not contained in the HIRA was gathered as part of this process. The HIRA and the CRA are separate processes but should be viewed as complementary.

Identifying community fire and life safety risks and their value based on probability and consequence, including impact on the community, will help form the plan to prevent, mitigate or accept community fire risk.

This information also informs Council on matters to be considered when identifying the level of service, training, emergency response capability, capital and operating budgets, fire prevention/enforcement, and public fire and life safety education.

## Conducting A Community Risk Assessment

### Identifying Risks – Mandatory Profiles

The initial step in conducting a Community Risk Assessment (CRA) involves identifying fire and life safety risks within the community. This is achieved by gathering data about the community and its activities. O. Reg. 378/18 mandates fire departments to consider various profiles during a CRA to comprehensively analyze potential risks within the community:

1. Geographic Profile
2. Building Stock Profile
3. Critical Infrastructure Profile
4. Demographic Profile
5. Hazard Profile
6. Public Safety Response Profile
7. Community Services Profile
8. Economic Profile
9. Past Loss and Event History Profile

Worksheets for each profile are provided in this risk assessment, serving as the foundation for assigning risk levels and identifying resources and solutions to address the risks effectively. Risks can be managed through several approaches:
- Avoidance: Implementing programs and initiatives to prevent fires or emergencies.

- Mitigation: Implementing programs and initiatives to reduce the likelihood and impact of fires or emergencies.
- Acceptance: Determining that specific risks will not be addressed through programs or initiatives, the fire department acknowledges the potential risk and commits to responding if it occurs.
- Transfer: Shifting the impact and management of risks to another organization or entity. Examples include contracting public fire safety education, fire code inspection and enforcement, or emergency response services to neighbouring municipalities or other organizations.

**Probability and Consequence Levels**
Throughout this report, reference is made to probability levels (Table 1) and consequence levels (Table 2).

**Probability**
The likelihood of a fire or emergency within a community is often estimated based on past occurrences. Reviewing historical fire-loss data, learning from experiences in other communities, and consulting community members with extensive historical knowledge are crucial steps. Professional judgment, informed by experience, should be exercised when estimating probability levels. Events' probabilities are categorized into five levels of likelihood:

**Table 1: Probability levels**

| Description | Specifics |
|---|---|
| Rare | • May occur in exceptional circumstances<br>• No incidents in the past 15 years |
| Unlikely | • Could happen at some time, especially if circumstances change<br>• 5 to 15 years since the last incident |
| Possible | • Might occur under current circumstances<br>• One incident in the past five years |
| Likely | • Will happen at some time under the current circumstances<br>• Multiple or recurring incidents in the past five years |
| Almost certain | • Expected to occur in most cases unless circumstances change<br>• Numerous or frequent incidents in the past year |

**Consequence**
The consequence of a fire or emergency refers to the potential losses or adverse outcomes associated with the event. Professional judgment and a review of past occurrences are crucial for determining consequence levels. Estimating the consequence level of an incident or event involves evaluating four key components:

1. Life Safety: This pertains to injuries or loss of life resulting from occupant and firefighter exposure to life-threatening fire or other hazardous situations.
2. Property Loss: This encompasses monetary losses related to private and public buildings, property contents, irreplaceable assets, significant historic or symbolic landmarks, and critical infrastructure.
3. Economic Impact: This includes monetary losses associated with property income, business closures, declines in tourism, reductions in tax assessment values, and employee layoffs.
4. Environmental Impact: This involves harm to both human and non-human life, such as wildlife, fish, and vegetation. It also encompasses a general decline in the community's quality of life due to air, water, or soil contamination resulting from the incident and response activities. The consequence of an event can be categorized into five levels based on severity:

**Table 2: Consequence Levels**

| Description | Specifics |
|---|---|
| **Insignificant** | • No life-safety issue<br>• Limited valued or no property loss<br>• No impact on the local economy and<br>• No effect on general living conditions |
| **Minor** | • Potential risk to the life safety of occupants<br>• Minor property loss<br>• Minimal disruption to business activity and<br>• Minimal impact on general living conditions |
| **Moderate** | • Threat to the life safety of occupants<br>• Moderate property loss<br>• Poses a threat to small local businesses and<br>• Could pose a threat to the quality of the environment |
| **Major** | • Potential for a large loss of life<br>• Would result in significant property damage<br>• Significant threat to large businesses, the local economy, tourism, and<br>• Impact on the environment would result in a short-term, partial evacuation of residents and businesses |
| **Catastrophic** | • Significant loss of life<br>• Multiple property damage to a substantial portion of the municipality<br>• Long-term disruption of businesses, local employment, tourism, and<br>• The environmental damage that would result in the long-term evacuation of residents and businesses |

## Risk Summary

The following worksheet outlines the primary risks to life safety and property, along with suggested methods for reducing or mitigating these risks. It is anticipated that both Council and the Fire Chief will utilize the preferred treatment options to identify areas requiring attention through public education, fire code enforcement, or adjustments in the level of fire service provision. These decisions will serve as the foundation for the Douro-Dummer community risk reduction plan.

The success of the plan will be gauged by a decrease in the occurrence of fires, diminished fire-related injuries, and a reduction in property loss. This will be achieved through ongoing fire-prevention initiatives, the implementation of early warning and detection systems, proactive inspections, and public education efforts aimed at promoting fire-safe behaviours.

| Top risk or issues/concerns | Preferred treatment option(s) |
|---|---|
| **Major waterfront multi-residential fire** | • Multiple stations response<br>• Access to on-site water<br>• Ongoing staffing requirement/rotation in the event of a major fire<br>• Tanker Shuttle through mutual aid, if available |
| **Major multi-building fire** | • Multiple stations response<br>• Access to on-site water<br>• Ongoing staffing requirement/rotation in the event of a major fire<br>• Tanker Shuttle through mutual aid, if available |
| **Major building fire – Lakefield College School** | • Automatic Aid Agreement with Selwyn Township<br>• Ongoing staffing requirement/rotation |
| **Forest fire** | • Fire Protection Agreement – MNRF<br>• FD is trained and equipped<br>• Multiple stations response<br>• Access to on-site water<br>• Ongoing staffing requirement/rotation in the event of a major fire<br>• Tanker Shuttle through mutual aid, if available |
| **Water or Ice Rescue** | • Multiple stations response<br>• Availability of required equipment in a timely manner<br>• Availability of trained staff in a timely manner<br>• Support from the County Rescue System |

| Top risk or issues/concerns | Preferred treatment option(s) |
|---|---|
| **Specialized or machinery rescue** | • Utilize the County SRU Team<br>• Utilize mutual-aid assistance, if available, or activation of provincial teams through the OFM/Provincial Emergency Operations Centre when necessary and appropriate. |
| **Hazardous materials/dangerous goods transportation incidents** | • Maintain the current practices guided by SOGs and policies consistent with the Establishing and Regulating Bylaw.<br>• Utilize mutual-aid assistance, if available, or activation of provincial teams when necessary and appropriate. |
| **High Angle/Confined Space Rescue** | • Utilize the County SRU team<br>• Utilize mutual-aid assistance, if available, or activation of provincial teams through the OFM/Provincial Emergency Operations Centre when necessary and appropriate. |
| **Structure Fires** | • Douro-Dummer Council is legally responsible for ensuring the fire department's response capability meets local needs and circumstances.<br>• Maintain the current practices guided by SOGs and policies consistent with the Establishing and Regulating Bylaw.<br>• Utilize mutual aid assistance, if available, when necessary and appropriate. |
| **Fire Services** | • The Fire Chief reports to the Douro-Dummer Council quarterly to ensure that Council meets its legal obligation and that its response capability meets local needs and circumstances.<br>• The Fire Chief ensures that the Douro-Dummer Council is informed of any emergency response capability issues, including inspections, pre-planning, training, staffing, equipment maintenance, and availability. |

## Structure Fire Loss Statistics

| **Year** | **2023** |
|---|---|
| Number of structure fires | 6 |
| Number of firefighter injuries | 0 |
| Number of civilian injuries and deaths | 0 |
| Total dollar loss | $1.5 M |
| Fire-cause determination | Yes |
| **Year** | **2022** |
| Number of structure fires | 8 |
| Number of firefighter injuries | 0 |
| Number of civilian injuries and deaths | 0 |
| Total dollar loss | $432,000 |
| Fire-cause determination | Yes |
| **Year** | **2021** |
| Number of structure fires | 10 |
| Number of firefighter injuries | 0 |
| Number of civilian injuries and deaths | 0 |
| Total dollar loss | $467,500 |
| Fire-cause determination | Yes |
| **Year** | **2020** |
| Number of structure fires | 3 |
| Number of firefighter injuries | 0 |
| Number of civilian injuries and deaths | 0 |
| Total dollar loss | $ 3,500 |
| Fire-cause determination | Yes |
| **Year** | **2019** |
| Number of structure fires | 5 |
| Number of firefighter injuries | 0 |
| Number of civilian injuries and deaths | 0 |
| Total dollar loss | $25,000 |
| Fire-cause determination | Yes |
| **Year** | **2018** |
| Number of structure fires | 15 |
| Number of firefighter injuries | 0 |
| Number of civilian injuries and deaths | 0 |
| Total dollar loss | $1.342 M |
| Fire-cause determination | Yes |

## Profile Worksheets

**Geographic Profile:**
The Township of Douro-Dummer is situated in Peterborough County, located in Central Ontario. With a surface area spanning approximately 460 square kilometres, the municipality is home to an estimated population of 7,632 as of 2021. The population density stands at approximately 16.6 individuals per square kilometre. Moreover, the township often sees an influx of more than 3,000 seasonal residents, contributing to its dynamic demographic landscape.

## Worksheet 1: Geographic Profile

| **Geographic profile risks**<br>List the geographic features in your community and how they may influence the delivery of fire protection services. | |
|---|---|
| **Geographic feature** | **Potential impact on the delivery of fire protection services** |
| **Stony and White Lakes and parts of the Trent-Severn Waterway** | • Subject to seasonal flooding, flooding during heavy rainfall or low water levels<br>• Impacts training and equipment for response activities<br>• Impacts response times/travel time to calls<br>• Recreational/tourist activities impact public fire safety education, fire code inspections, and enforcement.<br>• Impacts fire-protection delivery, structural, wildfire/<br>• grass fire, ice and water rescue and medical response to island properties.<br>• Generates additional tourists to the area seasonally |
| **Islands - Occupied** | • Occupancies on islands are occupied longer than originally intended or throughout the year.<br>• Appropriate 9-1-1 addressing<br>• The level of service should be addressed in the Establishing and Regulating Bylaw.<br>• Impacts training, equipment for response activities<br>• Impacts response times/travel time to calls |

| Geographic feature | Potential impact on the delivery of fire protection services |
|---|---|
| **Waterfront Properties and Resort Park** | • Limited access and egress during an emergency<br>• Some residences were built within the existing forest canopy without sufficient spacing to allow firefighting operations on the property. |
| **Highway 28/ Highway 7** | • Impacts transportation of all types, including commercial trailers and intermodal, that affect the supply chain<br>• Impacts the transportation of hazardous materials and dangerous goods<br>• Impacts life safety due to road conditions, collisions, and transportation of dangerous goods<br>• Impacts weekly large traffic volumes, specifically Friday and Sunday during the late spring, summer and through fall<br>• Continue working partnerships and response exercises with OPP, Peterborough EMS, and MTO to address major collisions, road closures and severe weather risks. |
| **Private roads** | • Impacts fire apparatus access<br>• Impacts weight-bearing capacity for fire apparatus<br>• Impacts response time/Golden Hour |
| **Bridges on Secondary Highways and private roads** | • Impact travel access and response times |
| **County Forest System and forested area** | • A considerable area of the municipality is forested<br>• Impacts training, equipment for response activities<br>• Impacts response times/travel time to calls<br>Implement Fire Smart Program and Principles in the community |

**Building-Stock Profile**

The building stock profile encompasses the types, numbers, uses, and ages of various buildings within the community. In assessing potential fire risks in the Douro-Dummer communities, consideration is given to the different types or classifications of buildings prevalent in the area, along with the presence of fire-safety systems and equipment during construction.

Past inspection practices and frequencies are also taken into account when evaluating the risk associated with building occupancy classification categories. Conversely, the need for historical inspection data concerning a specific occupancy classification category is considered when determining risk.

These building characteristics significantly influence public fire safety education, fire code inspection and enforcement, and emergency response activities that the fire department may deem necessary to address the identified risks.

**Assigning Risk Levels**

Assigning a risk level aids fire departments in prioritizing risks, thereby determining how to address or treat each risk. The risk level matrix provided in this section assists fire departments in determining risk levels based on the probability and consequence levels of each identified risk.

Risks are categorized as low, moderate, or high. The assigned risk level for each identified risk can be noted in the assigned risk level column in Appendix A on the relevant worksheets.

The matrix below can guide the determination of the assigned risk level.

To assign a risk level for each identified risk, plot the assigned probability and consequence levels on the relevant worksheets in Appendix A. This will help visualize and quantify the level of risk associated with each identified risk.

**Table A: Assigns a risk level for each identified risk.**

**Risk Level Matrix**

| Probability | INSIGNIFICANT | MINOR | MODERATE | MAJOR | CATASTROPHIC |
|---|---|---|---|---|---|
| ALMOST CERTAIN | Moderate Risk | Moderate Risk | High Risk | High Risk | High Risk |
| LIKELY | Moderate Risk | Moderate Risk | Moderate Risk | High Risk | High Risk |
| POSSIBLE | Low Risk | Moderate Risk | Moderate Risk | Moderate Risk | High Risk |
| UNLIKELY | Low Risk | Low Risk | Moderate Risk | Moderate Risk | Moderate Risk |
| RARE | Low Risk | Low Risk | Low Risk | Moderate Risk | Moderate Risk |

Consequence

## Worksheet 2: Building-Stock Profile Risks

| Building Occupancy Group<br><br>#-Number | Building Classification | Issues/Concerns<br><br>(i.e., number of buildings; age of buildings; use of buildings; building density, height, and area; historic and culturally significant buildings; etc.) | Probability<br><br>(Refer to Table 1 for suggested probability levels) | Consequence<br><br>(Refer to Table 2 for recommended consequence levels) | Assigned risk level<br><br>(Refer to the Risk Level Matrix for recommended risk levels) |
|---|---|---|---|---|---|
| **Group A** | | | | | |
| **#34** | Assembly | Assembly buildings occupied by a large number of people,<br>May contain high quantities of combustibles furnishings and decorations<br>Occupants are generally unfamiliar with building exit locations | Possible | Major | Moderate |
| **Group B** | | | | | |
| | Detention | 0 | N/A | N/A | N/A |
| | Care/ Treatment | 0 | N/A | N/A | N/A |

| Building Occupancy Group<br><br>#-Number | Building Classification | Issues/Concerns<br><br>(i.e., number of buildings; age of buildings; use of buildings; building density, height, and area; historic and culturally significant buildings; etc.) | Probability<br><br>(Refer to Table 1 for suggested probability levels) | Consequence<br><br>(Refer to Table 2 for recommended consequence levels) | Assigned risk level<br><br>(Refer to the Risk Level Matrix for recommended risk levels) |
|---|---|---|---|---|---|
| **Group C** | | | | | |
| 5189 | Single-Family Dwellings | SIR/OBC 301,302,303, New Development, Light Weight Construction, close spatial separation between units, concerns regarding wildland interface and lack of protected space (Fire Smart Canada)<br>Mixed construction types throughout (ordinary, balloon, platform)<br>Building services concerns – age, wiring, lack of early warning devices, lack of fire separations<br>Rural farm dwellings<br>Remote access issues and private roads<br>Access to water supply | Likely | Moderate | Moderate |
| 53 | Multi-Unit Residential Dwellings | SIR/OBC 321, 322,323, apartment buildings, lack of inter-connected early warning devices CO and smoke alarms | Possible | Moderate | Moderate |
| 0 | Hotel/Motel | SIR/OBC 355 | N/A | N/A | N/A |
| 28 | Mobile Homes and Trailers | SIR/OBC 342 | Possible | Moderate | Moderate |

| Building Occupancy Group<br><br>#-Number | Building Classification | Issues/Concerns<br><br>(i.e., number of buildings; age of buildings; use of buildings; building density, height, and area; historic and culturally significant buildings; etc.) | Probability<br><br>(Refer to Table 1 for suggested probability levels) | Consequence<br><br>(Refer to Table 2 for recommended consequence levels) | Assigned risk level<br><br>(Refer to the Risk Level Matrix for recommended risk levels) |
|---|---|---|---|---|---|
| **Group D & E** | | | | | |
| 62 | Business and personal service / mercantile | Occupied by a large number of people during business hours May contain a high level of combustible content. | Possible | Moderate | Moderate |
| **Group F** | | | | | |
| 9 | Industrial | SIR/OBC community and employment | Possible | Major | Moderate |
| **Other Buildings** | | | | | |
| 6050 | Occupancies not classified in OBC, such as farm buildings | SIR/OBC 811 Timber Barns 983 Modern Construction | Possible | Major | Moderate |
| 207 | Buildings, not an occupancy | Silos, Bulk Feed Tanks, Pool Enclosures, Solar Panels | Possible | Moderate | Moderate |

**Critical Infrastructure Profile**

The critical infrastructure profile pertains to the facilities or services essential for maintaining interconnected networks, sustaining the economy, and ensuring public safety and security. Examples include:

1. Electricity Distribution
2. Water Distribution
3. Telecommunications
4. Hospitals
5. Airports

These critical infrastructure components play crucial roles in meeting vital human needs and safeguarding the community's well-being.

## Worksheet 3: Critical Infrastructure Profile

| Identified critical infrastructure | Issues/concerns |
|---|---|
| **Continuity of government** | The local government is closed or unable to operate, affecting confidence in ratepayers. As technology changes, so do the causes. Causes may include severe weather, infectious/communicable disease, IT infrastructure attack, or electrical grid instability/failure. |
| **Electricity transmission and distribution** | Hydro failure to the municipal building and EOC<br>Fires at transformers and Ontario Hydro Transformer Station<br>Sabotage |
| **Radio/television communication** | Inability to communicate with the public and outside area<br>Inability to provide emergency information or instructions |
| **Telecommunications** | It affects most municipal fire departments<br>It involves the paging and emergency notifications of responders<br>It affects communications with EOC or alternate comms centre |
| **Roads** | Access to emergency scenes and evacuation routes<br>The public need to access information from fire stations or municipal building |
| **Natural gas delivery** | Potential for leaks in main lines above/below ground<br>Provider or infrastructure failures<br>Lack of product could place the civil population at risk during three seasons.<br>A lack of products could affect the mercantile, commercial, industrial, and hospitality sectors. |

| Identified critical infrastructure | Issues/concerns |
|---|---|
| **Propane delivery** | Potential for leaks in main lines above/below ground<br>Provider or infrastructure failures<br>Lack of product could place the civil population at risk during three seasons.<br>A lack of products could affect the mercantile, commercial, industrial, and hospitality sectors. |
| **Primary and secondary emergency operations centre** | Potential to be unusable due to lack of power, failure of generator or IT, sabotage, extreme weather, or public health emergency |
| **Transportation of fuels** | Without reliable transportation, fuel supplies and logistical support, businesses cannot continue to operate, residents cannot evacuate if necessary, and conversely, it makes it more difficult for the community to recover. Lack of fuels may limit the use of personal gasoline/diesel generators. |
| **Emergency shelters** | Long-duration operations<br>Shelter size may not accommodate the need<br>Logistical support is required to support shelter operations, particularly long-term.<br>Requirement for sanitation, disinfection, and potable water |

## Demographic Profile

The demographic profile encompasses the composition of the community's population, taking into account various factors such as population size and dispersion, age, gender, cultural background, level of education, socio-economic makeup, and transient population.

Understanding the characteristics of the population within the community enables the fire department to identify segments that may be at a higher risk of fire. This awareness allows for the identification of high-risk behaviours to target and specific communication techniques to engage with these high-risk groups effectively.

Fire protection services, including public fire safety education, fire code inspections, and enforcement programs, should be tailored to address the needs of high-risk groups. Delivering fire safety programs in ways that resonate with these groups can have a significant impact. For instance, utilizing communication techniques that are popular among specific high-risk segments increases the likelihood of message reception and, consequently, effectiveness in reducing fire risks.

Population distribution charts can indeed be valuable tools in identifying high-risk or vulnerable demographic groups within the community. By visually representing the

distribution of population across various demographic factors such as age, gender, cultural background, education level, and socio-economic status, these charts provide insights into where particular vulnerabilities or risk factors may exist.

For example, population pyramids can highlight age distributions, helping identify segments with higher proportions of elderly individuals who may be more susceptible to fire-related risks. Similarly, charts depicting educational attainment or income levels can pinpoint areas with lower socio-economic status, which may correlate with higher fire risk due to factors like inadequate housing conditions or limited access to fire safety resources.

By analyzing population distribution charts alongside data on fire incidents or safety concerns, fire departments can prioritize outreach efforts and tailor fire prevention programs to address the specific needs of vulnerable groups within the community. This targeted approach enhances the effectiveness of fire safety initiatives and contributes to overall community resilience.

## Worksheet 4a: Demographic Profile (StatsCan 2021 Census Data)

| Ages of population | # Of people | % Of the total population |
|---|---|---|
| **0-4** | 340 | 4.4 |
| **5-9** | 430 | 5.6 |
| **10-14** | 440 | 5.7 |
| **15-19** | 400 | 5.2 |
| **20-24** | 355 | 4.6 |
| **25-29** | 345 | 4.5 |
| **30-34** | 390 | 5.1 |
| **35-39** | 460 | 6.0 |
| **40-44** | 400 | 5.2 |
| **45-49** | 390 | 5.1 |
| **50-54** | 515 | 6.7 |
| **55-59** | 680 | 8.9 |
| **60-64** | 720 | 9.4 |
| **65-69** | 605 | 7.9 |
| **70-74** | 500 | 6.5 |
| **75-79** | 315 | 4.1 |
| **80-84** | 205 | 2.6 |
| **85 and over** | 135 | 1.7 |
| **Total population** | 7630 | 100 |

In addition to the permanent population, the seasonal population of approximately 3,000 residents who engage in cottage, camping, and recreational activities within the Township of Douro-Dummer also significantly impacts the community's demographics and associated fire risk factors.

Seasonal residents often have distinct characteristics and behaviours compared to permanent residents, which can influence fire risk. For instance, they may spend extended periods in remote or rural areas where access to emergency services could be limited. Moreover, seasonal properties, such as cottages or campsites, may have different fire safety standards or equipment compared to permanent residences.

Therefore, it's essential for fire departments to consider the unique demographic profile of both permanent and seasonal residents when assessing fire risks and developing fire prevention strategies. Population distribution charts should encompass both permanent and seasonal populations to provide a comprehensive understanding of the community's demographics and associated vulnerabilities. This inclusive approach ensures that fire safety initiatives effectively address the needs of all residents, regardless of their residential status.

## Population Distribution

(StatsCan 2021 Census Data)

| Total distribution of the population by broad age groups | 100.0<br>7630<br>Population | Male<br>3830<br>Population | Female<br>3800<br>Population |
|---|---|---|---|
| **0-14 years** | 1210 | 615 | 595 |
| **15-64 years** | 4660 | 2305 | 2355 |
| **65 years and over** | 1760 | 910 | 850 |
| **85 years and over** | 135 | 70 | 65 |
| **The average age of the population** | 44.8 | 44.6 | 44.9 |
| **The median age of the population** | 48.4 | 48.0 | 48.8 |

## Population By Ethnicity

**(**StatsCan 2021 Census Data – Extrapolation or Approximation)

| Total – visible minority for the population in private households – 25% of sample data | Total | Male | Female |
|---|---|---|---|
| **The total visible minority population** | 195 | 105 | 90 |
| **South Asian** | 50 | 25 | 25 |
| **Black** | 80 | 50 | 30 |
| **Chinese** | 35 | 20 | 15 |
| **Japanese** | 10 | | |
| **Multiple Visible Minorities** | 10 | | |

* Visible minority population so small that it is not broken down by ethnic origin

## Education

(StatsCan 2021 Census Data – Extrapolation or Approximation 25% Sample Data)

| Total – highest certificate, diploma or degree for the population aged 15 years and over in private households – 25% sample data | Total<br>6405 | Male<br>3205 | Female<br>3200 |
|---|---|---|---|
| No certificate, diploma, or degree | 850 | 540 | 315 |
| Secondary (high) school diploma or equivalency | 1,830 | 895 | 935 |
| Post-secondary certificate, diploma, or degree | 3,725 | 1,775 | 1,950 |
| Apprenticeship or trades certificate or diploma | 525 | 430 | 95 |
| Trades certificate or diploma other than a certificate of apprenticeship or certificate of qualification | 200 | 145 | 60 |
| Certificate of apprenticeship or certificate of qualification | 330 | 285 | 40 |
| College, CEGEP or other non-university certificate or diploma | 1,810 | 755 | 1,055 |
| University certificate or diploma below bachelor level | 115 | 70 | 45 |
| University certificate or diploma at bachelor level or above | 75 | 35 | 40 |
| Bachelor's degree | 945 | 360 | 585 |
| University certificate or diploma above bachelor level | 75 | 35 | 40 |
| Degree in medicine, dentistry, veterinary medicine, or optometry | 30 | 10 | 20 |
| Master's degree | 170 | 85 | 85 |
| Earned doctorate | 50 | 35 | 15 |

## Socio-economic Summary

(StatsCan 2021 Census Data)

| Total – income statistics in 2020 for the population aged 15 years and over in private households – 100% data | | Total<br>6405 | Male<br>3210 | Female<br>3200 |
|---|---|---|---|---|
| **Without total income** | | 1945 | 875 | 1075 |
| **With total income** | | 4460 | 2335 | 2130 |
| **Under $10,000 (including loss)** | | 445 | 195 | 255 |
| **$10,000 to $19,999** | | 765 | 315 | 445 |
| **$20,000 to $29,999** | | 910 | 380 | 535 |
| **$30,000 to $39,999** | | 760 | 320 | 440 |
| **$40,000 to $49,999** | | 730 | 375 | 360 |
| **$50,000 to $59,999** | | 620 | 315 | 300 |
| **$60,000 to $69,999** | | 475 | 260 | 210 |
| **$70,000 to $79,999** | | 360 | 200 | 160 |
| **$80,000 to $89,999** | | 270 | 155 | 115 |
| **$90,000 to $99,999** | | 220 | 130 | 95 |
| **$100,000 and over** | | 645 | 455 | 195 |
| **$100,000 to $149,999** | | 445 | 295 | 150 |
| **$150,000 and over** | | 200 | 155 | 45 |

## Workforce

(StatsCan 2021 Census Data – Extrapolation or Approximation 25% Sample Data)

| Total – population aged 15 years and over by labour force status - 25% sample data | Total<br>6405<br><br>a+b+c = Workforce | Male<br>3205<br><br>a+b+c = Workforce | Female<br>3200<br><br>a+b+c = Workforce |
|---|---|---|---|
| **In the labour force** | 3,845 | 1,965 | 1,880 |
| **Employed** | 3,505(a) | 1,845(a) | 1,660(a) |
| **Unemployed** | 345(b) | 120(b) | 220(b) |
| **Not in the labour force** | 2,565(c) | 1,245(c) | 1,320(c) |
| **Participation rate** | 60.0 | 61.3 | 58.8 |
| **Employment rate** | 54.7 | 57.6 | 51.9 |
| **Unemployment rate** | 9.0 | 6.1 | 11.7 |

## Home Ownership

(StatsCan 2021 Census Data – Extrapolation or Approximation 25% Sample Data)

| Total – private households by tenure – 25% sample | 2925 |
|---|---|
| **Owner** | 2785 |
| **Renter** | 140 |
| **Condominium** | 0 |

Considering these questions can provide valuable insights into demographic groups within the community and their associated fire safety issues/concerns:

1. Are there specific age groups that make up a large portion of your community? If yes, who are they?

- For example, there may be a significant proportion of elderly residents or young children in the community, both of which could have specific fire safety needs. Elderly individuals may require assistance with mobility or hearing impairments, while young children may need guidance on fire safety education tailored to their age level.

2. Are there groups whose language and cultural practices impact fire safety in your community? If yes, who are they?

- Communities with diverse cultural backgrounds may have residents who speak languages other than the predominant language. Language barriers could affect understanding of fire safety instructions and access to relevant information. Additionally, cultural practices or beliefs may influence behaviours related to fire safety practices.

3. Are there transient populations in your community (e.g., post-secondary school students, migrant workers, seasonal tourists, etc.)? If yes, who are they?

- Transient populations may have different levels of familiarity with fire safety regulations and practices. For instance, post-secondary school students living in dormitories or rental properties may be less familiar with fire evacuation procedures compared to permanent residents.

4. Are specific socio-economic groups and circumstances impacting fire safety in your community? If yes, who/what are they?

- Socio-economic factors such as income level, housing conditions, and access to resources can influence fire safety risks. Low-income households may have limited access to fire safety equipment or may reside in older buildings with outdated infrastructure, increasing their vulnerability to fire incidents.

5. Are there demographic groups within your community that have cognitive or physical disabilities served by community service agencies? If yes, who are they?

- Individuals with cognitive or physical disabilities may require specialized assistance and accommodations to ensure their safety during fire emergencies. Community service agencies that support these populations play a crucial role in addressing their unique fire safety needs.

By addressing these questions, fire departments can better understand the diverse demographics within their community and develop targeted fire safety programs and initiatives to address the specific needs of each group. This inclusive approach ensures that fire safety measures are accessible and effective for all residents, promoting overall community safety and resilience.

## Demographic Profile

Use the answers to the questions above to list the identified demographic groups in the first column of the worksheet below.

## Worksheet 4b: Demographic Profile Risks

| Identified Demographic Group | Issues/concerns |
|---|---|
| **Senior population** | • A significant number of seniors reside in the community, with approximately 1,760 individuals over the age of 65.<br>• Ontario is experiencing a trend of increasing seniors population due to the retirement of baby boomers.<br>• Some seniors may face mobility and cognitive challenges, requiring varying levels of care. –<br>• No Vulnerable Occupancies (O/Reg. 364/13) identified. |
| **Seasonal Population** | • Approximately 3,000 seasonal residents/visitors frequent the municipality.<br>• Fire safety messaging targeting tourists and seasonal property owners is crucial.<br>• Local attractions and outdoor activities attract additional visitors, potentially necessitating emergency services.<br>• Public fire safety messages may be disseminated through static signs, social media, pamphlets, and newspaper articles.<br>• Some seasonal residents may be unfamiliar with their addresses and inaccessible by road.<br>• A private seasonal resort is present in the area. |

Note: The information on this worksheet should be considered in conjunction with all other worksheets and not in isolation. Worksheet 10 allows fire departments to consider all the information on all worksheets to decide how to provide fire protection services in their municipality/community.

## Hazard Profile

The hazard profile encompasses the various hazards present within the community, including natural hazards, hazards caused by human activities, and technological hazards. These may include, but are not limited to:

- Natural Hazards: Floods, freezing rain/ice storms, forest fires, hurricanes, tornadoes, snowstorms, windstorms, extreme temperatures.

- Hazards Caused by Humans: Hazardous materials spills, transportation emergencies (air, rail, road), cyber-attacks, human health emergencies.

- Technological Hazards: Energy supply disruptions (pipelines, storage and terminal facilities, electricity, natural gas, oil facilities, etc.).

Fire departments must consider all potential hazards that pose a significant risk to or may have a significant impact on the community and to which fire departments may be expected to respond. This comprehensive approach ensures effective planning and response strategies to mitigate the risks associated with various hazards.

## Worksheet 5: Hazard Profile

| Identified Hazard | Probability (refer to Table 1 for suggested probability levels) | Consequence (refer to Table 2 for recommended consequence levels | Assigned risk level (refer to the risk level matrix for recommended risk levels) |
|---|---|---|---|
| **Structure conflagration** | Unlikely | Major | Moderate |
| **Large fire** | Possible | Major | Moderate |
| **Wildland/residential interface fires*** | Possible | Major | Moderate |
| **Hazmat incident** | Possible | Major | Moderate |
| **Plane crash** | Rare | Major | Moderate |
| **Motor vehicle collisions** | Likely | Moderate | Moderate |
| **High-Pressure Pipeline Failure** | Possible | Moderate | Moderate |
| **Transportation incident MCI** | Possible | Major | Moderate |
| **Special event – large crowds** | Unlikely | Major | Moderate |
| **Utility disruption** | Likely | Moderate | Moderate |
| **Critical infrastructure failure** | Likely | Moderate | Moderate |
| **Cyber attack/IT failure** | Likely | Major | Moderate |
| **High-angle rescue** | Unlikely | Moderate | Moderate |
| **Trench rescue** | Unlikely | Moderate | Moderate |
| **Ice storm*** | Likely | Major | Moderate |
| **Severe thunderstorm*** | Likely | Major | Moderate |
| **Extreme temperatures*** | Likely | Major | Moderate |
| **Snow/blizzard*** | Likely | Major | Moderate |
| **Severe wind/tornado/straight-line winds*** | Likely | Major | Moderate |
| **Flood*** | Possible | Moderate | Moderate |
| **Drought*** | Possible | Moderate | Moderate |
| **Well water issues** | Possible | Moderate | Moderate |
| **Earthquake** | Unlikely | Moderate | Moderate |
| **Infectious/communicable disease – Human** | Likely | Major | Moderate |
| **Infectious/communicable disease – Animal** | Likely | Major | Moderate |

***Denotes potentially changing risks associated with climate change

Note: The information on this worksheet should be considered in conjunction with all other worksheets and not in isolation. Worksheet 10 allows fire departments to consider all of the information on all worksheets together to make decisions about providing fire protection services in their municipality/community.

## Public Safety Response Profile

The public safety response profile encompasses the agencies and organizations within the community, such as police, EMS (Emergency Medical Services), and rescue teams, that may respond to various types of incidents.

Fire departments should consider the involvement of other public safety response agencies, such as police, EMS, and rescue teams, that might be tasked with or able to assist in responding to emergencies or mitigating their impact. This consideration aids fire departments in prioritizing community risks and determining the level of fire protection services they provide.

For instance, the presence of a private fire and rescue service at a local industrial facility may influence decisions regarding the type and level of fire protection services that a municipal fire department provides to that facility. Collaborating with other public safety agencies ensures a coordinated response to emergencies and enhances overall community safety.

### Worksheet 6: Public Safety Response Profile

| Identified public safety response agency | Incident response | Lead role | Issues/concerns |
|---|---|---|---|
| **Fire** | • Fires<br>• MVCs<br>• Rescues<br>• Medicals<br>• HazMat<br>• Public Education<br>• Access to MNRF for forest fires | • Suppress or extinguish fires<br>• Perform rescues<br>• Deliver initial patient care<br>• Property Conservation<br>• Cause and origin of fires | • Recruitment/retention<br>• Daytime staffing<br>• Fire Attack Team Capability |
| **Ontario Provincial Police** | • Collisions<br>• Fires<br>• Crime scenes | • Scene control<br>• Primary/initial investigation | • Staffing for major incidents |
| **Peterborough County-City Paramedic Services** | • Medicals<br>• MVCs<br>• Fires | • Primary medical care provider | • Staffing for major incidents<br>• Hospital offload delayed |
| **Neighbouring fire departments** | • Automatic/mutual aid<br>• Technical rescue<br>• Hazmat | • Emergency response<br>• Fill-in<br>• Standby<br>• Technical Response | • Daytime response capability |

| Identified public safety response agency | Incident response | Lead role | Issues/concerns |
|---|---|---|---|
| **HUSAR/CBRNE** | • Fire investigation criteria<br>• Fires involving vulnerable occupancies<br>• HUSAR response<br>• CBRNE response | • Fire investigation lead agency supported by police<br>• Co-ordinate CBRN/HUSAR responses | • Lengthy response/travel time<br>• Adequate staffing for duration events |

Note: The information on this worksheet should be considered in conjunction with all other worksheets and not in isolation. Worksheet 10 allows fire departments to consider all of the information on all worksheets together to make decisions about providing fire protection services in their municipality/community.

## Community Services Profile

The community services profile encompasses agencies, organizations, or associations within the community that can provide support to the fire department in delivering public fire safety education, conducting fire code inspections and enforcement, or responding to emergencies.

These community service agencies play a vital role in supporting the fire department's efforts by providing services such as:

- In-kind support
- Financial assistance
- Provision of venues for training
- Enhanced access to high-risk groups in the community
- Temporary shelter for displaced residents following an incident

Collaboration with community service agencies strengthens the fire department's ability to effectively deliver fire safety programs and respond to emergencies. By leveraging the resources and expertise of these organizations, the fire department can enhance its impact and improve overall community safety and resilience.

## Worksheet 7: Community Services Profile Risks (Non-government organizations)

| Community service agency | Types of assistance offered | Issues/concerns |
|---|---|---|
| **Canadian Red Cross** | Lodging, clothing, food, hygiene care and personal assistance; family reunification; child services; preparedness and training | 2-hour warning notice |
| **Amateur Radio Emergency Services** | Support communications services EOC-shelter or site | Availability of amateur radio operators |

| Community service agency | Types of assistance offered | Issues/concerns |
|---|---|---|
| **Salvation Army** | Support for food, lodging, care, and personal assistance | Availability of members |
| **St. John Ambulance** | Emergency patient care<br>Assist with shelter support | Availability of members |

Note: The information on this worksheet should be considered in conjunction with all other worksheets and not in isolation. Worksheet 10 allows fire departments to consider all of the information on all worksheets together to make decisions about providing fire protection services in their municipality/community.

## Economic Profile

The economic profile refers to the economic sectors that significantly impact the community's financial sustainability. When prioritizing risks within the community, the fire department should consider the impact of fires and other emergencies on the industrial or commercial sectors that contribute significantly to the local economy in terms of economic production and job opportunities.

This consideration aids in determining the type and level of fire protection services provided to these sectors within the community. By recognizing the importance of these economic sectors and their vulnerability to fire-related risks, the fire department can tailor its response strategies to mitigate potential impacts and ensure the continued economic vitality of the community.

### Worksheet 8: Economic Profile Risks

| Identified occupancy | Key risk | Probability (Refer to Table 1 for suggested probability levels) | Consequence (Refer to Table 2 for recommended consequence levels) | Assigned risk level (Refer to the risk level matrix for recommended risk levels) |
|---|---|---|---|---|
| **Taverns** | Fire | Unlikely | Moderate | Moderate |
| **Taverns** | Weather event | Likely | Minor | Moderate |
| **Taverns** | Power failure | Likely | Minor | Moderate |
| **Taverns** | Telecommunications /IT failure | Likely | Minor | Moderate |
| **Gas stations** | Fire | Unlikely | Moderate | Moderate |

| Identified occupancy | Key risk | Probability (Refer to Table 1 for suggested probability levels) | Consequence (Refer to Table 2 for recommended consequence levels) | Assigned risk level (Refer to the risk level matrix for recommended risk levels) |
|---|---|---|---|---|
| **Gas stations** | Telecommunications /IT failure | Likely | Minor | Moderate |
| **Gas stations** | Out of fuel | Unlikely | Major | Moderate |
| **Grocery stores** | Power Failure/fuel disruption | Likely | Moderate | Moderate |
| **Grocery stores** | Telecommunications /IT failure | Likely | Minor | Moderate |
| **Local business** | Fire | Unlikely | Moderate | Moderate |
| **Local business** | Weather event | Likely | Moderate | Moderate |
| **Local business** | Power failure | Likely | Moderate | Moderate |
| **Local business** | Telecommunications /IT failure | Likely | Minor | Moderate |
| **Municipal ops** | Weather event | Likely | Moderate | Moderate |
| **Municipal ops** | Power failure | Likely | Moderate | Moderate |
| **Municipal ops** | Telecommunications /IT failure | Likely | Moderate | Moderate |
| **Municipal ops** | Flooding | Possible | Moderate | Moderate |
| **Municipal ops** | Fire | Unlikely | Major | Moderate |
| **Municipal ops** | IT failure/attack | Likely | Moderate | Moderate |
| **Municipal ops** | Seasonal reception centre – tourists | Possible | Moderate | Moderate |

| Identified occupancy | Key risk | Probability (Refer to Table 1 for suggested probability levels) | Consequence (Refer to Table 2 for recommended consequence levels) | Assigned risk level (Refer to the risk level matrix for recommended risk levels) |
|---|---|---|---|---|
| **Municipal ops** | Road closures – storms | Likely | Moderate | Moderate |
| **Schools** | Fire | Unlikely | Major | Moderate |
| **Schools** | Weather event | Likely | Moderate | Moderate |
| **Schools** | Power failure | Likely | Moderate | Moderate |
| **Wide area municipal** | Hazmat/TDG | Unlikely | Major | Moderate |

Note: The information on this worksheet should be considered in conjunction with all other worksheets and not in isolation. Worksheet 10 allows fire departments to consider all of the information on all worksheets together to make decisions about providing fire protection services in their municipality/community.

## Past Loss and Event History Profile

The past loss and event history profile involves analyzing previous response data to identify trends related to deaths, injuries, dollar loss, and fire causes across various occupancy types. This analysis helps in determining the leading causes of fires and high-risk locations and occupancies within the community.

In the absence of fire loss data, local knowledge becomes a crucial predictor of fire risk. This includes insights from firefighters, community members, and stakeholders familiar with historical fire incidents and their underlying causes.

Additionally, provincial statistics provide valuable information on the types of occupancies and locations where fire losses, injuries, and deaths have occurred. By leveraging both local knowledge and provincial data, the fire department can develop targeted strategies to address fire risks effectively and enhance community safety.

## Worksheet 9a: Past Loss and Event History Profile

**OBC classification Annual (structure fire) response history**

| Occupancy | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
|---|---|---|---|---|---|---|---|
| **1. Class A** | | | | | | | |
| **2. Class B** | | | | | | | |
| **3. Class C** Single family residence | 15 | 5 | 3 | 10 | 8 | 6 | 47 |
| **4. Class C** Multi-res. | | | | | | | |
| **5. Class C** Motel | | | | | | | |
| **6. Class C** Mobile home | | | | | | | |
| **7. Class C** Other – Cottages remote/island | | | | | | | |
| **8. Class D&E** | | | | 1 | | | 1 |
| **9. Class F** | 1 | | | | | 1 | 2 |
| **10. Unclassified** Farm | | | | | | | |

Note: The information on this worksheet should be considered in conjunction with all other worksheets and not in isolation. Worksheet 10 allows fire departments to consider all of the information on all worksheets together to make decisions about providing fire protection services in their municipality/community**.**

## Past Loss and Event History Profile

List the causes for each occupancy type identified on the previous worksheet. Assign probability, consequence and risk levels to each cause identified. NOTE: Class C – single-family residential occupancies – has been selected due to the significant number of incidents versus all other building classifications.

## Worksheet 9b: Past Loss and Event History Profile

| Occupancy Type | Causes | Probability (refers to Table 1 for suggested probability levels) | Consequence (refers to Table 2 for recommended consequence levels) | Assigned risk level (refers to the risk level matrix for recommended risk levels) |
|---|---|---|---|---|
| **Group C – Residential** | Electrical Failure | Likely | Major | Moderate |
| **Group C – Residential** | Mechanical Failure | Likely | Major | Moderate |
| **Group C –– Residential** | Routine Maintenance | Likely | Moderate | Moderate |
| **Group C – Residential** | Other Intentional | Unlikely | Minor | Low |
| **Group C – Residential** | Misuse of Ignition sources | Unlikely | Minor | Low |
| **Group C – Residential** | Improper discard/handling of ignition source | Unlikely | Minor | Low |

Note: The information on Worksheet 9b should be considered in conjunction with all other worksheets and not in isolation. Worksheet 10 allows fire departments to consider all of the information on all worksheets together to make decisions about providing fire protection services in their municipality/community.

When determining the type and level of fire protection services, it's essential to consider all three lines of defence which form the foundation of public fire protection in Ontario: public education, code enforcement, and emergency response. These lines of defence work together to reduce the probability or consequence of identified risks.

The primary goal is to prioritize public education and code enforcement measures, as they can mitigate risks and potentially reduce the frequency of emergency responses to major fires. By implementing these measures effectively, the community can be better prepared and proactive in fire prevention.

Once the fire department has identified the preferred treatment option for each risk, it can then plan and execute activities to address those risks. Factors to consider include the department's current resources, staffing levels, training, equipment, and authority, as well as collaboration with other agencies or stakeholders who may be involved in implementing the preferred treatment options.

By carefully considering these factors and leveraging all available resources, the fire department can develop comprehensive strategies to enhance public safety and minimize the impact of fire-related risks within the community.

## Risk Treatment Options

Once risk levels have been determined, the fire department can assess how best to address each risk and allocate the necessary resources. There are four main options for treating risks:

**1. Avoiding the Risk:**

- Avoiding the risk involves implementing programs and initiatives aimed at preventing fires or emergencies from occurring.

- For instance, public fire safety education initiatives seek to change behaviours to prevent fires and ensure appropriate responses during emergencies. Fire code inspections and enforcement ensure buildings comply with safety regulations outlined in the Ontario Fire Code.

**2. Mitigating the Risk:**

- Mitigating the risk entails implementing programs and initiatives to reduce both the likelihood and severity of fires or emergencies.

- For example, routine fire code inspections and enforcement programs help minimize risks by ensuring compliance with safety standards. Pre-planning programs involving fire suppression crews provide valuable insights into community buildings, enabling effective planning for fire suppression operations.

**3. Accepting the Risk:**

- Accepting the risk means acknowledging that certain risks may occur and opting not to implement specific programs or initiatives to address them proactively.

- For instance, while fire departments may not actively work to prevent motor vehicle collisions or environmental hazards like ice storms, they accept that these events may happen and respond accordingly.

**4. Transferring the Risk:**

- Transferring the risk involves shifting the responsibility for managing and mitigating risks to another organization or entity.

- This could include contracting out public fire safety education, fire code inspection and enforcement, or emergency response services to neighbouring municipalities or external organizations.

After considering these options, the fire department can note the preferred treatment option (avoid, mitigate, accept, or transfer the risk) in the corresponding column of Worksheet 10 in Appendix A.

Furthermore, fire departments should ensure that their operational policies and standard operating guidelines address the required levels of service and activities to manage each risk effectively. This involves setting clear goals and objectives, determining necessary resources, training, equipment, and implementing activities and programs across all three lines of defence: public education, code enforcement, and emergency response.

## Worksheet 10: Identifying Treatment Options for The Top Risks in The Community

| Mandatory profiles | Top risk or issues/concerns | Preferred treatment option |
|---|---|---|
| **Geographic profile** | Water – subject to seasonal flooding or flooding during heavy rainfall | **Accept:** Douro-Dummer Fire Services has the appropriate training, response procedures and SOGs to address this risk. |
| | Water -– impacts training and equipment for emergency response | **Avoid and mitigate:** Douro-Dummer Fire Services has the necessary equipment, continuous training and SOGs to address risk. |
| | Water – impacts emergency response and travel time to incidents | **Accept:** Douro-Dummer Fire has appropriate training, communications, response procedures and SOGs to address this risk. |
| | Road network, including Hwy. 28 | **Accept:** Douro-Dummer Fire Services has the appropriate fire protection agreement, training, communications, response procedures and SOGs to address this risk. |
| | Private roads | **Accept:** Douro-Dummer Fire Services has response procedures and SOGs to address this risk. (Private road owners/users must be aware of Douro-Dummer Fire access limitations regarding integrity and weight limitations of private roads.) This level of service should be identified in the E&R Bylaw. |
| | Private Campgrounds | **Avoid and mitigate:** Douro-Dummer Fire Services promotes its' Burning Bylaw to establish times during which fires may be set in the open air and the precautions to be observed by persons setting the fires and implement burn bans when necessary. Douro-Dummer Fire Department works with MNRF when the Minister declares a Restricted Fire Zone. |
| | Bridges | **Accept:** Douro-Dummer Fire Services has appropriate training, communications, response procedures and SOGs to address this risk. Alternate routes are available within most of the municipality. |
| | Crown Land | **Accept:** Douro-Dummer Fire Department has the appropriate training, communications, response procedures, SOGs and agreements with MNRF to address this risk. Implement the Fire Smart program and principals in the community. |
| **Building stock profile** | Fire | **Avoid and mitigate:** Inspections of commercial, industrial, and mercantile occupancies should be conducted every two years to enhance fire safety measures and minimize the risk of fire incidents with economic repercussions for the community. Additionally, public fire safety education initiatives can contribute to lowering the overall risk of fires. |
| | Fire | **Avoid and mitigate:** Legacy buildings in the community may face an elevated risk of fire due to factors such as construction type, materials used, and construction techniques. To mitigate this risk, Douro-Dummer Fire should conduct annual inspections of these buildings in collaboration with their owners. These inspections aim to identify potential fire hazards and implement measures to reduce the risk of fire incidents. Additionally, offering public education opportunities to building owners can further enhance fire safety awareness and practices within the community. |

| Mandatory Profiles | Top risk or issues/concerns | Preferred treatment option |
|---|---|---|
| **Building stock profile** | Large Structure Fire – (Economic Loss to the Community) | **Avoid and Mitigate:** A significant fire in any of these structures, particularly those related to large employers, has the potential for substantial economic loss to the Douro-Dummer community. To mitigate this risk, it is essential to conduct annual inspections of these buildings in collaboration with their owners. These inspections aim to identify potential fire hazards and implement measures to reduce the risk of fire incidents. Additionally, offering public education opportunities to both owners and staff can enhance awareness of fire safety practices and the potential outcomes of a significant fire, ensuring preparedness and appropriate response measures. |
| **Building stock profile** | Lightweight Construction | **Avoid and Mitigate:** Douro-Dummer Fire should maintain ongoing firefighter training programs that incorporate building construction awareness, particularly focusing on the hazards associated with lightweight construction. It's crucial for company officers to understand the risk/benefit analysis and fire growth curves before deploying crews for search and rescue operations in newer homes. This knowledge equips them to make informed decisions about the safety of firefighting operations in different types of structures, ensuring the well-being of both firefighters and the public. |
| **Building stock profile** | OBC Group C – Single family occupancies | **Avoid and mitigate:** Continue delivering public education materials and programming aimed at promoting smoke alarms, carbon monoxide alarms, and home fire escape planning for families. Offer information materials and training sessions on the proper use of fire extinguishers. Maintain public messaging emphasizing the importance of professionally installed and maintained wood-burning appliances, along with regular chimney and flue cleaning before and during the heating season, as per usage requirements. Implement Fire Smart techniques as deemed appropriate for the community's needs and circumstances. |
| **Building stock profile** | Poor maintenance and general housekeeping | **Avoid and mitigate:** During inspections, identify instances of poor equipment maintenance, including electrical and appliance maintenance. Emphasize the importance of fire-safe housekeeping practices to prevent fires and limit their spread. Highlight the necessity of maintaining clear pathways for emergency egress in the event of a fire. |
| **Building stock profile** | Vacant farms and other rural occupancies | **Avoid:** Collaborate with the Chief Building Official to reach out to property owners or occupants of unoccupied or vacant buildings to ascertain their intended disposition. Take appropriate measures to secure, make safe, or demolish buildings as necessary. Conduct inspections of occupied properties as needed to encourage the installation of smoke alarms fire extinguishers, and adherence to fire-safe housekeeping practices. |

| Mandatory profiles | Top risk or issues/concerns | Preferred treatment option |
|---|---|---|
| **Critical infrastructure profile** | Electricity | **Accept:** The loss of electrical utility has a profound impact on daily life, affecting the entire community reliant on reliable electrical service. Encourage the use of backup generators for critical business operations and disseminate public information on the safe use of generators for families and residences. |
| | Natural gas | **Accept:** The loss of reliable natural gas distribution can significantly impact various parts of the local community. Collaborate with the utility to expedite system repairs and disseminate relevant public information to affected residents and businesses. |
| | Propane | **Accept:** The loss of dependable propane distribution can have significant implications for various parts of the community. Maintain collaboration with propane distributors to facilitate the restoration of reliable propane delivery and disseminate pertinent public information accordingly. |
| | IT/Tele-communications | **Accept:** Prepare for potential disruptions in cell and internet services across the municipality. Recognize that the loss of these services can impede business operations, commerce, and certain government services. Collaborate with service providers to guarantee backup power availability at all sites and explore alternative reliable and redundant service options. |
| | Continuity of government | **Avoid and mitigate:** Ensure that staff members who are unable to work from primary or alternate locations have remote access to the municipal computer and telephone networks. Additionally, ensure that the Municipal Emergency Operations Center (EOC) has alternate power sources in place. Consider collaborating with an IT provider to assess the availability of redundant IT systems to enhance resilience and continuity of operations. |

| Mandatory profiles | Top risk or issues/concerns | Preferred treatment option |
|---|---|---|
| **Demographic profile** | Seniors | **Avoid and mitigate:** As the number of seniors remaining in or relocating to Douro-Dummer may increase in the near term, it's crucial to ensure that public services they require or are interested in joining are readily available. This demographic expects accessibility to essential services, including those related to fire safety. Therefore, there will be an ongoing need to provide public fire safety education to new residents, whether through initiatives led by the fire department, building management, or the real estate industry. This proactive approach ensures that seniors are equipped with the knowledge and resources necessary to maintain their safety and well-being in the community. |
| | Seniors | **Avoid and mitigate:** Leverage shared opportunities such as fairs, community events, Fire Prevention Week, and public fire safety education clinics to target seniors, especially as they continue to be mobile for longer periods. Education efforts should encompass various topics tailored to their specific needs, including:<br><br>- Ensuring smoke and carbon monoxide alarms are installed and functioning properly in their homes.<br>- Developing and regularly practicing a home escape plan tailored to their particular residences.<br>- Promoting safe cooking practices to prevent kitchen fires.<br>- Providing guidance on how to effectively extinguish grease fires in the kitchen.<br>- Offering instruction on the proper operation of fire extinguishers.<br>- Educating on burn prevention strategies, such as avoiding moving pans or pots containing burning grease.<br><br>• By incorporating these topics into public education initiatives and events, Douro-Dummer Fire can effectively empower seniors to take proactive measures to enhance their fire safety awareness and preparedness at home. |
| | Youth | **Avoid and mitigate:** To maximize fire safety education among youth, leverage platforms like youth group meetings to deliver crucial information and hands-on training. These sessions should cover:<br><br>- Stressing the significance of installing and maintaining smoke and carbon monoxide alarms in their homes.<br>- Teaching the process of creating and regularly practicing a home escape plan tailored to their living spaces.<br>- Providing practical demonstrations on how to properly operate a fire extinguisher.<br>- Educating on burn prevention techniques, including the importance of not moving pans or pots containing burning grease while cooking.<br><br>• By incorporating these topics into youth group meetings, Douro-Dummer Fire can effectively equip young individuals with the knowledge and skills needed to prevent and respond to fire emergencies, fostering a safer community for all. |

| Mandatory profiles | Top risk or issues/concerns | Preferred treatment option |
|---|---|---|
| **Demographic profile** | Schools (Public and Private) | **Avoid and mitigate:** Utilize school visits as a platform to deliver comprehensive fire safety education to students, covering the following topics:<br>• Educate students on fire-safe behaviour, emphasizing the importance of not playing with ignition sources and practicing caution around fire-related items.<br>• Encourage active participation in fire drills to familiarize students with emergency procedures and evacuation protocols.<br>• Stress the significance of installing and regularly testing smoke and carbon monoxide alarms in their homes to detect potential hazards early.<br>• Provide age-appropriate training on how to operate a fire extinguisher, empowering students with practical firefighting skills.<br>• Educate on burn prevention strategies, including the importance of avoiding moving pans or pots containing burning grease while cooking.<br>• Guide students in developing and regularly practicing a home escape plan tailored to their living spaces, ensuring they are prepared in the event of a fire.<br>• Organize a contest for the best digital media fire prevention messaging, encouraging students to creatively convey fire safety messages through various digital platforms.<br>• By incorporating these elements into school visits, Douro-Dummer Fire can effectively engage students in fire safety education and empower them to become proactive advocates for fire prevention in their homes and communities. |
| | Seasonal residents and tourists | **Avoid and mitigate:** Maintain an ongoing and robust public education campaign focused on the importance of smoke and carbon monoxide alarms, home/cottage escape plans, and fire extinguishers.<br>This continuous effort serves as a constant reminder to residents to prioritize fire safety measures and utilize municipal numbers or other location-identifying applications in case of emergencies. |
| | Residents – public education and general information | **Avoid and mitigate:** Continue delivering public education programming in schools emphasizing the importance of smoke alarms and carbon monoxide alarms, teaching children to crawl low through smoke, and creating home fire escape plans.<br>These efforts are crucial for educating children about fire safety and preparing them to respond effectively in case of emergencies. |

| Mandatory profiles | Top risk or issues/concerns | Preferred treatment option |
|---|---|---|
| **Hazard profile** | Fire | **Avoid and mitigate**: Continue to publicly emphasize the importance of the three lines of defence, ensuring that the community understands the necessity of public education programming.<br>The further the travel distance, the greater the Douro-Dummer fire response time. |
| | Fire | **Avoid and mitigate:** Continue to deliver public education programming in schools that promote smoke alarms, carbon monoxide alarms, crawling low through smoke, and home fire escape planning with children. |
| | Fire | **Avoid and mitigate:** In the event of additional significant residential growth, Douro-Dummer Fire should meet with area builders annually to remind them of the value of residential sprinklers. |
| | Severe weather events/storms | **Accept:** Severe weather events, flooding, and temperature extremes can not be avoided. Many are predictable and forecast ahead of time.<br>The public relies on high-quality, accurate, timely messaging during these events. |
| | TDG/hazmat incidents | **Accept:** Mass casualties, wide area perimeter, isolation or destruction, and transportation route closures may occur.<br>Wide area evacuations may be necessary.<br>Douro-Dummer Fire Department has training, experience and SOGs to address these incidents, their public safety colleagues, and the transportation industries. |
| **Public safety response profile** | Mutual-aid fire departments | **Avoid and mitigate:** Douro-Dummer Fire Department relies on outside fire departments or the PEOC for some technical rescue skills. (Douro-Dummer Fire limitations should be identified in the Establishing and Regulating Bylaw) |
| | Douro-Dummer Fire Department | **Accept:** Like most fire departments in Ontario, the Douro-Dummer Fire Department needs more available firefighters during the business day.<br>The ongoing recruitment process is aimed at filling this need. If recruitment is not successful, other methods of daytime staffing must be considered. |
| | Douro-Dummer Fire Department – training | **Avoid and mitigate**: Ensure all firefighters receive live fire training annually to maintain professional competency. |
| | Ontario Provincial Police | **No Concerns** |
| | Peterborough County-City Paramedic Services | **No Concerns** |
| **Community services profile** | Support for ongoing recruitment programs for various community services | **Avoid and mitigate:** Continued recruitment for community service agencies ensures they can continue supporting municipal operations during major events**.** |

| Mandatory profiles | Top risk or issues/concerns | Preferred treatment option |
|---|---|---|
| **Economic profile** | Electricity | **Accept:** The loss of the electrical utility severely impacts daily lives.<br>The entire community relies on reliable electrical service. Encourage using backup generators for business-critical operations and provide public information on the safe use of generators for families and residences. |
| | Fires | **Accept** Potential economic decline due to industrial/commercial/mercantile fires - loss of income for families in the community. |
| **Past loss and event history profile** | Fires | **Avoid and mitigate:** Directed public education programs focussing on cooking practices, dangers of grease fires, and loose clothing catching fire near stoves.<br>Identify the risks associated with unsafe housekeeping practices, the failure to maintain wood-burning appliances and the need to clean flues and vents regularly.<br>Maintaining 30m of defensible space between forests and residential structures is necessary. |

## Review of the Community Risk Assessment:

According to O. Reg. 378/18, the fire department must complete a new community risk assessment at least once every five years. Additionally, the Regulation mandates that the fire department review its community risk assessment at least annually to ensure its alignment with the community's evolving fire and emergency risks. This periodic review aims to identify any changes in the mandatory profiles that may necessitate adjustments in risk levels or the type and level of fire protection services provided by the fire department.

The objective of this review is to ensure that the fire protection services offered are evidence-based and effectively address the identified risks within the community. Documentation of these reviews is crucial, and it should include the following:

- Any modifications made to the mandatory profiles.
- Changes in assigned risk levels or fire protection services resulting from the review.
- Any other pertinent information deemed relevant to the review or alterations to fire protection services.

If no significant changes occur in the community within the 12-month review period, no adjustments to the profiles or fire protection services are necessary. In such cases, a thorough review of existing documents would suffice to maintain compliance with regulatory requirements.

## Annual Review of The Community Risk Assessment

**2025**

| Profile type | Changes | Preferred treatment option | Clerk/CAO sign off or report to Council |
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**2026**

| Profile type | Changes | Preferred treatment option | Clerk/CAO sign off or report to Council |
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**2027**

| Profile type | Changes | Preferred treatment option | Clerk/CAO sign off or report to Council |
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**2028**

| Profile type | Changes | Preferred treatment option | Clerk/CAO sign off or report to Council |
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**2029**

| Profile type | Changes | Preferred treatment option | Clerk/CAO sign off or report to Council |
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## Conclusion

The Douro-Dummer Fire Department has met the community's emergency needs without receiving any written complaints from ratepayers. Similarly, the Office of the Fire Marshal has not raised concerns about public fire protection in the Township of Douro-Dummer.

As public expectations of fire services evolve, it is wise for Council to prioritize allocating additional resources to public education and fire code enforcement. This strategic approach aims to maintain a lower fire loss and injury rate, improve overall community safety, and prevent catastrophic fire incidents.

The Douro-Dummer Fire Master Plan complements the Community Risk Assessment (CRA) by guiding the municipality in determining the appropriate "Level of Service" for fire protection. Recommendations in the Fire Master Plan include establishing clear goals and objectives, identifying necessary resources, providing training and equipment, and implementing activities and programs aligned with the Three Lines of Defence framework for effective fire protection services.

Continuous review and updating of operational policies and standard operating guidelines are essential aspects of the ongoing Fire Master Plan process. Additionally, new policies and guidelines should be developed to address emerging risks effectively. The Fire Master Plan identifies areas requiring Council approval for the levels of service and activities aimed at enhancing fire safety within the community.

In addition to the ongoing Fire Master Plan process, it is crucial to conduct a yearly review of the Community Risk Assessment (CRA) and a major review every five years. These reviews ensure that any new risks are identified promptly and existing risks are evaluated for any changes. This comprehensive approach allows the municipality to stay proactive in addressing emerging risks and adapting to evolving community needs. Furthermore, aligning the CRA reviews with the Fire Master Plan reviews enhances coordination and synergy between these critical processes, fostering a cohesive and integrated approach to fire protection and community safety planning.

End of Report.

## References:

**Government of Ontario, TG-02-2019 Community Risk Assessment Guideline | Ministry of the Solicitor General (gov.on.ca)**

**Government of Ontario, *Fire Protection and Prevention Act, 1997, SO 1997, c. 4***

**Government of Ontario, *Ontario Regulation 378/18: Community Risk Assessments*, May 2018**

**Government of Ontario *O. Reg. 364/13: MANDATORY INSPECTION - FIRE DRILL IN VULNERABLE OCCUPANCY (ontario.ca)***

**National Fire Protection Association, *NFPA 1300, Standard on Community Risk Assessment and Community Risk Reduction Plan Development*, Proposed Second Draft, January 14, 2019**

**Douro-Dummer Fire Department Establishing and Regulating Bylaw 2019-28**