Township of South-West Oxford

Master Fire Plan

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Township of South-West Oxford
Master Fire Plan

Prepared by:

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Statement of Impartiality

The Loomex Group acted as a third-party consultant to develop this master fire plan. The company conducted impartial reviews and evaluated its findings against established legislation and industry best practices.

All information presented in this master fire plan is intended to be objective.

Disclaimer Regarding Recommendations

The recommendations in this master fire plan are intended to support the best interests of the Township of South-West Oxford.

The recommendations have been designed to provide information that the Township of South-West Oxford can use to address the current and anticipated fire protection needs in the community. However, some recommendations may require additional study or consideration before they are implemented.

Recommended Review Frequency

This master fire plan provides a long-term strategic vision for the Township of South-West Oxford. Every effort has been made to ensure that the information provided in this master fire plan is accurate as of the date the document was finalized.

In order to remain effective, this master fire plan must be kept current with local needs and circumstances. At a minimum, the Township of South-West Oxford should review this document annually to ensure the information it contains remains up to date. In addition, this master fire plan should be updated in five years, and it should be completely redone in ten years.

Executive Summary

Project Purpose

In 2025, the Township of South-West Oxford contracted The Loomex Group to develop a master fire plan ("**MFP**").

The MFP project had the following goals:

- Identify and evaluate the current and anticipated fire protection needs in South-West Oxford.
- Assess the fire protection services that South-West Oxford currently receives.
- Provide data that South-West Oxford can use to make informed decisions about the safety of its residents, businesses, visitors, and firefighters.
- Provide strategies and identify resources that South-West Oxford can use to manage its current and anticipated fire protection needs adequately and cost-effectively.

The Council of Township of South-West Oxford ("**Council**") and South-West Oxford Fire and Emergency Services ("**the Department**") can reference this MFP when making policy, organizational, capital, and operational decisions for the short term (0 to 2 years), medium term (2 to 5 years), and long term (5 to 10 years).

Project Development Process

The MFP development process included the following components:

- Evaluate the Department's structure, programs, and levels of service.
- Meet with stakeholders from South-West Oxford and the Department to gain first-hand insights about the community and the Department's operations.
- Assess the current fire safety risks, needs, and circumstances in South-West Oxford.
- Review recent fire loss statistics for South-West Oxford and then compare them to current trends in order to estimate the township's future fire protection needs.

After completing the tasks listed above, The Loomex Group consolidated its findings and developed this MFP document.

Each section of this MFP focuses on a specific area of the Department's operations. The sections provide context for various legislative or operational topics and then present relevant findings (as applicable).

Summary of Project Findings

Some of the Department's strengths are as follows:

- The Department is committed to training all of its personnel to applicable NFPA standards in order to ensure a high level of preparedness and professionalism.
- The Department is staffed by volunteer firefighters who are dedicated to contributing the time and effort needed to protect their community.
- The strong level of collaboration between the Department and neighbouring fire departments enhances fire prevention efforts and access to specialized training officers.

Some of the challenges facing the Department are as follows:

- Decentralized and inconsistent documentation practices hinder timely access to critical information, and they complicate data analysis efforts.
- The limited availability of reliable water sources within South-West Oxford poses a critical challenge to effective firefighting operations.
- It is difficult for the Department to attract and retain volunteer firefighters due to time commitments and competing priorities.

The Department's strengths and weaknesses are both given due consideration in order to provide South-West Oxford with a realistic picture of the Department's current capabilities and limitations.

Recommendations

This MFP contains various recommendations for Council and the Department to consider. The recommendations focus on several topics, including:

- occupational health and safety, wellness, and mental health programs
- proactive fire prevention and public education initiatives
- water supply infrastructure to ensure reliable fire protection, community safety, and sustainable growth
- records management

All of the recommendations in this MFP are designed to prioritize the safety of local residents and firefighters. The recommendations are all within the township's means to implement, and they include ways for South-West Oxford to act cost-effectively wherever possible. Overall, the information in this MFP is intended to help Council and the Department provide an appropriate level of service to the South-West Oxford community now and in the coming years.

Summary of Recommendations

Purpose of Recommendations

The recommendations in this MFP suggest practical improvements that the Department can reasonably complete within the next ten years[1] in order to:

- Meet legislative obligations.
- Adhere to best practices.
- Enhance operational effectiveness.
- Protect the safety of community residents, visitors, and businesses.
- Protect firefighter safety.

Additional Considerations

In order to provide South-West Oxford with a feasible implementation schedule, each recommendation in this MFP includes the following considerations:

- Does the recommendation need to be implemented for compliance purposes?
- Does Council need to approve the recommendation before it is implemented?
- Does the recommendation need to be included in the Department's budget through the regular budgeting process?
- When should the recommendation be implemented?
    - Short-term: Implement the recommendation within five years.
    - Long-term: Implement the recommendation within five to ten years.
    - Ongoing: Implement the recommendation on an ongoing basis (as needed).

List of Recommendations

Table 1 collects the 51 recommendations found in this MFP.

[1] In addition to the formal recommendations, this MFP also contains information and observations that the Department can use to guide its operations over a longer term.

Table 1. List of recommendations.

Rec. #	Section	Recommendation	Considerations
3-1	Legislation	South-West Oxford Fire and Emergency Services should continue using applicable standards and guidelines as benchmarks to gauge the effectiveness of its operations and safety initiatives.	Mandatory: Yes Council approval: No Budget impact: No Timeframe: Ongoing
3-2	Legislation	The Fire Chief should develop a public education campaign that teaches local residents the importance of emergency preparedness and how to assemble a 72-hour emergency kit.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term
4-1	Bylaws and Service Levels	The Fire Chief should review the establishing and regulating bylaw for South-West Oxford on an annual basis. The review should be used to confirm that the bylaw remains current with all emergency and non-emergency services provided by South-West Oxford Fire and Emergency Services.	Mandatory: Yes Council approval: Yes Budget impact: No Timeframe: Short-term
4-2	Bylaws and Service Levels	The Fire Chief should establish a schedule for reviewing all of the fire service bylaws in South-West Oxford, updating them (as needed) to ensure they are current and applicable.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
4-3	Bylaws and Service Levels	Using the recommendations for specialized services provided in the 2026 South-West Oxford Master Fire Plan as a guide, the Fire Chief should continue to review South-West Oxford Fire and Emergency Services' emergency response history and operational demands to ensure that all applicable firefighters are trained to the NFPA 1006 standard by 2028.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term

Rec. #	Section	Recommendation	Considerations
4-4	Bylaws and Service Levels	South-West Oxford Fire and Emergency Services should consider assigning a fire station with lower call volumes as a centralized hub for specialized rescue services. Consolidating NFPA 1006 disciplines (such as passenger/heavy vehicle rescue, rope rescue, and confined space rescue) with the ability to provide grain rescue at one location would support efficient NFPA 1006 certification compliance by 2028. This initiative would also support training, equipment management, and team development.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term
4-5	Bylaws and Service Levels	In order to ensure multi-agency coordination during emergency responses at Tillsonburg Regional Airport, South-West Oxford Fire and Emergency Services should formalize mutual aid agreements with airport management personnel, County of Oxford Paramedic Services, and Tillsonburg Fire Services.	Mandatory: No Council approval: Yes Budget impact: No Timeframe: Short-term
4-6	Bylaws and Service Levels	South-West Oxford Fire and Emergency Services should develop a training program that includes airside awareness training and pre-incident planning related to Tillsonburg Regional Airport.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term
5-1	Fire Service Agreements	The Fire Chief should work with South-West Oxford's CAO to review all agreements (both official and unofficial) that are currently in place for South-West Oxford Fire and Emergency Services. The agreements should then be updated (as applicable) to reflect the community's current risks, needs, and circumstances. All updated (or new) agreements should then be presented to Council for consideration and approval.	Mandatory: No Council approval: Yes Budget impact: No Timeframe: Short-term
5-2	Fire Service Agreements	South-West Oxford should initiate a formal review of its fire dispatch agreement to determine whether it aligns with current operational needs and expectations. As part of this review, performance and service standards should be clearly identified and incorporated into the agreement.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term

Rec. #	Section	Recommendation	Considerations
5-3	Fire Service Agreements	South-West Oxford should formalize contractual agreements with the departments or agencies that provide specialty services locally (as identified in the South-West Oxford Community Risk Assessment). The agreements should clearly outline expectations, response protocols, resource availability, and cost-sharing arrangements for all applicable services (such as hazardous materials responses, technical rescues, and water/ice rescues).	Mandatory: Yes Council approval: Yes Budget impact: Possible Timeframe: Short-term
6-1	Recruitment and Retention	South-West Oxford Fire and Emergency Services should develop a community-focused recruitment strategy that includes methods for building awareness, interest and commitment among community members in order to attract new firefighters.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term
6-2	Recruitment and Retention	South-West Oxford Fire and Emergency Services should consider adding a firefighter clothing allowance to its annual budget in order to support retention levels, reduce out-of-pocket expenses, and promote a professional appearance among its members.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term
6-3	Recruitment and Retention	South-West Oxford Fire and Emergency Services should implement a comprehensive retention plan that includes training opportunities, recognition programs, flexible schedules, and financial incentives.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term
6-4	Recruitment and Retention	South-West Oxford should implement a process to ensure that the voices of local volunteer firefighters are heard and considered in decision-making processes.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term

Rec. #	Section	Recommendation	Considerations
7-1	Departmental Communications	The Fire Chief should find ways for South-West Oxford Fire and Emergency Services' current and future officers to strengthen their team-building, conflict-resolution, and communication skills.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term
7-2	Departmental Communications	The Fire Chief should host monthly or quarterly meetings to provide all members of South-West Oxford Fire and Emergency Services with updates on operations, training, equipment, and departmental goals.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
7-3	Departmental Communications	South-West Oxford Fire and Emergency Services should leverage new information-sharing technologies to improve the way it communicates information between its fire stations. A digital platform would enable secure access to documents, schedules, announcements, training materials, and reporting.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term
7-4	Departmental Communications	In order to strengthen community engagement and public communication (related to emergency alerts, fire safety messages, and community news), digital signs should be installed in Beachville, Sweaburg, Mount Elgin, and Brownsville. One digital sign should be installed in each of those locations.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Long-term
8-1	Occupational Health and Safety	South-West Oxford Fire and Emergency Services should incorporate recommendations from the Firefighter Guidance Notes into its training programs in order to enhance operational safety, standardize best practices, and ensure compliance with provincial health and safety regulations.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing

Rec. #	Section	Recommendation	Considerations
8-2	Occupational Health and Safety	In order to protect local firefighters from occupational cancer risks, South-West Oxford Fire and Emergency Services should reference the Cancer Prevention Checklist on a regular basis as part of its health and safety protocols.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
8-3	Occupational Health and Safety	South-West Oxford Fire and Emergency Services should invest in additional sets of bunker gear in order to ensure that its firefighters have access to clean, serviceable equipment when their primary gear is out for inspections, cleaning, or repair.	Mandatory: Yes Council approval: Yes Budget impact: Yes Timeframe: Short-term
8-4	Occupational Health and Safety	The Fire Chief should research ways to provide the local fire service personnel with improved access to fitness equipment and programs.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term
8-5	Occupational Health and Safety	Additional financial support should be allocated to South-West Fire and Emergency Services in order to strengthen the pre-incident planning program with more resources. The additional resources should be used to enhance operational readiness, improve firefighter safety, and support more effective decision-making during emergency responses.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
9-1	Fire Prevention and Public Education	South-West Oxford Fire and Emergency Services should implement a public education and awareness program that emphasizes targeted outreach efforts, consistent messaging, and active community engagement. The program should also include a formalized “after the fire” initiative to support residents after an incident occurs (through standardized recovery protocols, emotional support resources, and guidance on restoring essential fire protection systems, such as smoke alarms and carbon monoxide alarms).	Mandatory: Yes Council approval: No Budget impact: No Timeframe: Short-term

Rec. #	Section	Recommendation	Considerations
9-2	Fire Prevention and Public Education	South-West Oxford Fire and Emergency Services should formalize a smoke alarm and carbon monoxide alarm program to promote residential fire safety. A system to document and evaluate the results of the program (to ensure accountability, track progress, and identify areas for improvement) should also be established.	Mandatory: Yes Council approval: No Budget impact: No Timeframe: Short-term
9-3	Fire Prevention and Public Education	South-West Oxford Fire and Emergency Services should adopt a more proactive and structured approach to public fire safety education. This approach should be formalized through the establishing and regulating bylaw for South-West Oxford.	Mandatory: No Council approval: No Budget impact: Possible Timeframe: Ongoing
9-4	Fire Prevention and Public Education	The Fire Chief should implement a risk-based inspection schedule that ensures high-risk occupancies are inspected annually. All moderate- and low-risk occupancies can be reviewed on a rotating basis.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
9-5	Fire Prevention and Public Education	The Fire Chief should implement an enhanced public awareness and engagement communication campaign to educate property owners about different inspection processes, common violations, and the importance of maintaining fire safety systems.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term
10-1	Training Program	The Fire Chief should consider incorporating leadership training and incident command training into the Department’s Officer Leadership Team meetings.	Mandatory: No Council approval: No Budget impact: No Timeframe: Short-term

Rec. #	Section	Recommendation	Considerations
10-2	Training Program	The Fire Chief should formalize a “post-incident analysis and review” program.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
10-3	Training Program	The Fire Chief should develop a training schedule to ensure that the local officers and firefighters understand the long-term vision for training delivery. The Fire Chief should ensure that the training schedule is based on the mandatory subjects that firefighters must complete annually.	Mandatory: Yes Council approval: No Budget impact: No Timeframe: Short-term
10-4	Training Program	South-West Oxford Fire and Emergency Services should invest in a broader range of realistic training props in order to enhance its hands-on learning initiatives.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term
11-1	Responses	The Fire Chief should formalize a policy that restricts the storage of firefighter gear in personnel vehicles to clean, properly contained PPE. The policy should also require local firefighters to consult their insurance providers to verify potential changes in coverage conditions. In order to ensure safety and compliance with NFPA standards, all gear should be stored and transported using fire department vehicles wherever possible.	Mandatory: Yes Council approval: No Budget impact: No Timeframe: Short-term
11-2	Responses	The Fire Chief should review the effective response force for South-West Oxford Fire and Emergency Services on an annual basis. The review should also examine the fire department’s deployment statistics and response time objectives. If any of those areas require updates to remain current, the Fire Chief should submit recommendations to Council for consideration and approval.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing

Rec. #	Section	Recommendation	Considerations
11-3	Responses	South-West Oxford Fire and Emergency Services should begin developing automatic aid agreements with the fire departments in Woodstock, Ingersoll, and Tillsonburg. Doing so will improve response times, public safety, and firefighter safety by ensuring the closest available resources are dispatched automatically to emergency scenes.	Mandatory: No Council approval: Yes Budget impact: No Timeframe: Short-term
11-4	Responses	South-West Oxford Fire and Emergency Services should work closely with the municipal planning and public works departments to identify and enhance emergency response routes from existing fire stations due to the potential for community growth, future development, and increased call demand.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
12-1	Fire Department Structure	South-West Oxford Fire and Emergency Services should formalize a policy to ensure clarity, consistency, and operational continuity in regard to acting positions within the fire department.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
12-2	Fire Department Structure	South-West Oxford should explore ways to establish a shared fire chief or shared deputy fire chief arrangement with a neighbouring municipality in order to strengthen leadership capacity and ensure command continuity within South-West Oxford Fire and Emergency Services.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term
12-3	Fire Department Structure	South-West Oxford Fire and Emergency Services should explore the option of sharing administrative services with neighbouring municipalities (similar to the existing arrangements for the shared Training Officer and Fire Prevention Officer).	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Long-term

Rec. #	Section	Recommendation	Considerations
13-1	Fire Station Facilities	South-West Oxford Fire and Emergency Services should evaluate the configurations and sizes of its fire stations to ensure the facilities are capable of meeting current and future operational needs. This evaluation should include a range of considerations, such as future growth, evolving service demands, and health and safety standards.	Mandatory: Yes Council approval: No Budget impact: No Timeframe: Ongoing
13-2	Fire Station Facilities	South-West Oxford Fire and Emergency Services should assess the administrative areas in its fire stations to ensure they are capable of meeting current and future operational needs. Consideration should also be given to enhancing those areas (if possible).	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing
14-1	Water Supply	The Fire Chief and representatives of South-West Oxford should consult with representatives of Oxford County to identify local firefighting constraints and capabilities. Any needs related to non-fire-rated systems should also be discussed (as some areas of South-West Oxford are serviced by non-fire-rated drinking systems).	Mandatory: Yes Council approval: Yes Budget impact: Yes Timeframe: Long-term
14-2	Water Supply	South-West Oxford should investigate the feasibility of obtaining Superior Tanker Shuttle Accreditation to enhance fire protection coverage across the community.	Mandatory: No Council approval: No Budget impact: Yes Timeframe: Long-term
14-3	Water Supply	South-West Oxford Fire and Emergency Services should consider acquiring a larger-capacity pumper tanker with an approximate capacity of 2,500 to 3,000 imperial gallons. Purchasing this tanker would enhance operational effectiveness, firefighter safety, and long term compliance with Superior Tanker Shuttle Service Accreditation requirements.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Ongoing

Rec. #	Section	Recommendation	Considerations
14-4	Water Supply	South-West Oxford should implement a plan to develop alternative water sources across the community. The plan should begin with a comprehensive assessment of current water supply gaps, particularly in built-up areas that are over 5 km from reliable water sources.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Long-term
15-1	Asset Management	South-West Oxford Fire and Emergency Services should consider purchasing a new fire apparatus for Station 1 – Brownsville in order to address current limitations related to transportation and operational capacity. As part of this acquisition, the fire department should investigate the advantages of procuring a mini-rescue pumper, which could enhance response capability across South-West Oxford by providing a more versatile, rapid-deployment unit capable of supporting both fire suppression and rescue operations.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term
15-2	Asset Management	South-West Oxford should develop a comprehensive preventative maintenance plan for all of its fire service equipment in order to ensure that reliable equipment is available for emergency responses. Doing so should also assist with extending the service life of the equipment.	Mandatory: No Council approval: No Budget impact: Yes Timeframe: Short-term
15-3	Asset Management	The Fire Chief should prepare a comprehensive report recommending continued investment in radio communications equipment for South-West Oxford Fire and Emergency Services. In order to support informed decision-making, the report should include a detailed assessment of the current radio system's age, condition, reliability, coverage, and maintenance requirements, as well as any current operational challenges and future requirements.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Ongoing
15-4	Asset Management	The Fire Chief should continue to update the asset management plan for South-West Oxford, which includes schedules for replacing fire service vehicles and equipment with predetermined life cycles. The plan should be based on industry standards, manufacturers' recommendations, and best practices.	Mandatory: No Council approval: No Budget impact: No Timeframe: Ongoing

Rec. #	Section	Recommendation	Considerations
15-5	Asset Management	South-West Oxford Fire and Emergency Services should mandate that all of its fire apparatus maintenance, inspections, and repairs must be completed by individuals who are properly trained, qualified, and licensed to work on emergency vehicles.	Mandatory: Yes Council approval: No Budget impact: Yes Timeframe: Ongoing
16-1	Documentation and Records Management	South-West Oxford Fire and Emergency Services should adopt a cloud-based centralized records management system in order to enhance the accuracy, accessibility, and security of documentation related to fire operations.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term
16-2	Documentation and Records Management	In order to enhance operational efficiency, improve firefighter safety, and deliver more timely and effective emergency responses, South-West Oxford Fire and Emergency Services should consider using modern technological tools that integrate with a records management system.	Mandatory: No Council approval: Yes Budget impact: Yes Timeframe: Short-term

1.0 Introduction

1.1 Purpose of a Master Fire Plan

A master fire plan is a strategic planning document that evaluates a fire department from administrative, legislative, and operational perspectives. In addition to evaluations, an MFP includes recommendations designed to enhance the fire department's operations.

Overall, an MFP is intended to guide a fire department's operations and allow it to meet the community's current and anticipated risks, needs, and circumstances for the foreseeable future.

1.2 Master Fire Plan for the Township of South-West Oxford

1.2.1 Project Background

In 2025, South-West Oxford contracted The Loomex Group to complete an MFP. The township stated that the MFP must provide information to help local fire service personnel make policy, capital, and organizational decisions over a ten-year timeframe. According to South-West Oxford's request for proposals for this project, the objectives for the MFP were as follows:

- Specify actions, such as building new stations or acquiring updated apparatus and equipment.
- Detail the human and financial resources required for implementation, including staffing and funding sources.
- Establish deadlines for each action step and milestone.[2]

In order to meet the stated objectives, the MFP development process included a review of the Department from legislative, administrative, and operational perspectives. The community's past, current, and anticipated fire protection needs were also assessed.

Based on the findings obtained during the MFP development process, various recommendations have been developed to help South-West Oxford enhance community safety for its residents, visitors, and businesses. These recommendations include strategies related to governance, services, and personnel.

All of the recommendations in this MFP are designed to prioritize the safety of local residents and firefighters, and they aim to provide South-West Oxford with ways to enhance its services in a cost-effective manner.

[2] Township of South-West Oxford, "RFP-2025-03: Consulting Services for Master Fire Plan."

1.2.2 Initial Stakeholder Engagement

Start-Up Meeting

The Loomex Group began the MFP development process by meeting with the Fire Chief of South-West Oxford to review the project's work scope and framework.

Following the start-up meeting, The Loomex Group provided the Fire Chief with a project framework for review and approval.

Stakeholder Engagement

After the project framework was approved, The Loomex Group held engagement sessions with the following stakeholders from South-West Oxford:

- David Mayberry, Mayor
- Council of Township of South-West Oxford
- Mary Ellen Grib, CAO
- Julie Middleton, Clerk
- Shane Caskanette, Fire Chief
- Adam Prouse, Works Superintendent
- Brad Smale, Chief Building Officer
- Scott Vitas, Mechanic
- Rob Wilson, Water & Wastewater Technical Services
- Dan Santos, Water & Wastewater Technical Services
- Mackenzie Schultz, Water & Wastewater Technical Services
- Don Ford, Water & Wastewater Technical Services
- Emily Lavender-Ruple, Township of South-West Oxford
- local officers and firefighters from all three of the Department's fire stations

Additional participants in the engagement sessions included the following stakeholders:

- Paige Ford, Shared Fire Prevention Officer, Oxford County
- Conor Brennan, Asset Management Specialist, Oxford County

The purpose of the stakeholder consultations was to gain a list of insights about the fire protection services in South-West Oxford from the individuals who approve or provide those services.

1.2.3 Data Collection Process

Document Reviews

The Loomex Group reviewed various administrative, legislative, and operational documents about South-West Oxford and the Department, such as:

- applicable legislation, bylaws, and agreements
- municipal maps
- operating and capital budgets
- organizational charts
- fire protection agreements, policies, and standard operating guidelines ("**SOGs**")

Site Visits

Representatives of The Loomex Group spent time in South-West Oxford to observe the community firsthand.

Additional Data Collection Methods

Engagement with the Mayor and Council

The Loomex Group provided a survey to South-West Oxford's mayor and councillors in order to gather their opinions about the Department's services. The survey also asked the participants to discuss their concerns about those services, as well as suggest ways that Council could support the Department.

Engagement with Fire Service Personnel

The Loomex Group facilitated a SWOT analysis session with the Department's personnel in order to gather their opinions about the Department's operations and organizational structure.

The key takeaways from the SWOT analysis are as follows:

- Personnel believe that they contribute significantly to the safety and well-being of their community.
- Overall, compensation is viewed as fair (except for training pay).
- Personnel noted that most fire stations are adequately equipped to perform the required duties. However, personnel from Station 1 note that the station does not have enough vehicles to transport a full complement of firefighters to emergency scenes.
- Training is viewed as well-organized, educational, and applicable.

- Staffing levels are generally appropriate, but daytime coverage remains a challenge.
- Personnel want to receive a uniform allotment, which they believe would help encourage pride, ownership, and strong firefighter retention levels.
- Personnel would appreciate seeing their suggestions reflected in decision-making processes.

1.2.4 Drafting the Master Fire Plan

Document Development Process

The Loomex Group consolidated the findings it obtained during the data collection process and then began drafting the MFP document.

The following questions were considered while the MFP was being drafted:

- What can the Department do to enhance firefighter safety?
- What can the Department do to enhance the community's well-being?
- Are there opportunities for the Department to introduce shared services?
- Are there opportunities for the Department to save or avoid costs?

The Loomex Group also identified baselines and benchmarks that the Department can use to perform an ongoing self-assessment of its service delivery capabilities.

Ongoing Review Process

The MFP development process incorporated regular meetings with the Department's personnel. These meetings ensured that the MFP benefited from continual stakeholder contributions.

Document Structure

The information in this MFP is organized into four main categories.

Context: The information included under a heading that reads "Context" is intended to provide relevant background details about the legislation, standards, or best practices that are related to a specific topic. This information is applicable to the Ontario fire service in general, not any fire department exclusively.

Findings: The information included under a heading that reads "Findings" is intended to explain how the legislation, standards, or best practices discussed under the preceding "Context" heading are directly applicable to South-West Oxford and the Department.

Roadmap for Improvement: The information included under the heading “Roadmap for Improvement” provides a detailed explanation of the strategies that have been developed for South-West Oxford.

Recommendations: The information included under the heading “Recommendations” includes a formal list of the strategies that have been developed specifically for South-West Oxford and the Department. In order to understand the rationale for the recommendations, South-West Oxford and the Department can refer to the information provided under the “Context,” “Findings,” and “Roadmap for Improvement” headings in the applicable sections of this MFP.

1.2.5 Finalizing the Master Fire Plan

The final MFP deliverables are as follows:

- finalized copies of the MFP to be provided to the Fire Chief and the CAO of South-West Oxford
- Council presentation to summarize key findings and recommendations from the finalized MFP document

2.0 Community Characteristics

2.1 Overview of South-West Oxford

The Township of South-West Oxford was formed in 1975 following the amalgamation of the Township of Dereham, the Township of West Oxford, and the Village of Beachville. According to Statistics Canada, South-West Oxford had a population of 7,583 residents at the time of the 2021 census.

In 2024, the intercensal estimate of Oxford County's population was 135,976 residents, which is a 7 per cent increase from the 2021 intercensal estimate of 126,731 residents. It is estimated that South-West Oxford had 8,010 residents and 2,640 households in 2024.

Table 2 shows the number of households and residents in six communities in South-West Oxford as of 2024.

Table 2. Community households and population summary (2024).

Area	# of Households	Population
Beachville	351	1,067
Brownsville	182	553
Dereham Centre	21	64
Mount Elgin	296	900
Salford	73	222
Sweaburg	262	796

An excerpt from the Oxford County 2024 Hazard Identification and Risk Assessment provides the following information about South-West Oxford:

> Description: South-West Oxford is a rural township characterised by a mix of agricultural land and smaller hamlets. It is known for its picturesque countryside and strong farming community. The area is rich in history, and many parcels of land have been handed down from generation to generation.
>
> Economy: The economy is predominantly agricultural, with significant dairy, beef, and crop farming operations. The township also supports small-scale manufacturing and local services.
>
> Community Life: South-West Oxford has a strong sense of community, with various local events, fairs, and community groups that foster a close-knit environment. […] There is a large Amish community on the east side of the township.

South-West Oxford also contains a portion of Highway 401, which is Canada's busiest highway.

According to the 2021 Statistics Canada census, South-West Oxford covers an area of 369.61 square kilometres.

2.2 Overview of South-West Oxford Fire and Emergency Services

Personnel

As of this MFP, the Department has a full-time fire chief and 63 suppression personnel, including:

- 3 district chiefs
- 6 captains
- 6 acting captains
- 3 training captains
- 45 firefighters

The Department also has the following shared positions:

- 1 administrative assistant
  - The administrative assistant also provides customer service at the Department's front counter.
- 1 fire prevention officer (shared position with Oxford County)
- 1 fire training officer (shared position with Oxford County)

Fire Stations

As of this MFP, the Department has the following three fire stations:

Station 1 – Brownsville
292244 Culloden Line
Brownsville, ON N0L 1C0

Station 2 – Mount Elgin
333269 Plank Line (Highway 19)
Mount Elgin, ON N0J 1N0

Station 3 – Beachville
434696 West Hill Road
Beachville, ON N0J 1A0

The three fire stations serve a population of approximately 7,583 residents and an approximate area of 369.61 square kilometres.

Collectively, the three fire stations have eight types of fire apparatus, including pumper trucks, tankers, and rescue trucks.

3.0 Legislation and Standards

3.1 Overview

Legislation

In Ontario, fire departments must operate in accordance with numerous acts and other types of legislation, such as:

- Fire Protection and Prevention Act, S.O. 1997 ("**FPPA**")
- Occupational Health and Safety Act, R.S.O. 1990 ("**OHSA**")
- Emergency Management and Civil Protection Act, R.S.O. 1990 ("**EMCPA**")
- O. Reg. 332/12: Building Code ("**OBC**")
- O. Reg. 213/07: Fire Code ("**OFC**")
- O. Reg. 343/22: Firefighter Certification
- applicable municipal bylaws

For brief definitions of these documents—as well as definitions of other applicable legislation—see Appendix C of this MFP.

Industry Standards

The following industry standards and guidelines also influence how fire departments operate:

- National Fire Protection Association ("**NFPA**") standards
- Office of the Fire Marshal ("**OFM**") guidelines and memoranda
- Ontario Fire Service Health and Safety Committee Firefighter Guidance Notes

The resources listed above provide baselines that fire departments should use to gauge the effectiveness of their operations and safety initiatives.

3.2 Legislative Compliance

Context

The FPPA outlines the minimum standards that municipalities and fire departments must meet. Various FPPA requirements also relate to other regulations and codes, such as the OFC and OBC (which deal with life safety systems).

If a municipality in Ontario decides to have a fire department, the FPPA requires that municipality to maintain a complete fire safety and fire protection program.

At a minimum, a municipality is legally obligated to establish/implement a public education and fire prevention program, as well as any additional services the municipality determines are needed (including any fire suppression services).

As per section 6 (3) of the FPPA, each fire chief is responsible for ensuring that their fire department is compliant with applicable legislation and standards.

Findings

Table 3 lists some of the legislative requirements that South-West Oxford and the Department must meet. The table indicates whether there is compliance with the stated requirements.

Table 3. Selected requirements of the Fire Protection and Prevention Act.

Reference	Requirement	Compliant?
FPPA, 2 (1) (a)	Establish a program in the municipality which must include public education with respect to fire safety.	Yes
FPPA, 2 (2) (b)	Establish a fire department.	Yes
FPPA, 5 (1)	Provide fire suppression services.	Yes
FPPA, 6 (1)	Appoint a fire chief for the fire department.	Yes
O. Reg. 364/13	Implement a vulnerable occupancy program.	Yes
O. Reg. 365/13	Complete inspections upon complaint.	Yes
O. Reg. 365/13	Complete inspections upon request.	Yes
O. Reg. 378/18	Complete a community risk assessment.	Yes

As noted in the table above, South-West Oxford and the Department are compliant with the stated requirements of the FPPA.

3.3 Community Risk Assessments

Context

On July 1, 2019, the Province of Ontario passed O. Reg. 378/18. This regulation falls under the authority of the FPPA.

As per O. Reg. 378/18, every municipality in the province is required to complete a new community risk assessment ("**CRA**") every five years. As a best practice, municipalities should also consider reviewing their CRAs annually or when there are any significant changes in the community.

Each fire department should review the risks identified in its municipality's CRA. The document will contain information that the fire department can use to develop public education activities and fire prevention initiatives aimed at addressing the threats the community is most likely to face.

Findings

The Department completed a CRA in 2024. By completing this document, South-West Oxford is compliant with O. Reg. 378/18. The CRA also provides the Department with information that it can use to develop fire prevention initiatives aimed at enhancing community safety.

Going forward, the Department should use the CRA's findings to complement the information provided in this MFP.

3.4 Accessibility for Ontarians with Disabilities Act

Context

The Accessibility for Ontarians with Disabilities Act ("**AODA**") came into effect on June 13, 2005. The intention of the AODA is to improve accessibility features in all public establishments in Ontario by 2025.

It is important to note that fire stations are publicly funded buildings, which means they should be accessible and inclusive spaces for all members of the public. However, many fire departments in Ontario are operating from stations that were constructed before the introduction of the AODA. Consequently, numerous fire departments do not have facilities that meet accessibility requirements.

Findings

The work scope for this MFP did not include an assessment to determine whether the fire stations in South-West Oxford are compliant with the AODA.

Based on a cursory visual review, Station 1 – Brownsville and Station 3 – Beachville are compliant with the AODA. However, Station 2 – Mount Elgin is not compliant with the AODA, as its second floor lacks an elevator or barrier-free access for individuals with mobility impairments.

3.5 Emergency Management

Context

In order to receive their annual compliance recognition, municipalities must meet specific requirements of the EMCPA.

Examples of applicable requirements are as follows:

- Establish an emergency management program ("**EMP**") and an EMP committee.
- Provide annual emergency management training to all members of the local emergency control group ("**ECG**").
- Conduct an annual exercise that uses the EMP and involves all members of the ECG.
- Designate a community emergency management coordinator ("**CEMC**"), as well as an alternate CEMC.
- Review the community's critical infrastructure annually (making updates as required).
- Review the community's hazard identification and risk analysis annually (making updates as required).

Additional emergency management requirements are governed by O. Reg. 380/04.

The EMCPA states that municipalities, not fire departments, are responsible for fulfilling emergency management obligations. However, many municipalities appoint a member of their fire department's senior management team to serve as their primary CEMC (or alternate CEMC).

Findings

South-West Oxford strives to comply with O. Reg 380/04 on an ongoing basis by maintaining a robust EMP, and the Department's personnel are actively involved in this program. However, the Department only provides a limited amount of public education related to emergency management.

The EMP includes the following components:

- South-West Oxford has an emergency response plan that can be implemented in response to any type of municipal emergency that could occur in the community.
- South-West Oxford conducts an annual review of its critical infrastructure, as well as an annual review of its hazard identification and risk assessment.
- South-West Oxford conducts an annual emergency exercise.

Table 3 summarizes some of the requirements found in O. Reg. 380/04. The table indicates whether South-West Oxford and the Department are compliant with the applicable requirements.

Table 4. Selected requirements outlined in O. Reg. 380/04.

Emergency Management Requirement	Compliant?
Appoint a primary CEMC and an alternate CEMC.	Yes
Establish an EOC and an alternate EOC	Yes
Establish an EMP committee.	Yes
Develop an emergency plan.	Yes
Review the community's hazard identification and risk analysis annually (making updates as required).	Yes
Review the community's list of critical infrastructure annually (making updates as required).	Yes. (The list of critical infrastructure was most recently reviewed in the 2024 CRA.)

3.6 NFPA Certification

Context

In Ontario, O. Reg. 343/22 requires fire service personnel to obtain certifications to specific NFPA standards. Firefighters must obtain these certifications in order to confirm they have the skills and knowledge to carry out their duties safely and effectively.

For more information about NFPA certification, see section 10.3 of this MFP.

Findings

South-West Oxford is striving to ensure that all of its fire service personnel have the applicable NFPA certifications (or have been granted exemption through the OFM exemption process).

3.7 Roadmap for Improvement

Legislative Compliance and NFPA Certification

As a best practice, the Department should continue using applicable standards and guidelines as benchmarks to gauge the effectiveness of its operations and safety initiatives. Doing so can help the Department keep its services aligned with legislative requirements and community needs.

Designing a training program that references applicable standards can also help the Department's personnel maintain their knowledge and skill levels, which is vital for protecting firefighter safety.

Public Education Related to Emergency Management

The Department should consider running annual campaigns to educate local residents about emergency preparedness. For example, the Fire Chief could develop a public education campaign about the importance of 72-hour emergency kits.

Other outreach methods include workshops, digital signage, and printed materials. Each of these options can help the Department provide information to help community members understand how to prepare for and respond to emergencies effectively.

3.8 Recommendations

Recommendations regarding legislation in South-West Oxford are as follows:

3-1. South-West Oxford Fire and Emergency Services should continue using applicable standards and guidelines as benchmarks to gauge the effectiveness of its operations and safety initiatives.

3-2. The Fire Chief should develop a public education campaign that teaches local residents the importance of emergency preparedness and how to assemble a 72-hour emergency kit.

4.0 Bylaws and Service Levels

4.1 Overview

In Ontario, a bylaw is a local law enacted by a municipality under the authority of the Municipal Act, 2001. Municipalities use bylaws to regulate various aspects of their governance, including municipal services, operational procedures, and enforcement protocols. Fire protection services are also established and formalized through bylaws.

Each municipality faces unique risks, demands, and community circumstances. These factors influence which fire protection services should be provided by the local fire department. For instance, vehicle extrication is a service that is needed in many communities. However, technical or heavy urban rescues are specialized services that may only be necessary in specific jurisdictions.

After identifying which services are needed in the community, it is important to determine a level of service for the fire department. That level of service should align with community needs and available resources.

4.2 Establishing and Regulating Bylaw

Context

An establishing and regulating bylaw ("**E&R bylaw**") is used to specify which services a fire department must deliver to its community. The bylaw also sets a level of service for the local fire service personnel.

In order to develop an E&R bylaw, a municipal council must assess its community's risks, needs, and circumstances. The local fire chief should also be involved in discussions about the content of the bylaw.

Once a municipal council formalizes its community's E&R bylaw, the councillors and the fire chief must review and update the document on a regular basis to make sure it remains current with the community's needs. The councillors must also approve updates to the E&R bylaw each time there is a change to the local fire department's structure, services, or operations (for both emergency and non-emergency services). For instance, implementing recommendations from an MFP may require a council to update the community's E&R bylaw. As a best practice, an updated version of the E&R bylaw should be presented to the council for consideration and approval before any recommendations are implemented.

Formally setting a level of service in the E&R bylaw establishes which NFPA certifications and training are applicable to local firefighters. As noted in section 3.6, firefighters must obtain NFPA certification in order to deliver specific firefighting services (as per O. Reg. 343/22).

The type of certification a firefighter must obtain depends on the level of service they are expected to provide. As such, a fire department should reference the E&R bylaw when reviewing its training and certification programs. Doing so may help identify whether any gaps exist in the current programs.

Findings

The current E&R bylaw for South-West Oxford is Bylaw No. 77-2021. The content of the bylaw is recent as of 2021. However, Bylaw No. 64-2024 amended the E&R bylaw to include an updated organizational chart.

According to Bylaw 77-2021, the Department is authorized to perform the following core and specialized services:

- basic firefighting
- structural firefighting, including interior search and rescue
- vehicle firefighting
- grass, brush, and forestry firefighting
- automatic and mutual aid
- tiered medical response
- vehicle accident response and extrication
- fire prevention and public education
- hazardous materials response (operations level)
- water and ice water rescue (awareness level)
- urban search and rescue (awareness level)
- rope rescue (awareness level)
- confined space rescue (awareness level)
- trench rescue (awareness level)
- farm and silo rescue (awareness level)

The following sections discuss the Department’s core and specialized services in more detail.

4.3 Core Services

Core services are the main services that most fire departments offer. These services include interior and exterior fire suppression, medical responses, and vehicle extrication.

A fire department can determine its core services based on the following considerations:

- How many calls does the fire department receive for a specific type of service?
- What risk does the threat pose to the community?
- Is it affordable to provide a specific service?
- Does the local municipal council need to approve the service before it is offered?

After a municipal council approves a list of core services for its fire department, the fire department must strive to become proficient at delivering those services.

It is vital for the fire department to become proficient at delivering its core services before it attempts to develop specialized services. In order to have an acceptable level of proficiency, a fire department should have appropriate documentation, training, and equipment in place across the organization.

A fire department should only consider delivering specialized services after verifying that it has met those criteria, as it is unlikely that a fire department will provide specialized services effectively if it does not attain proficiency in its core services.

4.3.1 Firefighting Services

Context

Fire departments can provide a variety of firefighting services. A common example of these services is structural firefighting, which is often divided into either interior or exterior structural firefighting (as found in NFPA 1001 levels I and II).

Other types of firefighting services are as follows:

- firefighting in areas that are not protected by fire hydrants
- brush fires
- marine firefighting
- mutual aid response to other municipalities

Findings

Fire Suppression

According to the E&R bylaw, the Department is approved to provide both interior and exterior fire suppression services. As noted in section 2.2, the Department has 63 suppression firefighters.

When an emergency occurs, the Department's firefighters are notified/respond via page or by using the "Who's Responding" phone application. If the incident involves a fire, it automatically triggers a two-station response. Doing so is intended to ensure the Department has an adequate number of personnel and resources to respond to potentially high-risk situations.

A single-station response is the initial dispatch model that is used to manage incidents that do not involve a fire (such as medical emergencies, rescues, and alarm activations). However, this dispatch model is flexible. The Department can have a second station respond if an incident's complexity or severity increases and additional support is deemed necessary. This approach balances readiness with resource efficiency, ensuring appropriate coverage while minimizing unnecessary deployments.

For more information about the Department's response times, as well as challenges related to delivering firefighting services, see section 11 of this MFP.

Fire Prevention Services

The Department's core services also include various fire prevention services, such as public education and code enforcement initiatives.

For more information about the Department's fire prevention services, see section 9 of this MFP.

Mutual Aid Support

The Department's core services include mutual aid support. This support allows the Department to provide vehicles and firefighters to neighbouring municipalities upon request.

For more information about the Department's participation in mutual aid services, see section 5 of this MFP.

4.4 Specialized Services

Context

Examples of Specialized Services

In addition to core services, some fire departments deliver specialized services.

Examples of specialized services are as follows:

- water/ice rescue
- hazardous materials response
- confined space rescue

- trench rescue
- high/low angle rescue
- search and rescue

If a fire department identifies a need to provide specialized services, it may consider making a recommendation to the local council to approve the delivery of those services.

Applicable NFPA Standards

The following NFPA standards provide recommendations related to specialized services:

- NFPA 1006, *Standard for Technical Rescue Personnel Professional Qualifications*, outlines the minimum job performance requirements for technical rescue personnel.[3]
- NFPA 1670 sets the operational guidelines for various search and rescue services, as well as the planning and training related to those services.
    - NFPA 1670 is included in the consolidated standard NFPA 2500, *Standard for Operations and Training for Technical Search and Rescue Incidents and Life Safety Rope and Equipment for Emergency Services*.

The NFPA has also outlined three levels of operational capability for technical rescue services:

- **Awareness Level.** This level represents the minimum capability of organizations that respond to technical search and rescue incidents.
- **Operations Level.** This level represents the capability of organizations to respond to technical search and rescue incidents and to identify hazards, use equipment, and apply limited techniques specified in this standard to support and participate in technical search and rescue incidents.
- **Technician Level.** This level represents the capability of organizations to respond to technical search and rescue incidents and to identify hazards, use equipment, and apply advanced techniques specified in this standard necessary to coordinate, perform, and supervise technical search and rescue incidents.[4]

[3] As of July 1, 2028, fire departments delivering select specialized services will be required to train personnel to the relevant standards of NFPA 1006 (in accordance with O. Reg. 343/22). For more information about this regulation, see section 10.3 of this MFP.

[4] National Fire Protection Association, *NFPA 2500, Standard for Operations and Training for Technical Search and Rescue Incidents and Life Safety Rope and Equipment for Emergency Services*.

Determining an Appropriate Level of Service

In order to determine an appropriate level of service for specialized services, a fire department should take the following steps:

1. Conduct a risk assessment to identify the types of technical rescue incidents most likely to occur in the local area.
2. Determine the appropriate level of operational capability (awareness, operations, or technician) by considering the following questions:
    - Does the fire department have enough firefighters to deliver specialized services?
    - How will offering specialized services impact firefighter safety?
    - Does the fire department have the equipment needed to deliver specific specialized services? If so, what is the condition of that equipment?
    - What initial level of training will the firefighters need to complete before they can provide specific services safely and effectively? Can the fire department provide that training to its firefighters?
    - What level of ongoing training will the firefighters need to complete to maintain the necessary knowledge and skill levels that specialized services require?
    - Is there any current documentation that supports the need for specific specialized services in the community?
    - How frequently do incidents requiring the provision of specialized services occur in the community?
    - Does the municipality have the resources needed to fund the cost of having the fire department provide specialized services?
3. Develop standard operating procedures and training programs that align with NFPA 1670 and procure appropriate equipment.

By aligning its technical rescue services with NFPA standards, a fire department can ensure its personnel are properly trained, equipped, and organized to perform rescues in a consistent, competent, and compliant manner. This alignment can also reduce the level of risk for both responders and members of the public.

Fire departments and municipalities should also reference NFPA 1006 and NFPA 1670 when communicating proficiency expectations to fire service personnel. Reviewing these standards can also provide an enhanced understanding of risks, as well as better practices for guiding and supervising fire service personnel.

As noted in section 4.3, a municipality must ensure that its firefighters are proficient at delivering their core services before they attempt to deliver any specialized services.

Although calls that involve specialized services may occur infrequently, they often place firefighter safety at a significantly higher risk than calls requiring the delivery of core services. Most specialized services are also costly to deliver, and many require firefighters to complete ongoing training to obtain various certifications.

Findings

According to Bylaw No. 77-2021, the following specialized services are currently provided in South-West Oxford:

- tiered medical assistance services
- grass, brush, and forestry firefighting services
- hazardous materials response services (operations level)

Each of the services listed above has high associated costs. The services also require the Department's personnel to dedicate a large amount of time to completing training and certification requirements.

The following subsections discuss specialized services that are relevant to South-West Oxford and the Department.

4.4.1 First Responder Medical Services

Context

In Ontario, many fire departments provide medical services. Often, these services are examples of "first response services." If a fire department provides first response services, it means that the firefighters are trained to deliver immediate medical care (such as CPR, defibrillation using AEDs, oxygen therapy, and basic first aid) before paramedics arrive. These services provide critical care during the crucial early minutes of a medical emergency.

It is common for fire departments to partner with local EMS crews in order to ensure seamless care for affected individuals.

Findings

According to Bylaw No. 20-2012, the Department is approved to provide medical response services. These services are provided in order to support the Department of Health and Emergency Services in Oxford County.

The Department's medical response services are defined in an agreement with the Multi-Agency Emergency Response Team in Oxford County. The agreement clearly outlines dispatch protocols, response criteria, training standards, and equipment requirements for participating fire service personnel.

Comments expressed during stakeholder engagement sessions suggest there are delays when the Central Ambulance Communications Centres dispatch the Department to emergency medical calls. The Department has no formal method to track this perceived delay, but has noted that when a unit from the Department arrives at an emergency scene, the EMS unit has often already left or is leaving the scene.

4.4.2 Common Passenger/Heavy Vehicle Rescue

Context

Fire departments provide vehicle extrication services in order to ensure the safe removal of people who are trapped in vehicles after collisions.

In order to perform extrication duties, firefighters must be trained to use specialized tools (such as hydraulic cutters, spreaders, and stabilizing equipment) to dismantle or move parts of a vehicle carefully without causing further injury to victims. This service is critical for quickly accessing and treating injured individuals, especially when time is a major factor in survival.

Findings

As of this MFP, the Department provides common passenger and heavy vehicle rescue services. These services typically involve stabilizing vehicles, performing extrications using hydraulic tools, and delivering immediate medical care to injured occupants.

Statistics show that 40 per cent of the Department’s common passenger vehicle rescue services are required on major highways in South-West Oxford, including Plank Line and Highway 401.

4.4.3 Ice and Water Rescue

Context

Fire departments provide surface water, ice, and watercraft rescue services in order to respond to emergencies involving people in distress in water. These services are important in communities with lakes, rivers, and seasonal ice hazards.

Surface water and ice rescues require firefighters to use specialized techniques to protect the safety of victims and rescuers in challenging conditions (such as cold temperatures and unstable surfaces). Firefighters must also know how to use various specialized equipment (such as dry suits, throw bags, inflatable boats, and other related rescue equipment).

As a best practice, the fire departments that perform these kinds of rescues should reference NFPA standards.

Findings

As of this MFP, the Department does not provide ice water rescue services. This type of specialized response is not part of the defined level of service in South-West Oxford.

For reference purposes, it is worth noting that South-West Oxford is situated within multiple watershed areas. Some of these areas include land that falls under the jurisdiction of the Long Point Region Conservation Authority, as well as portions of the Cedar Creek, Catfish Creek, Spitters Creek, and Reynolds Creek watershed systems. As a result, geography and environmental considerations extend across several interconnected watershed regions throughout South-West Oxford, and the township is influenced by several conservation authorities.

4.4.4 Rope Rescue and Confined Space Rescue

Context

Fire departments provide rope rescue and confined space rescue services to handle complex emergencies where specialized access is required.

Rope rescues involve using technical systems of ropes, pulleys, and harnesses to reach and safely evacuate individuals from high elevations or steep terrains. These types of rescue operations can include complex scenarios in areas where angles exceed 60 degrees (such as cliffs, high-rise structures, and confined vertical spaces). There are many risks associated with rope rescues, such as falls, equipment failures, and challenging environmental conditions. Due to these risks, teamwork and precise technical skills are essential to a successful rescue.

Confined space rescues involve the removal of individuals from enclosed or restricted areas (such as tanks, sewers, and utility vaults) where dangers like toxic atmospheres or restricted movement can pose serious risks.

In order to perform rope rescues and confined space rescues safely and efficiently, firefighters should receive specialized training that references the following NFPA standards:

- NFPA 1006 outlines the qualifications for individuals performing rope rescues.
- NFPA 1670 outlines the standards for organizations that offer rope rescues.

In order to obtain certification for rope rescues, candidates must demonstrate proficiency in advanced rope systems, patient packaging, anchoring, and mechanical advantage systems. Typically, this demonstration follows the successful completion of a certified training program and practical evaluation.

After the initial training/demonstration is completed, ongoing training must be completed in order to maintain competency and ensure safety. This ongoing training is often

mandated annually or biannually, and it includes scenario-based exercises, equipment inspection refreshers, and updates on evolving rescue techniques and NFPA standards.

Findings

As of this MFP, the Department does not provide rope rescue services or confined space rescue services. These types of specialized responses are not part of the defined level of service in South-West Oxford.

4.4.5 Hazardous Materials Responses

Context

Guidelines related to hazardous materials responses are outlined in NFPA 470, *Hazardous Materials/Weapons of Mass Destruction (WMD) Standard for Responders*.

NFPA 470 defines a hazardous material as follows:

> Matter (solid, liquid, or gas) or energy that when released is capable of creating harm to people, the environment, and property, including weapons of mass destruction (WMD) as defined in 18 US Code, Section 2332a, as well as any other criminal use of hazardous materials, such as illicit labs, environmental crimes, or industrial sabotage.

As a best practice, all fire departments should be trained to recognize hazardous substances.

Findings

The Department's personnel are trained to recognize hazardous substances, assess risks, and implement protective measures to contain and control the spread of contaminants. The personnel are also trained to respond to specific incidents (at the operations level) in a defensive manner. During a response, the Department's goal is to protect people, property, and the environment without stopping the release of the hazardous substance.

4.4.6 Services and Support for Airports

Context

A small or rural fire department may face several challenges when providing services to an airport. For example, limited staffing levels and a lack of specialized training can hinder the department's ability to respond effectively to aviation-specific emergencies, such as aircraft fires and fuel spills. Coordination with airport personnel and an understanding of aviation protocols also require ongoing collaboration and training, which can be difficult to maintain with limited resources.

Findings

Tillsonburg Regional Airport is located at 244411 Airport Road in South-West Oxford. The airport is a small but well-equipped facility that supports both private and business aviation. The airport features a paved runway that is suitable for a range of aircraft, and it offers several essential services (such as airplane repairs and avionics support). There is also an on-site café.

As a regional airport, Tillsonburg Regional Airport is a valuable asset that supports local transportation infrastructure, providing convenient access for general aviation and contributing to the area's economic activity. In addition, the airport's combination of technical services and community-friendly amenities makes it a practical and accessible hub for aviation in the region.

As of this MFP, the Department provides emergency services to Tillsonburg Regional Airport. However, the Department's personnel do not have any specialized awareness training or aircraft training related to airport emergencies. In addition, because the airport is federally regulated, the Department is not the authority having jurisdiction for the facility, which limits the Department's ability to conduct formal inspections or enforce the OBC and OFC.

4.4.7 Multi-Storey Occupancy Responses

Context

As the number of residents living in Ontario increases, multi-storey buildings are becoming more common in many municipalities.

Fires in multi-storey occupancies are more complex than fires in single-family dwellings. The greater level of complexity is due to several factors, such as:

- Multi-storey fires require a larger effective response force.[5] The responding fire crew must have enough personnel to control the building's lobby, elevator, stairwells, and corridors while conducting firefighting activities.
- It takes more time for fire crews to get into position to extinguish a fire in a multi-storey occupancy.
- In multi-storey occupancies, smoke can travel from one affected unit to another, endangering many building occupants.

[5] For more information about the concept of an effective response force, see section 11.2 of this MFP.

Findings

As of this MFP, there are no multi-storey occupancies located within the Department's jurisdiction. The buildings in South-West Oxford are primarily single-storey residential, commercial, and industrial structures.

4.5 Other Fire Protection Bylaws

Context

In addition to an E&R bylaw, a municipal council may pass other fire protection bylaws, such as:

- open-air burning bylaws
- false alarm bylaws
- fireworks bylaws
- fire route bylaws

Some municipalities also have fire protection bylaws that outline their service agreements, such as their mutual aid and automatic aid agreements.

For more information about fire service agreements, see section 5 of this MFP.

Findings

Table 4 lists the fire protection bylaws that South-West Oxford currently has in place.

Table 5. Fire protection bylaws in South-West Oxford.

Bylaw #	Bylaw Scope
52-2019	Authorizes an agreement between South-West Oxford and the townships of Blandford-Blenheim, East Zorra-Tavistock, Norwich, and Zorra to establish a shared fire service training officer position
58-2024	Open-air burning bylaw to regulate and control outdoor fires and prevent fires
60-2022	Authorizes an agreement between South-West Oxford and the townships of Blandford-Blenheim, East Zorra-Tavistock, Norwich, and Zorra to establish a shared fire prevention officer position
61-2022	Authorizes an agreement with the Town of Tillsonburg to provide fire communications and dispatch services in South-West Oxford
64-2024	Amends Bylaw 77-2021 to include an updated organizational chart for the Department

Bylaw #	Bylaw Scope
90-2024	Amends Bylaw 55-2024 to update user fees and charges for services and licenses provided by South-West Oxford (including fire protection services)
38-2003	Authorizes an automatic aid agreement with the Township of Zorra
47-2010	Authorizes an automatic aid agreement with the Township of Bayham
20-2012	Authorizes a multi-agency emergency response team agreement with Oxford County for tiered medical response

4.6 Roadmap for Improvement

Documentation Reviews and Updates

As a best practice, the Fire Chief should review the E&R bylaw for South-West Oxford on an annual basis. The review process can be used to verify that the bylaw remains current with all emergency and non-emergency services the Department provides. The Fire Chief should also establish a schedule for reviewing South-West Oxford's other fire service bylaws on a regular basis, updating them (as needed) to ensure they are current and applicable.

By reviewing the bylaws for South-West Oxford on a regular basis, the Department can help ensure that its operations are compliant with current legislation (such as the OFC, the OBC, and the OHSA) and the community's risks, needs, and circumstances.

Considerations for Specialized Services

Designated Station for Specialized Services

If one of the Department's stations receives fewer calls than the other stations, the Department could designate that station as a hub for specialized services. By focusing on a specific area (such as surface water rescues, rural water supply operations, or agricultural responses), the station can take the lead in developing and delivering targeted training, enhancing the Department's overall capabilities.

This initiative could also help firefighters at a less active station develop their own identity and purpose, increasing the station's levels of interest and engagement. In addition, conducting training sessions for specialized services with all Department personnel would promote collaboration, build expertise, and create a sense of pride and ownership among the crews. Over time, this strategy could improve the Department's recruitment and retention levels, as well as its operational readiness.

Emergency Medical Response

The Department should review its emergency medical responses through strategic assessments of local needs, call volumes, and response gaps. Conducting these assessments on a continuing basis can provide information that can be used to enhance policies and tiered-response agreements with the County of Oxford Paramedic Services.

This initiative will help the Department ensure that it contributes meaningfully to pre-hospital care while maintaining efficiency and safety. The outcome of this initiative should also help to ensure that roles and responsibilities are well-defined for both the Department and other responders.

Common Passenger/Heavy Vehicle Rescue

In order to enhance the delivery of passenger vehicle extrication services, a risk assessment of local highways—especially major highways like Highway 401—should be conducted. This assessment should aim to identify collision hotspots, traffic volumes, and access challenges.

The Department should also establish strong interagency partnerships with the paramedic services, police, and towing services in the County of Oxford. Doing so can help ensure coordinated response operations and scene safety for the firefighters. In addition, the Department's personnel may need continuing or enhanced training in the following areas:

- vehicle stabilization
- glass management
- tool operation
- patient handling
- heavy vehicle rescues
- scene safety

Going forward, the Department should plan to train and certify applicable personnel on NFPA 1006, Chapter 8 ("Common Passenger Vehicle Rescue") and Chapter 9 ("Heavy Vehicle Rescue Operations), by 2028. In addition, regular hands-on drills and certification updates may be required.

Ice and Water Rescue

South-West Oxford is located within multiple watershed areas, and it is connected to several conservation authorities. This location creates a unique responsibility to protect public safety and support environmental stewardship.

The interconnected waterways, combined with agricultural, forested, and urban land uses, present a range of water-related risks throughout the year. Also, seasonal flooding, recreational activities, and variable water quality each contribute to conditions that can escalate quickly into emergencies.

In order to address these challenges effectively, the Department should develop a plan to strengthen its level of water and ice rescue readiness. This plan should begin by assessing local watercourses, identifying high-risk zones, and understanding the patterns of public use across South-West Oxford. Also, forming partnerships with conservation authorities and neighbouring municipalities will support shared situational awareness and access to training environments. The Department can then gradually develop an appropriate level of water and ice rescue capability, starting with awareness-level training for all of its members. The Department can also enhance public education on water safety and ensure responders understand seasonal hazards.

Over time, select personnel can be trained to higher levels of specialization, supported by targeted equipment such as cold-water suits, throw bags, and shore-based rescue tools.

By using a realistic and structured approach, the Department can develop a scalable, sustainable model that aligns with community needs and ensures that responders are prepared for water and ice emergencies across diverse watershed areas.

Rope Rescue, Confined Space Rescue, and Agricultural Grain Rescue

The Department should develop a grain bin rescue program by:

- establishing a clear operational scope
- identifying local agricultural risks
- forming partnerships with farmers and grain facilities (and possibly county technical rescue teams)

All of the Department’s firefighters should receive awareness-level training to understand grain behaviour, atmospheric hazards, and mechanical risks. Having this knowledge will ensure safe initial actions during a response to an incident.

At the same time, a dedicated group of personnel can be developed into a specialty team trained in rope rescue and confined space awareness. That team can be supported by essential equipment, such as atmospheric monitors, lock-out/tag-out kits, rope gear, and a grain rescue tube.

The approach described above is designed to reflect the realities of a rural, volunteer-based fire department. By working collaboratively with neighbouring fire departments, the Department can establish a regional grain bin rescue team that provides shared expertise and reliable coverage for the broader agricultural area.

Tillsonburg Regional Airport

The Department should consider establishing formal partnerships (such as mutual aid agreements) with the management team at Tillsonburg Regional Airport. Partnerships should also be formed with Tillsonburg Fire Services and applicable EMS crews and mutual aid agencies. These partnerships will help all parties align their operations for coordinated emergency responses.

The Department should also develop an awareness training program that would have the firefighters conduct pre-planning and site evaluations of the airport. Awareness training for airside firefighter operations should also be conducted.

Other Specialized Services

In addition to the specialized services discussed above, the Department should aim to conduct the following services at the listed levels of proficiency:

- Hazardous materials responses at the operations level
- High/low angle rescue at the awareness level
- Machinery (farm) at the operations level
- Structural collapse at the awareness level
- Trench rescue at the awareness level

4.7 Recommendations

Recommendations regarding the bylaws and service levels in South-West Oxford are as follows:

4-1. The Fire Chief should review the establishing and regulating bylaw for South-West Oxford on an annual basis. The review should be used to confirm that the bylaw remains current with all emergency and non-emergency services provided by South-West Oxford Fire and Emergency Services.

4-2. The Fire Chief should establish a schedule for reviewing all fire service bylaws in South-West Oxford, updating them (as needed) to ensure they are current and applicable.

4-3. Using the recommendations for specialized services provided in the 2026 South-West Oxford Master Fire Plan as a guide, the Fire Chief should continue to review South-West Oxford Fire and Emergency Services' emergency response history and operational demands to ensure that all applicable firefighters are trained to the NFPA 1006 standard by 2028.

4-4. South-West Oxford Fire and Emergency Services should consider assigning a fire station with lower call volumes as a centralized hub for specialized rescue services. Consolidating NFPA 1006 disciplines (such as passenger/heavy vehicle rescue, rope rescue, and confined space rescue) with the ability to provide grain rescue at one location would support efficient NFPA 1006 certification compliance by 2028. This initiative would also support training, equipment management, and team development.

4-5. In order to ensure multi-agency coordination during emergency responses at Tillsonburg Regional Airport, South-West Oxford Fire and Emergency Services should formalize mutual aid agreements with airport management personnel, County of Oxford Paramedic Services, and Tillsonburg Fire Services.

4-6. South-West Oxford Fire and Emergency Services should develop a training program that includes airside awareness training and pre-incident planning related to Tillsonburg Regional Airport.

5.0 Fire Service Agreements

5.1 Overview

Under the authority of the Municipal Act and the FPPA, a municipality can enter into an agreement with another municipality to provide or receive a service.

The most common types of agreements are mutual aid plans, automatic aid agreements, and fire protection agreements.

5.2 Types of Fire Service Agreements

Context

Mutual Aid

A mutual aid plan allows a participating fire department to request assistance from a neighbouring fire department (as long as the other fire department is authorized to participate in a plan approved by the Fire Marshal).

Section 7 of the FPPA states that the Fire Marshal may appoint fire coordinators to "establish and maintain a mutual aid plan under which the fire departments that serve [a] designated area agree to assist each other in the event of an emergency."

Automatic Aid

An automatic aid agreement allows the closest fire department to respond to an incident regardless of municipal boundaries. The purpose of the agreement is to reduce the time it takes for firefighters to arrive at the scene of a fire and begin suppression duties.

Fire Protection Agreements

A municipality may enter into a fire protection agreement if it does not have an existing fire department or does not have the means to establish one. A municipality may also participate in a fire protection agreement to have multiple departments operating a joint fire department.

A fire protection agreement can provide a municipality with access to resources such as additional staffing and specialized equipment. The agreements can also help a municipality obtain assistance with its public education and code enforcement initiatives.

Findings

Table 5 lists the current fire service agreements that Council has approved for South-West Oxford.

Table 6. Current fire service agreements in South-West Oxford.

Type of Agreement	Year Established	Participating Partner	Scope of Agreement
Fire Protection Tanker Operations Service	2024	City of Woodstock	The Department provides specific fire protection tanker operations within Woodstock.
Automatic Aid Agreement	2003	Corporation of the Township of Zorra	The Department provides firefighting services in an specified area within Zorra.
Automatic Aid Agreement	2010	Municipality of Bayham	The Department provides automatic aid in an specified area within Bayham.
Simulcast Radio System Support	2025	Rural Fire Service Oxford County ("**RFSOC**") and Five9 Solutions	Five9 Solutions provides communication and dispatching support for RFSOC.
Tower Agreement	2025	RFSOC and Five9 Solutions	Five9 Solutions allows RFSOC to maintain and operate equipment at the Uniondale Tower Site.
Fire Response	1990	Stelco Steel and Township of Zorra	The Department responds to fires at the Stelco Steel limestone and lime processing facility.
Multi-Agency Emergency Response Team	2012	Oxford County (Department of Public Health and Emergency Services)	The Department provides tiered medical responses.
Fire Communications and Dispatch Agreement	2022	Town of Tillsonburg	Town of Tillsonburg provides fire communications and dispatch services for the Department.
Emergency Services Training and Registration Agreement	2024	Ontario Fire College and RFSOC	The Ontario Fire College provides regionalized training to Oxford County fire departments.

Going forward, South-West Oxford should ensure that its fire service agreements are evaluated on a regular basis. The agreements should also be revised on a routine basis (as needed) in order to improve the delivery of fire protection services to the residents and businesses in South-West Oxford.

5.3 Dispatch Services

Context

Fire departments have several options for their dispatch services. Common examples of dispatch services are as follows:

- A fire department may operate an in-house dispatch centre. Although this option provides a fire department with direct control and fire-specific expertise, it can be costly.
- Dispatch services can be handled through a shared public safety answering point. In this scenario, fire, police, and EMS crews share resources and infrastructure. Although this arrangement can improve coordination, it may not have a fire-specific focus.
- Some fire departments use a centralized regional or countywide dispatch system. This option can enhance mutual aid coordination and standardization across multiple departments.
- Smaller fire departments might choose to contract their dispatch services to a private provider or a neighbouring municipality. This option may reduce internal burdens, but it could result in a loss of direct control.
- An integrated 911 centre can manage all emergency services from a single point. This option can provide a streamlined response, but it requires significant investments and coordination.

Overall, each type of dispatch service model has inherent trade-offs in terms of cost, control, and service specialization. As such, each fire department should assess its operational needs and resources in order to decide which dispatch option is the best choice for its community.

Regardless of the dispatch service model chosen, all fire departments should adhere to O. Reg 343/22, which outlines the qualifications and certifications required for emergency communicators.

Findings

South-West Oxford has advised that Tillsonburg Fire Services is responsible for providing the Department’s dispatching services. The fire departments in Oxford County also have an agreement with Five9 Solutions Inc. to provide simulcast radio system support services.

The current dispatch service has presented ongoing challenges related to its ability to support the Department's operational expectations. There are concerns about response times, inconsistent communication protocols, and a lack of situational awareness during emergencies.

5.4 Roadmap for Improvement

Document Reviews

The Fire Chief and the CAO for South-West Oxford should review all agreements the Department currently has in place (both official and unofficial) and then update them to reflect the community's current risks, needs, and circumstances.

South-West Oxford should also initiate a formal review of its existing fire dispatch agreement in order to assess its alignment with current operational needs and expectations. As part of this review, performance standards and service standards should be identified and incorporated into the agreement.

Automatic Aid Agreements

South-West Oxford should consider forming automatic aid agreements with the fire departments in Woodstock, Ingersoll, and Tillsonburg. These agreements would allow the closest available fire department to respond immediately to emergencies, which would improve response times, optimize resource use, and increase community safety. This additional support would be especially valuable in areas with limited hydrant access or longer travel distances.

For more information about automatic aid agreements, see section 11.2.7 of this MFP, which includes GIS maps that illustrate the coverage enhancements that are possible through strategic partnerships with neighbouring fire departments.

Contractual Service Agreements

A contractual service agreement provides a formalized and legally binding framework for delivering fire protection services to another municipality or organization. These agreements define the scope of services, as well as expected costs and responsibilities. Because this information is formalized in an agreement, transparency and accountability can be maintained.

South-West Oxford should establish contractual service agreements with the fire departments or agencies that provide specialty services (as identified in the CRA for South-West Oxford). These agreements should clearly outline service expectations, response protocols, resource availability, and cost-sharing arrangements for applicable services, such as hazardous materials responses, technical rescues, and water/ice rescues.

If South-West Oxford establishes any contractual service agreements, it should ensure that those agreements are updated (as needed) in order to remain current with operational capabilities, legal requirements, and community needs.

Shared Service Agreements

South-West Oxford should expand and formalize shared service agreements that support meaningful collaboration between fire departments and external partners. By intentionally coordinating personnel, equipment, training facilities, and administrative functions, the township can build a more resilient and efficient emergency response system. This collaborative model allows multiple organizations to draw on each other's strengths, ensuring that critical capabilities remain available even during periods of high call volume, staffing challenges, or resource limitations.

Establishing and maintaining these agreements also creates a built-in redundancy, enhances operational reliability, and improves service continuity across the region. In particular, smaller communities will benefit from the pooled resources and collective expertise that shared service arrangements provide. This collaboration reduces operational costs while enhancing the overall standard of emergency response.

5.5 Recommendations

Recommendations regarding fire service agreements in South-West Oxford are as follows:

5-1. The Fire Chief should work with South-West Oxford's CAO to review all agreements (both official and unofficial) that are currently in place for South-West Oxford Fire and Emergency Services. The agreements should then be updated (as applicable) to reflect the community's current risks, needs, and circumstances. All updated (or new) agreements should then be presented to Council for consideration and approval.

5-2. South-West Oxford should initiate a formal review of its fire dispatch agreement to determine whether it aligns with current operational needs and expectations. As part of this review, performance and service standards should be clearly identified and incorporated into the agreement.

5-3. South-West Oxford should formalize contractual agreements with the departments or agencies that provide specialty services locally (as identified in the South-West Oxford Community Risk Assessment). The agreements should clearly outline expectations, response protocols, resource availability, and cost-sharing arrangements for all applicable services (such as hazardous materials responses, technical rescues, and water/ice rescues).

6.0 Recruitment and Retention

6.1 Overview

Strong recruitment and retention levels are crucial to the success of a volunteer fire department. Without proper staffing numbers, a fire department cannot provide adequate services to its community. As such, it is critical for volunteer fire departments to have the necessary tools, information, and support to recruit and retain an appropriate number of firefighters.

Attendance levels are also important to consider. In the context of the fire service, attendance refers to the number of firefighters who respond to an emergency call.

As a best practice, volunteer fire departments should try to find ways to improve their recruitment, retention, and attendance levels. Often, there are significant costs involved with replacing trained and certified personnel, and the loss of these personnel can impact a fire department's performance levels due to the loss of experience.

6.2 Recruitment

Context

Many fire departments struggle to recruit a consistent number of volunteer firefighters. Although the factors affecting recruitment vary from region to region, there are some common themes that most fire departments face, such as:

- aging populations
- competing interests
- cultural shifts away from community service

Another difficulty is the amount of time it takes to identify, develop, and implement strategies to resolve recruitment challenges. Often, trying to resolve recruitment issues can cause a significant drain on a fire department's time and resources. In many cases, the issues that impact recruitment levels can also affect retention levels.

Findings

Upon review, the Department's recruitment practices to attract new firefighters have been minimal and largely passive.

Over the past several years, the Department has not initiated any formal recruitment campaigns or assigned dedicated personnel to oversee hiring activities. During that time, the Department has also experienced a steady decline in application numbers, resulting in staffing challenges and increased pressure on existing personnel.

6.3 Retention

Context

Many volunteer fire departments find it challenging to retain qualified firefighters. It is not uncommon for a department to lose 10 to 20 per cent (or more) of its volunteer workforce each year, which means that a complete turnover of volunteer personnel is possible within five to ten years.

Due to poor retention rates, fire departments must spend a significant amount of time and money recruiting and training new volunteers. Because new volunteer firefighters often have limited experience and skills, volunteer fire departments are likely to have fewer qualified personnel who can fill leadership roles (such as officer positions) when they become available.

Table 6 lists some of the challenges associated with volunteer recruitment and retention. The table is a direct excerpt from the article “Where Are They Going?”, written by Deputy Fire Chief Ian Shetler for the Association of Municipal Managers, Clerks, and Treasurers of Ontario.[6]

Table 7. Challenges associated with recruiting and retaining volunteer firefighters.

Source of Problem	Contributing Factors
Time Demands	• The two-income family and working multiple jobs • Increased training time demands • Higher emergency call volume • Additional demands within the department (administrative, fund-raising, etc.)
Training Requirements	• Higher training standards and new government requirements • More time demands • Greater public expectation of capabilities (broader range of services) • Additional training to meet broader range of services • Recertification demands
Increasing Call Volume	• Fire department assuming wider response roles (EMS, hazmat, technical rescue) • Increasing emergency medical call volume • Increasing number of automatic alarms

[6] Shetler, “Where Are They Going?”

Source of Problem	Contributing Factors
Change in the "Nature of the Business"	• Abuse of emergency services by the public • Less of an emphasis on social aspects of volunteering
Changes in Sociological Conditions (In Urban and Suburban Areas)	• Transience • Loss of community feeling • Loss of community pride • Less of an interest or time for volunteering • Two-income families • "Me" generation
Changes in Sociological Conditions (In Rural Areas)	• Employers less willing to allow response to calls • Time demands • "Me" generation
Leadership Problems	• Poor leadership and lack of coordination • Authoritative management style • Failure to manage change

Findings

The Department recognizes that there is a need to implement a comprehensive recruitment and retention strategy.

For reference purposes, Table 7 compares the years of service among the Department's personnel.

Table 8. Years of service among local fire service personnel.

Years of Service	Firefighters	Captains and Acting Captains	Fire Chief and Deputy Fire Chief
0 to 4.9	26	3	0
5 to 9.9	3	2	0
10 to 20	5	4	0
20 to 30	3	2	1
30+	2	1	2
Total	**39**	**12**	**3**

6.4 Fire Station Common Areas

Context

A fire department's success is largely based on its ability to work as a team. As such, it is crucial to prioritize ways of building relationships and trust. In addition, many volunteer firefighters join the fire service due to a sense of community.

As a best practice, a fire station should have a common area where the station's firefighters can interact with each other. By incorporating a common area, a fire department can help its firefighters build connections, which may lead to higher levels of morale and increased retention rates.

A common room is also useful as a place to conduct informal discussions, training activities, and debriefing sessions. These events can allow firefighters to reflect on their performance and evaluate how to perform more effectively in the future. Firefighters can also use the common area to relax following stressful events, and this relaxation can serve as an informal way to manage mental health.

In addition, many fire stations have a kitchen space where firefighters can prepare meals together. When personnel eat together, they can improve team bonding and levels of trust. The experience can also help provide stress relief, a sense of belonging, and improved communication.[7]

Findings

As of this MFP, the three fire stations in South-West Oxford have common areas that are well-maintained and adequate for the Department's needs.

The condition of the common areas is a positive reflection of the Department's commitment to upholding operational readiness and organizational pride.

6.5 Attendance Management

Context

Importance of Attendance

It is critical for fire service personnel to respond to emergencies, complete training sessions, and participate in equipment maintenance activities. Attending these events helps firefighters maintain their knowledge, skills, and operational readiness.

[7] Sinden, K. et al. "A Qualitative Study on the Experiences of Firefighters Serving in an Urban Fire Department in Canada."

Fire chiefs and other leadership personnel must monitor attendance levels in their fire departments in order to ensure their department is staffed by firefighters who can meet the following criteria:

- Respond to incidents safely and effectively.
- Implement the skills acquired from completing training.
- Operate equipment safely.
- Understand their role within the fire department.
- Educate community members at public education events.
- Ensure all fire apparatus and equipment are operating properly.
- Remain aware of the fire department's goals and objectives.
- Conduct pre-incident planning and building familiarization activities.
- Contribute to a healthy organizational culture.

The importance of consistent attendance cannot be overstated. However, it is also important to acknowledge that it is difficult for firefighters to attend every event that involves their fire departments, as significant time commitments are required.

Maintaining consistent attendance is especially difficult for volunteer firefighters, as they must balance their fire service duties with their employment and personal commitments. Firefighters also need an appropriate amount of rest after completing an emergency response.

The pressure to maintain consistent attendance levels while meeting other obligations can lead to an unsustainable work-life balance. Therefore, fire departments that rely on volunteer personnel must ensure that they create opportunities that provide all staff members with the time needed to maintain a healthy work-life balance. From the firefighter's perspective, the schedule will provide time to fulfill other obligations. From the fire department's perspective, the schedule may help encourage good firefighter retention rates.

Table 8 identifies some of the risks associated with poor attendance levels. Many of the risks described in the table stem from poor training attendance, as low levels of training participation can lead to a range of operational issues.

Table 9. Risks associated with poor attendance levels.

Risk	Explanation
Increased risk of injury	Firefighting is inherently dangerous. If firefighters do not attend training sessions on a regular basis, they are at a higher risk of injury due to a lack of preparedness for the challenges they face during emergency responses.
Legal liability	A municipality could face legal repercussions if the Ministry of Labour finds that inadequate training—stemming from poor attendance—has compromised firefighter readiness. This situation could lead to charges against a municipality for failing to provide necessary training.
Investigations by the Fire Marshal	A pattern of poor attendance and the resulting lack of training can prompt the Ontario Fire Marshal to investigate a fire department's compliance with safety and training standards.
Compromised service delivery	Inadequate training due to poor attendance can lead to subpar service delivery, exposing a municipality to greater liability and damaging its credibility. This can erode public trust and confidence in the fire department's ability to protect the community.
Attrition among firefighters	Firefighters who perceive that there is an increased level of risk to their personal safety due to insufficient training may choose to leave their fire department. The departure of experienced personnel can further strain a fire department's capabilities.
Morale issues	The presence of safety-related concerns—exacerbated by poor attendance at training sessions—can significantly impact morale. Firefighters may feel undervalued and unprotected, which can lead to a demotivated workforce.
Reluctance to take necessary risks	When firefighters lack confidence in their training and safety measures, they may be hesitant or unwilling to take calculated risks that are often crucial for saving lives and property. This hesitancy can hinder a fire department's effectiveness during emergency responses.

Attendance Management Programs

Many fire departments implement an attendance management program to keep track of how many staff members are attending various functions and events on a regular basis. Ideally, the goal of the program is not to assign blame to staff members who do not have high levels of attendance. Rather, the program should be used to uncover issues that are affecting consistent attendance levels.

In addition, a fire department can use the results of the program to help create a minimum attendance standard that is applicable to its number of available staff members, as well as its structure, services, and operations.

The results of an attendance management program may also provide an opportunity for a fire chief to speak candidly about the challenges that the fire department's personnel are facing. Fire chiefs can use this opportunity to reinforce the importance of regular attendance and its direct effect on public safety. A fire chief can also strive to find cost-effective ways of enhancing the fire department's operations to help firefighters overcome attendance-related challenges. For instance, a fire chief may take steps to increase the level of job satisfaction among personnel in order to increase attendance.

It is important to note that attendance levels can also be affected by call volumes. For example, it is common for fire departments to experience periods of low call volumes, as well as periods with an unusually high number of calls for service over a very short timeframe. Because instances of low and high call volumes are both possible, a fire department must use discretion when evaluating attendance levels during these periods. Without due discretion, a fire department may end up with an inaccurate impression of the readiness or availability of its staff members.

As a best practice, a fire department's management team should consider extending the length of time they use as "assessment periods" for their fire department's attendance management program. Doing so will help yield a more accurate picture of the availability and readiness levels of the fire department's personnel.

Findings

The Department has an attendance management program that is structured to ensure accountability and support.

The Department reviews its attendance levels periodically (in accordance with its E&R bylaw). If a firefighter does not meet the required standards, a three-step process is initiated as outlined in the bylaw.

6.6 Roadmap for Improvement

Recruitment

In order to attract a sufficient number of volunteer firefighter candidates, fire departments should develop community-focused recruitment strategies that include methods for building awareness, interest, and commitment.

Going forward, the Department should develop a clear recruitment plan that defines the organization's goals, target demographics, and outreach methods. The plan should include community engagement initiatives (such as open houses, school visits, and local events) in order to build visibility and trust.

Retention Initiatives

The Department should develop a multi-part retention plan that includes training opportunities, recognition programs, flexible scheduling, and financial incentives. Suggestions related to these key areas are provided below.

Financial Incentives

The Department should consider adding a firefighter clothing allowance to the annual budget. Doing so would help reduce out-of-pocket expenses for the Department's personnel, and it could help promote a professional appearance among the Department's members. This initiative would also demonstrate that South-West Oxford is committed to its volunteer firefighters, helping them maintain high standards of safety and professional presentation.

South-West Oxford should also consider implementing financial incentives for its volunteer firefighters as part of its annual budget. For instance, firefighters could receive an annual stipend or honorarium to acknowledge their service. This kind of financial recognition acknowledges the time, commitment, and personal sacrifices made by the volunteer personnel who serve their community.

Recognition Initiatives

South-West Oxford should strive to ensure that the suggestions provided by the local volunteer firefighters are considered in decision-making processes. This initiative should begin with a conscious effort to create opportunities for the volunteer personnel to share their insights and experiences. These opportunities can include meetings, open dialogue, and representation in planning discussions.

If the leadership team actively listens and responds to the comments provided by the volunteer personnel, it can strengthen trust, boost morale, and cultivate a sense of ownership and pride. This process key can enhance teamwork and operational effectiveness while laying a strong foundation for long-term retention and community engagement.

Attendance Management Initiatives

An attendance management program should be designed to outline expectations and ensure a fair process for addressing deficiencies through progressive steps.

For instance, the Department could implement the following process to address attendance issues with a firefighter:

1. The firefighter attends a counselling meeting with a captain.
2. If issues persist, the firefighter receives a written notice from their district chief.

3. If necessary, the Fire Chief reviews the case to determine whether further action is required.

Overall, an attendance management program will promote accountability while offering opportunities for improvement and support.

6.7 Recommendations

Recommendations regarding recruitment and retention in South-West Oxford are as follows:

6-1. South-West Oxford Fire and Emergency Services should develop a community-focused recruitment strategy that includes methods for building awareness, interest and commitment among community members in order to attract new firefighters.

6-2. South-West Oxford Fire and Emergency Services should consider adding a firefighter clothing allowance to its annual budget in order to support retention levels, reduce out-of-pocket expenses, and promote a professional appearance among its members.

6-3. South-West Oxford Fire and Emergency Services should implement a comprehensive retention plan that includes training opportunities, recognition programs, flexible schedules, and financial incentives.

6-4. South-West Oxford should implement a process to ensure that the voices of local volunteer firefighters are heard and considered in decision-making processes.

7.0 Departmental Communications

7.1 Overview

Fire departments need to have good communication with their firefighters, partners, and the public in order to operate effectively. The success of a fire department in recruiting and retaining staff—as well as its success in maintaining a good relationship with the community—can be significantly affected by how well it communicates and interacts socially.

Maintaining effective communication and staffing levels can be challenging for volunteer fire departments. For instance, it can be difficult for volunteer fire departments to keep their staffing levels consistent, especially during regular business hours. As such, these fire departments often need to look into different ways of operating and new strategies to solve staffing problems and enhance their operations.

Communication is also a reciprocal consideration. It is important for municipalities to make sure their firefighters are treated with respect and receive the benefits they deserve for their hard work and commitment.

7.2 Internal Communications

Context

A community consists of many groups, each with its own history, culture, and behaviours. Internal groups include municipal staff and local fire service personnel. Other groups include external agencies that share services with the fire department. It is important for fire departments to communicate openly with both internal and external groups. Doing so can help build trust and increase collaboration.

There are many proven ways to practise effective communication, such as:

- Distribute online surveys.
- Hold face-to-face meetings and discussion groups.
- Send regular emails, newsletters, and text messages.
- Revise and review SOGs with applicable personnel.
- Use social media platforms to relay updates.

Effective communication is especially important when a fire department wants to introduce changes to its services or structure. Without due consideration of social dynamics, the potential benefits of changes at the operational level may be offset by consequences at the social level.

If a fire department does not communicate its plans, some staff members and residents may be resistant to changes that will affect existing services or staffing models. However, when staff members and residents contribute to the planning process and understand the specifics of proposed decisions, they usually feel a sense of involvement.

Findings

The Department typically communicates through emails and text messages. Many important messages are also communicated during training nights.

The district chiefs are responsible for communicating with the captains, and the captains are responsible for communicating with the firefighters who are assigned to them. Each captain may develop a different strategy to communicate with their assigned firefighters.

7.3 External Communications

Context

Often, communicating with members of the public is a critical part of the decision-making process. As a best practice, municipal councils and fire departments should avoid making significant operational changes until they understand which groups those changes will affect. It is also important to anticipate how the affected groups will react to any proposed changes.

Fire departments also communicate externally during emergency responses, during recruitment initiatives, and when delivering fire prevention and public education about fire safety.[8]

Findings

Typically, the Department's leadership personnel communicate to the public through face-to-face conversations, telephone conversations, emails, and the Department's website.

7.3.1 Business Relationships

Context

Many fire departments experience lower firefighter response numbers during regular business hours. Often, low response numbers are due to business owners not allowing volunteer fire service employees to respond to emergencies during business hours.

[8] For more information about fire prevention and public education, see section 9 of this MFP.

In some communities, there are business owners who hesitate to hire volunteer firefighters altogether. The perception is that business operations will suffer when volunteer firefighters abruptly leave the job site to respond to emergencies.

Some municipalities have taken steps to improve volunteer firefighter availability by publicly acknowledging businesses that hire volunteer firefighters and allow them to respond to emergencies during business hours.

Findings

South-West Oxford does not have a formal procedure to acknowledge the local businesses that allow their volunteer fire service employees to respond to emergencies during normal work hours.

7.4 Roadmap for Improvement

Internal Communication Initiatives

In order to ensure that all personnel receive important messages, the Department's leadership personnel may want to consider repeating critical messages multiple times through different channels to reinforce the receipt, retention, and understanding of all communications.

It may also be beneficial to provide the Department's officers (and potential future officers) with opportunities to develop their team-building and conflict-resolution skills. Developing these kinds of interpersonal skills may help support enhanced levels of trust and clarity throughout the Department.

Lastly, in order to improve communications and transparency, the Department should consider providing monthly updates from the Fire Chief. These updates could include operational highlights, training opportunities, equipment changes, and recognition of member contributions. If the Department chooses to pursue this initiative, it must ensure that all of its members have access to the Fire Chief's messages. As such, it may be necessary to streamline the Department's communication channels, which may include the adoption of a digital platform (such as Microsoft SharePoint) that is designed to store messages and documentation in an accessible manner.

External Communication Initiatives

In order to enhance its external communication efforts, the Department should consider investing in the installation of digital signage. Ideally, digital signs should be installed in Beachville, Sweaburg, Mount Elgin, and Brownsville. Although the Department is currently using social media to communicate with the public, many residents in these communities lack regular online access. As such, the four proposed digital signs will help the Department share emergency alerts, fire safety messages, and community updates to a wider audience.

The Department can also consider facilitating public engagement initiatives (such as open houses, school visits, and fire prevention campaigns) on a regular basis. These events can be used to share information related to a variety of topics, such as:

- fire service recruitment
- fire department marketing
- public fire safety education
- emergency preparedness

For more information about public education and fire prevention initiatives, see section 9 of this MFP.

Business Relationships

The Department should consider engaging with local businesses and employers to explain the value of allowing volunteer firefighters to respond to emergency calls during regular business hours. Emphasis should be placed on the need to ensure community safety and resilience.

The Department should also consider finding ways to recognize employers who support volunteer fire service personnel. This public acknowledgement can be demonstrated in several different ways, such as awards, social media messages, and community events.

7.5 Recommendations

Recommendations regarding departmental communications in South-West Oxford are as follows:

7-1. The Fire Chief should find ways for South-West Oxford Fire and Emergency Services' current and future officers to strengthen their team-building, conflict-resolution, and communication skills.

7-2. The Fire Chief should host monthly or quarterly meetings to provide all members of South-West Oxford Fire and Emergency Services with updates on operations, training, equipment, and departmental goals.

7-3. South-West Oxford Fire and Emergency Services should leverage new information-sharing technologies to improve the way it communicates information between its fire stations. A digital platform would enable secure access to documents, schedules, announcements, training materials, and reporting.

7-4. In order to strengthen community engagement and public communication (related to emergency alerts, fire safety messages, and community news), digital signs should be installed in Beachville, Sweaburg, Mount Elgin, and Brownsville. One digital sign should be installed in each of those locations.

8.0 Occupational Health and Safety

8.1 Overview

Fire departments must take occupational health and safety seriously. Firefighting is a challenging profession, and it is impossible to know what dangers a firefighter will face on any given day. Emergencies may escalate unexpectedly, involve harmful chemicals, or cause serious mental trauma to first responders.

Due to the dangers that firefighters encounter, fire departments should ensure that they implement health and safety practices that are proactive rather than reactive. For instance, firefighters often need to access their gear at a moment's notice, which is why fire departments should strive to always keep their equipment clean and ready for service.

From a compliance standpoint, there is specific health and safety legislation that all fire departments must follow, such as the OHSA. There are also many examples of industry best practices that fire departments can follow to safeguard their firefighters.

8.2 Firefighter Guidance Notes

Context

As a best practice, fire departments should adhere to the Firefighter Guidance Notes developed by the Ontario Fire Service Health and Safety Advisory Committee. The committee was formed under Section 21 of the OHSA, and it comprises stakeholders from across Ontario. The Firefighter Guidance Notes are reviewed and approved by the Minister of Labour.

According to the website for the Firefighter Guidance Notes:

> [The] firefighter's guidance notes [are intended to] help fire service workers understand potential health and safety issues in their workplace. The notes also help employers identify hazards that are unique to fire services and determine how to prevent injury and illness to their workers.[9]

The Firefighter Guidance Notes also include information referred to as "actions for employers." Municipalities and fire departments should pay particular attention to this section, as it contains information that can be used to verify that employers are exercising the proper due diligence.

The Firefighter Guidance Notes are not legally binding, but they are widely respected, and they are often used by inspectors and fire departments to guide safe practices.

[9] Ontario Association of Fire Chiefs, "Firefighter Guidance Notes."

Findings

The Department's operations reference the Firefighter Guidance Notes. This acknowledgement demonstrates the Department's commitment to upholding health and safety standards.

8.2.1 Cancer Prevention Checklist

Context

Cancer prevention is a vitally important topic for fire departments to understand.

Firefighters are exposed to toxic chemicals and carcinogens while responding to fires and hazardous situations. These exposures significantly increase the risk of developing various types of cancer, which is a leading cause of firefighter illness and death. By prioritizing cancer prevention through proper decontamination efforts, the use of protective equipment, and regular health screenings, fire departments can protect the long-term health and well-being of their firefighters. In addition to saving lives, these kinds of initiatives help support operational readiness, reduce healthcare costs, and demonstrate a commitment to the safety and longevity of the firefighting workforce.

Ontario's Firefighter Cancer Prevention Checklist is a self-audit tool designed to help fire departments identify and reduce cancer risks associated with firefighting. The checklist was developed by the Section 21 Committee (with support from the Ministry of Labour), and it addresses many key areas, such as:

- field decontamination
- handling and transporting contaminated equipment
- in-station cleaning
- personal protective equipment ("**PPE**") usage
- gear maintenance
- post-fire hygiene practices
- administrative policies
- ensuring apparatus area ventilation is adequate for gear storage[10]

The Firefighter Cancer Prevention Checklist also discusses the primary routes of exposure (such as inhalation and skin absorption), and it describes the steps that fire departments can take to minimize those risks.

[10] For information about diesel exhaust, see section 13 of this MFP.

These actions cover topics like the proper use of respiratory protection, the cleaning of gear, and the implementation of hygiene protocols.[11]

Findings

As of this MFP, the Department is gradually incorporating information from the Firefighter Cancer Prevention Checklist into its operations.

8.3 Personal Protective Equipment

Context

Firefighters use a variety of PPE to protect themselves from injury and death. This gear is referred to as a protective ensemble.

A firefighter's protective ensemble includes the following types of PPE:

- firefighter pants and jackets
- helmets
- firefighting boots
- gloves
- flash hoods

Every piece of a protective ensemble is crucial to protecting a firefighter's health and safety.

Over the last few decades, health and safety agencies have conducted studies to find ways of reducing firefighter injuries and deaths. For example, WSIB Ontario has recognized that certain cancers are directly attributable to the toxic by-products of fires and hazardous materials, which can attach to the fabric of a firefighter's protective ensemble. As a result of the health and safety studies, the fire service has revised many of the regulations it has issued for protective ensembles. There are now several legislative requirements that fire departments must follow in order to ensure their firefighters have protective ensembles that meet compliance standards.

In addition, NFPA 1851, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*, recommends that fire departments retire ensemble elements "no more than 10 years from the date the ensembles or ensemble elements were manufactured." (Following this standard is recommended by Firefighter Guidance Note #4-8, "Care, maintenance, inspection and replacement of structural firefighting personal protective equipment.")

[11] Ministry of Labour, Training and Skills Development. "Firefighter's cancer prevention checklist."

Remaining compliant with protective ensemble regulations and standards is vitally important, given how frequently firefighters use their gear. As part of their obligation to meet protective ensemble standards, fire departments must strive to implement robust cleaning measures that limit the chances of their firefighters and fire apparatus becoming exposed to contaminants. Doing so will also help fire departments maintain clean environments in their fire stations.

Ideally, all fire departments should ensure that each of their firefighters has a protective ensemble that is properly sized by a manufacturer representative. Although there is a cost to acquiring properly sized protective ensembles, it is a necessary cost, as it helps protect firefighter safety.

Findings

The Department uses an approved supplier to provide its personnel with properly sized protective ensembles (where possible). The Department also replaces its PPE after ten years, and it purchases eight protective ensembles per year. This practice helps to ensure that all protective ensembles used by the Department's personnel are newer than ten years old.

The Department provides its personnel with PPE that is compliant with applicable NFPA standards. In addition, the Department has a standard operating procedure that outlines when and how to maintain its PPE. For example, if any PPE is contaminated during an emergency response, the gear is rinsed at the incident, sealed in a bag, and sent to a third-party company for cleaning, inspection, and repair (as required). The Department also sends each protective ensemble to an approved third-party company for annual testing and cleaning.

In order to enhance the Department's operating procedures, the Fire Chief should consider developing an SOG that explains the correct way to handle PPE that becomes contaminated from completing an emergency response. Doing so can help reduce the risk of introducing harmful contaminants to the fire station, a fire apparatus, personal vehicles, and clothing.

8.4 Respirator Fit Testing

Context

Each firefighter must have a fit-tested mask when they wear a self-contained breathing apparatus ("**SCBA**") during an emergency response. Every firefighter should also have a fit-tested N95 mask for protection against airborne contaminants.

CAN/CSA Z94.4-18, *Selection, Use, and Care of Respirators*, outlines specific fit-testing requirements that all fire departments should follow.

Findings

The Department ensures that SCBA fit testing is completed annually (every October).

8.5 Diesel Exhaust Systems

Context

Table 9 provides excerpts from Firefighter Guidance Note #3-1, “Controlling exposure to diesel exhaust.”

Table 10. Excerpts from Firefighter Guidance Note #3-1.

Topic	Excerpt from Firefighter Guidance Note #3-1
Background	Exhaust produced by diesel engines is a complex mixture of gases, vapours, and particulates. The gas portion of diesel exhaust is mostly carbon dioxide, carbon monoxide, nitric oxide, nitrogen dioxide and sulfur oxides. Vapours include hydrocarbons, such as Polycyclic Aromatic Hydrocarbons. The particulate portion of diesel exhaust is made up of particles such as carbon, organic materials […] and traces of metallic compounds.
Concerns/hazards	The International Agency for Research on Cancer, part of the World Health Organization, has classified diesel engine exhaust as carcinogenic to humans. It found that diesel exhaust is a cause of lung cancer and noted a positive association with an increased risk of bladder cancer.
Actions for employers	Employers must: • make sure the fire station is adequately ventilated by either natural or mechanical means so that the atmosphere does not endanger the health and safety of workers • take all measures reasonably necessary in the circumstances to protect workers from exposure to diesel exhaust components, including: o substitution of the hazardous biological or chemical agent o engineering controls o administrative controls, including work practices o hygiene facilities and practices o where applicable, personal protective equipment

In order to reduce diesel exhaust exposure, the Firefighter Guidance Notes recommend using a series of control measures related to:

- ventilation
- buildings
- trucks
- equipment
- written operating procedures
- choice of fuel
- air monitoring
- maintenance
- housekeeping
- firefighter education

Findings

As of this MFP, Station 1, Station 2, and Station 3 are equipped with CO/NO_2 monitoring systems and diesel exhaust extraction fans that are designed to remove engine emissions from the facilities.

In addition, the Department has established procedures that require its apparatus to be started and moved outdoors immediately, as doing so further minimizes the amount of diesel fumes within the stations.

Together, the systems and practices noted above ensure that the Department is actively managing and reducing diesel exhaust exposure for its firefighters.

8.6 Joint Health and Safety Committee

Context

Each fire department should have a joint health and safety committee ("**JHSC**") that includes representation from its senior management team and its firefighters. Ideally, a JHSC should perform monthly health and safety inspections and meet at quarterly intervals to discuss applicable concerns.

In some municipalities, the local fire department and municipal staff share a single health and safety committee.

Findings

Table 10 shows the JHSC questionnaire that was completed during the MFP development process. Based on the information provided for this questionnaire, the JHSC in South-West Oxford is compliant with applicable legislation.

Table 11. Joint health and safety committee questionnaire.

Question	Answer
Does the Department participate in a JHSC?	Yes
Does the JHSC have terms of reference?	Yes
Does the JHSC consist of both fire service personnel and municipal staff members?	Yes
Is the JHSC compliant with all applicable regulations and bylaws?	Yes
Is the JHSC conducting monthly inspections?	Yes
Is the JHSC holding quarterly meetings?	Yes
Does the JHSC post its health and safety minutes on a bulletin board?	Yes
Is the JHSC bulletin board up to date?	Yes
Is the JHSC documenting its actions?	Yes
Has the JHSC formalized a complaint process?	Yes

8.7 Health and Wellness

Context

It is crucial for employers to support the well-being of their employees in order to maintain a healthy workplace environment.

Fire departments can support their firefighters through health and wellness programs that address topics such as:

- cancer prevention
- nutrition and physical activity
- critical incident management
- post-traumatic stress disorder

There are several standards that provide guidance about health and wellness for fire departments, such as NFPA 1550, *Standard for Emergency Responder Health and Safety*.

The following three sections of NFPA 1550 are particularly important:

- Chapter 13 addresses the topics of health, fitness, and infection control.
- Chapter 14 states that fire departments must provide their members and their immediate families with access to a behavioural health program.
- Chapter 15 provides guidance regarding occupational exposure to potentially traumatic events.

There are also standards that address mental health in the workplace, such as CAN/CSA-Z1003-13/BNQ 9700-803/2013: *Psychological Health and Safety in the Workplace*.

CAN/CSA-Z1003 identifies 13 organizational factors that affect psychological health at work:

- organizational culture
- psychological and social support
- clear leadership and expectations
- civility and respect
- psychological demands
- growth and development
- recognition and rewards
- involvement and influence
- workload management
- engagement
- balance
- psychological protection
- protection of physical safety

Fire departments can use the available health and wellness guidelines to develop programs to support all personnel in their organizations.

Findings

The following subsections describe specific aspects of health and wellness, discussing the ways in which they relate to South-West Oxford and the Department.

8.7.1 Mental Health

Context

Typically, mental health support programs involve several components, such as:

- onboarding training
- regular mental health training
- critical incident stress defusing and debriefing support
- peer support

It is also common for a mental health program to be split into subcategories, such as pre-incident education, peer support, and critical incident stress management ("**CISM**"):

- Pre-incident education involves providing firefighters with information about managing their mental health. Because of the nature of their work, firefighters are exposed to more tragic events than the average individual.
- Peer support is the emotional and practical support exchanged between two people who have undergone a shared experience, such as a mental health challenge or illness. A peer supporter is an individual who has lived through a distressing event and is trained to support others who have undergone similar experiences.
- A critical incident is any situation that can cause a firefighter to experience strong emotional reactions that have the potential to interfere with their ability to function. A CISM team is responsible for recognizing the signs of exposure to critical incident stress and taking steps to help affected personnel recover.

Findings

The Department has taken several steps to provide mental health resources to its personnel. For example, the Department has established an internal peer support team.

The Department also offers an employee assistance plan that provides its personnel with access to various types of mental health support. The personnel can access mental health assistance through a phone application that directs them to appropriate resources.

8.7.2 Physical Health

Context

Physical fitness programs can teach firefighters ways to reduce injuries at work and improve their overall quality of life.

Engaging in physical exercise can also help firefighters maintain good mental health.

Findings

The Department does not currently provide any structured physical fitness programs, resources, or facilities for its personnel.

8.8 Fireground Safety

8.8.1 Incident Command

Context

Fireground safety is a critical component of a fire department's operations. In order to maintain fireground safety, a structured approach to minimizing risks during emergency responses must be in place.

There are several key components that help ensure fireground safety. Some of these components are as follows:

- A clearly established incident command system ("**ICS**") ensures that all personnel operate under a unified command, enabling coordinated decision-making and accountability.
- Effective radio communications are essential for maintaining situational awareness, relaying assignments, and transmitting urgent information.
- Fire crews must have the training and the ability to declare a mayday, which is a distress call indicating a firefighter is lost, trapped, or injured. In addition, the process for declaring a mayday situation must be universally understood, and procedures must be in place to ensure a rapid rescue.
- The presence of an incident safety officer ("**ISO**") can enhance safety by monitoring conditions, identifying hazards, and advising command personnel about proper risk management throughout the incident.

When the proper components are in place, it helps ensure that fire crews can operate in a safe and organized fireground environment.

Findings

The Department currently provides incident command responses, but it has not formalized an accompanying SOG. In addition, the Department does not seem to offer sufficient training related to the roles and responsibilities associated with incident command.

8.8.2 Incident Safety Officer

Context

An ISO plays a critical role during responses to fires and large or complex incidents by completing the following tasks:

- Monitor conditions.
- Identify hazards.
- Ensure that safety protocols are followed.
- Address immediate safety concerns.
- Help prevent injuries.
- Improve accountability.

Having an ISO to complete specific tasks allows the Incident Commander to focus on an overall response strategy. The dedicated oversight provided by the ISO can also enhance the responding fire crew's situational awareness, level of coordination, and overall effectiveness.

The ISO can take a proactive approach to protecting the firefighters while also helping the fire department improve its overall operational effectiveness by aligning its operations with best practices and provincial safety standards.

Overall, establishing an ISO and an associated ISO program can enhance on-scene safety and reduce the risk of injuries or fatalities.

Firefighter Guidance Note #2-4, "Incident safety officer," and NFPA 1521 provide information about the role of an ISO.[12]

Findings

As of this MFP, all of the Department's officers have ISO certification, which ensures that the Department maintains an adequate number of qualified ISO personnel during emergency responses.

[12] NFPA 1521 is consolidated in NFPA 1550, *Standard for Emergency Responder Health and Safety*.

Furthermore, the Department has a culture where all officers or section officers are responsible for ensuring safety on the fireground.

8.8.3 Pre-Incident Planning

Context

Pre-incident planning is one of the most important processes a fire department can complete in order to protect the safety of its firefighters.

When firefighters respond to an emergency in a building with an unfamiliar layout, the risk to their safety increases significantly. The risk increases even more in large commercial, industrial, and institutional buildings. Firefighters are also at risk when they respond to an emergency in a building where visibility is limited.

By completing the pre-incident planning process, firefighters can familiarize themselves with site layouts and prepare themselves for the risks inherent to a building's construction, such as the likelihood of collapse. The fire department can then use that information when developing its response protocols in order to enhance the safety of building occupants and fire crews during emergencies.

Fire departments should make it a priority to complete the pre-incident planning process for all buildings that are at high risk, have vulnerable occupants, or have high value to the community. It is also important to revisit those buildings on a regular basis to reassess the results of any previous pre-incident planning. Doing so can help ensure that all data is kept current with any changes to a building's uses, layouts, and on-site materials.

Employers also have responsibilities as part of the pre-incident planning process. According to Firefighter Guidance Note #6-45, "Pre-incident planning," employers should take the following actions:

- Develop a pre-incident planning program that compiles building information.
- Keep building data updated with information gained during fire prevention activities or from other allied agencies.
- Provide known building information to responding firefighters, including building configurations and functions.
- Coordinate building tours for firefighters.
- Train firefighters to conduct pre-incident planning for the employer's occupancy.

By working together, local businesses and fire departments can help protect the safety of firefighters and community members.

Findings

As of this MFP, the Department conducts a minimal amount of pre-incident planning. The lack of pre-planning initiatives is due to the limited time and resources available to the Department's volunteer firefighters.

8.8.4 Reflective Chevrons for Fire Apparatus

Context

Reflective chevrons on fire trucks are crucial for enhancing a vehicle's visibility and safety. Installing reflective chevrons is particularly important due to Ontario's diverse weather and lighting conditions.

According to NFPA 1901, at least 50 per cent of the rear-facing vertical surfaces of a fire apparatus should be equipped with retroreflective striping in a chevron pattern. These chevrons consist of alternating red and yellow stripes, each 6 inches wide, sloping downward at a 45-degree angle from the centreline of the vehicle. This design significantly improves the visibility of emergency vehicles, reducing the risk of collisions, especially during nighttime operations or in adverse weather conditions.[13]

Currently, there is no provincial law that mandates adherence to NFPA 1901, but many Ontario fire departments choose to follow the standard. Implementing the NFPA 1901 standard demonstrates a commitment to firefighter safety and public awareness, and it is aligned with best practices observed across North America.

Findings

The Department ensures that all of its emergency vehicles are equipped with reflective chevrons that are designed to enhance visibility and safety during emergency responses.

8.9 Roadmap for Improvement

Integration of Industry Standards and Best Practices

Firefighter Guidance Notes

The Department should continue to incorporate the Firefighter Guidance Notes into its training programs. For example, the Department can try aligning its training objectives with the content of the Firefighter Guidance Notes, distributing them during sessions. Doing so will help the Department enhance operational safety, standardize best practices, and ensure compliance with provincial health and safety regulations.

[13] National Fire Protection Association. *NFPA 1900, Standard for Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances*.

Referencing the Firefighter Guidance Notes is also a practical and effective way to enhance firefighter knowledge, consistency, and operational readiness.

Cancer Prevention Checklist

The Department should continue incorporating the Cancer Prevention Checklist into its health and safety protocols in order to protect its firefighters from occupational cancer risks.

For example, the Department should continue integrating checklist items into daily routines. These topics include awareness training and the reinforcement of best practices for decontamination, PPE handling, and post-incident hygiene.

Personnel Protective Equipment

The Department currently provides its personnel with properly fitted PPE that is replaced according to a ten-year replacement cycle. Both of these practices support firefighter safety and compliance with industry standards. However, the absence of a second set of gear for each firefighter makes it challenging to maintain protection after contamination occurs during an emergency response. Therefore, in order to strengthen health and safety practices, the Department should work toward securing resources to provide a second set of PPE for all of its personnel.

Going forward, the Department should invest in additional sets of bunker gear to ensure that its firefighters have access to clean, serviceable equipment when their primary gear is out for inspections, cleaning, or repair.

Health and Wellness

The Department should continue providing its peer support team with the resources it needs to maintain firefighter health and wellness.

Going forward, the Fire Chief should research ways to provide the Department’s personnel with improved access to fitness equipment and programs. Such initiatives can support operational readiness, injury prevention, and long-term wellness.

Fireground Safety and Pre-Incident Planning

In order to ensure fireground safety, a fire department should use a structured approach that integrates incident command protocols and comprehensive pre-incident planning. When staffing levels are limited, that approach must be streamlined in a way that maximizes available resources.

In order to improve its operational readiness, the Department requires more financial support for allocating additional resources (such as dedicated personnel, scheduling flexibility, or digital tools) to support more consistent and thorough pre-incident planning

efforts. As part of this planning, the Department should identify high-risk structures, map water sources (such as cisterns), and develop tactical response strategies.

8.10 Recommendations

Recommendations regarding occupational health and safety in South-West Oxford are as follows:

8-1. South-West Oxford Fire and Emergency Services should incorporate recommendations from the Firefighter Guidance Notes into its training programs in order to enhance operational safety, standardize best practices, and ensure compliance with provincial health and safety regulations.

8-2. In order to protect local firefighters from occupational cancer risks, South-West Oxford Fire and Emergency Services should reference the Cancer Prevention Checklist on a regular basis as part of its health and safety protocols.

8-3. South-West Oxford Fire and Emergency Services should invest in additional sets of bunker gear in order to ensure that its firefighters have access to clean, serviceable equipment when their primary gear is out for inspections, cleaning, or repair.

8-4. The Fire Chief should research ways to provide the local fire service personnel with improved access to fitness equipment and programs.

8-5. Additional financial support should be allocated to South-West Fire and Emergency Services in order to strengthen the pre-incident planning program with more resources. The additional resources should be used to enhance operational readiness, improve firefighter safety, and support more effective decision-making during emergency responses.

9.0 Fire Prevention and Public Education

9.1 Overview

Fires are extremely dangerous incidents that can lead to fatalities and severe property damage. According to the OFM, there were 53,339 structure fires in Ontario between 2017 and 2021. Those incidents caused 473 deaths, 3,598 civilian injuries, and nearly $4.5 billion in property loss.[14]

Due to the negative outcomes that result from fires, fire departments have traditionally viewed fire suppression as their primary focus. However, many fire departments now recognize the importance of developing proactive fire prevention initiatives to increase community safety. Statistics show that most fires—as well as injuries, deaths, and costs resulting from fires—are preventable. For instance, structure fires often occur due to a lack of fire safety knowledge or a disregard for fire safety regulations. While improved building codes contribute to fire safety, public awareness and proper emergency response are essential for occupant survival.

The OFM endorses the use of a fire safety model known as the three lines of defence, which was first introduced by the Honourable John B. Webber in the Report of the Public Inquiry into Fire Safety in Highrise Buildings (published in 1983). The three lines of defence are:

1. Public Education
2. Code Enforcement
3. Fire Suppression

The goal of the three lines of defence is to encourage fire departments to use fire prevention initiatives to reduce the need for fire suppression. Although fire suppression must remain a critical focus for fire departments, it is important for fire departments to take steps to reduce the need for this kind of response.

Despite the OFM's emphasis on prevention, many municipalities underfund public education and code enforcement initiatives, often reallocating resources to suppression efforts. However, choosing to fund proactive fire prevention initiatives is the more cost-effective option.

A strong prevention plan, led by a dedicated fire prevention officer, can significantly reduce fire-related harm and enhance community safety. Moreover, the FPPA requires every municipality to implement a fire prevention program.

[14] OFM, 2022.

Effective fire prevention programs should use public education initiatives to bring safety issues to the forefront. Once established, the programs will require continued monitoring and revision to ensure they keep pace with the community's current and anticipated fire protection needs.

By prioritizing public education and code enforcement initiatives, a municipality is more likely to protect lives and property. The municipality can also benefit from cost savings over the long term.

9.2 Community Demographics

Context

When a fire department understands its community's demographics, that department can tailor its services to meet the specific needs of the population it serves. Examples of relevant community demographics are as follows:

- age distribution
- population density
- language diversity

Emergency responses, public education campaigns, and fire prevention programs can all be based on an understanding of community demographics.

Consider the following examples:

- If a municipality's population has a large percentage of senior citizens, that community may require an increased level of medical response readiness.
- If a municipality has a large percentage of residents who speak a diverse number of languages, that community would benefit from having multilingual safety materials to reduce potential language barriers.
- Lower-income neighbourhoods are often at an increased fire risk due to older housing stock and a lack of smoke alarms. Factors like these may prompt the need for free alarm installation programs.

Aligning resources and strategies to respond to community demographics can help a fire department bolster safety and build stronger community trust.

Findings

The following subsections discuss various community demographics that are applicable to the Department.

9.2.1 Population

Permanent Residents

According to the 2021 Statistics Canada census, South-West Oxford has a population of 7,583 year-round residents. This number is 0.7 per cent lower than the number of residents recorded in the 2016 census.

Tourism

South-West Oxford is a quiet, rural community that does not experience a large influx of tourists. As such, many aspects of local planning and public safety strategies are focused on allocating resources to the needs of permanent residents rather than seasonal visitors.

With fewer demands from the tourism sector, the Department can tailor its operations, risk assessments, and community outreach efforts to the makeup of the local population. The benefit of this approach is that it allows the Department to keep its service delivery aligned with the needs of year-round residents.

Age Distribution

Table 11 compares the age distribution in South-West Oxford to the Province of Ontario (based on the findings of the 2021 Statistics Canada census).

Table 12. Age distribution in South-West Oxford and the Province of Ontario.

Age Range	South-West Oxford	Ontario
0 to 14 years	21.0%	15.8%
15 to 64 years	62.3%	65.6%
65 years and over	16.6%	18.5%
85 years and over	1.4%	2.4%

Based on the 2021 census data, the average age in South-West Oxford is 39.4 (compared to the provincial average of 41.8), and the median age is 39.6 (compared to the provincial average of 41.6).

9.2.2 Language

According to the 2021 Statistics Canada census, South-West Oxford is a predominantly English-speaking community, with 87.7 per cent of residents identifying English as their first language. Approximately 98.8 per cent of the township’s residents can hold a conversation in English, and 4.1 per cent are bilingual in English and French.

The 2021 Statistics Canada census also notes that 71.0 per cent of South-West Oxford's residents were born in Canada to parents who were both born in Canada.

9.2.3 Level of Education

Table 12 compares the highest level of education obtained by residents of South-West Oxford aged 15 years and over to the provincial average. The information is based on the findings of the 2021 Statistics Canada census.

Table 13. Education levels in South-West Oxford and the Province of Ontario.

Education Level	South-West Oxford	Ontario
No certificate	21.1%	15.3%
High school diploma or equivalency	34.4%	27.2%
Post-secondary certificate, diploma, or degree	44.4%	57.5%

9.3 Public Education Initiatives

Context

Public education initiatives raise a community's awareness about the importance of fire safety. For example, public education can be used to help residents understand codes and regulations. Other initiatives can teach residents how to install and maintain smoke alarms, carbon monoxide detectors, and related fire safety technology. By delivering proactive public education initiatives, fire departments can help people of all ages understand ways to reduce the number of fires in their community.

Common ways of providing public education are as follows:

- Complete door-to-door campaigns.
- Deliver public service announcements.
- Participate in community events.

Many fire departments also deliver public education virtually through various online platforms. For instance, social media channels provide fire departments with a practical way of relaying information to a wide audience in real-time, especially if a large-scale incident is pending or has just occurred.

It is also common for fire departments to provide public fire safety education through lectures, videos, and pamphlets. Although these are helpful tools, they are not enough to reduce fire risk.

It is critical that fire departments train members of the public to prevent, respond, and react to fires safely. Proactive training can greatly reduce the number of fires within a community, as well as the damage caused by fires that occur.

Findings

As of this MFP, individual members from each of the Department's fire stations organize local fire education events without a cohesive strategy. This lack of coordination makes it difficult for the Department to keep track of events, monitor attendance, and manage liability concerns for its personnel.

In order to address the current challenges, the Department has re-established its public fire safety educator position. This position is responsible for overseeing all aspects of the Department's public fire and life safety initiatives, including the distribution of educational materials at local events and the development of public education programs for various social media platforms. The public fire safety educator also collaborates with the shared fire prevention officer for Oxford County on matters related to fire and life safety.

9.4 Signage

Context

Many fire departments install signage at the front of their fire stations to display public education messages.

Signs can be used to communicate information about a variety of topics, such as:

- burning restrictions
- basic fire safety practices
- fire department social media accounts
- upcoming public events
- applicable public safety concerns

Findings

As of this MFP, the Department does not have any signage installed in front of its fire stations to provide public education messages.

9.5 Code Enforcement

Context

In Ontario, fire code enforcement inspections are conducted under the authority of the FPPA and the OFC. The inspections are carried out by municipal fire departments to ensure that buildings comply with established fire safety standards.

Inspectors have the authority to enter a building without a warrant at reasonable times in order to assess fire safety conditions. If violations are identified, inspectors can issue orders requiring property owners or occupants to take necessary measures to rectify the issues. Those actions may involve removing fire hazards, making structural repairs, or implementing fire safety plans.

Findings

As noted in section 4.5 of this MFP, South-West Oxford shares a fire prevention officer role with the townships of Blandford-Blenheim, East Zorra-Tavistock, Norwich, and Zorra.

The Fire Prevention Officer works with the Fire Chief to conduct fire safety inspections for the following types of buildings:

- industrial occupancies
- assembly occupancies
- residential occupancies
- commercial occupancies

The Fire Chief and the Fire Prevention Officer also review fire safety plans during the fire safety inspections. (Plans are also reviewed upon request.)

According to the E&R bylaw for South-West Oxford, the Department is approved to conduct routine inspections, and some inspections have been conducted for high-risk properties after a potential fire safety issue was identified. Although the E&R bylaw contains information related to inspections, the Department does not have established policies or procedures for conducting routine inspections. There are also no policies or procedures in place for reviewing fire safety plans or dealing with properties and buildings that are not compliant with the OFC.

Additional information about the Department’s code enforcement services is provided in the following subsections.

9.5.1 Types of Inspections

Context

As per O. Reg. 365/13, fire departments must conduct inspections upon request and upon receiving a complaint.

A fire department will conduct a request inspection (or a sale request inspection) when it receives a notification related to new occupancies, licensing, property sales, or fire code compliance.

A fire department will conduct a complaint inspection when it receives notice of a fire code violation.

Fire departments must also complete follow-up actions for all inspections. The most common follow-up action is the issuance of a letter.

O. Reg. 365/13 states:

> If a Chief Fire Official receives a request made by or on behalf of an owner of a building for approval of anything that the fire code requires to be approved or permits to be approved, the Chief Fire Official shall assess the request and determine whether it would be advisable to conduct a fire safety inspection in the building or a part of the building in order to decide whether to grant or refuse the approval.

If an inspection is required, O. Reg. 365/13 states, “The Chief Fire Official shall ensure that the fire safety inspection conducted under this section is conducted in accordance with the directives, if any, issued by the Fire Marshal.”

Findings

As noted above, the Fire Chief and the shared Fire Prevention Officer conduct fire safety inspections in South-West Oxford for industrial, assembly, and commercial occupancies. The purpose of the inspections is to ensure the buildings are in compliance with fire safety regulations.

In addition to conducting routine inspections, the Fire Prevention Officer responds to inspection requests from property owners or occupants and then investigates complaints related to fire safety concerns. Fire safety plans are reviewed (either upon request or as part of these inspections) to verify their adequacy and alignment with applicable codes and standards.

9.5.2 Vulnerable Occupancy Inspections

Context

A vulnerable occupancy is a building or an organization that functions as a retirement home, a care facility, or a care and treatment facility.

As per O. Reg. 364/13, “Mandatory Inspection – Fire Drill in Vulnerable Occupancy,” fire departments must inspect vulnerable occupancies and verify that all vulnerable occupancies in their community have conducted the required fire drills.

According to O. Reg. 364/13:

> 3. (1) If the person ensuring that an inspector observes the fire drill [at a care occupancy, care and treatment occupancy, or retirement home] is not the Fire Marshal, the person shall file the following information with the Fire Marshal in the form and manner and within the time period directed by the Fire Marshal:
>
> 1. The operating name of the care occupancy, care and treatment occupancy or retirement home.
>
> 2. The street address of the care occupancy, care and treatment occupancy or retirement home.
>
> 3. The classification of the care occupancy, care and treatment occupancy or retirement home as a care occupancy, care and treatment occupancy or retirement home.
>
> 4. The date the fire drill was observed.
>
> 5. The date the fire safety inspection was conducted.
>
> (2) If the person ensuring that an inspector observes the fire drill […] is the Fire Marshal, he or she shall keep a record of the information described in subsection (1).

Findings

As of this MFP, there is one vulnerable occupancy in the Department’s response area. The Department observes fire drills and conducts inspections at this site on an annual basis.

9.5.3 Fire Inspection Statistics

Context

There are several reasons why fire departments must track their inspections:

- Tracking inspections is a requirement of the FPPA.

- The information may help a fire department develop strategic plans to address operational needs (such as staffing levels).
- The information may identify occupancies where additional inspections are required.
- The information can help a fire department develop a fire prevention campaign that focuses on areas in the community that have a number of complaints and violations.
- Tracking inspections creates a paper trail, which can help protect building owners, as well as a municipality and its fire department, from potential liability issues.

Above all, tracking inspections can help a fire department identify ways to improve the safety of community residents, businesses, and visitors.

There are several types of OFC violations that a fire department may identify when conducting an inspection.

Depending on the nature of the violation, the applicable authority having jurisdiction ("**AHJ**") may issue one of the following notices:

- **Verbal:** The inspector notes an issue verbally. The issue is corrected immediately, and the officer acknowledges the correction.
- **Letter of compliance:** The inspector sends a formal letter to the building owner. The letter states that the inspection is complete, as well as whether the occupancy is compliant.
- **Order:** According to section 5.21.(1) of the FPPA, an inspector "may order the owner or occupant of the land or premises to take any measure necessary to ensure fire safety on the land."
- **Notice of violation:** The inspector notes violations in a letter to the building owner. This letter includes the date by which the owner must resolve the noted issues.
- **Charges:** If a building owner does not comply with an order, they may be charged under the FPPA.

Findings

Table 13 summarizes the reasons for the inspections conducted by the Department from 2020 to 2024.

Table 14. Inspection reasons, 2020 to 2024.

Type of Inspection	Total
Complaint inspections	17
Owner request inspections	32
Sale request inspections	5
Routine inspections	42
Licensing inspections	5
Other inspections	8
Open-air permits	288
Total	**397**

During the MFP development process, it was discovered that the Department is unable to provide a summary of inspections by year and occupancy type due to the limitations of its current records management system ("**RMS**").

Upon review, the Department's RMS system is outdated and lacks the functionality to store, categorize, and retrieve inspection data in a structured format.

For more information about the Department's RMS, see section 16 of this MFP.

9.5.4 Fire Inspection Frequency

Context

As discussed in section 9.1, the concept of the three lines of defence recommends using fire prevention activities in order to reduce the need for fire suppression services.

Fire inspections are a crucial component of all fire prevention programs. When a fire department inspects the different occupancies in the community on a frequent basis, it is likely to remain aware of factors that have the potential to cause a fire or other emergency. Those factors can include changes to a building's use, layout, or on-site materials.

Findings

As of this MFP, fire safety inspections are conducted once per week in each of the five municipalities served by the shared Fire Prevention Officer. These inspections are coordinated in collaboration with the local fire chiefs, each of whom provides direction or relevant information to guide the Fire Prevention Officer's activities. This approach ensures consistent oversight across all jurisdictions, allowing for proactive identification

of fire safety risks, as well as timely reviews of fire safety plans and responses to inspection requests and complaints.

9.5.5 Smoke Alarm/Carbon Monoxide Alarm Program

Context

As of this MFP, Ontario does not have a policy that mandates inspections for residential smoke alarms and carbon monoxide alarms. However, as a rule, all residences are required to have working alarms on every floor level and outside sleeping areas. Testing and maintaining the alarms is the responsibility of homeowners and landlords (in the case of rental units).

Although there is no mandated policy for smoke alarms and carbon monoxide alarms, it is highly advisable for fire departments to implement an applicable program. Doing so is a proactive way to ensure the best possible outcome for local residents in the event that a fire or carbon monoxide emergency occurs.

All smoke alarm/carbon monoxide alarm programs should include the following components:

- Each time firefighters interact with local residents (such as during emergency responses), they should verify that the residents have working alarms.
- Fire departments should proactively check residential smoke/carbon monoxide alarms.
- Fire departments should have a method for tracking and keeping statistics regarding the number of working and non-working smoke alarms in the community.

Fire departments can accomplish most requirements of a smoke alarm/carbon monoxide alarm program by conducting home inspections and home fire escape reviews for community residents, including the residents of seasonal dwellings and trailer parks.

Findings

The Department does not currently have a formalized smoke alarm/carbon monoxide alarm program.

Going forward, the Department should consider implementing this kind of program, as it would enhance public fire safety education and prevention efforts, particularly in residential settings where working alarms are critical for early detection and life safety. Establishing a structured program could also support community outreach, improve compliance with the requirements of the OFC, and reduce fire-related injuries and fatalities.

9.6 Residential Sprinkler Systems in New Residential Buildings

Context

Installing a sprinkler system in a residential building can reduce the risk of severe property damage and loss of life. The sprinkler systems can help suppress fires, keeping them small and reducing their ability to spread. If a residential sprinkler system can control a fire in this way, building occupants may have more time to evacuate their homes.

The NFPA has conducted a study that examined residential sprinkler systems.[15] Some of the facts uncovered by the study are as follows:

- Sprinklers were effective at controlling a fire in 98 per cent of cases in which they were used.
- Sprinklers save lives and reduce injuries and property loss.
    - When sprinklers were present, the civilian fire death rates were 90 per cent lower.
    - When sprinklers were present, the injury rates per fire were 32 per cent lower.
- Sprinklers have proven to work reliably in reported structure fires considered large enough to activate them.

Recent data collected by the NFPA also confirms that various enhancements in sprinkler system designs have improved their performance and reliability.

Sprinkler systems can be supported by a home's well or through standalone tanks and pump systems that activate automatically during a fire.

Findings

As of this MFP, South-West Oxford does not have any requirements related to the installation of sprinkler systems in residential buildings.

9.7 Fire Investigations

Context

According to the FPPA, a fire department must investigate all fires that occur within its jurisdiction. In order to gain the skills needed to conduct accurate investigations, firefighters should complete advanced training to the standards of NFPA 1033.

[15] McGree, "U.S. Experience with Sprinklers."

After a fire occurs, a fire department conducts a preliminary investigation to identify the cause, origin, and circumstances of the fire. If the cause is accidental, information from the inquiry reinforces the need to increase fire prevention and public education initiatives. However, if the cause of a fire is suspicious, further investigations and actions are required. For instance, fire departments must notify the OFM and the local police about all suspicious fires.

The FPPA also states that assistants to the Fire Marshal must notify the OFM of all incidents that meet—or that appear to meet—any of the following criteria:

- The investigating firefighters suspect the fire or explosion is incendiary (criminal). Incendiary fires may include dumpster fires, car fires, and wildland fires. All incendiary fires/explosions must be reported to the applicable police authority.
- A fire or explosion results in either a fatality or serious injury that requires a person to be hospitalized as an in-patient. In such instances, the fire department must make every reasonable effort to confirm the status of injured persons transported to the nearest hospital before releasing the fire scene.
- A fire or explosion results in significant loss for the community.[16]
- An explosion is the primary event.
- A fire results in an unusual spread of fire or smoke.
- A fire or explosion involves circumstances that may result in widespread public concern (such as an environmental hazard).
- A fire or explosion involves clandestine drug operations or marijuana growing operations.
- A fire or explosion occurs in a multi-unit residential occupancy, and the impact of the fire's spread or the explosion extends beyond the unit of origin.
- A fire or explosion occurred in a multi-unit residential occupancy, and the fire department suspects that OFC violations have impacted the event.
- A fire or explosion occurs in a vulnerable occupancy.

Under the FPPA, a fire department must follow all regulated steps when conducting a fire investigation. This obligation includes notifying and working with OFM investigators (as required).

[16] A significant loss refers to a dollar loss of one million dollars or more or a loss that is twice the amount of the average sale price of a residential occupancy in the community.

Findings

The fire investigations in South-West Oxford are conducted by the Fire Chief or the Department's officers (depending on the level of investigation that is required).

The Department's management team is aware of the investigation requirements listed in the FPPA. The team also knows when to work with an OFM fire investigator, as some previous incidents have required the Department to work closely with the OFM.

9.8 Roadmap for Improvement

Public Education Initiatives

The Department should strive to establish a proactive approach to public education. This approach should include targeted outreach initiatives, consistent messaging, and community engagement.

The Department should also consider implementing an "after-the-fire" program to assist residents after a fire occurs. The program can focus on recovery, education, and prevention information, and it could begin with the development of a standardized response protocol that aims to provide affected individuals with the following resources:

- safety information
- emotional support resources
- guidance for restoring fire protection systems (such as smoke alarms and carbon monoxide alarms)

The Fire Chief should also implement an enhanced public awareness and engagement communication campaign. This campaign should be used to educate property owners about inspection processes, common violations, and the importance of maintaining fire safety systems. Providing this kind of public education and collaborating with local businesses can help support a culture of fire safety and voluntary compliance.

Also, the E&R by-law for South-West Oxford should clearly define the fire prevention resources that the township is committed to providing in order to ensure legislative compliance, accountability, and consistent service delivery. For instance, the by-law should formally assign responsibility for mandated fire prevention functions, such as:

- public fire safety education
- fire code inspections and enforcement
- complaint response
- the review of fire safety plans

The E&R by-law should also specify the types of inspections that need to be conducted (such as routine, risk-based, complaint-initiated, and follow-up inspections), and it should provide a schedule that outlines the general frequency of all required inspections.

In order to deliver the services defined in the E&R by-law, the Department may require more support, such as dedicated personnel or a shared service agreement. Acquiring this support would require funding.

Risk-Based Fire Inspection Schedule

In order to develop a successful fire inspection program, the Department should develop a risk-based inspection schedule that prioritizes high-risk occupancies and ensures regular compliance checks. Occupancies that are low- or moderate-risk sites can be reviewed on a rotating basis.

Smoke Alarm/Carbon Monoxide Alarm Program

In order to improve residential fire safety and meet legislative obligations, the Department should formalize a smoke alarm and carbon monoxide alarm program. This initiative should begin with public education campaigns, targeted outreach to vulnerable populations, and partnerships with local organizations to distribute and install alarms where needed.

9.9 Recommendations

Recommendations regarding fire prevention and public education in South-West Oxford are as follows:

9-1. South-West Oxford Fire and Emergency Services should implement a public education and awareness program that emphasizes targeted outreach efforts, consistent messaging, and active community engagement. The program should also include a formalized “after the fire” initiative to support residents after an incident occurs (through standardized recovery protocols, emotional support resources, and guidance on restoring essential fire protection systems, such as smoke alarms and carbon monoxide alarms).

9-2. South-West Oxford Fire and Emergency Services should formalize a smoke alarm and carbon monoxide alarm program to promote residential fire safety. A system to document and evaluate the results of the program (to ensure accountability, track progress, and identify areas for improvement) should also be established.

9-3. South-West Oxford Fire and Emergency Services should adopt a more proactive and structured approach to public fire safety education. This approach should be formalized through the establishing and regulating bylaw for South-West Oxford.

9-4. The Fire Chief should implement a risk-based inspection schedule that ensures high-risk occupancies are inspected annually. All moderate- and low-risk occupancies can be reviewed on a rotating basis.

9-5. The Fire Chief should implement an enhanced public awareness and engagement communication campaign to educate property owners about different inspection processes, common violations, and the importance of maintaining fire safety systems.

10.0 Training and Certifications

10.1 Overview

According to O. Reg. 297/13, subsections 4 (1) and (2):

- Employers must keep a record of the training their employees and supervisors receive.
- Employers must keep a record of any worker or supervisor who is exempt from completing specific training.
- Employers must update employee training records each time an employee completes a training program. Doing so provides evidence that the employer took steps to prevent hazards, accidents, discrimination, and harassment in the workplace.

In addition to the items listed above, there are specific training requirements that fire departments must observe. For instance, in order to perform response duties safely, firefighters must receive training that teaches them the skills they need to carry out their assigned tasks. The training must also help the firefighters develop an aptitude for recognizing the appropriate actions to take during an emergency response.

Fire departments must also offer basic training to comply with legislation. According to the OHSA, all employers must “provide information, instruction and supervision to a worker to protect the health or safety of the worker.” As such, fire departments should complete ongoing training to ensure that their operations remain safe and effective. Ongoing training also helps firefighters remain current with applicable certification requirements while keeping their knowledge and skill levels up to date—a well-trained firefighter is a firefighter who is properly equipped to make decisions that will mitigate risks and save lives.

10.2 Training Structure

Context

A well-organized training program is beneficial for many reasons, such as:

- The program ensures that firefighters are consistently prepared to respond to a wide range of emergencies safely and effectively.
- The program supports the development of core competencies.
- The program reinforces operational procedures.
- The program keeps personnel up to date with evolving techniques, equipment, and regulations.

- A strong training framework supports teamwork, decision-making under pressure, and physical readiness.
- Conducting structured training events on a regular basis reduces the risk of injury, improves response times, and enhances public safety.

In addition to the operational benefits listed above, a well-structured training program can help a fire department ensure compliance with provincial and national standards, which can reinforce the department's credibility and professionalism.

Findings

The Department has based its training program on applicable NFPA standards. Currently, the Department conducts training sessions three times a month, and refresher training related to the NFPA 1001 standard is provided every four years (at a minimum).

As noted in section 4.5 of this MFP, South-West Oxford shares a training officer role with the townships of Blandford-Blenheim, East Zorra-Tavistock, Norwich, and Zorra. The Training Officer coordinates and delivers NFPA-related training programs on behalf of the partner municipalities.

According to South-West Oxford's CRA, the Department introduced minimum training requirements for all of its new and existing volunteer firefighters in 2016. These requirements are based on rank, and they mandate the Department's personnel to obtain or complete the following certifications or courses:

- NFPA 1001, Firefighter I and II
- NFPA 1072, Hazardous Materials (awareness-level and operations-level)
- NFPA 1041, Fire Instructor, Level I
- NFPA 1002, Pump Apparatus Operations
- NFPA 1006, Chapter 5, General Rescuer
- NFPA 1035, Public Educator, Level I
- NFPA 1035, Public Information Officer
- Introduction to Incident Management
- Class D Driver's License and Air Brake Endorsement Course
- Legislation (Ontario Fire College)

10.2.1 Recruit Training

Context

All firefighters complete approximately 400 hours of recruit training when they begin working in the fire service. Due to the costs and time commitments involved in providing recruit training, some fire departments send their new firefighters to third-party trainers or establish agreements with other fire departments to share training duties.

In Ontario, the OFM trains and certifies firefighters to NFPA standards, which are the benchmarks for firefighting training in North America. The training is facilitated by the OFM Academic Standards and Evaluation unit. This group is responsible for conducting written tests, practical evaluations, and other methods of assessment for certification courses. The OFM Academic Standards and Evaluation unit can also issue International Fire Service Accreditation Congress seals and National Board on Fire Service Professional Qualifications applications (as appropriate).

Findings

As of this MFP, the Department uses the following recruitment process:

1. A job posting is advertised on the township's official website and applicable social media channels.
2. Interested candidates complete an online application form that is available on the township's website.
3. Candidate information sessions are held.
4. An application review is conducted to verify the licences, addresses, certifications, work permit statuses, and pardon verifications of the candidates.
5. Candidate panel interviews are held.
6. A physical abilities assessment is conducted to evaluate the occupational requirements, heights, and SCBA mask sizes of the candidates.
7. Candidates must prove they meet acceptable vision requirements.
8. Candidates must pass a criminal and vulnerable sector screening.
9. Candidates must produce an acceptable driver's abstract.
10. Candidates who are unfamiliar with firefighting duties are offered positions as auxiliary firefighters as applicable.
11. Candidates are offered probationary firefighter positions.
12. Candidates must produce acceptable First Aid and CPR certificates.

13. Candidates without NFPA 1001 (Levels I & II) and NFPA 1072 (awareness-level and operations-level) certifications enroll in training provided by the Regional Fire Services Ontario Campus. This process takes approximately six months, with training sessions conducted every other weekend.
14. Candidates with the appropriate level of NFPA certification conduct a skills verification as required.
15. Candidates begin a one-year probation period.

The Department has structured its recruitment process to ensure that all members and potential candidates are aware of the requirements they must meet.

10.2.2 Ongoing Training

Context

It is crucial for volunteer firefighters to receive ongoing training. A well-structured training program will help ensure the firefighters remain skilled, confident, and ready to respond to a wide range of emergencies.

Ongoing training offers several key benefits, such as:

- The training reinforces core competencies and introduces new techniques.
- The training increases familiarity with fire service equipment.
- The training helps ensure compliance with safety standards and legislation.
- The training promotes teamwork, builds muscle memory for critical tasks, and helps firefighters stay mentally and physically prepared.

Ongoing training is especially important for small and rural fire departments that may not receive a high volume of emergency calls. The training will help the personnel in those departments maintain their operational readiness even when there are fewer emergency responses to complete.

Findings

As of this MFP, the Department’s firefighters have access to NFPA-compliant training through courses offered by the Regional Fire Services Ontario Campus. This training provides personnel with valuable opportunities to enhance their skills and meet national standards for several key competencies, such as fire suppression, rescue operations, and incident command.

10.2.3 Officer Development Program

Context

According to the OHSA, employers should ensure that each worker they appoint to a supervisory role has the prerequisites to qualify as a competent supervisor.

The following excerpt from the Province of Ontario's website paraphrases the OHSA's definition of a competent supervisor:

> The OHSA gives employers and workers duties that help support the role of the supervisor. When appointing a supervisor, the employer must ensure the person is competent. To be competent, a supervisor must have enough knowledge, training, and experience to organize the work and how it is to be performed. He or she must also be familiar with the OHSA and any regulations under it that apply to the workplace and know about any actual or potential health and safety hazards in the workplace.[17]

The legislation about competent supervisors applies to various employment sectors, including the fire service. In addition, personnel who serve in supervisory roles must meet certain occupational health and safety requirements.

In order to ensure personnel are competent prior to their appointment as supervisors, many fire departments establish an officer development program. This type of program can cover essential topics that personnel should learn to prepare themselves for potential leadership roles in the future.

Examples of key training topics are as follows:

- incident command
- fireground tactics
- leadership skills
- communication skills
- knowledge of applicable legislation and departmental policies

An officer development program should also include mentorship opportunities, scenario-based exercises, and processes to evaluate decision-making and team management abilities. By combining formal education with practical experience, officer development programs can equip future leaders with the knowledge and skills to guide their crews safely and effectively during both emergency responses and administrative tasks.

[17] Ontario.ca, "Supervisors under the Occupational Health and Safety Act."

Another best practice is having leadership personnel attend seminars and conferences. Attending these events can provide many benefits, such as:

- the chance to stay current with evolving fire service practices, technologies, and legislation
- the chance to network with other leadership personnel, share experiences, and gain insights into innovative solutions and emerging challenges within the field
- the chance to support professional development and collaboration across departments
- the chance to equip fire chiefs with the knowledge and tools needed to lead effectively and make informed decisions for their communities

Findings

As of this MFP, the Department's captains, acting captains, and district chiefs must obtain the following certifications:

- NFPA 1021 Fire Officer I
- NFPA 1521 Incident Safety Officer

The Department uses the InFuse Compliance System, which is a cloud-based platform that supports health and safety initiatives in South-West Oxford. This system provides access to a wide range of training and compliance tools, such as:

- a management suite
- general health and safety courses
- modules related to the AODA
- modules related to violence and harassment in the workplace

The resources listed above are particularly valuable for the development of the Department's officers. These personnel gain the knowledge and skills they need to maintain a safe and inclusive working environment.

10.3 NFPA Certification

Context

O. Reg. 343/22: Firefighter Certification came into effect on July 1, 2022. The regulation falls under the authority of the FPPA, and it establishes the mandatory minimum certification standards for specific fire protection services.

As per O. Reg. 343/22:

- All firefighters must have the minimum level of certification for all services they perform. This stipulation is to ensure that firefighters receive consistent, ongoing training that matches the level of service set by their municipal council. The stipulation is also in place to help protect firefighter safety.
- Municipal councils must set the types of service and the levels of service that their fire departments will provide. Once decided, the council must arrange for its fire department to receive the appropriate level of training (based on applicable NFPA standards) for those services.
- Firefighters must meet the NFPA standards that are applicable to their roles, and they must have the ability to perform the services associated with their roles. For example, a fire prevention officer must have certification at the level of inspections they provide, and captains must have certification at the level of supervision they conduct.
- A fire department must ensure that all of its personnel meet the level of training required under O. Reg. 343/22 by the compliance deadline.
    - NFPA 1006 certifications have a compliance deadline of July 1, 2028.
    - All other certifications have a compliance deadline of July 1, 2026.

In addition to the items listed above, fire departments must ensure that all applicable personnel are certified to the following standards prior to the certification deadline:

- NFPA 1001 identifies the minimum job performance requirements for career and volunteer firefighters whose duties are primarily structural in nature. (NFPA 1001 is consolidated in NFPA 1010, *Standard on Professional Qualifications for Firefighters*.)
- NFPA 1002 identifies the requirements that firefighters must meet before driving to emergency sites, as well as requirements for the regular maintenance and repair of fire apparatus. (NFPA 1002 is consolidated in NFPA 1010, *Standard on Professional Qualifications for Firefighters*.)
- NFPA 1072 identifies the minimum job performance requirements for firefighters operating at the scene of a hazardous materials incident or weapons of mass destruction incident. (NFPA 1072 is consolidated in NFPA 470, *Hazardous Materials/Weapons of Mass Destruction (WMD) Standard for Responders*.)
- NFPA 1006, *Standard for Technical Rescue Personnel Professional Qualifications*, identifies the minimum job performance requirements for firefighters delivering specialized rescue services.
- NFPA 1033, *Standard for Professional Qualifications for Fire Investigators*, specifies the job performance requirements that fire investigators must meet.

- NFPA 1031 specifies the job requirements, knowledge levels, and skill levels that fire inspectors must meet. (NFPA 1031 is consolidated in NFPA 1030, *Standard for Professional Qualifications for Fire Prevention Program Positions*.)
- NFPA 1035 specifies the standard that contains guidelines for fire and life safety educators. (NFPA 1035 is consolidated in NFPA 1030, *Standard for Professional Qualifications for Fire Prevention Program Positions*.)
- NFPA 1021 identifies the minimum job performance requirements that fire officers should meet. (NFPA 1021 is consolidated in NFPA 1020, *Standard for Fire and Emergency Services Instructor, Fire Officer, and Emergency Medical Services Officer Professional Qualifications*.) As of July 1, 2026, the following level of certification becomes mandatory for the listed positions:
  - NFPA 1021, Fire Officer I: The fire officer at the supervisory level.
  - NFPA 1021, Fire Officer II: The fire officer at the supervisory/managerial level.
  - NFPA 1021, Fire Officer III: The fire officer at the managerial/administrative level.
  - NFPA 1021, Fire Officer IV: The fire officer at the administrative level.
- NFPA 1041 identifies the job requirements that fire service instructors who participate in training should meet. (NFPA 1041 is consolidated in NFPA 1020, *Standard for Fire and Emergency Services Instructor, Fire Officer, and Emergency Medical Services Officer Professional Qualifications*.)
- NFPA 1521 identifies the job requirements that health and safety officers and incident safety officers should meet. (NFPA 1521 is consolidated in NFPA 1550, *Standard for Emergency Responder Health and Safety*.)

Until recently, a provincial program allowed firefighters to meet their certification requirements without completing the necessary NFPA training. Firefighters could attempt to have their training grandfathered or attain a legacy status that reflected their skill levels.[18]

Under the grandfathering process, fire departments could submit lists indicating which personnel should qualify as NFPA-certified based on their years of experience and ongoing training. The Ontario government gave fire departments two opportunities to complete the grandfathering process. The final deadline was December 31, 2018.

Fire departments were also able to submit names of members who did not complete the grandfathering process but had the qualifications to perform certain fire protection tasks, such as exterior firefighting, interior firefighting, and auto extrication. The final deadline to register for legacy status was September 2023.

[18] Legacy status does not certify firefighters to NFPA standards. In order to achieve NFPA certification, firefighters must complete the applicable testing process or training and certification process.

A fire department with personnel who completed either process prior to the final deadline must ensure that they retain the appropriate documentation to prove their firefighters hold legacy status or had their training grandfathered. Fire departments must also retain appropriate training records as proof that they meet applicable requirements.

Findings

As noted above, the Department has based its training program on applicable NFPA standards. This program is both well-established and effectively maintained, and it ensures that all of the Department's recruits are trained to the recognized standards.

The Department also promotes accessibility by offering training opportunities to anyone who is interested in taking applicable courses. These courses further support operational readiness and community engagement.

Table 14 summarizes the training and certification levels in the Department. The table shows the following information:

- the number of personnel who should complete each course and become certified[19]
- the number of personnel who have received OFM, IFSAC, or ProBoard certification
- the number of personnel who have had their training status grandfathered or have legacy status
- the percentage of eligible personnel who are certified, in the process of becoming certified, or have had their training status grandfathered for the certification

[19] As per O. Reg. 343/22, all NFPA certifications listed in the table will be mandatory for personnel who complete the duties covered by the applicable standard as of July 1, 2026.

Table 15. Firefighter certification levels in South-West Oxford.

NFPA Standards	Applicable Personnel	OFM, IFSAC, or Proboard Certified	Legacy or Grandfathered	Percentage Completed or Pending
NFPA 1001: Fire Fighter I	54	43	11	100%
NFPA 1001: Fire Fighter II	54	43	11	100%
NFPA 1002: Fire Apparatus Driver/Operator	54	31	0	57%
NFPA 1021: Fire Officer I	14	10	4	100%
NFPA 1041: Fire Services Instructor I	22	18	4	100%
NFPA 1521: Incident Safety Officer	10	10	0	100%
NFPA 1031: Fire Inspector I	1	1	0	100%
NFPA 1033: Fire Investigator	1	1	0	100%
NFPA 1035: Fire and Life Safety Educator I	54	20	0	37%
NFPA 1072: Hazardous Materials Response (operations level)	54	42	3	83%

10.4 Other Training and Development

Context

In addition to foundational training related to NFPA standards and rescue requirements, firefighters may also complete training related to the following topics:

- emergency medical response
- defibrillation
- driver training
- mental health
- incident command systems
- wildland firefighting
- airport responses

Fire service personnel can complete their training by conducting hands-on drills, scenario-based exercises, and online learning modules. The purpose of the training is to help firefighters maintain their skills and stay up to date with the latest protocols and equipment.

Findings

The Department provides tiered medical training that is led by EMS crews. This training ensures that the Department has personnel who are prepared to respond to medical emergencies. Specialized training has also been provided for airport-related response scenarios.

The Department has also incorporated online training modules to enhance the accessibility and flexibility of its training courses. A peer support app is also used to promote mental wellness among the Department's personnel.

10.4.1 Provincial and Municipal Training

Context

In addition to recruit training and in-service training, all firefighters must complete specific provincial and municipal training. For instance, all employees of public sector organizations must complete AODA training, and all workers who may be exposed to hazardous situations and materials must complete WHMIS training.

Findings

As noted in section 10.2.3, the Department uses the InFuse Compliance System. The Department uses this system to provide applicable provincial and municipal training. This system also provides the tools needed to reach health and safety compliance goals.

OFM training is used to complete mandatory WHMIS requirements.

10.4.2 Post-Incident Analysis and Review

Context

Fire departments may conduct a post-incident analysis and review ("**PIAR**") following an emergency response. In some cases, an after-action review will also be conducted. Each of these reviews is a type of structured evaluation that is used to assess the actions that were taken during an incident. The purpose of these evaluations is to identify successes and areas for improvement. This information can then be used to enhance the effectiveness of future emergency responses.

The results of a PIAR can be used to support many operational goals and initiatives, such as:

- Reinforce training.
- Improve response strategies.
- Update standard operating procedures.
- Enhance firefighter safety by uncovering any procedural lapses or equipment failures that may place personnel at risk.

By analyzing the outcomes of previous incidents, a fire department can reduce the likelihood of future mistakes, improve coordination, and ensure that its firefighters are better prepared and protected to respond to future emergencies.

According to the NFPA, a structured post-incident review process is essential for maintaining continuous improvement, accountability, and safety. Moreover, the Ministry of Labour emphasizes the importance of implementing an incident command system that is supported by operational guidelines, training, post-incident analyses, and regular reviews and revisions.

Findings

As of this MFP, the Department conducts an informal PIAR after it completes an emergency response. These PIARs typically involve open discussions among crew members to review the incident.

10.5 Driver Training and Licensing

Context

It is critically important for fire departments to understand the current certification and regulatory requirements associated with driver training and licensing. An individual should only operate a large vehicle (such as a fire apparatus) after completing specialized training and obtaining either a DZ or AZ licence. If a fire department allows an unqualified or untrained firefighter to operate a fire apparatus, it puts the safety of the driver and others at risk.

Relevant excerpts from different legislation related to driver training and licensing are as follows:

- Section 25 (2)(a) of the OHSA states that an employer must “provide information, instruction and supervision to a worker to protect the health or safety of the worker.”
- Section 25 (2)(h) of the OHSA states that an employer must “take every precaution reasonable in the circumstances for the protection of a worker.”
- Firefighter Guidance Note #6-7, “Driving skills for emergency apparatus response,” recommends having firefighters complete theoretical and practical training if their role involves operating a fire apparatus.

Findings

The Department maintains an effective driving and licensing program through its partnership with the Regional Fire Services Ontario Campus, which provides structured driver training. The Department benefits from having three qualified personnel who serve as signing authorities, enabling in-house certification and oversight of driver competencies. As a result, the Department can ensure that standards are applied consistently and that the entire fleet maintains a high level of operational readiness.

10.6 Roadmap for Improvement

Training Structure and Schedule

The Department must continue to ensure that its personnel receive training that provides them with the knowledge and skills needed to conduct a wide range of fire protection services. These subjects include the mandatory training topics that all firefighters must complete annually.

In order to ensure consistency, the Department’s training should be delivered on an ongoing basis, and it should be structured in a way that makes the Department’s long-term vision clear for all personnel.

The Department should also consider ways to enhance or expand its current training program. For example, the Fire Chief should consider incorporating leadership training and incident command training into the leadership team meetings for the Department's officers. Doing so will help make sure that the Department has a team of personnel who have the knowledge and skills to maintain leadership continuity and direct safe and effective response efforts.

Enhancing the availability and variety of training props can also support hands-on learning and skills development, particularly for specialized scenarios. By formalizing the training calendar and investing in realistic training aids, the Department can improve its levels of preparedness, engagement, and overall effectiveness.

Post-Incident Analysis and Review

The Department should formalize a process for conducting PIARs following emergency responses. Doing so would provide a structure for evaluating tactical decisions, identifying areas for improvement, and reinforcing successful strategies.

The Department can use the results of the PIARs as learning opportunities to enhance its levels of safety and effectiveness.

10.7 Recommendations

Recommendations regarding the training program in South-West Oxford are as follows:

10-1. The Fire Chief should consider incorporating leadership training and incident command training into the Department's Officer Leadership Team meetings.

10-2. The Fire Chief should formalize a "post-incident analysis and review" program.

10-3. The Fire Chief should develop a training schedule to ensure that the local officers and firefighters understand the long-term vision for training delivery. The Fire Chief should ensure that the training schedule is based on the mandatory subjects that firefighters must complete annually.

10-4. South-West Oxford Fire and Emergency Services should invest in a broader range of realistic training props in order to enhance its hands-on learning initiatives.

11.0 Response

11.1 Overview

Fire departments must respond promptly to all emergency calls in order to maximize the protection of residents and minimize potential property damage and dollar loss.

Fast response times are especially critical when an emergency involves a structure fire. A fire's growth is heat-generated, and it is dependent upon fuel and air supply. Once the temperature in a room ablaze reaches approximately 1,000 °F (590 °C), a flashover will occur in the entire room within six to ten minutes (or less). A flashover is an instance of a fire spreading very rapidly across a gap because of intense heat. When a flashover occurs, it significantly increases the risk of fatalities and property damage.

It is also vital to have a quick response time when a medical emergency occurs. Recent research has shown that response times and mortality are correlated.[20] For example, when a patient is experiencing a heart attack, their survivability decreases at a rate of 10 per cent/minute.[21] The outcomes of many other medical emergencies also depend on fast response times.[22]

Although not all fire departments respond to the same incidents (such as medical calls), they should still understand the importance of response times in order to determine which services, staffing levels, and performance standards are applicable to them. Every municipal council should also determine which types and levels of service its fire department should provide. Once those items are established, the council should determine the fire department's performance standards.

In general, performance standards establish how many firefighters should respond to an emergency and how long it should take for them to arrive at an incident site. A fire department can assign response duties based on those considerations. In all cases, it is essential for a fire department to respond to emergencies with an adequate number of personnel and resources to deliver effective fire protection and suppression services.

By setting performance standards, a fire department can ensure that it is achieving fast, consistent response times while dispatching a fire crew with enough personnel to complete all critical tasks in a timely manner.

[20] Pons et al., "Paramedic Response Time: Does It Affect Patient Survival?"

[21] Medical Advisory Secretariat, "Use of Automated External Defibrillators in Cardiac Arrest: An Evidence-Based Analysis."

[22] Blackwell and Kaufman, "Response Time Effectiveness: Comparison of Response Time and Survival in an Urban Emergency Medical Services System"; Wilde, "Do Emergency Medical System Response Times Matter for Health Outcomes?"

11.2 Effective Response Force

11.2.1 Staffing Levels, Response Benchmarks, and NFPA Standards

Context

For many years, fire departments analyzed their performance levels by comparing their initial response times to a standard metric. However, many agencies now agree that fire departments should set their own benchmarks in order to measure their performance levels. This process involves determining a fire department's effective response force.

The term "effective response force" refers to the following:

- The number of firefighters needed to respond to an emergency safely and effectively.
- The resources needed to respond to an emergency safely and effectively.
- The time it takes for firefighters and resources to arrive at the scene of an emergency

After determining the effective response force that it should provide, a fire department should examine its past performance, fire station locations, and minimum dispatch time. By examining these factors, a fire department can identify its strengths and weaknesses and determine how often it has dispatched its intended effective response force. The fire department can then establish response benchmarks that it can use to measure its performance.

If a fire department can meet its self-determined benchmarks, it means that the organization is operating at optimal capacity during emergency responses. A fire department can also analyze responses that fall short of its benchmarks to identify areas for improvement. For example, a fire department may set its total response time at 12 minutes, and it might aim to achieve that response time for 90 per cent of its responses. In this example, the fire department assumes that 10 per cent of its responses will involve a total response time that exceeds 12 minutes. By analyzing the responses that are longer than 12 minutes, the fire department can determine the issues that hinder its ability to meet its goals. This form of self-assessment can provide information that impacts decisions about station locations, staffing levels, apparatus deployment, and future standard development.

A fire department can submit its response benchmarks to its municipal council for approval to ensure that the community understands the fire protection services it can expect to receive. Each community has unique hazards, expectations, and needs, and it is important to make sure the fire department's response benchmarks consider those factors.

Finally, it is important to make sure that all decisions adhere to applicable legislation and guidelines, such as the FPPA, the OHSA, and NFPA standards.

For example, under the OHSA, employers are responsible for protecting employees from workplace injuries or death. As such, fire departments and municipal councils must ensure that their firefighters receive adequate training and supervision for all services they provide.

The following NFPA standards provide information that fire departments can reference when determining their emergency response benchmarks:

- NFPA 1225, *Standard for Emergency Services Communications*
- NFPA 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments*[23]

The information in NFPA 1720 is particularly useful to review, as it contains recommendations for a variety of demand zones.

Table 15 shows the staffing levels and response time standards that NFPA 1720 provides for urban, suburban, rural, and remote area demand zones.[24] The table defines each type of demand zone by its demographics and lists the minimum number of staff needed for responses in each area, as well as the expected response time.

Table 15 also includes a metric for measuring fire department effectiveness. (The metric lists how many personnel should respond to an incident within an expected time.) For example, if an incident occurs in an urban area demand zone, a fire department should dispatch at least 15 personnel to the emergency site. If the fire department can dispatch those 15 personnel within nine minutes at least 90 per cent of the time, that fire department is considered effective.

[23] NFPA 1710 and 1720 are scheduled to be consolidated into NFPA 1750 by 2026.

[24] This table is adapted directly from section 4.3.2 of NFPA 1720.

Table 16. Staffing and response time standards as per NFPA 1720.

Demand Zone[25]	Demographics	Minimum Staff to Respond[26]	Response Time[27] (minutes)	Meets Objective (%)
Urban area	> 1,000 people/mi^2 (2.6 km^2)	15	9	90
Suburban area	500 to 1,000 people/mi.^{2} (2.6 km^2)	10	10	80
Rural area	< 500 people/mi.^{2} (2.6 km^2)	6	14	80
Remote area	Travel distance ≥ 8 mi. (12.87 km)	4	Directly dependent on travel distance	90
Special risks	Determined by AHJ	Determined by AHJ based on risk	Determined by AHJ	90

In addition to the information in the table above, sections 4.3.4 and 4.3.5 of NFPA 1720 outline the following requirements for all fire departments:

> Upon assembling the necessary resources at the emergency scene, the fire department shall have the capability to safely commence an initial attack within 2 minutes 90 percent of the time.
>
> Personnel responding to fires and other emergencies shall be organized into company units or response teams and have the required apparatus and equipment.[28]

Section 4.4.2 of NFPA 1720 addresses annual evaluation requirements as follows:

> The fire department shall evaluate its level of service, deployment delivery, and response time objectives on an annual basis.

[25] A jurisdiction can have more than one demand zone.

[26] Minimum staffing includes members responding from the AHJ's department and automatic aid.

[27] Response time begins upon completion of the dispatch notification and ends at the time interval shown in the table.

[28] NFPA 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments*.

> The evaluation shall be based on data relating to level of service, deployment, and the achievement of each response time objective in each demand zone within the jurisdiction of the fire department.[29]

Findings

As of this MFP, the Department does not measure its performance levels or response times against any benchmarks.

According to the 2021 Statistics Canada census, South-West Oxford has a population density of 20.5 people per square kilometre (or 53.1 people per square mile). Based on the community's current population density, South-West Oxford should consider following the guidelines that NFPA 1720 provides for a rural area demand zone. Doing so can help assess the effectiveness of the fire services provided for structure fires that occur in the township.

11.2.2 Crew Size and Direct Response to Incidents

Context

In some communities, the local firefighters respond to their fire station when an emergency call is received. Other communities permit their firefighters to proceed directly to an emergency scene in their personal vehicles. It is the responsibility of a fire department's leadership team to determine which kind of response is acceptable.

Permitting a direct response has some advantages, such as:

- Volunteers may be able to reach areas that are not located near a fire station before an apparatus can arrive.
- Volunteers may be able to provide medical care (if medical equipment is available).

However, permitting a direct response also has many disadvantages, such as:

- It may be difficult for an Incident Commander to form crews of an appropriate size and maintain a reasonable span of control.
  - NFPA 1561 recommends that crews operate in organized teams under direct supervision to ensure coordinated and safe operations.
  - Firefighter Guidance Note #2-1, "Incident command," stresses the importance of proper incident command and crew management to reduce risks and improve operational effectiveness.

[29] Ibid.

- The unstructured arrival of firefighters at different times can lead to confusion, delays in assigning tasks, and challenges in tracking personnel. Each of these issues can compromise accountability and firefighter safety.
- As firefighters arrive, their personal vehicles may create traffic hazards or unsafe conditions at the emergency scene.
- If an accident occurs while a firefighter is en route to an incident, the firefighter, the fire department, or the municipality may be held liable.
- Firefighters who arrive at an incident before an apparatus may not have access to full protective gear, such as SCBA, firefighting tools, and medical PPE. A lack of appropriate equipment may limit a firefighter's ability to mitigate an incident.
- Firefighters who arrive at an incident before an apparatus may choose to take high-risk actions without proper equipment or supervision. These actions may create challenges for other responding personnel if the firefighters require assistance.
- Firefighters may not have all the pertinent information about the incident (such as the presence of a violent person or hazardous materials).
- Firefighters who arrive at an emergency scene located on a roadway may be struck by a vehicle if a proper "blocker truck" has not yet arrived.
- It is more difficult to record accurate arrival times for individuals than for fire crews.

Response procedures are often based on factors such as departmental policies, geography, call type, and available resources. In order to ensure safety and consistency, leadership personnel must also consider issues related to liability, insurance, and provincial regulations.

Many fire departments require their personnel to report to the fire station to ensure there is proper accountability, gear access, and organized response in department vehicles. Alternatively, in some rural or spread-out areas, a department's leadership team may authorize select personnel to respond directly to the scene of an emergency in their personal vehicles in order to reduce response times, but all personnel operating under this mandate must be trained and equipped appropriately.

Regardless of its approach, a fire department should develop SOGs that outline when direct responses are appropriate, what equipment must be transported, and how scene safety and accountability are to be maintained.

When determining response procedures, a fire department should consider its ability to provide a crew of an appropriate size. The National Institute of Standards and Technology ("**NIST**") has conducted more than 60 controlled fire response experiments to determine whether the size of a fire crew impacts its ability to protect lives and property during responses to residential fires.

The NIST summarized the findings of its fire response experiments as follows:

> […] four-person firefighting crews were able to complete 22 essential firefighting and rescue tasks in a typical residential structure 30 percent faster than two-person crews and 25 percent faster than three-person crews.
>
> Researchers also performed simulations using NIST's Fire Dynamic Simulator to examine how the interior conditions change for trapped occupants and the firefighters if the fire develops more slowly or more rapidly than observed in the actual experiments. The fire modeling simulations demonstrated that two-person, late-arriving crews can face a fire that is twice the intensity of the fire faced by five-person, early arriving crews. Additionally, the modeling demonstrated that trapped occupants receive less exposure to toxic combustion products—such as carbon monoxide and carbon dioxide—if the firefighters arrive earlier and involve three or more persons per crew.[30]

Another NIST study evaluated the effectiveness of fire crew sizes during responses to high-rise fires. The NIST summarized the study's findings as follows:

> The NIST study, conducted with 13 Washington, D.C.-area fire departments, analyzed 14 "critical tasks"—those undertaken when potential risks to building occupants and firefighters are greatest—[and] found that three-member crews took almost 12 minutes longer than crews of four, 21 minutes longer than crews of five, and 23 minutes longer than crews of six to complete all tasks. Four-person crews took nine minutes and 11 minutes longer than five- and six-member crews, respectively.[31]

Due to the inherently dangerous and unpredictable nature of emergency scenes, firefighters should operate under direct supervision at all times. Direct supervision helps ensure that safety protocols are followed, risks are properly assessed, and tasks are carried out efficiently and effectively.

Fire departments must also provide direct supervision in order to meet legislative requirements:

- Section 25.2 (a) of the OHSA states that employers must "provide information, instruction and supervision to a worker to protect the health or safety of the worker."
- Section 25.2 (h) of the OHSA states that employers must "take every precaution reasonable in the circumstances for the protection of a worker."

[30] National Institute of Standards and Technology, "Landmark Residential Fire Study Shows How Crew Sizes and Arrival Times Influence Saving Lives and Property."

[31] National Institute of Standards and Technology, "Landmark High-Rise Fire Study Evaluates Effectiveness of Crew Sizes, Elevator Use."

When a firefighter responds to an incident site in their personally owned vehicle, it does not affect the recorded arrival time of the fire department. According to the NFPA, arrival time is measured only when a fire department's first dispatched unit reaches the incident site and is able to begin mitigating the emergency. A firefighter who arrives at the site in a personally owned vehicle represents an individual responder, not an equipped or staffed fire apparatus that can initiate response operations. As such, the arrival of a firefighter in a personally owned vehicle cannot be used to designate either the end of a fire department's travel time or the start of emergency mitigation (as per the NFPA's response time sequence).

Findings

As of this MFP, the Department's volunteer personnel respond to their assigned fire station before proceeding to an emergency scene.

11.2.3 Standardized Response

Context

It is beneficial for neighbouring fire departments to standardize their equipment, incident command systems, and operational procedures. Standardization helps to ensure seamless coordination during mutual aid responses. For instance, interoperability can reduce confusion during high-stress situations, as personnel from different fire departments can work together efficiently with shared tools, terminology, and tactics.

Neighbouring fire departments should also consider engaging in joint training sessions. Joint training builds familiarity among crews, improves communication, and reinforces the consistent application of safety protocols.

It is worth noting that the OFM encourages mutual aid partnerships and coordinated emergency management practices that are designed to improve service delivery and responder safety across jurisdictions. This collaborative approach strengthens regional preparedness and ensures a more unified and effective response to complex incidents.

Findings

As of this MFP, the Department has standardized response protocols for reported structure fires. When a structure fire occurs, two fire stations automatically dispatch tankers, pumpers, and crews. The responding crews are supported by mutual aid partners if the available water supply is limited.

All other incidents (such as medical assists, motor vehicle collisions, and alarm activations) are handled as a single-station response. However, the response can be upgraded at any time based on the nature or escalation of the incident. This scalability allows additional fire stations or mutual aid partners to be dispatched as needed.

11.2.4 Critical Tasks

Context

A fire department can determine its optimal effective response force by completing a critical tasks analysis for each type of emergency response that it is required to provide.

Completing a critical tasks analysis allows a fire department to standardize its emergency response protocols and ensure it dispatches the appropriate number of personnel for each type of incident.

A critical tasks analysis can be completed by using the following process:

1. Examine the type of risks that exist at an emergency scene.
2. Identify the tasks needed to eliminate the risks that exist at an emergency scene.
3. Determine the number of personnel needed to carry out the tasks that will mitigate and eliminate the risks that exist at an emergency scene.

When it comes to performing critical tasks, fire departments can either assign the tasks to multiple personnel or carry out the tasks sequentially.

Often, fire departments use an assignment chart (based on information received at the time of an emergency call) to assign critical tasks on the fireground during an emergency response. If an incident safety officer is available, they can assess the overall safety of the incident and provide critical information to the Incident Commander.

Fire departments must also consider the location of the emergency, as the location will impact the assignment and performance of critical tasks. For example, when a fire occurs in an area that does not have municipal fire hydrants, it is critical for the responding fire department to have enough firefighters on the scene to ensure there is an adequate level of support and water supply to perform suppression duties.

Various fire service authorities have developed general guidelines about resource deployment. Table 16 presents a critical tasks analysis for a fire in a single-family home (based on best practices and findings from the NIST, NFPA, and OFM). In addition to the number of personnel noted in the table below, fire departments should also consider assigning an individual to serve as an ISO.[32]

[32] For more information about the concept of an ISO, see section 8.8.2 of this MFP.

Table 17. Minimum firefighters required for critical tasks at single-family home fires.

Personnel	Critical Tasks	Firefighters Required
Crew #1	• Perform search and rescue duties. • Conduct fire control/extinguishment duties on the fire floor. • Serve as the pump operator.	4
Crew #2	• Provide backup support for crew #1. • Perform search and rescue duties. • Locate the fire extension beyond the immediate fire area.	4
Crew #3	• Assume the role/duties of a rapid intervention team. • Conduct firefighting operations after another crew has exited the structure and is ready to take over the rapid intervention team duties.	4
Chief Officer	• Serve as Incident Commander.	1
Accountability/ Scribe	• Help the Incident Commander organize tasks on the fireground.	1
Total		**14**

Findings

As discussed in section 11.2.1 of this MFP, South-West Oxford is classified as a rural demand zone due to its low population density, as per the guidelines of NFPA 1720.

According to this standard, the Department should respond with at least six firefighters within 14 minutes of receiving an emergency notification, and it should meet this benchmark for 80 per cent of its incident responses. The purpose of this benchmark is to ensure adequate coverage and timely intervention in rural communities where volunteer staffing levels and longer travel distances may impact emergency responses.

During the MFP development process, the Department's performance from 2015 to 2025 was measured against the guidelines of NFPA 1720. The key takeaways from this comparison are as follows:

- Between 2015 and 2025, the Department maintained an average of eight initial responding personnel, which exceeds the minimum staffing level recommended by NFPA 1720.

- The Department's average response time was 17 minutes and 58 seconds, approximately four minutes longer than the maximum response time recommended by NFPA 1720.

The takeaways listed above suggest that the Department has adequate personnel availability levels, but its response efficiency is below standard. Issues with response efficiency may be caused by a variety of factors, such as travel distance, dispatch delays, or mobilization challenges. In order to address these issues, the Department may need to consider relocating one of its fire stations, improving dispatch coordination, or enhancing coverage through shared services agreements.

11.2.5 Response Statistics

Context

Reviewing historical performance levels (especially as they relate to distribution and concentration) can help a fire department identify its service delivery capabilities. Modelling and statistical analyses can also be conducted to determine whether resources are being used efficiently and effectively.

All fire departments should also retain accurate records of their historical response times. The information is essential to have when measuring performance levels, making strategic decisions, and determining service alternatives.

Table 17 defines the four steps that are involved in dispatching a response to an emergency call.

Table 18. Summary of response time intervals.

Step	Description	Actions
1	Public safety answer point call processing time	• Step 1 begins when the public safety answer point or 911 call centre receives an emergency call and transfers the call to the fire department. • This step ends when the fire department's dispatch centre answers the transferred call.
2	Secondary public safety answer point alarm processing time	• Step 2 begins when the fire department's dispatch centre receives an alarm (referred to as the "incident beginning"). • This step ends when the communication technician/dispatcher activates the paging devices at the fire station (referred to as "dispatch time").

Step	Description	Actions
3	Chute time	• Step 3 begins when the fire station activates its pagers (and the responding apparatus begins its response). • This step ends when the apparatus's response is noted by (or to) the dispatcher via the fire department's radio system (referred to as "en route time").
4	Travel time (first unit)	• Step 4 begins when the responding apparatus initially acknowledges its response. • This step ends when the responding apparatus uses its radio to notify the dispatcher that it has arrived at the emergency scene (referred to as "on-scene time").

By timing how long it takes to complete each of the four steps defined above, a fire department can determine the average response time of its first due unit (which is the first vehicle to arrive at the emergency scene). However, in order for historical data to be useful, fire departments must ensure they track their response times consistently across all types of responses, including automatic aid and mutual aid responses.

Findings

The following tables summarize some of the Department's response statistics for the years 2020 to 2024. When reviewing these statistics, it is important to note that the average response time does not mean there were enough firefighters at the scene to perform any of the critical tasks. Often, the first response time was recorded by the firefighter who was the first responder at the incident site, having arrived at the scene in their personal vehicle.

Station 1 – Brownsville

Table 18 lists the response times for Station 1 – Brownsville for 2020 to 2024 (for fire emergency calls only).

Table 19. Average response times for Station 1 – Brownsville (2020 to 2024).

Category	2020	2021	2022	2023	2024	Avg.
Average chute time	08:10	06:42	06:33	07:12	07:45	07:17
Average travel time	04:21	04:57	04:57	06:36	06:36	05:49
Average Response Time	**12:31**	**11:39**	**11:30**	**13:48**	**14:40**	**14:21**

Station 1 – Brownsville also recorded the following statistics about the number of its on-scene personnel from 2020 to 2024:

- In 2020, there was an average of 13.0 on-scene personnel.
- In 2021, there was an average of 8.7 on-scene personnel.
- In 2022, there was an average of 1.8 on-scene personnel.
- In 2023, there was an average of 6.7 on-scene personnel.
- In 2024, there was an average of 9.1 on-scene personnel.

Based on the numbers above, approximately 7.1 personnel from Station 1 were at the average emergency scene from 2020 to 2024.

Station 2 – Mount Elgin

Table 19 lists the response times for Station 2 – Mount Elgin for 2020 to 2024 (for fire emergency calls only).

Table 20. Average response times for Station 2 – Mount Elgin (2020 to 2024).

Category	2020	2021	2022	2023	2024	Avg.
Average chute time	05:27	07:42	07:17	07:26	06:59	06:58
Average travel time	06:27	08:03	03:30	04:19	04:50	05:26
Average Response Time	**11:54**	**15:45**	**10:47**	**11:45**	**11:49**	**12:24**

Station 2 – Mount Elgin also recorded the following statistics about the number of its on-scene personnel from 2020 to 2024:

- In 2020, there was an average of 14.0 on-scene personnel.
- In 2021, there was an average of 7.8 on-scene personnel.
- In 2022, there was an average of 2.3 on-scene personnel.
- In 2023, there was an average of 4.3 on-scene personnel.
- In 2024, there was an average of 6.9 on-scene personnel.

Based on the numbers above, approximately 7.6 personnel from Station 2 were at the average emergency scene from 2020 to 2024.

Station 3 – Beachville

Table 20 lists the response times for Station 3 – Beachville for 2020 to 2024 (for fire emergency calls only).

Table 21. Average response times Station 3 – Beachville (2020 to 2024).

Category	2020	2021	2022	2023	2024	Avg.
Average chute time	07:09	06:09	08:06	06:06	05:53	06:41
Average travel time	06:22	06:13	07:50	06:22	05:43	06:30
Average Response Time	**13:31**	**12:22**	**15:56**	**12:28**	**11:36**	**13:11**

Station 3 – Beachville also recorded the following statistics about the number of its on-scene personnel from 2020 to 2024:

- In 2020, there was an average of 12.9 on-scene personnel.
- In 2021, there was an average of 9.3 on-scene personnel.
- In 2022, there was an average of 2.5 on-scene personnel.
- In 2023, there was an average of 4.8 on-scene personnel.
- In 2024, there was an average of 4.3 on-scene personnel.

Based on the numbers above, approximately 6.4 personnel from Station 3 were at the average emergency scene from 2020 to 2024.

Table 21 lists the number of times per year (from 2020 to 2024) that the Department assisted other agencies with emergency responses, including automatic aid responses and mutual aid responses.

Table 22. Automatic aid and mutual aid responses, 2020 to 2024.

Type of Aid	2020	2021	2022	2023	2024	Avg.
Assistance to other agencies	0	1	1	1	1	0.8
Assistance to police	2	0	0	1	0	0.6
Automatic aid	2	0	1	0	0	0.6
Mutual aid	9	10	9	9	4	8.2
Total	**13**	**11**	**11**	**11**	**5**	**10.2**

Table 22 lists the types and number of fire responses made by the Department from 2020 to 2024.

Table 23. Fire responses, 2020 to 2024.

Type of Response	2020	2021	2022	2023	2024	Avg.
Loss fires: structures	7	8	12	8	8	8.6
Loss fires: other	1	3	2	0	1	1.4
Loss fires: vehicles	7	17	11	10	20	13
Total	**15**	**28**	**25**	**18**	**29**	**23**

Table 23 lists the amount of dollar loss that occurred in South-West Oxford from 2020 to 2024 due to dollar loss fires. The information is organized by occupancy group.

Table 24. Dollar loss by occupancy type, 2020 to 2024.

Occupancy Type	2020	2021	2022	2023	2024
Group A	$0	$0	$0	$2,300	$0
Group C	$320,000	$163,500	$302,000	$700	$626,000
Group D & E	$0	$0	$1,500	$4,000	$0
Group F	$0	$5,000	$7,500	$0	$200
Other	$10,214,000	$1,335,000	$2,935,000	$2,133,000	$1,000
Outdoor	$1,000	$110,400	$15,500	$0	$40,000
Vehicle	$336,000	$184,600	$513,200	$136,950	$1,469,000
Yearly Loss	**$10,871,000**	**$1,798,500**	**$3,774,700**	**$2,276,950**	**$2,136,200**

11.2.6 GIS Mapping

Context

After determining its historical response times, a fire department can use Geographic Information System ("**GIS**") maps to determine the distance that it can reach with its fire apparatus within a given amount of time.

Because GIS mapping is based on municipal road speeds and road networks, this technique provides more accurate information than previous mapping techniques. Using GIS maps can help a fire department understand how the location of its fire stations and associated travel routes can affect its response times. This information can help a fire department determine the response boundaries of its effective response force.

Findings

Several GIS maps were created for South-West Oxford during the MFP development process.

The GIS maps were designed to illustrate the ways in which automatic aid agreements with neighbouring fire departments would significantly enhance the effectiveness and efficiency of fire protection services across South-West Oxford. The study used geographic data and response modelling to highlight areas where coverage gaps could be addressed through strategic partnerships that have the potential to improve response times and resource availability during emergencies.

The GIS study also referenced the guidelines that NFPA 1720 provides for a “rural demand zone” (which is the identified demand zone for South-West Oxford). As such, the GIS maps assume the Department will aim to dispatch six firefighters to arrive at the scene of an emergency within 14 minutes.

Figure 2 illustrates the current response area that the Department’s three fire stations can cover in 14 minutes (inclusive of the average chute times for each individual station). It is important to note that the presence of gap areas in the northwest, northeast, and southeast portions of South-West Oxford.

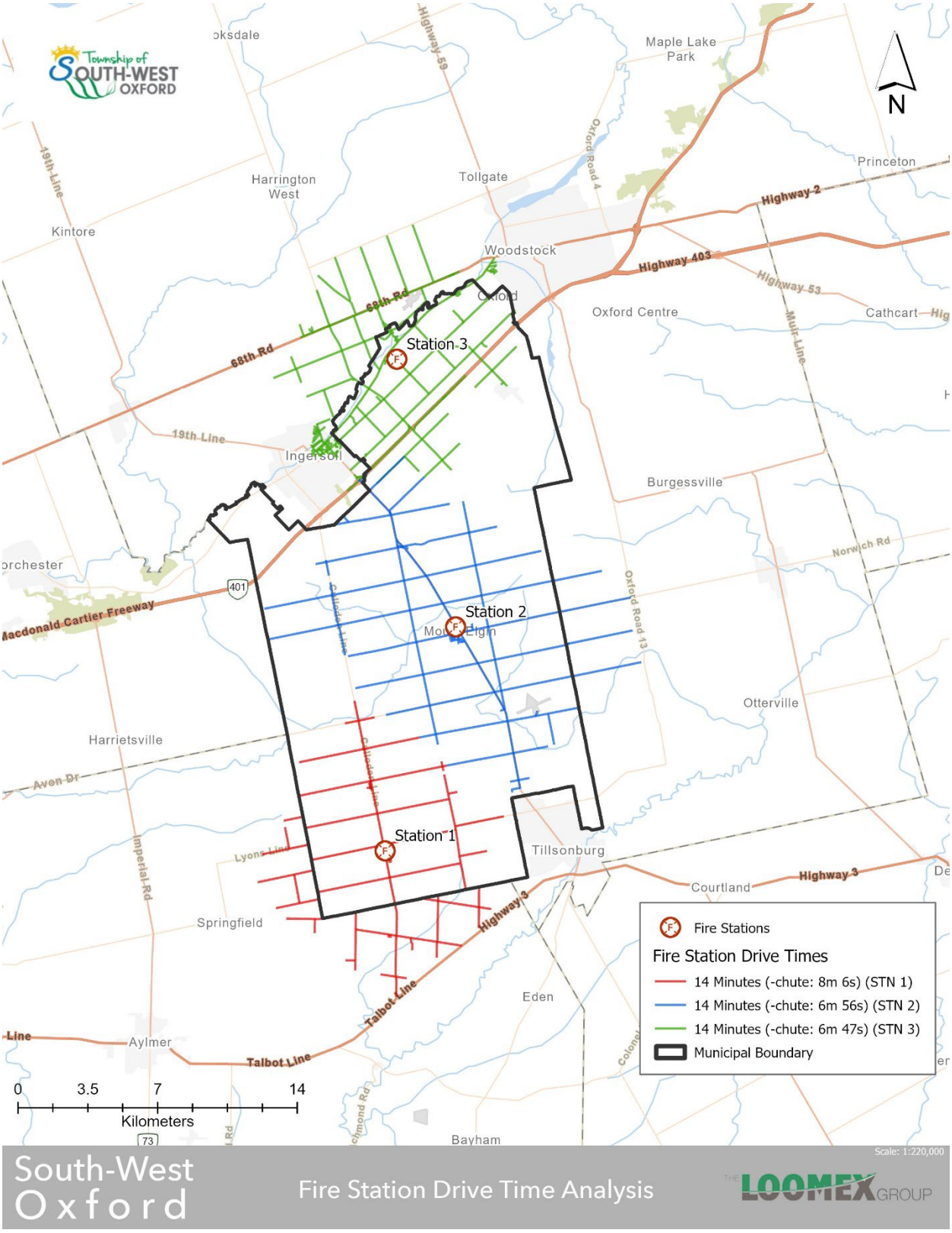

Figure 1. Current response area in South-West Oxford.

Figure 3 illustrates the area that can be covered during an initial response that includes an automatic aid agreement with the Town of Woodstock. The map shows that having this kind of agreement reduces the size of the gap area in the northeast portions of South-West Oxford.

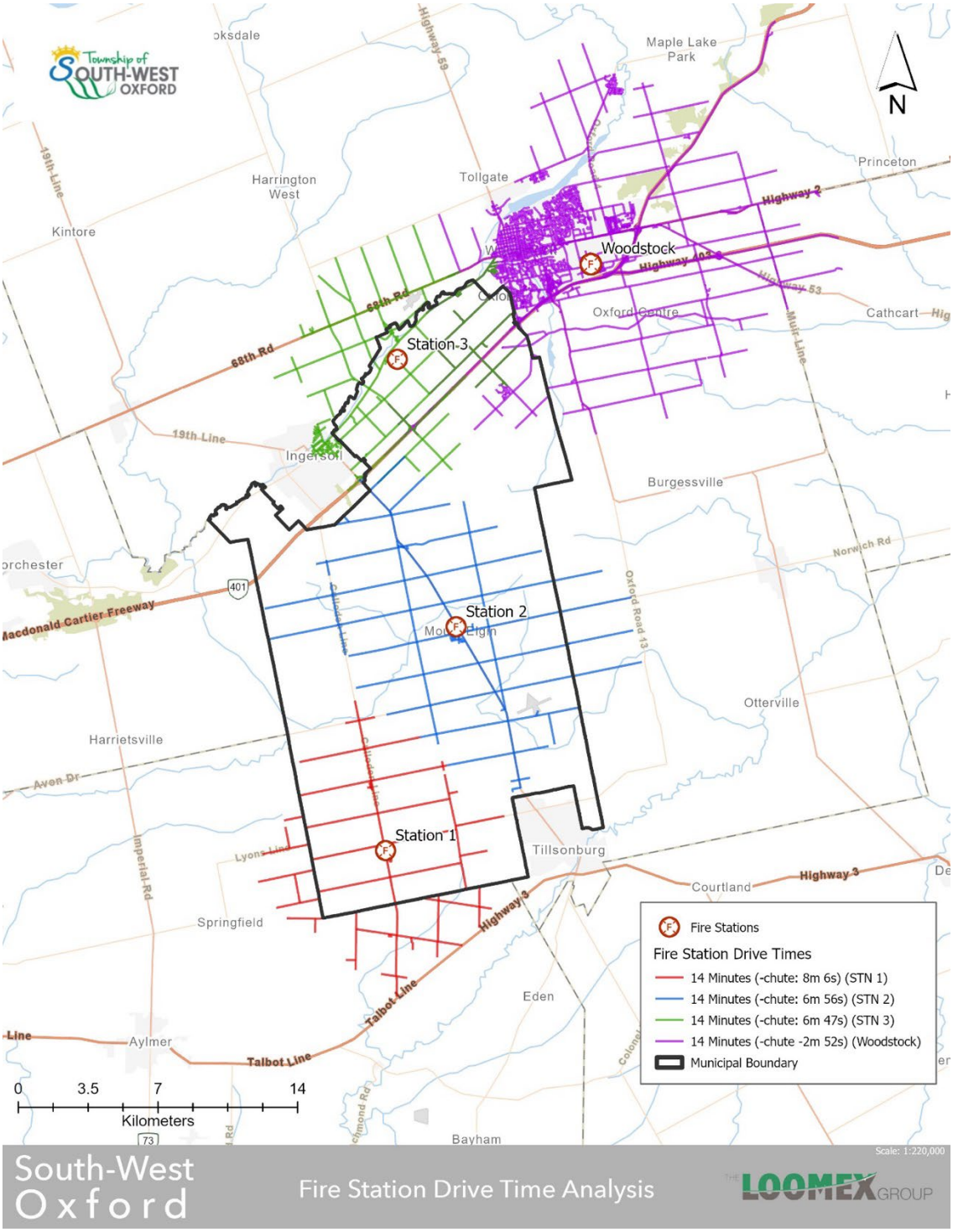

Figure 2. Response area with automatic aid provided by Woodstock.

Figure 4 illustrates the area that can be covered during an initial response that includes an automatic aid agreement with the Town of Ingersoll. The map shows that having this kind of agreement reduces the size of the gap areas in the northwest and northeast portions of South-West Oxford.

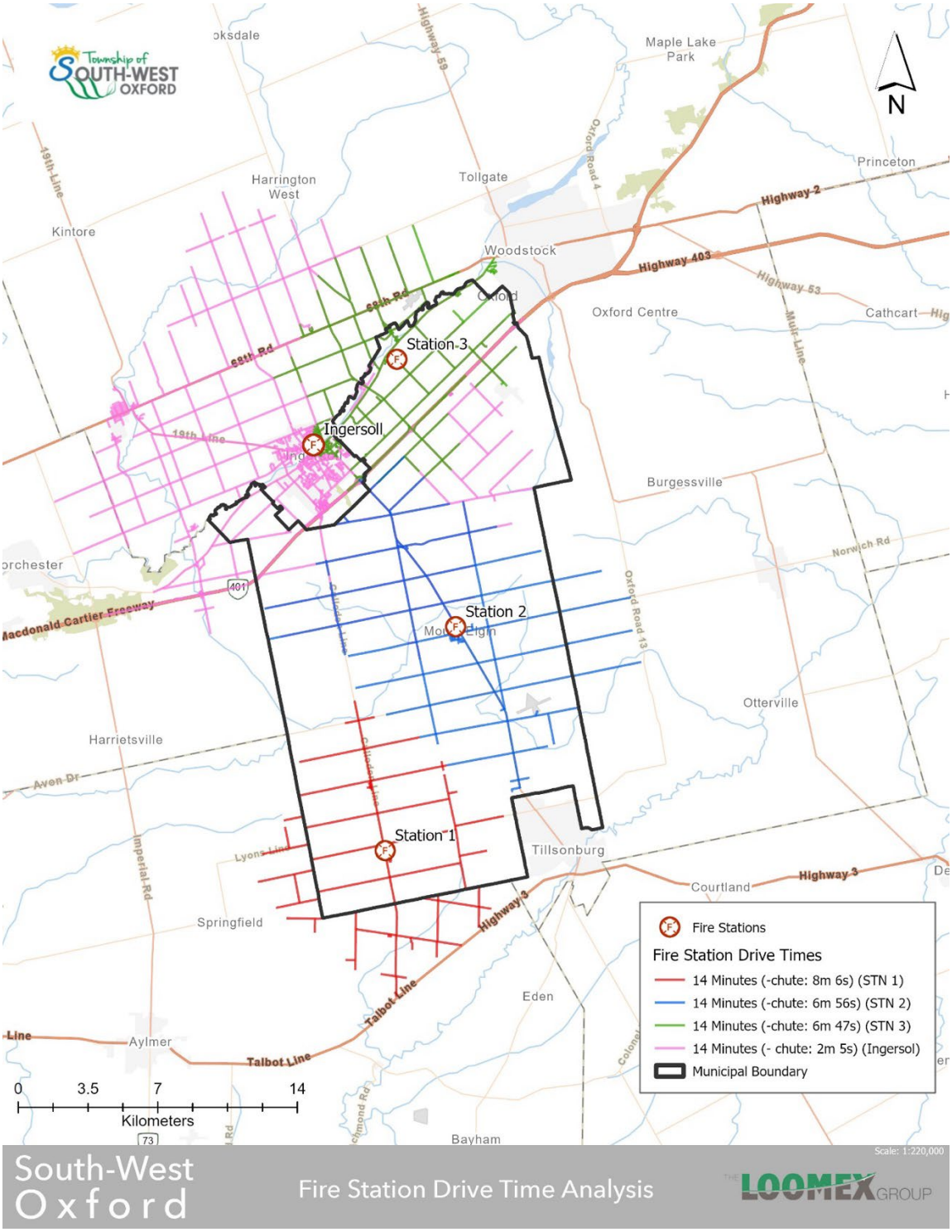

Figure 3. Response area with automatic aid provided by Ingersoll.

Figure 5 illustrates the area that can be covered during an initial response that includes an automatic aid agreement with the Town of Tillsonburg. The map shows that having this kind of agreement reduces the size of the gap area in the southeast portions of South-West Oxford.

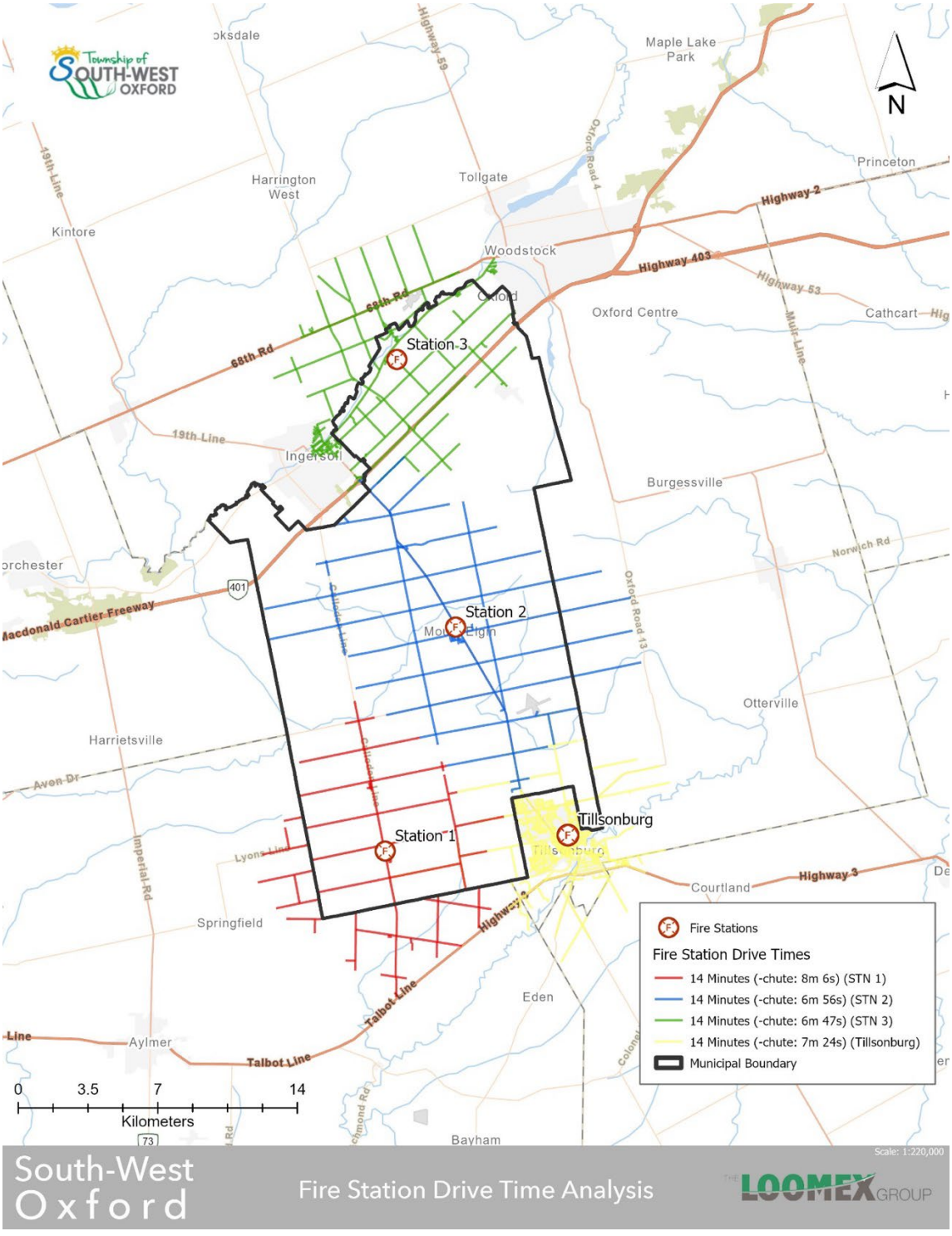

Figure 4. Response area with automatic aid provided by Tillsonburg.

Figure 6 illustrates the total response coverage area within 14 minutes that is possible when all three fire stations in South-West Oxford respond to an emergency with automatic aid provided by the fire stations in the towns of Ingersoll, Woodstock, and Tillsonburg.

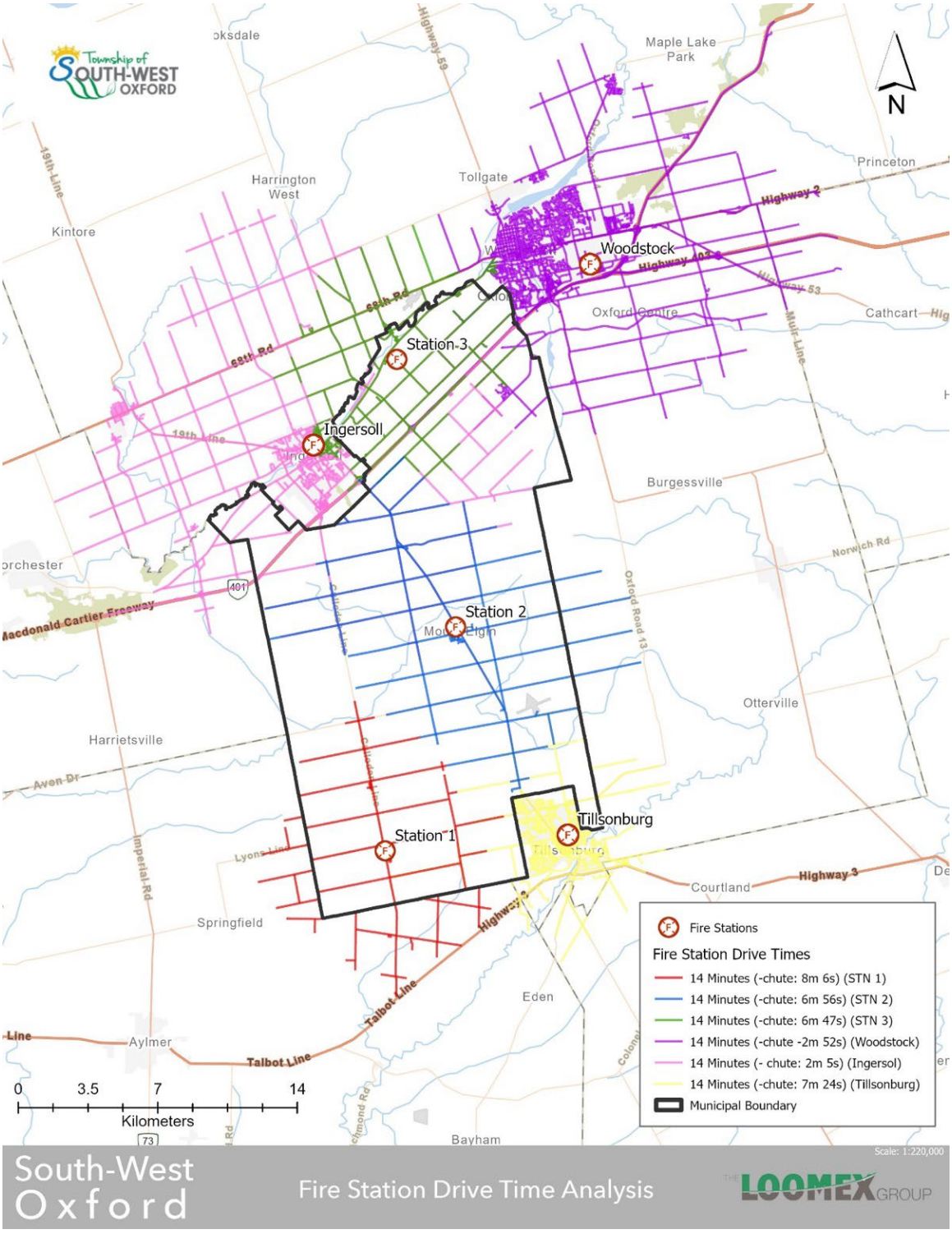

Figure 5. Combined coverage area within 14 minutes (with automatic aid support).

11.3 Roadmap for Improvement

Direct Response to Emergency Scenes

The Department may consider allowing applicable firefighters to carry their protective gear with them in their personal vehicles. Doing so would allow the firefighters to respond directly to emergency scenes, which may improve the Department's ability to provide an effective response force with enough personnel to carry out the required critical tasks.

Although this initiative may enhance the Department's response capabilities, there are important safety, compliance, and insurance implications to consider. For instance, the Department must ensure that its personnel do not transport soiled/contaminated PPE in their personal vehicles. Doing so poses health risks, and it can degrade the gear's performance (according to the Firefighter Guidance Notes and NFPA 1851). Only clean gear, stored in protective cases or bags, may be transported in personal vehicles, and even then, the Department should establish strict protocols to prevent contamination and damage.

In addition, from an insurance standpoint, personal auto insurance policies generally do not cover work-related use of vehicles, and firefighters may not be protected if an accident occurs while responding to a call in their own vehicle.

It also must be noted that, when a firefighter responds to an emergency scene in a personally owned vehicle, it does not affect the recorded arrival time of the Department. As per the NFPA, "arrival time" is measured only when a fire department's first dispatched unit reaches the incident scene and is able to begin mitigating the emergency (or at the start of mitigation efforts in the NFPA's response time sequence).

Response Statistics and Effective Response Force

According to NFPA 1720, South-West Oxford meets the definition of a rural demand zone. Currently, the Department is able to provide a response that meets the guidelines for a rural demand zone approximately 80 per cent of the time. This metric can be used to establish the baseline response for South-West Oxford. In order to maintain the baseline or enhance the level of service, the Department should continually analyze its response data to identify issues that are causing delayed responses or low numbers for critical tasks.

Maintaining and improving the Department's baseline requires a structured approach to continuous improvement. The Department should regularly analyze data related to its responses/response areas on a station-by-station basis in order to identify trends, gaps, and risk factors contributing to delayed response times or insufficient staffing for critical tasks. These actions will enable all of the Department's fire stations to meet or exceed the NFPA 1720 standard for a rural demand zone in all of the Department's response areas.

In addition to the initiatives described above, the Department should review the CRA for South-West Oxford to identify areas where population density is likely to expand. Understanding the current population centres (such as Brownsville, Mount Elgin, Sweaburg, and Beachville) and the projected growth areas can help the Department proactively ensure that the baseline effective response force is being met.

The Department should also review its staffing levels and ability to ensure an effective response force for critical task numbers. For example, the availability of the Department's personnel was greatly impacted during and immediately after the COVID-19 pandemic. As a result of these impacts, the Department's response patterns were affected during that period.

Notably, in 2020, the Department's fire stations had an average of 13.3 personnel responding per incident. Conversely, in 2024, the stations had an average of 6.8 personnel responding per incident. Due to the variables that can affect staffing levels, the Fire Chief should conduct an annual review of the Department's effective response force, critical task numbers, deployment statistics, and response time objectives. Doing so will help ensure those aspects of the Department's response operations remain current with applicable needs and services.

The Department can strengthen its effective response force by using the minimum number of firefighters required to complete the critical tasks at single-family home fires as a baseline. This metric can serve as the foundation for response planning and performance measurement. However, it is important to note that these staffing numbers are not intended to represent the number of firefighters available at the initial arrival. Rather, those numbers represent the cumulative number of personnel needed to perform essential fireground functions safely as staff members arrive at the scene and operations expand.

Infrastructure Enhancement

As the communities in South-West Oxford grow, it will become increasingly important to assess the condition and accessibility of the local roads, especially roads that are used as primary emergency response routes. Those assessments should include evaluations of road width, surface quality, and seasonal reliability.

For safety purposes, the local roads must be capable of supporting the size and weight of emergency vehicles, especially in rural or newly developed areas. During stakeholder engagement sessions, certain emergency response access routes were identified as priorities for infrastructure upgrades to support emergency operations. In addition, bridge load limits and culvert conditions along those access routes should be reviewed to ensure they are capable of safely accommodating emergency vehicles and do not impede response times or operational effectiveness.

Collaboration with other municipal partners is also essential. By working with the Planning Department and the Public Works Department, the Department may be able to ensure that emergency access needs are considered during development approval and road maintenance scheduling processes.

GIS Maps, Automatic Aid Agreements, and Municipal Collaboration

The Department can use the results of a GIS mapping study to inform the way it plans, responds to emergencies, and engages with the community. By charting out key information on a map (such as response times, high-risk zones, the location of vulnerable populations, and the location of water sources), the Department can identify potential service gaps and prioritize resource allocation.

Mapping current response routes and travel times can also help identify bottlenecks or areas with limited access. This data can be used to recommend road upgrades, alternative routes, or new access points to improve response efficiency. Going forward, the Department should continue to use GIS maps (based on the local road speeds, road network, and firefighter chute times) to identify gaps and overlaps in its response times and areas.

The information revealed by GIS maps may also indicate opportunities to collaborate with neighbouring fire departments. For example, the GIS maps that were created for this MFP identified various gap areas in South-West Oxford. These are areas where the Department's current fire stations cannot meet the guidelines that NFPA 1720 has outlined for a rural demand zone.

In order to meet the NFPA 1720 standard and ensure the safety of the public and the firefighters, the Department should attempt to establish automatic aid agreements with the towns of Woodstock, Ingersoll, and Tillsonburg. Doing so can help improve response times and public and firefighter safety by ensuring the closest available fire service resources are dispatched automatically to emergencies. The agreements will also help ensure there is response coverage in the parts of South-West Oxford where significant population growth is expected.

11.4 Recommendations

Recommendations regarding responses in South-West Oxford are as follows:

11-1. The Fire Chief should formalize a policy that restricts the storage of firefighter gear in personnel vehicles to clean, properly contained PPE. The policy should also require local firefighters to consult their insurance providers to verify potential changes in coverage conditions. In order to ensure safety and compliance with NFPA standards, all gear should be stored and transported using fire department vehicles wherever possible.

11-2. The Fire Chief should review the effective response force for South-West Oxford Fire and Emergency Services on an annual basis. The review should also examine the fire department's deployment statistics and response time objectives. If any of those areas require updates to remain current, the Fire Chief should submit recommendations to Council for consideration and approval.

11-3. South-West Oxford Fire and Emergency Services should begin developing automatic aid agreements with the fire departments in Woodstock, Ingersoll, and Tillsonburg. Doing so will improve response times, public safety, and firefighter safety by ensuring the closest available resources are dispatched automatically to emergency scenes.

11-4. South-West Oxford Fire and Emergency Services should work closely with the municipal planning and public works departments to identify and enhance emergency access response routes from existing fire stations due to the potential for community growth, future development, and increased call demand.

12.0 Fire Department Structure

12.1 Overview

As a best practice, the design of an organizational structure should be based on several factors, such as leadership, resource allocation, staffing levels, community needs, risk profile, and call volume.

The items listed above can directly affect a fire department's efficiency and safety during emergency responses, as well as the public's level of trust in the fire department's capabilities.

According to the NFPA, organizational effectiveness is closely linked to emergency response outcomes, with well-managed fire departments showing better incident control and lower injury rates.[33] A strong organizational foundation can also enhance a fire department's ability to conduct fire prevention, public education, and community engagement initiatives.

12.2 Organizational Structure and Staffing Levels

12.2.1 Staffing

Context

A fire department must ensure that it has the appropriate staffing levels and positions to accomplish the following objectives:

- Meet community needs.
- Minimize response times.
- Dispatch enough personnel to perform critical tasks simultaneously.
- Enhance the safety of firefighters and members of the public.
- Increase operational efficiency.
- Comply with provincial standards.

Findings

Figure 7 shows the Department's current organizational chart. The chart is excerpted directly from Appendix "E" of Bylaw No. 77-2021 (as amended in 2024).

[33]National Fire Protection Association, *NFPA 1201: Standard for Providing Fire and Emergency Services to the Public*.

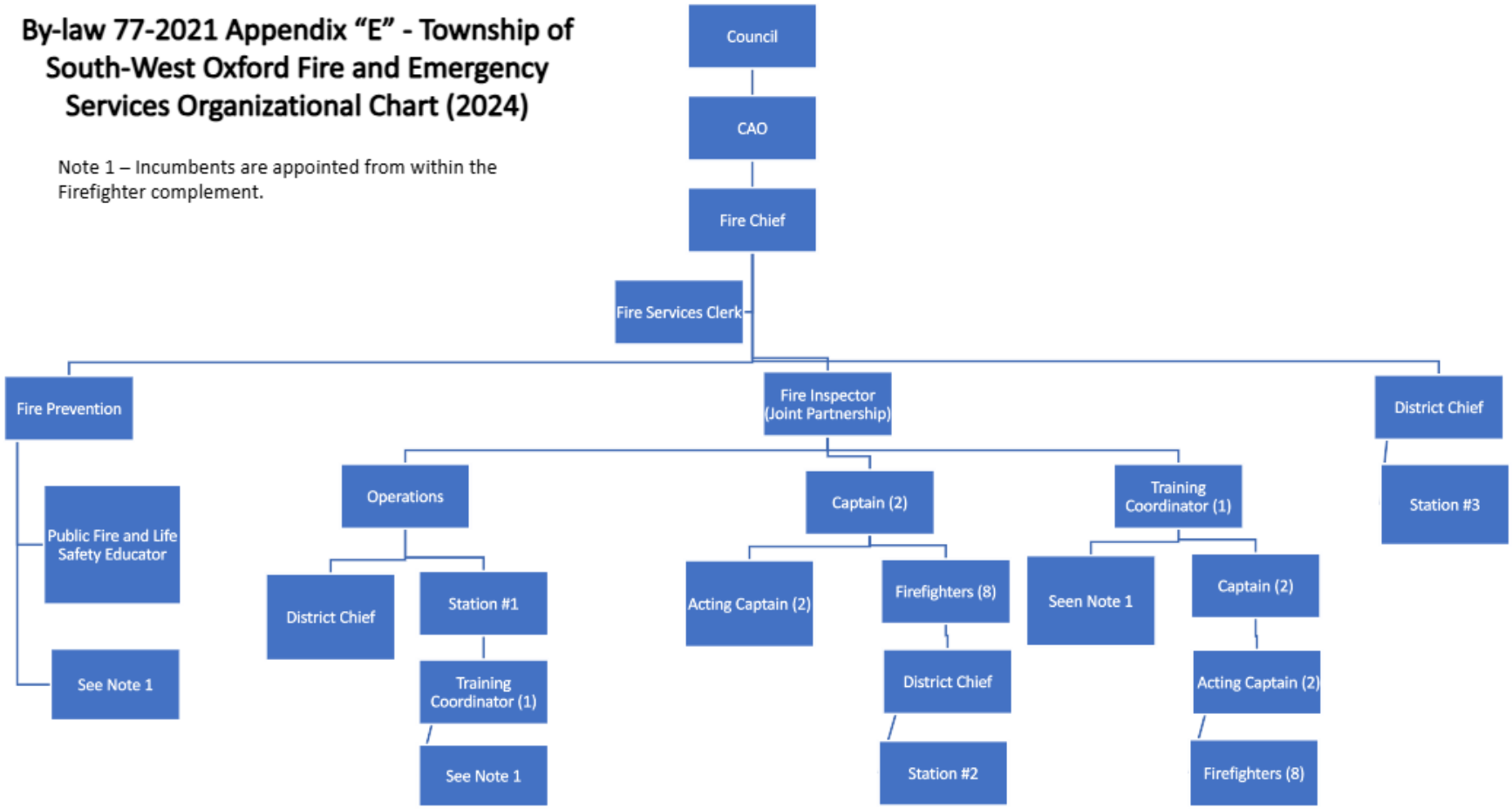

Figure 6. Organizational chart for South-West Oxford Fire and Emergency Services.

The Department operates under a clear, well-defined organizational structure that supports administrative needs and operational effectiveness. For example, fire prevention duties are handled by a fire inspector (through a partnership), which demonstrates a proactive approach to community safety and compliance.

The Department's operations are led by the three district chiefs. Each district chief oversees the personnel at one of the Department's fire stations.

When fully staffed, each station should have the following 21 personnel:

- 1 district chief
- 2 captains
- 2 acting captains
- 1 training coordinator
- 15 firefighters

Two-hour training sessions are scheduled every Thursday evening. One session per month is dedicated to maintenance training in order to ensure equipment readiness and operational safety.

12.2.2 Succession Planning

Context

It is essential for volunteer fire departments to conduct succession planning in order to maintain leadership continuity, operational readiness, and long-term sustainability.

Succession planning involves identifying and developing personnel who have the potential to fill leadership roles when current leaders retire or step down. Fire departments may choose to develop their personnel through mentorship programs, structured training, and acting officer opportunities. It is also useful for a fire department to establish and communicate promotional policies so that its members can understand the ways they can advance in their careers.

The OFM emphasizes the importance of succession planning in the fire service, especially for volunteer departments, where turnover can be more frequent, and leadership development opportunities may be limited.

Findings

The Department has developed a "career path" document that summarizes the classification and certification requirements for each position in the organization. This document is recent as of 2025.

The purpose of the career path document is to illustrate the Department's intended succession plan. For example, the document outlines how the Department's personnel can progress from an entry-level position (such as an auxiliary firefighter) by obtaining various qualifications, such as:

- NFPA standards
- Ontario College legislation courses
- specialized training (such as public education, fire investigation, and incident safety training)

The overall purpose of the career path document is to support the professional development of the Department's personnel, promoting leadership continuity while ensuring the Department maintains operational readiness.

Figure 8 illustrates the Department's career path document (as of 2025).

SOUTH-WEST OXFORD
Fire & Emergency Services
Career Path 2025
Classification Certification Requirements

CLASSIFICATION	CERTIFICATION REQUIREMENTS
Auxiliary Firefighter	Township Employment Requirements
Probationary Firefighter	NFPA 1001 Firefighter Level 1
Probationary Firefighter	NFPA 1001 Firefighter Level 2
Probationary Firefighter	NFPA 1072 Hazmat Awareness
Probationary Firefighter	NFPA 1072 Hazmat Operations
2nd Class Firefighter	All Probationary Firefighter Requirements
2nd Class Firefighter	DZ Drivers Licence
2nd Class Firefighter	NFPA 1002 Pumper Operations
1st Class Firefighter	All 2nd Class Firefighter Requirements
1st Class Firefighter	NFPA 1035 Public Life Fire Safety Educator Level 1
1st Class Firefighter	Legislation 101 – Ontario Fire College
1st Class Firefighter	NFPA 1006 Auto Extrication Level 1
Training Instructor	All 1st Class Firefighter Requirements
Training Instructor	NFPA 1041 Fire Instructor Level 1
Acting Captain	All 1st Class Firefighter Requirements
Acting Captain	NFPA 1041 Fire Instructor Level 1
Acting Captain	NFPA 1021 Fire Officer Level 1
Acting Captain	NFPA 1035 Public Life Fire Safety Educator Level 2
Acting Captain	NFPA 1521 Incident Safety Officer
Training Coordinator	All Acting Captain Requirements
Training Coordinator	NFPA 1041 Fire Instructor Level 2
Captain	All Acting Captain Requirements
Captain	NFPA 1041 Fire Instructor Level 2
Captain	NFPA 1035 Public Information Officer
Public Educator	NFPA 1035 Public Life Fire Safety Educator Level 2
Public Educator	NFPA 1035 Public Information Officer
Public Educator	NFPA 1041 Fire Instructor Level 1
Fire Inspector	All 1st Class Firefighter Requirements
Fire Inspector	Fire Code Part 2&6 – Life Safety
Fire Inspector	Fire Code Part 9 - Retrofit
Fire Inspector	Courtroom Procedures
Fire Inspector	NFPA 1031 Fire Inspector Level 1
Fire Inspector	NFPA 1033 Fire Investigator
Fire Inspector	NFPA 1035 Fire Life Safety Educator Level 2
Fire Inspector	NFPA 1035 Public Information Officer
District Chief	All Captain Requirements
District Chief	NFPA 1021 Fire Officer Level 2
District Chief	NFPA 1033 Fire Investigator

Figure 7. Career path requirements (as of 2025).

12.2.3 Job Descriptions

Context

Job descriptions should clearly define the roles, responsibilities, and expectations of each position in an organization.

In the fire service, detailed job descriptions can help a fire department accomplish the following objectives:

- Ensure that all personnel understand the duties associated with their role.
- Ensure that all personnel understand how their role fits within the department's structure, supporting both individual and team effectiveness.
- Ensure that all personnel understand their level of accountability.
- Ensure consistency between roles.
- Increase operational efficiency.
- Reduce confusion.
- Improve safety.
- Provide a foundation for recruitment, training, performance evaluation, and succession planning.
- Support compliance with legislation (such as the OFM and the OHSA).

Findings

As of this MFP, the Department's job descriptions outline a clear hierarchy of roles, each with distinct responsibilities, qualifications, and working conditions. The expectations for promotion are clearly defined.

12.2.4 Inter-Municipal Collaboration

Context

Strengthening relationships between neighbouring fire departments helps increase operational effectiveness. These kinds of relationships can also help protect the safety of firefighters and community members during large-scale or multi-jurisdictional emergencies.

As a best practice, fire departments in neighbouring municipalities should encourage open dialogue between their teams, conduct shared training, and align their response protocols. Taking these actions can greatly enhance cooperation and increase the overall resilience of the region.

Findings

As of this MFP, the Department's level of inter-municipal collaboration is limited. The collaboration primarily occurs during large-scale emergencies and joint firefighter training exercises.

12.3 Fire Department Comparisons

12.3.1 Funding Comparison

Context

A comparison of operating expenses can help identify benchmarks, evaluate cost-effectiveness, and ensure responsible fiscal management.

Municipal leaders and fire chiefs can also assess whether their current spending aligns with service levels and community risks. This information can highlight areas where efficiencies may be gained, as well as areas where investments may be needed.

Findings

During the development of this MFP, it was challenging to compare operating expenses for the Fire Chief with those of other municipal fire chiefs. The intent of the comparisons was to help determine whether current spending aligns with established service levels and community risk profiles and then highlight areas where efficiencies may be achieved or where additional investments may be warranted. However, comparisons made with comparable fire departments were difficult to interpret, as municipalities do not consistently present the budgets for their fire department in the same manner.

12.3.2 Service Delivery Model Comparison

Context

Fire departments across Canada operate under a variety of service delivery models. Each service model should be tailored to the needs, size, and resources of a community.

Table 25 summarizes three different service delivery options.

Table 25. Service delivery options for fire departments.

Service Delivery Option	Scope
Full-time fire department	Full-time fire departments are common in larger communities. In these departments, on-duty staff are positioned at the fire station, and they respond to emergency calls as needed.

Service Delivery Option	Scope
Volunteer fire department	Volunteer fire departments are common in smaller communities (such as rural communities). These departments rely on trained on-call firefighters who respond to emergencies as required. Often, the on-call personnel are community members with other jobs and personal commitments they must balance alongside their fire service duties. NFPA 1720 defines a volunteer fire department as a fire department in which volunteer personnel make up 85 per cent of the staff.
Composite fire department	Composite fire departments have both full-time staff and volunteer or part-time firefighters to maintain coverage and operational flexibility. NFPA 1720 defines a composite fire department as a fire department in which neither career firefighters nor volunteers make up 85 per cent of the department's staff.

Each service model has advantages and challenges, which is why a municipality must strive to establish the structure that best aligns with its community's risks (as identified in its CRA) and service expectations.

Most fire departments are owned and operated by the municipality they serve. In addition to their primary jurisdictional responsibilities, many fire departments maintain a variety of collaborative agreements with neighbouring communities. Examples of these agreements include fire protection agreements, shared response agreements, automatic aid arrangements, and broader mutual aid partnerships. Such agreements support coordinated emergency responses, enable the shared use of personnel and specialized resources, and help ensure consistent coverage during simultaneous incidents or periods of reduced staffing.

Findings

As of this MFP, the Department has a volunteer service delivery model, as more than 85 per cent of its personnel are volunteer firefighters. The Department currently operates three fire stations and has a limited amount of inter-municipal collaboration (except during large-scale incidents or joint training exercises). Dispatching services are handled by the Tillsonburg Fire Department.

12.4 Roadmap for Improvement

Establish Support Positions

In order to ensure strong and consistent leadership within the Department, both support and command positions should be created. These positions can help maintain the continuity of authority when the Fire Chief is unavailable. Also, establishing support positions (such as a deputy chief or other senior officer) strengthens operational oversight, distributes administrative responsibilities, and ensures effective command and decision-making during staff absences or periods with increased workloads.

South-West Oxford should also consider supplementing its internal leadership capacity through shared service arrangements. The concept of having a shared fire chief or deputy chief is used to enhance leadership coverage, provide specialized expertise, and improve administrative efficiency and regional coordination. These arrangements can be particularly valuable for smaller fire departments or during periods of extended absences, peak operational demands, or major initiatives.

A similar approach should be taken in regard to emergency management functions. Specifically, dedicated support for the CEMC role should be established (either internally or through shared services with neighbouring municipalities).

Incorporating support positions will help South-West Oxford consistently meet legislative requirements while maintaining emergency preparedness and reducing administrative strains. Moreover, clearly defined internal support roles and flexible shared service options create a resilient leadership model that promotes stability, accountability, and organizational continuity.

Acting District Chief

The Department should formalize a protocol for having an acting district chief (when needed). Doing so would ensure leadership continuity and maintain effective decision-making.

The proposed protocol should involve designating a qualified individual (such as a captain) to assume the role of district chief on a temporary basis. In order to ensure success, clear policy guidelines should be established related to authority, responsibilities, and duration.

Acting Captain

In order to enhance leadership consistency across all of its fire stations, the Department should develop a plan for managing any acting captain assignments. Currently, acting captains are appointed on an as-needed basis. Having a formal policy will ensure that leadership transitions are predictable and aligned with organizational expectations.

The formal policy should outline when an acting captain must be appointed (such as during periods when the Fire Chief is unavailable due to travel or other commitments), and it must clearly define the qualifications, authority, and responsibilities associated with the role. By creating a standardized process, the Department will strengthen command continuity, maintain operational effectiveness, and provide clarity for both station personnel and senior leadership personnel.

Share Administrative Duties with Neighbouring Municipalities

The Department currently has a shared services model related to the Training Officer and the Fire Prevention Officer. Expanding this model to include administrative personnel could offer several strategic advantages, such as:

- reduced costs
- improved efficiency
- redundancy for key administrative functions (such as operations, fire prevention, training, support services, and emergency management)

In order to expand the current shared services model, the Department should investigate options for collaborating with neighbouring municipalities.

12.5 Recommendations

Recommendations regarding the fire department structure in South-West Oxford are as follows:

12-1. South-West Oxford Fire and Emergency Services should formalize a policy to ensure clarity, consistency, and operational continuity in regard to acting positions within the fire department.

12-2. South-West Oxford should explore ways to establish a shared fire chief or shared deputy fire chief arrangement with a neighbouring municipality in order to strengthen leadership capacity and ensure command continuity within South-West Oxford Fire and Emergency Services.

12-3. South-West Oxford Fire and Emergency Services should explore the option of sharing administrative services with neighbouring municipalities (similar to the existing arrangements for the shared Training Officer and Fire Prevention Officer).

13.0 Fire Station Facilities

13.1 Overview

A fire station assessment is conducted in order to determine whether a fire station is likely to support its fire department's current and anticipated operations.

There are several key factors that all fire station assessments should consider, such as:

- size of the facility
- building features
- age and condition of the facility
- building capacity
- resources to support various administrative operations.

Ideally, a fire station should also be easy to renovate or update with new technology or equipment. Having a fire station that is easily adaptable will help support a fire department as it grows or begins offering new services.

13.2 Fire Stations in South-West Oxford

13.2.1 Facility Configuration and Size

Context

In order to provide effective fire protection services to the community, a fire department requires a fire station with appropriate space, functionality, and accessibility features. The following standards are related to the configuration of fire stations:

- NFPA 1901 emphasizes the importance of design considerations that accommodate vehicle sizes and operational needs.
- NFPA 1500 emphasizes that station safety and layout are key components of firefighter health and wellness.

A modern fire station should have the capacity and resources to furnish the following spaces:

- administrative areas
- indoor training area that uses existing station space (including the apparatus bay for hands-on and practical training)
- storage areas
- exercise room (to support the physical aspects of firefighter wellness)

- kitchen facilities
- common room
- parking area
- apparatus floor

Each of the spaces listed above supports specific operational functions. For clarification purposes, Table 26 explains the importance of some of these spaces.

Table 26. Key areas in fire stations.

Type of Area	Importance
Common area	A well-designed common area can help support firefighter retention and mental well-being. These spaces can be used as welcoming environments for firefighters to reduce burnout and make social connections.
Decontamination and cleaning areas	Firefighters are exposed to various hazardous substances (such as carcinogens, biological agents, and toxic residues) during emergency responses. Without proper decontamination protocols and dedicated cleaning facilities, these contaminants can be transferred to living quarters, vehicles, and personal gear. This transference increases the potential for long-term health risks. Guidelines related to infection control are outlined in NFPA 1581, *Standard on Fire Department Infection Control Program*. This information explains the need for designated areas to clean/store contaminated gear separately from clean zones. The Firefighter Guidance Notes also emphasize the need to minimize occupational illnesses and ensure compliance with health and safety regulations. Having proper decontamination spaces helps protect firefighters from chronic exposure, and it demonstrates a fire department's commitment to professional standards and personnel well-being.
Dedicated training space	A training area (or facility) is a safe space that enables a fire department to provide hands-on training that simulates complex scenarios, such as structural fires, vehicle extrication incidents, and hazardous material incidents. Having a dedicated training space also aligns with the OFM's recommendations related to firefighter certifications and ongoing skills maintenance. These recommendations are designed to help fire departments meet provincial standards while enhancing teamwork, confidence, and operational readiness.

Findings

Building Design

In general, the design of the fire stations in South-West Oxford is suitable for the Department's operations. However, at both Station 1 – Brownsville and Station 2 – Mount Elgin, the apparatus floor is undersized for modern types of fire apparatus. The limited size of these areas may present operational challenges as vehicle designs continue to evolve.

Administrative Areas

The administrative areas in the Department's fire stations are inadequate for the organization's current operational needs, particularly in regard to supporting the work of the district chiefs, captains, and training captains. Specifically, the existing administrative areas do not provide sufficient room or functionality to complete essential administrative tasks, coordination activities, training preparation, and daily leadership duties.

The shared Fire Prevention Officer operates out of Station 2 – Mount Elgin, and the Fire Chief works from both Station 3 – Beachville and the local municipal office. This arrangement allows for a functional distribution of administrative responsibilities across the Department's facilities.

Training Rooms

Most of the Department's training areas seem adequate to meet current operational requirements. The exception is the training area at Station 2 – Mount Elgin, which is not accessible and therefore cannot fully support training needs.

Storage Rooms

Station 1 – Brownsville and Station 2 – Mount Elgin both have storage deficiencies. Due to the lack of dedicated storage space, equipment and bunker gear are stored on the apparatus floor, which exposes these items to diesel exhaust and other contaminants.

In order to address the current health, safety, and operational concerns, both fire stations require renovations or a dedicated storage solution to remove gear and equipment from the vehicle floor area and ensure proper protection from exposure to harmful substances.

Kitchen Facilities

The Department's kitchen facilities appear to be adequate to meet current operational requirements.

Common Rooms

The Department's common areas appear to be adequate to meet current operational requirements.

Parking Areas

The Department's parking areas appear to be adequate to meet current operational requirements. However, consideration should be given to paving the parking area at Station 2 – Mount Elgin in order to improve accessibility, reduce maintenance challenges, and enhance safety for responding personnel.

Apparatus Floors

In order to improve firefighter safety and operational efficiency, the Department should assess ways to enhance the design and functionality of its apparatus bay floors. Some key improvements to consider are as follows:

- Establish designated gear removal areas to prevent contamination.
- Install exhaust extraction systems to reduce exposure to diesel emissions.
- Find ways to establish organized storage zones for clean gear and equipment. Options to consider include renovations or alternative storage solutions that remove gear from the apparatus bay and provide an increased amount of safer storage capacity.

13.2.2 Key Building Features in Older Fire Stations

Context

The age of a fire station is an important consideration. Often, older fire stations are unable to undergo significant renovations or accommodate new equipment, such as updated health and safety systems.

In many municipalities, budgeting concerns have impacted the ability to keep the systems in older buildings up to date. As a result, it is common for older fire stations to have poor or failing lighting and HVAC systems. The design of older buildings may also fail to meet current legislative requirements.

Currently, there is no Canadian report or standard that addresses the features of older fire stations. However, in 2024, the NFPA published a report that included information about the renovation needs of U.S. fire service providers. Since many Canadian fire departments have chosen to follow NFPA standards, this report can serve as a useful reference.

The NFPA report discussed various studies that were conducted to assess fire stations that are over 40 years old. An excerpt from the report reads as follows:

> There is no national guidance for the maximum age of a fire station. However, older fire stations do not have the modern facilities that are most beneficial for fire stations, such as decontamination areas with laundry facilities and gear storage areas that are separate and apart from living areas, exhaust capture systems, and private or separate facilities for male and female firefighters. Old fire stations are also more likely to have problems that cannot be addressed through repair and maintenance alone.[34]

The NFPA report goes on to identify three key features that are commonly lacking in fire stations that are over 40 years old: backup power, exhaust emission control, and private or separate facilities for men and women

As noted above, many older fire stations were not built to include separate facilities for both men and women. This is because the facilities were constructed before female firefighters were common in the fire service. In response to this lack of private facilities, the NFPA made the following observation:

> Many fire departments are recognizing a need to retrofit fire stations to have either private gender-neutral facilities or separate facilities for men and women. The current trend in fire station design is to have gender-neutral spaces to provide all firefighters with privacy while on the job.[35]

In addition, over the last 50 years, the average size of a fire apparatus has increased significantly. As a result, fire departments need more apparatus floor space than ever before. Apparatus bay doors must also be wide and high enough to accommodate the height of a modern fire apparatus.

Findings

All three of the Department's fire stations were originally designed to meet the basic operational and logistical needs of fire service personnel. As such, the stations have space to store apparatus, complete administrative functions, and conduct day-to-day firefighter activities.

However, the Department's fire stations were configured to match the size and needs of the community at the time of their construction. The main building components were appropriate for the staffing levels and equipment at that time, but the demands placed on the Department have increased.

[34] Messerschmidt, "Renovation Needs of the US Fire Service."

[35] Ibid.

Due to changing demands, there is now a need for additional space at Station 1 – Brownsville and Station 2 – Mount Elgin. This space is needed to accommodate personnel, vehicles, and specialized equipment. Also, although both stations have dedicated areas for specific functions, their layouts and infrastructure may pose challenges for the Department's current and future operations.

As a result of space constraints, bunker gear is stored directly on the apparatus floor at two of the Department's three fire stations. This practice raises concerns about contamination control and firefighter safety. Maintaining preparedness and NFPA-related certifications is also challenging due to a lack of space at the stations.

13.2.3 Station 1 – Brownsville

Station 1 – Brownsville (shown in Figure 9) is located at 292244 Culloden Line.

Figure 8. Exterior of Station 1 – Brownsville.

According to a 2023 building condition assessment completed by Facility Risk Solutions, Station 1 was constructed in 2010 as a one-storey fire station with a gross floor area of 5,335 square feet. The station has a single-sided apparatus bay layout, with three bays where all vehicles enter and exit from the same side of the building.

Overall, the building assessment determined that Station 1 is in good condition. Although a full accessibility audit was not completed as part of the building assessment, general observations indicated that the facility is considered partially accessible.

13.2.4 Station 2 – Mount Elgin

Station 2 – Mount Elgin (shown in Figure 10) is located at 333269 Plank Road.

Figure 9. Exterior of Station 2 – Mount Elgin.

Station 2 was constructed in 2007. The building is a one-storey fire station with a gross floor area of 4,908 square feet. The building also has a second floor that was added to accommodate meetings and training sessions. The station has a single-sided apparatus bay layout, with four bays where vehicles enter and exit from the same side of the building.

According to a 2023 building condition assessment completed by Facility Risk Solutions, the overall condition of Station 2 is good. Although a full accessibility audit was not completed as part of the building assessment, general observations indicated that the facility is considered partially accessible.

13.2.5 Station 3 – Beachville

Station 3 – Beachville (shown in Figure 11) is located at 434696 West Hill Line.

Figure 10. Exterior of Station 3 – Beachville.

Station 3 was constructed in 2019. The building is a one-storey fire station with a gross floor area of 7,000 square feet. The station has a single-sided apparatus bay layout, with three bays where vehicles enter and exit from the same side of the building.

According to a 2023 building condition assessment completed by Facility Risk Solutions, the overall condition of Station 3 is good. Although a full accessibility audit was not completed as part of the building assessment, general observations indicated that the facility is considered accessible.

Station 3 has a sufficient amount of space to support the Department's operational needs. The building also has enough space to house apparatus, accommodate personnel, and support administrative functions.

13.3 Roadmap for Improvement

Facilities Improvements

In order to provide the current and future level of service to South-West Oxford, the Department should conduct a comprehensive evaluation of its fire station facilities. The evaluation should include a review of station configuration, size, condition, functionality, and compliance with modern health, safety, and accessibility standards. Consideration should also be given to projected community growth, evolving service demands, and long-term operational requirements.

The Department should also address the identified facility deficiencies that directly impact firefighter safety, operational readiness, and workplace efficiency. For example, while the majority of station parking areas are adequate, the parking area at Station 2 – Mount Elgin requires attention. The Department should assess the feasibility of paving this lot to enhance accessibility, improve responder safety, and reduce maintenance challenges associated with the current surface.

The Department should also introduce organized storage zones for clean gear and equipment by pursuing renovations or implementing purpose-built storage solutions. Potential options include relocating bunker gear and equipment away from the apparatus bay (to prevent exposure to diesel exhaust) and providing an increased amount of safer storage capacity that is consistent with firefighter health and safety best practices.

In conjunction with the improvements noted above, the Department should enhance the amount of indoor training space within its facilities in order to support year-round training, equipment familiarization, and skills maintenance in a controlled environment.

Improvements to Administrative Areas and Training Areas

The Department should assess the administrative areas and training areas at its fire stations in order to identify ways of optimizing those spaces.

Ideally, the administrative areas should have the capacity to support the Department's current and anticipated operational needs, and the training areas should be versatile and accessible.

The current administrative areas are inadequate for the Department's operational needs. For instance, the spaces do not support the duties of the district chiefs, captains, and training captains. The existing workspaces do not provide sufficient room, privacy, or functionality for essential administrative responsibilities, including daily coordination, documentation, training preparation, and leadership activities. These limitations impact workflow efficiency and the ability of officers to perform their duties effectively.

The Department also currently operates with a distributed administrative model, where the shared Fire Prevention Officer works out of Station 2 – Mount Elgin, and the Fire Chief splits time between Station 3 – Beachville and the municipal office. In order to make operations more efficient, all of the Department's current and future full-time staff members should operate from a single location.

13.4 Recommendations

Recommendations regarding the fire station facilities in South-West Oxford are as follows:

13-1. South-West Oxford Fire and Emergency Services should evaluate the configurations and sizes of its fire stations to ensure the facilities are capable of meeting current and future operational needs. This evaluation should include a range of considerations, such as future growth, evolving service demands, and health and safety standards.

13-2. South-West Oxford Fire and Emergency Services should assess the administrative and training areas in its fire stations to ensure they are capable of meeting current and future operational needs. Consideration should also be given to enhancing those areas (if possible).

14.0 Water Supply

14.1 Overview

In the context of fire suppression, a water supply can be a municipal water supply (which is found in hydrant-protected areas) or a rural water supply (which is found in areas without fire hydrants).

Fire departments must remain aware of which water supplies are available in their communities, as a reliable water supply is essential for delivering effective fire suppression services.

14.2 Hydrant-Protected Areas

14.2.1 Municipal Fire Hydrants

Context

Overview

In hydrant-protected areas, municipal water and distribution systems provide the water supply that firefighters use for emergency responses. These systems must have the capacity to provide firefighters with a water supply that has a sufficient flow for firefighting operations, and they must be able to support the local distribution system (including fire hydrants).

Municipalities are responsible for fire pump flow testing, hydrant testing, repairs, and replacements. In addition, a municipality must ensure that its fire hydrants adhere to the following standards:

- NFPA 291, *Recommended Practice for Water Flow Testing and Marking of Hydrants*
- OFC, section 6.6.3.5 (regarding fire pump flow tests)
- OFC, section 6.6.4 to 6.6.6 (regarding hydrant condition, inspection, and markings)

Colour-Coding Scheme

In order to help fire crews identify the amount of fire flow they can expect from a given hydrant, the NFPA has developed a colour scheme. This visual indication allows firefighters to arrive at an incident site and quickly determine whether there is enough water to complete the required suppression services. The colour-coding scheme also helps fire crews make decisions about increasing the available water supply by attaching it to another hydrant (if needed).

Table 27 shows the fire hydrant colour-coding scheme outlined in NFPA 291, *Recommended Practice for Water Flow Testing and Marking of Hydrants*.

Table 27. Colour classifications for municipal hydrants (as per NFPA 291).

Class	Top and Nozzle Colour	Barrel Colour	Fire Flow	Pressure
AA	**Light Blue**	**Chrome Yellow**	1,500 gpm (5,680 L/min or greater)	20 psi (140 kPa)
A	**Green**	**Chrome Yellow**	1,000 to 1,499 gpm (3,785 to 5,675 L/min)	20 psi (140 kPa)
B	**Orange**	**Chrome Yellow**	500 to 999 gpm (1,900 to 3,780 L/min)	20 psi (140 kPa)
C	**Red**	**Chrome Yellow**	500 gpm (1,900 L/min or less)	20 psi (140 kPa)

Figure 12 shows an example of a fire hydrant that is painted according to the colour scheme outlined in NFPA 291.

Figure 11. Fire hydrant painted according to the NFPA 291 colour code.

In order to adhere to the requirements of the OFC, fire hydrants should also have reflective markers, which often come in the form of coloured rings or tapes. The purpose of the markings is to allow firefighters to assess hydrant capabilities quickly, even during periods of low light or adverse weather conditions. Installing these markers can aid in the efficiency of emergency response.

Storz Connections

Another item to consider is the presence of Storz connections. A Storz connection uses a large-diameter, quick-connect coupling system. This system significantly reduces the time and effort required to hook up hoses, especially under pressure-filled conditions. Moreover, if a fire hydrant has a Storz connection, the water flow capacity from that hydrant may be improved.

Communities with older hydrants can also retrofit their hydrants with Storz adapters to promote standardization and compatibility with modern firefighting equipment. This initiative ensures that a more streamlined response is possible, particularly during mutual aid or automatic aid scenarios. During these scenarios, firefighters from multiple agencies must be able to connect to a hydrant with ease.

Overall, a Storz connection allows firefighters to connect a pumper truck to a hydrant quickly, and they may also increase the water flow for suppression activities.

Findings

As of this MFP, there are only three fire hydrants in South-West Oxford. However, those fire hydrants are designated for flushing the municipal water system rather than for fire suppression efforts. As a result, the Department cannot rely on fire hydrants to provide a water supply for fire suppression.

On the outer limits of South-West Oxford, water is sourced from municipal hydrants in Tillsonburg, Ingersoll, and Woodstock.

Oxford County is responsible for providing potable municipal water services to the villages of Mount Elgin, Sweaburg, Beachville, and Brownsville.

Table 28 shows the locations of hydrants in other municipalities that the Department uses for fire suppression in South-West Oxford. The table notes the type of water source, its location, and its distance from the community that it serves.

Table 28. Municipal hydrants near South-West Oxford.

Community	Type of Water Source	Location of Water Source	Distance
Beachville	Fire hydrant	Woodstock (Beachville Road)	3 km
Beachville	Fire hydrant	Ingersoll (Beachville Road)	4 km
Brownsville	Fire hydrant	Tillsonburg (North Street West)	7 km
Delmer	Fire hydrant	Tillsonburg (North Street West)	3 km
Foldens	Fire hydrant	Ingersoll (Plank Line)	6.5 km
Foldens	Fire hydrant	Sweaburg Road and Cedar Line	7 km
Mount Elgin	Fire hydrant	Tillsonburg (Plank Line and Quarter Town Line)	10 km
Mount Elgin	Fire hydrant	Ingersoll (Plank Line)	9.7 km
Ostrander	Fire hydrant	Tillsonburg (Plank Line and Quarter Town Line)	2.2 km
Salford	Fire hydrant	Ingersoll (Plank Line)	4.5 km
Sweaburg	Fire hydrant	Woodstock (Sweaburg Road and Cedar line)	2.5 km

14.2.2 Private Hydrants

Context

The following process is applicable for properties with private hydrants:

1. The property's owner or developer must provide hydrant installation and water flow certifications to the Chief Fire Official.
2. The Chief Fire Official must approve the flow certifications before the owner or developer is allowed to occupy the property.
3. After receiving approval to occupy their property, the developer or owner must ensure they test their on-site hydrants annually to verify they remain operational and comply with the OFC.

In contrast to the NFPA colour-coding scheme (discussed in section 14.2.1 of this MFP), private hydrants are usually painted red to distinguish them from municipal hydrants.

Figure 13 shows an example of a private fire hydrant.

Figure 12. Example of a private fire hydrant.

Findings

As of this MFP, South-West Oxford does not have any private hydrants.

14.3 Non-Hydrant-Protected Areas

Context

Section 3.2.5.7 (1) of the OBC states, “An adequate water supply for firefighting shall be provided for every building.”

When fire departments respond to emergencies in areas without fire hydrants, they must use an alternate water source to provide fire suppression services. Dry hydrants and tankers are both common alternative water sources that fire departments can use to meet the requirements of the OBC:

- Dry hydrants provide fire departments with a water supply sourced from rivers, lakes, ponds, or storage tanks. Many fire departments that respond to calls in non-hydrant-protected areas rely on dry hydrants.
- A tanker is a type of fire apparatus that can transport water to non-hydrant-protected areas.

In order to enhance firefighting capabilities, municipalities should consider installing cisterns and dry hydrants. This infrastructure should be installed in strategic areas, particularly in rural areas or regions that lack access to municipal water systems.

Cisterns and dry hydrants can provide reliable, accessible water sources for tanker shuttle operations. These water sources can reduce response times and improve the effectiveness of fire suppression efforts. In addition, strategically placed cisterns and dry hydrants can help a fire department maintain a continuous water supply, especially during large or prolonged incidents.

According to Fire Underwriters Survey ("**FUS**"), properly installed and maintained water supply alternatives can contribute to improved fire protection grades. These improved grades can potentially lead to lower insurance premiums for area residents. The OFM also supports the implementation of alternative water sources as part of comprehensive community risk reduction strategies (as referenced in the FPPA).

Overall, investing in cisterns and dry hydrants helps strengthen local fire protection infrastructure while increasing community resilience. However, using dry hydrants often requires firefighters to purchase specialized equipment or complete specific training. For guidance on alternative water sources, municipalities should consult NFPA 1142, *Standard on Water Supplies for Suburban and Rural Firefighting*.

Findings

In addition to the limited municipal hydrant system, the Department uses cisterns to support fire suppression operations. Within the central area of the township, cisterns and dry hydrants serve as the primary water supply, ensuring coverage in areas that are not serviced by external municipal infrastructure.

South-West Oxford's municipal cisterns and dry hydrants are the foundation of the community's water supply strategy for ensuring firefighting services. Several ponds and lakes are also available for use as water sources. The ponds at Spring Lake (on Prouse Road) and the Oxford County Landfill site (on Salford Road) are available all year, and the pond at the Oxford Hills Golf Club is available on a seasonal basis.

Although there are several water sources available, some areas of South-West Oxford are located significantly farther from water sources than others. As a result, the Department's fire response capabilities vary throughout the community.

Table 29 provides information about the cisterns and dry hydrants available to the communities in South-West Oxford. The table notes the type of water source, its location, and its distance from the community that it serves.

Table 29. Water sources in and near South-West Oxford.

Community	Type of Water Source	Location of Water Source	Distance
Beachville	Cistern (approx. 200,000 L)	Station 3 – Beachville	1.5 km
Brownsville	Cistern (approx. 50,000 L)	Station 1 – Brownsville	0.5 km
Brownsville	Dry hydrant	Spring Lake (Prouse Road)	6.3 km
Culloden	Dry hydrant	Spring Lake (Prouse Road)	3 km
Dereham Centre	Dry hydrant	Spring Lake (Prouse Road)	3.5 km
Foldens	Cistern (approx. 200,000 L)	Station 3 – Beachville	6.9 km
Mount Elgin	Cistern (approx. 180,000 L)	Mount Elgin (Mount Elgin Road & Elgin Street)	0.5 km
Mount Elgin	Cistern (approx. 50,000 L)	Mount Elgin (Peggy Avenue & Graydon Drive)	0.5 km
Salford	Dry hydrants (x2)	Oxford County Landfill (Salford Road)	1.5 km
Verchoyle	Dry hydrant	Spring Lake (Prouse Road)	2.5 km

As another way to maintain a water supply, the Department uses a water shuttle operation. As part of this operation, multiple tankers travel continuously between a water source and an incident site to maintain a water supply. The Department also relies on mutual aid agreements, and it proactively develops rural water supply strategies to ensure adequate fire protection in the community.

14.3.1 Superior Tanker Shuttle Accreditation

Context

The Superior Tanker Shuttle Accreditation program is offered by FUS, and it is available for fire departments that meet the following criteria:

- The fire department can maintain a minimum water supply of 200 gallons/minute for a two-hour duration for residential properties up to 8 km away from a fire station.

- The fire department can maintain a minimum water supply of 500 gallons/minute for a one-hour duration for commercial properties up to 5 km away from a fire station.

One benefit of a tanker service is that it may lead to reduced costs for a community's residents. Many insurance providers offer reduced fire insurance premiums in communities that have fire departments with Superior Tanker Shuttle Accreditation.

Findings

As of this MFP, South-West Oxford does not have Superior Tanker Shuttle Accreditation.

14.3.2 Tanker Shuttle Program

A tanker shuttle program is critical for protecting the safety of residents and firefighters. Regardless of whether the Department chooses to obtain Superior Tanker Shuttle Accreditation, a tanker shuttle program is still required for fighting fires in non-hydrant-protected areas of South-West Oxford.

Table 31 provides information on the tankers used by the Department. The table also includes information about the tankers used by neighbouring fire departments that regularly respond to emergencies alongside the Department.

Table 30. Water tankers operated by Oxford County fire departments.

Department	Number of Tankers	Imperial Gallons	Axles (Single or Tandem)	Cab Size (2 to 5)
South-West Oxford	1	1,632 imp. gal.	Simple	2
South-West Oxford	1	1,632 imp. gal.	Simple	2
South-West Oxford	1	1,632 imp. gal.	Simple	2
Zorra	2	2,500 imp. gal.	Tandem	2
Zorra	1	2,000 imp. gal.	Tandem	2
Blandford-Blenheim	1	2,500 imp. gal.	Tandem	5
Blandford-Blenheim	1	2,500 imp. gal.	Tandem	3

As shown in the table above, the Department currently operates three single-axle tankers with an approximate capacity of 1,600 imperial gallons. However, the fire departments in Zorra and Blandford-Blenheim have upgraded to tankers with a minimum capacity of 2,500 imperial gallons.

14.4 Roadmap for Improvement

Municipal Fire Hydrants

Because the municipal hydrants in South-West Oxford are only used to flush the local water system, South-West Oxford should work with Oxford County to place fire hydrants in strategic locations throughout the community. Currently, the Department relies on cisterns and rural water sources to complete fire suppression duties, and implementing a strategic water supply plan is essential to enhancing the Department's fire protection capabilities.

South-West Oxford should also identify any built-up areas that fall outside the 5 km radius of an adequate water supply (as defined by FUS guidelines). For instance, there are several communities where South-West Oxford should either install new hydrants or expand the capacity of the cisterns in order to improve water supply coverage. The communities that should be prioritized include Mount Elgin, Brownsville, Beachville, and Foldens. As a best practice, South-West Oxford should ensure that any new hydrants are painted as per the colour-coding scheme outlined in NFPA 291.

Taking steps to improve the water supply in South-West Oxford will help strengthen emergency response capabilities, improve insurance ratings, and enhance public safety.

Non-Hydrant-Protected Areas

In order to improve fire protection coverage and meet FUS guidelines, South-West Oxford can implement alternative water sources. For instance, South-West Oxford should assess the current gaps that are affecting water availability (especially in built-up areas beyond 5 km from reliable sources). South-West Oxford can then identify and evaluate potential sites to install dry hydrants, such as farm ponds, stormwater retention basins, and other static water bodies.

The Department can also improve the safety of firefighters and individuals at incident scenes by procuring larger-capacity fire tankers. According to guidelines provided by FUS, an adequate water supply of 40,000 imperial gallons within 5 km of built-up areas is recommended.

Increasing the water capacity of the Department's tanker fleet would reduce the number of shuttle trips required to support fire suppression operations. Fewer shuttle cycles will decrease the amount of emergency vehicle travel, thereby reducing exposure to roadway hazards while lowering the risk of collisions involving a fire apparatus.

Larger-capacity tankers also allow more water to be delivered on both initial and subsequent arrivals, improving fire flow sustainability and operational efficiency at the incident scene. Collectively, these benefits enhance firefighter safety, reduce vehicle wear, and improve the Department's ability to operate effectively in non-hydrant-protected areas.

Based on FUS guidelines, the communities of Mount Elgin, Brownsville, and Foldens are most in need of immediate water supply improvements. Establishing or upgrading the water sources in these communities would significantly improve the Department's fire protection capabilities. Doing so would also align with best practices for rural fire service planning. For instance, increasing the volume of the cistern in Brownsville would enhance the water supply coverage in the community.

Superior Tanker Shuttle Accreditation

The water supply infrastructure in South-West Oxford presents challenges for the Department's operations. For example, South-West Oxford does not have hydrants for firefighting purposes. Despite those limitations, the Department provides a very good service to local residents, demonstrating a dedication and adaptability to local needs.

South-West Oxford can enhance its fire protection services by pursuing Superior Tanker Shuttle accreditation. This designation can significantly improve insurance ratings for properties that are beyond the reach of municipal hydrants. The certification also provides communities without municipal hydrants the opportunity to achieve fire protection equivalency through efficient water shuttle operations.

If the Department chooses to pursue the Superior Tanker Shuttle accreditation, it will need to train and certify its personnel who perform tanker shuttle operations. Those personnel will also need to complete formal testing in order to meet FUS standards.

The benefit of obtaining Superior Tanker Shuttle accreditation is that it will improve the Department's emergency response capabilities. The accreditation can also provide long-term benefits to South-West Oxford residents, as it can lead to reduced insurance premiums and enhanced public safety.

Tanker Apparatus Upgrades

One best practice the Department should pursue is increasing the size of its tanker apparatus. Specifically, the Department should consider using tandem-axle tankers that can carry more water than single-axle tankers. In addition, it is ideal for the tanker shuttle program to primarily use similar-sized tankers, increasing the efficiency of the tanker rotation process.

When the Department next replaces its tankers, it should purchase at least one tanker with a capacity of 2,500 imperial gallons. The tanker should also have pumping

capacity. Purchasing this tanker would increase the available water supply for non-hydrant-protected areas and increase safety for the community and firefighters.

14.5 Recommendations

Recommendations regarding the water supply in South-West Oxford are as follows:

14-1. The Fire Chief and representatives of South-West Oxford should consult with representatives of Oxford County to identify local firefighting constraints and capabilities. Any needs related to non-fire-rated systems should also be discussed (as some areas of South-West Oxford are serviced by non-fire-rated drinking systems).

14-2. South-West Oxford should investigate the feasibility of obtaining Superior Tanker Shuttle Accreditation to enhance fire protection coverage across the community.

14-3. South-West Oxford Fire and Emergency Services should consider acquiring a larger-capacity pumper tanker with an approximate capacity of 2,500 to 3,000 imperial gallons. Purchasing this tanker would enhance operational effectiveness, firefighter safety, and long-term compliance with Superior Tanker Shuttle Service Accreditation requirements.

14-4. South-West Oxford should implement a plan to develop alternative water sources across the community. The plan should begin with a comprehensive assessment of current water supply gaps, particularly in built-up areas that are over 5 km from reliable water sources.

15.0 Asset Management

15.1 Overview

Asset management refers to the purchase, use, and upkeep of the various vehicles and equipment that fire departments use during emergency responses. Fire departments require their assets to remain in good working condition so that they can provide services safely and effectively.

A prudent asset management plan is essential to the success of a fire department's operations. The primary components of an asset management plan include strategic planning, cost forecasting, and budgeting.

15.2 Fire Fleet

15.2.1 Fleet Deployment

Context

Firefighters respond to many kinds of emergencies, including fires, explosions, and motor vehicle collisions. In order to manage these situations safely and effectively, firefighters need to have access to an adequate and reliable fire fleet. A typical fire fleet consists of various specialized vehicles, such as pumpers, tankers, rescue vehicles, and aerials.

Purchasing a vehicle for a fire fleet is a significant investment for any municipality. Due to these costs, it is crucial for fire departments to make sure they only purchase vehicles that are necessary for responding to the specific risks in their communities. Each type of vehicle serves a distinct purpose, and not every fire department requires every type of vehicle.

In addition to the initial purchase price, the ongoing maintenance and eventual replacement of the vehicles in a fire fleet can both be costly. Because fire fleets are used to complete tasks in extreme conditions, the vehicles require regular maintenance to ensure they remain operational. Therefore, municipalities must budget for both the upkeep and the replacement of their fire fleets.

Despite the financial and time commitments involved in purchasing and maintaining a fire fleet, it is essential for every municipality to ensure that its fire department has the vehicles it needs to mitigate and resolve emergencies in the community.

Findings

The Department's fire fleet includes the following vehicles:

- pumpers
- rescues
- tankers
- support vehicle (pickup truck)
- administrative vehicle

The Department also has various small vehicles that are used to provide both emergency and non-emergency services.

The Department regularly includes its firefighters in discussions about its fleet deployment strategy, and many personnel contribute thoughtful suggestions based on their own experience. However, it appears that the firefighters' suggestions are not always reflected in the final decisions. In addition, the firefighters are not provided with any information regarding how the decision-making process was conducted or why specific recommendations were not implemented.

The Department's strategic planning process was most recently completed in 2015. The finalized plan identified opportunities to strengthen management practices, particularly in regard to fleet oversight and apparatus replacement. The strategic plan determined that the Department's current approach is not sufficiently aligned with industry standards about vehicle lifecycle management and replacement scheduling (such as NFPA 1911 and FUS guidelines).

Station 1 – Brownsville currently operates with two pieces of apparatus, which are only capable of transporting seven firefighters to emergency scenes. The limited capacity of these vehicles restricts the station's ability to deploy a full crew during critical responses, particularly those requiring rapid intervention or sustained operations.

To address the shortcomings of the Department's fire fleet, the strategic plan recommends implementing a formal fleet management program grounded in NFPA 1911 and FUS guidelines.

In addition, the responsibility for emergency vehicle specification and procurement should be centralized under the Fire Chief, ensuring operational needs are prioritized. At the same time, other members of the Department should continue to provide essential insights on maintenance capabilities.

15.2.2 Safety Standards

Context

Over the years, the vehicles used by the fire service have undergone considerable changes. For example, modern vehicles are generally larger than older models, and they have significantly more advanced technology. In addition, many types of older vehicles do not possess important features mandated by current regulations, such as anti-lock braking systems and roll stability control.

Due to changes in construction materials and onboard features, the vehicles in a modern fire fleet must comply with stricter safety standards than their older equivalents. These safety standards are outlined in various legislative documents, such as:

- the OHSA
- NFPA 1901, *Standard for Automotive Fire Apparatus*
- NFPA 1912, *Standard for Service Tests of Fire Pump Systems and Fire Apparatus*
- ULC S515-04: *Automotive Fire Fighting Apparatus*

Before purchasing any new vehicles for their fire fleets, municipalities and fire departments should carefully review all relevant laws and safety standards. This review is a crucial part of the planning and budgeting discussions that should take place during the development of an asset management plan.

By budgeting for the replacement of vehicles at the appropriate times, fire departments can protect the health and safety of their firefighters and maintain service levels in their communities.

Findings

The Department follows industry standards when purchasing a new fire apparatus.

15.2.3 Inspections, Testing, and Maintenance

Context

A fire fleet must undergo weekly and annual inspections, tests, and maintenance in order to ensure that each vehicle can start and operate properly whenever an emergency occurs. This level of servicing involves the following tasks:

- checking and adjusting brakes
- making lubrication and oil changes
- completing annual pump tests

- completing non-destructive ladder tests
- completing Ministry of Transportation inspections

Ongoing vehicle maintenance is imperative to the success of a fire department's operations. If the vehicles in a fire fleet cannot pass routine maintenance requirements (such as pump testing and regular valve replacements), a municipality and its firefighters are at risk of safety and liability concerns.

As a result of routine upkeep, each vehicle in a fire fleet will be out of service for several days a year in order to undergo scheduled maintenance. In addition, many types of servicing cannot be performed in-house. For example, fire departments usually need to hire mechanics with specialized training to inspect and repair safety systems, pollution control systems, and engine and driveline systems. In years past, a mechanically skilled firefighter could have performed those tasks, but the complex technology in modern vehicles has made it necessary to contract specialized assistance. Advanced maintenance work may also require certain vehicles to be taken out of service for extended periods.

Findings

The Department conducts routine maintenance of its apparatus to ensure all vehicles and equipment remain in peak operational condition. Routine maintenance practices include thorough inspections, fluid checks, and testing emergency systems (such as lights, sirens, and communication devices).

15.2.4 Fleet Renewal and Rationalization

Context

A fire fleet assessment can begin with the following considerations:

- What types of apparatus comprise the current fire fleet?
- What types of responses does the fire department make?
- What are the fire department's available staffing levels for responses?

A fire department should keep these considerations in mind because they will help identify which fire apparatus it should purchase to suit its current and expected needs. Once a fire department has identified which fire apparatus it is likely to need, it should work with its municipal council to develop a strategic plan that outlines an appropriate fleet replacement schedule.

A fleet replacement schedule should consider several factors for each vehicle in the fire department's fire fleet. The main factors to consider are as follows:

- age of current vehicle
- availability of replacement parts
- number of engine hours
- safety features and reliability
- current costs of maintenance and servicing

Every municipal council and fire department should strive to have a fire fleet that is applicable to their community's needs. The fleet must have the functionality to operate whenever it is needed, and it must have the reliability to operate with minimal breakdowns at an emergency scene or during a training session.

Fire departments can also reference material developed by FUS when developing an apparatus replacement plan. For example, in smaller communities, FUS will not recognize an apparatus that is more than 20 years old. However, FUS also recognizes the tremendous financial burden that buying fire apparatus places on municipalities. As such, FUS will allow a community to extend the life cycle of a used or rebuilt fire apparatus if the vehicle can pass the recommended annual tests and is deemed to be in excellent mechanical condition.

When it is time to replace a fire apparatus, FUS recommends following the CAN/ULC-S515-13 standard, which was developed by the Underwriters Laboratories of Canada. This standard, titled the "Standard for Automotive Fire Fighting Apparatus," has been adopted as a national standard of Canada.

Table 30 presents the fleet replacement schedule that has been developed by FUS. The table's content and footnotes are sourced directly from FUS, as written by SCM Risk Management Services.[36]

[36] "Insurance Grading Recognition of Used or Rebuilt Fire Apparatus," Fire Underwriters Survey.

Table 31. Fire apparatus replacement for fire insurance grading purposes.

Apparatus Age	Major Cities[37]	Medium Sized Cities[38] or Communities Where Risk is Significant	Small Communities[39] and Rural Centres
0-15 years	First line	First line	First line
16-20 years	Reserve	Second line	First line
20-25 years[40]	No credit in grading	No credit in grading or reserve[41]	No credit in grading or reserve[41]
26-29 years[40]	No credit in grading	No credit in grading or reserve[41]	No credit in grading or reserve[41]
30+ years	No credit in grading	No credit in grading	No credit in grading

[37] Major Cities are defined as an incorporated or unincorporated community that has:

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

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

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

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

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

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

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

Findings

Table 31 shows the Department's current fire apparatus replacement schedule.

Table 32. Fire apparatus replacement schedule for South-West Oxford.

Vehicle	Make and Model	Year Built	Proposed Replacement Year
Rescue/pumper	2017 Freightliner – Metalfab pumper 1050	2017	2037
Tanker	2007 International – Tanker 420 pump	2007	2026
Pumper	2023 Freightliner Fort Garry pumper 1250	2024	2044
Tanker	2007 International Metalfab tanker 420 pump	2007	2026
Rescue	2010 Freightliner Metalfab walk-in-rescue	2010	2030
Pumper	2025 Freightliner pumper 1250 pump	2025	2035
Pumper/tanker	2022 Freightliner – Metalfab 840 pump	2022	2042
Rescue	2010 Freightliner Metalfab walk-in	2010	2030
Spare pumper (training)	1998 Spartan Advantage	1998	No replacement schedule

15.2.5 Electric Fire Apparatus

Context

An electric-powered fire apparatus is an emerging type of technology in the fire service. These vehicles offer significant environmental and operational benefits, but there are also challenges related to availability, reliability, and cost.

As of this MFP, electric fire trucks are commercially available through several manufacturers, such as Rosenbauer and Pierce Manufacturing. However, the availability of the vehicles remains limited, with production primarily focused on larger urban fire departments that are capable of pioneering new technologies.

In terms of reliability, the use of electric fire trucks has shown promising results for initial deployments in urban centres. For instance, the Los Angeles Fire Department has reported strong performance benefits. However, questions remain about battery endurance during extended operations, as well as performance in cold climates and long-term maintenance needs. Due to these uncertainties, the current versions of these vehicles may not be ideal for cold climates, especially given the possible need to remain at an incident scene for an extended period.

In addition, most of the companies that make electric fire apparatus are American, and tariff uncertainties may factor into the decision to purchase an electric fire apparatus.

Table 32 summarizes various factors that fire departments should consider when choosing between electric and diesel-powered vehicles.

Table 33. Electric fire apparatus vs. diesel fire apparatus.

Category	Electric Fire Apparatus	Diesel Fire Apparatus
Purchase cost[42]	Approximately 30 to 50 per cent higher than a diesel fire apparatus	Lower than the average electric fire apparatus
Operating cost	Lower than the average diesel fire apparatus: • Charging costs are lower than fuelling costs. • Less maintenance is required.	Higher than the average electric fire apparatus: • Fuelling costs are higher than charging costs. • A diesel apparatus is more susceptible to mechanical wear.
Reliability	Good for urban/short runs Uses emerging technology	Proven reliability across all conditions
Availability	Limited (mainly large cities, pilot programs)	Widely available from multiple manufacturers
Environmental impact	Zero tailpipe emissions	High emissions (contributes to air pollution)
Cold weather performance	Still under evaluation (battery efficiency may drop)	Proven performance in cold climates
Infrastructure needed	Charging stations, possible upgrades to power grid	Existing fueling infrastructure

[42] As of this MFP, it is difficult to provide a precise cost estimate due to the current level of economic uncertainty related to tariffs.

Category	Electric Fire Apparatus	Diesel Fire Apparatus
Lifespan (projected)	Potentially longer (fewer moving parts)	Standard lifespan
Ideal use	Urban, short-distance, quick-turnaround operations	Urban, rural, and long-duration operations

Findings

South-West Oxford has begun to adopt electric vehicles within the Department's fleet. However, the transition to purchasing electric fire apparatus presents several challenges, including high upfront costs, the need for upgraded charging infrastructure, and concerns about battery reliability during prolonged emergencies.

Going forward, South-West Oxford should review the advantages and disadvantages outlined in Table 32 when determining whether it should purchase an electric fire apparatus.

15.3 Fire Service Equipment

15.3.1 Standard Equipment and Systems

Context

In addition to various types of apparatus, firefighters rely on a range of equipment to perform their duties.

Examples of fire service equipment are as follows:

- fire hoses and nozzles
- fittings
- ladders
- generators and lighting
- ventilation fans
- portable pumps
- saws
- gas detectors
- thermal imaging cameras
- various hand tools
- extrication equipment

Examples of other essential systems and equipment are as follows:

- radio communication systems
- dispatch equipment
- administrative systems, such as an RMS

All equipment is considered part of a fire department's assets. As a best practice, municipalities should keep track of the equipment their fire departments use, as this will assist with budget planning for any necessary repairs or replacements.

Findings

The Department maintains a proactive approach to equipment procurement by purchasing certain essential items on an annual basis. Annual purchases support the Department's ongoing operations and readiness. Larger or specialized equipment acquisitions are strategically forecasted and incorporated into future budgets, ensuring financial sustainability and operational efficiency.

Planned equipment purchases are documented within the Department's asset management plan. The plan serves as a comprehensive framework for tracking lifecycle costs, replacement schedules, and long-term resource allocation.

15.3.2 Radio Communication Systems

Context

Fire service personnel use radio communication systems to communicate with dispatch services, response agencies, and other responders at emergency scenes. Although purchasing, maintaining, and upgrading radio systems may require a significant level of capital investment, these systems are vital during emergency responses. Without effective radio communications, it is difficult for first responders to coordinate response efforts safely.

Fire departments should also consider the safety features of their portable radios. For instance, intrinsically safe portable radios are designed to operate safely in hazardous environments where flammable gases, vapours, or combustible dusts may be present. These radios are engineered to prevent sparks, heat, or electrical energy that could otherwise ignite and cause an explosion. Due to the potential for an incident to occur at a fuel storage facility or an industrial site, it is important for fire departments to have intrinsically safe portable radios. This type of radio is also crucial when fire service personnel respond to a chemical fire.

Intrinsically safe radios may be certified to strict standards to ensure they can be used without creating a risk of ignition. One of these standards is NFPA 1802, which is included in the consolidated standard NFPA 1930, *Standard on Fire and Emergency*

Service Use of Thermal Imagers, Two-Way Portable RF Voice Communication Devices, Ground Ladders, Rescue Tools, Fire Hose, and Fire Hose Appliances. The content of NFPA 1802 includes performance standards for portable radios used by fire crews in extreme and hazardous conditions.

Findings

The Department understands that reliable communication systems are critical for maintaining situational awareness, executing coordinated tactical operations, and responding promptly to changing conditions on the fireground.

Although the Department's current radio equipment is reliable, the system is not intrinsically safe, and it does not meet the requirements for use in hazardous environments.

As of this MFP, the Department is researching the acquisition of new portable radio units. The Department's primary objectives are to increase the total number of portable radios available to its personnel and to upgrade the quality and reliability of radio reception across all operational environments. By improving the accessibility and performance of its portable communication equipment, the Department aims to minimize the risk of miscommunication, enhance real-time decision-making, and improve firefighter safety.

15.4 Roadmap for Improvement

Firefighter Involvement

In order to develop a successful fleet deployment strategy, the Department should involve its firefighters in the planning and evaluation process. Firefighters can use their frontline experience and firsthand knowledge of tools, vehicles, and equipment to supplement data-driven asset management planning and strategic forecasting. By working collaboratively with firefighters, the Department can promote a sense of ownership and increase morale levels among personnel. This approach can also ensure that the fleet deployment strategy is resilient, mission-focused, and tailored to the demands of real-world incidents.

Fleet Expansion

As noted above, Station 1 – Brownsville has a limited capacity to transport personnel. In order to address this issue, the Department should expand the station's fire fleet.

One consideration is replacing the current spare pumper with a crew cab pumper, specifically a mini-pumper rescue with integrated seating. Investing in this apparatus will improve the Department's operational readiness and its compliance with national standards.

Increasing the size of the fleet at Station 1 – Brownsville will contribute to safer and more efficient emergency service delivery within the Brownsville coverage area, as well as diversifying the Department's response capabilities.

The Department should also consider the addition of a dedicated support vehicle to enhance operational effectiveness and service continuity. Support vehicles play an important role in transporting equipment, supplies, and personnel to and from incident scenes, training activities, and special operations. The vehicles are especially important during incidents with extended durations.

Currently, the Fire Chief's vehicle is the Department's only support vehicle. When the Fire Chief is unavailable, the Department has no dedicated support capability. This limitation can affect logistical support, reduce operational flexibility, and increase reliance on frontline apparatus for non-suppression tasks. Establishing an additional support vehicle would provide redundancy, ensure the continuity of support functions, and improve overall scene safety, efficiency, and incident management capacity.

Fleet Renewal and Rationalization

The Department should begin the fleet renewal and rationalization process by evaluating its operational needs, the long-term sustainability of its assets, and its compliance with applicable regulations. As of this MFP, the Department uses NFPA standards (particularly NFPA 1901 and NFPA 1911) to guide specifications for new apparatus and ensure consistency in safety, performance, and serviceability.

In addition, the Department should formally adopt and apply FUS guidelines as a foundational component of its asset management and fleet planning process. These guidelines provide critical benchmarks for apparatus service life, deployment, and functionality, which directly influence insurance grading and community risk assessment. By integrating FUS requirements into its capital planning and replacement strategy, the Department can prioritize apparatus renewal, optimize fleet composition, and provide a clear, defensible rationale for capital investments while supporting improved fire protection ratings and long-term service sustainability.

Inspection, Testing, and Maintenance

A fire apparatus is a highly specialized emergency vehicle that operates under demanding conditions. Each type of apparatus is critical for protecting the safety of firefighters and the public.

A fire apparatus contains complex systems, such as braking, suspension, steering, pumps, emergency systems, electrical components, and safety restraints. Each of these systems must function reliably during emergency responses. Ensuring that repairs and maintenance are performed by trained and properly licensed technicians helps guarantee that work is completed according to manufacturer specifications, regulatory requirements, and recognized safety standards.

Going forward, the Department should ensure that the maintenance of its fire fleet is assigned to qualified personnel who have been trained to perform mechanical repairs and testing on these types of vehicles. This approach reduces the risk of mechanical failure, unplanned apparatus downtime, and liability exposure for the Department and South-West Oxford. Moreover, improper or unqualified repairs can compromise vehicle performance, void warranties, and increase the likelihood of collisions or equipment failure during emergency operations.

Requiring trained and licensed individuals to perform repairs will show that the Department demonstrates due diligence, supports firefighter safety, and promotes the long-term reliability and service life of its apparatus.

Fire Service Equipment

In order to manage fire service equipment successfully, immediate operational readiness must be balanced with long-term asset sustainability.

Going forward, the Department should continue conducting routine maintenance work on all of its equipment (from basic hand tools to specialized fire ground tools and rescue equipment). Doing so will ensure each piece of equipment is reliable during emergency responses. The maintenance work should also help extend the service life of critical assets. As the Department advances its overall asset management framework, it is important to consider how equipment replacements are planned and executed, as prudent management will help to maintain consistency, safety, and fiscal responsibility.

There are two primary approaches the Department can use when planning equipment replacements. The first option is a scheduled life cycle replacement model. This approach replaces equipment based on predetermined service lives, manufacturer recommendations, usage patterns, and risk thresholds. This approach offers predictable budgeting, improved reliability, and alignment with standards (especially for critical safety equipment such as PPE, SCBA, fire hoses, and electronic monitoring devices). However, this method may sometimes result in replacing equipment that is still serviceable, depending on its actual condition and use.

The second option is to replace equipment when its assigned apparatus is going to be replaced. This approach combines equipment procurement with the apparatus replacement process, ensuring that new vehicles arrive fully outfitted with standardized, modern tools. This approach simplifies acquisitions, and it ensures compatibility across the apparatus fleet. However, although this option is useful for durable items with long service lives (such as ladders, hard suction lengths, tool mounting systems, and certain hand tools), it is not suitable for equipment with shorter life spans or items subject to intensive wear.

Overall, the Department should aim to develop a balanced strategy that provides predictable financial planning, enhances operational readiness, and supports the long-term sustainability of its equipment inventory.

Radio Communications

Establishing reliable radio communications requires strategic infrastructure investments, interoperability planning, and frontline engagement.

In order to improve firefighter safety and ensure dependable communication in hazardous environments, the Department should ensure that it has intrinsically safe portable radios. Reliable radio communications are essential for firefighter safety, effective command and control, interagency coordination, and overall emergency response performance.

Going forward, the Department needs to evaluate its current radio system, consider future operational requirements, and create a report for Council. The report should include a detailed assessment of the current radio system's age, condition, reliability, coverage, and maintenance requirements. The report should also identify any current operational challenges and present options for enhancing communication capabilities. (For example, the report can suggest incremental upgrades, a full system replacement, or a transition to a standardized platform used by neighbouring municipalities, which can improve interoperability.) Lastly, the report should include information about cost estimates, anticipated service life, and potential risks associated with delaying investments in the radio system. It is recommended that the Fire Chief engage a third-party radio system specialist to assist with the report.

In order to manage the costs associated with upgrading its radio systems (if required), the Department should consider grant funding, regional partnerships, and a phased procurement approach. Also, the Department should ensure that its radios are included in the asset management plan. This inclusion will help support long-term budgeting, streamline maintenance tracking, and enhance equipment lifecycle planning.

15.5 Recommendations

Recommendations regarding asset management in South-West Oxford are as follows:

15-1. South-West Oxford Fire and Emergency Services should consider purchasing a new fire apparatus for Station 1 – Brownsville in order to address current limitations related to transportation and operational capacity. As part of this acquisition, the fire department should investigate the advantages of procuring a mini-rescue pumper, which could enhance response capability across South-West Oxford by providing a more versatile, rapid-deployment unit capable of supporting both fire suppression and rescue operations.

15-2. South-West Oxford should develop a comprehensive preventative maintenance plan for all of its fire service equipment in order to ensure that reliable equipment is available for emergency responses. Doing so should also assist with extending the service life of the equipment.

15-3. The Fire Chief should prepare a comprehensive report recommending continued investment in radio communications equipment for South-West Oxford Fire and Emergency Services. In order to support informed decision-making, the report should include a detailed assessment of the current radio system's age, condition, reliability, coverage, and maintenance requirements, as well as any current operational challenges and future requirements.

15-4. The Fire Chief should continue to update the asset management plan for South-West Oxford, which includes schedules for replacing fire service vehicles and equipment with predetermined life cycles. The plan should be based on industry standards, manufacturers' recommendations, and best practices.

15.5 South-West Oxford Fire and Emergency Services should mandate that all of its fire apparatus maintenance, inspections, and repairs must be completed by individuals who are properly trained, qualified, and licensed to work on emergency vehicles.

16.0 Documentation and Records Management

16.1 Overview

It is vital for every fire department to maintain up-to-date records about its responses, fire prevention initiatives, inventory, and maintenance efforts.

Proper records management ensures there is documentation to support the following administrative and operational needs:

- Proper records management provides evidence that the fire department, its fire chief, and its municipal council are meeting their legislative requirements.
  - For instance, accurate fire prevention records are crucial for ensuring that a fire department complies with local regulations.
- Proper documentation can help a fire department reduce the risk of liability issues for itself and its municipality.
- A fire department can use documentation to complete strategic planning.
- Historical response data enables fire departments to analyze response times, identify service gaps, and justify staffing or funding needs. A fire department can also use this data to guide targeted community risk reduction efforts.
- Having a set of up-to-date inventories can support operational readiness by ensuring equipment is accounted for and serviceable. Detailed fleet repair logs can also help prolong the expected lifecycle of an apparatus, and they can assist with scheduling preventative maintenance and controlling costs.

Best practices have shown that using a formalized RMS is the most efficient way of maintaining accurate records.

16.2 Records Management System

16.2.1 Documentation

Context

Fire departments should maintain various types of documentation in order to uphold consistency, safety, and operational efficiency.

Table 33 outlines some of the key types of documentation for fire departments.

Table 34. Key types of documentation for fire departments.

Type of Documentation	Description
Operational documents	Written policies, SOGs, and manuals ensure that all personnel understand their roles, follow best practices, and perform tasks uniformly. This guidance can reduce the risk of errors during emergency operations. These documents also support legal protection and accountability by providing a clear record of departmental standards and expectations.
Training schedules	Training schedules ensure that personnel meet certification requirements and keep their skills up to date. The schedules can also support a fire department's strategic planning efforts.
Equipment checklists	Equipment checklists can help a fire department maintain readiness and identify maintenance issues early. This information can be used to prolong the life of essential apparatus and gear.

Both NFPA 1500 and NFPA 1561 address the importance of written procedures and records. These standards are included in the consolidated standard NFPA 1550, *Standard for Emergency Responder Health and Safety*.

Findings

The Department currently uses multiple digital platforms to store critical information across. Some information is also retained in physical files.

Because the Department has a fragmented RMS, the Department's personnel have to search through various files in order to locate necessary data. Searching for information in multiple locations leads to inefficiencies and potential delays in accessing time-sensitive information.

16.2.2 OFM Reporting

Context

In Ontario, fire departments are legally obligated to report fire incidents to the OFM in accordance with the FPPA. Fire departments must submit data to the OFM on a quarterly basis.

Section 11(1) of the FPPA designates fire chiefs and other specified individuals as "assistants to the Fire Marshal." These individuals are required to adhere to directives issued by the Fire Marshal, including the timely reporting of fire incidents.

In addition, Fire Marshal Directive 2023-001 includes a requirement that mandates assistants to the Fire Marshal to notify the OFM of fires or explosions that result in fatalities, life-threatening injuries, or significant property damage. These notifications must be communicated promptly. It is also essential for the OFM to fulfill its responsibilities, which include investigating the causes of fires and maintaining comprehensive fire-related statistics across the province.

Findings

The Department uses FirePro software to manage and submit its reports to the OFM.

16.3 Roadmap for Improvement

Records Management

The Department should update its RMS in order to reduce the inefficiencies caused by fragmented record-keeping practices. Ideally, the Department should start using a modern, cloud-based RMS platform.

In order to update its RMS efficiently, the Department should take the following steps:

1. Assess current documentation practices.
2. Identify where records are stored and then evaluate accessibility challenges.
3. Define departmental requirements (including compliance needs and user access levels).
4. Explore cloud-based RMS options that offer centralized data handling that can be integrated with the Department’s existing systems.

Overall, transitioning to a web-based RMS platform would enable the Department to streamline data entry, improve real-time access to critical information, and ensure consistent compliance with reporting standards.

Fire Department Modernization

There are numerous types of technology that can be integrated with an RMS. The Department can explore technologies that will allow it to enhance its response capabilities in a way that is affordable and suited to the organization’s staffing levels. Key innovations worth exploring include:

- mobile response applications that deliver real-time dispatch information and mapping
- digital vehicle and equipment check systems that streamline inspections and maintenance tracking

- enhanced firefighter-safety technologies, such as thermal imaging cameras, gas detection devices, and accountability systems

Table 34 lists some examples of the types of technology that can be integrated with an RMS. Each of these technologies can be integrated into the Department's operations. Going forward, the Department should explore these options to identify which tools will help enhance response times, coordination, and firefighter safety without overextending available resources.

Table 35. Examples of technologies used by the fire service.

Type of Technology	Purpose and Additional Information
Mobile dispatch and alerting apps (such as Who's Responding)[43]	• Personnel can use these applications to receive notifications and respond efficiently from remote locations.
GPS, mapping tools, satellite communication, drones, and location tools (such as What3Words)	• These tools can be integrated into vehicles to aid navigation. • These tools can help locate hydrants or rural addresses. • These tools can help pinpoint and relay exact positions (such as locations in densely forested regions).
Incident command software and pre-incident planning apps	• This type of software can provide access to building layouts, hazardous materials data, and hydrant locations.
Cloud-based training platforms and scheduling tools	• These tools can help manage certifications and availability.

16.4 Recommendations

Recommendations regarding documentation and records management in South-West Oxford are as follows:

16-1. South-West Oxford Fire and Emergency Services should adopt a cloud-based centralized records management system in order to enhance the accuracy, accessibility, and security of documentation related to fire operations.

[43] Note: The Department is already using the Who's Responding application for mobile notification purposes.

16-2. In order to enhance operational efficiency, improve firefighter safety, and deliver more timely and effective emergency responses, South-West Oxford Fire and Emergency Services should consider using modern technological tools that integrate with a records management system.

Appendix A: List of Abbreviations

This Master fire plan uses the following acronyms and abbreviations:

AHJ:	authority having jurisdiction
AODA:	Accessibility for Ontarians with Disabilities Act
CEMC:	community emergency management coordinator
CISM:	critical incident stress management
Council:	Council of the Township of South-West Oxford
CRA:	community risk assessment
Department, the:	South-West Oxford Fire and Emergency Services
E&R bylaw:	establishing and regulating bylaw
ECG:	emergency control group
EMCPA:	Emergency Management and Civil Protection Act, R.S.O. 1990
EMP:	emergency management program
MFP:	master fire plan
FPPA:	Fire Protection and Prevention Act, S.O. 1997
FUS:	Fire Underwriters Survey
GIS:	geographic information system
ICS:	incident command system
ISO:	incident safety officer
JHSC:	joint health and safety committee
NFPA:	National Fire Protection Association
NIST:	National Institute of Standards and Technology
OBC:	O. Reg. 332/12: Building Code
OFC:	O. Reg. 213/07: Fire Code

OFM:	Ontario Fire Marshal
OHSA:	Occupational Health and Safety Act, R.S.O. 1990
PIAR:	post-incident analysis and review
PPE:	personal protective equipment
RFSOC:	Rural Fire Service Oxford County
RMS:	records management system
SCBA:	self-contained breathing apparatus
SOGs:	standard operating guidelines

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Appendix C: Applicable Legislation

In Ontario, the fire service must observe various requirements outlined in the following legislation.

Accessibility for Ontarians with Disabilities Act: This act defines accessibility standards for goods, services, facilities, accommodation, employment, buildings, structures, and premises.

Coroners Act: This act outlines the regulations that govern the control of bodies. The act authorizes and regulates coroner inquests and coroner inquest recommendations.

Dangerous Goods Transportation Act: This act outlines the regulations that govern the transportation of dangerous goods.

Day Nurseries Act: This act defines the legislative requirements that day-care operators must meet (to the satisfaction of their local fire chief) before they can operate a day-care facility.

Development Charges Act: This act authorizes portions of development charges to be allocated to the fire service.

Emergency Management and Civil Protection Act: This act requires every municipality to have an emergency management plan and a trained community emergency management coordinator to conduct training exercises for the emergency control group.

Employment Standards Act: This act outlines regulations pertaining to human resources. (See also: **Labour Relations Act**.)

Environmental Protection Act: This act requires fire service personnel to report spills to the Ministry of the Environment, Conversation, and Parks (formerly referred to as the Ministry of the Environment).

Forest Fire Prevention Act: This act only applies to areas classified as “fire regions.” The act outlines regulations for controlling outdoor fires in restricted fire zones. The act requires municipalities to extinguish all grass, brush, and forest fires that occur within their geographic limits. The act authorizes the applicable minister to appoint wardens and officers.

Fire Protection and Prevention Act: This act outlines the regulations that govern both the Ontario Fire Marshal and municipalities. Part IX of the act is generally the responsibility of the Ministry of Labour, except where terms and conditions in collective agreements may adversely affect the provision of fire protection.

Highway Traffic Act: This act outlines: how fire vehicles are to operate during emergency responses; firefighter responses on roads that have been closed by police; the use of flashing green lights on the personal vehicles of fire service personnel; and controlling traffic at accident scenes.

Human Rights Code: This act defines how boards of inquiry, complaints, discrimination, and enforcement are handled.

Municipal Act: This act authorizes the passing of bylaws that are necessary for the provision of fire protection.

Municipal Freedom of Information and Protection of Privacy Act: This act defines how access to information held by institutions is granted and obtained. The intention of the act is to protect the privacy of individuals concerning personal information about themselves held by institutions.

Occupational Health and Safety Act: This act outlines regulations that govern various occupational health and safety concerns.

O. Reg. 207/96: Outdoor Fires: This regulation outlines directives for controlling outdoor fires that occur outside of restricted fire zones.

O. Reg. 211/01 and 440/08: Propane Storage and Handling: These regulations require and propane operators to obtain approval from their local fire department in regard to all risk and safety management plans. The fire department must approve the sections of the plans that deal with fire safety, fire protection, and emergency preparedness.

O. Reg. 213/07: Fire Code: This regulation outlines various requirements that fire departments must observe.

O. Reg. 297/13: Occupational Health and Safety Awareness and Training: This legislation outlines the health and safety awareness training that an employer must provide for its employees.

O. Reg. 332/12: Building Code: This regulation authorizes municipalities to appoint certain fire service personnel as building inspectors.

O. Reg. 340/94: Drivers' Licenses: This regulation outlines the licensing requirements of each class of motor vehicle.

O. Reg. 364/13: Mandatory Inspection – Fire Drill in Vulnerable Occupancy: This regulation mandates that fire departments complete inspections in vulnerable occupancies.

O. Reg. 365/13: Mandatory Assessment of Complaints and Requests for Approval: This regulation mandates that fire departments complete inspections upon complaint or request.

O. Reg. 378/18: Community Risk Assessments: This regulation mandates that a municipality or its fire department must complete a community risk assessment no later than five years after the day its previous community risk assessment was completed. The regulation also outlines content that all community risk assessments must include.

O. Reg. 380/04: Standards: This regulation defines standards for municipal emergency management programs.

O. Reg. 714/94: Firefighters – Protective Equipment: This regulation defines protective equipment standards that fire departments must meet.

Pesticides Act: This act makes it mandatory to report wholesale and retail pesticide use to the fire department.

Provincial Offences Act: This act authorizes assistants to the Fire Marshal to serve as provincial offences officers (in regard to offences related to smoke alarms).

Workplace Safety and Insurance Act: This act requires employers to report on-the-job accidents. The act also requires employers to document employee training records and provide them upon request.