Township of Severn

Fire Master Plan

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Fire Master Plan

Prepared by:

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Township of Severn Land Acknowledgement

A land acknowledgment is a formal statement that recognizes the relationship between Indigenous peoples and their traditional territories. At the Township of Severn, we recognize the following land acknowledgment:

> We would like to begin by acknowledging that the land on which we gather, and which the Township of Severn operates, is part of the traditional territory of the Anishinaabeg. For thousands of years, Indigenous peoples have been inhabiting and caring for this land. In particular, we acknowledge the territory of the Ojibway (or Chippewas) peoples. This territory is covered by Lake Simcoe Treaty 16 and the J. Collins land purchase.
>
> We are grateful to have the opportunity to work on this land, and by doing so, give our respect to its first inhabitants.

Statement of Impartiality

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

Disclaimer Regarding Recommendations

The recommendations in this fire master plan are intended to support the best interests of the Township of Severn.

The recommendations have been designed to provide information that the Township of Severn 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 fire master plan provides a long-term strategic vision for the Township of Severn. Every effort has been made to ensure that the information provided in this fire master plan is accurate as of the date the document was finalized.

In order to remain effective, the plan must be kept current with local needs and circumstances. At a minimum, the Township of Severn should review this document annually to ensure the information it contains remains up to date. In addition, this fire master 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 Severn contracted The Loomex Group to develop a fire master plan ("**FMP**").

The FMP project had the following goals:

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

The information in this FMP has been prepared for the Council of the Township of Severn ("**Council**") and Severn Fire and Emergency Services ("**the Department**").

It is important to acknowledge that the Department is an integral part of Severn. This FMP includes information about individual responsibilities for Council, other municipal departments/staff in Severn, and the Department. However, there are instances where these responsibilities may be shared between multiple stakeholders.

Council and the Department can reference this FMP when they are making policy, organizational, capital, and operational decisions for the short term (within 2 years), medium term (within 5 years) and long term (within 5 to 10 years).

Project Development Process

The FMP development process included the following components:

- Evaluate the Department's structure, programs, and levels of service.
- Meet with stakeholders from Severn and the Department to gain first-hand insights about the community and its fire services.
- Assess the current fire safety risks, needs, and circumstances in Severn.
- Review recent data for Severn and then compare that information to current trends in order to estimate the community's future fire protection needs.

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

Each section of this FMP focuses on a specific area of the Department's operations. In each section, context is provided for various legislative requirements, operational topics, and best practices. Relevant findings that are related to Severn and the Department are then presented (as applicable). Each section of this FMP also includes a "Roadmap for Improvement" and recommendations (as applicable).

Summary of Project Findings

Some of the Department's strengths are as follows:

- The Department is supported by municipal departments that promote and provide a safe working environment for the volunteer officers and firefighters.
- With the support of Council, the Department has established an administrative team that consists of personnel who work well together.
- The Department consists of volunteer officers and firefighters who are dedicated to providing their Council-approved level of service as effectively as possible.
- The Department has developed proactive public education and code enforcement programs.
- The Department has almost completed the necessary training to ensure compliance with certification requirements that will become mandatory in 2026.
    - The Department has also begun developing a plan to ensure that it meets certification requirements that will come into effect in 2028.

Some of the challenges facing the Department are as follows:

- Like many volunteer-based fire service providers, the Department faces challenges related to recruitment and retention.
- It is challenging for the Department to ensure that it has the number of firefighters needed to perform the critical tasks at the scene of a structure fire. This challenge is most common during weekdays.
- The Fire Administrative Team is working on shifting the Department to a more proactive organization (through the addition of more policies and procedures), but, at times, this process creates challenges for the volunteer officers and firefighters.

Throughout this FMP, the Department's strengths and weaknesses are both given due consideration in order to provide Severn with a realistic picture of the Department's current capabilities and limitations.

Summary of Recommendations

This FMP contains various recommendations for the Department to consider. The recommendations focus on several topics, such as:

- Update bylaws and agreements that reflect the Department's current operations.
- Build processes to ensure that all bylaws and agreements remain current.
- Continue working with applicable Severn directors or managers and volunteer officers and firefighters to build strong recruitment and retention programs.
- Continue working with applicable Severn directors to enhance both internal and external communications.
- Promote occupational health and safety for the volunteer officers and firefighters.
- Continue to enhance the current fire prevention programs while also expanding the ways of delivering those programs.
- Continue to ensure the Department meets the provincial certification requirements of 2026 and 2028 while managing existing training programs.
- Analyze response data to identify any gaps related to critical task numbers and the Department's effective response force.
- Ensure the Department's full-time staff members have a clear understanding of their roles and responsibilities, as well as changes that can be made to assist them with managing their roles.
- Review and update the fire stations in Severn (as required) to ensure the facilities meet the current and future needs of the community and the Department.
- Continue to enhance the water supply for non-hydrant areas by developing plans to ensure there is coverage in gap areas in Severn.
- Ensure the Department has a solid strategic plan to manage its fire fleet and equipment.
- Develop policies and procedures and build a link between the Department's fire-specific records management system and Severn's corporate records management system.

All of the recommendations in this FMP give consideration to prioritizing the safety of Severn's residents and firefighters. The recommendations are all within the township's means to implement, and they include ways for Severn to act cost-effectively wherever possible.

Overall, this FMP outlines strategies and resources that will help Council and the Department provide an appropriate level of service to the Severn community now and in the coming years.

Summary of Recommendations

Purpose of Recommendations

The recommendations in this FMP 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 Severn with a feasible implementation schedule, each recommendation in this FMP 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 two years.
    - Medium-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 52 recommendations found in this FMP.

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

Table 1. List of recommendations.

#	Section	Recommendation	Considerations
3-1	Legislation and Standards	Severn Fire and Emergency Services should continue to use the Township of Severn Community Risk Assessment to develop fire prevention programs and establish response standards.	Mandatory: No Council approval: No Budget: No Timeframe: Ongoing
3-2	Legislation and Standards	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Fire Prevention Officer, should review the Township of Severn Community Risk Assessment on an annual basis, updating the document when required.	Mandatory: No Council approval: No Budget: No Timeframe: Ongoing
3-3	Legislation and Standards	The Community Emergency Management Coordinator, in conjunction with the Emergency Management Program Committee, should develop a municipal business continuity plan for Council's consideration and approval.	Mandatory: No Council approval: Yes Budget: Yes Timeframe: Medium-term
4-1	Bylaws and Service Levels	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should update the establishing and regulating bylaw so that it reflects the current operations of Severn Fire and Emergency Services. The updated bylaw should then be presented to Council for consideration and approval.	Mandatory: Yes Council approval: Yes Budget: Possible Timeframe: Short-term

#	Section	Recommendation	Considerations
4-2	Bylaws and Service Levels	The Director of Fire and Emergency Services/Fire Chief should conduct a review of the current specialized services provided by Severn Fire and Emergency Services. The review should also consider the levels of specialized services that should be provided in the future, as this information can be used to help ensure Severn receives a level of service that is appropriate for the community.	Mandatory: No Council approval: Yes Budget: Possible Timeframe: Short-term
4-3	Bylaws and Service Levels	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should establish a schedule for reviewing all bylaws that affect the operations of Severn Fire and Emergency Services. The schedule should ensure that the bylaws are reviewed on a regular basis.	Mandatory: No Council approval: No Budget: No Timeframe: Medium-term
4-4	Bylaws and Service Levels	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should ensure that any updated bylaws that affect the operations of Severn Fire and Emergency Services are presented to Council for consideration and approval.	Mandatory: Yes Council approval: Yes Budget: Possible Timeframe: Medium-term
5-1	Fire Service Agreements	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should review all current agreements that affect the operations of Severn Fire and Emergency Services, making updates to the agreements as required.	Mandatory: Yes Council approval: Yes Budget: Possible Timeframe: Medium-term

#	Section	Recommendation	Considerations
5-2	Fire Service Agreements	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should establish a schedule to review all agreements that affect the operations of Severn Fire and Emergency Services. The schedule should ensure that the agreements are reviewed on a regular basis.	Mandatory: No Council approval: No Budget: No Timeframe: Medium-term
5-3	Fire Service Agreements	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should ensure that any updated or new agreement that affects the operations of Severn Fire and Emergency Services is presented to Council for consideration and approval.	Mandatory: Yes Council approval: Yes Budget: Possible Timeframe: Medium-term
6-1	Recruitment and Retention	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should continue to review the current recruitment program for Severn Fire and Emergency Services. The review should be used to find ways of improving the flexibility of the recruitment program, as this may help ensure the available firefighter staffing levels are maximized as much as possible.	Mandatory: No Council approval: No Budget: Possible Timeframe: Ongoing
6-2	Recruitment and Retention	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should develop a volunteer firefighter retention committee that includes a volunteer officer or firefighter from each of the fire stations in Severn. The mandate of the committee should be to review the current retention programs and strategies for Severn Fire and Emergency Services and compare them to related programs across the province.	Mandatory: No Council approval: No Budget: Yes Timeframe: Medium-term

#	Section	Recommendation	Considerations
7-1	Departmental Communications	The Director of Fire and Emergency Services/Fire Chief should formalize an internal communications plan for Severn Fire and Emergency Services that aligns with Severn's current communication policies and strategies.	Mandatory: No Council approval: No Budget: Possible Timeframe: Short-term
7-2	Departmental Communications	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should develop a plan (and accompanying procedures) for after-hours critical messaging for emergency response communications.	Mandatory: No Council approval: No Budget: No Timeframe: Short-term
7-3	Departmental Communications	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should develop a process to thank the local businesses that support Severn Fire and Emergency Services.	Mandatory: No Council approval: No Budget: Possible Timeframe: Medium-term
8-1	Occupational Health and Safety	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Joint Health and Safety Committee, should continue to review and implement the Cancer Prevention Checklist into the operations of Severn Fire and Emergency Services (where appropriate).	Mandatory: No Council approval: No Budget: Possible Timeframe: Short-term

#	Section	Recommendation	Considerations
8-2	Occupational Health and Safety	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Joint Health and Safety Committee, should develop a process and policy to manage the cleaning, testing, and repairing of personal protective equipment. The process/policy needs to include a guideline for managing any personal protective equipment that is contaminated after being used during an emergency response.	Mandatory: Yes Council approval: No Budget: Possible Timeframe: Short-term
8-3	Occupational Health and Safety	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should review the ways in which the individual health and safety committees in Severn can work together, such as through the development of common policies.	Mandatory: No Council approval: No Budget: No Timeframe: Ongoing
8-4	Occupational Health and Safety	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should consider forming a health and wellness committee for Severn Fire and Emergency Services. The committee should focus on cancer prevention, peer support, and critical incident programs.	Mandatory: No Council approval: No Budget: Possible Timeframe: Medium-term
8-5	Occupational Health and Safety	The Director of Fire and Emergency Services/Fire Chief should prioritize ways to enhance on-scene radio coverage in order to protect the safety of firefighters and reduce liability for Severn.	Mandatory: Yes Council approval: yes Budget: Yes Timeframe: Medium-term

#	Section	Recommendation	Considerations
9-1	Fire Prevention and Public Education	Severn Fire and Emergency Services should update its fire prevention policy to ensure that it aligns with NFPA 1035 and the information in the Township of Severn Community Risk Assessment. The Director of Fire and Emergency Services/Fire Chief should then submit the updated policy to Council for consideration and approval.	Mandatory: No Council approval: Yes Budget: No Timeframe: Medium-term
9-2	Fire Prevention and Public Education	Severn Fire and Emergency Services should continue to enhance its smoke alarm/carbon monoxide alarm program based on OFM guidance, past incident data, and community demographics. The scope of the program (and all subsequent campaigns) should also be based on the fire department's available resources.	Mandatory: Yes Council approval: No Budget: Possible Timeframe: Ongoing
9-3	Fire Prevention and Public Education	Severn Fire and Emergency Services should explore the possibility of establishing a dedicated public education group that includes officers and firefighters who are interested in transitioning from performing suppression duties to delivering public education programs.	Mandatory: No Council approval: No Budget: Possible Timeframe: Medium-term
9-4	Fire Prevention and Public Education	Severn Fire and Emergency Services should explore whether it is possible to update its recruitment process to include opportunities for candidates to participate in public education programs.	Mandatory: No Council approval: No Budget: Possible Timeframe: Medium-term

#	Section	Recommendation	Considerations
9-5	Fire Prevention and Public Education	The Director of Fire and Emergency Services/Fire Chief should complete a comprehensive cost-benefit analysis regarding the mandatory installation of residential sprinkler systems in new residential buildings located in water-access-only areas. The Director of Fire and Emergency Services/Fire Chief should also develop a public education program regarding the use of sprinkler systems in urban/wildland areas.	Mandatory: No Council approval: No Budget: No Timeframe: Long-term
9-6	Fire Prevention and Public Education	Applicable representatives of the Township of Severn (including the Chief Administrative Officer) should seek legal advice regarding the current “portable pump program.” Specifically, Severn should try to determine whether the scope of the program poses any liability issues for the township.	Mandatory: Yes Council approval: No Budget: Yes Timeframe: Medium-term
10-1	Training Program	The Deputy Chief, in conjunction with the Training Officer, should establish a training committee to assist with implementing the training program for Severn Fire and Emergency Services and ensuring that sufficient instructors are available to facilitate training.	Mandatory: No Council approval: No Budget: Yes Timeframe: Medium-term
10-2	Training Program	The Deputy Chief, in conjunction with the Training Officer, should develop a formalized training policy for Severn Fire and Emergency Services. The policy should set the expectations and levels of training required for certification (in compliance with the legislated deadlines).	Mandatory: Yes Council approval: No Budget: Possible Timeframe: Short-term

#	Section	Recommendation	Considerations
10-3	Training Program	The Deputy Chief, in conjunction with the Training Officer, should develop a formalized officer development plan to ensure that Severn Fire and Emergency Services has enough qualified officers (and potential officers) to meet the definition of a component supervisor as defined by the Occupational Health and Safety Act.	Mandatory: Yes Council approval: No Budget: Yes Timeframe: Short-term
10-4	Training Program	The Deputy Chief, in conjunction with the Training Officer, should integrate technology into the training program in order to help front-line instructors create instructional materials, develop lesson plans, and update training certifications.	Mandatory: No Council approval: No Budget: Possible Timeframe: Short-term
11-1	Response	The Director of Fire and Emergency Services/Fire Chief should develop a response standard that recommends levels of service for low-, moderate-, and high-risk occupancies. This standard should be based on historical response data and an effective response force that is achievable for Severn Fire and Emergency Services. After the response standard is developed, it should be included in the establishing and regulating bylaw.	Mandatory: No Council approval: Yes Budget: No Timeframe: Long-term
11-2	Response	The Director of Fire and Emergency Services/Fire Chief should use historical emergency response data to identify any gaps in the effective response force for Severn Fire and Emergency Services. If any gaps are identified, the Director of Fire and Emergency Services/Fire Chief should consider potential solutions to mitigate those gaps and then present those options to the Chief Administrative Officer.	Mandatory: No Council approval: No Budget: No Timeframe: Long-term

#	Section	Recommendation	Considerations
11-3	Response	The Director of Fire and Emergency Services/Fire Chief should meet with the fire chiefs who oversee fire departments in neighbouring municipalities in order to discuss establishing automatic aid agreements for the response gap areas that have been identified in Severn.	Mandatory: No Council approval: No Budget: No Timeframe: Short-term
12-1	Fire Department Structure	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Chief Administrative Officer, should review the updated organizational structure recommended in the 2026 Township of Severn Fire Master Plan. Specifically, consideration should be given to reclassifying the Fire Prevention Officer position as an additional Deputy Chief.	Mandatory: No Council approval: Yes Budget: Yes Timeframe: Medium-term
12-2	Fire Department Structure	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Chief Administrative Officer, should use the normal budgeting process to establish a set number of hours per week to have on-duty volunteer firefighters to complete operational tasks, handle legislative requirements, and solve response gaps. The amount of remuneration should be based on a volunteer firefighter's remuneration.	Mandatory: No Council approval: Yes Budget: Yes Timeframe: Medium-term
12-3	Fire Department Structure	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should develop a succession plan for all positions within Severn Fire and Emergency Services.	Mandatory: No Council approval: No Budget: No Timeframe: Medium-term

#	Section	Recommendation	Considerations
13-1	Fire Stations and Related Facilities	The Director of Fire and Emergency Services/Fire Chief should work with the District Chief of each fire station in Severn to review the storage areas at each station. This review should involve determining which items are required at each site, as well as a way to keep each storage area organized.	Mandatory: No Council approval: No Budget: Possible Timeframe: Short-term
13-2	Fire Stations and Related Facilities	The Director of Fire and Emergency Services/Fire Chief should develop a report that recommends installing standalone backup generators at Station 1 and Station 3. The report should identify possible grant opportunities, as well as the level of funding required to complete the installations. Any requests for funding for the generators should be made through the Severn's normal budgeting process.	Mandatory: No Council approval: Yes Budget: Yes Timeframe: Medium-term
13-3	Fire Stations and Related Facilities	The Director of Fire and Emergency Services/Fire Chief should develop a long-term strategic plan that includes budget considerations and recommendations regarding the most practical way of extending the life cycle of each fire station in Severn. The strategic plan should also include approximate timelines for when each of the fire stations will need to undergo renovations or be replaced. Any future requests for funding should be made through Severn's normal budget process.	Mandatory: No Council approval: Yes Budget: Yes Timeframe: Medium-term
13-4	Fire Stations and Related Facilities	The Director of the Fire and Emergency Services/Fire Chief should review the requirements and feasibility of renovating Station 3 in order to accommodate a front-line tanker and provide proper storage space for personal protective gear.	Mandatory: No Council approval: No Budget: Possible Timeframe: Short-term

#	Section	Recommendation	Considerations
13-5	Fire Stations and Related Facilities	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Public Works, should review the possibility of allowing Severn Fire and Emergency Services to use a portion of the public works yard to conduct practical training.	Mandatory: No Council approval: No Budget: Yes Timeframe: Long-term
14-1	Water Supply	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Public Works, should establish a schedule/timeline for completing fire flow testing in 2026 for all of the current municipal fire hydrants in Severn.	Mandatory: Yes Council approval: No Budget: Possible Timeframe: Short-term
14-2	Water Supply	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Public Works, should develop a water supply plan for the non-hydrant-protected areas in Severn. The plan should identify any gap areas, and it should also include a maintenance and testing program. In addition, if any gap areas are identified, a report should be developed regarding the installation of water-supply options for those non-hydrant-protected areas. Any requests for funding for the installation of water supply options should be made through the Severn's normal budgeting process.	Mandatory: No Council approval: No Budget: Yes Timeframe: Medium-term
15-1	Fire Fleet and Equipment	Severn Fire and Emergency Services should ensure that it reviews the onboard pumping capacity of any new tanker that it orders. In order to help Severn maintain its Superior Tanker Shuttle Accreditation and provide a better level of service in non-hydrant-protected areas, any new tanker that is ordered should have an onboard pumping capacity of 3,785 litres/minute (1,000 gallons/minute).	Mandatory: No Council approval: Yes Budget: Yes Timeframe: Ongoing

#	Section	Recommendation	Considerations
15-2	Fire Fleet and Equipment	The Director of Fire and Emergency Services/Fire Chief should review all the specifications of any vehicle that Severn considers purchasing as part of its fire fleet replacement plan. The review should focus on determining whether the new apparatus has the capacity/features to meet Severn's current and anticipated fire protection needs.	Mandatory: No Council approval: No Budget: No Timeframe: Ongoing
15-3	Fire Fleet and Equipment	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Public Works, should review whether there are any opportunities to share an in-house mechanic as a way to achieve potential cost-saving benefits related to necessary repairs and maintenance for the vehicles in the Township of Severn's fire fleet, as well as other municipal vehicles.	Mandatory: No Council approval: No Budget: No Timeframe: Long-term
15-4	Fire Fleet and Equipment	Severn Fire and Emergency Services should develop an equipment maintenance program to ensure that all of its equipment is serviced on a regular basis. An equipment maintenance plan can help the fire department ensure that each piece of its equipment remains in optimal working condition and reaches its expected lifespan.	Mandatory: Yes Council approval: No Budget: Possible Timeframe: Short-term
15-5	Fire Fleet and Equipment	Severn Fire and Emergency Services should engage a third-party radio communications company to complete a full needs analysis of the current radio and paging systems. Any budgetary impacts that result from that study should be presented to the Chief Administrative Officer for consideration and inclusion in future budgets (as applicable). Also, the third-party radio communications company should help the fire department develop a radio communications plan.	Mandatory: Yes Council approval: No Budget: Yes Timeframe: Medium-term

#	Section	Recommendation	Considerations
15-6	Fire Fleet and Equipment	The Director of Fire and Emergency Services/Fire Chief should develop an equipment replacement plan that includes budgetary information. Any budgetary impacts that result from that plan should be presented to the Chief Administrative Officer for consideration and inclusion in future budgets (as applicable).	Mandatory: No Council approval: No Budget: Yes Timeframe: Medium-term
16-1	Documentation and Records Management	Severn Fire and Emergency Services should continue implementing all applicable modules in its record management system.	Mandatory: No Council approval: No Budget: Possible Timeframe: Short-term
16-2	Documentation and Records Management	The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should continue implementing the data-sharing process between the fire department-specific records management system and the Township of Severn's corporate electronic document records management system.	Mandatory: No Council approval: No Budget: No Timeframe: Short-term
16-3	Documentation and Records Management	Severn Fire and Emergency Services should leverage technology (where possible) to ensure that accurate data is collected for both the fire department-specific and corporate records management systems. Additionally, the technology should make it easy for the officers and firefighters to enter information into the system, as well as retrieve information.	Mandatory: No Council approval: No Budget: No Timeframe: Ongoing

1.0 Introduction

1.1 Purpose of a Fire Master Plan

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

The goal of an FMP is to provide information that a fire department can use to accomplish the following initiatives:

- Protect the safety of local firefighters, residents, and businesses.
- Adjust or enhance services to meet current and anticipated needs.
- Remain compliant with applicable legislation and training requirements.
- Explore opportunities to introduce shared services.
- Prepare budgets, implementation plans, and asset management plans.

Overall, an FMP 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 Fire Master Plan for the Township of Severn

1.2.1 Project Background

In 2025, Severn contracted The Loomex Group to complete an FMP that the township and the Department can use to make policy, capital, and organizational decisions over a ten-year timeframe.

In order to meet the stated objectives, the FMP 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 FMP development process, various recommendations have been developed to help Severn enhance community safety for its residents, visitors, and businesses. These recommendations include strategies related to governance, services, and personnel. All recommendations prioritize the safety of local residents and firefighters, and they aim to provide Severn with ways to enhance its services in a cost-effective manner.

1.2.2 Initial Stakeholder Engagement Process

Start-Up Meeting

The Loomex Group began the FMP development process by meeting with the Director of Fire and Emergency Services/Fire Chief to review the project's work scope and framework.

Following the start-up meeting, The Loomex Group provided the Director of Fire and Emergency Services/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 Severn and the Department:

- Mayor and Council
- Laurie Kennard, CAO
- Ritch Lowell, Director of Fire and Emergency Services/Fire Chief
- Robert Nagle, Deputy Chief
- Jake Hawkins, Fire Prevention Officer
- John Kidd, Training Officer
- Volunteer District Chiefs, Captains, and Firefighters
- Michelle Prophet-Healy, Manager of Human Resources/Health and Safety
- Anthony Drouin, Water and Wastewater Superintendent

The stakeholder consultations were held in order to gain insights about the fire protection services in Severn 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 Severn and the Department, such as:

- applicable legislation, bylaws, and agreements
- municipal maps
- operating and capital budgets
- organizational charts

- current fire protection services
- standard operating guidelines ("**SOGs**"), policies, and other documents that provide directions for the local fire service personnel

Site Visits

Representatives of The Loomex Group spent time in Severn to observe the community firsthand.

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 participants also discussed the Department's current and anticipated needs.

1.2.4 Drafting the Fire Master Plan

Document Development Process

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

The following questions were considered while the FMP 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 FMP development process incorporated regular meetings with the Department's personnel. These meetings ensured that the FMP benefited from continual stakeholder contributions.

Document Structure

The information in this FMP 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 Severn 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 Severn.

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

1.2.5 Finalizing the Fire Master Plan

The final FMP deliverables are as follows:

- finalized copies of the FMP to be provided to the Director of Fire and Emergency Services/Fire Chief and the CAO of Severn
- a presentation for Council that summarizes key findings and recommendations from the finalized FMP document

2.0 Community Characteristics

2.1 Overview of the Township of Severn

The Township of Severn is a lower-tier municipality located in the northern corner of the County of Simcoe, approximately 90 minutes north of the Greater Toronto Area. Severn borders the City of Orillia, the Township of Oro-Medonte, and the Township of Tay. Severn is well-connected to the rest of Ontario, as it contains portions of Highways 400, 11, and 12.

Severn was founded on January 1, 1994, following the amalgamation of the village of Coldwater, the Townships of Matchedash and Orillia, and parts of the Townships of Oro-Medonte and Tay.

Severn consists of several rural and urban communities, including:

- Ardtrea
- Coldwater
- Fesserton
- Marchmont/Bass Lake
- Port Severn
- Severn Falls
- Washago
- Westshore

According to the 2021 Statistics Canada census, Severn has a population of 14,576 residents.

Geographically, Severn covers an area of 523.06 square kilometres and contains a unique mix of rugged pre-Cambrian shield, pristine waters, and rolling farmland.

Severn's economy is supported by a variety of sectors, and the community contains historical buildings, retail businesses, restaurants, campgrounds, resorts, and marinas.

2.2 Overview of Severn Fire and Emergency Services

Overview

The Department was created in 1994 following the formation of the Township of Severn. Prior to 1994, the area was served by the Coldwater Fire Department, the Matchedash Township Fire Department, and the Orillia Township Fire Department.

Between 2020 and 2024, the Department responded to an average of 410 incidents per year.[2]

As of this FMP, the Department is a volunteer fire service supported by full-time administrative staff, as well as volunteer senior officers, officers and firefighters. The Department's full-time staff includes:

- Director of Fire and Emergency Services/Fire Chief
- Deputy Fire Chief
- Training Officer
- Fire Prevention Officer

The Department operates from four fire stations. Station 1 and Station 2 each have their own dedicated response areas, whereas Station 3 and Station 4 share a single response area.[3]

[2] For more information about the Department's response statistics, see section 11 of this FMP.

[3] For more information about the Department's fire stations, see section 13 of this FMP.

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 FMP.

Industry Standards and Guidelines

In addition to legislation, the following industry standards and guidelines 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).

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 2 lists some of the requirements that all municipalities and fire departments must meet according to the FPPA and related regulations. The table indicates whether Severn and the Department are compliant with these requirements.

Table 2. Selected requirements of the Fire Protection and Prevention Act.

Reference	Requirement	Compliant?
FPPA, 2 (2) (b)	Establish a fire department.	Yes
FPPA, 2 (1) (a)	Establish a program in the municipality which must include public education.	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 indicated in the table above, Severn 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

Severn had a CRA completed in 2024. By completing this document, Severn is compliant with O. Reg. 378/18.

Table 3 shows the risks that were identified in Severn according to the 2024 CRA. The table also shows the overall risk scores/levels that were assigned to each threat.

Table 3. Risks identified in the 2024 Severn Community Risk Assessment.

Risk Name	Risk Score	Risk Level
Rail line incident	125	**Very High**
Human health emergency	110	**High**
Wildland/grass/bush fire	108	**High**
Road and highway emergency	108	**High**
Weather event	105	**High**
Flooding	100	**High**
Critical infrastructure failure	96	**High**
Fire in residential occupancy	90	**Moderate**
Fire in vulnerable occupancy	84	**Moderate**
Fire in downtown core	84	**Moderate**
Hazardous materials incident	80	**Moderate**
Fire/explosion in commercial occupancy	76	**Moderate**
Fire/explosion in schools or other assembly occupancy	72	**Moderate**
Fire/explosion in industrial occupancy	72	**Moderate**

The 2024 CRA also included risk treatment plans that Severn can implement to address the risks that were identified in the community. These risk treatment plans also include information that the Department can use to develop fire prevention initiatives aimed at enhancing community safety.

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. If any of those facilities are renovated—or if new facilities are constructed—they would have to comply with the AODA.

Findings

The work scope for this FMP did not include an accessibility assessment for the Department's fire stations. However, based on a cursory visual review, it is clear that not all of the Department's fire stations are compliant with the AODA.[4]

3.5 Emergency Management

3.5.1 Requirements of the Emergency Management and Civil Protection Act

Context

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

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).

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

[4] For more information about the Department's fire stations, see section 13 of this FMP.

Many of the duties associated with emergency management, such as response efforts, are performed in a facility called an emergency operations centre ("**EOC**").

Findings

Table 4 summarizes some of the requirements found in O. Reg. 380/04. The table indicates whether Severn and the Department are compliant with the applicable requirements.

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

Requirement	Findings
Appoint a primary CEMC and an alternate CEMC.	The Director of Fire and Emergency Services/Fire Chief serves as Severn's primary CEMC. The Deputy Chief serves as Severn's alternate CEMC.
Establish an EOC and an alternate EOC.	Severn's municipal office serves as the township's primary EOC. Station 3 serves as Severn's alternate EOC.
Establish an EMP committee.	An EMP committee has been established and approved by Council.
Develop an emergency plan.	Severn's emergency response plan is current, and it is reviewed annually.
Review the community's hazard identification and risk analysis annually (making updates as required).	Severn reviews its hazard identification and risk analysis annually, updating the document as needed.
Review the community's list of critical infrastructure annually (making updates as required).	Severn reviews its list of critical infrastructure annually, updating the document as needed.

Overall, the township takes a proactive approach to ensure that it meets the compliance requirements stated in the EMCPA and O. Reg. 380/04. For instance, Council has established Bylaw No. 2023-27, which formally appoints members to the township's EMP committee.

According to Bylaw No. 2023-27, Severn's EMP committee includes the following members:

- Chief Administrative Officer

- Director of Fire and Emergency Services/Fire Chief/CEMC
- Director of Public Works
- Director of Planning and Development
- Director of Finance/Treasurer
- Deputy Fire Chief
- Mayor

3.5.2 Emergency Preparedness and Business Continuity

Context

As per O. Reg. 380/04 and the EMCPA, an EMP must include a public education component that addresses emergency preparedness. According to the Government of Canada's website, emergency preparedness "includes all activities, such as plans, procedures, contact lists and exercises, undertaken in anticipation of a likely emergency."[5]

Another essential part of emergency preparedness is business continuity. Various disasters and large-scale emergencies can severely impact the businesses in a community. For example, some incidents may cause a temporary suspension of services for certain businesses. If an incident requires a business to remain closed for an extended period, the loss of revenue may prove so great that the business is unable to reopen. Business closures can lead to a loss of jobs and services in a community, as well as a loss of revenue to the municipality.

It is also worth remembering that a municipality is often the largest employer in the community, which means that a municipality can consider itself a business. As such, it is in a municipality's best interest to develop a business continuity plan (also known as a continuity of operations plan). Doing so can help ensure that there is a strategy in place to guide continuity and recovery operations, which can help safeguard the economic standing of the community.

Findings

As of the FMP, Severn provides public education related to emergency management. However, Severn does not currently have a municipal business continuity plan.

[5] Health Canada, "Emergency Preparedness."

3.6 NFPA Certification

Context

O. Reg. 343/22 requires fire service personnel to obtain certifications to specific NFPA standards by the legislated deadlines in order to confirm they have the skills and knowledge to carry out their duties safely and effectively.

Most certifications have a compliance deadline of July 1, 2026, although select certifications have a deadline of July 1, 2028.[6]

Findings

As of this FMP, the Department is striving to ensure that its senior officers and firefighters will meet the requirements of O. Reg. 343/22 prior to the legislated deadlines.[6]

3.7 Roadmap for Improvement

Community Risk Assessment

The Department should use the information in the 2024 CRA for Severn to complement the information and recommendations provided in this FMP.

The Director of Fire and Emergency Services/Fire Chief and the Fire Prevention Officer should also work together to review the CRA on an annual basis, ensuring the document is updated as required.

Emergency Management

Severn is taking a proactive approach to maintaining its EMP and adhering to the requirements of the EMCPA. However, as a best practice, all of the current emergency management bylaws should be reviewed to confirm they are up to date and reflect the structure of the current EMP committee.

Additionally, the EMP committee should consider expanding the EMP for Severn by creating a business continuity plan. Doing so will help enhance Severn's emergency management capabilities. For instance, a business continuity plan can help Severn reduce or mitigate the loss of municipal services during an emergency, as well as protect its critical services.

[6] For more information about O. Reg. 343/22 and NFPA certification requirements, see section 10.7 of this FMP.

3.8 Recommendations

Recommendations regarding legislation and standards in Severn are as follows:

3-1. Severn Fire and Emergency Services should continue to use the Township of Severn Community Risk Assessment to develop fire prevention programs and establish response standards.

3-2. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Fire Prevention Officer, should review the Township of Severn Community Risk Assessment on an annual basis, updating the document when required.

3-3. The Community Emergency Management Coordinator and the Emergency Management Program Committee should develop a municipal business continuity plan for Council's consideration and approval.

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 FMP 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.

As noted in section 3.6 of this FMP, firefighters must obtain NFPA certification in order to deliver specific firefighting services (as per O. Reg. 343/22). The type of NFPA certification a firefighter must obtain depends on the level of service they are expected to provide, which is an item that can be included in an E&R bylaw.

Formally setting a level of service in the E&R bylaw will allow firefighters to focus on obtaining the NFPA certifications that are applicable to them. In addition, a fire department can reference the E&R bylaw when it is time to review its training program. Doing so may help identify whether any gaps exist in the current program.

Findings

The current E&R bylaw for Severn is Bylaw No. 2007-65, “Being a bylaw to establish and regulate a fire department for the corporation of the Township of Severn.”

According to Bylaw No. 2007-65, Council has approved the following services and operational criteria for the Department:

- the establishment of a fire chief and reporting structure
- the responsibility of the fire chief
- the organizational structure of the fire department
- the minimum qualifications for new fire department personnel
- the establishment of a fire department chaplain
- the criteria for responding to emergencies outside the borders of the Township of Severn

A review of Bylaw No. 2007-65 shows that the document does not fully reflect the Department’s current operations.

4.3 Core Services

Context

Overview of 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.

Overview of Firefighting Services

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

The current E&R bylaw for Severn does not define the Department's core firefighting services, which are as follows:

- emergency medical response
- interior and exterior structural firefighting
- responses to water-access-only fires (with marine vessel assistance from the fire departments in Georgian Bay and Muskoka Lake)
- vehicle fire responses
- wildland fire responses
- responses to motor vehicle accidents with or without extrication
- responses to island fires (with assistance from the fire departments in Georgian Bay and Muskoka Lake)
- public assistance calls
- other agency assistance calls
- mutual aid support
- management of the portable pump program

In addition to firefighting services, the Department's core services 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 FMP.

4.4 Specialized Services

Context

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.[7]
- 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.[8]

[7] 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 FMP.

[8] 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*.

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 that are 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 in order 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 the appropriate equipment.

By aligning its technical rescue services with NFPA standards, a fire department can ensure that 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 provide an enhanced understanding of risks, as well as better practices for guiding and supervising fire service personnel.

As noted in section 4.3 of this FMP, 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 applicable certifications.

Findings

The current E&R bylaw for Severn does not define which specialized services the Department is approved to provide.

Table 5 lists the specialized services that the Department currently delivers. The table also indicates which level of service the Department provides for each service.

Table 5. Specialized services provided by Severn Fire and Emergency Services.

Type of Service	Level of Service
Rope rescue	Awareness
Confine space rescue	Awareness
Trench rescue	Awareness
Hazardous materials response	Operational
High/low angle rescue	Awareness
Water/ice rescue	Shore-based
Marine vessel rescue	Awareness

In regard to water rescues and responses to fires requiring a marine vessel, the Department has an agreement with the fire departments in the Township of Georgian Bay and the City of Orillia. The agreements allow the neighbouring fire departments to provide assistance with those services. There is also one “handshake” water/ice rescue agreement with the fire department in the Township of Muskoka Lakes.

Additionally, the Department can request assistance from both the Province of Ontario and Barrie Fire and Emergency Services to help manage some of its specialized services.

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
- firework bylaws
- fire route bylaws
- cost-recovery bylaws

Some municipalities also have fire protection bylaws that outline their mutual aid, automatic aid, and other service agreements.[9]

Findings

Table 6 lists the fire protection bylaws that Severn has in place (as of this FMP). Some of these additional bylaws are established to support agreements.

Table 6. Current fire protection bylaws in Severn.

Bylaw #	Bylaw Title	Scope of the Bylaw
2004-53	Being a by-law to designate and regulate private roadways as fire routes within the Township of Severn	Establish private roads that are required to be fire routes and explain how these roads shall be built and maintained.
2016-61	Being a by-law to provide for the installation of portable pumps and ancillary equipment in storage containers for the purpose of firefighting along the Severn River portion of the Township of Severn, and regulate the use thereof by citizens or citizen groups	Establish a portable pump program for water-access-only areas in Severn and provide details on the ownership, maintenance, and management of related equipment.
2020-53	Being a by-law to restrict outdoor fires on crown land at 6920 Upper Big Chute Road	Establish a restriction on any burning on crown land that the fire department cannot access.
2021-23	Being a by-law to regulate open-air burning in the Township of Severn	Establish rules related to open-air burning, including when and how members of the public can conduct open-air burning.

[9] For more information about fire service agreements, see section 5 of this FMP.

Bylaw #	Bylaw Title	Scope of the Bylaw
2023-53	Being a by-law to regulate outdoor wood burning appliances in the Township of Severn	Establish rules about the location and use of outdoor wood-burning appliances.
2025-21	Being a by-law to adopt user fees and service charges for the Township of Severn	Establish fees for municipal services, including fire watch/fire scene security and standby fees.
2025-22	Being a by-law to regulate the use of fireworks within the Township of Severn	Establish when fireworks can be discharged in Severn, as well as who can discharge fireworks.
2025-63	Being a by-law restricting the weight of vehicles passing over bridges	Establish gross weight limits for bridges in Severn. This bylaw affects the Department's operations due to the weight of some of its vehicles.
2025-86	Being a by-law to provide for the remuneration and expenses for volunteer firefighters of the Township of Severn	Establish policies regarding remuneration, honorariums, and expenses to be paid to the Department's volunteer officers and firefighters.

4.6 Roadmap for Improvement

Establishing and Regulating Bylaw

An E&R bylaw is a vitally important document because it is used to define how a fire department operates. Due to this importance, it is imperative for an E&R bylaw to be reviewed, updated, and approved by a municipal council whenever any changes are made to the local fire department's types or level of service.

As noted in section 4.3, the current E&R bylaw for Severn does not reflect the Department's current operations. The bylaw is also vague in regard to the way the Department is expected to operate. Going forward, the Director of Fire and Emergency Services/Fire Chief and the Severn Director of Corporate Services/Clerk should update the E&R bylaw to ensure it reflects the current level of service the Department is providing.

The new E&R bylaw should provide clear details about both core and specialized services, as this will provide Council with unambiguous information for its review and approval. In addition, an organizational chart should be created for the updated E&R bylaw (included as a schedule or an annex).

Overall, the updates to the E&R bylaw should aim to ensure the document is a policy document rather than an operational document, as it is Council's responsibility to approve specific policies (such as a policy regarding the Department's level of service).

Specialized Services

There are significant monetary and personnel costs associated with the delivery of specialized services. These costs may become more challenging to manage due to the NFPA 1006 certification requirements that will take effect in 2028.

In order to prepare for the NFPA certification requirements, including the associated costs, the Department should review all of the specialized services it is currently providing. This review can help the Department verify whether it is providing the correct services. After the Department confirms that it is delivering the appropriate specialized services, the level of service for each of those tasks can be reviewed to determine whether any changes need to be made to the E&R bylaw. If any changes are required, they should be presented to Council for consideration and approval. In addition, all of the approved services will need an accompanying training plan that will help the Department's officers and firefighters meet the 2028 certification deadline.

When the Department is reviewing its specialized services, it should also explore potential opportunities to work with neighbouring fire departments for the purpose of sharing the costs associated with specialized services.

Due to the makeup of Severn, the Department should also review types/levels of service related to farm machinery rescues, silo rescues, and elevator rescues.

Other Fire Protection Bylaws

Severn has various fire protection bylaws that affect the Department's operations. Many of those bylaws have been in force for several years, and they should be reviewed to ensure they are current. It would also be beneficial for the Director of Fire and Emergency Services/Fire Chief to establish a schedule for reviewing Severn's fire service bylaws on a regular basis, updating them (as required) in conjunction with the Director of Corporate Service/Clerk. All updated bylaws would then need to be presented to Council for consideration and approval.

4.7 Recommendations

Recommendations regarding the bylaws and service levels in Severn are as follows:

4-1. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should update the establishing and regulating bylaw so that it reflects the current operations of Severn Fire and Emergency Services. The updated bylaw should then be presented to Council for consideration and approval.

4-2. The Director of Fire and Emergency Services/Fire Chief should conduct a review of the current specialized services provided by Severn Fire and Emergency Services. The review should also consider the levels of specialized services that should be provided in the future, as this information can be used to help ensure Severn receives a level of service that is appropriate for the community.

4-3. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should establish a schedule for reviewing all bylaws that affect the operations of Severn Fire and Emergency Services. The schedule should ensure that the bylaws are reviewed on a regular basis.

4-4. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should ensure that any updated bylaws that affect the operations of Severn Fire and Emergency Services are presented to Council for consideration and approval.

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

The Department currently has several types of service agreements in place, including mutual aid, fire protection, and service level agreements. Table 7 summarizes the current service agreements that Council has approved for Severn.

Table 7. Current fire service agreements in Severn.

Type of Agreement	Year Formed	Participating Partner	Scope of Agreement
Mutual Aid	2007	Fire departments in the County of Simcoe	A reciprocal agreement to provide or receive resources when requested within the County of Simcoe or the Province of Ontario.
Mutual Aid	2007	Fire departments in the District of Muskoka	A reciprocal agreement to provide or receive resources when requested within the District of Muskoka or the Province of Ontario.
Fire Protection Agreement	2023	Province of Ontario	A reciprocal agreement to provide or receive resources for wildfire responses in identified municipal land and crown land.
Fire Protection Agreement	2025	Township of Georgian Bay	An agreement with the Georgian Bay Fire Department to provide support for water/ice rescues in Severn.
Fire Protection Agreement	2007	City of Orillia	An agreement with the Orillia Fire Department to provide support for water/ice rescues in Severn.
Service Agreement	2003	Georgian Central Ambulance Communications Centre	An agreement that specifies when the Department will provide pre-hospital care in support of the paramedic services.
Service Agreement	2018	County of Simcoe Sunnybrook Centre for Pre-hospital Care	An agreement to ensure there is an approved level of pre-hospital care for patients, as well as training expectations for the Department.
Service Agreement	2025	City of Orillia	An agreement with the City of Orillia to provide full dispatch services for the Department.
Service Agreement	2025	Fire Marque Inc.	An agreement with Fire Marque Inc. to have the company provide cost-recovery services in the event of a fire in Severn.
Lease Agreement	2008	County of Simcoe	An agreement with the County of Simcoe to lease space at Fire Station #3 for a land ambulance station.

5.3 Roadmap for Improvement

Review and Update of Current Agreements

Many of Severn's current fire service agreements are several years old. As a result, some of the agreements may no longer be current with certain aspects of the Department's operations, particularly the tiered response agreements and the water/ice/marine agreements. Additionally, there is at least one "handshake" agreement with the Township of Muskoka Lakes (in regard to water/ice/marine vessel services).

Going forward, the Department should review all of its fire service agreements to ensure they are current and applicable. Once the review is completed, the Director of Fire and Emergency Services/Fire Chief should work with the Director of Corporate Services/Clerk to make any necessary revisions to the agreements, consulting with the applicable partners (as needed). All new/revised agreements should then be presented to Council for consideration and approval. Additionally, the Director of Fire and Emergency Services/Fire Chief should develop a schedule that will ensure all of the Department's agreements are reviewed on an ongoing basis and updated as needed.

New Automatic Aid Agreements

The Director of Fire and Emergency Services/Fire Chief should work on developing new automatic aid agreements with neighbouring fire departments in order to ensure that all areas in Severn receive the same level of effective response force (or as close as possible).

For more information about emergency responses, including the concept of an effective response force, see section 11 of this FMP.

5.4 Recommendations

Recommendations regarding fire service agreements in Severn are as follows:

5-1. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should review all current agreements that affect the operations of Severn Fire and Emergency Services, making updates to the agreements as required.

5-2. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should establish a schedule to review all agreements that affect the operations of Severn Fire and Emergency Services. The schedule should ensure that the agreements are reviewed on a regular basis.

5-3. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should ensure that any updated or new agreement that affects the operations of Severn Fire and Emergency Services is presented to Council for consideration and approval.

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 levels, 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

The recruitment process for the Department takes place once per year. Candidates are solicited by word of mouth, community events, and Severn's website and social media platforms. In previous years, signage was placed at the fire stations, in flyers, and at fall fairs. The recruitment drive is open for 90 days, and it includes two open houses (one on a weeknight and one on a Saturday morning) as a way to maximize outreach efforts.

The open houses are designed to provide potential candidates with information about the expectations of a volunteer firefighter, as well as information about the Department and the overall recruitment process. Interested candidates are also given a volunteer firefighter recruitment orientation booklet.

Currently, all potential candidates for the Department must live within ten minutes of one of the fire stations in Severn. This requirement must be met before a candidate is selected for an interview. All selected candidates must also complete applicable tests, submit a driver's abstract, submit applicable medical clearance (related to physical testing), and complete a vulnerable sector check.

If a candidate has completed the necessary requirements and is deemed suitable to move to the next step of the recruitment process, the candidate will be interviewed by the Director of Fire and Emergency Services/Fire Chief and the Deputy Chief. The candidate will also be given an aptitude test and a physical test, which are both completed in a single day.

When a candidate completes the interviews and testing requirements successfully, they are enrolled in the Department's recruit training program (as needed). The candidates are then given an offer of employment by the Manager of Human Resources/Health and Safety.

Overall, the Department's recruitment methods are similar to those used by other volunteer fire departments in Ontario.

In 2025, the Department received 30 applications from candidates interested in becoming volunteer firefighters. However, a recurring challenge related to recruitment is getting the applicants to follow through with the components they are required to complete in order to be considered for an interview.

During the development of this FMP, the Director of Fire and Emergency Services/Fire Chief and the Manager of Human Resources/Health and Safety were working to clarify the roles and responsibilities associated with the Department's recruitment process. The goal of this initiative is to identify efficiencies and avoid duplication.

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 volunteers often have

limited experience and skills, volunteer fire departments are likely to have fewer qualified personnel who can fill available leadership roles (such as officer positions).

Table 8 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.[10]

Table 8. 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
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

[10] Shetler, “Where Are They Going?”

Source of Problem	Contributing Factors
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

Table 9 compares the years of service among the Department's personnel.[11]

Table 9. Years of service, Severn Fire and Emergency Services personnel.

Years of Service	Full-Time Staff	District Chiefs	Captains	Firefighters	% of Staff
0 to 2.9	-	-	-	26	40%
3 to 4.9	-	-	1	8	14%
5 to 9.9	1	-	3	4	12%
10 to 15	-	-	6	2	12%
16 to 20	2	1	4	3	15%
21 to 25	-	-	1	-	2%
26 to 30	1	-	-	-	2%
30 +	-	1	1	-	3%
Total	**4**	**2**	**16**	**43**	

According to the information shown in the table above, approximately 65 per cent of the Department's roster consists of personnel who have under ten years of service experience. Since most of the Department's personnel have less than ten years of experience, the organization is considered a "young fire department." Developing an effective retention program can help increase the collective fire service experience of the Department.

[11] Note: During the development of this FMP, the Department was short one district chief.

In regard to retention programs, Council takes steps to recognize the Department's volunteer personnel (both officers and firefighters) for their years of service. For example, Council provides two events each year, as well as a gift for each volunteer officer and firefighter at Christmas. The current retention program also includes the hosting of a fun family activity. In addition, the Department's senior management team continues to explore ways to thank the volunteer personnel for work that is considered out of the ordinary. For instance, the personnel received gift cards to recognize all the work they did during the 2025 ice storm.

In regard to compensation, the volunteer officers and firefighters receive remuneration twice per year, and they work according to a Council-approved honorarium and points system. The remuneration rates for the volunteer officers and firefighters are reviewed by Council every four years, and they are also adjusted according to the Consumer Price Index. The volunteer officers and firefighters also receive a monetary enhanced benefit based on their years of service, and the Department's personnel are included in Severn's Employee Family Assistance Program.

6.4 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.

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 functioning 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 10 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 10. 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 OFM 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 situation can erode public trust/confidence in the fire department's ability to protect the community.

Risk	Explanation
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. For instance, 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. 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. This opportunity can be used to reinforce the importance of regular attendance and its direct impact 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 currently has an attendance management program. The scope of the program is defined in the Severn Fire and Emergency Services policy manual. An excerpt from that manual is as follows:

> The regular attendance of members at emergency calls and training is critical to the safe and successful operation of the fire service. Regular attendance means:
>
> a) at least 75% of regularly scheduled training hours, and
>
> b) for firefighters at least 30% of the firefighter's station call response, for officers at least 35% of the station call response, and
>
> c) at least 75% of regularly scheduled hall/apparatus checks.
>
> Attendance will be reviewed quarterly with members below these requirements.
>
> From time to time, it is acknowledged that events in a member's personal or work life may temporarily impact attendance. In such instances, every effort will be made to temporarily accommodate the member and facilitate training. However, if the members' continued inability to regularly attend emergency calls and training adversely impacts health and safety or minimum staffing, progressive discipline may be administered.

6.5 Roadmap for Improvement

Recruitment

In Severn, the Director of Fire and Emergency Services/Fire Chief, the Deputy Chief, and the Manager of Human Resources/Health and Safety must think of ways to promote recruitment for the Department each year. Although this process is challenging, there are many examples of initiatives that other Ontario fire departments have used to meet their own recruitment needs. For instance, door hangers, QR codes on fire trucks, and signage at fire stations and municipal buildings have been used to promote recruitment.

Going forward, the Department should also consider ways of streamlining the current recruitment process. For instance, if a volunteer firefighter with the required NFPA certifications moves to Severn (or has employment in the township), there could be a process to onboard that candidate with the Department right away, instead of waiting for the next recruitment drive.

Since all firefighters must follow the same basic standards, the Department could also consider working with neighbouring fire departments to allow recruit firefighters in Severn to participate in an external recruit training program. The first way to facilitate this option is to have the Department create a list of potential candidates after its recruitment process is completed. Next, the Department will need to remain aware of when neighbouring fire departments are conducting their own recruit training programs during a given year.

The Department may also want to consider setting an annual schedule for its recruitment drives. Doing so will let potential candidates know when their applications must be submitted, and it will also let them know when both testing and recruitment classes will take place. If the Department changes the recruitment dates or processes each year, there is the potential that qualified candidates will miss their chance to apply.

Although it is a labour-intensive process to recruit and train volunteer firefighters, it is important to make recruitment a priority. It is essential for the Department to have enough personnel to provide an effective response force across Severn, as this is crucial to protecting the safety of the firefighters and the public.[12] In order to maintain a successful volunteer fire service, the Department's recruitment strategy needs to be both flexible and creative.

Retention

Similar to a recruitment strategy, the Department needs to ensure that it has a strong retention strategy. By having a plan to retain volunteer firefighters with the required knowledge and skills, the Department will be well-positioned to protect the safety of the community and its firefighters, as well as avoid unnecessary costs that would occur if the Department transitioned away from a volunteer staffing model.

In Severn, municipal staff members and the Department have been working on ways to recognize the local volunteer firefighters (by hosting family events and other initiatives), and these efforts to enhance the Department's retention program need to remain a priority. It is also important for the program to acknowledge the cultural shift from what the role of a volunteer firefighter was expected to be in years past to what the role is expected to be today. There are many initiatives across the province that the Department can consider implementing as part of its retention program, such as:

- Develop a mentorship program for new volunteer firefighters to provide them with the level of support they require as recruits.
- Invest in programs for the volunteer firefighters to further their education in both fire service skills and general skills.
- Continue to enhance social events for the volunteer firefighters and their families.

[12] For more information about the concept of an effective response force, see section 11 of this FMP.

- Continue to enhance firefighter appreciation events.
- Consider exploring ways and opportunities to provide volunteer firefighters with enhanced benefits, increased mental health support (tailored to critical incidents), and the ability to apply for any internal job postings.
- Consider providing the volunteer firefighters with corporate email addresses that are managed within the corporate email policy (similar to other staff members in Severn), as this will allow the firefighters to receive corporate information, and it may help them feel like a vital part of the township.
- Consider ways to ensure that Council, Severn, and the Department continue to promote a culture that encourages the volunteer firefighter to feel welcomed, supported, and a vital part of the community.
- Develop ways to engage with the volunteer firefighters to get their opinions/suggestions regarding the Department's retention programs.

In addition to the initiatives suggested above, the Department should develop a retention committee that includes the Director of Fire and Emergency Services/Fire Chief, the Manager of Human Resources/Health and Safety, and a volunteer officer or firefighter from each fire station. The mandate of the committee should be to review the Department's current retention programs and strategies and compare them to other programs across the province. The committee should then use the results of its reviews to develop a formal retention program that includes a budget requirement. The proposed retention program can be presented to the CAO for consideration and—if the program is approved—funding would be secured through the normal budget process.

Overall, the challenge of retaining volunteer firefighters has been prevalent in the fire service for many years. In order to address these challenges, a concerted effort must be made to enhance the Department's retention program, ensuring that the program remains a priority. Although the Department is not more important than any of the other municipal departments in Severn, the needs associated with managing volunteer firefighters are different than the needs associated with managing other municipal employees.

6.6 Recommendations

Recommendations regarding recruitment and retention in Severn are as follows:

6-1. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should continue to review the current recruitment program for Severn Fire and Emergency Services. The review should be used to find ways of improving the flexibility of the recruitment program, as this may help ensure the available firefighter staffing levels are maximized as much as possible.

6-2. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should develop a volunteer firefighter retention committee that includes a volunteer officer or firefighter from each of the fire stations in Severn. The mandate of the committee should be to review the current retention programs and strategies for Severn Fire and Emergency Services and compare them to related programs across the province.

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.
- Review/revise 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, as well as other municipal departments, 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 uses several methods to maintain internal communications with its firefighters. Examples of the Department's reciprocal communication methods are as follows:

- phone calls
- text messages
- emails
- group chats through a program in the records management system ("**RMS**")
- training nights
- post-emergency discussions
- scheduled meetings
- ad-hoc methods

It is important to note that some of the current internal communications practices are not necessarily approved or supported within Severn communication polices.

The Department strives to use as many internal communication methods as possible in order to ensure that each of its firefighters receives important messages. For example, the Department uses personal emails to relay information such as road closures or updates about any fire apparatus that will be out of service temporarily. In the future, the Department intends to use its new RMS program to communicate these types of internal messages, sending the information in group chats.

The Department also holds weekly meetings with its full-time staff, as well as quarterly meetings with its officers. Minutes from these meetings are recorded by a staff member from Severn's Customer Care Team. However, the representative of the Customer Care Team cannot always stay for the duration of every meeting with the full-time staff due to other operational requirements. When this situation arises, a member of the Department's administrative team records the notes. The Customer Care Team has been in place for over a year, and it is continuing to improve in its purpose of meeting all the requirements of the Department and the other municipal departments.

Other in-person communications are delivered during training sessions. The Director of Fire and Emergency Services/Fire Chief and the Deputy Chief attend one or two training

sessions every month, which allows them to engage with the firefighters and relay internal updates. The Director of Fire and Emergency Services/Fire Chief and the Deputy also hold post-incident discussions. During these discussions, the responding crews review the completed emergency call with the Director of Fire and Emergency Services/Fire Chief or the Deputy Chief. If the crew responded to a major incident, a formal post-incident analysis is conducted.

When the Department communicates with other municipal departments in Severn, the messages are usually delivered via email, phone, text, or face-to-face meetings. All full-time staff members are required to communicate with other departments while fulfilling their assigned duties. In addition, the Director of Fire and Emergency Services/Fire Chief has opportunities to provide and receive corporate-wide communications through weekly meetings with the CAO and biweekly meetings with the senior management team.

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.[13]

Findings

In regard to external communications, the Department works with the Severn Communications Department to send scheduled messages through Severn's official website, as well as its Facebook, X, and Instagram channels. These types of external messages are provided from Mondays to Fridays during normal business hours.

If members of the public want to reach the Department, they can visit the Department's website (to make a request to attend an event), send an email, or make a phone call.

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

7.4 Roadmap for Improvement

Internal Communications

Maintaining internal communication is essential for ensuring that all of the Department's personnel are informed about critical information. In order to be effective, the communication must flow from the Director of Fire and Emergency Services/Fire Chief to the firefighters, and from the firefighters to the Director of Fire and Emergency Services/Fire Chief.

Going forward, the Director of Fire and Emergency Services/Fire Chief should continue to prioritize internal communication methods, exploring additional ways to enhance the Department's current approach. One option for the Director of Fire and Emergency Services/Fire Chief to consider is engaging the district chiefs and officers as part of communication efforts. Doing so may help the district chiefs and officers feel empowered and trusted to handle communications within their fire stations.

It is also important for the Department to ensure that any internal communication plans or methods that it develops are aligned with current/future corporate communications plans. In order to ensure consistency, discussions should take place with the CAO and other Severn directors.

External Communications

As of this FMP, Severn is providing a strong level of external communications to the community. This information includes scheduled messaging throughout the year, issued both during and after business hours. However, one identified gap is the lack of messages/communication outside of normal business hours. Since the Department operates on a 24/7 basis, there are times outside of normal business hours when critical messages must be communicated during an emergency response. Going forward, an after-hours emergency response communication policy should be developed and implemented.

The Department and the Economic Development Officer should also work together to discuss developing a policy for publicly thanking local businesses for their contributions to the Department. These kinds of acknowledgements can be communicated via scheduled messages that are issued during normal business hours.

7.5 Recommendations

Recommendations regarding departmental communications in Severn are as follows:

7-1. The Director of Fire and Emergency Services/Fire Chief should formalize an internal communications plan for Severn Fire and Emergency Services that aligns with Severn's current communication policies and strategies.

7.2 The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should develop a plan (and accompanying procedures) for after-hours critical messaging for emergency response communications.

7.3 The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should develop a process to thank the local businesses that support Severn Fire and Emergency Services.

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.[14]

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.

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

Findings

Representatives of the Department's management team value the importance of the Firefighter Guidance Notes, but they believe that some of the Department's officers and firefighters may not fully understand the guidelines, and others may not be informed of them.

The Department has made a good effort to incorporate the Firefighter Guidance Notes into its operations. For instance, the Department's SOGs reference the Firefighter Guidance Notes where applicable. In addition, at the start of training sessions, instructors review the applicable Firefighter Guidance Notes with attendees.

8.3 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

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. These actions cover topics like the proper use of respiratory protection, the cleaning of gear, and the implementation of hygiene protocols.[15]

Findings

As of this FMP, the Department does not have a formalized process for handling contaminated PPE at a fire scene.

The Director of Fire and Emergency Services/Fire Chief has provided the Firefighter Cancer Prevention Checklist to the applicable member of the Department's joint health and safety committee ("**JHSC**"). The Director of Fire and Emergency Services/Fire Chief has asked this committee member for their opinion on how to integrate the checklist into the Department's operations. Once the Director of Fire and Emergency Services/Fire Chief receives the committee member's comments, the intent is to use the information to help develop a cancer prevention plan for the Department.

8.4 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 for 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.

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

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.”)

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 follows the ten-year shelf-life requirements for structural protective ensembles. In order to maintain this adherence, the Deputy Chief tracks all of the Department’s PPE to verify that each piece of equipment remains compliant.

The Department also maintains compliance by ordering ten new sets of bunker gear each year through the normal budgeting process. This new PPE replaces expiring PPE, and it also helps to ensure there are enough sets of spare bunker gear that can be used in case a firefighter’s primary PPE requires cleaning or is sent out for testing. As of this FMP, there is not enough bunker gear to outfit a large number of firefighters who have contaminated bunker gear from completing an emergency response. However, the Department’s goal is to have two sets of compliant bunker gear for each of its firefighters. Currently, the supplier of the Department’s PPE completes applicable sizing requirements.

To help offset the costs of outfitting a firefighter with PPE, the Department has developed a process for its recruits. When a recruit starts with the Department, they are assigned PPE from the cache of compliant spare equipment. If none of that PPE is the right fit for the recruit, the Department rents gear from a third party.

The recruit firefighter will then continue using the spare or rented gear for their six-month training plus their twelve-month probation period. After that time, new PPE is ordered for the firefighter.

In regard to PPE cleaning and testing, the Department currently does not have any process or procedure to manage gear that becomes contaminated after responding to a fire or other incident. As a result, the firefighters will return in the fire apparatus with dirty gear, which could contaminate the apparatus.

Until recently, the Department sent its contaminated PPE out to a third party. This third party washed, dried, and cleaned the PPE before it was put back in service. However, this process required the bunker gear to be out of service for several days. In order to reduce the amount of time involved with washing and drying PPE, the Department has installed new PPE extractors at Station 2. In 2026, funding obtained through a cancer prevention grant from the province will be used to install PPE extractors at Station 1 and Station 3. These extractors will allow the Department to complete in-house PPE washing. The PPE will then be air-dried with the assistance of PPE dryers that have been installed at Stations 1, 2, and 3.

Figure 1 shows the new PPE extractors at Station 2.

Figure 1. New PPE extractors at Station 2.

In regard to the annual testing that is required for bunker gear, the Department sends its gear to an approved third-party testing and repair facility. The gear is tested and repaired at the facility as required. The Department keeps track of when the gear needs to be tested and then sent out, as it can take two to four days before the bunker is returned.

8.5 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 conducts an annual fit-testing process for all of its firefighters for both SCBA and N95 masks. The Department completes in-house testing, and the testing machine is shared with the Orillia Fire Department. The Deputy Chief uses the Department's RMS to maintain records of the testing.

In addition to the mandatory fit-testing process, the Department issues personal SCBA masks to each of its firefighters to ensure they have the proper mask to fit their facial features. Having properly fitted masks reduces the risk of inhaling contaminants at an incident site.

8.6 Diesel Exhaust Systems

Context

Table 11 provides excerpts from Firefighter Guidance Note #3-1, "Controlling exposure to diesel exhaust."

Table 11. 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 the following topics:

- ventilation
- buildings
- trucks
- equipment

- written operating procedures
- choice of fuel
- air monitoring
- maintenance
- housekeeping
- firefighter education

Findings

The Department has worked towards becoming compliant with Firefighter Guidance Note #3-1 by installing automated diesel exhaust systems at its fire stations. These systems reduce the level of fumes that both the firefighters and the PPE are exposed to when at the stations. The proactive installation of these systems was made possible due to the support of Council.

Figure 2 shows an example of the diesel exhaust systems that have been installed at all of the Department's fire stations.

Figure 2. Diesel exhaust systems installed at the fire stations in Severn.

8.7 Joint Health and Safety Committee

Context

Each fire department should have a 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

The Department has a JHSC that is separate from the JHSC for Severn. In 2025, Severn hired a new Human Resources/Health & Safety Coordinator, and one of the duties assigned to this role is to bridge the gap between the two JHSCs. In addition, minutes are reciprocally circulated between the two committees.

With the addition of the Human Resources/Health & Safety Coordinator, the members of the Department's JHSC are as follows:

- Human Resources/Health & Safety Coordinator (worker representative)
- one firefighter per fire station (worker representative)
- Deputy Fire Chief (management representative)
- one captain per fire station (management representative)

Monthly workplace inspections are conducted by all members of the committee, and they are organized and scheduled for the upcoming year by the Human Resources/Health & Safety Coordinator.

In regard to certified members of the JHSC, there is one worker representative and one management representative who are certified in health and safety. This level of certification makes the JHSC compliant. In the future, there will be opportunities for the JHSC representatives to complete part two of the certification process.

A JHSC questionnaire was completed during the FMP development process. Based on the answers provided for the questionnaire (shown in Table 12), the Department's JHSC is compliant with applicable legislation.

Table 12. 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

Question	Answer
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

Each component of a health and safety program is important, and it is crucial to maintain these components on an ongoing basis. For instance, it is essential to ensure that all health and safety bulletin boards are kept up to date. Doing so will ensure that the Department's personnel have access to current information as required. As indicated in the answers to the questionnaire provided above, the Department has up-to-date health and safety boards at each of its fire stations. An example of one of these health and safety boards is shown in Figure 3.

Figure 3. Example of a health and safety bulletin board.

8.8 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.

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

8.8.1 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

As noted in section 6.3 of this FMP, the Department's firefighters have access to Severn's Employee Family Assistance Program. In the past, the Department had a peer support team, but updates to that team are required.

During recruit training, the Department's personnel receive education related to health and safety and mental health. The recruits are also provided with access to applicable programs, including the Employee Family Assistance Program. In addition, the Department provides its recruits and firefighters with Resilient Minds training. This kind of training is designed to help first responders manage the types of stress and trauma that are related to the types of emergency responses they conduct. The Resilient Minds training is also offered to applicable family members who are related to the Department's personnel.

8.8.2 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

Currently, neither Severn nor the Department has fitness equipment in the facilities. However, the firefighters are given discounts through Perkopolis and Applaud that can be used to access physical fitness facilities. As of this FMP, the firefighters have not used this benefit.

8.9 Fireground Safety

8.9.1 Incident Command System

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 adheres to the recognized framework for a fireground ICS (including fireground accountability), providing applicable ICS training as required. Currently, the Department is not providing entry control for any high-risk incidents.

Radio communications are facilitated via a two-way radio system that has both talk-around and repeater capabilities. Due to the current radio infrastructure, most of the radio communications use the talk-around method (which uses line-of-sight communications) instead of the repeater system (which receives a radio transmission and retransmits it at a higher power). The Department is starting to test a mobile repeater to be able to provide better radio coverage at emergencies.

8.9.2 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.

In a volunteer fire department, where personnel may have varying levels of professional experience, a dedicated ISO can reinforce a culture of safety. 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 1550, *Standard for Emergency Responder Health and Safety*, provide information about the role of an ISO.

Findings

Currently, the Department has ensured that it has four of its full-time staff members trained to the NFPA 1550 standard. When possible, one of the full-time staff members assumes the role of safety officer at high-risk incidents. For low-risk incidents, the incident commander is responsible for serving as the safety officer.

8.9.3 Pre-Incident Planning

Context

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 specific occupancy.

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

Findings

The Department currently has several methods that it uses to pre-plan occupancies and document the pre-planning information for its response crews. The Department’s pre-planning methods are as follows.

1. The Department completes the pre-planning process as part of its training schedule. On training nights, the firefighters go to predetermined occupancies with either the Training Officer or the Fire Prevention Officer. The firefighters review each occupancy, and they document any information that will be useful during emergency responses at that occupancy.
2. As part of the recruit training program, recruits follow a pre-planning process that is similar to the method described in point 1 above.
3. During scheduled or requested inspections, the Fire Prevention Officer completes the pre-planning process for the applicable occupancies. The Fire Prevention Officer will also document any information that will be useful during emergency responses at those occupancies.

As of this FMP, the Department collects its pre-planning information manually. The information is kept in binders that are stored in response vehicles so that officers and firefighters can review important data when they are en route to an emergency scene.

Starting in the first quarter of 2026, the Department plans to implement a new RMS. The new RMS will electronically provide responding crews with information in their vehicles. In addition, the information will automatically show up on the response map for the occupancy where the emergency response is needed.

8.10 Roadmap for Improvement

Cancer Prevention Checklist

The Director of Fire and Emergency Services/Fire Chief should work with the JHSC to continue incorporating the Cancer Prevention Checklist into the Department's operations. Once the JHSC has determined the best way to implement the checklist, an accompanying policy should be developed for the Department. The goal of the policy should be to help reduce the risk of firefighters developing cancer from job-related factors.

Personal Protective Equipment

The Department is currently following a ten-year shelf-life policy for its PPE, and the support of Council has helped the Department maintain this policy. In order to continue this policy in the future, Council will need to keep providing the required funds as part of the budget process. These funds are necessary for buying new PPE, as well as enhancing the PPE cleaning and maintenance program, which reduces the amount of time that the Department's PPE is out of service.

In addition to maintaining its current PPE program, the Department should develop a comprehensive process for managing PPE that becomes contaminated at a fire scene. This process should follow applicable sections of the Firefighter Guidance Notes, as well as industry best practices. As part of the process, the Department should purchase the required equipment for the program, and it should provide training to ensure that all of its firefighters understand the program's goals and protocols.

Health and Wellness

Severn and the Department have made a conservative effort to promote and support health and wellness for the Department's firefighters. However, the current level of support can still be enhanced. For instance, updates can be made to the peer support and critical incident programs (either internally or in partnership with neighbouring fire departments).

In addition, a wellness committee could be established with representatives from Severn, the Department's management team, and the Department's firefighters. This committee could review ongoing programs and make recommendations about ways to continue supporting and enhancing aspects of firefighter health and wellness.

Fireground Safety

Due to the current radio infrastructure in Severn, most of the Department's radio communications use the talk-around method instead of the repeater system. The challenge with using the talk-around function is that dispatch, incoming vehicles, and

the Incident Commander may not hear the radio traffic. If these responders do not receive certain messages, it can create unsafe operating environments.

As noted in section 8.9.1, the Department is starting to test a mobile repeater. Going forward, the Department needs to prioritize the enhancement of its on-scene radio coverage. Doing so is essential for protecting firefighter safety and reducing liability for Severn by ensuring that all radio communications are recorded.

8.11 Recommendations

Recommendations regarding occupational health and safety in Severn are as follows:

8-1. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Joint Health and Safety Committee, should continue to review and implement the Cancer Prevention Checklist into the operations of Severn Fire and Emergency Services (where appropriate).

8-2. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Joint Health and Safety Committee, should develop a process and policy to manage the cleaning, testing, and repairing of personal protective equipment. The process/policy needs to include a guideline for managing any personal protective equipment that is contaminated after being used during an emergency response.

8-3. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should review the ways in which the individual health and safety committees in Severn can work together, such as through the development of common policies.

8-4. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should consider forming a health and wellness committee for Severn Fire and Emergency Services. The committee should focus on cancer prevention, peer support, and critical incident programs.

8-5. The Director of Fire and Emergency Services/Fire Chief should prioritize ways to enhance on-scene radio coverage in order to protect the safety of firefighters and reduce liability for Severn.

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.[16]

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. Although improved building codes contribute to fire safety, both public awareness and proper emergency responses 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 services. 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.

[16] 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 age distribution, population density, and 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, Severn has a population of 14,576 year-round residents. This number is 8.3 per cent higher than the number of residents recorded in the 2016 census.

Seasonal Residents

Seasonal residents make up approximately one-third of the total population in Severn.

Tourism

During the summer months, Severn experiences a large influx of tourists. The level of tourism increases the amount of vehicular traffic in the township, as well as the amount of boating traffic. The additional traffic has the potential to increase the number of calls for assistance that the Department receives.

Age Distribution

Table 13 compares the age distribution in Severn to the Province of Ontario (based on the findings of the 2021 Statistics Canada census).

Table 13. Age distribution in Severn and the Province of Ontario.

Age Range	Severn	Ontario
0 to 14 years	14.3%	15.8%
15 to 64 years	62.3%	65.6%
65 years and over	23.5%	18.5%
85 years and over	1.9%	2.4%

Based on the 2021 census data:

- The average age in Severn is 45.4 (compared to the provincial average of 41.8).
- The median age in Severn is 49.6 (compared to the provincial average of 41.6).

9.2.2 Language and Generation Status

According to the 2021 Statistics Canada census, Severn is a predominantly English-speaking community, with 94.7 per cent of residents identifying English as their first language. Overall, 99.9 per cent of the township’s residents can hold a conversation in English, and 4.2 per cent are bilingual in English and French.

The 2021 Statistics Canada census also notes that 77.9 per cent of Severn's residents were born in Canada to parents who were both born in Canada.

9.2.3 Level of Education

Table 14 compares the highest level of education obtained by residents of Severn aged 15 years and over to the provincial average (based on the findings of the 2021 Statistics Canada census).

Table 14. Education levels in Severn and the Province of Ontario.

Education Level	Severn	Ontario
No certificate	16.1%	15.3%
High school diploma or equivalency	30.8%	27.2%
Post-secondary certificate, diploma, or degree	53.4%	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 to, 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

Public Education Initiatives

Examples of the Department's public education initiatives are as follows:

- conducting school visits to kindergarten classes at three local schools
- facilitating a forestry pump program
- participating in the Coldwater Fall Fair
- participating in the Orillia Fall Fair
- participating in the Christmas in July event (in Georgian Bay)
- participating in the Coldwater Reading Program
- participating in the Simcoe North Community BBQ (hosted by MPP Jill Dunlop)
- participating in the Severn Shores Public School orientation night
- setting up a Coldwater BIA booth
- setting up a Fire Smart booth at Orillia Square Mall
- delivering a presentation on fire safety to the Orillia Horticultural Society
- participating in the Maple Leaf Foods initiative at Coldwater Foodland
- participating in the Supporting On-Farm Diversified Uses seminar

The Department also helps promote Emergency Preparedness Week, Carbon Monoxide Awareness Week, and Fire Prevention Week.

In addition to the events listed above, the Department (as represented by the FPO) proactively meets with community groups prior to events to ensure life safety. By consulting with the event organizers, vendors, and event participants, the Department has an opportunity to ensure that fire code regulations are being met. The meetings also allow the Department to ensure that it can provide an effective response to the event if an emergency occurs.

Fire Safety Programs

The Department facilitates the following fire safety programs in the community:

- Alarmed For Life
- FireSmart
- Christmas safety initiatives
- Halloween safety initiatives

- Farm safety initiatives
- Home escape planning
- Home safety surveys

9.3.1 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

Banners and signs are used in Severn to promote Fire Prevention Week (including the annual theme) and Test Your Smoke Alarm Day.

Signs are also used throughout Severn to show the current fire rating. Burning is not permitted during a fire ban.

9.3.2 Smoke Alarm/Carbon Monoxide Alarm Program

Context

As of this FMP, 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 has a smoke alarm program that involves proactively engaging with the community. For instance, when the Department's personnel respond to an emergency call, the firefighters engage with the residents at the incident site (as appropriate) and offer to test and verify the functionality of existing smoke/CO alarms. If an alarm is not functioning as intended, the Department will install a new alarm or change the batteries in the existing alarm (if required and requested by the resident). The smoke alarm program has also allowed the Department to answer questions from residents.

The Department also facilitates the Alarmed for Life Program. This program enables the Department's staff to provide alarms to Severn residents free of charge. The alarms provided through this program are combination smoke/CO alarm units. Over the past five years, the number of recorded residences involved in the Alarm for Life Program has increased:

- In 2020, one residence was involved in the program.[17]
- In 2021, ten residences were involved in the program.
- In 2022, 11 residences were involved in the program.
- In 2023, 34 residences were involved in the program.
- In 2024, 62 residences were involved in the program.

In recent years, the Department has also made efforts to conduct door-to-door campaigns.

[17] In 2020, the program was impacted by the COVID-19 pandemic.

9.4 Code Enforcement and Fire Inspections

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

In Severn, the Fire Prevention Officer is responsible for handling OFC enforcement duties. These duties include issuing formal inspection orders and other charges under the FPPA.

The following subsections discuss additional code enforcement and fire inspection statistics for Severn.

9.4.1 Request and Complaint 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

The Department completes fire safety inspections upon request and upon complaint as required.

9.4.2 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 FMP, there are three vulnerable occupancies in Severn. The Department ensures that all three vulnerable occupancies meet their legislative requirements by conducting annual inspections and witnessing fire drills at these sites.

9.4.3 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 15 lists the number of inspections the Department completed from 2020 to 2024. The inspections are categorized by occupancy type.

Table 15. Number of inspections per occupancy type, 2020 to 2024.

Type of Occupancy	2020	2021	2022	2023	2024	Total
Group A (assembly)	7	59	63	57	45	231
Group B (vulnerable occupancies)	0	9	7	6	6	28
Group C (residential)	5	50	52	24	17	148
Group D & E (mercantile/commercial)	10	24	103	74	91	302
Group F (industrial)	1	2	7	3	0	13
Miscellaneous (not classified)	0	20	22	15	18	75
Total	**23**	**164**	**254**	**179**	**177**	**797**

According to the Department's records, 90 per cent of inspections conducted in Severn consist of routine inspections and annual inspections of vulnerable occupancies. The remaining 10 per cent of inspections are conducted as a result of complaints.

Severn has three vulnerable occupancies. In 2025, the Department completed all necessary inspections and witnessed all fire drills at these occupancies.

Table 16 summarizes the types and number of violations that were identified from 2020 to 2024 as a result of an inspection.

Table 16. Violations noted/issued from 2020 to 2024.

Type of Notice	2020	2021	2022	2023	2024	Total
Verbal/Letter/Notice of Violation	23	160	249	178	177	787
Inspection Order	0	4	5	1	0	10
Total Inspections	**23**	**164**	**254**	**179**	**177**	**797**
Resolved	**23**	**164**	**254**	**179**	**177**	**797**

9.4.4 Frequency of Fire Inspections

Context

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

Proactive 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 noted above, the Department conducts routine inspections, required annual inspections of vulnerable occupancies, inspections upon request, and inspections upon complaint.

9.5 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.[18] 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.

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

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

Severn does not currently have any Council-approved polices or bylaws that require new residential properties to have residential sprinklers.

9.6 Portable Pump Program

Context

It can take a considerable amount of time for firefighters to respond to an emergency at a water-access-only property, as they must travel to the location by boat. In order to address this issue, some municipalities that contain water-access-only or limited-access-only properties have implemented a portable pump program. These programs provide associations or residents living in water-access-only or limited-access-only areas with portable water pumps and firefighting equipment. Residents can use the pumps and equipment to begin fighting a small outdoor fire before firefighters arrive. These efforts may help mitigate the effects of this type of fire before it has a chance to grow.

Facilitating a portable pump program requires a fire department to ensure that the relevant equipment is maintained and replaced when broken. The fire department must also provide training to both residents and firefighters on how and when to operate portable pumps and related firefighting equipment.

Findings

In Severn, Council has approved Bylaw No. 2016-61. This bylaw allows Severn and the Department to provide a portable pump program for water-access-only and limited-access-only properties along the Severn River.

There are currently 16 portable pump locations in Severn. The equipment at those sites can be used to begin initial fire suppression efforts for small outdoor fires prior to the arrival of the Department.

The portable pump program is managed by the Department. One of the main duties involved with managing the program is ensuring the portable pumps are in place by April 1st and removed on November 1st of each year. (Bylaw No. 2016-61 states which kind of equipment must be present in the storage containers on residential properties.) The Department is also responsible for ensuring that the portable pumps and the

related equipment are kept in good working condition, with any missing or damaged equipment replaced as required.

The Fire Prevention Officer provides annual training about the portable pump program to the members of associations for the water-access-only areas and limited-access-only areas.

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.

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 inpatient. 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.[19]
- 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.

[19] 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.

- 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).

Findings

From 2020 to 2024, the Department conducted the following number of fire investigations:

- One investigation was conducted in 2020.
- Four investigations were conducted in 2021.
- Ten investigations were conducted in 2022.
- Twelve investigations were conducted in 2023.
- Eleven investigations were conducted in 2024.

All investigations were completed by the Fire Prevention Officer (with assistance from the Department's senior staff).

The Department ensured that the OFM was notified about its fire investigations as required. The OFM attended one investigation.

9.8 Roadmap for Improvement

Public Education

Dedicated Personnel with Public Education Duties

The Department should explore ways to strengthen its fire prevention programs with officers and firefighters who are interested in transitioning from performing suppression duties to delivering public education programs. In addition, when the Department conducts a recruitment drive, it should explore the possibility of recruiting candidates who are interested in having a role associated with public education exclusively or a role that has a combination of public education and fire suppression duties.

Programs and Policies

In the coming years, Severn anticipates that it will have a structured data collection and tracking system. This program will ensure that the local fire safety programs benefit from evidence-based planning and continuous improvement.

The Department should use existing data from Severn, as well as provincial data and OFM data (about public education initiatives), to develop a fire prevention policy.

Community Engagement

The Department should continue to expand its community engagement and outreach efforts in order to promote fire safety awareness.

Specifically, the Department should continue to strengthen its partnerships with local businesses, organizations, employers, and schools. The Department should also ensure that it is delivering public education programs that reach all residents, including seasonal residents (wherever possible). In order to reach as many residents as possible, the Department can leverage social media campaigns, which can be also promoted to and accessible to seasonal residents.

Fire Inspections

The Department should explore the possibility of having its suppression officers and firefighters help conduct inspections. Leveraging the experience of these personnel can significantly enhance the Department's inspection efforts by increasing its operational capacity and improving the accuracy and relevance of the inspections. The opportunity to engage in fire inspections should be included in the Department's recruitment package and initiatives.

In addition, many of the Department's officers have first-hand knowledge of local risks, building layouts, and operational challenges. As such, the officers are well-suited for identifying fire hazards, assisting with code compliance issues, and developing effective response strategies. Moreover, including suppression staff in these activities will promote greater integration between the Department's fire prevention and emergency response functions. This integration can lead to improved situational awareness and coordinated action during emergency responses.

Both of the initiatives discussed above can help the Department strengthen its overall fire safety strategy while maximizing the use of its internal resources.

Smoke Alarm/Carbon Monoxide Alarm Program

The Department should review the scope of its current smoke alarm/CO alarm program. This review can be used to verify that the program meets the community's current needs.

The review may also help the Department identify topics that it should incorporate into its public education program, as this information may enhance safety and compliance among residents. Moreover, the smoke alarm/CO alarm program should be targeted towards the residents who are most at risk.

Applicable records should also be kept for the smoke alarm/CO alarm program. These records should include information about the results of the program, as well as statistics for measuring compliance levels. The current gap in data collection has limited the Department's ability to evaluate the overall effectiveness of its recent public education and prevention initiatives. Without this information, the Department's ability to identify trends, assess community risks, or demonstrate the impact of its smoke alarm/CO alarm program may be impacted.

Overall, a robust smoke alarm/CO alarm program can help reduce preventable injuries and deaths while strengthening public trust and engagement with fire safety initiatives.

Fire Prevention Policy

The Department has a fire prevention policy, but the current policy needs to be updated. The updated policy should be designed to meet community needs (as identified by the most recent CRA for Severn), and it should align with NFPA 1035.

The revised fire prevention policy should include the following components:

- smoke/CO alarm program
- fire inspection frequency (based on risk)
- public education initiatives (based on information provided by the CRA for Severn)

After the fire prevention policy is updated, it should be presented to Council either as a standalone document or as part of the E&R bylaw.

Residential Sprinkler Systems

Severn does not currently have any requirements regarding the installation of residential sprinkler systems in newly constructed buildings. However, there are many benefits to introducing this type of requirement.

One of the components of the three lines of defence is fire suppression. Typically, fire suppression is associated with fire trucks and firefighters, but it can also include residential sprinkler systems. Sprinkler systems are useful in areas with water-access properties, as well as any area where a significant response time is possible due to the site's distance from a fire station.

Going forward, the Director of Fire and Emergency Services/Fire Chief should complete a comprehensive cost/benefit analysis regarding the mandatory installation of residential sprinkler systems in new residential buildings. One aspect of the analysis should be a consideration of different ways to promote the installation of sprinkler systems for any structures located in the urban/wildland interface area of Severn.

Portable Pump Program

There is a limited amount of formal documentation related to Severn's portable pump program. The main document is a Council-approved bylaw regarding the day-to-day management of the program. Going forward, the Department should formalize additional documentation for the portable pump program. Examples of this applicable documentation are as follows:

- documentation related to the installation/removal of the portable pumps and related equipment
- documentation for a comprehensive public education and training program (complete with participating sign-off acknowledgements)
- documentation for the scheduling of maintenance

In addition, because the current bylaw for the pump program was established in 2016, Severn is advised to seek legal advice on the program. Specifically, Severn may want to solicit information regarding any liability issues related to the management of the program (including the storing of equipment on residential properties). This legal advice can help Severn understand any risks associated with the pump program, and it may help Severn identify any mitigation strategies that are needed in order to reduce the risk of liability for the township, Council, and the Department.

9.9 Recommendations

Recommendations regarding fire prevention and public education in Severn are as follows:

9-1. Severn Fire and Emergency Services should update its fire prevention policy to ensure that it aligns with NFPA 1035 and the information in the Township of Severn Community Risk Assessment. The Director of Fire and Emergency Services/Fire Chief should then submit the updated policy to Council for consideration and approval.

9-2. Severn Fire and Emergency Services should continue to enhance its smoke alarm/carbon monoxide alarm program based on OFM guidance, past incident data, and community demographics. The scope of the program (and all subsequent campaigns) should also be based on the fire department's available resources.

9-3. Severn Fire and Emergency Services should explore the possibility of establishing a dedicated public education group that includes officers and firefighters who are interested in transitioning from performing suppression duties to delivering public education programs.

9-4. Severn Fire and Emergency Services should explore whether it is possible to update its recruitment process to include opportunities for candidates to participate in public education programs.

9-5. The Director of Fire and Emergency Services/Fire Chief should complete a comprehensive cost-benefit analysis regarding the mandatory installation of residential sprinkler systems in new residential buildings located in water-access-only areas. The Director of Fire and Emergency Services/Fire Chief should also develop a public education program regarding the use of sprinkler systems in urban/wildland areas.

9-6. Applicable representatives of the Township of Severn (including the Chief Administrative Officer) should seek legal advice regarding the current “portable pump program.” Specifically, Severn should try to determine whether the scope of the program poses any liability issues for the township.

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 Challenges for Volunteer Fire Departments

Context

Volunteer fire departments often face several training-related challenges, such as:

- a lack of time to complete mandatory and ongoing training
- a lack of certified instructors
- no dedicated training facility
- scheduling issues
- excessive travel demands

Of all the potential training challenges, time commitments are perhaps the most difficult issue for volunteer firefighters to overcome. Volunteer firefighters must balance their work and personal commitments with their fire service duties.

The difficulty is that most fire service training requires significant time to complete, and it is possible that some volunteer firefighters will need to take time away from their families or jobs for several weeks or more. Such a scenario can create an unsustainable work-life balance, especially as firefighter certification standards become more demanding.

Another challenge is that some volunteer fire departments have limited personnel or resources, which makes it difficult to run an effective ongoing training program. However, fire departments must still find ways to deliver a training program that meets legislative requirements. All fire departments must adhere to the same training and certification regulations, regardless of their size.

Findings

The Department is currently working to ensure that all of its personnel are certified to the NFPA standards that are relevant to their roles. The addition of the Training Officer to the Department has greatly enhanced the delivery of training within the organization, and instructors are gradually obtaining the qualifications they require.

Despite good progress, the Department still faces some challenges related to training. For instance, instructors are currently spending too much time on processing training documentation manually, which reduces the amount of time they can spend delivering training. In addition, the Department's training program relies heavily on the Training Officer, which means that a single-point-of-failure scenario could occur.

10.3 Training Structure

Context

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

- A strong training structure 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 (such as teamwork and decision-making under pressure) and reinforces operational procedures.
- The program keeps personnel up to date with evolving techniques, equipment, and regulations.
- Regular, structured training reduces the risk of injury, improves response times, and ultimately enhances public safety.

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

Findings

The Training Officer oversees the Department's training program, including both ongoing in-service training and standardized training. This duty involves developing an annual training schedule that includes all regular, specialized, and mandatory training for the year. The schedule is distributed to the district chiefs and captains, who are responsible for arranging suitable training instructors.

Overall, the Department's training program addresses the current needs of the organization.

10.4 Recruit Training

Context

Most firefighters complete approximately 400 hours of recruit training when they join the fire service. Recruit training includes basic firefighter training, and it may also include first responder medical training if the fire department performs medical services.

Typically, basic firefighter training is aligned with NFPA 1001, Level I and II standards, and it covers the following essential topics:

- fire behaviour
- suppression techniques
- PPE and SCBA use
- ladder and hose operations
- search and rescue
- an overview of the ICS
- hazardous materials response (awareness level)
- other topics (as needed)

First responder medical training usually includes standard first aid and CPR training, as well as emergency medical responder certification. Medical training may also include training on the use of defibrillators and the administration of oxygen.

Due to the costs and time commitments involved in providing in-house training for recruits, some fire departments send their new firefighters to third-party trainers (such as regional training centres) 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

The Department's recruitment process is outlined in section 6.2 of this FMP.

The Department provides the level of training that is required for all recruits. However, if a recruit has already completed applicable training and certifications prior to their hiring, that candidate is provided with training that is specific to the Department. That training must be completed before the recruit is allowed to respond to emergencies.

10.5 Ongoing Training

Context

It is crucial for volunteer firefighters to receive ongoing training. Some of the benefits of ongoing training are as follows:

- 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 or rural fire departments that may not receive a high volume of emergency calls. The training will help the personnel in these departments maintain their operational readiness even when there are fewer emergency responses to complete.

Findings

The Department delivers ongoing training and in-service training that meet its operational needs, such as NFPA certification requirements.[20]

[20] For more information about the Department's NFPA certification requirements, see section 10.7 of this FMP.

As noted in section 10.3, the Training Officer develops an annual training schedule for the Department in order to help instructors deliver ongoing training. The annual training schedule is a valuable asset for the Department.

10.6 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.[21]

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.

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

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.

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

The Department has five volunteer officers assigned to each of its fire stations (assuming Station 3 and Station 4 are counted as one station):

- Station 1 has a district chief and four captains.
- Station 2 has four captains and one acting captain.
- Station 3 and Station 4 share one district chief and four captains.

The Department's district chiefs, captains, and acting captain all have varying levels of experience and certification. Some personnel hold many certifications, while others have significantly fewer formal credentials.

As of this FMP, the Department does not have a formalized/structured officer development program.

10.7 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. This process allowed fire departments to submit lists indicating which personnel should qualify as NFPA-certified based on their years of experience and ongoing training. The Ontario government gave two opportunities to complete the grandfathering process. The final deadline was December 31, 2018. Fire departments must retain the appropriate documentation to prove their firefighters had their training grandfathered. Fire departments must also retain appropriate training records as proof that they meet applicable requirements.

Fire departments must retain the appropriate documentation to prove their firefighters had their training grandfathered. Fire departments must also retain appropriate training records as proof that they meet applicable requirements.

Findings

Table 17 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[22]
- the number of personnel who have completed each course or who are currently enrolled, waiting to write the certification exam, or waiting to receive exam results
- the number of personnel who have had their training status grandfathered or are otherwise exempt
- the percentage of eligible personnel who are certified, in the process of becoming certified, or have had their training status grandfathered for the certification

Based on its current staffing levels, the Department is on pace to meet NFPA certification requirements by the legislated deadline of July 1, 2026.

[22] 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 (unless otherwise noted).

Table 17. Firefighter certification levels in Severn.

NFPA Standards	Applicable Personnel	Completed	Pending	% Completed
NFPA 1001: Fire Fighter I	57	50	4	88%
NFPA 1001: Fire Fighter II	57	47	4	82%
NFPA 1002: Fire Apparatus Driver/Operator[23]	57	18	0	32%
NFPA 1021: Fire Officer I	19	8	6	42%
NFPA 1041: Fire Services Instructor I	23	20	0	87%
NFPA 1521: Incident Safety Officer	4	4	0	100%
NFPA 1031: Fire Inspector I	4	1	1	25%
NFPA 1033: Fire Investigator	4	2	0	50%
NFPA 1035: Fire and Life Safety Educator I	6	1	0	17%
NFPA 1035: Fire and Life Safety Educator II	1	1	0	100%
NFPA 1035: Public Information Officer	3	3	0	100%
NFPA 1072: Hazardous Materials Response (operations level)	57	20	11	35%

[23] As part of the annual budgeting process, the Department has requested to have 15 firefighters certified to the standard of NFPA 1002 in 2026.

10.8 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
- driving and apparatus operations
- mental health
- incident command systems
- wildland firefighting

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 employs multiple methods to address the non-NFPA-related training needs that are specific to Severn. These methods include the use of various learning contracts and third-party trainers. The reason that several methods are used is to ensure that the Department's personnel are adequately trained to meet local demands.

10.8.1 Provincial and Municipal Training

Context

In addition to recruit training and in-service training, all firefighters must complete applicable provincial and municipal training.

The Province of Ontario requires fire departments to provide their employees with training on the following topics:

- Workplace Hazardous Materials Information System ("**WHMIS**")
- AODA requirements
- workplace harassment
- other training (as required)

Findings

The Department provides provincial and municipal training as required. Members of the Department's management team have completed the required training listed above. However, the Department does not include provincial or municipal training in its training matrix.

10.8.2 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

As of this FMP, 72 per cent of the Department's personnel (42 out of 57 staff members) hold a DZ or AZ licence. These individuals are certified to operate a fire apparatus as per the compliance standards regulated by the Ministry of Transportation. However, as noted in Table 17, 18 of the current DZ or AZ drivers have the applicable NFPA certification to ensure compliance for operating a fire apparatus by July 2026.

In order to ensure the DZ licensing program is sustainable, the Department recognizes that the program needs to be facilitated by a third-party organization, which will help the Department's personnel obtain applicable certifications going forward.

10.8.3 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

The Department conducts a formal PIAR after it completes a response to a major incident. These PIARs are usually led by the Director of Fire and Emergency Services/Fire Chief or the Deputy Chief. The results of the formal PIARs are documented and reviewed by the Department's administration team to determine whether any aspect of the Department's policies or training program needs to be updated.

The Department also conducts informal PIARs. The Department's officers and firefighters conduct the informal PIARs at their fire stations after completing a response to a small-scale incident. During the PIARs, the officers and firefighters discuss how the small incident was managed.

10.9 Roadmap for Improvement

Training Committee

In order to enhance its training program, the Department should consider establishing a training committee. Having a formalized training committee would help the Department ensure that all mandated training is conducted in a consistent manner, and it would also help ensure that instructors are provided with the information they need to deliver effective training. The membership of the training committee would consist of the Deputy Chief, the Training Officer, and one captain from each of the fire stations.

A formal training committee would also provide support for the Training Officer, which can help the Department avoid a single-point-of-failure scenario. In addition, the committee would provide the Training Officer with the chance to oversee the training program more proactively. The Training Officer could work with the committee to identify and address any gaps that may exist within the Department's training structure, including any issues that may arise at a specific fire station.

By continually analyzing its training program, the Department will have more opportunities to engage in strategic planning and policy development regarding the training and certification process.

Formal Training Policy

As of this FMP, the Department is on track to meet the NFPA certification requirements that are mandated by O. Reg. 343/22. However, the Director of Fire and Emergency Services/Fire Chief should work with the Training Officer to develop a formal training policy that supports this process. The policy should outline the Department's expectations regarding training, as well as the level of training that is required for certification prior to the deadlines outlined in O. Reg. 343/22.

As part of its overall training strategy, the Department should incorporate provincial and municipal training into its training matrix. This training could be added to the training sessions that are completed during the initial orientation process. Alternatively, these sessions can be added as items on the annual training calendar.

If the provincial and municipal training cannot be incorporated into the regular training program, the Department may want to consider mandating its firefighters to complete the additional training virtually (on their own time), which would reduce the impact on the Department's in-service training time.

It is noted that the fire management team has completed provincially mandated training.

Officer Development Plan

Like all fire departments, the Department relies on personnel with many years of experience in the fire service to provide leadership and guidance to newer firefighters. However, as noted in section 10.6, the Department lacks a formal officer development program.

In order to establish an officer development program, the Department should create guidelines for officer development, including a policy that outlines the necessary certifications that personnel must obtain to advance to an officer rank.

NFPA Certification

A gap has been identified in the Department's NFPA certification process. This gap is related to the certification that is required to operate a fire apparatus at an emergency scene. Going forward, the Department should continue making it a priority to increase the number of firefighters who have certification to the NFPA 1002 standard. This standard ensures that the firefighters who are driving the fire apparatus are also trained and certified to operate the vehicle.

Documentation Practices and Technology Needs

The Department should aim to reduce the amount of time that its instructors are spending on manually completing training documentation duties. In order to enhance this kind of time management, the Department should consider improving its documentation practices by using technology in order to ensure that records are managed consistently.

In addition to its investment in a new RMS, the Department should consider training its officers to use the technology. For instance, the Department should be training its officers on the following topics:

- Maintain electronic documentation and other records (including training records).
- Develop interactive lesson plans and instructional materials.
- Update training certifications within the RMS.

Going forward, the Director of Fire and Emergency Services/Fire Chief and the Training Officer should work together to develop a process and policy that will help the Department leverage the recommended technology that will support the training program, as well as address the Department's ongoing training needs.

10.10 Recommendations

Recommendations regarding the training program in Severn are as follows:

10-1. The Deputy Chief, in conjunction with the Training Officer, should establish a training committee to assist with implementing the training program for Severn Fire and Emergency Services and ensuring that sufficient instructors are available to facilitate training.

10-2. The Deputy Chief, in conjunction with the Training Officer, should develop a formalized training policy for Severn Fire and Emergency Services. The policy should set the expectations and levels of training required for certification (in compliance with the legislated deadlines).

10-3. The Deputy Chief, in conjunction with the Training Officer, should develop a formalized officer development plan to ensure that Severn Fire and Emergency Services has enough qualified officers (and potential officers) to meet the definition of a component supervisor as defined by the Occupational Health and Safety Act.

10-4. The Deputy Chief, in conjunction with the Training Officer, should integrate technology into the training program in order to help front-line instructors create instructional materials, develop lesson plans, and update training certifications.

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. A prompt response time is especially critical when an emergency involves a structure fire. The growth of a fire is caused by heat, 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.[24] For example, when a patient is experiencing a heart attack, their survivability decreases at a rate of 10 per cent/minute.[25] The outcomes of many other medical emergencies also depend on fast response times.[26]

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 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 in order 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.

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

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

[26] 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 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*[27]

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

Table 18 shows the staffing levels and response time standards that NFPA 1720 provides for urban, suburban, rural, and remote area demand zones.[28] The table defines each type of demand zone by its demographics, and it indicates the minimum number of staff needed for responses in each area, as well as the expected response time.

Table 18 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.

[27] NFPA 1720 and other standards are scheduled to be consolidated into NFPA 1750 by 2026.

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

Table 18. Staffing and response time standards as per NFPA 1720.

Demand Zone[29]	Demographics	Minimum Staff to Respond[30]	Response Time[31] (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.[32]

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.

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

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

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

[32] 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.[33]

Findings

According to the 2021 Statistics Canada census, Severn has a population density of 27.9 people per sq. km (or 72.3 people per sq. mi.). Based on the community's current population density, Severn meets the definition of a rural area demand zone (as per NFPA 1720).

As of this FMP, the Department does not measure its performance levels or response times against any benchmarks. This lack of statistics is primarily due to the Department's current RMS. However, during the FMP development process, the Department advised that it is transitioning to a new RMS that will have the functionality to retain and provide accurate data, which will assist the Department with measuring its response benchmarks.

In addition, due to a policy change in January 2025, the Department's firefighters now arrive at their fire station and then respond to the incident scene aboard a fire apparatus. As a result of this change, it is now easier for the Department to track the number of firefighters that attend each emergency call, as well as the time they arrive at the incident scene.

11.2.2 Crew Size and Direct Response to Incidents

Context

In some communities, the 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:

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

[33] Ibid.

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.
- 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 firefighting tools, SCBA, 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 when developing response models.

Many fire departments require their personnel to report to the fire station in order 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.[34]

Another NIST study evaluated the effectiveness of fire crew sizes during responses to high-rise fires. The NIST summarized the findings of that study 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.[35]

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

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

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.”

Findings

In January 2025, the Department created a new policy that requires all of its officers and firefighters to respond to their fire station and assemble as a crew before they respond to an incident.

Initially, the new policy was met with a mixed reaction from the Department’s firefighters. However, in the short time that the policy has been in place, the Department’s response capabilities have improved. Although the Department’s response time is slightly longer than it was before, personnel are now responding to emergencies with a fire apparatus that arrives with a crew that is ready to mitigate the incident.

The policy has also improved en route communications for the officers, as they can now pre-plan response efforts with their crew while travelling to the incident site.

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 FMP, the Department works with other fire departments to provide support for tanker operations. In some cases, the Department also supports other fire departments by providing personnel during a response.

However, the Department's personnel do not participate in a significant amount of inter-departmental training with neighbouring fire departments. The lack of this training is mainly due to the nature of the volunteer training night system, which is individualized to each of the participating fire departments.

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. This process 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 steps:

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 ISO 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 19 presents an initial critical tasks analysis for a fire in a single-family home. The table is based on best practices and findings from the NIST, NFPA, and OFM. In addition to the number of personnel noted in the table below, as more personnel arrive at the emergency scene, fire departments should consider assigning an ISO.[36] An RIT team should also be established with a minimum of two firefighters (but a four-firefighter team is ideal). Also, as a reference, note that a structure fire that occurs in a non-hydrant area of a municipality will require an additional four to six firefighters to perform the tasks associated with a tanker shuttle.

Table 19. 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

There was a lack of available response data during the FMP development process. As a result, a statistical review of the Department's critical tasks could only examine data from the six structure fires that occurred between January and November 2025.

[36] For more information about the concept of an ISO, see section 8.9.2 of this FMP.

At three of the structure fires, the Department provided a sufficient number of personnel to perform critical tasks in a non-hydrant area.

At the other three structure fires—which all occurred on weekdays during the day or on weekends—the Department was unable to provide that number of personnel.

11.2.5 Aerial Operations

Context

Aerial operations can play a crucial role in effectively managing structure fires, especially in areas that are not easily accessible from the ground.

An aerial apparatus is a vehicle with an extendible ladder or elevated platform. This kind of apparatus is used to provide elevated water streams, which increase the reach and effectiveness of fire suppression efforts. These vehicles also support roof access and high-angle rescues, both of which are vital for firefighter safety and the rapid control of fire spread.[37] The presence of an aerial apparatus also improves operational efficiency and allows the Incident Commander to deploy resources more strategically, particularly when interior attacks are limited due to fire intensity, hazardous conditions, or structural instability.

Given the importance of aerial capabilities, forming automatic aid agreements with neighbouring fire departments to dispatch an aerial apparatus to structure fires has merit. The agreements are particularly important because not all departments have the financial means or staffing levels to maintain their own aerial units. As such, mutual aid or automatic aid agreements can help ensure communities have timely access to these resources when needed.

The automatic dispatch of an aerial unit minimizes delays, allowing for quicker aerial deployment during the critical early stages of an incident. This kind of regional collaboration enhances fireground safety while improving outcomes for both civilians and responders.

Findings

As of this FMP, the Department does not have an aerial device. However, during the 2025 budget process, the acquisition of an aerial device was approved. The estimated delivery date of the new aerial device is 2029.

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

11.3 Response Statistics

Context

Reviewing historical performance levels and response statistics (such as the types and number of emergency responses) can help a fire department identify its service delivery capabilities.

In addition, modelling and statistical analyses can 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 20 defines the four steps that are involved in dispatching a response to an emergency call.

Table 20. 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").
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 fire apparatus to arrive at the emergency scene that is capable of mitigating or responding to the incident). The fire department can also establish a baseline for its effective response force.

In order for historical data to be useful, fire departments must track both the types of responses they make and how long it takes to complete those responses. That information needs to be tracked consistently across all types of responses, including automatic aid and mutual aid responses.

Findings

Response Time Statistics

Due to the limitations of the Department's current RMS, it is challenging to review historical response data. It is also difficult to review this information due to the complexity of transitioning to a new RMS, as well as adapting to a change in response protocols that has significantly altered statistics about the Department's responses.

Prior to January 2025, the Department would often dispatch a fire apparatus to an emergency call with only one firefighter. Although this process ensured quick response times, those times were false indications of response capabilities. When the fire apparatus arrived at the incident site, there may not have been any on-scene firefighters already present. If there were any on-scene firefighters, there was no process for keeping track of how many personnel were responding to the call.

Following the 2025 change in protocol, the Department can now measure its emergency response capabilities against a baseline, which will allow the Department to set benchmarks for the future. The Department also has a contract with the City of Orillia that allows Orillia to measure the Department's dispatch time. Having this information, along with travel time statistics provided by GIS maps, will help ensure the Department has good response statistics on an ongoing basis.

Emergency Response Statistics

The Department completed the following number of emergency responses per year from 2020 to 2024:

- There were 389 responses in 2020.
- There were 396 responses in 2021.
- There were 415 responses in 2022.
- There were 437 responses in 2023.
- There were 413 responses in 2024.

Table 21 shows the types and number of loss fire responses made by the Department from 2020 to 2024, including the five-year average.

Table 21. Fire responses, 2020 to 2024.

Type of Response	2020	2021	2022	2023	2024	Avg.
Loss fires: structures	14	9	18	10	12	12.6
Loss fires: other	1	0	1	0	0	0.4
Loss fires: vehicles	15	7	17	11	9	11.8
Total	**30**	**16**	**36**	**21**	**21**	**24.8**

The Department also completes emergency responses to assist the local paramedic services, local police service, and other partner agencies (through automatic aid and mutual aid for neighbouring departments). Table 22 lists the number of times per year (from 2020 to 2024) the Department assisted those agencies and provided automatic aid or mutual aid responses.

Table 22. Automatic aid and mutual aid responses for other agencies.

Type of Aid	2020	2021	2022	2023	2024	Avg.
Assistance to paramedic services	74	91	106	126	128	105
Assistance to police services	2	1	2	0	1	1.2
Assistance to other agencies	2	1	0	0	0	0.6
Automatic aid	0	0	1	0	0	0.2
Mutual aid	2	1	2	2	2	1.8
Total	**80**	**94**	**111**	**128**	**131**	**108.8**

Next Steps

Going forward, the Department can use the statistics summarized above to assist with benchmarking exercises.

11.4 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 maps are based on municipal road speeds and road networks, they provide 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 as part of the FMP development process, including the following maps shown below:

- Figures 4 to 6 illustrate the area that personnel from Station 1, Station 2, and Station 3 can cover in 20 minutes (including chute time).
- Figure 7 shows the area that personnel from all three stations can cover in 20 minutes (including chute time).[38]

[38] The maps shown in Figures 4 to 7 have also been provided to Severn in an interactive format that allows the township to compare a variety of response time intervals from each station.

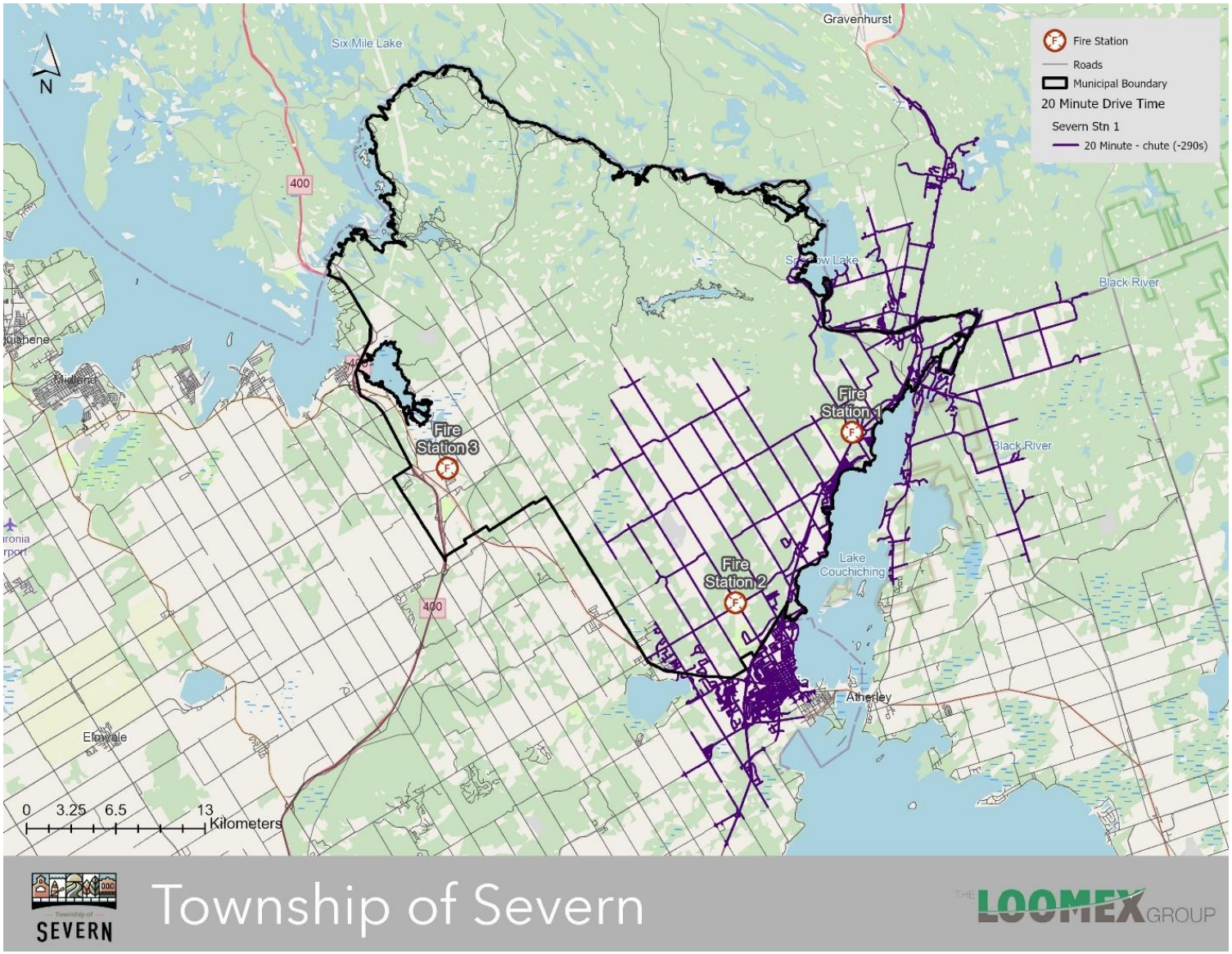

Figure 4. Map of 20-minute coverage area, Station 1.

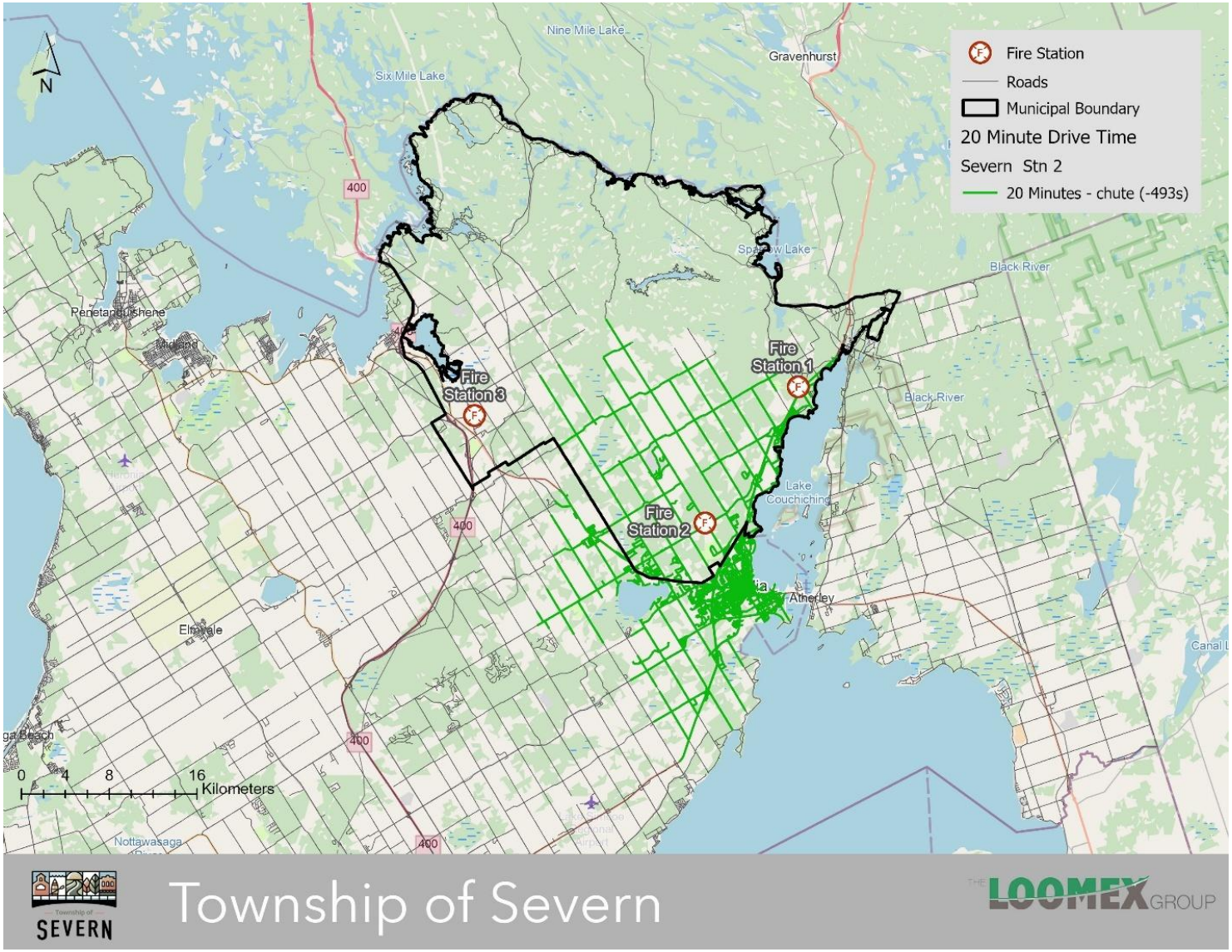

Figure 5. Map of 20-minute coverage area, Station 2.

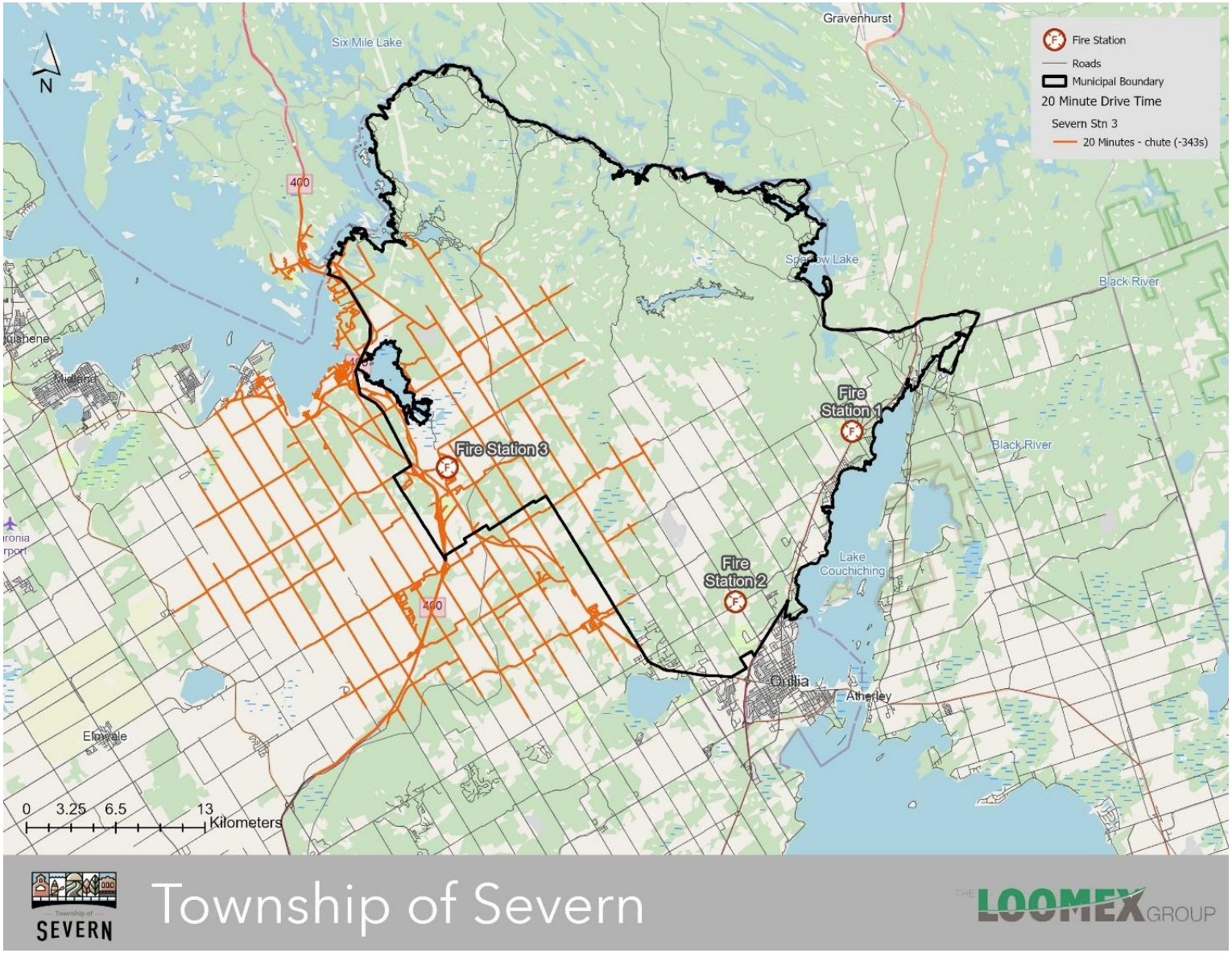

Figure 6. Map of 20-minute coverage area, Station 3.

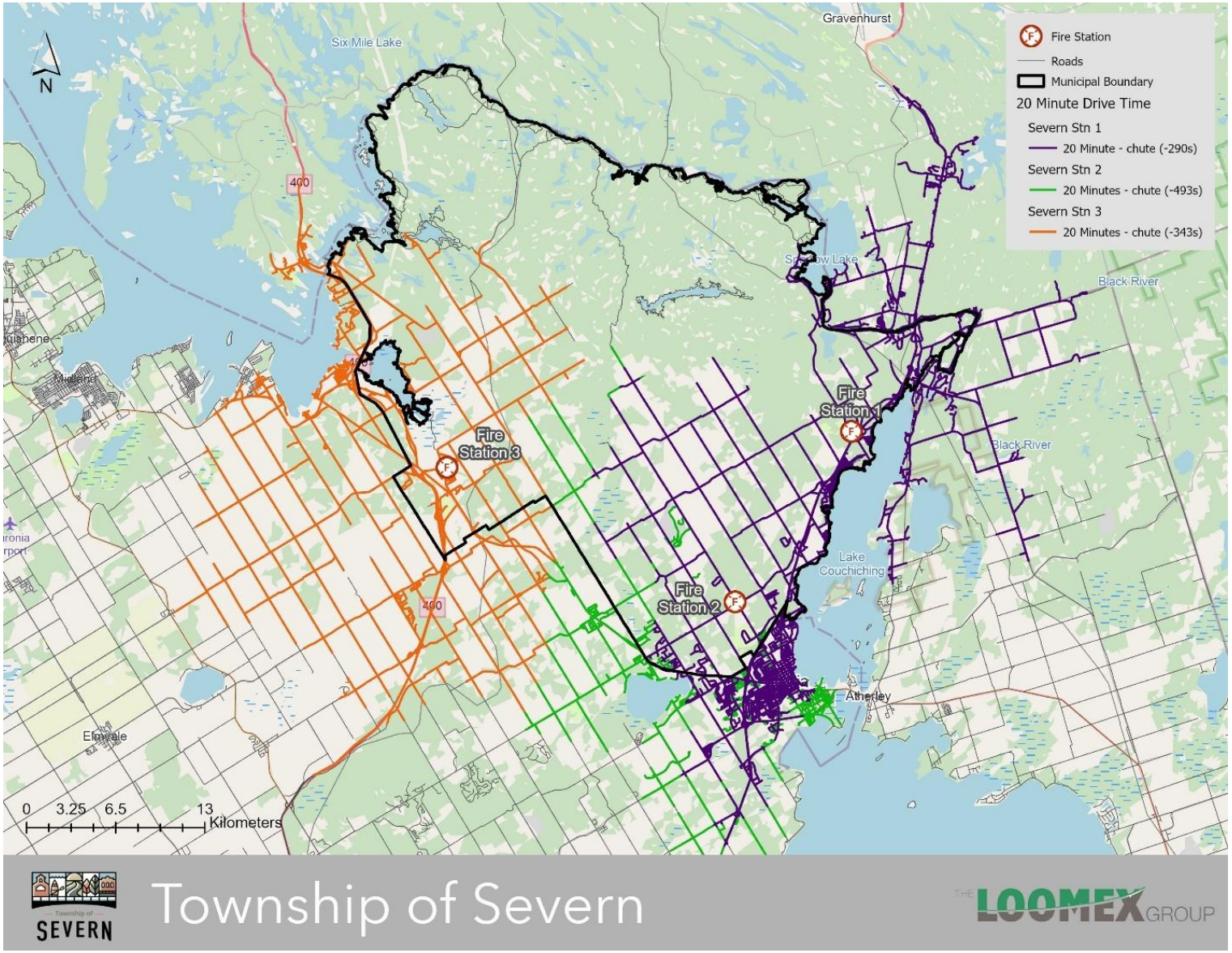

Figure 7. Map of 20-minute coverage area, Stations 1, 2, and 3.

As the maps provided above show, the Department can reach most areas of Severn with its first responding fire apparatus within 20 minutes. However, the Department cannot reach the northernmost part of Severn (which has a lower population density) within 20 minutes.

11.5 Roadmap for Improvement

Staffing Levels and Response Benchmarks

The Department should begin tracking applicable data to ensure that it is meeting its response baseline (effective response force) and moving towards its benchmarks. Doing so will assist the Department with making operational decisions and presenting recommendations to Council. Although data entry is a time-consuming process, the administrative team must prioritize inputting the necessary information into the Department's RMS.

As more accurate historical data is entered into the RMS, the Director of Fire and Emergency Services/Fire Chief will need to begin analyzing the information in order to gain insights for making strategic decisions about the Department's future level of service. If any gaps are discovered in the Department's effective response force, adjustments must be made in order to ensure that the Department can meet its Council-approved level of service. Those adjustments may require making updates to staffing levels or services that the Department can no longer provide.

Critical Tasks

As noted in section 11.3, only 11 months of response data were available for review during the FMP development process. Currently, this data is the only source of information that can be assessed to determine whether the Department is meeting the applicable critical task numbers for its responses to structure fires.

Going forward, the Department should start tracking information related to critical tasks in more detail. Having this information is important for ensuring that the safety of the community and its firefighters is sufficiently protected. For instance, knowing the average critical task numbers on the fireground allows the Department to set operational procedures to ensure the safety of its firefighters. Also, if the Department is not meeting the critical task numbers, changes to its staffing levels or level of service will need to happen.

Once obtaining a substantial amount of data (for multiple years of responses), the Department should be able to determine whether there are gaps in the critical task numbers it provides at an emergency scene, as well as when it cannot provide an effective response force.

If gaps are identified in the effective response force, the Department may want to allocate funding (through the normal budget process) to establish a set number of hours per week to bring volunteer firefighters into the fire station for coverage. (The exact schedule can be managed by the Director of Fire and Emergency Services/Fire Chief.) This coverage could be used to ensure adequate coverage during daytime hours and long weekends, which is typically when the Department has access to fewer volunteer firefighters. The volunteer firefighters could also perform other duties, such as those related to public education, training preparation, and corporate requirements (including monthly checks of fire extinguishers, emergency lighting, and AEDs).

If the Department receives approval to establish a set number of volunteer hours per week, then the Director of Fire and Emergency Services/Fire Chief should continue to monitor the effectiveness of the program to ensure that it is meeting expectations regarding the effective response force. If there is a point when there are significant gaps in providing the appropriate number of firefighters for the effective response force, then the Department should consider looking at establishing daytime staffing with volunteer firefighters. This type of staffing model is becoming more prevalent with many small-to-medium-sized volunteer fire departments in the province. The benefit of this approach is that the volunteer firefighters can be used to solve staffing challenges while improving coverage.

Aerial Operations

As of this FMP, the Department does not have an aerial device. However, Council has approved the acquisition of an aerial device, and the unit is expected to be delivered in 2027.

Rather than waiting until the aerial device is delivered, the Department should begin to develop lesson plans for training its personnel to operate an aerial device. The Department should also develop driver training scenarios, response protocols, and other applicable policies. Also, the Department could reach out to one of its neighbouring fire departments to see whether that organization would like to assist with awareness training for aerial devices.

All of the initiatives noted above should be built into the Department’s work plan for 2026. Doing so will help ensure the aerial device can be put into service more quickly once it is delivered.

Response Statistics

Along with tracking crew size and critical task numbers, the Department should track its response statistics. Doing so provides another source of information that can be used to assess the Department’s effective response force.

Going forward, the Department should input response statistics into its RMS as the information becomes available. This information can then be referenced when it is time to make strategic decisions for the Department.

GIS Mapping

As noted above, GIS maps are vital resources that can be referenced when making strategic decisions. Moreover, as the Department gradually obtains more historical data, GIS maps can be used to show aspects of the Department's operations that can be enhanced through automatic aid agreements with neighbouring fire departments. These kinds of agreements can significantly improve the Department's effective response force.

The following GIS maps illustrate the areas in Severn that neighbouring fire departments can reach within 20 minutes of an initial response:

- Figure 8 shows the response area in Severn that the Orillia Fire Department can reach within 20 minutes.
- Figure 9 shows the response area in Severn that Tay Fire and Emergency Services can reach within 20 minutes.
- Figure 10 shows the response area in Severn that Oro-Medonte Fire and Emergency Services can reach within 20 minutes.
- Figure 11 shows the response area in Severn that the Georgian Bay Fire Department can reach within 20 minutes.
- Figure 12 shows the response area that Ramara Fire and Rescue Services can reach in Severn within 20 minutes.[39]

[39] Ramara Fire and Emergency Services has a different response protocol regarding the number of firefighters it dispatches aboard its fire apparatus. An agreement should be established to ensure that Ramara Fire and Emergency Services always dispatches an appropriate number of firefighters whenever it responds to incidents in Severn. Otherwise, an inadequate number of firefighters may be dispatched, and the Department's effective response force may remain limited despite the support of another fire department.

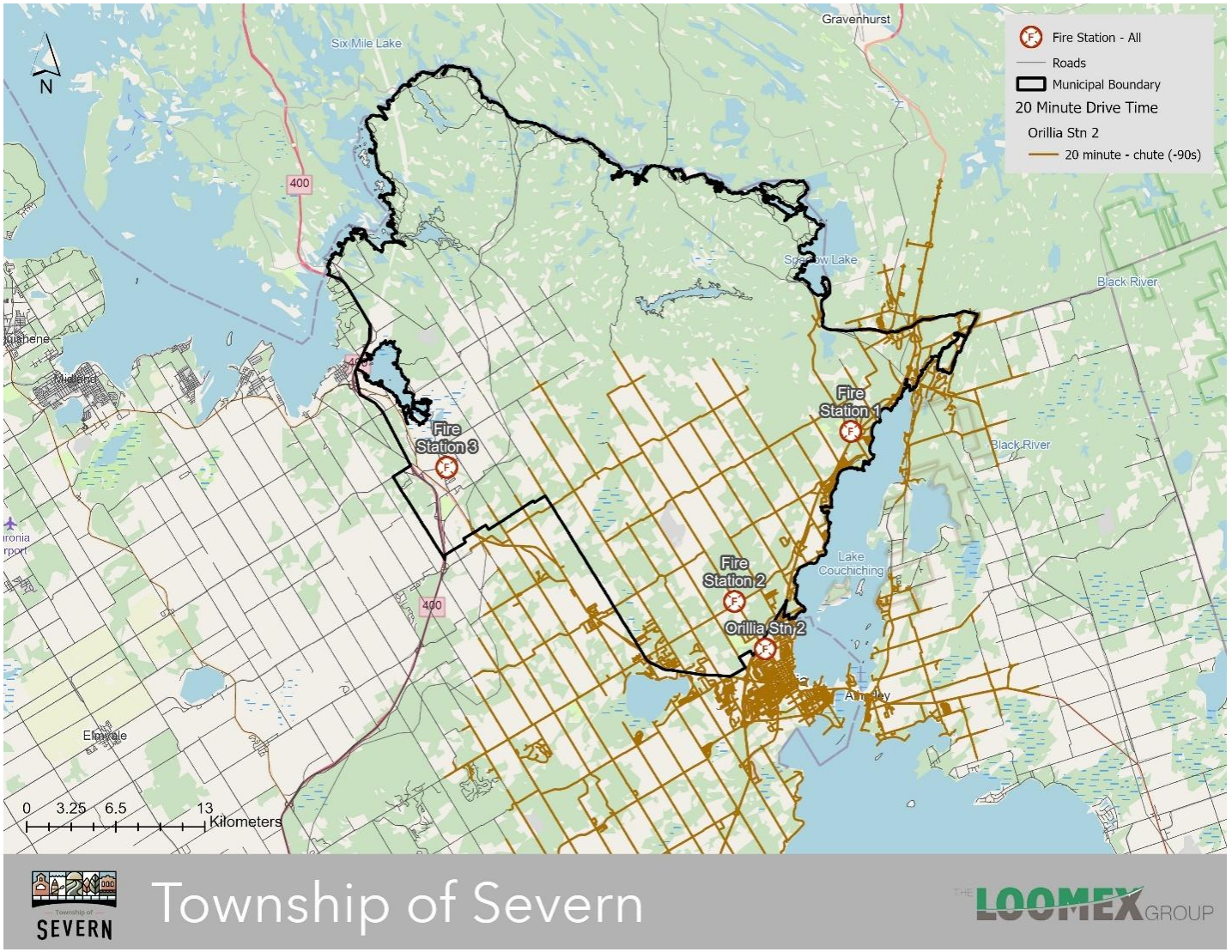

Figure 8. Orillia Fire Department: 20-minute response area.

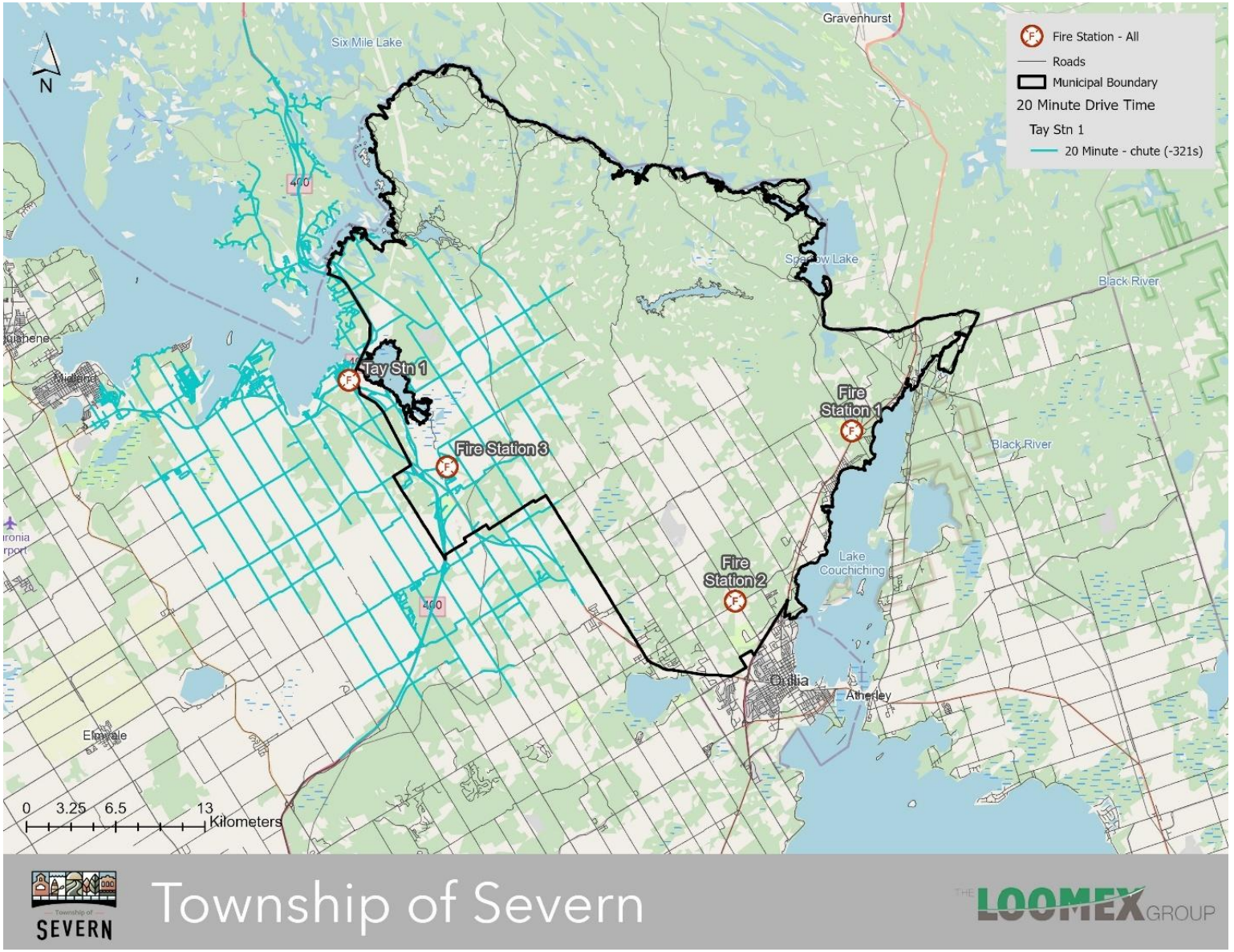

Figure 9. Tay Fire and Emergency Services: 20-minute response area.

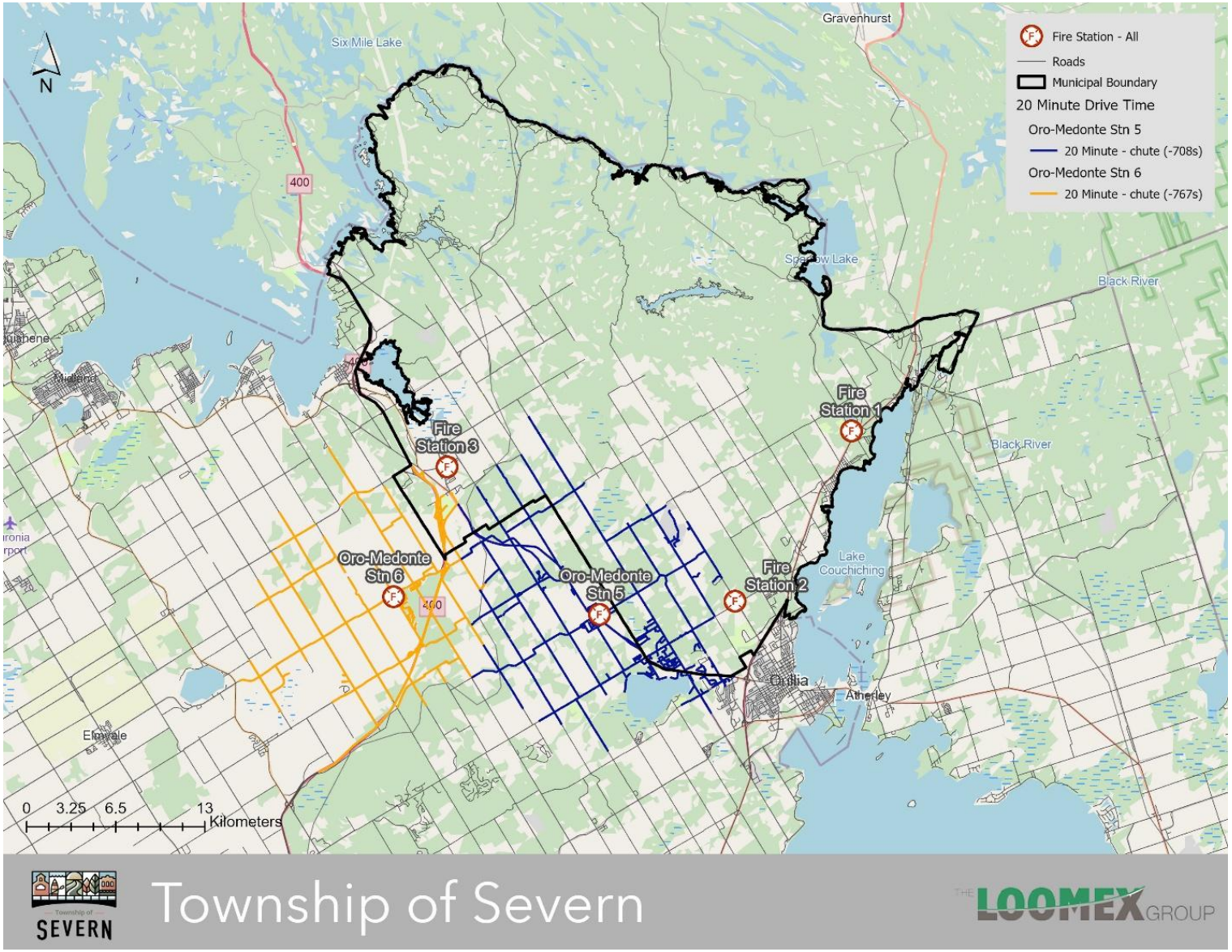

Figure 10. Oro-Medonte Fire and Emergency Services: 20-minute response area.

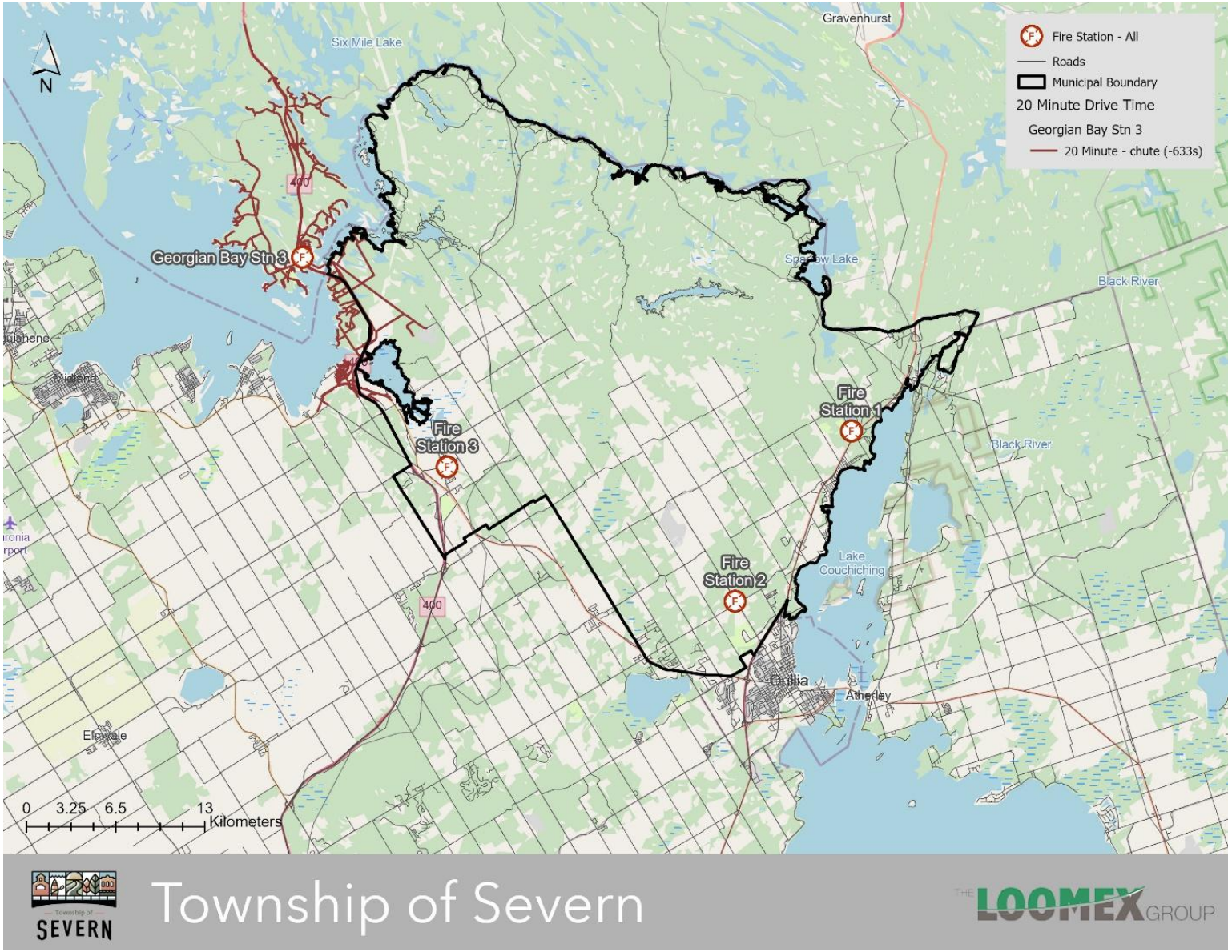

Figure 11. Georgian Bay Fire Department: 20-minute response area.

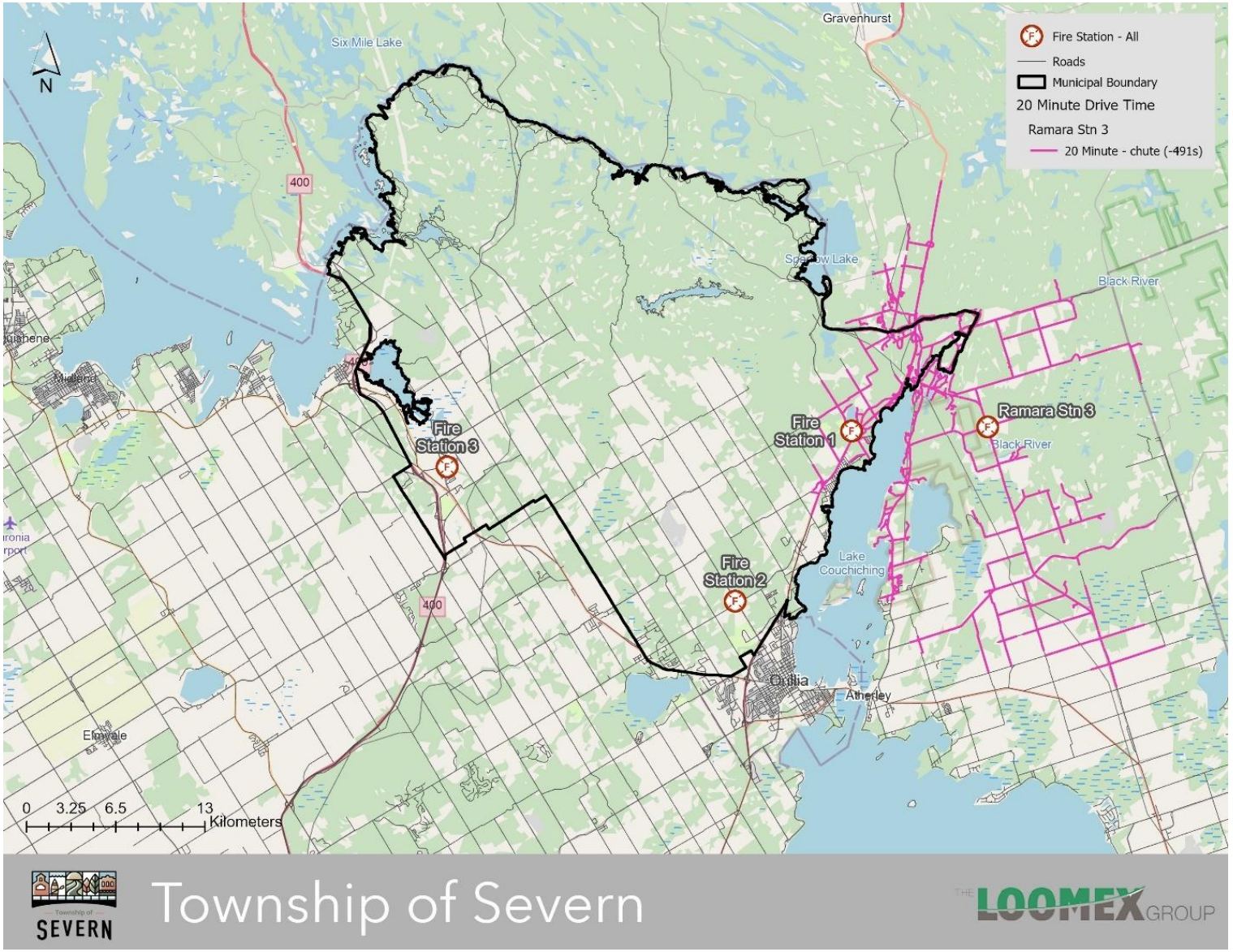

Figure 12. Ramara Fire and Emergency Services: 20-minute response area.

If the Department were to establish automatic aid agreements with the neighbouring departments listed above, the combined response would help increase the number of on-scene firefighters available to perform critical tasks and provide an effective response force in Severn.

Figure 13 shows the combined coverage area in Severn that can be reached within 20 minutes when the Department has the support of neighbouring fire departments.

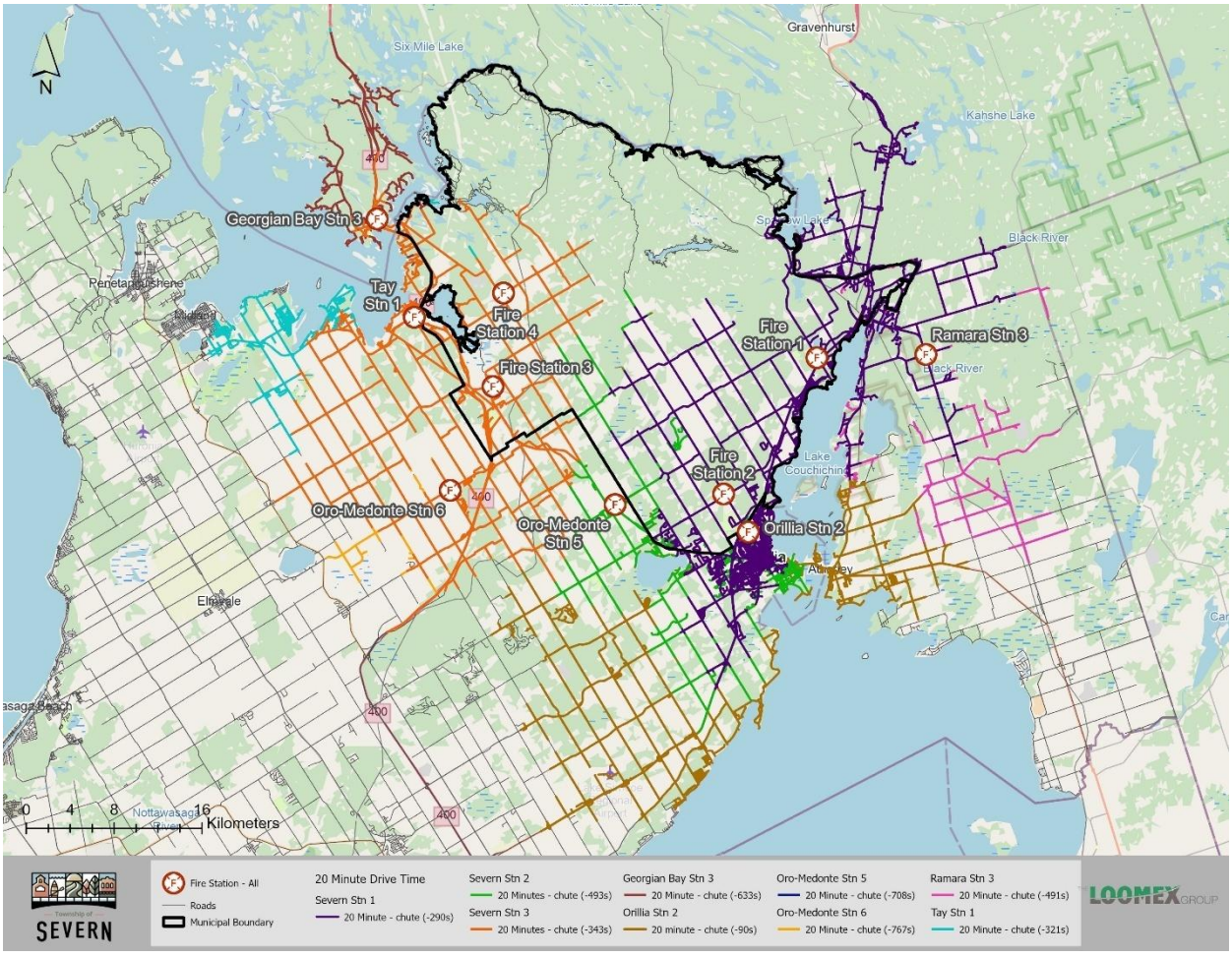

Figure 13. 20-minute coverage area, local and neighbouring fire departments.

As illustrated by the preceding GIS maps, the effective response force and the critical task numbers in Severn can be improved by working with neighbouring fire departments.

In order to achieve the enhancements that the GIS maps have identified, the Director of Fire and Emergency Services/Fire Chief needs to engage with the fire chiefs who oversee the neighbouring fire departments. The ensuing conversations should discuss the feasibility of entering into automatic aid agreements for high-risk calls (such as commercial building fires and structure fires).

It is important to note that the proposed automatic aid agreements should be reciprocal, which means that the Department would respond automatically to applicable emergency calls in the neighbouring municipalities. This kind of arrangement could potentially reduce the financial impacts associated with an automatic aid agreement. If any automatic aid agreements are established, GIS mapping can be used to help define response grids that designate the areas in which neighbouring fire departments are responsible for providing coverage during an emergency response.

11.6 Recommendations

Recommendations regarding response in Severn are as follows:

11-1. The Director of Fire and Emergency Services/Fire Chief should develop a response standard that recommends levels of service for low-, moderate-, and high-risk occupancies. This standard should be based on historical response data and an effective response force that is achievable for Severn Fire and Emergency Services. After the response standard is developed, it should be included in the establishing and regulating bylaw.

11-2. The Director of Fire and Emergency Services/Fire Chief should use historical emergency response data to identify any gaps in the effective response force for Severn Fire and Emergency Services. If any gaps are identified, the Director of Fire and Emergency Services/Fire Chief should consider potential solutions to mitigate those gaps and then present those options to the Chief Administrative Officer.

11-3. The Director of Fire and Emergency Services/Fire Chief should meet with the fire chiefs who oversee fire departments in neighbouring municipalities in order to discuss establishing automatic aid agreements for the response gap areas that have been identified in Severn.

12.0 Fire Department Structure

12.1 Overview

As a best practice, a fire department's organizational structure should be based on several considerations, 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. These factors can also influence 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.[40] A strong organizational foundation can also enhance a fire department's ability to conduct fire prevention, public education, and community engagement initiatives.

12.2 Roles and Responsibilities

Context

In order to meet the needs of its community, a fire department must ensure that it has the appropriate staffing levels and positions (as approved by its municipal council).

Having an appropriate staffing structure can help a fire department accomplish the following objectives:

- Minimize response times.
- Dispatch enough personnel to perform critical tasks simultaneously (such as fire suppression, search and rescue, and incident command).
- Enhance the safety of firefighters and members of the public.
- Increase operational efficiency.

[40]National Fire Protection Association, *NFPA 1201: Standard for Providing Fire and Emergency Services to the Public*.

- Comply with provincial standards.
- Ensure public safety by following the three lines of defence.
- Help the local municipality meet its corporate goals and fulfill its vision.

Findings

The following subsections discuss the Department's staffing levels, as well as the roles and responsibilities of each position within the organization. This information is based on the comments obtained during engagement sessions, as well as the results of a time management study that was conducted during the FMP development process.

The results of the 2024 organizational review that was conducted by Blackline Consulting were also examined. This review mainly included discussions about the Department's full-time staffing (not volunteer staffing). Notably, the 2024 review stated, "the Department staffing is in line with peers."

12.2.1 Organizational Structure

At its full complement (as approved by Council), the Department has four full-time positions:

- 1 Director of Fire and Emergency Services/Fire Chief position
- 1 deputy chief position
- 1 fire prevention officer position
- 1 training officer position

At its full complement, the Department has 75 volunteer positions, with 25 volunteers allotted to each fire station.[41] These positions include the following roles:

- 3 volunteer district chief positions (1 per station)
- 12 volunteer captain positions (4 per station)
- 60 volunteer firefighter positions (20 per station)

Because the Department is a volunteer-based fire services provider, its staffing levels fluctuate on a regular basis. As of this FMP, the Department has four full-time personnel and 61 volunteer personnel.

Figure 14 illustrates the Department's current organizational structure and staffing level.

[41] For staffing purposes, Station 3 and Station 4 are treated as a single fire station, sharing a full complement of 25 firefighters.

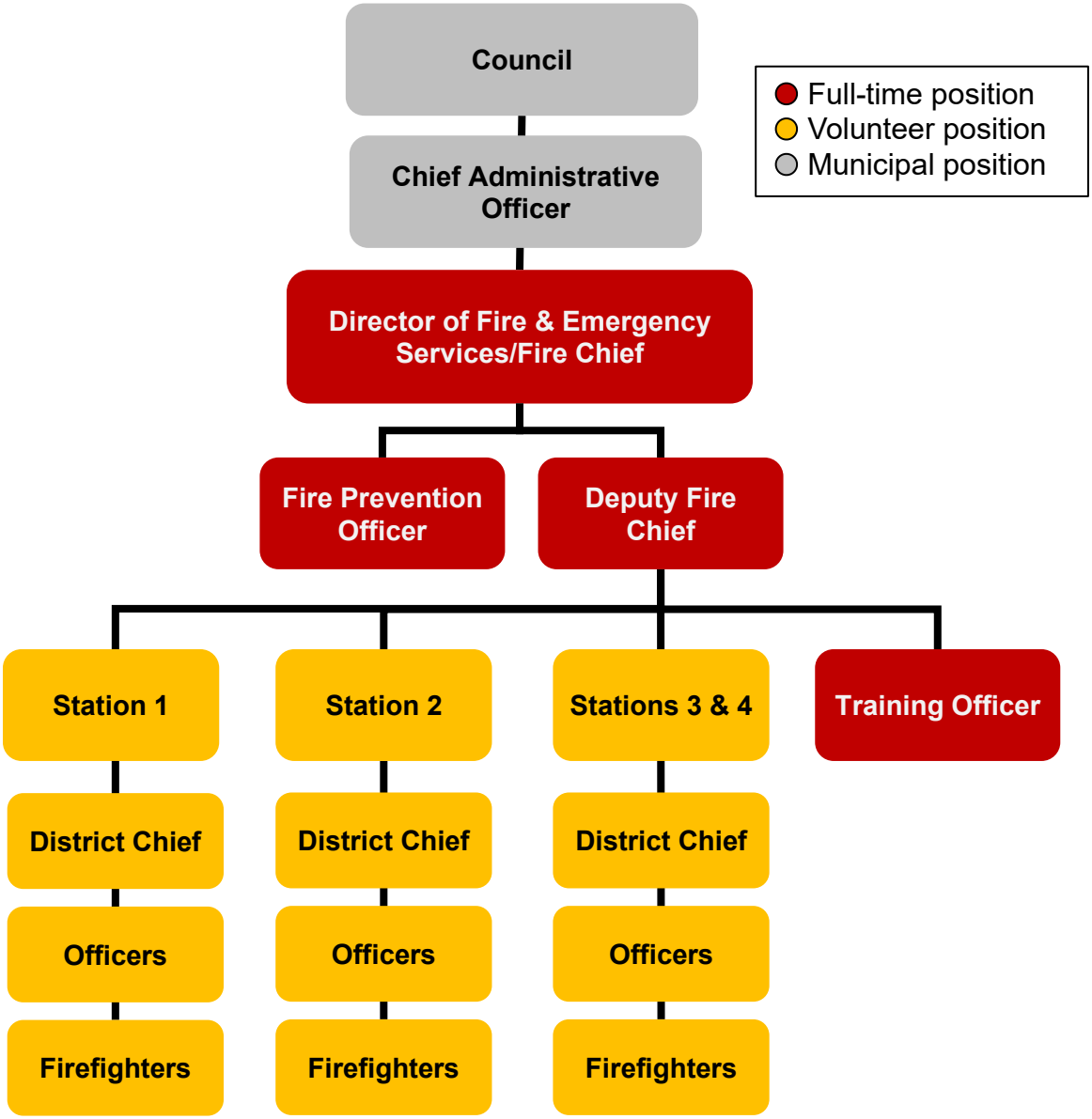

Figure 14. Current organizational structure, Severn Township Fire Services.

12.2.2 Responsibilities Per Staff Member

Table 23 summarizes the responsibilities that are delegated to each position within the Department. (The table is not intended to show an exhaustive list of duties. For more information about each role, consult the Department's official job descriptions.)

Table 23. Staff roles and responsibilities, Severn Fire and Emergency Services.

Role	Responsibility
Director of Fire and Emergency Services/Fire Chief/CEMC	• Serve as a member of Severn's senior management team. • Serve as liaison between Severn's municipal departments and the Department. • Oversee the overall operations of the Department. • Oversee the fire prevention division. • Develop the strategic direction of the Department. • Serve as Severn's CEMC. • Respond to emergencies as required. • Serve as an on-call senior chief officer for 26 weeks a year during after-business hours.
Deputy Chief	• Oversee the operations of the Department. • Oversee the training division. • Manage the facilities and fleet for the Department. • Serve as Severn's alternate CEMC. • Conduct duties of Director of Fire and Emergency Services/Fire Chief when required. • Respond to emergencies as required. • Serve as an on-call senior chief officer for 26 weeks a year during after-business hours. • Serve as a management representative on the Department's JHSC.

Role	Responsibility
Training Officer	• Determine the vision and goals of the training program (in conjunction with the Deputy Chief). • Oversee the day-to-day operation of the training program, including conducting training, developing training lesson plans, and preparing training instructors. • Manage the recruit training program. • Respond to emergencies as required.
Fire Prevention Officer	• Develop the vision and goals of the fire prevention program (in conjunction with the Director of Fire and Emergency Services/Fire Chief). • Oversee the day-to-day operation of the fire prevention programs, including conducting inspections and public education programs. • Work with other applicable municipal departments in Severn as required. • Respond to emergencies as required.
Station District Chief	• Oversee the day-to-day operations of the fire station (in conjunction with the Deputy Chief). • Conduct training as required. • Attend public education events as required. • Respond to emergencies as required.
Station Captains	• Oversee the day-to-day operations of the fire station (in conjunction with the District Chief). • Conduct training as required. • Attend public education events as required. • Respond to emergencies as required.
Station Firefighters	• Attend required training. • Attend public education events as required. • Respond to emergencies as required.

12.2.3 Time Management Study

Background and Structure of Study

During the FMP development process, each of the Department's full-time staff members completed a time management study. The purpose of the studies was to obtain "snapshots" of the tasks completed by each full-time staff member, as well as the time commitments required to complete those tasks. In addition, the Director of Fire and Emergency Services/Fire Chief was asked to provide information about the time that he spends on various duties over the course of a year.

Table 24 defines the categories that the Department's full-time personnel used to sort their time. The table indicates which categories are relevant to each staff member.

Table 24. Time category definitions and relevant full-time staff members.

Category	Definition	Director of Fire and Emergency Services/Fire Chief	Deputy Chief	Fire Prev. Officer	Training Officer
Corporate duties	Complete senior management duties and emergency management program duties.	✓	✓		
Strategic	Establish the long-term goals and direction of the Department.	✓	✓	✓	✓
Tactical	Complete specific actions to implement the short- and long-term goals and direction of the Department.	✓	✓	✓	✓
Task	Complete hands-on day-to-day actions.	✓	✓	✓	✓

Category	Definition	Director of Fire and Emergency Services/Fire Chief	Deputy Chief	Fire Prev. Officer	Training Officer
External fire chief and CEMC meetings	Attend meetings outside the Department, such as county-wide fire chiefs' meetings and provincial CEMC meetings.	✓	✓		
On-duty response	Respond to emergencies during regular business hours.	✓	✓	✓	✓
Off-duty response	Respond to emergencies outside of regular business hours.	✓	✓	✓	✓
Off-duty meetings	Attend meetings outside of regular business hours, including station training sessions, station meetings, and community meetings/events.	✓	✓	✓	✓

Results of Time Management Study

The results of the time management study are presented as follows:

- Figure 15 shows the results of the Director of Fire and Emergency Services/Fire Chief's time management study.
- Figure 16 shows the results of the Deputy Chief's time management study.
- Figure 17 shows the results of the Fire Prevention Officer's time management study.
- Figure 18 shows the results of the Training Officer's time management study.

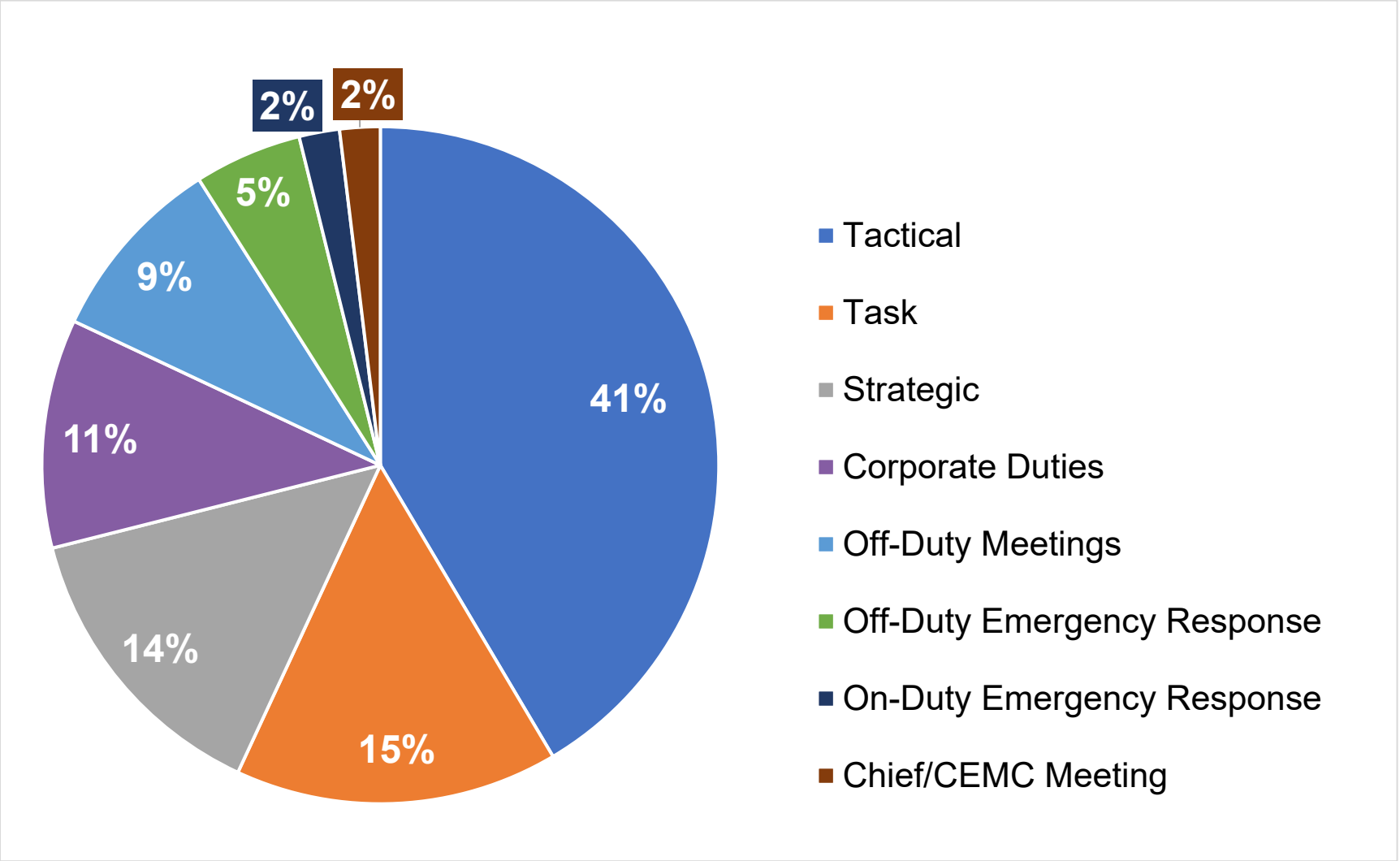

Figure 15. Time allocation, Director of Fire and Emergency Services/Fire Chief.

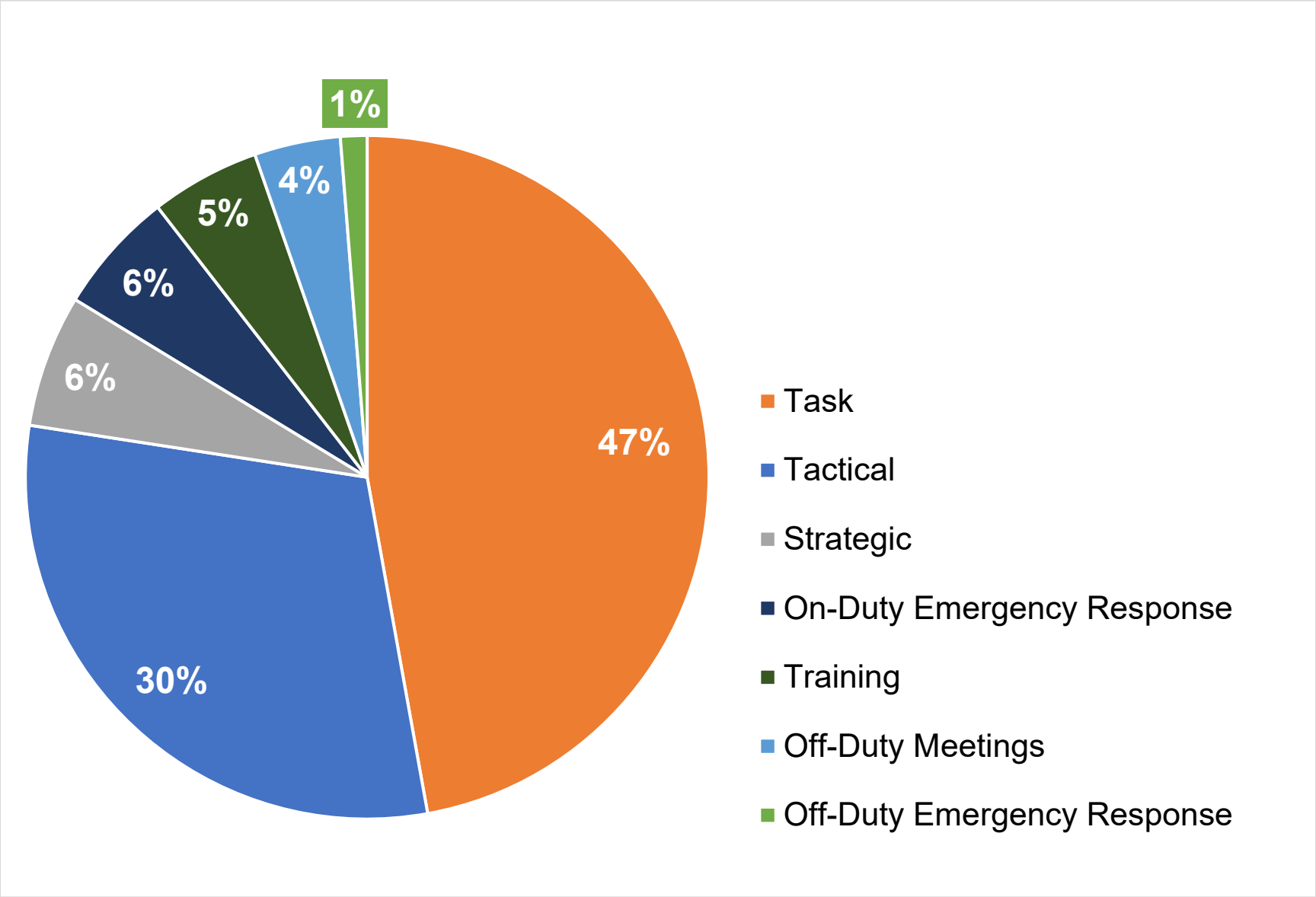

Figure 16. Time allocation, Deputy Chief.

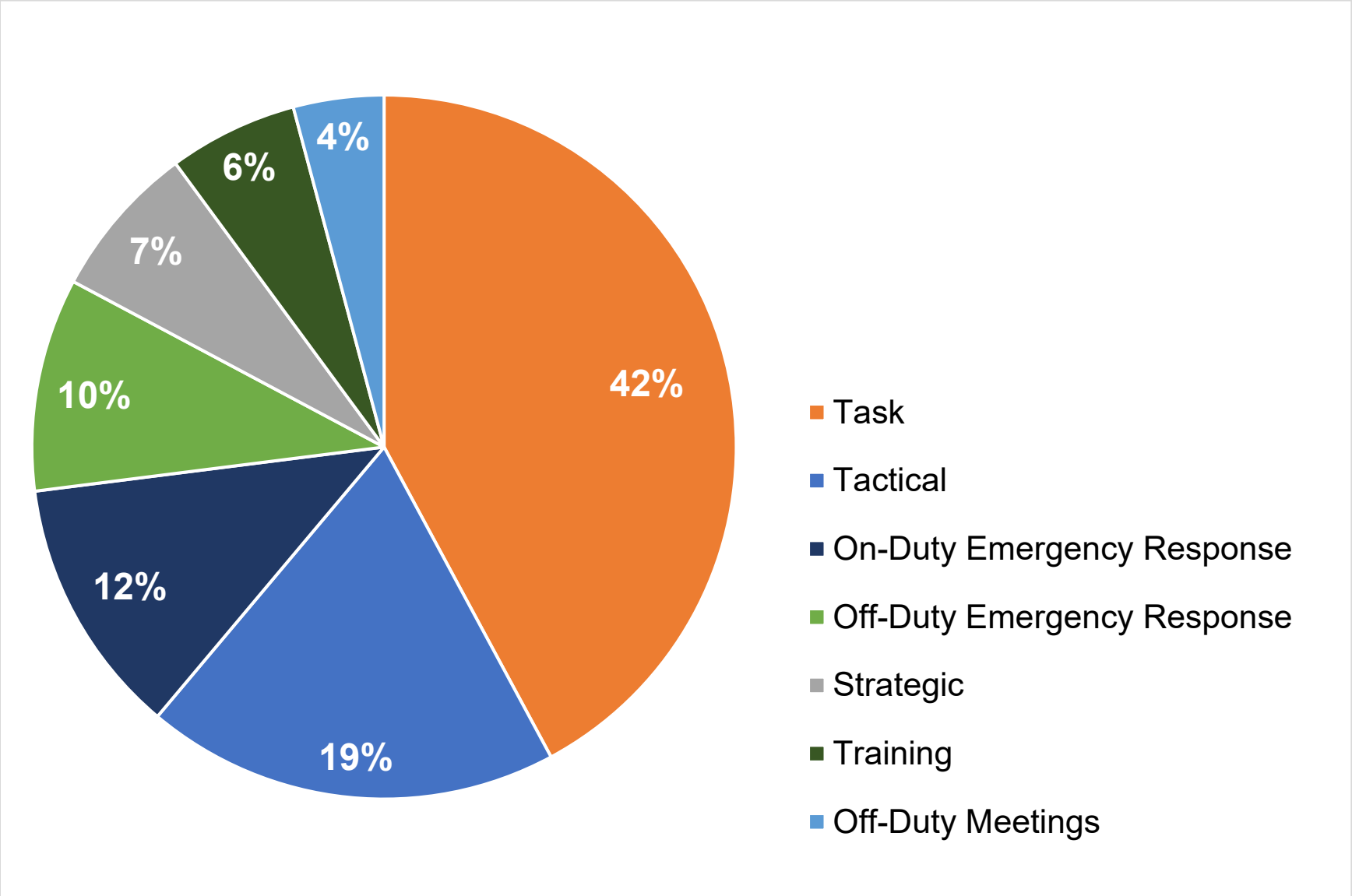

Figure 17. Time allocation, Fire Prevention Officer.

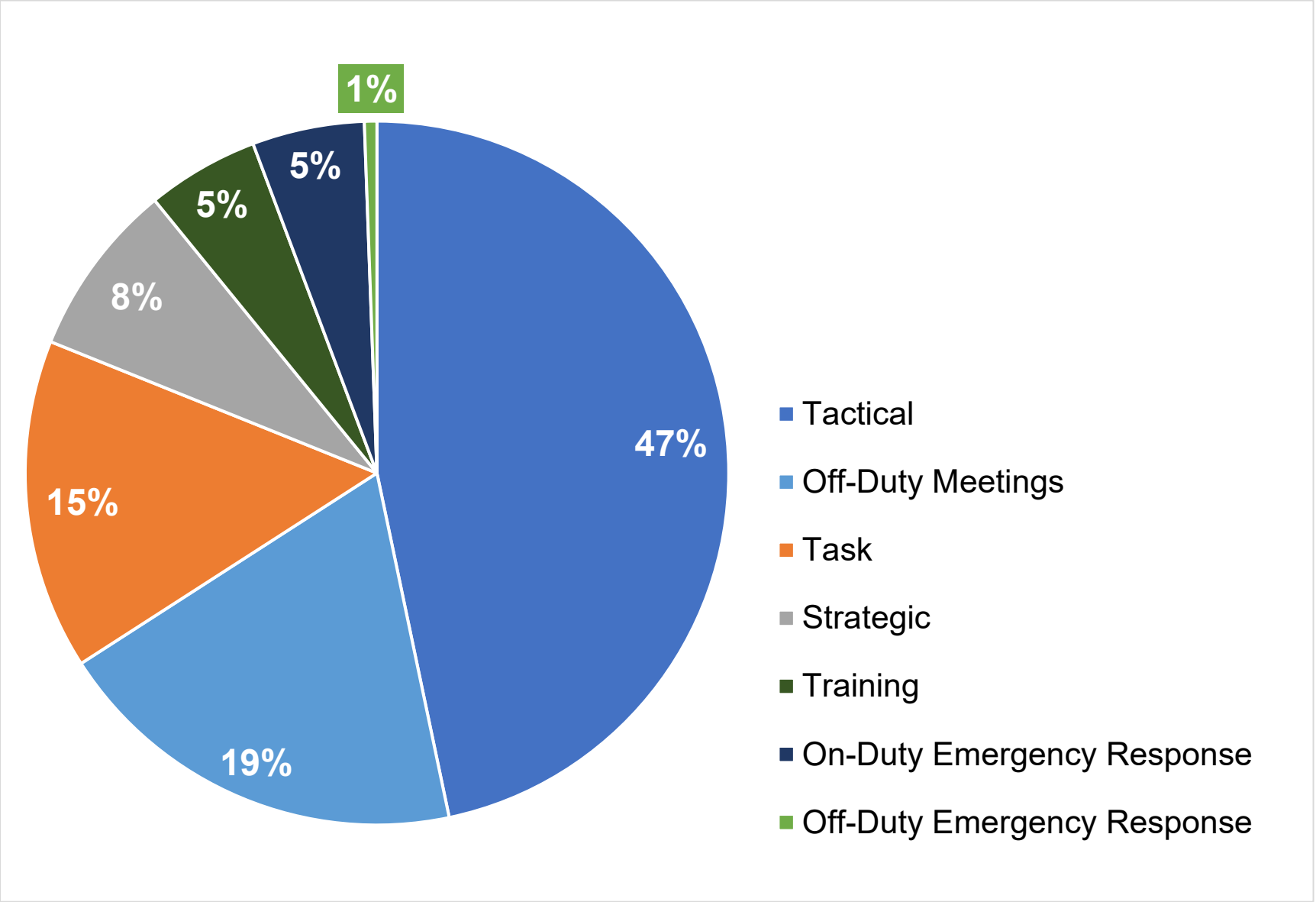

Figure 18. Time allocation, Training Officer.

12.3 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, and 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

The Department has job descriptions for each of its roles.

As of this FMP, the Department's senior management team is in the process of reviewing each job description for operational changes or updates. If any changes or updates are required, the Director of Fire and Emergency Services/Fire Chief works with the Manager of Human Resources/Health and Safety to update the job descriptions.

12.4 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 leadership personnel 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.

Key components of a well-structured succession plan are as follows:

- Identify key roles in the fire department.
- Outline the skills and qualifications required for each key role in the fire department.
- Provide qualified personnel with the training and experience they need to step into key roles when required.
- Develop and maintain a training program.
- Develop and maintain a fire prevention program.
- Complete administrative duties.

There are many reasons why it is important to complete succession planning. For example, if a specific member of the fire department is absent (such as someone in a leadership role), the completion of important tasks may be delayed or disrupted. This situation may lead to a single-point-of-failure scenario if there are no additional personnel who are trained to perform those tasks. In some cases, the inability to complete certain tasks may hinder operational effectiveness and firefighter safety.

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 is currently focusing on reviewing and redefining the current roles within the organization. As a result, the Department has not dedicated a significant amount of time to discussing succession planning initiatives with applicable directors.

12.5 Inter-Municipal Fire Department 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 more 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

Under the guidance of the Director of Fire and Emergency Services/Fire Chief, the Department has been working to strengthen its relationships with other fire departments in the area. As part of these efforts, representatives of the Department have attended meetings with the other fire chiefs from the County of Simcoe, as well as county-wide training and fire prevention meetings.

The fire chiefs of the County of Simcoe have also established an informal agreement regarding shared equipment and joint equipment purchases.

12.6 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.
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 should strive to establish the structure that best aligns with its community's risks (as identified in its CRA) and service expectations.

It is worth noting that most fire departments are owned and managed by the municipality they serve. However, some fire departments may also have fire protection agreements with other nearby communities.

Findings

More than 85 per cent of the Department's staff members are volunteers. According to the definition provided in NFPA 1720, this percentage means the Department is classified as a volunteer fire department. However, as mentioned in section 12.2.1, the Department has several full-time staff members who support the organization's volunteers.[42]

12.7 Roadmap for Improvement

Staffing Levels

The Department is a volunteer-based organization with four full-time positions. In order to continue operating with this service model for the foreseeable future, the Department should continue focusing on steadily increasing (and maintaining) its number of volunteer firefighters. The Department should also consider implementing some of the options discussed in section 11 of this FMP to bridge any gaps in its effective response force.

Full-Time Staff Members and Time Management

The results of the time management study conducted for this FMP indicate that the Department's full-time staff members are currently spending too much of their time on tactical activities and operational tasks. As a result, the full-time personnel do not have enough time to complete strategic or corporate initiatives. This scenario means that the Department is operating reactively rather than proactively.

There are several reasons why the Department's full-time personnel are experiencing challenges related to time management within their specific roles. One of the main challenges is the amount of work required to ensure the Department's operations meet legislative regulations, municipal/public requirements, and municipal/public expectations. Also, it can be challenging for the full-time staff to recognize their individual duties, especially when there is a blending of roles and responsibilities.

[42] For more information about the Department's service delivery model, see section 11 of this FMP.

As shown in section 12.2.3 of this FMP, the Training Officer and the Fire Prevention Officer are primarily focused on delivering training and fire prevention initiatives, rather than spending time on planning and strategy development related to future initiatives. As a result, the Deputy Chief must assume a tactical role and handle planning and strategic duties for the training division. This scenario means that the Director of Fire and Emergency Services/Fire Chief must assume some of the Deputy Chief's operational duties.

All four of the Department's current full-time staff members also complete a variety of operational tasks, such as delivering station supplies, moving fire apparatus, or repairing equipment and infrastructure. Completing these tasks reduces the amount of time available for managing the Department, supporting volunteer officers and firefighters, and planning for the future.

Although there are time management challenges and a potential tendency to act in an operational capacity, it is important to note that the Department's full-time personnel are a cohesive unit. The full-time staff members are willing to work together and help each other accomplish the requirements of all positions.

Another challenge that was identified during the FMP development process is that the Department only has two staff members who can provide on-call support and serve as representatives of Severn outside of regular business hours.[43] As noted in section 12.2.2, both the Director of Fire & Emergency Services/Fire Chief and the Deputy Chief handle on-call duties. (The roles alternate the responsibility over the course of the year.) This scenario means that, for 26 weeks of the year, the on-call officer cannot leave the vicinity of Severn, as they need to remain available to respond to emergency calls. The on-call officer also needs to be available to support the district chiefs and captains in case these personnel have any questions or concerns. The nature of this arrangement makes it difficult to maintain a healthy work-life balance, as it impacts which days are available for vacation or time off, since each staff member can only schedule personal days when the other staff member is available to serve as the on-call officer.

From a high-level perspective, it is easy to question the need for one of the current officers to serve as the on-call officer and remain available after business hours. However, the reality is that this arrangement is one of the ways the volunteer fire service is supported, and it protects Severn from potential liability concerns. These considerations aside, the human cost to the current arrangement cannot be ignored, as it strains the work-life balance of both the Director of Fire & Emergency Services/Fire Chief and the Deputy Chief. In years past, this type of arrangement was seen as acceptable, as there was a perception that "the nature of the job is being on call." Today, there is a greater focus on improving the work-life balance of all personnel.

[43] Note: This issue was not discussed in the 2024 report prepared by Blackline Consulting.

As a way to reduce the time management challenges and the burdens of the on-call system, the Department should consider using a multi-step approach to help all of its staff members manage their individual roles. However, due to the nature of managing a volunteer fire department, any plan the Department implements will need to have some degree of flexibility. As such, the following steps are based on a progressive approach to improved time management. The Department does not need to complete the steps all at once, but just as the need arises. Each step requires monitoring and adjustment phases, as well as milestones that should be reached before the Department progresses to any additional steps:

1. The Director of Fire and Emergency Services/Fire Chief should review the roles, responsibilities, and current job descriptions for the full-time personnel and then set parameters for the time each position allocates to strategic, tactical, and task objectives.
2. The Director of Fire and Emergency Services/Fire Chief should work with the full-time staff to develop a plan on how to achieve the objectives for each position. These goals should then be reiterated during regular meetings and coaching sessions.
3. The Director of Fire and Emergency Services/Fire Chief should continue to track and monitor the roles and responsibilities of each full-time position in order to make recommendations in the future.
4. The Director of Fire and Emergency Services/Fire Chief should explore ways to bridge any gaps in responses and day-to-day operational tasks (with the possibility of seeking funding to have volunteer firefighters staff a fire station for response purposes). Doing so would help with the time management challenges at the task level. If this system were put into place, many of the requirements for moving equipment between fire stations, delivering supplies, or moving fire apparatus could be done by volunteer firefighters instead of full-time staff members, which would allow the latter to concentrate on their designated roles/responsibilities.
5. Consideration should be given to assigning operational and administrative duties to one of the other full-time positions in the Department. This initiative will require a change in the Department’s rank structure (for the Deputy Chief) to ensure the person filling the role would have the ability to make decisions on behalf of the Department. The additional personnel would also need to be added to the on-call senior officer rotation. Adding a third person to the rotation would reduce the number of times a chief officer has to be on call, changing from 26 weeks a year to 17 weeks a year, which is a significant reduction. (Also, adding a third person would provide greater flexibility for picking holidays and weekends off.) Overall, this change will make a large impact on the officers’ work-life balance. The change will also allow the Director of Fire & Emergency Services/Fire Chief to become more strategic within the Department and have the ability to work more closely with the CAO and the directors on corporate/strategic initiatives.

Additional Chief Officer

This initiative provides additional context for item 5 in the list above.

As discussed previously in this FMP, the Department and the CAO should consider reorganizing the current full-time staffing model to include another chief officer position. Doing so could help the Department address some of its current time management issues and work-life balance challenges.

First, the Department needs to consider whether the Training Officer or the Fire Prevention Officer has the capacity to assume additional duties. Based on the results of the time management study conducted for this FMP, both positions have assigned roles/responsibilities that take significant time to complete. This workload is part of the reason why a training and fire prevention committee is recommended for the Department's organizational structure.

When viewed from a strategic lens, the Training Officer's position (as supported by the Deputy Chief and training committee) is still very dynamic due to the provincial certification requirements that must be met in 2026 and 2028. In addition to these requirements, the Training Officer needs to ensure that the Department's regular training programs (for both volunteer firefighters and recruits) are facilitated. As such, the Training Officer position has limited hours available to complete an expanded list of duties.

In contrast to the Training Officer's workload, the Fire Prevention Officer's current roles, responsibilities, and legislative requirements are more stable, and they are not affected by as many changes. It is important to note that it still takes a significant time for the Fire Prevention Officer to complete all assigned duties effectively. However, once fire prevention programs are developed, they usually do not need to undergo significant changes. Rather, the programs mostly need to be implemented.

Based on the considerations discussed above, it is more prudent to assign additional chief officer duties to the Fire Prevention Officer and update the Department's rank structure accordingly.

In order to ensure this reorganization is successful without reducing the effectiveness of the fire prevention programs, a fire prevention committee should be added to the Department's structure. The committee members could serve as liaisons at the Department's fire stations and assist with the delivery of public education programs.

Ideally, once the three chief officer positions are established, the dedicated focus should be as follows:

- The Director of Fire and Emergency Services/Fire Chief should primarily focus on the strategic direction of the Department. This position should also oversee the Department's overall operations while having an increased presence and ability to work with other corporate directors and the CAO. This position would also respond to emergencies as required or when serving as the on-call officer.
- One Deputy Chief would manage the Department's operations, training, fleet, and facilities. This focus would include overseeing the aspects of the Department's operations, including the district chiefs, captains, and firefighters. This position would also oversee the training program (in conjunction with the Training Officer and training committee) and the Department's vehicles, equipment, and facilities. This position would also respond to emergencies as required or when serving as the on-call officer.
- The new Deputy Chief would manage the Department's administrative, fire prevention, and quality assurance obligations. This focus would include overseeing and implementing the fire prevention programs (with assistance from the fire prevention committee), assisting with the day-to-day administration of the Department, overseeing health, safety, and wellness programs and any community risk reduction programs. The role would also handle quality assurance duties, such as submitting necessary provincial legislative requirements/reports (such as standard incident reports), Ministry of Transportation billing, required medical documentation, or Fire Marque documentation. This position would also respond to emergencies as required or when serving as the on-call officer.

Figure 19 shows the Department's new organizational structure with the addition of the third chief officer position.

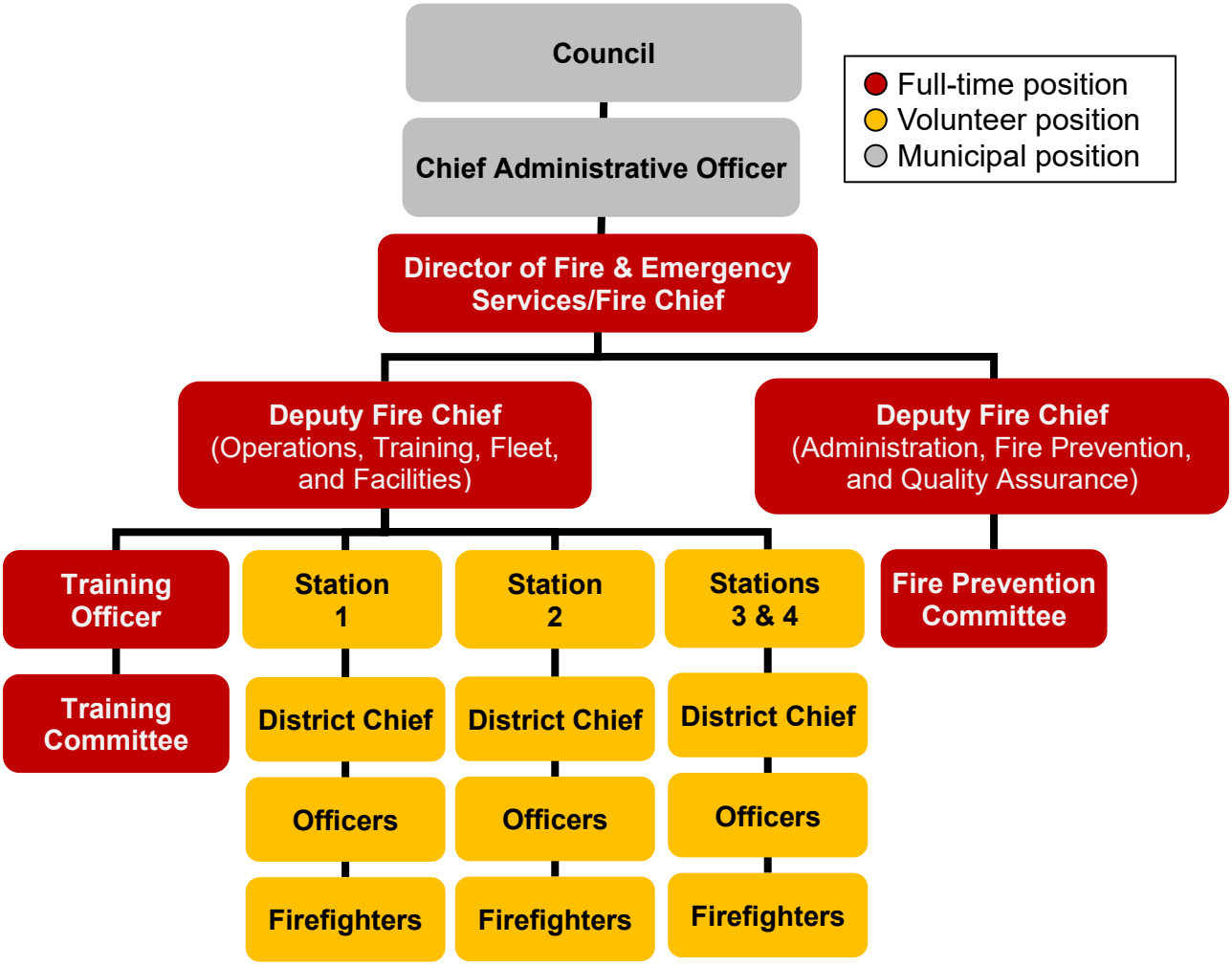

Figure 19. Future organizational chart with additional deputy chief.

Once the reorganization of the full-time staff has been completed, the Director of Fire and Emergency Services/Fire Chief should establish a process for monitoring the new position's time. Doing so will help ensure that the scope and effectiveness of the Department's fire prevention programs are not being reduced. In addition, the Director of Fire and Emergency Services/Fire Chief should continue to monitor growth trends in Severn and analyze the Department's ability to manage growth from a public education and code enforcement perspective. (The types of occupancies in the community also need to be monitored, especially if there is a change that requires the Department to conduct an increased number of fire inspections.)

It is important to note that, in the future, the Department may need to reintroduce a dedicated fire prevention position, especially if there is a significant level of growth in Severn. Figure 20 shows what the Department's full organizational structure would look like in the future if a dedicated fire prevention position were to be reintroduced.

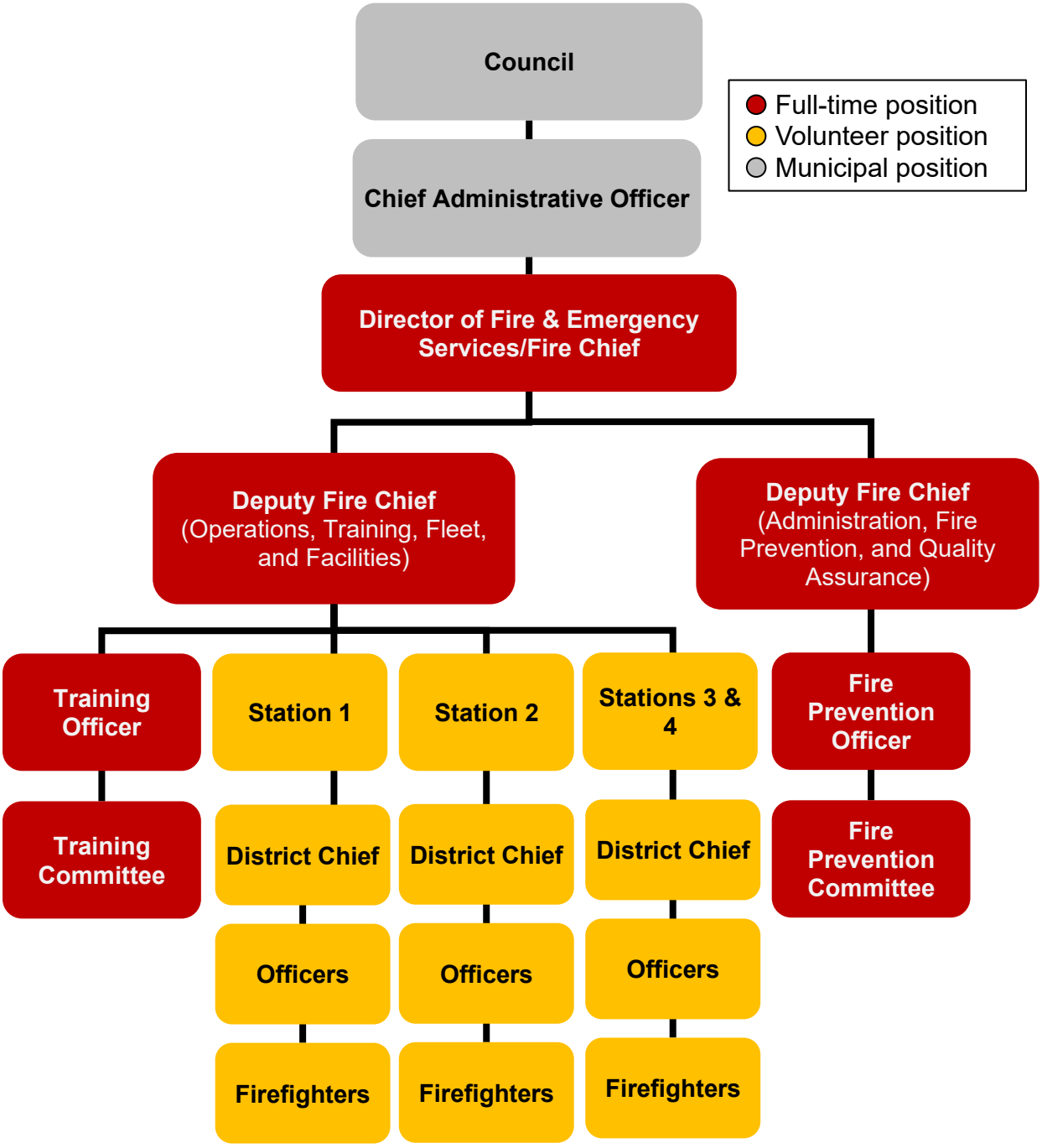

Figure 20. Future organizational chart with fire prevention officer position.

Operational Pay for Volunteers

The Department should consider using the normal budgeting process to allocate a weekly budget for bringing in on-duty volunteer firefighters, particularly during daytime hours. (However, the schedule would be flexible, and it would be managed by the Director of Fire and Emergency Services/Fire Chief.)

These funds could be used to pay the volunteer firefighters to perform a variety of operational tasks, such as:

- moving fire apparatus
- repairing equipment or infrastructure
- assisting with meeting legislative requirements
- preparing for training sessions
- assisting with fire prevention programs

For example, if there was a budget allocated for 80 hours of operational pay per week (at a standard volunteer hourly rate), it would allow the Department to bring two people in when required. These personnel could handle various tasks or staff a fire station on a long weekend when there is a shortage of available volunteer firefighters. This initiative would be part of the approach to address time management challenges for full-time staff members (as previously discussed), as well as a way to manage the Department's effective response force.

Impact on Time Management

Both the addition of another deputy chief position and the introduction of operational pay for volunteer personnel can help the Director of Fire and Emergency Services/Fire Chief dedicate more time to strategic initiatives and corporate duties.

Figure 21 compares the Director of Fire and Emergency Services/Fire Chief's current time allotment versus the time allotment the role would have after the Department reclassifies the Fire Prevention Officer as an additional Deputy Chief.

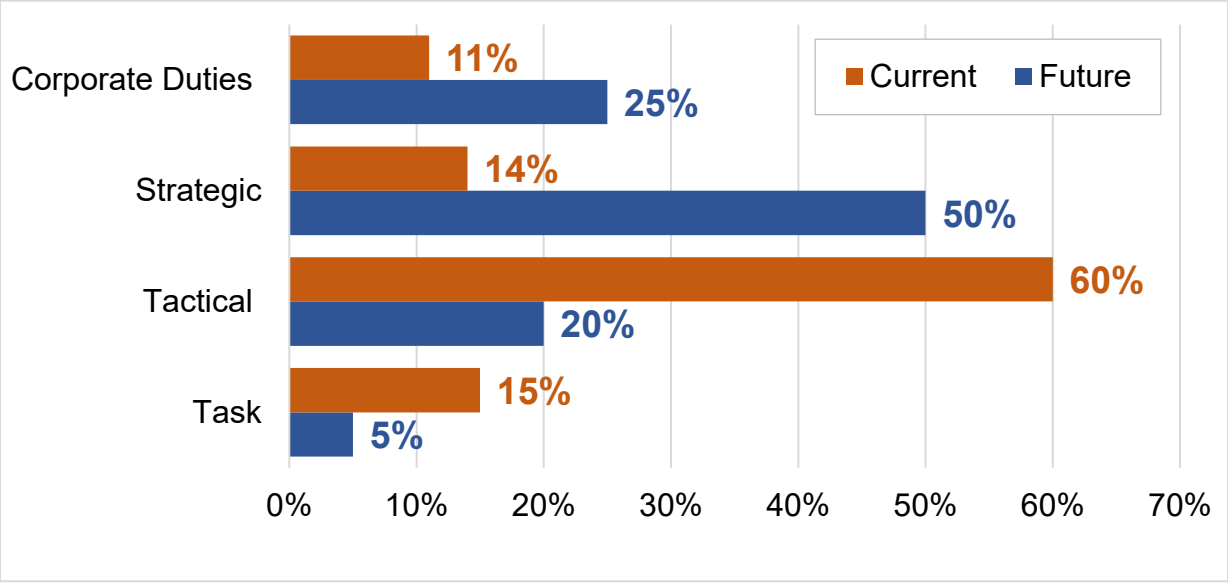

Figure 21. Time reallocation, Director of Fire and Emergency Services/Fire Chief.

Figure 22 compares the current time allotment for all four of the Department's current full-time staff members versus the ideal time allotment that would result from establishing an additional deputy chief position and—in the future—operational pay for volunteer firefighters.

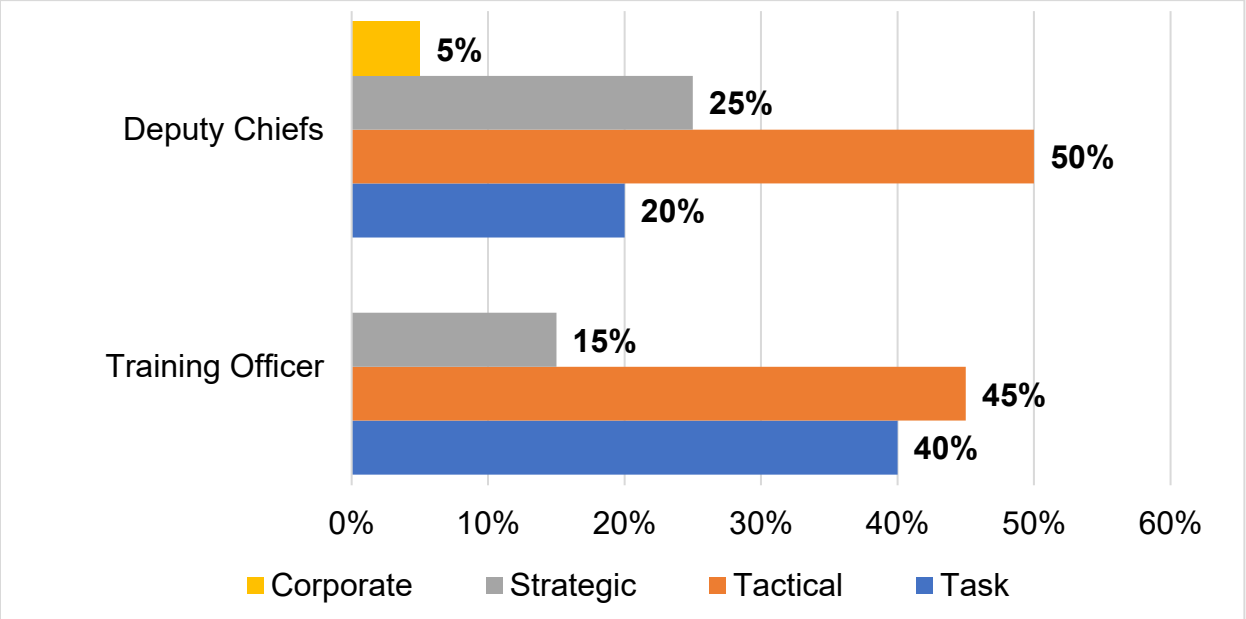

Figure 22. Ideal vs. current time breakdown for full-time roles.

Succession Planning

All municipal services in Severn, including fire protection services, must be delivered at a level that meets the community's risks, needs, and circumstances. When a senior manager or a volunteer firefighter leaves the Department, the organization's capacity to deliver its Council-approved services will likely decrease. However, the same types and levels of service must still be delivered to the community. As such, it is crucial for the Department (in conjunction with the Manager of Human Resources/Health and Safety) to prepare for potential vacancies by focusing on succession planning.

For leadership roles, succession planning should involve training any interested personnel (both firefighters and officers) to ensure they are qualified to fill positions when they become vacant. For instance, the Department should train its firefighters to become captains, and it should train its captains to become district chiefs. In order to gauge the level of interest amongst its staff members, as well as share information about succession planning, the Department should hold information nights for all of its volunteer personnel. During those meetings, the Department can explain the qualifications associated with officer positions, including the level of training and experience required to fill those roles.

For firefighter roles, the Department should strive to maintain a waiting list of candidates who are interested in becoming volunteer firefighters.

Whenever one of the current firefighters chooses to leave their role, the Department can reach out to the candidates on the waiting list. Doing so can reduce the amount of time it takes to enroll a new firefighter in the recruit training program. (This method should also help reduce the amount of time needed for the candidate to complete the recruit training.) Ideally, the waiting list will include candidates who already have applicable certifications related to the Department's Council-approved services. If the candidates already have those certifications, it will minimize the amount of time needed before a firefighter can start responding to emergencies. Although maintaining a waiting list of interested/qualified candidates may be challenging, it is better for the Department to take a proactive approach to recruitment and succession planning rather than a reactive approach.

There are also concerns related to full-time staff members who choose to leave their roles. Each of the Department's full-time staff members has specific duties, but the tasks assigned to those roles also overlap. For instance, the full-time personnel provide important services to the Severn community, but they also provide crucial support for the Department's volunteer firefighters. As noted in section 12.2.3 of this FMP, each of the Department's full-time personnel is currently working at maximum capacity, so if one of those individuals leaves the Department, it may cause operational gaps. Because it is unreasonable to assume that full-time personnel will remain in their roles indefinitely, both the Director of Fire and Emergency Services/Fire Chief and the Human Resources Department must plan for potential departures in order to reduce their impacts (as much as possible).

Replacing staff members in key positions can be challenging, but it is not impossible. Going forward, the Director of Fire and Emergency Services/Fire Chief and the Human Resources Department should meet with each of the Department's full-time staff members to discuss their current roles and responsibilities, as well as roles they might wish to fill in the future. After these discussions have concluded, the Director of Fire and Emergency Services/Fire Chief and the Human Resources Department can work to help any full-time staff member achieve the necessary experience and training for future roles. By implementing this process, Severn should have the potential to fill future vacancies with internal candidates, rather than having to search for external candidates.

12.8 Recommendations

Recommendations regarding the fire department structure in Severn are as follows:

12-1. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the CAO, should review the updated organizational structure recommended in the 2026 Township of Severn Fire Master Plan. Specifically, consideration should be given to reclassifying the Fire Prevention Officer position as an additional Deputy Chief.

12-2. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Chief Administrative Officer, should use the normal budgeting process to establish a set number of hours per week to have on-duty volunteer firefighters to complete operational tasks, handle legislative requirements, and solve response gaps. The amount of remuneration should be based on a volunteer firefighter's remuneration.

12-3. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Manager of Human Resources/Health and Safety, should develop a succession plan for all positions within Severn Fire and Emergency Services.

13.0 Fire Stations and Related 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 Station Facilities in Severn

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
- training rooms
- storage areas
- exercise room
- kitchen facilities

- common room
- parking space
- apparatus floor

One of the most important spaces in a fire station is a dedicated training area. This kind of room is particularly important for volunteer fire departments. A training space enables a fire department to provide consistent and safe hands-on training that simulates the complex scenarios firefighters encounter (such as structural fires, vehicle extrication incidents, and hazardous material incidents). When a fire department has access to training space, it can prepare its firefighters to respond to emergencies swiftly, efficiently, and in a way that safeguards lives and property. Moreover, having a proper training ground supports the OFM's recommendations related to firefighter certification requirements and ongoing skills maintenance. These recommendations are designed to help fire departments meet provincial standards while enhancing teamwork, confidence, and operational readiness.

Fire departments also need fire stations that are 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.

Findings

Fire Station Locations

As noted in section 2 of this FMP, there are currently four fire stations in Severn. However, for response purposes, Station 3 and Station 4 operate as a single fire station, and all firefighters are assigned to Station 3.

The addresses of the four fire stations in Severn are as follows:

Fire Station 1
3216 South Sparrow Lake Road
Washago, ON L0K 2B0

Fire Station 2
3958 Burnside Line
Orillia, ON L3V 6H4

Fire Station 3
1 Firehall Lane
Coldwater, ON L0K 1E0

Fire Station 4
2060 North River Drive
Coldwater, ON L0K 1E0

Figure 23 illustrates where the fire stations in Severn are located within the community.

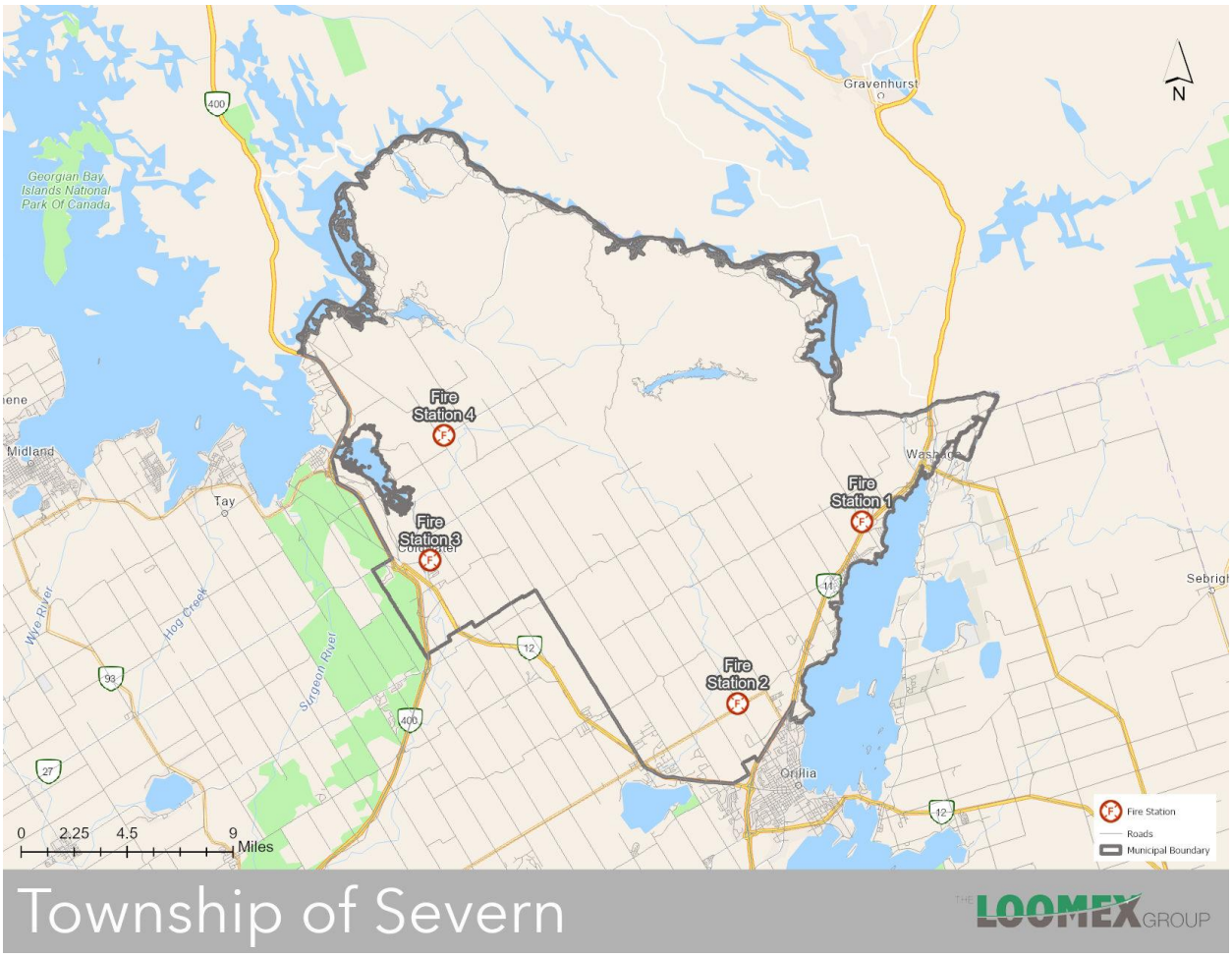

Figure 23. Fire station locations in Severn.

Fire Station Functionality

Each room in a fire station supports a specific purpose, such as functionality, health and safety initiatives, and legislative requirements.

Table 26 lists some of the key features that a fire station should have, indicating whether the fire stations in Severn have those features. The subsections that follow this table provide more details about the features, rooms, and functionality of the fire stations.

Table 26. Functionality of the fire stations in Severn.

Station	Training Room	AODA Compliant	Male/Female Washroom	Male/Female Shower	Admin. Office	Internet and Cell Phone Coverage	Backup Power
Station 1	Yes	No	Yes	Yes	Yes	Poor	Portable Generator
Station 2	Yes	Yes	Yes	Yes	Yes	Poor[44]	Standalone Generator
Station 3	Yes	No	Yes	Yes	Yes	Poor	Portable Generator
Station 4	Yes	No	Yes	Yes	Yes	Poor	Yes

[44] Note: The Department is currently working on improving the internet and cell phone coverage at this station.

13.2.1 Fire Station 1

Findings

Fire Station 1 (shown in Figure 24) was constructed in 1988. The station currently houses a pumper, a tanker, and a rescue truck.

Figure 24. Exterior of Fire Station 1.

Administrative Areas

Station 1 has an administrative area (shown in Figure 25) where the Department's officers and firefighters complete their administrative duties.

Figure 25. Administrative area at Fire Station 1.

Training Room

Station 1 has a suitable training area that can accommodate the number of firefighters assigned to the station who would attend a training session. The training room (shown in Figure 26) also contains technology to support the Department's training sessions.

Figure 26. Training area at Fire Station 1.

Storage Area

Fire Station 1 contains a multi-purpose storage area, but the size of the room is limited, which makes it difficult for the Department to organize its equipment and ensure that all items have their own space. Figure 27 shows the storage area at Station 1.

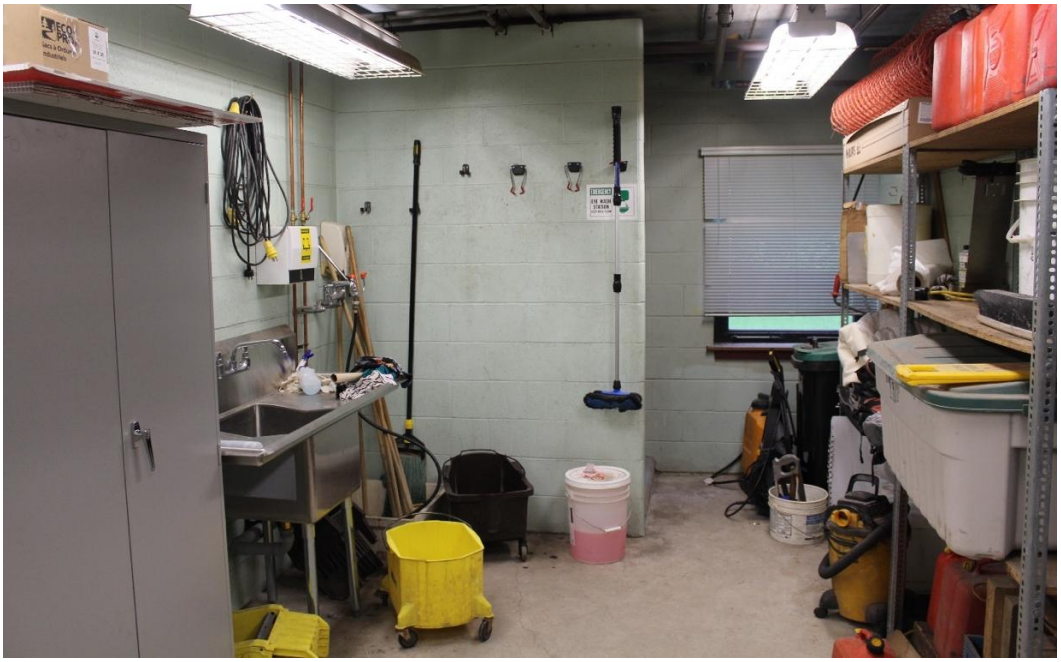

Figure 27. Storage area at Station 1.

Kitchen Area

Station 1 has a small kitchen area that is equipped with a modern stove and fridge (shown in Figure 28).

Figure 28. Kitchen area at Station 1.

Fire Apparatus Floor Area

The fire apparatus floor area at Station 1 (shown in Figure 29) has enough space to house the three pieces of fire apparatus assigned to the facility, and the overhead doors are large enough to accommodate the size of the current vehicles.

If the Department purchases a new fire apparatus for Station 1, it will be important to confirm whether the new vehicle is larger than the current vehicles. If so, a space allocation analysis should be conducted before the new fire apparatus is ordered or moved to this fire station.

Figure 29. Fire apparatus floor area at Station 1.

Other Features

PPE Storage

During the FMP development process, Council approved the purchase of PPE racks for Station 1 (shown in Figure 30). The racks provide better storage for the gear used by the Department's responding firefighters, and they have been installed in an area of the station that is located away from the fire apparatus. As a result of this change, the Department's firefighters now have a safer environment in which to get dressed.

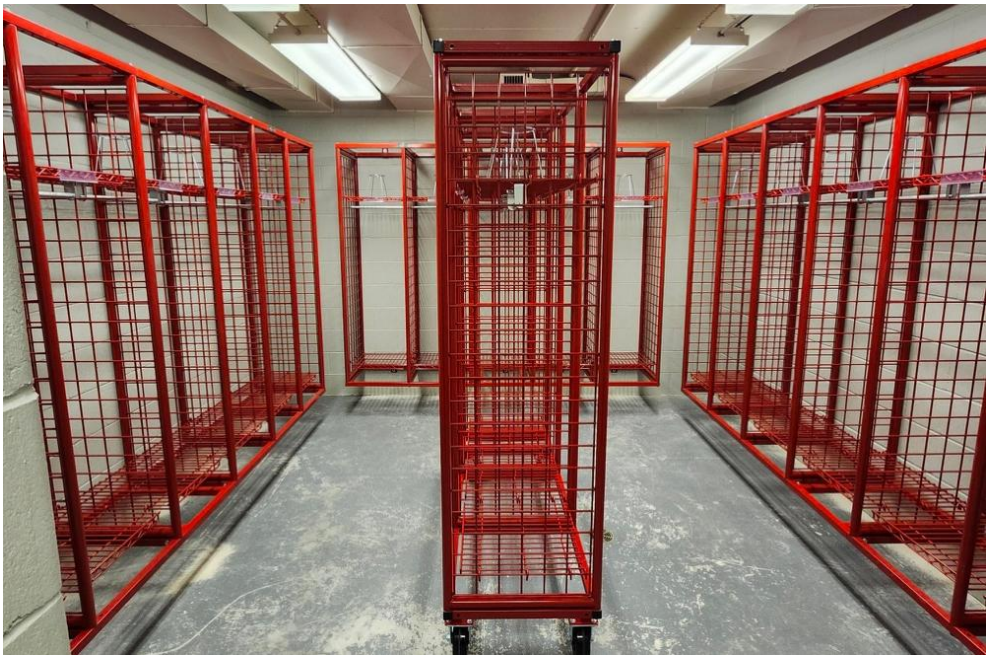

Figure 30. PPE racks at Station 1.

Backup Generator

Station 1 has a portable generator (shown in Figure 31) that can power some areas of the fire station in the event of a power outage. In order for the generator to operate, it must be moved outside, plugged into the fire station and manually set up and started. During the winter months, the Department may have an issue plugging in the generator due to its location and the accumulation of snow.

Figure 31. Portable standby generator at Station 1.

13.2.2 Fire Station 2

Findings

Fire Station 2 (shown in Figure 32) was constructed in 2019, and it is the newest of the four fire stations in Severn. The station currently houses a pumper, a tanker, a rescue truck, Car 2, the fire prevention officer's vehicle, a training vehicle, and a UTV (with trailer).

Figure 32. Exterior of Station 2.

Administrative Areas

Station 2 has an administrative area (shown in Figure 33) where the Department's officers and firefighters complete their administrative duties.

Figure 33. Administrative area at Station 2.

Training Room/Offices

Station 2 has a training room. During the FMP development process, this room was divided into cubicles to create office space for the Deputy Chief, the Fire Prevention Officer, and the Training Officer. Although the room has been reconfigured to create office space (as shown in Figure 34), there is still enough space to accommodate a training area.

Figure 34. Training room/offices at Station 2.

Storage Area

When the layout of Station 2 was designed, space was allotted for a storage area. This area (shown in Figure 35) provides the Department with a proper storage area for various items required for the fire station, including mops, pails, and truck cleaning equipment.

Figure 35. Storage area at Station 2.

Kitchen Area

Station 2 has a small kitchen area that includes a microwave and fridge. This area is shown in Figure 36. The kitchen area is used by the station's firefighters and the full-time administrative staff members who work in the facility.

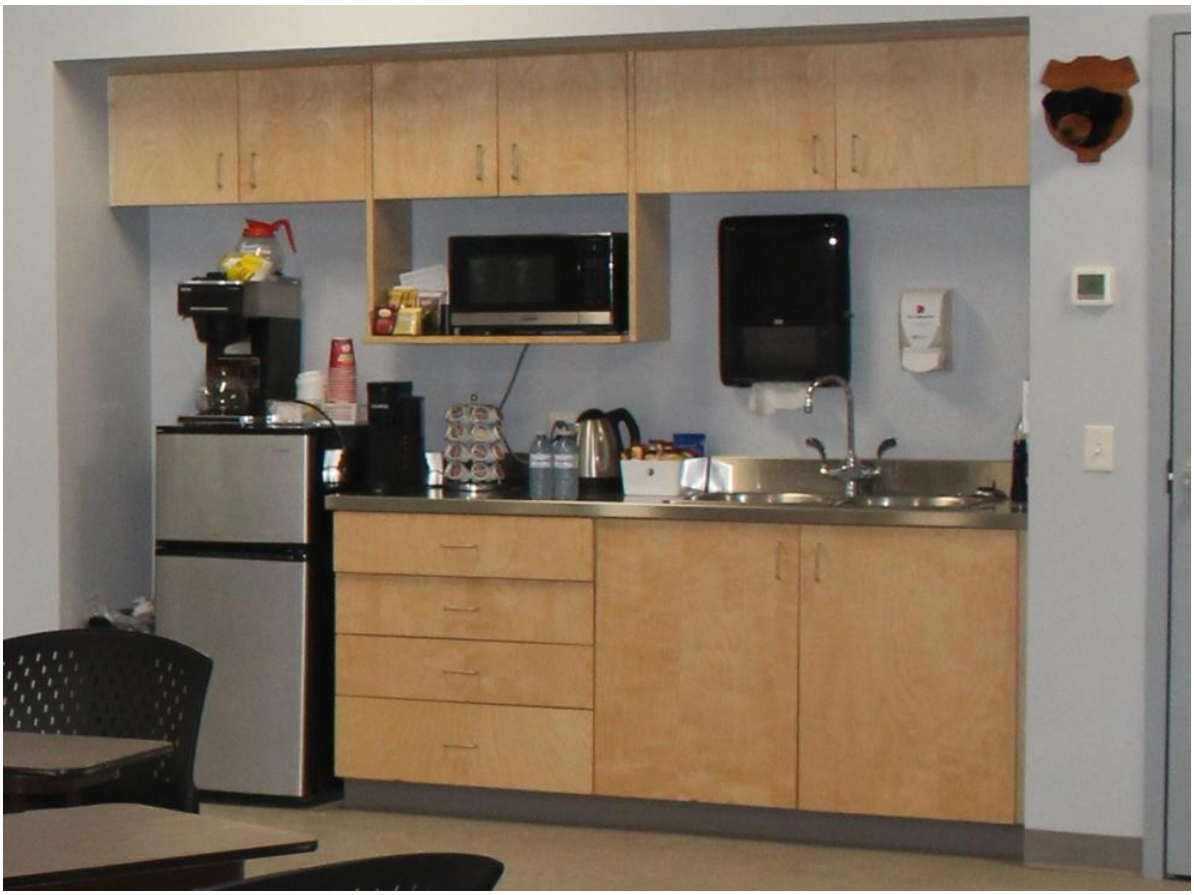

Figure 36. Kitchen area at Station 2.

Fire Apparatus Floor Area

The fire apparatus floor area at Station 2 was configured to accommodate the size of the Department's current vehicles, and it is also spacious enough to house additional and larger types of fire apparatus. As shown in Figure 37, there is ample space for a fire apparatus to leave the station while firefighters are walking to another vehicle that is also leaving the station for an emergency response.

Figure 37. Fire apparatus floor area at Station 2.

The fire apparatus floor area at Station 2 also has enough space to house PPE in an area that is a safe distance from the vehicles housed at the facility. This area provides the Department's firefighters with a safe environment. As shown in Figure 38, the PPE is stored on racks that are similar to the racks found at the other fire stations.

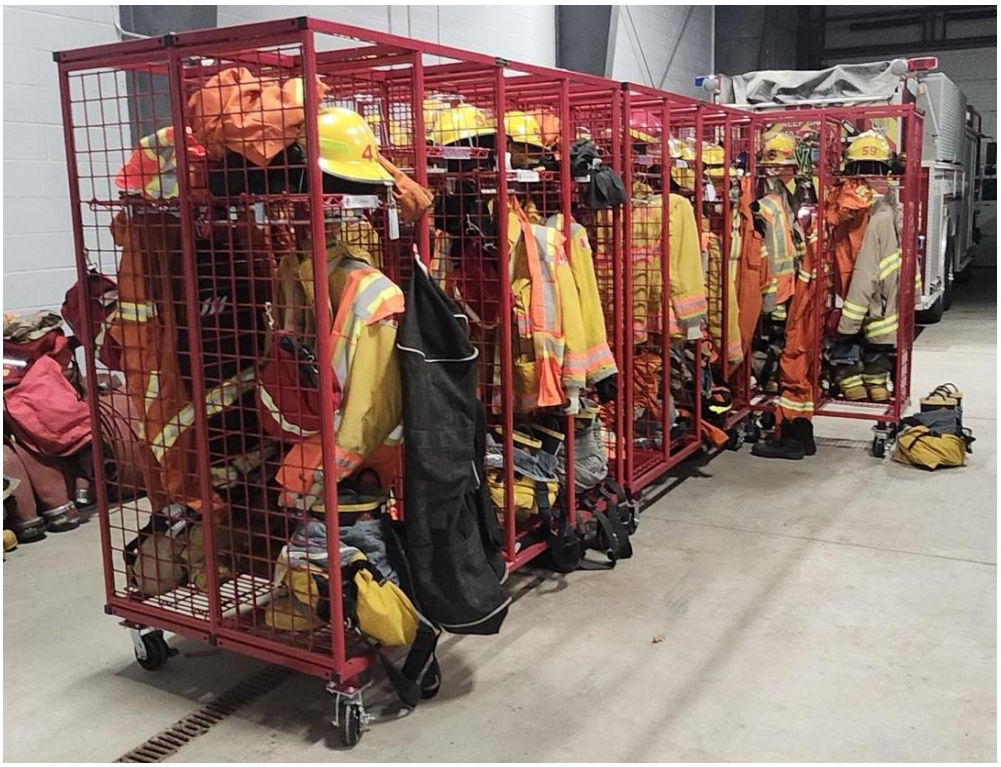

Figure 38. PPE racks at Station 2.

Other Features

Wi-Fi and Cellular Coverage

Moving the Department's administrative staff to Station 2 uncovered a need to upgrade the cell phone and Wi-Fi coverage at the facility.

Mezzanine Area

Due to the size of Station 2, the building contains several features that the other fire stations in Severn lack. For instance, Station 2 has a mezzanine area (shown in Figure 39). This space is a valuable asset, as it can be used as a storage area and—more importantly—as a training area.

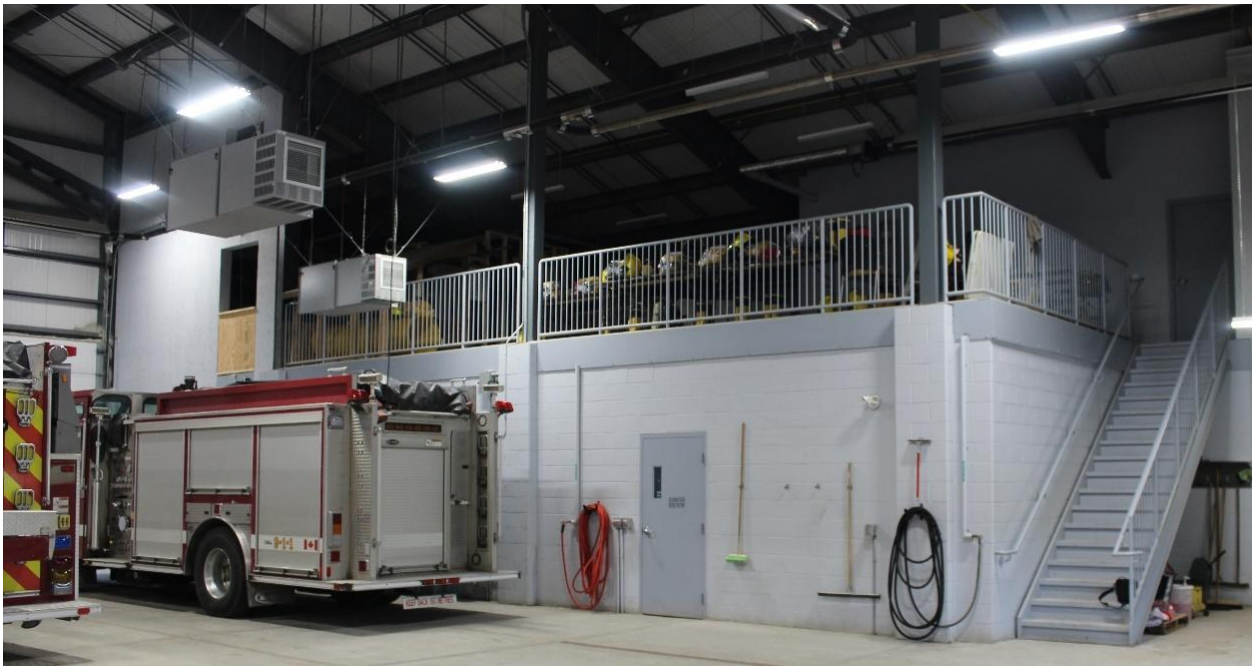

Figure 39. Mezzanine area at Station 2.

The design of the training space in the mezzanine area allows the Department to conduct training related to fire alarm systems and fire investigations. There are also training props that are used to prepare the Department's personnel for search and rescue and firefighter survival operations.

One of the most important training props is the maze system (shown in Figure 40). Another essential training prop is the two-storey bail-out system (shown in Figure 41). The Department uses this portion of the training area to teach its firefighters how to bail out of a building during an emergency response if their lives are in danger.

Figure 40. Firefighter search and rescue prop.

Figure 41. Two-storey bail-out training area.

Standalone Generator

Station 2 has a propane-fueled generator that can provide emergency power to the fire station in the event of a power outage. This standalone generator is shown in Figure 42.

Figure 42. Standalone generator at Station 2.

13.2.3 Fire Station 3

Findings

Station 3 (shown in Figure 43) was constructed in 1997. The station currently houses a pumper and a rescue truck, as well as a paramedic unit operated by County of Simcoe Paramedic Services.

Figure 43. Exterior of Station 3.

Lease with County of Simcoe Paramedic Services

As of this FMP, the Department shares Station 3 with County of Simcoe Paramedic Services. The terms of this arrangement are outlined in a lease. Currently, Station 3 is staffed by two paramedics on a 24/7 basis.

The paramedic service is in the process of building a new base that is expected to be operational by 2027. Once the base is operational, the paramedic service will move its staff and vehicle to the new facility.

Administrative Areas

Station 3 has an administrative area (shown in Figure 44) where the Department's officers and firefighters complete their administrative duties. The paramedics also use this space to complete their administrative duties.

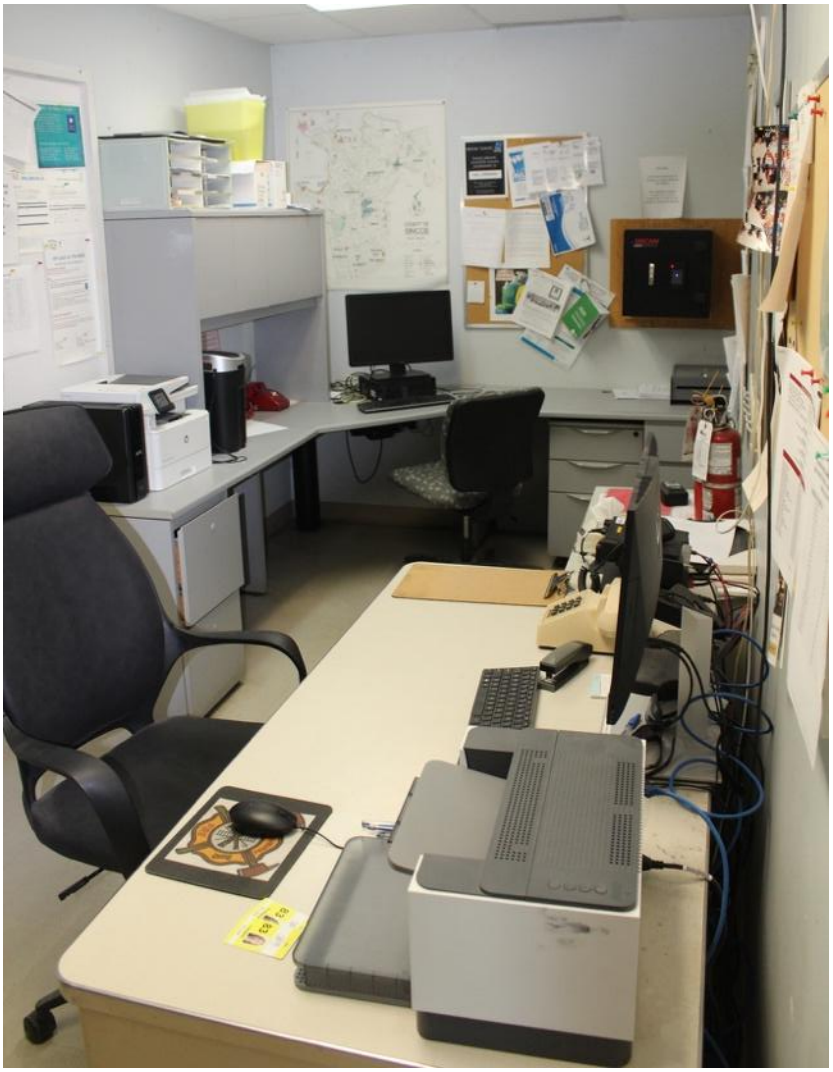

Figure 44. Administrative area at Station 3.

Training Room/Common Area

Because Station 3 is a shared facility, the training room also serves as a common area for the paramedics when they are in the station. The tables and chairs used for training sessions are stacked in the corner of the room (as shown in Figure 45), and they are set up when required.

Figure 45. Training room/common area at Station 3.

Storage Area

Station 3 has a well-organized storage area (shown in Figure 46) that is similar to the storage areas at the other fire stations in Severn. The storage area has space to keep equipment replacements and supplies for cleaning the fire apparatus and the station.

Figure 46. Storage area at Station 3.

Kitchen Area

Station 3 has a kitchen area that contains a microwave and a fridge (as shown in Figure 47). The kitchen can be used by on-duty paramedics, as well as the Department's officers and firefighters. The kitchen cupboards are used to store supplies for the paramedics. If the alternate EOC is activated at Station 3, Severn's ECG will need to make use of the kitchen facilities. In that case, the paramedics would need to be displaced from the kitchen area.

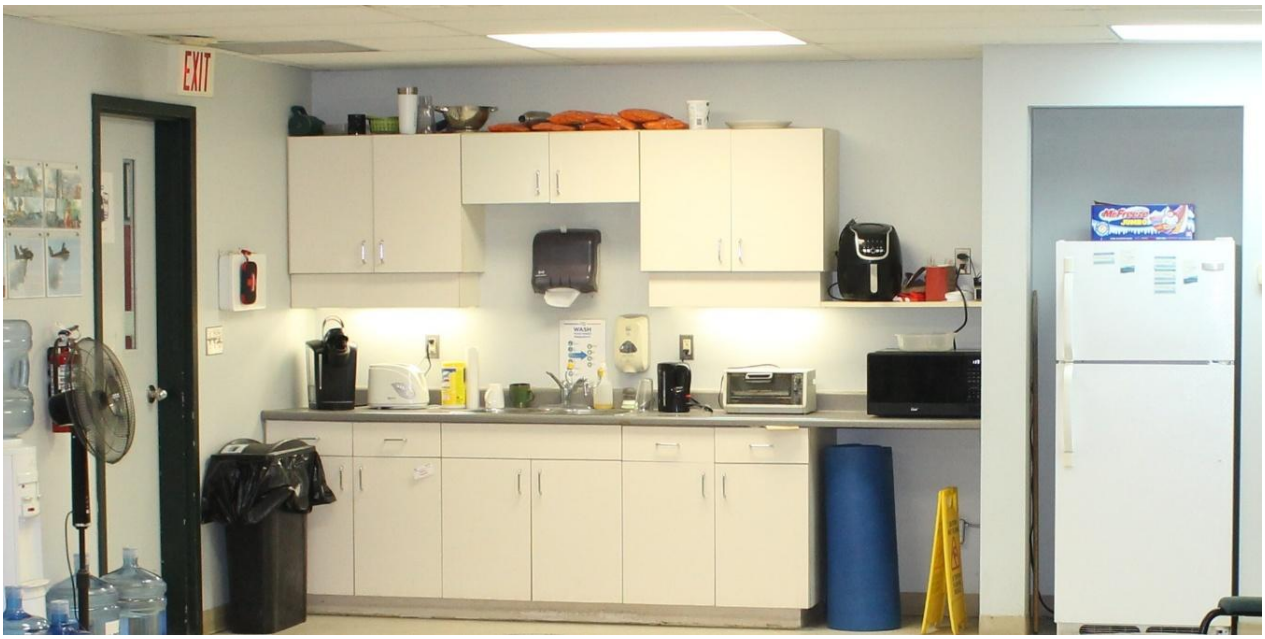

Figure 47. Kitchen area at Station 3.

Fire Apparatus Floor Area

The fire apparatus floor at Station 3 is adequate for the three vehicles that are currently housed at the facility (including the paramedic unit).

In terms of gear storage, PPE racks are located alongside one of the walls. These PPE racks are located in close proximity to where the pumper is parked (as shown in Figure 48). If the Department's firefighters are putting on their gear, there is a chance that the pumper may need to leave the fire station at the same time. As such, the lack of space poses a possible health and safety issue.

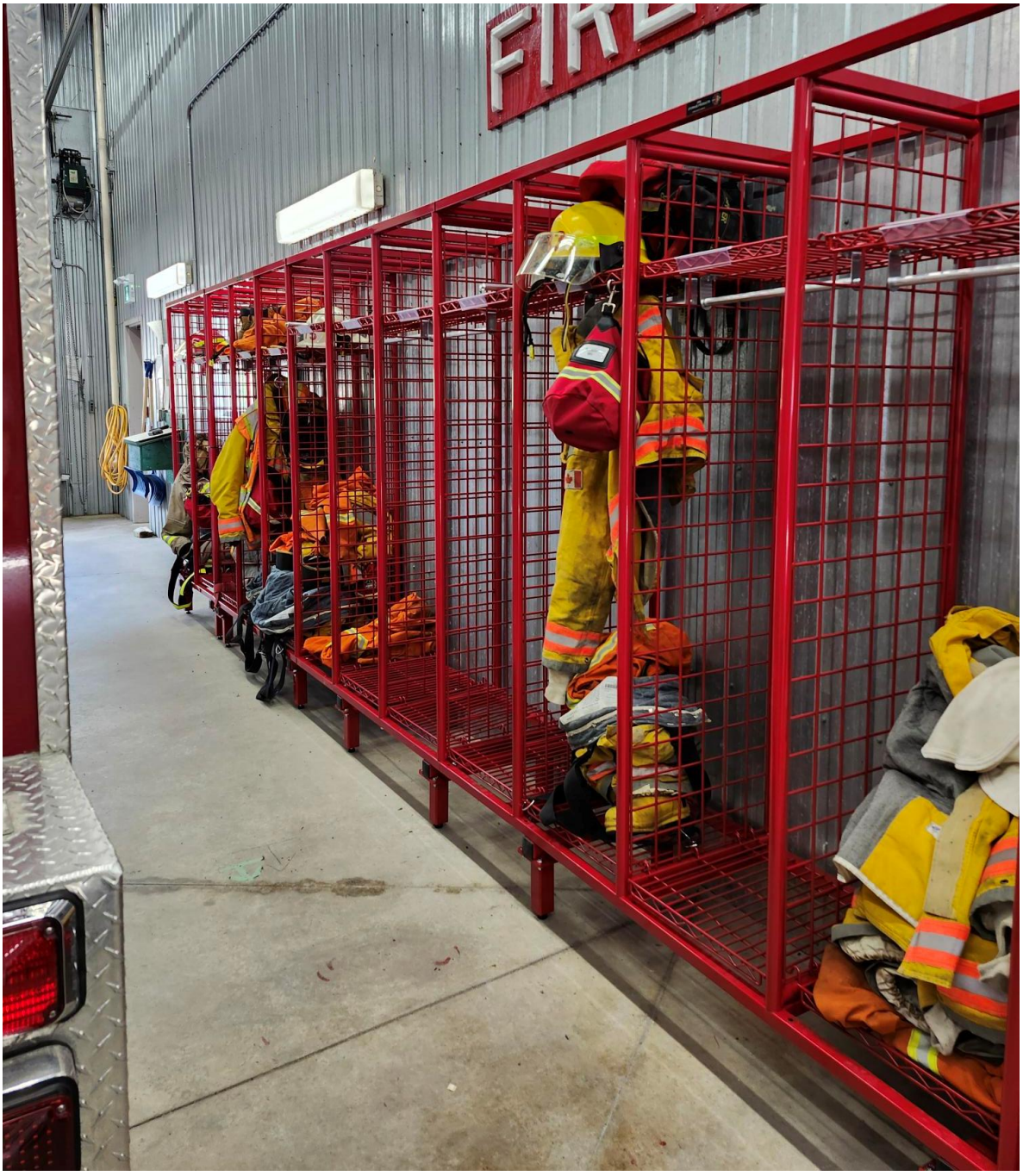

Figure 48. PPE racks on the fire apparatus floor at Station 3.

Other Features

Hose Tower

One unique building feature at Station 3 is the attached hose tower (shown in Figure 49). The hose tower is used to hang and dry both the firefighting hoses that the Department uses for both structure fires and wildland fires.

Figure 49. Hose tower at Station 3.

Backup Generator

Station 3 has a portable generator that can be deployed when needed. The current generator (shown in Figure 50) provides a minimum amount of backup power.

Figure 50. Backup generator at Station 3.

13.2.4 Fire Station 4

Findings

Station 4 (shown in Figure 51) was constructed in 1985 (approximately), and a training room was added to the original building in 2013. The station currently houses a pumper and a tanker that the Department relocated from Station 3. As of this FMP, Station 4 serves the same response area as Station 3, and the stations are dispatched together simultaneously. There are currently no firefighters assigned to Station 4, as the Department has not been able to recruit any firefighters who live close to the station.

Figure 51. Exterior of Station 4.

Multi-Purpose Room

Station 4 does not have a separate training area, office space, or storage room. However, the facility has a multi-purpose room that meets the requirements of the fire station. The interior of the multi-purpose room is shown in Figure 52.

Figure 52. Multi-purpose room at Station 4.

Fire Apparatus Floor Area

The size of the fire apparatus floor area at Station 4 is sufficient to store two response vehicles. Figure 53 shows one of the vehicles housed at Station 4.

Figure 53. Fire apparatus housed at Station 4.

Since the vehicles housed at Station 4 only respond to emergency calls when the other fire stations in Severn require support, the amount of space around the vehicles at this facility is adequate. A view of the available space is shown in Figure 54.

Figure 54. Amount of space on the fire apparatus floor area at Station 4.

Backup Generator

As at Station 1 and 3, Station 4 has a portable generator that can provide minimum back-up power. In order to activate the generator, it must be moved outside, manually started, and plugged into the fire station.

13.3 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 implement NFPA standards into their operations, this report can serve as a useful reference for fire departments in Canada.

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.[45]

The NFPA report goes on to identify three key features that are commonly lacking in fire stations that are over 40 years old. Typically, an older fire station will lack the following features:

- backup power
- exhaust emission control
- 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.[46]

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

Table 27 summarizes the year of construction and current age (as of 2025) of each fire station in Severn.

[45] Messerschmidt, “Renovation Needs of the US Fire Service.”

[46] Ibid.

Table 27. Year of construction and current age of the fire stations in Severn.

Fire Station	Year Constructed	Current Age (as of 2025)
Station 1	1988	37 years
Station 2	2019	6 years
Station 3	1997	28 years
Station 4	Approx. 1985	Approx. 40 years

As noted in the table above, three of the four fire stations in Severn are over 28 years old. Due to the age of these stations, the buildings may lack some of the key features that modern fire stations require.

13.4 Training Facilities

Context

Various sections of this FMP have discussed the importance of training. Specifically, an ongoing training program can help firefighters learn and maintain the skills needed to provide safe and effective services.

In recent years, several training courses and certifications have become mandatory for fire service personnel (as per O. Reg. 343/22).[47] Due to these certification requirements, fire departments must provide their personnel with consistent opportunities to complete practical and hands-on training activities. The need to complete training initiatives on an ongoing basis has also made it very important to provide firefighters with an adequate training area.

Some fire departments have a dedicated training facility. This type of facility provides a controlled environment for several types of training, such as:

- live-fire exercises
- technical rescue training
- hazardous materials response training
- incident command simulations

One benefit of a training facility is that it can make it easier for a fire department to align its training with NFPA standards, legislation, and other guidelines. Training facilities can also support a fire department’s recruitment initiatives and succession planning process.

[47] For more information about the training requirements related to O. Reg. 343/22, see section 10.3 of this FMP.

With a dedicated facility, it is easier for fire departments to provide their recruits and potential leadership personnel with structured, hands-on instruction.

Although there are many benefits to having a dedicated training facility, numerous municipalities find it challenging to establish adequate facilities for their fire departments due to the associated costs.

Findings

The Department does not currently have any designated training facilities. However, the Department does have training rooms at two of its fire stations, as well as a training area at Station 2. The Department also has access to external training facilities outside of Severn, and there are different sites within Severn that have the appropriate space to accommodate some types of training.

In 2025, the Department also made use of the OFM's mobile live fire training unit.

13.5 Roadmap for Improvement

Fire Stations

During the FMP development process, four common themes were identified during the review of the current fire stations in Severn. These four themes are as follows:

- the current use of storage areas
- the current storage of PPE on the fire apparatus floor areas
- the functionality of the current backup generators
- the limited apparatus floor space at Station 3

Information about these four themes is provided below.

Storage Areas

Although each of the fire stations in Severn has a storage area, the equipment kept in those areas varies from station to station. The systems used to organize the items in the storage areas also vary.

Going forward, the Department should develop a plan to review which items are required at each of its fire stations. The Department should then organize all of the necessary equipment and cleaning items within the individual stations. Once this process is completed, it will be easier for the Department to maintain its storage spaces. For instance, the Department could complete annual reviews to ensure that each storage space is organized and stocked with the required items.

PPE Storage

As noted in section 13.2, Council has provided the Department with the funds needed to purchase PPE racks for each of the fire stations in Severn.

At Station 1 and Station 2, the PPE racks are installed in locations that are far enough away from where the fire apparatus are stored. This separation allows the firefighters to put on their PPE in a safe environment, even when a fire apparatus is leaving or entering the building. In addition, Station 2 appears to have enough space to accommodate the installation of shelving units that could be used to store spare PPE. These shelves could be built either off the apparatus floor or in the mezzanine area.

At Station 3, PPE racks are installed on a wall adjacent to a fire apparatus due to the limited size of the apparatus floor area. As a result of this vehicle's proximity, the firefighters who operate the fire apparatus must take extra care when leaving or returning to the fire station. Going forward, the Department should consider backing the fire apparatus into the station, making use of a spotter to ensure that no firefighters are in the process of putting on PPE when the vehicle is in motion.

Also, if Station 3 is replaced or renovated in the future, the design of the new/updated fire station should include a dedicated bunker gear room (or bunker gear area). This kind of dedicated space should also be incorporated into the layout of any other fire stations that may be built in Severn in the future.

Backup Generators

As of this FMP, Station 1 and Station 3 each have a portable generator that must be manually positioned and then started. Both of these generators run on fuel. Station 2 has a fully automated backup generator that runs on propane.

Often, when there is a power outage, a fire station must remain operational for responding crews. Sometimes, the fire station is also used as a place for community members to pick up necessary supplies (such as water) or as a heating or cooling area. In addition, Station 3 is currently designated as the alternate EOC in Severn, but the facility does not have full backup generator power. Given this information, it would be beneficial to have fully automatic standalone generators at Station 1 and Station 3 (at a minimum). Based on the function that Station 4 currently serves, it is adequate to have a portable backup generator system at this facility.

Going forward, the Department should develop a report that outlines the costs associated with installing standalone backup generators at Station 1 and Station 3. The completed report should then be presented to Council for consideration during budget cycles. Additionally, once the report is completed, Severn and the Department would be in a position to apply for specific infrastructure grants.

Although there are significant costs associated with acquiring standalone generators, a well-considered report and costing plan could be put into place to begin contributing annual funding to Severn's capital budgets. This initiative can help Severn obtain enough capital to complete the projects.

Station 3 Fire Apparatus Area

In 2027, the paramedic service is expected to relocate to a new facility. At that time, the Department will want to relocate Tanker 3 to Station 3. It is essential to have Tanker 3 located at Station 3, as the Department has been unable to recruit firefighters in Station 4's area. However, the current apparatus floor area at Station 3 is not large enough to accommodate Tanker 3 due to the size of the apparatus. The Department should determine the requirements for renovating Station 3 in preparation for relocating Tanker 3. Renovating Station 3 can also allow the Department to address the issue of PPE storage on the fire apparatus floor.

Internet and Cell Phone Coverage

Due to the locations of the fire stations in Severn, it can be both costly and challenging to ensure fast, reliable internet. There are also challenges regarding the cell phone coverage at the fire stations (with the exception of Station 3).

During the FMP development process, the Department advised that it was attempting to upgrade the IT infrastructure at Station 2 in order to accommodate the administrative personnel working at that site.

Going forward, the Department should continue trying to enhance the connectivity at its fire stations (for both internet and cell phones). For instance, the Department will require robust internet connectivity in order to maintain response data and training information consistently. Also, it is imperative for Station 3 to have strong connectivity because this facility serves as the alternate EOC for Severn.

Addressing Concerns Related to Older Fire Stations

As of this FMP, three of the four fire stations in Severn are over 28 years old. Because these facilities are aging, significant capital funding may be needed to maintain the stations in the future.

In order to avoid the need to replace any of the fire stations in the near future, annual funding should be allocated to repair, maintain, or replace components at each facility. This initiative should help the fire stations remain both operationally and functionally sound. Moreover, by taking a proactive approach instead of a reactive approach, Severn may be able to reduce the costs associated with maintaining the fire stations, which should allow Council to budget accordingly with fewer surprise expenses.

The development of a long-term strategic plan should be the first step in the proactive approach to maintaining the fire stations. This plan should include the completion of a full building assessment (to examine the “bricks and mortar” aspects of the fire stations), which may require contracting a qualified third-party company to examine each building’s infrastructure.

The long-term strategic plan should also provide Council with a breakdown of the annual operating costs or capital funding investments for each of the fire stations. This breakdown should include timelines that specify when the funding would be required. Providing this information will help ensure that the necessary funds are available each year in order to prevent high or unexpected costs.

Overall, the proactive approach outlined above is intended to ensure that each of the fire stations in Severn can meet or exceed its expected life cycle.

Training Facilities

The Department currently uses different areas to facilitate its training program. However, the lack of a designated training facility makes it challenging to run an effective program consistently, especially in regard to managing exceptions, sign-off requirements, and provincial certifications.

Station 4 may make an ideal location to establish a dedicated training facility while also remaining a station that can accommodate emergency responses (if the Department can recruit candidates in the area to be volunteer firefighters).

The inside of Station 4 has enough space to facilitate training sessions, while the exterior of Station 4 has enough room to conduct vehicle training. In addition, Station 4 is adjacent to a public works yard, which means that the Department’s officers and firefighters could complete specific training locally rather than travelling outside of Severn. This arrangement would ensure that the Department’s personnel are available to respond to emergency calls (as needed), and they would not need to be away from their families for extended periods.

From a financial perspective, if the Department creates a small training facility, it may be able to work with neighbouring fire departments and allow them to use the facility on a cost-recovery basis.

If Station 4 is chosen as the site of a small training facility, the Department should work with the Director of Public Works to explore the possibility of designating a specific area for training purposes. Doing so would help ensure that the Department’s operations do not affect the public works operations at the facility.

13.6 Recommendations

Recommendations regarding the fire stations and related facilities in Severn are as follows:

13-1. The Director of Fire and Emergency Services/Fire Chief should work with the District Chief of each fire station in Severn to review the storage areas at each station. This review should involve determining which items are required at each site, as well as a way to keep each storage area organized.

13-2. The Director of Fire and Emergency Services/Fire Chief should develop a report that recommends installing standalone backup generators at Station 1 and Station 3. The report should identify possible grant opportunities, as well as the level of funding required to complete the installations. Any requests for funding for the generators should be made through the Severn's normal budgeting process.

13-3. The Director of Fire and Emergency Services/Fire Chief should develop a long-term strategic plan that includes budget considerations and recommendations regarding the most practical way of extending the life cycle of each fire station in Severn. The strategic plan should also include approximate timelines for when each of the fire stations will need to undergo renovations or be replaced. Any future requests for funding should be made through Severn's normal budget process.

13-4. The Director of the Fire and Emergency Services/Fire Chief should review the requirements and feasibility of renovating Station 3 in order to accommodate a front-line tanker and provide proper storage space for personal protective gear.

13-5. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Public Works, should review the possibility of allowing Severn Fire and Emergency Services to use a portion of the public works yard to conduct practical training.

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

Municipal Water and Distribution Systems

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 System Outlined in NFPA 291

The colour system outlined in NFPA 291 is intended to help fire crews identify the amount of fire flow they can expect from a given hydrant. This visual indication allows firefighters to arrive at an incident site and quickly determine whether there is enough water to complete the necessary response services. The colour-coding system also ensures that fire crews can make decisions about increasing the water supply by attaching it to another hydrant (if needed).

Table 28 shows the fire hydrant colour-coding scheme outlined in NFPA 291, *Recommended Practice for Water Flow Testing and Marking of Hydrants*.

Table 28. Colour classifications for municipal hydrants (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 55 shows an example of a fire hydrant that is painted according to the colour scheme outlined in NFPA 291.

Figure 55. Fire hydrant painted according to the NFPA 291 colour code.

Reflective Markings

In order to adhere to the requirements of the OFC, fire hydrants should have reflective markers. These markers often come in the form of coloured rings or tapes.

The reflective markings are intended to help firefighters assess hydrant capabilities quickly, even during periods of low light or adverse weather conditions. Installing these markers can aid in the efficiency of an emergency response.

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. In addition, if a hydrant has a Storz connection, the water flow capacity from that hydrant may be improved.

Some communities have older fire hydrants that lack Storz connections. Those hydrants can be retrofitted with Storz adapters to promote compatibility with modern firefighting equipment. This initiative also ensures a more streamlined response is possible, particularly for mutual aid or automatic aid scenarios where consistency in hose connections is critical.

Overall, there are several key benefits provided by a Storz connection. Notably, the connections allow firefighters to connect pumper trucks to hydrants quickly, and they may also increase the amount of water flow that is available for suppression activities.

Findings

During the FMP development process, separate meetings were held with the Director of Fire and Emergency Services/Fire Chief and the Water and Waste Superintendent. These meetings provided information about the municipal hydrants in Severn.

As of this FMP, there are municipal hydrants in Coldwater, Washago, and Westshore that supply water for firefighting purposes. All of the municipal hydrants in Severn are maintained and serviced by the local Public Works Department. The Public Works Department is following the colour-coding system that is outlined in NFPA 291 regarding flow rates, and the hydrants are marked accordingly. The municipal hydrants are also flushed annually, and they are each tested on a regular basis.

Table 29 shows the number of hydrants in each of the local communities in Severn. The table also shows the percentage of the total fire flow for each hydrant as per the results of the most recent tests, which were conducted in 2021. (For reference purposes, the Department might supplement the hydrants that fall under the “orange” category with the tanker shuttle program. The choice to do so depends on the level of fire flow that is needed for an emergency response.)

Table 29. Information about the municipal hydrants in Severn.

Community	# of Hydrants	500 – 999 gpm (Orange)	1000 – 1499 gpm (Green)
Coldwater	83	11%	89%
Washago	10	100%	0%
Westshore	134	28%	72%

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.

For visual reference purposes, private hydrants are usually painted red (as shown in Figure 56) to distinguish them from municipal hydrants.

Figure 56. Example of a private fire hydrant.

Findings

Severn currently contains a small number of private hydrants. In some cases, the Public Works Department might test a private fire hydrant because of where it is located. The results of those tests are provided to the Department.

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 culled 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.

Findings

Severn contains a number of municipal and privately-owned dry hydrants, cisterns, and water-access areas that can supply water during emergency responses. The dry hydrants are not currently tested by either the Department or the Public Works Department. However, the Public Works Department is responsible for repairing any issues related to the dry hydrants.

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 two-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

The Department successfully received its Superior Tanker Shuttle accreditation (with a commercial rating) in 2024.

14.4 Roadmap for Improvement

Municipal Fire Hydrants

The Public Works Department in Severn is doing a good job of maintaining the fire hydrant system, ensuring that it is always ready when needed for firefighting purposes.

In order to continue providing the Department with accurate flow rates, the Public Works Department should complete flow testing on the municipal fire hydrant systems in 2026. This testing will be key, as the previous test was completed several years ago (in 2021).

Non-Hydrant-Protected Areas

Severn has a number of water supply sources that are located in non-hydrant-protected areas. Similar to municipal fire hydrants, it is important to ensure that each of these water supply sources can function when needed. It is also important to confirm the type of supply that can be expected from those sources. Checking these water supplies and verifying their capabilities are both essential tasks to complete, as many factors (such as winter weather) can influence the performance of a water supply in a non-hydrant-protected area.

Going forward, the Director of Fire and Emergency Services/Fire Chief should work with the Director of Public Works to complete a study of the existing water supplies in the non-hydrant-protected areas of Severn. This study should include the mapping of water supply sources and the identification of any water supply gaps. In addition, a process should be put in place to ensure that each of those water supply sources are tested on an annual basis and maintained in good working condition.

14.5 Recommendations

Recommendations regarding the water supply in Severn are as follows:

14-1. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Public Works, should establish a schedule/timeline for completing fire flow testing in 2026 for all of the current municipal fire hydrants in Severn.

14-2. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Public Works, should develop a water supply plan for the non-hydrant-protected areas in Severn. The plan should identify any gap areas, and it should also include a maintenance and testing program. In addition, if any gap areas are identified, a report should be developed regarding the installation of water-supply options for those non-hydrant-protected areas. Any requests for funding for the installation of water supply options should be made through the Severn's normal budgeting process.

15.0 Fire Fleet and Equipment

15.1 Overview

A fire fleet and equipment management plan outlines the purchase, use, and upkeep of the various fire apparatus and equipment that a fire department uses during emergency responses and training. Fire departments require their fire apparatus and equipment to remain in good working condition so that they can provide services safely and effectively.

A prudent fire department fire fleet and equipment management plan is essential to the success of a fire department's operations. The primary components of the plan include strategic planning, cost forecasting, and budgeting. The plan should also be integrated with a municipality's asset management plan.

15.2 Fire Fleet

15.2.1 Time and Monetary Commitments

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.

The build-out time for a fire apparatus is another important consideration. Currently, there is a two-to-three-year build-out time for a fire apparatus. As such, fire departments must plan ahead for any new purchase, ensuring that the new vehicle will be ready by the time the current vehicle meets the end of its life cycle. These wait times also represent a cultural shift that affects municipal councils. Councillors must approve the funding needed to purchase a new fire apparatus that might not be received for an extended period of time.

In addition to the initial purchase, the ongoing maintenance and eventual replacement of the vehicles in a fire fleet can 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 Director of Fire and Emergency Services/Fire Chief provided Council with a comprehensive fire fleet status report in March 2025. The report highlighted the following information:

- age and life span of the vehicles in the current fire fleet
- estimated replacement costs for the next five types of fire apparatus
- estimated costs and timelines for an aerial device
- proposed future enhancement to the fire fleet

The comprehensive report also included the recommendation to purchase an aerial device for Severn. This initiative was approved by Council.

15.2.2 Considerations for Purchasing a Used Fire Apparatus

Context

Purchasing a used fire apparatus can offer lower upfront costs and quicker availability than a new vehicle. However, there are disadvantages and hidden risks associated with a used fire apparatus, such as:

- unknown maintenance history
- shorter remaining in-service life cycle
- outdated safety systems
- longer periods of downtime

In contrast, a new fire apparatus will have a full warranty, and it will likely conform to current NFPA safety features (such as advanced crash protection, clean-cab options, modern pumping technology, and modern communication technology). A new vehicle should also have predictable life cycle costs that are backed by manufacturer support.

Although the initial investment in a new fire apparatus is higher than a used apparatus, the new vehicle has long-term benefits, such as:

- reduced potential for surprise repairs
- improved reliability and response capability
- enhanced firefighter safety
- extended in-service life expectancy (which ensures a fire department can maintain operational readiness)
- extended usable life expectancy (which protects taxpayers from increases to maintenance bills)

Lastly, it is worth noting that a new fire apparatus can be purpose-built in a way that is configured to address local hazards.

Findings

The Department does not currently purchase any used fire apparatus.

15.2.3 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:

- 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 a fire fleet 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

By using the official request proposal system for Severn, the Department ensures that each new fire apparatus it purchases meets or exceeds applicable safety standards.

15.2.4 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 uses a variety of in-house personnel and third-party companies/emergency vehicle technicians to service the vehicles in its fire fleet (depending on the level or type of repair that is required).

The Department ensures that its vehicles undergo all required tests, including annual safety inspections (as per the Ministry of Transportation), pump testing, and ladder testing. In addition, each fire apparatus receives regular maintenance, such as oil changes. All of this work is completed by third-party companies.

The individual fire stations in Severn also check their fire apparatus every two weeks. If a vehicle needs any repairs, the Deputy Chief is informed and then arranges the repairs. (The same procedure is used if a fire apparatus needs any repairs after an emergency response is completed.)

15.2.5 Testing Schedule for Older Vehicles

Context

The age of the vehicles in a fire fleet significantly influences the level of maintenance, testing, and inspection that is necessary to keep those vehicles operational.

There are several standards that fire departments can use to assess the functionality of the vehicles in their fire fleets. As noted above, these standards include NFPA 1901, NFPA 1912, and ULC S515-04. Fire departments can also review the performance standards and technical updates developed by FUS. These standards are designed to help fire departments manage their fire fleets effectively, especially as vehicles age and become less reliable.

In 2004, Canada adopted ULC S515-04 as a national standard. This standard (and the related technical guidelines) provides fire departments with valuable information for assessing and replacing the vehicles in their fire fleets. Adhering to this standard can help a fire department maintain effective service levels both now and in the future.

FUS has developed a testing schedule for used or rebuilt vehicles that fire departments can reference. This schedule (shown in Table 30) offers a framework for evaluation, and it can be used to identify deficiencies in vehicles that are over 20 years old.[48]

Common concerns for older vehicles include slower acceleration speeds, reduced braking capabilities, and structural weaknesses (due to load wear on the chassis and extended use of the pump system).

By resolving vehicular issues, a fire department can help protect the safety of its firefighters and the community it serves.

[48] This table is adapted from a technical bulletin produced by FUS called “Insurance Grading Recognition of Used or Rebuilt Fire Apparatus.”

Table 30. Tests required to meet industry standards and insurance requirements.

Reason for Testing[49]	Test at Time of Purchase (New or Used)	Testing on an Annual Basis	Testing at 15 Years	Testing at 20 Years[50]	Annual Testing at 20 to 25 Years	Testing After Extensive Repairs[51]
Recommended for fire insurance purposes	Acceptance test[52] if new Service test[53] if used and over 20 years old	Service test	Acceptance test	Acceptance test	Acceptance test	Acceptance or service test depending on extent of repair
Required for fire insurance purposes	Acceptance test if new Service test if used and over 20 years old	No test required	No test required	Acceptance test	Acceptance test	Acceptance or service test depending on extent of repair
Factor in FUS grading	Yes	Yes	Yes	Yes	Yes	Yes
Required by listing agency	Acceptance test	No	No	No	N/A	Acceptance test
Required by NFPA[54]	Acceptance test	Annual service test	Annual service test	Annual service test	Annual service test	Service test

[49] Refer to “Service Tests for Used or Rebuilt Fire Apparatus” (in the FUS technical bulletin “Insurance Grading Recognition of Used or Rebuilt Fire Apparatus”) for a description of applicable tests.

[50] Apparatus older than 20 years may not be eligible for insurance grading purposes regardless of testing. Application must be made in writing to FUS for an extension of the gradable life of the apparatus.

[51] After extensive repairs, testing should occur regardless of apparatus age (within reason).

[52] Acceptance tests consist of a 60-minute capacity test and a 30-minute pressure test.

[53] Service tests consist of a 20-minute capacity test and a 10-minute pressure test (in addition to other listed tests).

[54] For information on acceptance tests, see NFPA 1911, *Standard for Automative Fire Apparatus*. For information on service tests, see NFPA 1911, *Standard for Service Tests at Fire Pump Systems on Fire Apparatus*, Article 5.1.

Findings

The Department does not currently have a fire fleet program that considers the life cycles of the vehicles in the fire fleet (or the required testing as per FUS).

15.2.6 Fleet Renewal and Rationalization

Context

A fire fleet assessment can begin with the following considerations:

- What types of vehicles 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 types of 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
- availability of replacement parts
- the features and technology of a current vehicle compared to a new vehicle

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.

When it is time to replace a fire apparatus, the factors of applicability, functionality, and overall vehicle condition should also be considered. Various technologies that firefighters can use while operating a new vehicle should also be considered, as well as ways to protect the safety of the vehicle's occupants.

Fire departments can 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 31 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.[55]

[55] “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[56]	Medium Sized Cities[57] or Communities Where Risk is Significant	Small Communities[58] and Rural Centres
0-15 years	First line	First line	First line
16-20 years	Reserve	Second line	First line
20-25 years[59]	No credit in grading	No credit in grading or reserve[60]	No credit in grading or reserve[60]
26-29 years[52]	No credit in grading	No credit in grading or reserve[60]	No credit in grading or reserve[60]
30+ years	No credit in grading	No credit in grading	No credit in grading

Most municipalities develop fleet replacement plans for five- or ten-year timeframes. In order to be realistic, the plans must account for inflation rates. Some price fluctuations are due to heightened material and labour costs. Other price changes are due to supply chain issues. Due to inflation rates, suppliers may reserve the right to increase the amount they charge customers for a new apparatus, even if a customer has a fixed-price contract or has pre-ordered an apparatus.

[56] 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

[57] 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.

[58] 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.

[59] 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.

[60] 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.

Because inflation rates are difficult to predict with certainty, municipalities should include a contingency plan as part of their capital replacement budgets. Doing so can help a municipality manage potential price increases to its apparatus order. A capital contingency plan may also help a municipality set aside funds that it can use to offset apparatus maintenance and service costs.

Supply and demand can also affect fleet replacement schedules. As of this FMP, there is a backlog in truck orders due to supply chain disruptions that occurred during the COVID-19 pandemic. The result of the backlog is that prolonged delivery times for new apparatus are possible. As such, fire departments and municipalities should consider ordering their new apparatus at a time that accounts for possible delivery delays.

Findings

Table 32 shows the Department's current fire apparatus replacement schedule.

Table 32. Fire apparatus replacement schedule for Severn.

Vehicle	Make and Model	Year Built	Proposed Replacement Year
Pumper 2	E-One	2007	2027
Car 1	Ford F150	2022	2029
Car 3	Ford F150	2023	2030
Training	Ford F550	2005	2030[61]
Rescue 1	International	2016	2031
Pumper 1	Spartan	2011	2031
Car 2	Chevrolet Silverado	2025	2032
Tanker 1	Spartan	2014	2034
Pumper 4	Freightliner	2015	2035
Tanker 3	Spartan	2017	2037
Pumper 3	Spartan	2018	2038
Rescue 3	Ford F550	2025	2040
Tanker 2	Spartan	2021	2041
Rescue 2	International	2023	2043

[61] Council approved the recategorization of this vehicle from a frontline apparatus to a support apparatus, which is expected to extend the life expectancy of the training vehicle to 25 years.

15.2.7 Electric Fire Apparatus

Context

An electric-powered fire apparatus is an emerging type of technology in the fire service. This kind of vehicle offers significant environmental and operational benefits, but there are also challenges related to availability, reliability, and cost.

As of this FMP, 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 the current types of electric fire apparatus are American, and tariff uncertainties may factor into the decision to purchase an electric fire apparatus.

Table 33 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[62]	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.

[62] As of this FMP, 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
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
Lifespan (projected)	Potentially longer (fewer moving parts)	Standard lifespan
Ideal use	Urban, short-distance, quick-turnaround operations	Urban, rural, and long-duration operations

Findings

As of this FMP, the Department does not have any electric fire apparatus or other electric vehicles in its fire fleet.

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
- SCBA filling stations
- 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 has various equipment, and each item is fixed and tested as required. The Department also strives to complete annual maintenance on specific equipment, but there is currently no formal equipment management program.

In 2025, the Department started a program for the maintenance and servicing of its saws and portable pumps. The program also began incorporating testing of the Department's hose, but because of the number of failures (which indicated a need to replace the hose), the remaining hose tests were postponed until 2026.

The individual fire stations in Severn also test and operate their equipment every two weeks (similar to the tests that are conducted on their fire apparatus). If any equipment requires repairs, the information is passed to the Deputy Chief, who will arrange for the equipment to be repaired. This procedure is also used when a piece of equipment needs to be repaired after it has been used during an emergency response.

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.

In addition, many volunteer fire departments use a paging system to alert firefighters of an emergency. The two main types of paging systems are voice and digital. Choosing an appropriate paging system is the responsibility of a fire department, and this decision may be informed by the needs of the community or the capabilities of its radio infrastructure.

In recent years, some fire departments have also used third-party web-based paging programs. These programs can be interfaced with computer-aided dispatch systems to alert firefighters of an emergency. In most cases, web-based paging programs can also provide one-way voice communications.

Findings

As of this FMP, the Department has several mobile, portable, and base radios. Each firefighter also has a pager. In order to improve firefighter safety and operational efficiency, the Department is currently working on a plan to increase its number of portable fireground radios.

The Department’s current radio and paging system operates using two radio towers that contain two tower repeaters. As noted in section 8.9.1 of this FMP, there are some gap areas within the community where personnel must switch to using a simplex (or “talk-around”) channel for on-scene radio communications

In order to address this health and safety issue, the Department is beginning to test a mobile repeater, which is intended to mitigate some of the on-scene connectivity issues.

15.4 Roadmap for Improvement

Inspections, Testing, and Maintenance

The cost of maintaining and repairing a fire apparatus continues to increase on a year-over-year basis. Part of the reason for this increase is the cost of dealing with complex fire apparatus systems, which often require an emergency vehicle technician to repair.

Going forward, Severn should review its entire municipal fleet (including vehicles belonging to the Department, the Public Works Department, and any other municipal departments with small fleets). If so, Severn should determine whether it is feasible to hire an in-house mechanic who is trained to work on the specialized systems used by the township's vehicles. The Director of Fire and Emergency Services/Fire Chief and the Director of Public Works should discuss this concept, then develop a report that outlines the costs involved with hiring an in-house mechanic. The report should also summarize the potential cost savings for Severn.

Fleet Renewal

As noted in section 15.2.1, the Director of Fire and Emergency Services/Fire Chief recently presented Council with a fire fleet status report. Going forward, the Department should plan for fire apparatus replacements several years in advance in order to accommodate long build-out times. In addition, Council must support the Department with replacement requests.

Due to the high costs associated with a fire apparatus, the Department should assess every vehicle that is due for replacement in order to determine whether the vehicle can be refurbished or remain in service for a longer period before it is replaced. When considering whether to replace, refurbish, or continue using a fire apparatus, the Department should consider the needs of the community, as well as the criteria outlined by FUS (see section 15.2.5).

The Department should review the specifications of all new apparatus ordered to ensure the vehicles meet Severn's current and anticipated fire protection needs. In particular, the Department should ensure that any new tanker that is ordered should have an onboard pumping capacity of 3,785 litres/minute (1,000 gallons/minute). Doing so can help Severn maintain its Superior Tanker Shuttle Accreditation and provide a better level of service in non-hydrant-protected areas.[63]

[63] For more information on non-hydrant-protected areas and Superior Tanker Shuttle Accreditation, see section 14.3 of this FMP.

Electric Vehicles

As of this FMP, the types of electric fire trucks that are available for purchase may not be ideal for rural areas or cold climates. Going forward, Severn should review the advantages and disadvantages outlined in Table 33 of this FMP in order to determine whether it should purchase an electric fire apparatus.

Standard Equipment and Systems

The Department uses a variety of equipment to provide its Council-approved level of service. Each piece of equipment is costly, and it should be maintained to ensure it reaches its full life cycle and remains operational at all times.

Going forward, the Department should develop a testing, maintenance, and repair program that includes the following components:

- Identify which pieces of equipment require annual testing.
- Clarify which pieces of equipment should be tested in-house and which should be tested by a third party.
- Indicate the expected life cycle of each piece of equipment (in order to ensure that replacements can be planned well in advance, which will allow Council to budget accordingly).
- Identify which pieces of equipment should be replaced on a proactive basis (due to their type and level of use).

Developing a testing, maintenance, and repair program will enable the Department to manage its equipment in a way that is proactive rather than reactive. The program can also help Severn avoid unnecessary costs and ensure the Department’s equipment is more cost-effective in the future.

Radio Communication Systems

The Department should aim to improve its radio/pager communications.

This initiative should begin with an equipment assessment that determines whether the current radios, pagers, and related infrastructure are all operating as intended. In order to test this equipment, all portable radio batteries should be checked and then replaced (as needed) as per the manufacturer’s specifications. After this task is complete, the Department should develop a process to ensure that all portable radios (and batteries) are serviced or reconditioned each year.

Following the equipment assessment, the Department can develop a replacement program to help forecast when its radios and pagers need to be replaced (because of technological reasons or because the equipment is reaching the end of its life cycle).

Radio communication systems are very complex, and they must be maintained correctly. If the proper care is not taken and radio systems do not function properly, the safety of the Department's firefighters may be compromised. In some such cases, a municipality could be held liable. Due to the high stakes associated with radio communication systems, the Department should engage radio communication experts to provide advice and guidance about the maintenance of these systems.

15.5 Recommendations

Recommendations regarding the Department's fire fleet and equipment are as follows:

15-1. Severn Fire and Emergency Services should ensure that it reviews the onboard pumping capacity of any new tanker that it orders. In order to help Severn maintain its Superior Tanker Shuttle Accreditation and provide a better level of service in non-hydrant-protected areas, any new tanker that is ordered should have an onboard pumping capacity of 3,785 litres/minute (1,000 gallons/minute).

15-2. The Director of Fire and Emergency Services/Fire Chief should review all the specifications of any vehicle that Severn considers purchasing as part of its fire fleet replacement plan. The review should focus on determining whether the new apparatus has the capacity/features to meet Severn's current and anticipated fire protection needs.

15-3. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Public Works, should review whether there are any opportunities to share an in-house mechanic as a way to achieve potential cost-saving benefits related to necessary repairs and maintenance for the vehicles in the Township of Severn's fire fleet, as well as other municipal vehicles.

15-4. Severn Fire and Emergency Services should develop an equipment maintenance program to ensure that all of its equipment is serviced on a regular basis. An equipment maintenance plan can help the fire department ensure that each piece of its equipment remains in optimal working condition and reaches its expected lifespan.

15-5. Severn Fire and Emergency Services should engage a third-party radio communications company to complete a full needs analysis of the current radio and paging systems. Any budgetary impacts that result from that study should be presented to the Chief Administrative Officer for consideration and inclusion in future budgets (as applicable). Also, the third-party radio communications company should help the fire department develop a radio communications plan.

15-6. The Director of Fire and Emergency Services/Fire Chief should develop an equipment replacement plan that includes budgetary information. Any budgetary impacts that result from that plan should be presented to the Chief Administrative

Officer for consideration and inclusion in future budgets (as applicable).

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 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. A robust RMS strengthens both the operational effectiveness and administrative accountability of a fire department.

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 34 explains 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

As of this FMP, the Department is using (or is required to use) several documentation programs. In addition to electronic documentation, some information is retained in hard copy (depending on the nature of the document).

The types of documentation the Department retains are summarized in Table 35.

Table 35. Documentation retained by the Severn Fire and Emergency Services.

Retention Method	Documentation Retained
Electronic document records management system ("**EDRMS**")	• Meeting minutes (for all meetings) • Fire fleet and equipment management • Fire department inspections • Payroll • Human resources • Training documents • Fire inspections

Retention Method	Documentation Retained
Corporate manual filing	• Invoices
Departmental third-party program	• Response data

Both the corporate and the departmental documentation systems require a fair amount of manual data entry. In addition, because there is documentation stored in several different systems, it is sometimes difficult for the Director of Fire and Emergency Services/Fire Chief to locate the reports that are needed to make day-to-day decisions or strategic decisions. For instance, the Department's response statistics and training sheets are filled out in hard copy and then submitted to the Deputy Chief for verification against the current RMS. The documents are then submitted to Severn's Customer Care Team to complete data entry processing. Another example of document retrieval challenges is related to financial queries. Currently, the Finance Department can provide the Director of Fire and Emergency Services/Fire Chief with general information about any funds spent on particular assets, but if specific information is required, then the Finance Department must retrieve the invoice manually.

In order to streamline the current documentation processes, the Department is currently implementing a third-party RMS that is tailored to the needs of the fire service. The Department is aiming to have the new system operational by the first quarter of 2026. Ideally, the third-party system should bring all of the Department's data together, such as:

- response statistics
- public education statistics
- fire inspection data
- training data
- fire fleet and equipment information (including a work order system)

The Department-specific RMS is not designed to replace the corporate EDRMS. The intention is to have the Department-specific RMS linked to tablets in the fire apparatus and computers at the fire station in order to reduce the amount of manual data entry that is needed for documentation purposes. In addition, the new RMS will be integrated with the EDRMS for record storage, data retention, and data recovery requirements.

16.2.2 OFM Reporting

Context

In Ontario, fire departments are legally obligated to report fire incidents to the OFM. Doing so is a requirement of 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 is current with the response data that it must submit to the province. The process for submitting the data is as follows:

1. The officer who was in charge during the emergency completes an incident report.
2. The applicable station’s district chief inputs the incident data into the Department’s RMS and sends a hard-copy incident report to the Deputy Chief.
3. The Deputy Chief completes a quality assurance check between the hard copy and the RMS to verify that all the required data is present and accurate.
4. Every quarter, the Director of Fire and Emergency Services/Fire Chief reviews the information that will be submitted to the province’s SIR system.
5. Once the Director of Fire and Emergency Services/Fire Chief is satisfied that the submitted data is accurate, a member of Severn’s Customer Care Team submits the data electronically to the province.
6. In the first or second quarter of the following year, the province will publish the statistics for the Department. At this point, the Department can access data from the province’s RMS.

16.3 Roadmap for Improvement

Documentation and RMS Enhancements

The Department is moving in the right direction with the choices it has made to streamline its RMS to make the system more efficient. However, it is important to note that this kind of initiative requires both time and cooperation from the different corporate services that can use (or need to access) the data in the RMS.

Going forward, the Department should continue to complete and expand the available RMS modules that are specific to the fire service, ensuring that all data is transferred to the EDRMS for retention purposes.

The Department should also leverage applicable technology to make it easier for all users to access necessary information from both the fire service RMS and the corporate EDRMS.

16.4 Recommendations

Recommendations regarding documentation and records management in Severn are as follows:

16-1. Severn Fire and Emergency Services should continue implementing all applicable modules in its record management system.

16-2. The Director of Fire and Emergency Services/Fire Chief, in conjunction with the Director of Corporate Services/Clerk, should continue implementing the data-sharing process between the fire department-specific records management system and the Township of Severn's corporate electronic document records management system.

16-3. Severn Fire and Emergency Services should leverage technology (where possible) to ensure that accurate data is collected for both the fire department-specific and corporate records management systems. Additionally, the technology should make it easy for the officers and firefighters to enter information into the system, as well as retrieve information.

Appendix A: List of Abbreviations

This Fire Master 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 Severn
CRA:	community risk assessment
Department, the:	Severn 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
EOC:	emergency operations centre
FMP:	fire master plan
FPPA:	Fire Protection and Prevention Act, S.O. 1997
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:	Office of the Fire Marshal
OHSA:	Occupational Health and Safety Act, R.S.O. 1990
PIAR:	post-incident analysis and review
PPE:	personal protective equipment
RMS:	records management system
SCBA:	self-contained breathing apparatus
SOGs:	standard operating guidelines
WHMIS:	Workplace Hazardous Materials Information System

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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 Office of the 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 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.

FINAL REPORT

5 Year Fire Master Plan

For The

Township of

Severn Fire & Emergency Services

BY

Fire Protection Survey Services

FPSS

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INTRODUCTION

Fire Protection Survey Services has been hired to undertake a 5 Year Fire Master Plan study for the Township of Severn Fire & Emergency Services Department. This study encompasses the operations, staffing, fire stations, fire apparatus, training, communications, fire prevention and public education, and maintenance programs.

During our study we interviewed staff, visited all four fire stations and looked at all apparatus and equipment. In addition, we drove virtually all roads in the Township to view risks and view conditions.

In general, we have found the Fire & Emergency Services Department to be well managed and equipped.

GENERAL REMARKS

The Township of Severn was amalgamated in 1994. It consists of five (5) previous municipalities. These are the Township of Orillia, Village of Coldwater, Township of Matchedash and a portion of the Townships of Tay and Medonte. (The balance of Medonte amalgamated with the Township of Oro to become the Township of Oro-Medonte.)

The present population of Severn is approximately 12,000.

The land area is approximately 535 square kilometres.

The land use is primarily agricultural in the rural areas with a mix of residential, institutional, commercial, industrial and multi-family residential in the urban and suburban areas.

The Township is divided into three (3) fire districts, as follows:

Fire District #1 includes Fire Station #1, 3216 South Sparrow Lake Road.

Fire District #2 includes Fire Station #2, 3958 Burnside Line

Fire District 3# includes Fire Station #3, 1 Fire Hall Lane, Coldwater and Fire Station #4, 2060 North River Road, Matchedash

From January 1st, 2015 to November 30th, 2015, there were a total of 321 calls in the Township. These can be broken down as follows:

Structure Calls: **12**

Medical Calls: **87**

Vehicle Calls: **15**

Other Calls, including Brush and Grass Fires, Burning Complaints, etc.: 207

CORE SERVICES

As per the Establishing & Regulating By-Law the Fire & Emergency Services was found to be able to provide:

- Public Education
- Fire Prevention
- Fire Suppression for Structural, Vehicle and Wild Land type fires.
- Response to Motor Vehicle Accidents
- First Aid / Cardio Pulmonary Resuscitation

In Addition, in conjunction with outside agencies, it can provide:

- Water Rescue.
- Ice Water Rescue.
- Hazardous Material Response.
- Natural Gas Leaks.
- Carbon Monoxide Incidents

Severn Fire is presently looking to make service agreements with outside Fire and Rescue Departments or Agencies.

- Structural Collapse Rescue
- Technical Rescue
- Trench Rescue
- Confined Space Rescue

WATER SUPPLY

There are three (3) municipal water supply systems within Severn Township that are suitable for fire fighting purposes. The utility staffing consists of 8 personnel. Also, there is a telemetering system in place which rings into cellular telephones in the event of an emergency. These water supply systems are outlined as follows:

Westshore

This system has 1,860 m3 (409,000 Imp. Gal.) Storage Capacity. Water main sizes vary between 150 mm (6 inches) and 300 mm (12 inches). Water mains must be at least 150 mm (6inches) in size to be acceptable for fire fighting. There are 127 municipal hydrants in the distribution system. Hydrant flow rates vary between 750 Gal./Min. and 1,140 Gal./Min. depending upon location.

Coldwater

This system has 1,536 m3 (338,000 Imp. Gal.) Storage Capacity. Water main sizes vary between 50 mm (2 inches) and 300 mm (12 inches). Water mains must be at least 150 mm (6inches) in size to be acceptable for fire fighting. There are 83 municipal hydrants in the distribution system. Hydrant flow rates vary between 670 Gal./Min. and 1,210 Gal./Min. depending upon location.

Washago

This system has 296 m3 (65,100 Imp. Gal.) Storage Capacity. Water main sizes vary between 19 mm (3/4 inches) and 200 mm (8 inches). Water mains must be at least 150 mm (6inches) in size to be acceptable for fire fighting. There are 10 municipal hydrants in the distribution system. One hydrant cannot be used in the winter months due to location. Therefore 9 hydrants can be used year round. Hydrant flow rates vary between 650 Gal./Min. and 750 Gal./Min. depending upon location.

Dry Hydrants

It was noticed that there are no dry hydrants in the municipality for rural areas other than the dry hydrants located on private property.

In order to provide water for fire suppression in the rural areas, a program should be set-up to provide dry hydrants in strategic locations. These dry hydrants should be designed and installed to meet the National Fire Protection Association standard NFPA 1142, Water Supply for Suburban and Rural Fire Fighting.

Residential Sprinklers

The Municipality has areas that have little or no year round road access. There are also areas that are only water accessible.

In these situations new residences should be encouraged to install residential sprinklers to provide fire protection to their homes. This could be accomplished by working with the Planning and Building department.

ADMINISTRATION

The Fire Department administration consists of a full-time Director of Fire and Emergency Services and a full-time Deputy Fire Chief, plus a full-time Administrative Assistant.

The Fire & Emergency Services Department (hereafter sometimes referred to as the Fire Department or Department) is regulated under the Township of Severn Fire & Emergency Services Establishing & Regulating By-Law.

The Fire Department was found to be well managed and well organized.

STAFFING

In addition to the career Director of Fire and Emergency Service, Deputy Fire Chief, and career Administrative Assistant the Fire Department consists of:
A career Fire Prevention Officer,
A Training Officer (part of Deputy Fire Chief's duties at present)
The personnel mentioned above are presently housed in the municipal office.

In addition, the following part-time personnel are located at the four Fire Stations (at authorized strength):
Fire District #1 – 1 District Chief
Fire District #2 – 1 District Chief
Fire District #3 – 1 District Chief
Fire Station #1 (3216 South Sparrow Lake Rd.) – 4 captains and 20 firefighters.
Fire Station #2 (3958 Burnside Line) – 3 captains and 20 firefighters. Allowed 4 captains.
Fire Station #3 (1 Fire Hall Lane, Coldwater) – 4 captains and 20 firefighters.
Fire Station #4 (2060 North River Drive, Matchedash) – included in stn. 3.

The number of part-time personnel appears to be adequate; however, attention should be regularly given as to the number actually able to respond, especially during the day-time hours. It is quite probable that the number of firefighters should be increased to 30 volunteers per Fire District, as the number responding to day time calls is fairly low at 15 volunteers. For structure fire calls this is an insufficient number of personnel to properly carry-out Tanker Shuttle operations, as well as try to maintain the Incident Command System (ICS) with 3 to 4 (or perhaps more) Sectors being required per fire.

The number of officers is considered to be adequate.

During meetings with the Department's Director of Fire and Emergency Services and Deputy Chief, comments were expressed concerning the need for a fire fighter retention program. This could include a benefit and insurance program and/or a minor pension plan.

TRAINING

Training is currently conducted under the Deputy Fire Chief acting as Training Officer as part of his duties.

A good recruit training program is offered to prepare potential part-time firefighters for their positions. This consists of in-house training to NFPA Standards. Then recruits are encouraged to attend the Ontario Fire College, in Gravenhurst, for the Firefighter 1 course.

Recruits are on one (1) year probation from time of hiring.

As part of a pro-active plan, Training evolutions are laid out for one year in advance.

The regular training sessions are every two (2) weeks in each of the three (3) fire districts providing both continued updated training in operating practices, as well as sessions on new equipment and techniques. Training is based on the requirements of the National Fire Protection Association, whose standards have been adopted in Ontario. Sessions are based on lesson plans and a training sheet Sign-off is required as each training evolution is completed.

Regular training is well set-up so that firefighters missing a session at his/her own fire station may attend the same training at another station on another day. This is especially carried out on new techniques subjects and new equipment. Each station attends these sessions on their regular training night.

Officer training is done using in-house personnel to NFPA Standards for Officers. Officers are encouraged to attend the Ontario Fire College for further training. For the position of Captain, a firefighter must have completed three (3) years of satisfactory performance. For the position of District Chief, a firefighter or captain must have completed five (5) years of satisfactory performance. Promotions for officers are conducted using examinations, interviews, courses and with a practical component, as well.

Pump Operators are trained in-house to NFPA Pump Operator Standards.
Driver training is carried out in-house and includes a Defensive Driving course.

Individual training records are maintained for all personnel.

As the preparation and training takes considerable time and is essential for the successful completion of emergency operations, we recommend that a Captain at each fire Station be appointed as an Assistant Training Officer to the Deputy Fire Chief as soon as possible. This will insure that the Training Curriculum is carried out smoothly within each fire district.

FIRE OPERATIONS AND RESPONSE

Currently minor responses such as medical calls and smaller traffic accidents are handled by a single station.

Structural responses are responded to by two or more stations (dispatched simultaneously) depending on the incident. However, structural fire responses in none hydrant areas require that all tanker apparatus from all stations respond to make absolutely sure that the Accredited Water Tanker Shuttle Program can be implemented without delay.

Call response personnel, on average, for structure fires, both Commercial (including Industrial and Institutional), is 15 day time and 35 night time. For second and subsequent alarms, an average of 8 additional personnel will respond. The numbers are the same for Residential calls, as well.

There are no major conditions that cause delays in responding to calls. Occasionally, heavy traffic and parking can be an issue.

Severn Fire & Emergency Services is a member of the Simcoe County Fire Mutual Aid System. Therefore, in consideration of a large conflagration or, if there are more than a single response call at the same time, they are able to call in extra equipment and manpower from neighbouring fire services. However, it is extremely important to understand that one municipality cannot constantly use a neighbour to keep bailing them out because they do not have the required equipment or manpower at hand. The Mutual Aid System, in Ontario, is designed to provide help when required and ideally, on a reciprocal basis.

It is recommended that the Fire Department consider obtaining a computerized system that allows senior officers, as well as responding personnel at a fire station, to view the number of available responding personnel. This allows an officer to request additional fire stations to respond, if it appears that there are insufficient personnel available to handle the emergency. These systems require the fire personnel to phone into the system each day with their response availability.

FIRE PREVENTION AND PUBLIC EDUCATION

These programs are carried out by a full-time Fire Prevention Officer.

Presently, pro-active fire prevention activities are annual inspections for Assembly, Industrial and Institutional occupancies. There is a goal of annual inspections for Commercial occupancies, but with only one FPO they are, in reality, only done every 2 to 3 years. Residential inspections are carried out on a "by request" basis.

The FPO also attends structure fires for the purpose of gathering witness statements and fire cause determination.

For people who are hard of hearing or deaf, there is a very pro-active program in place called Sightline for Safety. It involves the use of smoke alarms with strobe lights and bed and pillow shakers to alert people to a fire in the residence.

In addition, as time allows, a program is undertaken in public education activities, such as schools, citizen groups, senior groups, mall displays, etc.

There is a TAPP-C program in place for young offender arson situations.

Please note that the insurance industry expects Nursing and Retirement Homes to be inspected twice annually. Although they are classed as Institutional occupancies, the inspection frequency requirement differs from the usual annual inspection requirement.

The FPO should be a stakeholder in the development process for building stock pre-plans. Presently, each fire district does its own pre-plans. Copies of these pre-plans should be forwarded to the FPO's office for review and to keep on file.

The Fire Prevention Officer uses either Car #1 or Car #2 for carrying out inspections and the transporting of supplies for Public Education, etc. If neither of these vehicles is available, there are other municipal vehicles available for fire prevention use.

To provide for succession planning, it is recommended that a part-time assistant to the FPO be appointed. This person could be selected from the present personnel roster. They would be trained in basic fire prevention inspection techniques and initially carry out Commercial inspections in order to obtain a frequency of annually for the majority of Commercial occupancies. They would write up preliminary reports for perusal and approval by the full time FPO. Their inspection responsibility would increase as time permits. This assistant would also carry out their regular officer/firefighter duties.

COMMUNICATIONS

Severn Fire & Emergency Services is dispatched by the communication centre at the City of Orillia Fire Department. This is a modern and up-to-date facility staffed by trained career personnel. There are 4 full-time and 3 part-time dispatchers. Also, it is reported that Orillia City has cross training in place for firefighters to act as dispatchers when necessary. There is a back-up paging system in place from a base station located in Fire Station #3 Coldwater and, also, the Municipal Office.

Fire personnel are alerted by a radio pager system. All apparatus are radio equipped and there appears to be a sufficient number of portable radios available.

Repeater stations are located on Anderson Line and Telford Line.

The Fire Department has a pro-active upgrade plan for radios in order to meet their future requirements.

FIRE STATIONS

Fire Station #1 (3216 South Sparrow Lake Road)

This station is of modern design and construction.

It contains fire department offices. There is an office used by the firefighters and officers for report writing, etc. There are two offices which, at present, are primarily used for storage.

The station also contains a large training room/ classroom.

The large apparatus area has two, double-deep bays of large size with large front and rear apparatus doors.

There are male and female washrooms with shower facilities.

There is a mechanical room for maintenance and a hose tower for drying wet hose.

Fire Station #2 (3958 Burnside Line)

This structure is 47 years old and has pretty well come to the end of its useful life, as it stands. The bay size is too small to adequately house the apparatus and allow work to be carried-out on them and the equipment they carry. There are two bays for apparatus but they are only single truck deep. They are not drive through bays.
The classroom space is of inadequate size.

The facility lacks a proper kitchen, and the station has only a small washroom. This makes it difficult for the personnel to clean-up after a response, before returning home or to work.

Parking is limited with only enough space for 10 or 12 vehicles without blocking a portion of the apparatus bay doors.

We recommend that this structure be replaced with a modern one of non-combustible construction, a minimum 2-bays wide by two deep. This will accommodate any required apparatus for the foreseeable future. The bay area should be a minimum of 6.1 meters (20') wide per bay by 24.4 meters (80') deep. It should have bay doors, 4.2 meters (14') wide by 4.2 meters (14') tall on both the front and rear. There should be adequate space for the staff's bunker gear and storage space for seasonal equipment (such as grass and bush firefighting equipment in the winter) and other items. It should have a classroom capable of holding chairs and tables for at least thirty (30) personnel, as well as lecture space at the front of the room. The facility should have a kitchen where meals can be prepared in the event of a long response. An office should be provided where the officers can complete required paperwork. There should also be a small room for communications. Washroom facilities should be provided for male and female, with multiple sinks and toilets and at least two (2) showers. Locker facilities may also be desirable.

Fire Station #3 (1 Firehall Lane, Coldwater)

This is a fairly new structure. However, it shares space with the EMS Ambulance service who are tenants in this station. The ambulance personnel take over the training room area, so the fire personnel are left to make accommodation to train. Also, there is an

ambulance taking up space for fire apparatus. As a result, there is no tanker truck in this fire station. There are times when this type of arrangement could jeopardize the effectiveness of the Accredited Fire Department Water Tanker Shuttle Service.

Ambulance personnel do make accommodation for fire personnel on training nights. However, after emergency response calls, the fire crews are pretty well relegated to the apparatus bay. It would be a prudent measure to give some thought to rectifying this situation to allow for space for a tanker and space for fire personnel both during and after emergency calls.

Fire Station #4 (2060 North River Road)

This structure has been recently renovated with an addition of training room, kitchen area and washrooms.

There are two apparatus bays, single deep, which appear to be adequate for at least the next 5 years, as apparatus from Fire Station #3 responds with this station.

APPARATUS AND EQUIPMENT

Age of vehicles is an ongoing concern for fire departments and insurance companies. The insurance industry, via the Insurance Bureau of Canada (IBC), has guidelines as follows:

First line Pumpers and Tankers on a volunteer/part-time fire department should be replaced after 20 years of service. From 21 to 25 years, these apparatus can be retained as Reserve vehicles. After 25 years, there is no credit given for them.

As a general comment, the apparatus are all modern with the exception of Pumper #3 and Tanker #3 which are both 1997 and will have reached their 20 year life-span in 2017. Both of these vehicles are scheduled to be replaced in the next two years. The apparatus are generally well equipped. We recommend that all pumpers carry at least 300 metres of hi-volume water supply hose. In addition, as there is no aerial ladder in the fire department, we recommend that the pumpers carry 35 foot extension ladders, instead of 24 foot, to enable the firefighters to conveniently reach the roofs of two story buildings.

The provision of custom cab and crew cab units provides for personnel to ride apparatus to emergencies, rather than respond in their own vehicles. However, the use of personal vehicles will never be entirely eliminated in a volunteer/part-time fire department. Personnel arriving after the apparatus have departed will still have to respond in their personal vehicles. Some departments have tried to avoid this with the purchase of crew cab pick-ups to only transport personnel; however, they have found that the expense was not really worth it and, regularly, personnel still had to respond in their own vehicles.

There is a Vehicle Replacement Program in place.

Fire Station #1 (3216 South Sparrow Lake Road)

Pumper #1 – 2011 Metalfab on a Spartan Custom Cab and Chassis with 5,000 litre /min. (1,050 Imp.g.p.m.) pump and 4,000 litre (900 Imp. gal.) water tank. Built-in foam system.

Tanker #1 – 2013 Metalfab on a 2-door Spartan Custom Cab and Chassis with a 11,300 litre (2,500 Imp. gal.) water tank.

Rescue #1 – 2015 International Terrastar 4-door Cab and Chassis with a 12 foot walk around Oro Design body.

UTV - 2012 capable of negotiating almost any terrain, and capable of carrying equipment.

Support Trailer – 2011, 18 foot enclosed trailer. Used for rehabilitation and to house the UTV. Also, small spill kit up to 200 litres

Fire Station #2 (3216 South Sparrow Lake Road)

Pumper #2 – 2007 E-1 Custom Cab and Chassis with 5,000 litre /min. (1,050 Imp.g.p.m.) pump and 3,860 litre (850 Imp. gal.) water tank. Built-in foam system.

Tanker #2 – 2000 Almonte on a 2-door GMC Cab and Chassis with a 6,360 litre (1,400 Imp. gal.) water tank.

Fire Station #3 (1 Firehall Lane)

Pumper #3 – 1997 Metalfab on a 4-door Freightliner Cab and Chassis with 5,000 litre /min. (1,050 Imp.g.p.m.) pump and 4,500 litre (1,000 Imp. gal.) water tank. Built-in foam system.

Rescue #3 – 2008 Ford F550 2-door Cab and Chassis with a 12 foot walk around Oro Design body.

Fire Station #4 (2060 North River Road)

Pumper #4 – 2015 Metalfab on a 2-door Freightliner Cab and Chassis with 5,000 litre /min. (1,050 Imp.g.p.m.) pump and 3,600 litre (800 Imp. gal.) water tank. Built-in foam system.

Tanker #3 – 1997 Almonte on a 2-door GMC Cab and Chassis with a 6,800 litre (1,500 Imp. gal.) water tank.

Administration Vehicles

Car #1 – 2016 Ford F250 4-door 4X4

Car #2 – 2015 Ford F250 4-door 4X4

We recommend a 75' mid-mount Quint for pumper replacement, as the downtown commercial area of Coldwater has building stock requiring an aerial device for satisfactory firefighting.

MAINTENANCE PROGRAM

All apparatus and equipment is generally very well maintained. A good mechanical repair and service program is provided by two providers Clarke Diesel Limited in Oro-Medonte and Carrier Centers in Brantford, Ontario.

Clarke Diesel Ltd is a long established business and provides maintenance and repairs to the chassis of the vehicles. Clarke Diesel also completes a yearly safety inspection of the vehicles.

Carrier Centers have a modern, well equipped multiple bay facility, with a well-trained staff to provide service and repairs. Carrier has Emergency Vehicle Technicians on staff and has the capability to do repairs on-site, as well as in their Brantford shop (if necessary). Fire pump servicing and annual testing is provided by Carrier Emergency. This company is well established having been started in 1960. This is a respected firm in the fire service industry

GENERAL SUMMARY

If the department continues to be managed over the next 5 years with the same due diligence given to the items as discussed in this report, there should not be foreseeable difficulty in keeping up with the necessary requirements regarding growth and risks involved.

SUMMARY OF RECOMMENDATIONS

1: In order to provide reliable water supply for fire suppression in the rural areas, it is recommended a program be set-up to provide dry hydrants in strategic locations. These dry hydrants shall be designed and installed to meet the National Fire Protection Association standard NFPA 1142, Water Supply for Suburban and Rural Fire Fighting.

2: It is recommended that the Fire Department consider obtaining a computerized system that allows senior officers, as well as responding personnel at a fire station, to view the number of available responding personnel.

3: It is recommended that to allow for succession planning, a part-time assistant to the FPO be appointed and the addition of volunteer training officers in each station.

4: We recommend that Fire Station #2 be replaced with a modern one of non-combustible construction, a minimum 2-bays wide by 2-bays deep. This will accommodate any required apparatus for the foreseeable future. The bay area should be a minimum of 6.1 meters (20') wide per bay by 24.4 meters (80') deep. It should have bay doors, 4.2 meters (14') wide by 4.2 meters (14') tall on both the front and rear. There should be adequate space for the staff's bunker gear and storage space for seasonal equipment (such as grass and bush firefighting equipment in the winter) and other items. It should have a classroom capable of holding chairs and tables for at least thirty (30) personnel, as well as lecture space at the front of the room. The facility should have a kitchen where meals can be prepared in the event of a long response. An office should be provided where the

officers can complete required paperwork. There should also be a small room for communications. Washroom facilities should be provided for male and female, with multiple sinks and toilets and at least two (2) showers. Locker facilities may also be desirable.

5: It is recommended that all pumpers carry at least 300 metres of hi-volume water supply hose. In addition, as there is no aerial ladder in the fire department, we recommend that the pumpers carry 35 foot extension ladders, instead of 24 foot, to enable the firefighters to conveniently reach the roofs of two story buildings.

6: We recommend a 75' Aerial devise for pumper replacement as the municipality has building stock requiring an aerial devise for satisfactory firefighting.

7: It is recommended that the Severn Fire and Emergency Services investigate having a program in place to have Residential sprinkler systems installed in all new housing in remote areas. This recommendation is made because of the distance and time required for the Fire Services to reach these out-of-the-way risks.