



# Fire Service Review & Modernization Plan

2024

Mississippi Mills Fire Department

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# **Municipality of Mississippi Mills Fire Service Review & Modernization Plan**

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# Introduction

In 2021, the Municipality of Mississippi Mills contracted The Loomex Group to develop a Fire Master Plan (FMP). Since the first draft of the FMP was completed by The Loomex Group in 2022, the Mississippi Mills Fire Department had undergone some changes. The department recognized the need to develop an updated plan, based on the FMP and incorporating the provided recommendations. The Fire Service Review and Modernization Plan (FSRMP) will guide the Mississippi Mills Fire Department for the next 3 years. The plan includes a high-level review, long-term planning, and strategies for the recommendations outlined in the FMP, along with some newly identified additional recommendations.

## Performance Measures and Standards

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

- Fire Protection and Prevention Act, 1997 (FPPA)
- Occupational Health and Safety Act (OHSA)
- Ministry of Labour Fire Service Section 21 Guidance Notes
- National Fire Protection Association Standards (NFPA)
- Fire Underwriters Survey (FUS)
- Ontario Fire Marshal (OFM) Public Fire Safety Guidelines (PFSG)
- Ontario Fire Marshal's Office and Emergency Management (OFMEM)

## Summary of FMP Recommendations

### Overview of the FMP Recommendations

As laid out in the FMP, each recommendation has its own set of considerations. The legend below defines the different considerations and indicates how they are noted in the summary of recommendations (beginning on the following page).

**TABLE 1**

<b>Consideration</b>	<b>Definition</b>	<b>Indication Used</b>
Mandatory	Is the recommendation mandatory for legislative compliance?	Yes or No
Term	When should the recommendation be addressed?	IM (Immediate term, 0-1 yr) ST (Short-term, 1-4 yrs) LT (Long-term, 5-10 yrs) OG (Ongoing)
Council approval	Does Council need to approve the recommendation before it is implemented?	Yes or No
Budget impact	Will the recommendation have to be included in the Department's budget through the regular budgeting process?	Yes or No

## Summary of Recommendations

The FMP contains 19 recommendations. The Loomex Group based the recommendations on the results of the review and analysis of other relevant factors, including current legislation, by-laws, and agreements.

<b>FMP Section</b>	<b>Recommendation</b>	<b>Considerations</b>	<b>FSRMP Section</b>
Legislation, By-laws, and Agreements	The Fire Chief should review the Municipality's current fire protection agreements and automatic aid agreements. The Fire Chief should then notify Council of any changes needed to ensure the Municipality remains compliant with municipal regulations.	Term: OG Mandatory: Yes Council approval: Yes Budget impact: Yes	Page 11
Legislation, By-laws, and Agreements	If the Department implements any of this Fire Master Plan's recommendations that affect the Establishing and Regulating by-law, the Fire Chief should provide Council with an updated version of the by-law for consideration and approval.	Term: OG Mandatory: Yes Council approval: Yes Budget impact: Yes	Page 15
Occupational Health and Safety	The Fire Chief should consider ways to keep the PPE washing area at Station 1 separate from the PPE storage area.	Term: ST Mandatory: Yes Council approval: No Budget impact: Yes	Page 17
Occupational Health and Safety	The Fire Chief should develop a policy and process for reviewing Section 21 Guidance Notes with the Department's officers and firefighters during regular training sessions.	Term: ST Mandatory: No Council approval: No Budget impact: No	Page 19
Occupational Health and Safety	The Fire Chief should review the Department's health and wellness programs and establish a formalized health and wellness policy.	Term: ST Mandatory: No Council approval: No Budget impact: No	Page 22
SWOT Analysis	The Fire Chief and the officers should review the SWOT analysis results and determine if the Department should incorporate those findings into its strategic planning.	Term: IM Mandatory: No Council approval: No Budget impact: No	Page 27

<b>FMP Section</b>	<b>Recommendation</b>	<b>Considerations</b>	<b>FSRMP Section</b>
Social Dynamics	The Fire Chief should schedule regular engagement sessions with the Department's officers and firefighters to open lines of communication within the Department and allow all sections to voice suggestions.	Term: IM Mandatory: No Council approval: No Budget impact: Yes	Page 28
Social Dynamics	The Fire Chief should use social media to promote the Department, develop brand recognition, encourage firefighter pride, and help strengthen the Department's existing community trust.	Term: ST Mandatory: No Council approval: No Budget impact: No	Page 30
Fire Prevention and Public Education	The Fire Chief should develop a fire prevention policy that includes a smoke/CO alarm program, a public education program, and a schedule that sets inspection frequency by occupancy type. The Fire Chief should then submit the policy to Council for consideration and adoption.	Term: IM Mandatory: Yes Council approval: Yes Budget impact: Yes	Page 34
Fire Prevention and Public Education	The Fire Chief should develop a policy to ensure the Department completes the pre-planning process for the Municipality's high-risk occupancies.	Term: ST Mandatory: No Council approval: No Budget impact: No	Page 38
Training	The Fire Chief should develop a process for appointing volunteer trainers/para-trainers who can work with the Deputy Chief to deliver consistent, effective lesson planning and training.	Term: ST Mandatory: No Council approval: No Budget impact: No	Page 41
Training	The Fire Chief should form a training committee to work with the Deputy Chief and the station captains to help plan and develop the Department's training program.	Term: ST Mandatory: No Council approval: No Budget impact: No	Page 44

<b>FMP Section</b>	<b>Recommendation</b>	<b>Considerations</b>	<b>FSRMP Section</b>
Training	The Fire Chief should work with the Department's mutual aid partners to establish a joint training program to ensure operational and tactical consistency.	Term: ST Mandatory: No Council approval: No Budget impact: No	Page 47
Response Times and Resource Deployment	The Fire Chief should use the Department's historical response data to develop a baseline regarding response standards. The data should include information from the Department's low-, moderate-, and high-risk responses, as well as population density. The Department should then compare the baseline data with its effective response force model and present its findings to Council. Council should then establish an appropriate level of service for the Department.	Term: LT Mandatory: No Council approval: Yes Budget impact: No	Page 50
Water Supply	The Department should continue to deliver water in non-hydrant areas as per the standards of Superior Tanker Shuttle accreditation.	Term: ST Mandatory: Yes Council approval: No Budget impact: Yes	Page 56
Water Supply	The Fire Chief should review the NFPA's fire hydrant classifications and markings system and ensure the Municipality complies with applicable standards.	Term: IM Mandatory: Yes Council approval: No Budget impact: Yes	Page 61
Fire Apparatus and Equipment	The Municipality should review the Fire Underwriters Survey's technical bulletin regarding the replacement of used and refurbished apparatus.	Term: LT Mandatory: No Council approval: No Budget impact: No	Page 66

<b>FMP Section</b>	<b>Recommendation</b>	<b>Considerations</b>	<b>FSRMP Section</b>
Fire Stations	The Fire Chief should complete a cost analysis for Station 2. The Fire Chief should also complete a facility assessment to evaluate the station's current location and needs and verify that the facility complies with current building codes. The Fire Chief should use the results to compare options for upgrading, replacing, or relocating the station.	Term: ST Mandatory: No Council approval: Yes Budget impact: No	Page 71
Emergency Management	The Fire Chief and applicable municipal staff should review the Municipality's community emergency management coordinator (CEMC) and alternate CEMC positions. The review should verify at least one of these roles is filled by someone with an administrative background who can assist with provincial compliance documentation.	Term: OG Mandatory: No Council approval: No Budget impact: No	Page 74

## Section A: Community and Fire Service Challenges

The Mississippi Mills Fire Department has pinpointed two major challenges that will influence its operations and long-term planning over the next 3 years.

### A.1 Community Overview and Future Growth

The Municipality of Mississippi Mills has seen an increase in development activity in recent years which is trending to rise. According to the 2021 Statistics Canada Census, the Municipality has a total landmass of 511.25 km<sup>2</sup> and a population of 14,740 residents (Almonte alone accounting for 6,098), with approximately 28.8 residents per km<sup>2</sup>. Lanark County's Sustainable Communities Official Plan projects Mississippi Mills to grow to a population of 21,122 to the year of 2038. This projection represents a 60% increase in the Municipality's population. Additionally, the Municipality's updated Official Plan has a settlement strategy where 70% of future growth is expected to be within the urban settlement area of Almonte and 30% of future growth to rural settlement areas. Growth forecasts are intended to provide best estimates of future growth, to ensure municipalities are adequately prepared to accommodate growth through infrastructure planning, capital plans, and urban land requirements.

Population growth can significantly impact volunteer fire departments in several ways:

- **Increased Call Volume:** As the population grows, the number of emergency calls is likely to increase, putting more pressure on volunteer firefighters to respond to a higher volume of incidents.
- **Resource Strain:** More people in the community can lead to greater demand for resources, such as equipment, vehicles, and training materials. This can strain the department's budget and resources.
- **Recruitment Challenges:** With a larger population, the need for more volunteers increases. However, recruiting and retaining volunteers can be challenging, especially if the community's demographics change or if there are competing demands on people's time.
- **Training Demands:** A growing population may require more specialized training to handle a wider variety of emergencies. This can increase the time and effort needed to keep all volunteers adequately trained.
- **Infrastructure Needs:** The department may need to expand its facilities or build new ones to accommodate the increased number of volunteers and equipment required to serve a larger population.
- **Community Engagement:** As the community grows, maintaining strong relationships and effective communication with residents becomes more important. This can help in recruiting new volunteers and ensuring community support for the department.

- Funding and Support: A larger population might lead to increased funding opportunities through taxes or grants, but it also means departments need to effectively advocate for their needs to secure these resources

## A.2 Forecasted Future Training Requirements

As with many other volunteer fire departments across Ontario, attracting and keeping volunteers can be a major issue. The time commitment required for training and responding to emergencies can deter potential volunteers, especially younger individuals. Specifically, the training demands can be difficult to balance with their full-time jobs and personal commitments. Volunteers undergo extensive training to meet safety and operational standards. Additionally, keeping up with changing regulations and safety standards requires continuous training and adaptation, which can be challenging for volunteer departments.

The introduction of Ontario Regulation 343/22, which mandates standardized certification for firefighters, requires that firefighters performing the fire protection service is certified at a minimum to the corresponding certification standard. The fire services provided by the fire department are outlined in the municipality's E&R by-law. The regulation outlines a four to six-year implementation window. Four years for most standards, and six years for technical rescue standards. Certification requires complete of written and practical testing (accredited by IFSAC & ProBoard).

MMFD would be considered a full-service fire department as per the prescribed regulation definition, which includes a department that performs interior fire attacks, hazardous materials response to operations level, and auto extrication. For full-service fire departments, certification to all standards for the services they provide are required, including Firefighters, Fire Officers, Apparatus Operators, etc. The table below demonstrates the applicable certification standards and their associated compliance deadlines.



**TABLE 2****Mandatory Certification for Fire Protection Services**

<b>Certification Standard</b>	<b>Description</b>	<b>Compliance Deadline</b>
<b>NFPA 1001 - Firefighter I</b>	Basic firefighting skills and knowledge	July 1, 2026
<b>NFPA 1001 - Firefighter II</b>	Advanced firefighting skills and knowledge	July 1, 2026
<b>NFPA 1072 - Hazardous Materials Awareness</b>	Awareness level training for hazardous materials incidents	July 1, 2026
<b>NFPA 1072 - Hazardous Materials Operations</b>	Operations-level training for hazardous materials incidents	July 1, 2026
<b>NFPA 1021 - Fire Officer I</b>	Basic fire officer skills and knowledge	July 1, 2026
<b>NFPA 1021 - Fire Officer II</b>	Advanced fire officer skills and knowledge	July 1, 2026
<b>NFPA 1031 - Fire Inspector I</b>	Basic fire inspection skills and knowledge	July 1, 2026
<b>NFPA 1031 - Fire Inspector II</b>	Advanced fire inspection skills and knowledge	July 1, 2026
<b>NFPA 1033 - Fire Investigator</b>	Skills and knowledge for fire investigation	July 1, 2026
<b>NFPA 1041 - Fire Instructor I</b>	Basic fire instructor skills and knowledge	July 1, 2026
<b>NFPA 1041 - Fire Instructor II</b>	Advanced fire instructor skills and knowledge	July 1, 2026
<b>NFPA 1051 - Wildland Firefighter I</b>	Basic wildland firefighting skills and knowledge	July 1, 2026
<b>NFPA 1051 - Wildland Firefighter II</b>	Advanced wildland firefighting skills and knowledge	July 1, 2026
<b>NFPA 1006 - Technical Rescuer</b>	Skills and knowledge for technical rescue operations	July 1, 2028

Departments have some training options to address the certification requirements, including:

- Delivering training in-house and utilizing the assessment checklist route to certification
- Having students attend Regional Training Centres to complete training & certification
- Entering into a learning contract with the Ontario Fire College

The time constraints introduced with the mandatory certification deadlines have added extra pressure to the department to meet the requirements within the time constraints. Noting this, staff plan to create a report to Council that will:

- Identify what training programs are required for the services that MMFD is providing. Each area will be evaluated regarding the present (and future) services to be provided by the department, such as suppression, medical response, hazardous materials response, etc.
- Identify the number of hours that are required to meet each of those training needs based on Provincial and/or industry standards. This will include the recommended training hours required and what refresher programs need to be conducted, and when.
- Identify the resources required to accomplish this training. This will include whether the training program requires additional equipment, facilities, training props, course fees, and associated costs.

## Section B: Existing Recommendations

### Overview of the Fire Service Review & Modernization Plan

Each recommendation of the FSRMP is broken down into the key components of a plan to ensure clarity and alignment among all stakeholders. The table below outlines these key components or sections.

**TABLE 3**

<b>Section</b>	<b>Description</b>
Recommendation	The suggested best course of action, as provided by The Loomex Group in the Fire Master Plan, or staff as part of the Fire Service Review and Modernization Plan.
Current Status/Timeline	A snapshot of where the current project stands and a summary of upcoming milestones.
Cost	The recommendation's anticipated cost, required resources or impact to the department's budget.
Discussion	This section provides background information relevant to the recommendation. It also identifies any risks or challenges that could impact the department's plan and strategies for mitigating these risks.
End Goal	This section defines the goals and objectives of the plan: what the department is aiming to achieve.
Plan	This section outlines the steps the department will undergo to achieve the end goal, satisfying the recommendation.

## Recommendation 1: Fire Protection Agreements

### Recommendation

The Fire Chief should review the Municipality's current fire protection agreements and automatic aid agreements. The Fire Chief should then notify Council of any changes needed to ensure the Municipality remains compliant with municipal regulations.

### Current Status/Timeline

The Fire Chief completed reviews of every fire protection agreement and automatic aid agreement in 2024. The Ministry of Natural Resources and Forestry Agreement was reviewed and renewed in January 2024 with no changes made. The automatic aid agreements with the Town of Carleton Place and the Township of Lanark Highlands, were also reviewed and modified. An agreement with the Town of Arnprior was created and approved in September 2024. Finally, the Lanark County Rescue program has initiated a review by a third party, commencing in 2024.

### Cost

Each agreement required staff time for the review and modification of related documents. While no changes were made to the Ministry of Natural Resources and Forestry's agreement resulting in no budgetary considerations, changes were made to the existing agreements with the Town of Carleton Place and the Township of Lanark Highlands.

The Carleton Place agreement has long been included in the department's operational budget and will not necessitate any increase at this time. The updated agreement will impose a \$22.50 charge per property within the designated area, with an annual increase of 3%.

The Municipality of Mississippi Mills will not bear any cost for fire protection services provided under the Lanark Highlands automatic aid agreement. The agreement specifies how cost recovery will be determined for each incident type.

The newly created Arnprior automatic aid agreement has not been budgeted for in the past. Moving forward, the department would require a new operational budget code for this agreement in the amount of \$3,000.00 to cover the potential cost of a response to the prescribed area. However, it should be noted that the likelihood of a response in the designated area is minimal.

The review of the Lanark County Rescue program is being conducted at the County level, resulting in no cost to the municipality. However, the program's review will determine its future. If the program is cancelled, the municipality will bear the costs of the equipment, vehicle, and training required to meet service standards.

## Discussion

The Fire Chief and staff will continue to review the existing service agreements on an annual basis for the following reasons:

- **Cost Management:** Regular reviews help ensure that the costs associated with the service agreements remain within budget and identify any potential savings.
- **Performance Evaluation:** To assess whether we as the service provider or recipient are meeting the agreed-upon standards and performance metrics.
- **Compliance:** To ensure that the service agreement complies with any new regulations or laws that may have been introduced.
- **Risk Management:** To identify and mitigate any risks associated with the service agreement, such as outdated terms or potential liabilities.
- **Adaptability:** To allow for adjustments to be made in response to changing needs or circumstances, ensuring the service agreement remains relevant and effective.
- **Relationship Management:** To maintain a good working relationship with the service provider or recipient by addressing any issues or concerns promptly.

Considering these factors, challenges in response times may arise with our service agreement providers as their populations grow and resources become strained. This could also apply to Mississippi Mills as a service provider, as the department's resources may be preoccupied within Mississippi Mills. Additionally the department's resources could be tied up during a response to the designated service area should the home department's response be delayed or unable to respond.

The County of Lanark currently has a Rescue Services Agreement in place with the local municipalities. There are three County-owned rescue vehicles and equipment strategically placed throughout the County. Each of the vehicles is equipped to provide assistance and support to any of the fire services, police or ambulance within the County. Three service providers (Drummond North Elmsley – Tay Valley Fire Rescue, Montague Township Fire Department, and Mississippi Mills Fire Department) operate the vehicles in their respective response areas and are responsible for maintaining the equipment and ensuring personnel are trained to the appropriate standards.

The County of Lanark has contracted the professional services of an experienced and qualified consulting firm to develop a Rescue Services Review for Lanark County. The overall goal of the project is to provide recommendations that will assist Council in determining the direction of the Rescue Services Program.

Third-party review will include:

- Current agreement including scope, criteria, location, and number of units. This includes a review of the criteria for response. Provide recommendations for updating the agreement and response criteria as required.
- Current equipment including vehicles and cost of maintenance.
- Upcoming certification and training enhancement requirements.
- Future challenges related to auto-extrication in regard to electric vehicles;
- Opportunities to serve unmet needs and potential to provide enhanced services (i.e. confined space, trench rescue, water rescue, etc.)
- Consistent and equitable levels of service to the residents of Lanark County.
- Rescue Services Committee composition and management structure.
- Current data collection and metrics for rescue program performance.
- Financial analysis including budget planning and asset management/capital planning, cost to provide service for service providers, and potential cost-sharing and billing.

Should the rescue program be canceled, the municipality would assume the financial costs of filling in a service gap, which would require the purchase of a rescue vehicle, the maintenance of the said vehicle, the cost to purchase the necessary equipment for the rescue vehicle, and the cost of the related training for the department's firefighters.

## End Goal

The Fire Chief and staff will review the existing fire protection and automatic aid agreements on an annual basis. The review will take into account cost management, performance evaluation, compliance risk management adaptability, and relationship management.

## Plan

1. Preparation Phase: Collect all relevant documents, including the original agreements, amendments, performance reports, and financial statements.

### 2. Review Criteria

**Performance Metrics:** Evaluate if the agreed-upon performance standards are being met.

**Cost Analysis:** Analyze the costs associated with the service agreements to ensure they are within budget and identify any potential savings.

**Compliance Check:** Ensure the service agreements comply with current laws and regulations.

Risk Assessment: Identify any risks associated with the service agreements, such as outdated terms or potential liabilities.

Feedback Collection: Gather feedback from stakeholders and end-users about the service quality and any issues encountered.

### 3. Evaluation Phase

Performance Review: Compare the service agreement provider's performance against the agreed metrics.

Financial Review: Assess the financial aspects, including cost-effectiveness and any changes in pricing.

Legal Review: Ensure the agreement is legally sound and compliant with any new regulations.

Risk Review: Identify and evaluate any risks or issues that have arisen since the last review.

### 4. Service Agreement Amendment Reporting

Draft Report: Should the review warrant service agreement amendments, prepare a detailed report summarizing the findings of the review, including performance, cost, compliance, and risks.

Recommendations: Include recommendations for improvements, adjustments, or renegotiations of the agreement.

Stakeholder Review: Share the report with relevant stakeholders and Council for feedback and approval.

### 5. Action Plan

Implement Changes: Following Council's approval, based on the review findings and stakeholder feedback, implement the changes to the service agreements.

Update Documentation: Ensure all changes are documented and updated in the agreement.

### 6. Continuous Improvement

Training and Development: Provide training for department staff involved in managing and reviewing the service agreements, and the volunteer firefighters working with or providing the agreed upon services to keep them updated on best practices.

## Recommendation 2: Establishing & Regulating By-law

### Recommendation

If the Department implements any of this Fire Master Plan's recommendations that affect the Establishing and Regulating by-law, the Fire Chief should provide Council with an updated version of the by-law for consideration and approval.

### Current Status/Timeline

The Fire Chief reviewed and updated the establishing a regulating by-law in 2024. The by-law will be reviewed annually and updated as required.

### Cost

The annual review of the by-law and Council updates require staff time. In 2024, staff spent roughly 40 hours in reviewing, updating, and presenting the by-law to Council. Any changes to the Establishing and Regulating by-law may equate to budgetary implications dependent on the approved service levels set within.

### Discussion

An Establishing and Regulating By-Law (E&R) is a municipal document that outlines the policies and procedures for fire departments. It can be used to show how the municipality delivers fire protection services it has determined are necessary according to its needs and circumstances, as is required by the *Fire Protection and Prevention Act, 1997* (FPPA). An Establishing and Regulating by-law can state the type and level of fire protection services provided and may include policy direction in the following areas:

- Legislative/ regulatory requirements that may affect the delivery of fire protection services (e.g., FPPA, *Occupational Health and Safety Act*, and *Environmental Protection Act*)
- Fire Marshal directives
- Best practices (e.g., Ontario Fire Service Section 21 Advisory Committee Guidance Notes, National Fire Protection Association standards)
- General functions and core services to be delivered
- Goals and objectives of the fire department
- General responsibilities of fire department personnel
- Organizational structure
- Authority to proceed beyond established response areas
- Authority to apply costs to property owners for fire investigations
- Authority to effect necessary fire department operations, in consultation with the municipality's legal resources

The current E&R By-law was updated in 2024, with minor changes. It is recommended that by-laws affecting fire department operations be reviewed

annually or as significant changes occur in the community. Doing so will ensure that the Fire Chief's noted service levels, expectations, and authority are correctly aligned with the community's needs.

In collaboration with the Fire Chief, the Council should establish an objective and definitive response time to be included in the E&R By-law. The NFPA recommends completing some assessments to evaluate a baseline for a department's response time goal. Future assessments will offer an understanding of how the department has been performing, along with identifying areas for possible improvement in station location and vehicle and staffing distribution.

In the coming years, Mississippi Mills will encounter several challenges related to its fire department. These challenges include an anticipated increase in the budget due to changing training requirements. As regulations evolve, the municipality must allocate resources to ensure that firefighters receive up-to-date training. Additionally, the projected population growth in the municipality will lead to a higher demand for emergency responses. While this is positive for public safety, it will also place additional strain on the department's dedicated volunteer firefighters. Balancing these demands while maintaining effective fire protection services will be a critical task for the municipality.

## End Goal

Ensure that fire protection services are delivered effectively and efficiently, tailored to the specific needs and circumstances of the community during the annual review of the E&R by-law. Any changes or recommendations will be brought forward to Council for their consideration.

## Plan

To address the upcoming challenges to fire services, the department will:

### 1. Perform Annual Review of E&R By-law

- Objective: Ensure the by-law aligns with community needs and fire department operations.
- Action: Collaborate with the Fire Chief to review and update the by-law annually or as significant changes occur.

### 2. Establish Response Time Goals

- Objective: Define clear response time goals in the E&R By-law.
- Action: Work with the Fire Chief and Council to set an objective response time.



- Assessment: Conduct NFPA-recommended assessments to evaluate current response times and identify improvement areas.

### 3. Prepare for Population Growth

- Objective: Manage increased demand for emergency responses.
- Action: Plan for additional resources and support for volunteer firefighters.
- Strategy: Evaluate and adjust station locations, vehicle distribution, and staffing levels to meet growing needs.

### 4. Address Training Requirements

- Objective: Ensure firefighters receive up-to-date training for the services provided in accordance with the E&R by-law.
- Action: Allocate budget resources to meet evolving training regulations.
- Implementation: Schedule additional training sessions for the required certifications.

### 5. Budget Planning

- Objective: Balance budget increases with effective fire protection services.
- Action: Forecast budget needs based on the service levels outlined in the E&R by-law.
- Monitoring: Regularly review and adjust the budget to ensure sustainability.

## Recommendation 3: PPE Storage

### Recommendation

The Fire Chief should consider ways to keep the PPE washing area at Station 1 separate from the PPE storage area.

### Current Status/Timeline

This recommendation was addressed and completed in 2023 with the relocation of the washing area at Station 1.

### Cost

The purchase and installation of the new washing machines and the relocation of the existing washing machine was completed within the approved 2022 Capital Project budget in the amount of \$16,000.

## Discussion

Pursuant to NFPA Standards 1500 and 1581 which deal with fire facilities standards and PPE washing standards respectively, the Mississippi Mills Fire Department must be able to wash firefighter turnout gear after contamination. Additionally, the cleaning and decontamination area must be separate from other spaces.

At the time the FMP was completed, the department had one washer and one dryer located in the Almonte station. The washer itself met NFPA standards, however it was located inside the clean turnout gear storage area/bunker gear room. In order to meet the standard, it was recommended that the washer be relocated or a wall be constructed to divide the two areas.

It was determined that constructing a wall to divide the areas would impact the useful space currently available to the bunker gear room by reducing the footprint of the room and impacting the access/egress from where firefighters don/doff their gear. Additionally, the washer was rather large and could only wash either bunker gear shells or bunker gear liners at one time. This created a lengthy process to return a set of gear to a state of readiness as each gear set essentially must go through two separate wash cycles before being dried and then reassembled.

The department determined that the purchase of two smaller washers (one for washing shells and one for washing liners) would reduce the time to readiness, and would take up minimal space, allowing for them to be relocated. A dedicated cleaning area was set aside within the existing SCBA cleaning room for the washers to separate contaminated and decontaminated gear to comply with NFPA standards. The existing washer from the Almonte station was moved to Pakenham and installed in a separate room off of the bay floor to increase the department's cleaning capacity, as well as eliminate the need to transport contaminated gear to Almonte for cleaning.

## End Goal

Relocate or isolate the washing/cleaning facilities to minimize potential health and safety concerns (such as cross-contamination).

## Plan

When addressing the relocation of the washing and cleaning facilities, the department followed the following plan:

- Determined the appropriate relocation space for the Almonte station washer extractor, separate from the previously existing gear storage room.
- Researched washer extractor options that meet the needs of the department.
- Obtained quotes for viable options.
- Secured the purchase of washer extractor(s) within the approved budget.

- Installed the washer extractor(s) in the designated relocated area.
- Removed the existing washer extractor from the Almonte station and relocated and installed in the Pakenham station
- Trained staff and members on the proper use of the new washer extractor(s).

## Recommendation 4: Guidance Notes Review for Training

### Recommendation

The Fire Chief should develop a policy and process for reviewing Section 21 Guidance Notes with the Department's officers and firefighters during regular training sessions.

### Current Status/Timeline

The Mississippi Mills Fire Department adheres to the Section 21 Guidance Notes, utilizing them as best practices for both fire ground operations and training. These guidance notes are essential in ensuring that the department's operations are conducted safely and efficiently, aligning with the highest standards of fire service practices. However, staff recognize that these valuable resources are not consistently shared or reviewed with the entire department during training sessions or meetings. This communication gap can lead to inconsistencies in understanding and applying these best practices. The department will begin implementing Section 21 Guidance Notes during training sessions in 2025 and will align the department's SOGs and training plans with Section 21 Guidance Notes in 2026.

### Cost

Staff time is the only applicable cost to developing a policy and process for reviewing Section 21 Guidance Notes should the work be completed in-house. The department estimates 1,040 staff hours to review and update the department's existing Standard Operating Guidelines (SOGs) and training plans to align with Section 21 Guidance Notes (roughly 130 SOGs at 8 hours per SOG). Given the extensive time commitment needed for this task, the department might look into outsourcing it to a third party.

### Discussion

The firefighter guidance notes assist fire service personnel in understanding potential health and safety issues within their workplace. These notes also aid employers in identifying hazards unique to fire services and in determining measures to prevent injury and illness among their workers. The Section 21 Guidance Notes, maintained by a provincial team of fire service personnel, serve as a reliable and up-to-date reference. The Section 21 Committee is part of the Occupational Health and Safety Act (OHSA) initiative focused on firefighter safety. Additionally, the numerous NFPA Standards are valuable resources for developing SOGs. Currently, there are 71 separate guidance

notes divided into seven sections, along with an added Firefighter's Cancer Prevention Checklist. The section topics are:

- Section 1 – Apparatus and equipment
- Section 2 – Communications
- Section 3 – Environment
- Section 4 – Personal protective equipment
- Section 5 – Personal accountability
- Section 6 – Procedures
- Section 7 - Training
- Firefighter's cancer prevention checklist

The biggest challenge that faces any volunteer fire department is time. MMFD has 50 dedicated members and only six hours per month to train everyone to a certain level of competence in every service the department provides to the community. Due to time constraints, some tasks have inevitably been overlooked, and reviewing the Section 21 Guidance Notes before/during training is one of them.

### End Goal

Enhance the overall knowledge and preparedness of the department's personnel, ensuring that every member is well-informed and capable of executing their duties safely and effectively through the review of applicable Section 21 Guidance Notes during training.

### Plan

Implementing Section 21 Guidance Notes in the department's day-to-day operations involves several key steps to ensure the health and safety of the firefighters.

#### 1. Understand the Guidance Notes

- Review the Documents: Thoroughly read and understand the Section 21 Guidance Notes.
- Identify Key Areas: Focus on sections relevant to the department, such as apparatus and equipment, communications, environment, personal protective equipment, personal accountability, procedures, and training.

#### 2. Form a Committee

- Establish a Committee: Create a committee that includes representatives from management, firefighters, and health and safety reps.
- Assign Roles: Clearly define roles and responsibilities for each committee member.

### 3. Conduct a Gap Analysis

- **Assess Current Practices:** Compare the department's current health and safety practices and SOG's with the guidance notes.
- **Identify Gaps:** Highlight areas where the department's current practices do not meet the recommended guidelines.

### 4. Develop an Implementation Plan

- **Set Objectives:** Define clear, measurable objectives based on the identified gaps.
- **Create Action Steps:** Develop specific actions to address each gap, including timelines and responsible parties.
- **Allocate Resources:** Ensure the department has the necessary resources, including budget, personnel, and equipment.

### 5. Training and Education

- **Develop Training Programs:** Create training modules based on the guidance notes.
- **Schedule Training Sessions:** Organize regular training sessions for all firefighters.
- **Evaluate Training Effectiveness:** Use assessments and feedback to ensure the training is effective.

### 6. Implement Changes

- **Roll Out Changes:** Gradually implement the changes according to the department's action plan.
- **Monitor Progress:** Regularly check the progress of implementation and make adjustments as needed.

### 7. Review and Improve

- **Conduct Regular Audits:** Periodically review the implementation process and the effectiveness of the changes.
- **Update Practices:** Continuously update the department's practices based on new guidance notes and feedback from audits.

### 8. Communication

- **Keep Everyone Informed:** Regularly update all stakeholders on the progress and any changes.
- **Encourage Feedback:** Create channels for firefighters to provide feedback and suggestions.

## Recommendation 5: Health & Wellness Program

### Recommendation

The Fire Chief should review the Department's health and wellness programs and establish a formalized health and wellness policy.

### Current Status/Timeline

The department intends to address this recommendation in 2026, allowing ample time to thoroughly implement every aspect of the program.

### Cost

The review of the department's programs and the creation of a formalized health and wellness policy will necessitate a significant investment of staff time. This process will involve several key steps, including:

1. **Assessment and Analysis:** Staff will need to conduct a thorough review of existing programs to identify strengths, weaknesses, and areas for improvement. This may involve collecting and analyzing data, conducting surveys, and holding focus groups with employees.
2. **Policy Development:** Crafting a comprehensive health and wellness policy will require collaboration among various stakeholders, including HR, management, and possibly external consultants. This policy will need to address various aspects of employee well-being, such as physical health, mental health, and work-life balance.
3. **Implementation Planning:** Developing a detailed plan for rolling out the new policy and any associated programs will be crucial. This plan should include timelines, resource allocation, and communication strategies to ensure smooth implementation.
4. **Training and Education:** Staff will need to be trained on the new policy and any new programs. This could involve workshops, meetings, or online training modules to ensure everyone is informed and prepared.
5. **Monitoring and Evaluation:** Ongoing monitoring and evaluation will be necessary to assess the effectiveness of the new policy and programs. This will help in making any necessary adjustments and ensuring continuous improvement.

Additional costs will depend on the specific direction and scope of the programs and policy. These costs could include:

- **Consultant Fees:** If external experts are brought in to assist with the review and policy development.

- **Training Costs:** Expenses related to training materials, facilitators, and any required certifications.
- **Program Implementation:** Costs associated with launching new wellness initiatives, such as fitness programs, mental health resources, or PPE improvements.
- **Technology and Tools:** Investment in software or tools needed to support the new programs, such as wellness apps or data analytics platforms.
- **Ongoing Support and Maintenance:** Resources needed to sustain the programs, including staff time for ongoing management and periodic reviews.

By carefully planning and allocating resources, the department can effectively enhance its health and wellness offerings, ultimately benefiting both employees and the department as a whole.

## Discussion

The health and well-being of the department's volunteers is a top priority. Firefighting is inherently stressful and physically demanding. Volunteers also juggle the demands of their full-time jobs.

In addition to specialized training, significant physical fitness and mental resilience are essential for performing a variety of challenging tasks. Leaders must advocate for a cultural shift in attitudes and behaviors towards physical and mental wellness. Health and wellness programs can be powerful tools for fostering change, offering numerous benefits by cultivating a team of well-informed and well-equipped firefighters. Participation in health and wellness programs can correlate to significant health-risk reductions.

While the department offers various programs and resources, a formal wellness program would make joining the department more attractive for recruitment and help to retain membership. The current initiatives offered either in-house or through county-wide partners include:

- An employee assistance plan offering benefits through VFIS and Homewood Clinics.
- Participation in the county-wide Critical Incident Stress Management (CISM) program for firefighters, which includes peer support.
- Annual reviews and training sessions focused on mental health and available resources.
- PTSD training for all recruits during county-wide firefighter recruitment sessions.
- Access to exercise equipment (kept at Station 1).

NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments details basic expectations placed upon firefighters. Additionally, it identifies 14 essential job tasks that outline the physical and physiological strains placed on

firefighters. The 14 essential job tasks outlined in NFPA 1582 form the basis for the NFPA 1583 Standard on Health-Related Fitness Programs (HRFP) for Fire Department Members. According to the NFPA, “this standard outlines a comprehensive HRFP for fire department members involved in emergency operations to enhance their ability to perform occupational activities and reduce the risk of injury, disease, and premature death.” The relevant section of the standard is found in section 4.1, which states: “the fire department shall establish and provide an HRFP that enables members to develop and maintain a level of health and fitness to safely perform their assigned functions.”

Data suggests a correlation between the following:

- A proactive approach to health and fitness and a decrease in debilitating occupational injuries.
- A reduction in workers compensation claims and a decrease in acute and chronic health problems of firefighters.

Combining the health-related fitness program with a proactive occupational safety and health program provides a fire department with the level of quality needed for its members. The department should review the 14 essential job tasks from NFPA 1582 as they pertain to the recruitment and testing process and pursue options for offering personnel the ability to exercise and maintain fitness levels as explained in NFPA 1583.

Section 14.1 of NFPA 1500 Standard on Fire Department Occupational Safety, Health, and Wellness Program states that fire departments shall provide access to a behavioural health program for its members and their immediate families. Current coverage through VFIS include OTSD benefit, Critical Incident Stress Management Benefit, Family Bereavement and Trauma Counselling Benefit, and access to Homewood Health’s Employee and Family Assistance Programs.

The Municipality has a Joint Occupational Health and Safety Committee (JOHSC) and there is a Sub-Committee for the Fire Department. The Fire Department has seven members on the Sub-Committee, one from management and one worker representative from each station. The Sub-Committee meets on a quarterly basis. In addition, the sub-committee regularly reports back to department members during the monthly station meetings.

The Department, in consultation with the Sub-Committee, has begun the review of the Ministry of Labour, Training and Skills Development’s Firefighter’s Cancer Prevention Checklist. Through this review, the department has identified the need to create a Cancer Prevention Policy to formalize the steps the department will take to minimize or prevent exposures, keeping the workplace safe. Further to this policy and in accordance with NFPA 1500 section 9.11.1, the Department shall adopt and maintain a respiratory protection program that addresses the selection, care, maintenance, and use of



respiratory protection equipment (RPE), medical surveillance, training in respirator use, and the assurance of air quality. The program will be developed in consultation with the Department's Sub-Committee.

## End Goal

Implementing a well-thought-out health and wellness program and policy that considers all aspects of a firefighter's well-being to support long-lasting changes.

## Plan

Formalizing health and wellness programs involve creating a structured and comprehensive approach to support the well-being of individuals or employees. Here are the key steps to formalize such plans:

### 1. Assess Needs and Goals

- Identify Needs: Conduct surveys or assessments to understand the specific health and wellness needs of the firefighters.
- Set Goals: Define clear, achievable goals for the health and wellness programs, such as improving physical fitness or reducing stress, etc.

### 2. Develop a Comprehensive Plan

- Components: Include various aspects of wellness such as physical health, mental health, and safety.
- Action Steps: Outline specific actions and initiatives to achieve the wellness goals, such as fitness programs, mental health workshops, etc.

### 3. Create a Detailed Implementation Strategy

- Timeline: Develop a timeline for rolling out the wellness initiatives.
- Resources: Identify the resources needed, including budget, personnel, and materials.
- Responsibilities: Assign roles and responsibilities to staff for implementing different aspects of the programs.

### 4. Communicate the Plan

- Awareness Campaign: Communicate with the firefighters about the health and wellness programs and their benefits.
- Engagement: Encourage participation through incentives, challenges, or regular updates.

## 5. Monitor and Evaluate

- **Track Progress:** Use metrics and regular check-ins to monitor the progress of the wellness initiatives.
- **Feedback:** Collect feedback from participants to understand what's working and what needs improvement.
- **Adjustments:** Make necessary adjustments to the programs based on feedback and evaluation results.

## 6. Provide Support and Resources

- **Access to Services:** Ensure participants have access to necessary services such as fitness facilities, counseling, and health screenings.
- **Educational Materials:** Provide resources like articles, videos, or workshops to educate participants on various wellness topics.

## 7. Foster a Supportive Environment

- **Culture:** Promote a culture of wellness within the organization or community.
- **Peer Support:** Encourage peer support groups and wellness champions to motivate and support participants.

## 8. Celebrate Successes

- **Recognition:** Recognize and celebrate milestones and achievements to keep participants motivated.
- **Rewards:** Offer rewards or incentives for participation and progress.

Key steps to creating a health and wellness policy:

1. **Define Department's Objectives:** Clearly outline the goals of the health and wellness policy. This could include reducing absenteeism, improving employee morale, or promoting healthy lifestyle choices.

## 2. Develop the Policy

- **Mental Wellbeing:** Include provisions for mental health support, such as access to counseling services, stress management workshops, and mental health awareness campaigns.
- **Physical Wellbeing:** Promote physical activity by offering access to gym equipment, organizing fitness challenges, and provide healthier alternative food options during training and incident response.

3. Implement Wellness Programs: Introduce wellness programs that align with the department's policy objectives.
4. Communicate the Policy: Ensure that all employees and volunteer firefighters are aware of the health and wellness policy, using various communication channels such as emails, posters, or meetings to disseminate information.
5. Monitor and Evaluate: Regularly review the policy's effectiveness by collecting feedback from employees and tracking key metrics such as absenteeism rates and employee satisfaction.
6. Update as Needed: Keep the policy up to date with the latest health and wellness trends and adjust it based on feedback and changing needs.

## Recommendation 6: SWOT Analysis

### Recommendation

The Fire Chief and the officers should review the SWOT analysis results and determine if the Department should incorporate those findings into its strategic planning.

### Current Status/Timeline

The department plans to address this recommendation in 2025 to align with its' plan to complete a SWOT analysis every five years.

### Cost

Staff time will be the sole cost associated with this recommendation. The department estimates roughly 40 hours of staff time to prepare, hold and review results from the scheduled sessions.

### Discussion

During the research stage of the Fire Master Plan, Loomex held multiple SWOT analysis sessions with the department's officers and firefighters. During these sessions, members were asked for their feedback regarding the department's strengths, weaknesses, opportunities, and threats. Their answers were organized into themes and guided some of the recommendations for the department's operations.

### End Goal

Perform a SWOT analysis every five years to provide a comprehensive overview of the department's current state and help with strategic planning and decision making.

## Plan

The department will:

1. **Gather Staff and Members:** Assemble staff, officers, and firefighters to hold SWOT analysis sessions every five years or ask for their input via an online survey.
2. **Brainstorm**  
Ask questions to stimulate discussion about the past, present, and future of the department in relation to the four components of SWOT:
  - **Strengths:** Identify what the department does well. This could include skills, resources, or any other internal factors that provide an advantage.
  - **Weaknesses:** Recognize areas where the department could improve. These are internal factors that might hinder its performance.
  - **Opportunities:** Look for external factors that the department could exploit to its advantage. This could be trends, new technologies, or changes in regulations.
  - **Threats:** Identify external factors that could pose challenges. This could include funding issues, regulatory changes, or other external risks.
3. **Organize, Analyze and Prioritize Findings:** Review the collected comments and prioritize the suggestions based on their impact and feasibility, focusing on the critical areas.
4. **Develop Strategies:** Use the insights from the SWOT analysis to develop strategies. Compare these strategies with the recommendations given in the FMP/FSRMP to ensure alignment with department plans.
5. **Implement and Monitor:** Put the strategies into action and monitor their progress. Adjust plans as needed based on feedback and changing circumstances.

## Recommendation 7: Regular Engagement Sessions

### Recommendation

The Fire Chief should schedule regular engagement sessions with the Department's officers and firefighters to open lines of communication within the Department and allow all sections to voice suggestions.

## Current Status/Timeline

This recommendation was completed in 2024 with the introduction of monthly station meetings on regular training nights. However, the department will continually seek feedback from department members to make necessary improvements.

## Cost

Staff time will be the only implicated cost to address this recommendation.

## Discussion

Ensuring open lines of communication within a team or organization is crucial for fostering a positive work environment and achieving success. Staff strive to create a culture of openness by encouraging transparency and honesty in all interactions and making it clear that open communication is valued and expected. Members of the fire department have various opportunities to provide their feedback and suggestions.

Each station holds three training nights per month. In 2024, the department implemented a monthly maintenance and meeting nights, whereby the firefighters dedicate a portion of the training night to a station meeting and the rest to truck and equipment maintenance. The meetings are structured and comprised of a reading and approval of previous meeting minutes, a summary of the previous officer meeting (delivered by an attending officer), updates from the Chief and Deputy Chief, a review of the months fire calls, committee reports (Mutual Aid, Health & Safety, etc.), new business (including firefighter inquiries), and a section dedicated to the betterment of the fire department. The meeting minutes for each station are shared with the whole fire department so they are accessible to all members to review.

At the conclusion of regular station training nights, members are brought together for a debrief. Member are given the opportunity to share anything that they learned from the session, as well as provide their feedback on the training itself. This information can be valuable to the newly formed Training Committee, comprised of the Deputy Chief, officers and firefighters, as they plan for future training topics.

Similar to training, at the conclusion of an incident response after firefighters have returned to their station(s), it is general practice that the department completes an informal PIA (post incident analysis), whereby members discuss strengths, weaknesses, and lessons learned about their incident operations.

In addition to the station meetings, officers attend a monthly officer meeting or training night. For meetings, officers are prompted for agenda items a week before the meetings. The Chief and Deputy Chief set the agenda and address the requested topics and any additional information they deem pertinent. The meetings also include a roundtable portion whereby every officer is given the opportunity to speak.

## End Goal

Create an environment where open communication thrives, leading to better collaboration, higher member satisfaction, and improved overall performance.

## Plan

The department will continue to utilize the following strategies:

1. **Lead by Example:** Staff and managers will continue to model the behaviour they want to see in the members, including being approachable, actively listening, and openly sharing information.
2. **Hold Regular Meetings:** Maintain the current schedule of station and officer meetings to discuss progress, address concerns, and share updates to help keep everyone informed and engaged. Furthermore, the department is planning to reinstate annual individual check-ins with the Chief and Deputy Chief. These meetings will consist of a review of the firefighter's attendance records and personal development and will provide the firefighters an opportunity to give their feedback in a private setting. Staff will take note of suggestions given and consider any changes that can be made to address any issues brought to their attention.
3. **Use Multiple Communication Channels:** The department will continue to utilize various communication tools such as email and emergency response apps to ensure information is accessible to everyone.
4. **Anonymous Feedback Mechanisms:** The department will implement an annual anonymous survey to allow members to voice their opinions and concerns without fear of retribution. The responses will be grouped into common themes, analyzed and reviewed by staff to determine any necessary adjustments to the current engagement plan.
5. **Consistent Messaging:** Staff will ensure messaging from leadership is consistent and clear to reduce confusion and help align everyone with the department's goals.

## Recommendation 8: Social Media

### Recommendation

The Fire Chief should use social media to promote the Department, develop brand recognition, encourage firefighter pride, and help strengthen the Department's existing community trust.

## Current Status/Timeline

While the department's Facebook page was initiated in 2023, the development of the department's brand recognition is inherently an ongoing initiative. The department will continue to leverage the assistance of the municipality's Communications Coordinators to ensure consistent messaging.

## Cost

Staff time will be required to further develop the department's social media platform and strengthen community ties and firefighter pride.

## Discussion

To create effective educational messaging on fire and life safety, it's essential to understand the local history, community culture, and municipal demographics, including the anticipated future growth and development of the municipality.

Social media provides a valuable opportunity to connect your community with your fire department, educating residents on reducing fire and life safety risks. These platforms are also excellent for recruiting new members and sharing your department's achievements. Currently, the MMFD uses the municipality's web page to a limited extent. However, with creative use, social media can effectively engage a younger audience through community risk reduction outreach campaigns.

Since its' creation in January of 2023, the MMFD's Facebook page has grown to 621 followers as of August 2024, less than a year later. The department has also maintained an X account (formerly known as Twitter) since 2019.

Recently, the department, with the help of a volunteer firefighter, have developed multiple promotional videos. The videos have so far featured the department's newly acquired apparatus, participation and first place ranking in the 2024 Eastern Ontario Firefighters Association's Firefighters Games, and the Pakenham Association's Annual Pancake Breakfast. The videos have been widely shared and well received, demonstrating the capabilities of the department's fleet and the member's commitment to the department and the community.

In the spring of 2024, the Fire Department launched *Mississippi Mills Community Connect*, a platform designed to increase emergency preparedness and response. Community Connect is a free, secure and easy to use portal that allows residents and business owners to voluntarily share critical information with MMFD that will be relayed to MMFD personnel responding to an active emergency call. The new platform has been featured in a press release, video, social media and website posts, and directly with residents via email and mail for the final tax bill for 2024. The launch of the platform

has garnered positive community feedback and has increased department brand recognition.

The department has utilized the expertise of the municipality's Communications Coordinators in generating public education messaging related to fire and life safety and will continue to use this resource to ensure clear and consistent messaging. Additionally, the department is consulting with municipal staff regarding the creation of a logo for the department's Regional Training Centre to enhance brand recognition of the facility and training offerings. Following the development of a business case for the Regional Training Centre, a marketing strategy will aid the department in furthering this aim.

## End Goal

The department's use of social media will:

- Educate the public on various fire and life safety topics
- Increase community awareness about the fire department's activities and services
- Attract new volunteers and encourage firefighter pride
- Foster a sense of community

## Plan

To achieve the department's social media goals, staff will:

### 1. Identify The Audience

- Local Community: Residents, businesses, and local organizations.
- Potential Volunteers: Individuals interested in volunteering.
- Supporters: People who support the fire department's mission.

### 2. Utilize The Platforms

- Facebook: For community updates, events, and engaging with residents.
- Twitter: For quick updates and emergency notifications.
- YouTube: To post videos of training, events, and educational content.

### 3. Develop A Content Strategy

- Educational Posts: Fire safety tips, emergency preparedness, and training videos.
- Behind-the-Scenes: Show the realities of a volunteer fire department, training sessions, and equipment maintenance.
- Community Engagement: Highlight community events, fundraisers, and partnerships.
- Volunteer Spotlights: Feature stories and interviews with current volunteers.
- Emergency Updates: In tandem with the municipal social media accounts, provide real-time updates during emergencies and disasters.



#### 4. Posting Schedule

- Weekly: Quick updates, safety tips, and engagement posts.
- Monthly: Behind-the-scenes content, volunteer spotlights, and community highlights.
- As Required: In-depth articles, videos, and major event announcements.

#### 6. Engagement Tactics

- Interactive Posts: Contests, Polls, Q&A sessions, and live videos.
- Respond to Comments: Engage with followers by responding to their comments and messages.
- Hashtags: Use relevant hashtags to increase visibility (e.g. #VolunteerFireDept, #FireSafety, #FirePreventionWeek, #CarbonMonoxideAwarenessWeek).

#### 7. Monitor and Adjust

- Analytics: Track engagement metrics (likes, shares, comments) to see what works best.
- Feedback: Listen to community feedback and adjust the department's strategy accordingly.

#### 8. Collaborate

- Municipal Resources: Utilize the expertise of the municipality's Communications Coordinators, cross-post on municipal platforms and ensure consistent messaging.
- Local Media: Partner with local news outlets for broader reach.
- Community Organizations: Collaborate with schools, businesses, and other organizations for joint events and campaigns.

#### 9. Promote Volunteer Opportunities

- Highlight Benefits: Showcase the benefits of volunteering, such as skills development and community service.
- Application Process: Provide clear information on how to apply and what to expect.

#### 10. Celebrate Successes

- Milestones: Celebrate achievements and milestones, such as years of service or successful fundraisers.
- Recognition: Publicly recognize volunteers and supporters for their contributions.

## Recommendation 9: Fire Prevention Policy

### Recommendation

The Fire Chief should develop a fire prevention policy that includes a smoke/CO alarm program, a public education program, and a schedule that sets inspection frequency by occupancy type. The Fire Chief should then submit the policy to Council for consideration and adoption.

### Current Status/Timeline

Public education and code enforcement are municipal responsibilities mandated under the Fire Protection and Prevention Act (FPPA). To comply with the FPPA, a municipality must provide specific fire prevention and protection services and any additional services deemed necessary by its council to meet the community's needs.

The Office of the Fire Marshal (OFM) has outlined that this requirement includes the following components:

- A recognized smoke/CO alarm and home evacuation program
- A public education program
- A schedule for completing fire inspections and evacuations for vulnerable occupancies
- A schedule for completing fire inspections by complaint and request
- A simplified risk assessment to determine community risks and the required level of fire prevention and emergency response

In 2013, two additional regulations were introduced under the FPPA regarding fire prevention activities:

- O.Reg.365/13: Mandatory Assessment of Complaints and Requests for Approval
- O.Reg.364/13: Mandatory Inspection – Fire Drill in Vulnerable Occupancy

Currently, the Mississippi Mills Fire Department adheres to these guidelines when planning and conducting fire safety inspections and public education.

**Smoke/CO Alarm Campaign:** This is conducted year-round by visiting resident's door-to-door to ensure they have properly installed and functioning smoke and CO alarms.

**Public Education Program:** This involves visiting all schools in Mississippi Mills to deliver classroom presentations to junior grades. Various safety programs are also conducted at the youth center and during events for seniors.

**Vulnerable Occupancies:** These are thoroughly inspected annually, including a timed fire drill to ensure staffing levels and training meet evacuation requirements.

Complaints and Requests: These are addressed as quickly as possible, typically within 24 hours of the request or complaint.

Community Risk Assessment: This task hasn't been completed in a couple of years. The department is currently working on a plan based on the last risk assessment. A new assessment will be conducted in 2025, and the department will address any newly identified risks at that time.

The department will complete the Fire Prevention Policy in 2025.

## Cost

The department anticipates that developing a comprehensive fire prevention policy will necessitate approximately 40 hours of staff time. This estimate includes the time needed for researching best practices, drafting the policy, reviewing and incorporating feedback, and finalizing the document. The goal is to ensure the policy is thorough, effective and aligns with all relevant regulations and standards to meet the needs of the municipality.

## Discussion

With a more robust fire prevention/public education program in place, the Mississippi Mills Fire Department will gain a greater understanding of the community and its needs. This in turn will allow MMFD to be more proactive in its education and enforcement programs for the community. This increased level of community awareness will help to identify present and future equipment and training needs, along with what other fire safety programs may need to be rolled out to the community.

With these measures in place, firefighters will be better equipped to handle fires and other emergencies within the community. Their training goes beyond basic firefighting skills, making them more aware of the unique hazards present in the area, thanks to a proactive fire prevention and inspection program. These hazards should also be included in the upcoming risk assessment by MMFD.

The FUS chart below sets a benchmark, presenting an ideal set of goals for MMFD to pursue. Priority should be given to vulnerable occupancies, multi-family dwellings (including basement apartments), and assemblies. While the FUS suggested inspection frequencies are beyond the reach of most fire departments, MMFD should develop strategies to aid in reaching reasonable targets based on the highest priorities and staffing resources. The addition of personnel to the Fire Prevention Branch would assist in attaining a higher percentage of completed inspections.

**TABLE 4****FUS Suggested Inspection Frequency Chart**

<b>Occupancy Type</b>	<b>Benchmark</b>
Assembly (A)	3 to 6 months
Institutional (B)	12 months
Single Family Dwellings (C)	12 months
Multi-Family Dwellings (C)	6 months
Hotel/Motel (C)	6 months
Mobile Homes & Trailers (C)	6 months
Seasonal/Rec. Dwellings (C)	6 months
Commercial (F)	12 months
Industrial (F)	3 to 6 months

The suggested inspection frequency chart provided below establishes a benchmark specifically tailored for MMFD, offering a more practical and potentially achievable standard compared to the FUS chart. While the FUS chart represents an ideal goal to aspire to, the benchmark set for MMFD serves as a solid foundation to begin with. This approach takes into account MMFD's current capabilities and resources, ensuring that the expectations are both realistic and feasible. By starting with this benchmark, MMFD can gradually work towards the higher standards set by the FUS chart, fostering continuous improvement and progress over time.

**TABLE 5****MMFD Suggested Frequency Chart**

<b>Occupancy Type</b>	<b>MMFD Benchmark</b>
Assembly (A)	6 months
Institutional (B)	N/A
Single Family Dwellings (C)	Request
Multi Family Dwellings	12 months
Hotel/Motel (C)	N/A
Mobile Homes & Trailers	Request
Seasonal/Rec. Dwellings (C)	Request
Commercial (F)	12 Months
Industrial (F)	12 Months
Vulnerable Occupancy	6 Months

**End Goal**

The end goal of creating a fire prevention policy is to minimize the risk of fire incidents by identifying and controlling potential fire hazards in Mississippi Mills. This policy aims

to ensure the safety of all occupants by implementing effective emergency procedures and providing necessary training. Additionally, it ensures compliance with local, provincial, and federal fire safety regulations. By achieving these objectives, a fire prevention policy helps create a safer environment, protecting both lives and property from the devastating effects of fire.

## Plan

### 1. Conduct a Community Risk Assessment (CRA)

- Identify Community Risks: Assess the local fire risks based on factors such as geography, population, building profiles, and economic conditions.
- Gather Data: Collect data on past fire incidents, response times, and outcomes.
- Analyze Risks: Determine the most significant fire risks and prioritize them.

### 2. Develop Public Education Programs

- Smoke Alarm Programs: Ensure that every household has working smoke alarms. Conduct regular checks and provide free smoke alarms to those in need.
- Fire Safety Education: Distribute educational materials on fire safety practices, such as creating home escape plans and safe cooking practices.
- Community Outreach: Organize community events, workshops, and school programs to raise awareness about fire prevention.

### 3. Fire Safety Inspections and Enforcement

- Regular Inspections: Conduct regular fire safety inspections of residential, commercial, and public buildings.
- Enforcement: Ensure compliance with fire safety codes and regulations. Issue warnings and fines for non-compliance.
- Building Fire Safety Plans: Develop and enforce fire safety plans for buildings, especially those with vulnerable occupants.

### 4. Pre-Incident Planning

- Emergency Response Plans: Develop detailed emergency response plans for different types of fire scenarios.
- Training: Regularly train fire department personnel and community members on emergency response procedures.
- Resource Allocation: Ensure that fire-fighting resources are strategically located and well-maintained.

## 5. Fire Investigations

- Cause Analysis: Investigate the causes of fires to identify patterns and prevent future incidents.
- Reporting: Maintain detailed records of fire incidents and investigations to inform future prevention strategies.

## 6. Continuous Improvement

- Review and Update: Regularly review and update the fire prevention plan based on new data and changing community needs.
- Feedback Mechanism: Establish a system for receiving feedback from the community and fire department personnel to improve the plan.

## 7. Collaboration and Partnerships

- Local Government: Work closely with local government agencies to ensure alignment with broader safety and emergency management plans.
- Community Organizations: Partner with community organizations to enhance outreach and education efforts.
- Private Sector: Engage with businesses to promote fire safety in commercial settings.

## Recommendation 10: Pre-Plan Policy

### Recommendation

The Fire Chief should develop a policy to ensure the Department completes the pre-planning process for the Municipality's high-risk occupancies.

### Current Status/Timeline

Overall, the Mississippi Mills Fire Department currently lacks comprehensive policies and procedures for pre-planning. The pre-planning that has been completed for some high-risk occupancies is not readily accessible to all personnel, particularly during emergencies. This lack of accessibility can hinder effective response and coordination during critical incidents.

Over the past couple of years, the department has begun implementing some basic pre-planning sessions with the Officer group, visiting identified high-risk occupancies. These planning sessions lacked the proper documentation to be utilized to provide feedback to the whole department. A basic property information sheet has been created for Officers to complete with copies left in the first responding trucks. The completed property information sheets will be handed in to the Fire Prevention Officer to review and input the information into our database so that it will in turn be easily accessible to members

during a future response to the same address. Pre-planning will be addressed as part of the Fire Prevention Policy which will be completed in 2025.

## Cost

The primary cost associated with this recommendation to develop a pre-planning policy will be the allocation of staff time, rather than direct financial cost. The department estimates roughly 10 hours of staff time to compile a current list of high-risk occupancies and to complete the policy.

## Discussion

The department's pre-plan policy will include the use of the newly implemented software, First Due, as part of the documentation process. This innovative tool significantly enhances the accessibility and usability of pre-plans. First Due offers several key features:

1. **Centralized Access:** Pre-plans are stored in a centralized digital repository, making them easily accessible to all fire department personnel. This ensures that everyone has the most up-to-date information at their fingertips, whether they are in the station or on the scene of an emergency.
2. **Community Connect Portal:** This feature allows property owners to participate in the pre-planning process actively. Property owners can create and update their own pre-plans, providing valuable insights and information that can assist the fire department during a response. This collaborative approach helps ensure that pre-plans are accurate and comprehensive.
3. **Mobile Accessibility:** First Due's platform is designed to be mobile-friendly, allowing personnel to access pre-plans from their phones or tablets. This is particularly useful during emergencies when quick access to information is crucial. Firefighters can view building layouts, hydrant locations, and other critical details on the go, enhancing their situational awareness and response efficiency.
4. **Real-Time Updates:** The software allows for real-time updates to pre-plans. Any changes or new information can be immediately reflected in the system, ensuring that all personnel have the latest data. This dynamic capability is essential for maintaining the accuracy and relevance of pre-plans.

By leveraging First Due and its Community Connect portal, the Mississippi Mills Fire Department is taking significant steps toward improving its pre-planning processes. This technology enhances the department's preparedness and fosters stronger collaboration with the community, ultimately leading to more effective and efficient emergency responses.

## End Goal

The department aims to develop an achievable pre-planning policy by prioritizing high, medium, and low-risk occupancies, and methodically addressing each according to their assigned risk level. The new pre-planning policy will improve the overall preparedness and response capabilities of the fire department, ultimately saving lives and property.

## Plan

The Mississippi Mills Fire Department will establish a comprehensive pre-plan policy for the entire department. The department staff will gather additional building and occupancy information from the building/planning department to ensure accurate data and classification. Staff will continue utilizing the First Due software to aid in the department's pre-planning identification and documentation. Here are the initial steps to develop a successful pre-plan policy:

### 1. Identification of High-Risk Occupancies

- Utilize criteria such as building size, occupancy type, historical incident data, and potential hazards to identify high-risk occupancies.
- Maintain a list of high-risk occupancies, reviewed and updated annually.

### 2. Data Collection

- Conduct site visits to gather detailed information on building layout, construction type, fire protection systems, hazardous materials, and access points.
- Use standardized forms and checklists to ensure consistency.

### 3. Plan Development

- Develop pre-plans that include building layouts, hydrant locations, utility shut-offs, and tactical considerations.
- Ensure plans are easily accessible to all responding personnel, both in digital and hard copy formats.

### 4. Training and Drills

- Conduct regular training sessions and drills based on pre-plans to ensure all personnel are familiar with high-risk occupancies.
- Incorporate pre-plans into routine training exercises.

### 5. Review and Update

- Review and update pre-plans annually or whenever significant changes occur in the occupancy.
- Solicit feedback from personnel after incidents to improve pre-plans.



## 6. Documentation and Reporting

- Maintain records of all pre-planning activities, including site visits, data collected, and training conducted.
- Provide regular reports to the Fire Chief on the status of pre-planning efforts.

The next step is to ensure immediate access to this information during emergencies. The First Due software, a cloud-based system, can be accessed anywhere with the appropriate equipment. By equipping all fire department vehicles with tablets, responding personnel can obtain real-time data regarding buildings and any other information generated during pre-planning.

## Recommendation 11: Volunteer Instructors

### Recommendation

The Fire Chief should develop a process for appointing volunteer trainers/para-trainers who can work with the Deputy Chief to deliver consistent, effective lesson planning and training.

### Current Status/Timeline

The Mississippi Mills Fire Department currently boasts 27 instructors who are trained and certified to the NFPA 1041 standard. This certification qualifies them to conduct firefighter training both within the department and externally, ensuring that personnel receive high-quality, standardized instruction.

Despite having a substantial number of certified instructors, the department's training program has room for improvement. Specifically, the department should better leverage its' instructors' expertise in developing comprehensive lesson plans and effectively referencing the Section 21 Guidance Notes.

### Cost

Costs associated with this recommendation are addressed in Recommendation 12: Training Committee.

### Discussion

To address the recommendation of appointing volunteer trainers, the department has created a training committee. This training committee provides valuable knowledge, expertise, and support in planning, lessons, and setup. Additional information on the creation and involvement of the training committee is addressed in Recommendation 12: Training Committee.

The downside of utilizing the department's volunteer firefighters to form the training committee is that the members become overwhelmed when asked to take on additional responsibilities. Recruitment and retention are difficult due to the significant time commitment required, as all volunteers have full-time jobs and other personal commitments. The extensive training and certification needed can also be a barrier. The physical and emotional demands of firefighting can lead to burnout and stress, impacting the mental health and well-being of volunteers. Additionally, as community expectations for fire services grow, volunteers may struggle to meet these rising demands without adequate support and resources.

These constraints will ultimately lead to the requirement of hiring a full-time Training Officer as mandatory certification looms, regular training schedules must be met, and the growth of the Regional Training Centre creates more demand for courses.

## End Goal

The primary objective of involving a substantial number of instructors in the delivery of the department's training courses is to significantly enhance the knowledge and expertise across the entire fire department. By using the skills and experiences of many instructors, the department ensures that the firefighters are well-equipped with the latest techniques and best practices in firefighting and emergency response. This approach not only benefits the department by fostering a culture of continuous learning and improvement, but also expands MMFD's capacity to offer more training sessions at the regional training center. Consequently, the department can better serve the community by providing high-quality training to a larger number of firefighters, ultimately leading to a safer and more prepared fire department.

## Plan

### 1. Support the Training Committee

- Objective: Ensure the training committee continues to function effectively, addressing any needs or challenges.
- Actions:
  - Conduct regular check-ins with the training committee to understand their current challenges and requirements.
  - Provide resources such as materials, time, and access to experts if necessary.
  - Encourage open communication between the committee and management for continuous support.

### 2. Reassess Training Needs

- Objective: Evaluate and update training requirements for staff and volunteer firefighters.

- Actions:
    - Through regular engagement sessions with staff/volunteer firefighters, identify skill gaps or areas for improvement.
    - Collaborate with the training committee to review current training programs and align them with any new regulations, protocols, or emerging needs.
3. Determine Time Spent by Staff/Volunteers on Planning and Instructing
- Objective: Understand the time investment required by staff and volunteers in training-related activities.
  - Actions:
    - Document and track the hours spent by staff and volunteers on planning and instructing.
    - Analyze this data to identify any inefficiencies or overburdened personnel.
    - Use findings to optimize scheduling and possibly redistribute training responsibilities.
4. Evaluate Current Staffing Model (Volunteers vs. Full-Time)
- Objective: Assess the efficiency and effectiveness of relying on volunteers versus hiring full-time staff.
  - Actions:
    - Compare the training outcomes and performance metrics between volunteer instructors and full-time personnel.
    - Assess the sustainability of volunteer reliance (e.g., turnover rates, engagement levels) and determine if hiring full-time staff would yield better long-term results.
    - Conduct a cost-benefit analysis to understand the financial impact of transitioning from a volunteer instructions/training committee to full-time staff.
    - Explore hybrid models (e.g., using part-time staff or expanding volunteer incentives) if needed.
5. Future Staffing Needs: Add a Training Officer Position
- Objective: Plan for the creation of a dedicated training officer role to manage and oversee training activities.
  - Actions:
    - Develop a job description for the Training Officer position, outlining responsibilities such as coordinating training schedules, managing training materials, and monitoring compliance with standards, for both internal training purposes and for the RTC.
    - Determine the required qualifications, experience, and potential salary range for the position.

- Present the case for a Training Officer (based on data collected on time spent by volunteers/staff and the current effectiveness of training) to Council.
- Plan the timeline for recruiting and onboarding the Training Officer within the department's budget and staffing plans.

## 6. Monitor and Adjust

- Objective: Continuously monitor the training processes and make adjustments as necessary.
- Actions:
  - Set up quarterly or semi-annual reviews to assess the effectiveness of training programs, staffing decisions, and the potential need for additional roles or resources.
  - Adapt and iterate the plan based on feedback from staff, volunteers, and leadership.

## Recommendation 12: Training Committee

### Recommendation

The Fire Chief should form a training committee to work with the Deputy Chief and the station captains to help plan and develop the Department's training program.

### Current Status/Timeline

Based on both identified recommendations and in-house suggestions, the Mississippi Mills Fire Department has established a training committee. This committee includes members from both stations, each bringing a diverse range of experience and knowledge. The group's objectives are to identify training topics, develop lesson plans, recommend instructors, and assist with training setup and logistics.

The training committee meets early in the month to develop upcoming training topics and configure scheduling for station training nights. The committee members then form lesson plans and present them to the whole committee for critique and suggestions. After establishing training topics and creating annual training plans, the committee will meet at least quarterly, with additional meetings scheduled as needed. An initial block of training topics was launched in August 2024, running for three consecutive station training nights.

The current department training program includes a comprehensive plan for all firefighters, focusing on each member's development and progression. The program requirements include:

- NFPA 1001 – Firefighter levels one and two within the first year through our locally hosted Lanark County Recruit training.
- NFPA 1002 – Driver operator qualifications within the second or third year

- NFPA 1006 – Technical Rescue at the awareness levels
- NFPA 1021 – Fire Officer level one training for all suppression officers
- NFPA 1072 – Hazardous Materials response at the operations level
- NFPA 1041 – Fire Instructor level one for those teaching courses within the department

The department plans to continue with the current training committee program into the first quarter of 2025 and will reevaluate the efficiency and effectiveness of this initiative.

## Cost

Staff time will be required towards the scheduling and follow through of training committee plans, however, the Fire Chief and Deputy should, in the end, benefit from a reduced workload in planning. Training Committee members will be paid their allotted rate for their time. Each meeting will be tracked and equate to roughly \$400 in remuneration (1-2 hours in duration with up to 8 members attending, at a rate of \$25/hour). These hours will count towards the department's annual remuneration budget line and will therefore not be of a significant impact at this time.

As this group matures and expands its contributions to include various lesson plans, PowerPoints, training videos, safety plans, and Section 21 referrals, the time required to complete these tasks will increase significantly. This may impact the hours paid to various individuals.

## Discussion

The committee provides valuable knowledge, expertise, and support in planning, lessons, and setup. However, the Deputy Chief's time constraints largely remain unchanged. While the committee alleviates some workload, it also introduces more meetings and evening commitments, along with the possibility of additional time-consuming training and setup during daytime hours before training sessions. In addition, participation in the training committee puts added pressure on the department's volunteers to devote more of their personal time to brainstorm training topics, develop lesson plans, recommend instructors, and assist with training setup and logistics, on top of their regular departmental commitments.

A full-time training officer will be required should these training topics generate lengthy PowerPoints, video production and editing time, instructor supervision and assessment.

## End Goal

Key objectives of the training committee include:

**Standardization of Training:** Establish consistent training protocols and standards across the department to ensure all firefighters receive the same level of training and are equally prepared for emergencies.

**Skill Development, Safety and Efficiency:** Continuously improve the skills and knowledge of firefighters, ensuring they are proficient in various aspects such as firefighting techniques, rescue operations, and handling hazardous materials. Enhance the overall safety and efficiency of emergency responses by providing comprehensive and up-to-date training.

**Community Needs:** Tailor training programs to address the specific needs and risks of the community the fire department serves.

**Evaluation and Improvement:** Regularly assess training programs and outcomes to identify areas for improvement and implement necessary changes.

## Plan

### Training Committee Plan

Q4 2024:

Meeting 1:

- Review current training materials.
- Identify gaps and areas for improvement.
- Assign tasks for developing standardized lesson plans and PowerPoints.

Meeting 2:

- Present draft lesson plans and PowerPoints to the Deputy Chief for comments.
- Gather feedback and make necessary revisions.
- Begin developing safety plans.

Q1 2025:

Meeting 1:

- Finalize lesson plans and PowerPoints.
- Review and refine safety plans.

Meeting 2:

- Conduct a pilot training session using the new materials.

- Collect feedback from participants.
- Evaluate the efficiency and effectiveness of the training program.

### Evaluation and Next Steps

End of Q2 2025:

- Assess the overall impact of the training program.
- Identify successes and areas for further improvement.
- Decide on the continuation or modification of the training committee program based on evaluation results.

## Recommendation 13: Mutual Aid/Joint Training

### Recommendation

The Fire Chief should work with the department's mutual aid partners to establish a joint training program to ensure operational and tactical consistency.

### Current Status/Timeline

In early 2024, a member of the department suggested reviving and renewing the concept of the mutual aid committee. Senior members agreed that the committee was a great benefit in the past and supported the idea of looking into its revival. Since then, discussions with each of the County's chiefs have taken place regarding the proposed concept and new focus of the committee. The committee's inaugural meeting was held in June at Mississippi Mill's Station 1 and the first training session is planned for the fall of 2024. Additionally, the committee's first social event (golf tournament) will be taking place in September.

### Cost

The department will select two of its members to attend each of the semi-monthly training sessions and pay for their attendance. This will cost roughly \$600 annually from the department's remuneration budget. In addition, the department will cover the time for its two committee representatives to attend the three annual meetings (about \$300 annually). Additionally, each department will act as a host for the semi-monthly training roughly once every two years. As a host, the department is expected to provide a venue and food for the attendees. These expenses should be covered within the department's existing mutual aid operating budget.

There should be no increase to the budget so long as these training sessions occur on or in lieu of our regularly scheduled training nights. Should our members have to attend a separate additional night, there would be a small increase in remuneration budget.

## Discussion/Challenges

For many years from around the mid 1950's up until the mid 2010's, Lanark County fire departments had an established mutual aid organization. This organization had a committee of representatives from each department located in Lanark County. During its inception, the committee was intended to guide mutual aid operations between the county departments in the event of larger calls where singular departments needed outside assistance. Over time, this committee helped lay the groundwork for how mutual aid calls would work for responding manpower and more commonly tanker shuttle assistance. In the later years of the mutual aid organization, the years which many of us would be more familiar with, the committee was more driven towards training motives, as opposed to mutual aid operations. Eventually, in the last 10 years or so, many factors became involved, and the committee ceased functioning.

The original structure and operation of the committee were initially created with a different intent. County-wide mutual aid operations have since become well-entrenched, largely due to an active County Coordinator, planning and guiding combined operations. The respective Chiefs communicate their needs and issues to the County Coordinator to be resolved. The three components of the new mutual aid committee are the following:

1. **Specialized Training Topics:** Former committee members agreed that the specialized training topics addressed in the monthly meetings were advantageous, as they encompassed areas beyond the regular training scope of individual departments. Examples of potential training topics include Orange Ambulance service overview, Hydro One and Enbridge Gas hazard awareness, OFM investigations, Smiths Falls dispatch centre, Ottawa Fire Hazmat team, battery energy storage facilities industry experts, OPP collisions investigations, Lanark County Paramedic Service triage system, etc.
2. **County-Wide Training Days:** Apart from the monthly training sessions, the most valued aspect of the mutual aid committee was the county-wide training days. These events, held annually or semi-annually, provided an opportunity for all departments to cross-train on various tactics together.
3. **Social Events:** A significant aspect of the former mutual aid committee and its events was the social connections formed by regularly bringing department members together for various trainings and activities. In the past, mutual aid assistance was less frequent, which meant these committee functions were often the only opportunity to interact with members from other departments. Departments would greatly benefit from their members forming valuable social relationships, especially now that the chances of collaborating on mutual aid calls have significantly increased. In the past,



these social nights would generally take place semi-annually and consist of a golf and curling tournament.

The new Lanark County Mutual Aid Training Committee consists of 16 members, two from each of the eight departments within Lanark County. The committee has the elected roles of President and Committee Secretary, each serving a 24-month term. The committee members meet three times annually, taking place in February, June, and October. Semi-monthly training nights or social events will take place on the third Tuesday of each of the months of January, March, May, July, September, and November. Each Lanark County department will act as a host for a semi-monthly training night on a rotation (one training night every 24 months on average).

The challenge with the reinstatement of the mutual aid committee will be in scheduling a mutually convenient training night for outside departments as various departments train on different nights. Furthermore, the burden of adding an additional training night could be difficult for some of the department's volunteers to meet. However, the mutual aid committee has requested that departments rotate their representatives, with the intention distributing responsibilities more evenly among members. Additionally, rotating members will allow for including diverse perspectives, broader exposure to skill development opportunities, and social connections. The department's attendees will then be expected to share their experiences and lessons learned with the rest of the volunteers during the department's monthly station meetings.

## End Goal

Learn new techniques, and strategies and broaden the firefighter's depth of knowledge of external organizations. Build stronger relationships and encourage regular interaction with different representatives across Lanark County, improving communication channels and fostering better teamwork between departments.

## Plan

The Department and its staff will support the Lanark County Mutual Aid Training Committee through:

1. Clear Communication: Ensuring open and regular communication channels between the department's committee representatives and staff.
2. Adequate Resources: Provide necessary resources, such as key contacts, training materials, equipment, and funding to facilitate effective training sessions.
3. Administrative Support: Assist with scheduling, organizing venues, and managing logistics to ensure smooth operation of training events.

4. Collaboration: Foster collaboration with other departments and external experts to bring diverse perspectives and expertise to the training sessions. Provide feedback on suggested training topics, such as establishing annual Rescue Program training with neighbouring departments, rural water supply training, aerial operations and fire attack.

## Recommendation 14: Response Standards

### Recommendation

The Fire Chief should use the department’s historical response data to develop a baseline regarding response standards. The data should include information from the department’s low-, moderate-, and high-risk responses, as well as population density. The department should then compare the baseline data with its effective response force model and present its findings to Council. Council should then establish an appropriate level of service for the department.

### Current Status/Timeline

Department staff have compiled response data from their records over the last five years. The table below displays the number of calls received by each station, along with the average number of personnel responding and the average chute time. Chute time is measured from when a call is dispatched, until the time when a fire apparatus begins responding to an emergency call. This includes the time needed to put on their gear, get into the vehicle, and start moving towards the incident. Reducing chute time is crucial because it directly impacts the overall response time, which can be critical in saving lives and property during emergencies.

**TABLE 6**

<b>Year</b>	<b>Pakenham Number of calls</b>	<b>Pakenham Average Personnel</b>	<b>Pakenham Chute Time</b>	<b>Almonte Number of calls</b>	<b>Almonte Average Personnel</b>	<b>Almonte Chute Time</b>
2020	25	8.8	5:47	154	10.7	5:16
2021	37	11.9	6:46	143	8.9	4:10
2022	33	12.9	6:13	151	10.5	4:51
2023	34	12.1	5:35	189	12.8	4:28
2024	23	13.7	3:02	96	11.5	3:03

### Cost

The cost associated with developing a baseline regarding response standards for a fire department can vary based on several factors, including the size of the department, the

complexity of the data, and the resources required. Here are some potential costs to consider:

- Data Collection and Analysis:
  - Software and Tools: Purchasing or licensing data analysis software.
  - Personnel: Hiring or allocating staff time for data collection, analysis, and reporting.
  - Training: Training staff on data analysis tools and methodologies.
- Consulting Services:
  - External Consultants: Hiring consultants to assist with data analysis and developing response standards.
- Technology and Infrastructure:
  - IT Infrastructure: Upgrading or maintaining IT systems to handle data storage and analysis.
  - Data Management Systems: Implementing or enhancing data management systems.
- Meetings and Presentations:
  - Council Presentations: Preparing and presenting findings to the Council, which may include costs for materials and staff time.
- Ongoing Monitoring and Evaluation:
  - Continuous Improvement: Regularly updating and refining response standards based on new data and feedback.

Overall, the costs can range from a few thousand dollars for smaller departments with simpler needs to tens of thousands of dollars for larger departments with more complex requirements, based on the service levels set in the E&R By-law. A detailed cost-benefit analysis is important in order to ensure that the investment in developing these standards will lead to improved service levels and operational efficiency.

## Discussion

The response time of a fire department is influenced by a variety of factors, each playing a crucial role in how quickly emergency services can arrive at the scene. Here are the key elements:

1. Distance Between Fire Stations and the Incident Location: The farther the fire station is from the emergency, the longer it will take for firefighters to arrive. This is particularly challenging in rural areas where fire stations are spread out over larger distances.
2. Community Layout: The design and structure of the community, including road networks and accessibility, can significantly impact response times. Urban areas with well-planned road systems may experience faster response times compared to rural areas with complex or poorly maintained roads.

3. **Obstacles and Impediments:** Various obstacles can delay response times, such as:
  - **Weather Conditions:** Severe weather like snowstorms, heavy rain, or fog can slow down response times.
  - **Construction:** Roadworks and construction projects can create detours and traffic congestion.
  - **Traffic Jams:** High traffic volumes, especially during peak hours, can impede the movement of fire trucks.
  - **Lack of Direct Routes:** In rural areas, the absence of direct routes and the presence of narrow, winding roads can delay response times.
4. **Notification Time:** The time it takes for the emergency to be reported and for the fire department to be notified is critical. Delays in notification can significantly impact overall response times.
5. **Assembly Time of Firefighters:** This includes the time taken for firefighters to assemble at the fire station and then proceed to the incident scene. Assembly time can be broken down into:
  - **Dispatch Time:** The time taken to receive and process the emergency call.
  - **Chute Time:** The time from firefighters receiving the alert, arriving at the station to gear up, and leaving the station.
  - **Response Time to the Scene:** The actual travel time from the fire station to the incident location.

Assembly time can vary greatly due to factors such as weather conditions, road conditions, and the time of day.

Improving fire department response times is crucial for ensuring effective emergency services. One important guideline is NFPA 1720, which provides standards for the organization and deployment of fire suppression operations in non-urban and urban settings. This standard is particularly relevant for rural areas in parts of Mississippi Mills, where unique challenges such as longer distances and fewer direct routes can impact response times. By adhering to these guidelines, fire departments can enhance their preparedness and efficiency in responding to emergencies.

**TABLE 7****NFPA 1720 Standard for Volunteer Fire Department Response Times**

Demand Zone	Demographics	Minimum FF to respond	Response time (minutes)	Meets objective (%)
Urban area	>1000 people/mi <sup>2</sup> >386 people per km <sup>2</sup>	15	9	90%
Suburban area	500-1000 people/mi <sup>2</sup> 193-386 people per km <sup>2</sup>	10	10	80%
Rural Area	<500 people/mi <sup>2</sup> <193 people per km <sup>2</sup>	6	14	80%
Remote Area	Travel distance > 8 mi (12.87km)	4	Directly Dependent	90%
Special risks	Determined by AHJ	Determined by AHJ	Determined by AHJ	90%

According to the NFPA 1720 standards, the municipality's demand zones are as follows:

- Almonte (town limits) – 1,467/km<sup>2</sup> Population Density - Urban Area
- Mississippi Mills (as a whole) - 31.33/km<sup>2</sup> Population Density– Rural Area/Remote Area
- Pakenham (village limits) - 8.2/km<sup>2</sup> Population Density – Rural Area

Based on the limited data in Table 6, MMFD has generally not met the NFPA 1720 standard over the past five years. Although the data provides a high-level overview of the department's current response, it lacks the detail needed to accurately represent each station's compliance with the specified standard. Going forward, the department will keep more detailed records to accurately monitor each station's minimum number of responding personnel and their corresponding response times.

The department has identified lower response times during weekdays and has developed a plan to initiate dual station pages for daytime emergency calls to enhance firefighter response.

### End Goal

The primary objective of any fire department is to reach the incident scene swiftly and efficiently. Arriving within ten minutes significantly enhances the chances of containing the fire and preventing it from spreading further and to provide life-safety rescues. To

achieve this, the Fire Chief must ensure that the station is adequately staffed to provide a full crew response to emergencies.

## Plan

### Plan to Improve Fire Department Response Time

#### 1. Assessment and Analysis

##### A. Evaluate Current Response Times

- Review historical data on response times for different types of incidents for the past 5 years.
- Identify average response times and benchmark them against NFPA 1720 standards.

##### B. Community Risk Assessment

- Review the risk assessment to identify high-risk areas and types of incidents that occur frequently.
- Use this data to prioritize response improvements in the most critical areas.

##### C. Resource Inventory

- Assess current resources, including staffing levels, equipment, and infrastructure.
- Identify gaps in resources compared to the requirements set by NFPA 1720.

#### 2. Improving Staffing and Training

##### A. Increase Staffing Levels

- Assess the need for additional personnel based on the NFPA 1720 recommendation of a minimum of 9 firefighters for initial response in rural areas.
- Consider recruiting volunteers or part-time staff to fill gaps.

##### B. Enhance Training Programs

- Implement regular training sessions focusing on response time reduction strategies and efficient use of equipment.
- Conduct joint exercises with local agencies to improve coordination and efficiency.

#### 3. Optimizing Response Infrastructure

##### A. Improve Fire Station Locations

- Evaluate the placement of fire stations to ensure optimal coverage and reduce response times.
- Consider adding new stations or relocating existing ones based on geographic analysis and response data.

## B. Enhance Communication Systems

- Upgrade dispatch and communication systems to ensure faster and more accurate dispatching of fire units.
- Implement a reliable alert system to notify firefighters quickly.

## C. Develop Efficient Deployment Strategies

- Optimize deployment strategies based on geographic data and incident patterns.
- Establish pre-determined response plans for high-risk areas to ensure rapid deployment.

## 4. Leveraging Technology

### A. Implement GPS and Mapping Tools

- Equip fire trucks with GPS and real-time mapping tools to improve navigation and reduce response times.
- Use geographic information systems (GIS) to analyze response patterns and identify areas for improvement.

### B. Utilize Data Analytics

- Analyze data from response incidents to identify trends and areas needing improvement.
- Use data-driven insights to refine response strategies and resource allocation.

## 5. Monitoring and Continuous Improvement

### A. Establish Key Performance Indicators (KPIs)

- Define KPIs related to response times, incident outcomes, and resource utilization.
- Regularly review performance against these indicators to track progress and identify areas for improvement.

### B. Conduct Regular Reviews

- Schedule periodic reviews of response time data and operational procedures.
- Adjust strategies based on findings from reviews and emerging best practices.

## 6. Funding and Resource Allocation

### A. Secure Funding

- Identify potential funding sources, such as grants, local government budgets.
- Apply for grants and allocate resources to support response time improvement initiatives.

## B. Invest in Equipment and Infrastructure

- Upgrade fire trucks, equipment, and station facilities to enhance operational efficiency.
- Ensure that equipment is regularly maintained and serviced to avoid delays caused by malfunctions.

By following this plan, the fire department in Mississippi Mills can improve response times and enhance overall effectiveness, ultimately leading to better outcomes in emergency situations.

## Recommendation 15: Superior Tanker Shuttle Accreditation

### Recommendation

The department should continue to deliver water in non-hydrant areas as per the standards of Superior Tanker Shuttle accreditation.

### Current Status/Timeline

Currently, MMFD does not hold accreditation from the Fire Underwriters Survey (FUS) for Superior Tanker Shuttle operations. Despite this, the department is committed to strive towards meeting the standards associated with this accreditation to ensure that rural residents have access to an adequate water supply in case of emergencies. MMFD is equipped and capable of meeting these standards for a large portion of the municipality. MMFD will form a committee in 2025 to review the department's current capabilities, prepare for training and testing, and outline an implementation plan to move forward with accreditation should it be deemed beneficial.

In the past, the Mississippi Mills Fire Department was accredited for Superior Tanker Shuttle. However, this accreditation was not maintained due to the high annual costs of certification and the limited benefits it provided to residents in terms of reduced insurance premiums.

### Cost

The cost of implementing this recommendation begins with allocating staff time, utilizing both full-time and volunteer firefighters. An evaluation must be conducted to determine which areas within the municipality meet the distance requirements from a fire hall and/or water supply. Following this, all dry hydrants must be verified and certified by a third-party evaluator to ensure they meet the required flow rates, even during a 50-year drought.

The next step involves assessing the need for additional resources, such as extra tankers from neighboring municipalities under mutual aid agreements. Time will also be



dedicated to organizing tanker shuttle rotations to ensure compliance with and surpassing the minimum certification standards.

Once these standards are met, the accrediting body will be contacted to arrange testing and certification, which will incur a cost of \$5,000 to \$8,000. This full certification must be renewed every five years, with an annual review required.

## Discussion

Alternative water supplies refer to sources other than the traditional pressurized, municipal-type water supply systems. Firefighting operations typically depend on water and other extinguishing agents to be effective. In developed areas, water is provided through an extensive network of distribution pipes, storage facilities, and pumping stations.

However, in rural areas lacking municipal-type water supplies, firefighting becomes significantly more challenging. Historically, various methods have been employed to transport water from a source to the fireground. Over time, the capacity to move water from a source to the fireground has improved dramatically. The fundamental steps in a shuttle operation, which is a common method used in such scenarios, are as follows:

1. Set up pumper apparatus at the fire scene: This involves positioning the pumper apparatus at the location of the fire and delivering water from a temporary storage facility, such as a portable tank, through a fire pump to the fire. This ensures a continuous supply of water to combat the fire.
2. Draft water from a reliable source: Water is drafted from a location where supplies are known to be reliable and accessible. This could be a natural water source like a lake, river, or pond, or a man-made source such as a cistern or reservoir. The water is then drawn into a mobile water supply apparatus, such as a tanker truck.
3. Transport water to the fire scene: The mobile water supply apparatus, filled with water, is then driven from the source location to the fire scene. This step is crucial as it ensures that water is continuously supplied to the fireground.
4. Dump water into a temporary storage facility: Upon arrival at the fire scene, the water is dumped into a temporary storage facility, such as a portable tank. This allows the pumper apparatus to draw water from the tank and deliver it to the fire.
5. Repeat the shuttle cycle: The mobile water supply apparatus returns to the water source to draft more water and repeats the cycle. This process continues until the fire is extinguished or sufficient water is available on-site.

The Accredited Superior Tanker Shuttle Service is recognized as an equivalent to hydrant protection. Achieving this accreditation requires fire departments to uphold a

high standard of organization and regularly practice delivering the service. They must demonstrate through rigorous testing and thorough documentation that they can consistently provide water supplies that exceed the minimum requirements for hydranted municipal-type water systems.

#### Key Requirements for Accreditation:

To be recognized as an Accredited Superior Tanker Shuttle Service, the system for delivering water supplies must be meticulously designed and well-documented. It must meet all the requirements of the Standard Tanker Shuttle Service and surpass them in several critical areas:

1. **Proven Capability Through Testing:** The fire department must prove through testing that the specified requirements of the Superior Tanker Shuttle Service can be met. This involves demonstrating the ability to deliver water at the required flow rates under various conditions.
2. **Flow Rate for Personal Lines Insurance:** For personal lines insurance, the fire department must deliver a flow rate of at least 950 liters per minute (LPM) or 200 imperial gallons per minute (IGPM) within 5 minutes of arriving at the test site with the first major piece of apparatus (wheel stop).
3. **Flow Rate for Commercial Lines Insurance:** For commercial lines insurance, the fire department must deliver a flow rate of at least 1900 LPM or 400 IGPM within 5 minutes of arriving at the test site with the first major piece of apparatus (wheel stop).
4. **Sustained Flow Rate:** The fire department must be able to deliver the accredited flow rate within 10 minutes of arriving at the test site with the first major piece of apparatus (wheel stop). This ensures that the department can maintain a continuous and reliable water supply during firefighting operations.
5. **Adequate Water Volume:** The volume of water available for firefighting must be sufficient to sustain the accredited flow rate for a duration specified by the Fire Underwriters Survey Water Supplies for Public Fire Protection. This ensures that the fire department can maintain the necessary water flow for the entire duration of firefighting efforts.

The following portion of the Superior Tanker Shuttle Accreditation outlines the benefits to municipality's residents, including potential reductions in insurance costs for those living within specific areas. This certification is crucial for ensuring that properties are adequately protected and recognized for fire insurance grading purposes. Here are the key points:

## Fire Insurance Grading Recognition:

### 1. Location Requirements for Protected Property:

#### Commercial Lines (PFPC):

- The property must be within 5 km of a fire station.
- Additionally, it must be within 2.5 km of an approved water supply point.

#### Personal Lines (DPG):

- The property must be within 8 km of a fire station.
- Additionally, it must be within 5 km of an approved water supply point.

### 2. Water-Delivery System Availability:

- The water-delivery system must be available and accessible 24 hours a day, 365 days a year. This ensures that in the event of a fire, there is always a reliable source of water to combat the flames.

### 3. Documentation of Water Supply Capacity:

- The water capacity of alternative water supply sources must be documented for a 50-year drought cycle. This documentation must be available for review to ensure that the water supply is reliable even during extended periods of drought.
- Alternative evidence of the reliability of the water supply will be considered on a case-by-case basis. This allows for flexibility in demonstrating that the water supply is sufficient and dependable.

### 4. Benefits to Residents:

- **Potential Reduction in Insurance Costs:** Residents living within the specified areas may benefit from reduced insurance premiums. This is because properties that meet the fire insurance grading criteria are considered to be at a lower risk of fire damage, making them less expensive to insure.
- **Enhanced Safety and Peace of Mind:** Knowing that their property is within a well-protected area can give residents peace of mind. The proximity to fire stations and reliable water supply points means that in the event of a fire, help is readily available.
- **Community Resilience:** A well-documented and reliable water supply system contributes to the overall resilience of the community. It ensures that in times of emergency, there is a dependable resource to support firefighting efforts.

## End Goal

Ensuring the rural residences of Mississippi Mills have adequate water supply for their property to perform quick and efficient firefighting capabilities is crucial for safety and property protection.

## Plan

### Step 1: Initial Assessment

#### 1. Form a committee:

- Assemble a team of key personnel, including fire department leadership and officers.
- Assign roles and responsibilities for the review and implementation process.

#### 2. Review Current Capabilities:

- Assess the current tanker shuttle service capabilities.
- Identify gaps between current practices and the requirements for the Accredited Superior Tanker Shuttle Service.

### Step 2: Documentation and Design

#### • Gather Documentation:

- Collect all existing documentation related to the current tanker shuttle service.
- Review the Fire Underwriters Survey Water Supplies for Public Fire Protection guidelines.

#### • Design the System:

- Develop a detailed plan for the water delivery system, ensuring it meets and exceeds the requirements.
- Create flowcharts and diagrams to visualize the system design.

### Step 3: Training and Testing

#### • Develop Training Programs:

- Create comprehensive training programs for all personnel involved in the tanker shuttle service.
- Include both theoretical and practical training sessions.

#### • Conduct Initial Testing:

- Perform initial tests to evaluate the system's performance.
- Document the results and identify areas for improvement.

### Step 4: Implementation

#### • Upgrade Equipment:

- Procure any necessary equipment to meet the flow rate requirements.

- Ensure all apparatus are in optimal working condition.
- Implement the System:
  - Roll out the new system design and procedures.
  - Conduct regular drills to practice the new procedures.

#### Step 5: Continuous Improvement

- Regular Testing and Documentation:
  - Schedule regular testing to ensure the system consistently meets the requirements.
  - Maintain thorough documentation of all tests and results.
- Feedback and Adjustments:
  - Gather feedback from personnel involved in the tanker shuttle service.
  - Make necessary adjustments to improve efficiency and effectiveness.

#### Step 6: Accreditation

- Prepare for Accreditation:
  - Compile all documentation and test results.
  - Ensure all requirements are met and documented.
- Apply for Accreditation:
  - Submit the application for the Accredited Superior Tanker Shuttle Service.
  - Prepare for any inspections or evaluations required for accreditation.

#### Step 7: Community Engagement

- Inform the Community:
  - Communicate the benefits of the Accredited Superior Tanker Shuttle Service to the community.
  - Highlight potential improvements in insurance ratings and fire protection.
- Ongoing Education:
  - Provide ongoing education to the community about fire safety and the importance of the tanker shuttle service.

## Recommendation 16: Fire Hydrant Markings

### Recommendation

The Fire Chief should review the NFPA's fire hydrant classifications and markings system and ensure the Municipality complies with applicable standards.

### Current Status/Timeline

The FMP noted that some of the municipality's fire hydrants are not painted to the NFPA colour-coding scheme. However, the Fire Department has been in discussions with

Public Works about initiating a program to update and colour-code all its hydrants to match the appropriate classifications and markings in 2025. This program will begin with the purchase and installation of the reflective coloured disks and will later include the repainting of hydrants with proper colours. In addition to this work, moving forward, the municipality should inform the department of any changes to existing hydrant flow rates, as well as any future installations or upgrades. Doing so will ensure that the municipality's hydrants remain compliant with the applicable legislation.

## Cost

The overall cost for remarking the fire hydrants within Almonte's urban boundaries involves several factors. Firstly, staff time is required to verify the flow rates of each hydrant and match them to the appropriate colour coding standards. Following this, reflective disks need to be purchased to indicate the correct colour coding. Each disk costs approximately \$9, and since two disks are needed per hydrant, with a total of 352 hydrants, the cost would be  $\$9 \times 2 \times 352 = \$6,336.00$ . Additionally, the tops and caps of the hydrants will need to be painted to match the colours, which will incur further costs for staff time and paint.

The fire department is also in discussions with the Township of Lanark Highlands to install a new dry hydrant in the White Lake area, with both municipalities sharing the cost. The estimated cost is around \$10,000, but this depends on the results of test holes, permit costs, and any land rental agreements with the property owner.

## Discussion

Water supply is crucial for effective fire suppression. Recognizing its significance, the Fire Underwriters Survey (FUS) allocates a portion of its insurance grading schedule to water supply.

In the context of fire protection, water supply is classified into two categories:

- Municipal water supply (hydrant-protected areas)
- Rural water supply (non-hydrant areas)

The Mississippi Mills Fire Department employs a variety of water sources during fire operations, including municipal hydrants, private hydrants, and dry hydrants.

## Municipal Water Supply (In the Town of Almonte)

In hydrant-protected areas, the municipal water supply and distribution systems provide the water supply for fire protection services. This means that municipalities are responsible for supplying water with sufficient flow to meet firefighting requirements and the local distribution system, including fire hydrants. Municipalities are also responsible for any required hydrant testing, repairs, and replacement. Hydrant-protected properties usually have lower insurance premium costs than non-hydrant properties. In the town of Almonte, there are approximately 352 municipally owned hydrants, each offering different flow rates based on their specific locations within the town.



### Private Hydrants

Private hydrants are found in municipalities at commercial and industrial sites. When a developer or owner has a property with a private hydrant, they must confirm hydrant installations and water flows meet the requirements needed for flow rates. The developers and owners must also test their hydrants yearly to ensure they are operational. There are 12 privately owned hydrants in Almonte, each with varying flow rates depending on their location. These private hydrants are maintained by the respective businesses on whose properties they are situated. We are in discussions with Public Works to see if they should take over the testing and maintenance of these private hydrants.

The locations of these private hydrants are as follows:

**TABLE 8**

Location of Private Hydrant	Quantity at Location
110 Paterson Street	1
175 Paterson Street	1
219 Paterson Street	2
83 Little Bridge Street	1
1 Rosamond Street	1
276 Maude Street	1
376 Ottawa Street	2
430 Ottawa Street	2
476 Ottawa Street	1



### Non-Hydrant Areas

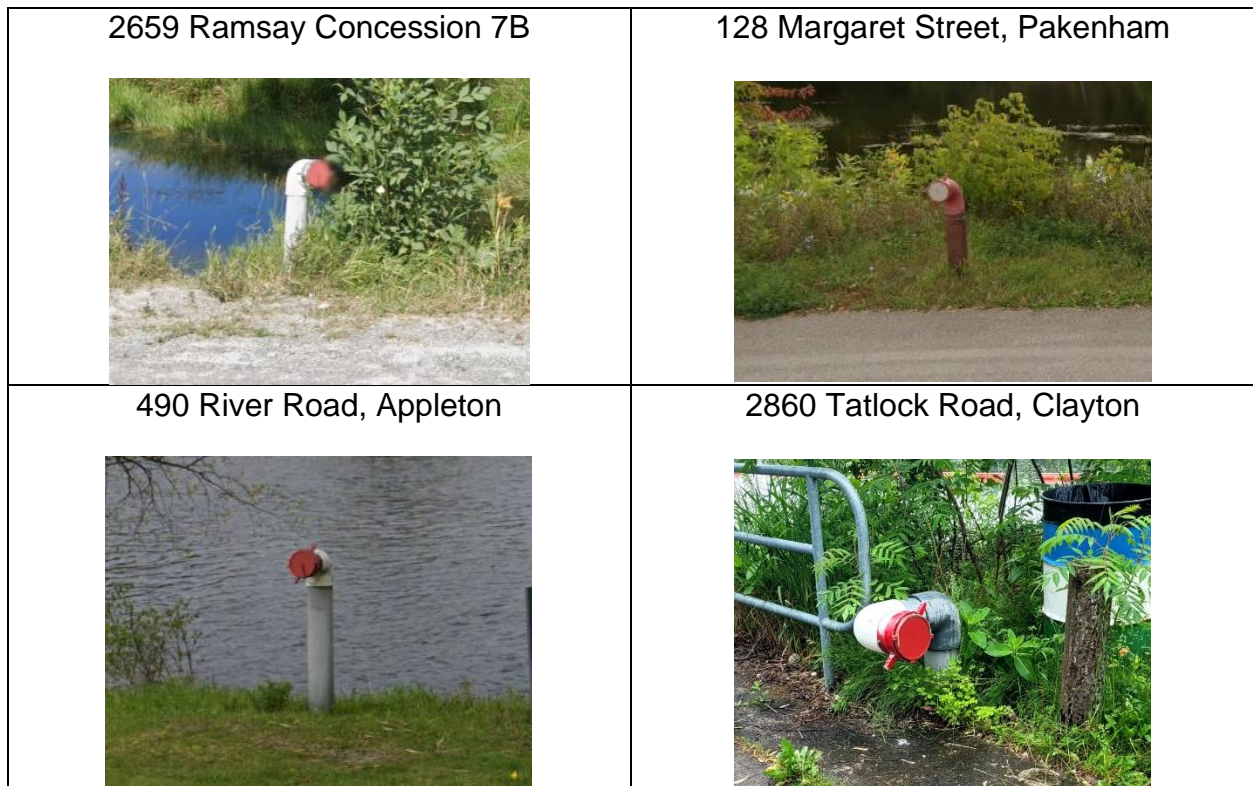
Ensuring an adequate water supply for fire protection in rural areas (non-hydrant areas) presents significant challenges for fire departments. Unlike urban areas, where water supply is dependent on fire hydrants almost exclusively, non-hydrant areas require fire departments to access a water supply from alternate sources. Common ways of meeting that need include

having additional fire apparatus (tankers) and having firefighters trained in tanker shuttle procedures. Two additional measures developed by the fire service to address issues of water supply in rural areas are as follows:

- The installation of non-pressurized dry hydrants: These dry hydrants are designed to allow fire apparatus to draw water from rivers, lakes, ponds, or storage tanks.
- The Superior Tanker Shuttle Accreditation Program: This program provides an improved insurance rate if the Department can maintain an adequate water supply for effective firefighting in areas up to 8 km away from a fire station for residential properties and 5 km for commercial properties.

Currently there are 4 dry hydrants in our municipality:

**FIGURE 1**



At the present time, the department is considering sharing the cost of the installation of a new dry hydrant on Peneshula Road with Lanark Highlands. This new location is within Lanark Highlands, and also on the border of Mississippi Mills, making it beneficial for MMFD's response area.



## Fire Hydrant Identification

As outlined in NFPA 291: Recommended Practice for Fire Flow Testing and Marking of Hydrants, fire hydrants should adhere to a designated colour-coding scheme (as shown in Table 11). The colour-coding helps the responding fire crews quickly identify the amount of fire flow they can expect from any given hydrant. Knowing this information allows incident commanders, water sector officers, and pump operators to ensure that there is enough water available for the required emergency response. The colour-coding scheme also ensures that responders can make decisions about increasing the water supply by attaching it to another hydrant if needed.

**TABLE 9**

### NFPA Hydrant Colour-Coding Scheme

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)

### End Goal

The primary goal is to have all hydrants properly marked in the Municipality to ensure they are easily and quickly identifiable during emergencies. With their locations and flow rates, which then will be inputted into our First Due software for on route planning

### Plan

- MMFD staff will share the information from NFPA 291 Recommended Practice for Water Flow Testing and Marking of Hydrants with Roads & Public Works (R&PW) staff.

- Work together with R&PW staff to identify the flow rates from each of the municipal and private hydrants.
- Assign flow rates to each hydrant in the department's response software. This will be the first step to help the fire department identify what hydrants are the highest flow rates when we require them for fire suppression.
- Compile flow rates totals and order the appropriate number of reflective disk for flow rate identification. Work with R&PW staff to install the reflective disks.
- Work with R&PW staff to arrange all of the hydrants tops to be painted with the proper colour markings for flow rates.

**FIGURE 2**

### **Reflective Disks & Hydrant Colour Coding Scheme**



## **Recommendation 17: Replacement of Used/Refurbished Apparatus**

### **Recommendation**

The Municipality should review the Fire Underwriters Survey's technical bulletin regarding the replacement of used and refurbished apparatus.

### **Current Status/Timeline**

The reliability of fire apparatus is crucial for the effective operation of a fire service. Delaying the replacement of a vehicle over the long term is not advisable, as it increases overall maintenance costs and can affect insurance costs based on the emergency service's FUS rating.

The Mississippi Mills Fire Department is well-equipped with pumpers, tankers, a ladder truck, brush trucks, and other support vehicles necessary for primary response to calls within the municipality. All of the department's first response fleet vehicles are within the recommended timeframe according to NFPA and Fire Underwriters Survey standards. However, the department's rescue/equipment truck located in Pakenham is a 24-year-old vehicle that was refurbished six years ago, but it remains a 24-year-old truck. Currently, there are no NFPA or FUS requirements for the replacement of rescue/equipment vehicles.

## Cost

Below is an overview of the 7-Year Long-Range Plan for mandatory vehicle replacement, in accordance with NFPA and FUS standards. The plan outlines a required expenditure of \$4,500,000 over the next seven years. Additionally, it includes a projected cost of \$620,000 for the replacement of the fire department's SCBA units, scheduled for 2026. A full detailed long-range plan will be brought forward to the Council at a later date.

**TABLE 10**

### 7-Year Long-Range Replacement Plan

Year	Vehicle Or Equipment	Replacement Cost	Description
2023			None.
2024	Pump 520	\$900,000	This would be a 15-year replacement (Already Purchased).
2025	Unit 570	\$90,000	This would be an 8-year replacement with this vehicle, possibly moving to By-law Enforcement.
2026	SCBAs	\$620,000.00	This is a 15-year replacement.
2027	Unit 571	\$90,000	This is a 10-year replacement with this vehicle either moving to By-law Enforcement or Fire Prevention.
2028			None.
2029	Pump 523	\$1,300,000.00	This is a 15-year replacement
2030	Rescue/Van 551	\$600,000	This would make that vehicle 30 years old.
2031	Ladder 510	\$2,500,000	This is a 20-year replacement
2032			None.
2033			None.
	<b>Total Vehicle Replacement Cost</b>	<b>\$ 4,580,00.00</b>	

## Discussion

When assessing a Fire Department's ability to respond and meet the needs of the community, the Fire Underwriters Survey considers the age of a fire truck as one of its guidelines.

The Medium Sized Cities section is the recommendation for vehicle replacement for a municipality the size of Mississippi Mills. This allows for up to a 20-year replacement

cycle, in which the fire vehicle can be utilized as Second Line response status. It is, however, recommended that all First Line units be replaced by a new or younger unit when they reach 15 years of age.

**TABLE 11**

**Service Schedule for Fire Apparatus for Fire Insurance Grading Purposes**

Apparatus Age	Major Cities <sup>3</sup>	Medium Sized Cities <sup>4</sup>	Small Communities <sup>5</sup> and Rural Centres
0 – 15 Years	First Line Duty	First Line Duty	First Line Duty
16 – 20 Years	Reserve	2 <sup>nd</sup> Line Duty	First Line Duty
20 – 25 Years <sup>1</sup>	No Credit in Grading	No Credit in Grading or Reserve <sup>2</sup>	No Credit in Grading or 2 <sup>nd</sup> Line Duty <sup>2</sup>
26 – 29 Years <sup>1</sup>	No Credit in Grading	No Credit in Grading or Reserve <sup>2</sup>	No Credit in Grading or Reserve <sup>2</sup>
30 Years +	No Credit in Grading	No Credit in Grading	No Credit in Grading

<sup>1</sup> All listed fire apparatus 20 years of age and older are required to be service tested by recognized testing agency on an annual basis to be eligible for grading recognition. (NFPA 1071)

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> Small Communities are defined as an incorporated or unincorporated community that has:

- no populated areas with densities that exceed 200 people per square kilometre; AND
- does not have a total population in excess of 1,000.

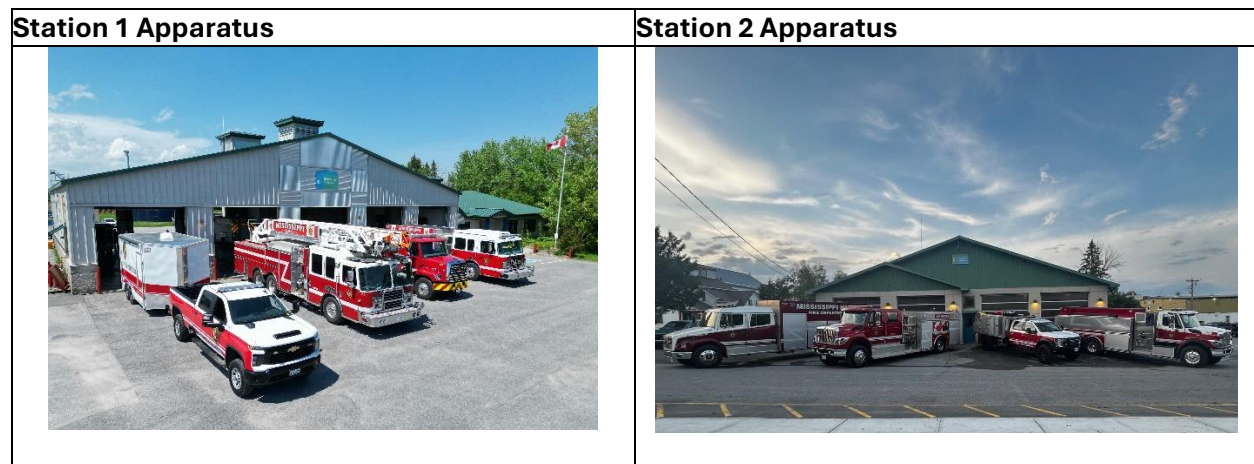
The NFPA 1911, *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus* also supports a regular replacement schedule for fire vehicles. This standard includes guidance on retirement criteria for fire apparatus. NFPA 1911 recommends that all front-run vehicles are replaced on a 15 to 20-year cycle, depending on the community size.

MMFD's current vehicle replacement schedule is as follows:

**TABLE 12**

Year	Vehicle Number	Vehicle Class	Replacement Year
2024	Pumper 520	First Line Truck	2039
2007	Pumper 522	Second Line Truck	2029
2018	Tanker 530	Water Tanker	2038
2011	Ladder 510	Ladder Truck	2031
2014	Pumper 523	First Line Truck	2029
2017	Tanker 531	Water Tanker	2037
2000	Truck 551	Rescue/Equipment	2030
2022	Truck 581	Bush Truck	2037
2024	Truck 580	Multi-Purpose Truck	2039
2017	Truck 571	Deputy Chief Response	2027
2016	SUV 570	Fire Chief Response	2026
2001	Truck 572	Prevention/Other	2026

**FIGURE 3**



**End Goal**

To ensure the highest level of safety and operational efficiency, the Mississippi Mills Fire Department aims to replace all fire apparatus in accordance with the Fire Underwriters Survey (FUS) recommendations. Specifically, the Department's goal is to:

- **Maintain Reliability and Safety:** Ensure that all first response vehicles are replaced within the recommended 15-year service period for active duty, and transition to reserve status for an additional 5 years, before being retired at 20 years of age.

- **Minimize Maintenance Costs:** Reduce overall maintenance expenses by adhering to the FUS guidelines, which suggest that older vehicles incur higher maintenance costs and may face difficulties in obtaining replacement parts.
- **Enhance Emergency Response:** Ensure that all apparatus, including the rescue/equipment truck in Pakenham, are within the recommended age and condition standards to guarantee quick and reliable emergency response.

By achieving these goals, the department will uphold the highest standards of fire service, ensuring the safety of the community and firefighters.

## Plan

### 1. Assessment and Inventory:

- Conduct a thorough assessment of the current fleet to identify vehicles nearing the end of their recommended service life.
- Maintain an updated inventory of all apparatus, including age, condition, and maintenance history.

### 2. Budget Planning:

- Develop a long-term financial plan that allocates funds for the replacement of vehicles.
- Explore potential funding sources such as grants, municipal budgets, and Development Charges.

### 3. Procurement Process:

- Establish a procurement timeline that aligns with the replacement schedule.
- Engage with manufacturers and suppliers to ensure timely delivery of new apparatus.

### 4. Maintenance and Monitoring:

- Implement a robust maintenance program to extend the life of current vehicles until replacement.
- Regularly monitor the condition of all apparatus to anticipate and address any issues promptly.

### 5. Council and Staff Engagement:

- Communicate the replacement plan to the Council and municipal staff to gain support and understanding.
- Provide updates on progress and any changes to the plan.

## 6. Training and Transition:

- Ensure that firefighters are trained on new equipment and vehicles.
- Plan for a smooth transition from old to new apparatus to avoid any service disruption.

## 7. Consideration of Forecasted Growth:

- Population Growth: Mississippi Mills is projected to grow to an estimated population of 21,122 by 2038, representing a 60% increase. This growth will likely increase the demand for emergency services.
- Infrastructure Expansion: Plan for additional fire stations and apparatus to accommodate the growing population and expanded service areas.
- Resource Allocation: Adjust budget and resource allocation to ensure that the fire department can meet the increased demand without compromising service quality.

The Mississippi Mills Fire Department is actively working on a comprehensive Long-Range Fleet and Equipment Plan. This plan is designed to ensure that the department's fleet and equipment remain up-to-date and fully operational. It will include detailed timelines for when each piece of equipment will need to be replaced, as well as the projected costs associated with these replacements. Once finalized, the plan will be presented to the Council for review and approval. This proactive approach aims to manage the department's financial resources effectively while maintaining high standards of safety and service for the community.

By following this comprehensive plan, the department aims to maintain a reliable and efficient fleet that meets the highest standards of safety and performance, while also preparing for the anticipated growth in Mississippi Mills. This will aid the department in its ability to continue to provide excellent service to the community.

## Recommendation 18: Facility Assessment

### Recommendation

The Fire Chief should complete a cost analysis for Station 2. The Fire Chief should also complete a facility assessment to evaluate the station's current location and needs and verify that the facility complies with current building codes. The Fire Chief should use the results to compare options for upgrading, replacing, or relocating the station.

### Current Status/Timeline

The municipality is currently assessing submission to the 'Mississippi Mills Building Condition Assessments' RFP, which closed at the end of August 2024. The RFP will be awarded in September 2024, with the report to be completed in the second quarter of 2025. The report will include a comprehensive building condition assessment,

recommended additional test or investigations, condition ratings for the building elements/systems/property features, cost estimates and facility condition indexes, and a 10-year capital and maintenance plan to fund the actions required to address the findings. This report will then be presented to Council.

Following the release of the municipality's Building Condition Assessment, staff will leverage departmental plans to address the issues identified in the consultant's assessment to form recommendations for Council. These recommendations may include offloading, maintain or building new facilities to better serve the public.

It should be noted that Station 2's next apparatus replacement will take place in 2029 as the first line truck will be due. As the facility already lacks the appropriate space to safely accommodate the larger modern fire trucks, this will add pressure to find a unit that will fit in the current station's bays.

## Cost

The cost related to this recommendation will be largely based on the Building Condition Assessments Report that will be brought forward to Council. One of the key cost factors will be the location of the new fire hall, as renovation is not an option due to space constraints. The location must be chosen with emergency response in mind.

Additionally, considerations will need to be made as to whether the municipality has available property or if it will need to be purchased from a private seller. Furthermore, discussions with the Roads & Public Works Department have included the idea of a shared building, with bays for both departments on each end and a shared office space in the middle. A shared facility could offer several advantages, including cost savings, resource efficiency, improved services and space optimization.

## Discussion

The Department operates out of the following two fire stations:

- Station 1 is located at 478 Almonte St, in Almonte.
- Station 2 is located at 106 Jeanie St, in Pakenham.

Station 1 was built in 2003 and consists of 8 bays which house:

- Pumper 520
- Pumper 522
- Tanker 520
- Ladder 510
- Truck 580 with Trailer, and UTV 590
- County Rescue 2
- Almonte's first motorized 1934 Antique Pumper



A hose room and tower, SCBA/bunker gear cleaning room, and a PPE storage room (bunker gear room) are all located off of the bay floor. On the administration side of the building, there are 4 staff offices, a training room, and a staff kitchen area. There is an additional office space designated for the OPP to use at their discretion.

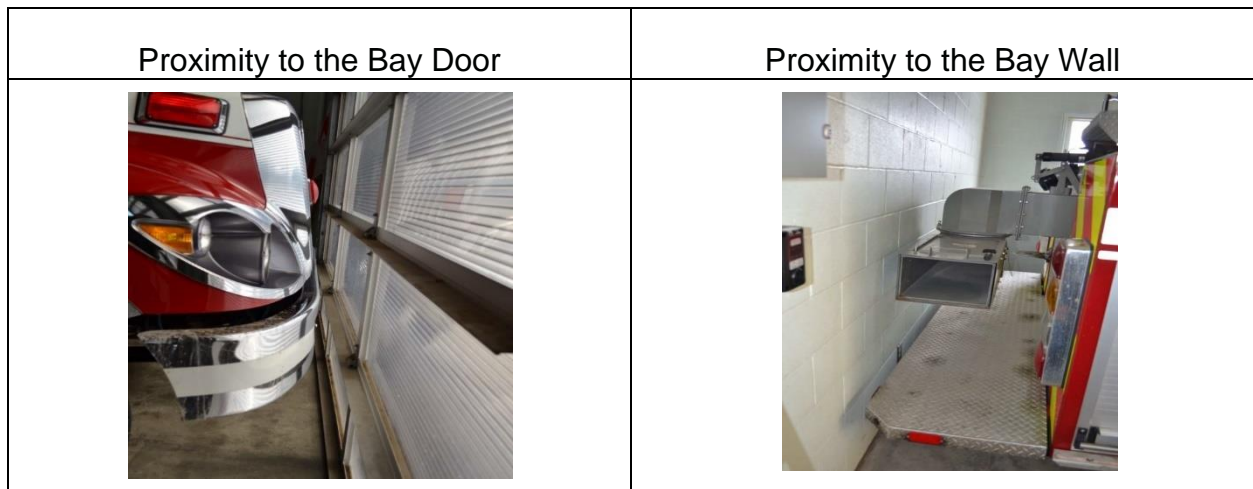
Station 2 was built in 1953 with an addition in 2003, and consists of 4 bays which house:

- Pumper 523
- Rescue/Equipment Truck 551
- Tanker 531
- Bush Truck 581

An SCBA/bunker gear cleaning room and a training room with a kitchenette are located off of the bay floor. There is no separate storage room for firefighters to keep their clean gear, other than within the designated cubbies in the Rescue/Equipment Truck 551.

The FMP review found that Station 2 presents several issues for the Department, with the primary being a lack of space. Due to the limited size of the bays, the department must park the fire apparatus extremely close to both the door and the wall (as shown in Figure 3 pictures below). This increases the potential for damage to the apparatus. The limited space also creates a severe pinch point for the department's firefighters and staff as they maneuver around the apparatus.

**FIGURE 4**



This lack of space will also affect the department when it comes time to replace the current apparatus. Newer apparatuses are much longer than those built in years past. As such, Station 2 will have insufficient space to house a new apparatus. The department must determine the best solution to address the space constraints at Station 2.

In addition to the issues caused by its limited available space, Station 2 presents several health and safety concerns. For example, Station 2 has minimal ventilation and exhaust systems for the Department's apparatus.

The municipality issued a Request for Proposals for a Mississippi Mills Building Conditions Assessments report which will include both of the department's fire stations. Once this assessment is completed and brought forward to Council, the fire department will have a better understanding of the facilities conditions and recommendations to either maintain, expand or rebuild.

In discussions regarding the future needs of both the Fire Department and the Roads & Public Works departments, staff have discussed the possibility of a combined shared facility in Pakenham as an opportunity to collaborate and satisfy both departments expanding needs.

## End Goal

Station 2's facility meets the current and future needs of the department through several key aspects:

- **Location and Accessibility:** The fire station is strategically located to ensure quick response times to emergencies.
- **Adequate Facilities:** The station has the necessary facilities to support the firefighters' daily operations, including training areas and maintenance facilities for equipment.
- **Safety and Health:** The design of the station prioritizes the health and safety of the firefighters. This includes proper ventilation, decontamination areas, separate PPE storage areas and fitness facilities.
- **Future-Proofing:** Planning for future needs, considering potential community growth, changes in technology, and evolving emergency response requirements.

## Plan

The plan for this recommendation will be formed based on the results of the consultant's findings in the municipality's Building Conditions Assessment report.

## Recommendation 19: CEMC/Alternate Positions

### Recommendation

The Fire Chief and applicable municipal staff should review the Municipality's community emergency management coordinator (CEMC) and alternate CEMC positions. The review should verify at least one of these roles is filled by someone with an administrative background who can assist with provincial compliance documentation.

## Current Status/Timeline

Currently this duty of community emergency management coordinator falls to the Director of Protective Service as the primary CEMC and the Administrative Assistant to the Fire Chief as the alternate (as of 2024). While the role of CEMC is currently included in the job description of the Fire Chief (also outlined in the E&R by-law), the position of alternate is not listed in the description for the Administrative Assistant to the Fire Chief. The department is planning to review the current roles and make the suggested reallocation of duties in 2025.

## Cost

Implementing this recommendation will incur two primary costs. First, staff time will be needed to thoroughly review and assess which positions or personnel possess the necessary knowledge and skills to take on the role of primary CEMC or alternate. Second, there will be the cost associated with re-evaluating the current Administrative Assistant to the Fire Chief position. This includes updating the existing job description to incorporate the new responsibilities. This process involves a detailed review of the current role, drafting and approving the revised job description, and communicating these changes to Council.

## Discussion

In accordance with the Emergency Management and Civil Protection Act (EMCPA), every municipality in Ontario is required to have an emergency response plan and an emergency planning program. The EMCPA also mandates that municipalities conduct an annual training exercise. Additionally, each community in Ontario must designate a Community Emergency Management Coordinator (CEMC).

The CEMC is responsible and accountable for coordinating the development and implementation of the municipality's emergency management program in accordance with the standards set out in the EMCPA and O. Reg. 380/04. Duties include:

- CEMCs may be required to write or update the Municipal Emergency Response Plan (MERP) and sub-plans.
- The CEMC reports to their municipality's Emergency Management Program Committee (EMPC).
- Coordinate local Emergency Management program with other municipalities, ministries, or other organizations (e.g. community partners such as the Canadian Red Cross, Salvation Army, etc.)
- Ensure the municipality's annual compliance with the EMCPA and associated regulations.

- Serve as the primary contact during actual or impending emergencies, as well as for routine communications.

The reality is that in an emergency situation, the Fire Chief will more than likely be responding the scene and filling the role of Operations Section Chief as part of the IMS roles. Therefore, consideration should be given to which roles within the municipality will be better suited to the responsibilities of CEMC (primary and alternate).

### End Goal

Ensure that the primary CEMC role is assigned to the Administrative Assistant to the Fire Chief position and the alternate role is assigned to an individual or position who possesses the required knowledge, skills, and availability to perform effectively.

### Plan

A structured approach to evaluating the responsibilities of a job description could include:

1. Understand the Role: Identify the responsibilities of the CEMC role.
2. Review the EMP: Review the level of service outlined in the current EMP.
3. Align with Organizational Goals: Ensure the role's responsibilities aligns with the organization's goals and objectives.
4. Evaluate Required Skills and Qualifications: Identify the necessary skills and competencies for each responsibility and determine the level of experience required to perform the tasks effectively.
5. Consider Daily Activities and Commitments: Consider the impact of routine tasks and the frequency at which tasks are performed. Firefighters must be available and ready to respond to emergencies at time, day or night.
6. Review and Update Regularly: Regularly review and update the job description to reflect any changes in responsibilities or organizational needs.
7. Final Review: Obtain final approval from HR, Council and relevant department heads.

## Section C: Additional Recommendations

Based on the challenges outlined in the Section A: Community and Fire Service Challenges and to meet the recommendations already addressed in the FMP, staff have proposed two new recommendations to advance the department.

### Recommendation 20: Staffing

#### Recommendation

To address the anticipated strain on full-time staff due to projected population growth and mandatory certification requirements, it is recommended that the Fire Chief review the current staffing supplement and the department explore hiring additional full-time staff, including a Training Officer, a Fire Prevention Officer, and a Public Education Officer, within the next three years.

#### Current Status/Timeline

The Department is led by the Director of Protective Services/Fire Chief and three full-time support staff, including a Deputy Chief, a Fire Prevention Officer, and an Administrative Assistant. The remaining staff is composed of 50 volunteers, who are established and approved by Council.

The department expects increased strain on its full-time staff in the coming years due to projected population growth and the implementation of mandatory certification requirements. Population growth can significantly impact the staffing needs of a fire department through increased call volume, expanding urban service areas, and potentially diversifying service needs, which all in turn can create a strain on resources, including staffing. Without adequate staffing, existing staff and firefighters may face increased workloads, leading to burnout and higher injury rates. Proper staffing helps maintain the health and safety of all staff which benefits the community they serve.

Beyond ensuring the department's own firefighters have the necessary certifications to meet the new regulation requirements within the specified deadlines, other departments will be looking to the Regional Training Centre to offer training opportunities to bring their own departments in line. Depending only on the current staff and RTC volunteer instructors to expand course offerings will result in missed opportunities to attract potential students and will divert full-time staff from their primary responsibilities.

#### Training Officer

Among their other duties, the Deputy Chief currently coordinates training activities, develops an annual training plan for the officers and firefighters, supports the district chief and captains with training, and ensure the department's training complies with

current provincial and national standards. While the newly formed training committee will ease some of the lesson planning burden for the Deputy, their time spent on training largely remains unchanged. The Regional Training Centre benefits from the variety of skills and knowledge of instructors from a pool of County volunteer fire department personnel. While their knowledge of Countywide practices and realities is beneficial to the local students, their availability to teach can be limited. The department continues to work to expand the RTC's instructor pool by offering opportunities for new personnel to gain teaching experience, however, their lack of availability during specific hours is inherent in belonging to a volunteer fire department. To further advance the RTC, the department aims to at minimum hire a part-time Training Officer in the next two years, or full-time position before three years.

### Public Education & Fire Prevention

Fire Prevention and Education, combined with Inspection and Enforcement, are the most effective methods of reducing injuries and deaths associated with fires and associated emergencies. Specifically, Fire Prevention and Public Education rank number one in relation to the 'Three Lines of Defence' presented by the OFMEM. Currently, the department has one full-time Fire Prevention Officer who focuses on inspections and enforcement, the number two line of 'Three Lines of Defense', in preventing fires before they begin.

MMFD's Public and Life Safety Education Program is limited to Fire Prevention Week in October of each year, and the Smoke/Carbon Monoxide Alarm Program. Public Education initiatives are currently scheduled by the Fire Prevention Officer and Administrative Assistant to the Fire Chief and requests for assistance are made to the volunteer firefighters for their participation at events. Depending on the volunteer firefighters' participation can sometimes restrict the department's ability to attend community events due to their other commitments.

The new O. Reg. 343/22: Firefighter Certification will require all firefighters performing PFLSE duties to be certified to the NFPA 1035 Professional Qualifications Standard as of July 1st, 2026. Currently, the department does not have a fully qualified staff member to perform these duties.

To consistently meet the frequency of inspections by occupancy type as addressed in Table 5 'MMFD Suggested Frequency Chart', compounded by the expected population growth in the municipality in the next 15 years, the department should hire an additional Fire Prevention Officer in the next three to five years, and a Public Education Officer in one to two years.

## Cost

The following are the approximate annual salaries for fire department staff based on our current salaries. The range of salaries for these positions in Ontario range from \$70,000 to \$112,000 per year.

- Training Officer (full-time): \$65,000 to \$ 80,000
- Public Education Officer (full-time): \$65,000 to \$80,000
- Fire Prevention Officer (full-time): \$65,000 to \$80,000

Cost offsets for these positions could include income from:

- Regional Training Centre course fees and rentals
- Fees collected under the municipality's Fees & Charges By-law, including Compliance Letters, Fire Safety Plan Review, Liquor License/Home Daycare/Mobile Canteen or Seasonal Stand inspections, etc.

## Discussion

### Training Officer

Industry standards and legislation aim to enhance the health and safety of firefighters. Fire departments strive to meet these standards and best practices by mitigating risks through their training programs. This proactive approach addresses the department's risk management actions and competencies. It's crucial that volunteer firefighters receive the same minimum training certifications and equipment as full-time firefighters.

While supporting the Deputy Chief and/or training committee in lesson planning and training delivery, a Training Officer for MMFD would mainly focus on the development and delivery of the Regional Training Centre course compliment. The RTC currently utilizes the service of Lanark County volunteer department instructors, who each have their own commitments to their full-time jobs and their respective departments.

MMFD would greatly benefit from a full-time Training Officer for several reasons:

- Consistency in Training: A dedicated training officer ensures that all firefighters receive consistent and standardized training, which is crucial for maintaining high safety and performance standards.
- Skill Development: Regular and structured training helps volunteers develop and refine their skills, ensuring they are well-prepared for a variety of emergency situations.
- Compliance with Standards: A training officer can ensure that the department meets national and local training requirements, such as those outlined by the NFPA.
- Safety: Proper training reduces the risk of injuries and fatalities by ensuring that firefighters are knowledgeable about the latest safety protocols and techniques.
- Morale and Retention: High-quality training can boost morale and job satisfaction

among volunteers, which can improve retention rates.

- **Operational Efficiency:** Well-trained firefighters can respond more effectively and efficiently to emergencies, improving overall service to the community.
- **Professional Development:** A training officer can help volunteers advance their careers by providing opportunities for professional development and certification.
- **Community Trust:** Consistent and high-quality training helps build trust within the community, as residents can be confident that their fire department is well-prepared to handle emergencies.

The department could consider the hiring of a part-time Training Officer to expedite the addition of this staffing role to capture the immediate demand for training due to the upcoming mandatory certifications deadlines. In order to properly offer a full course compliment to benefit both volunteer departments and individuals looking for pre-service qualifications, a full-time Training Officer position would be required to fit these student's varying schedules and availability.

Public education and code enforcement are municipal responsibilities mandated under the FPPA. To meet these FPPA standards, they must offer designated fire prevention and protection services, along with any other services deemed necessary by the council to address the community's needs.

The OFM has stipulated that this requirement also includes the following components:

- a recognized smoke/CO alarm and home evacuation program
- a public education program
- a schedule for completing fire inspections and evacuation for vulnerable occupancies
- a schedule for completing fire inspections by complaint and request
- a simplified risk assessment to determine the risks in the community and the required level of fire prevention and emergency response

## Public Education

Hiring a Public Education Officer can bring numerous benefits to the community and the department itself, including:

- **Enhanced Public Safety:** A public education officer can develop and deliver fire safety education programs to schools, businesses, and community groups, helping to reduce the risk of fires and other emergencies.
- **Community Engagement:** They can foster stronger relationships between the fire department and the community by participating in local events, providing safety demonstrations, and being a visible, approachable resource.



- Targeted Risk Reduction: By analyzing data to identify high-risk areas and populations, a public education officer can tailor programs to address specific community needs, thereby improving overall safety.
- Training and Development: They can train other firefighters and department personnel in public education techniques, ensuring that the entire team is equipped to promote fire safety effectively.
- Compliance and Standards: Ensuring that the fire department's educational programs meet provincial standards and keeping up with the latest fire safety research and best practices.
- Resource Optimization: By preventing fires and reducing emergency calls through education, the department can allocate resources more efficiently, potentially saving money and lives.
- Positive Public Image: A proactive approach to fire safety education can enhance the department's reputation, showing the community that the fire department is committed to their well-being.

#### Fire Prevention Officer

Similar to the benefits of hiring a Public Educator, adding another Fire Prevention Officer who specializes in code enforcement and inspections would provide significant advantages to both the department and the community, including:

- Enhanced Safety: Regular inspections and strict code enforcement help identify and mitigate fire hazards, reducing the risk of fires and enhancing overall safety for residents and businesses.
- Compliance with Regulations: Ensuring that buildings comply with fire safety codes and regulations can prevent legal issues and potential fines for property owners and the fire department.
- Education and Awareness: Fire Prevention Officers can educate property owners and the public about fire safety practices, leading to a more informed and proactive community.
- Reduction in Fire Incidents: Effective code enforcement and inspections can significantly reduce the number of fire incidents, saving lives and property.
- Resource Allocation: By focusing on prevention, the fire department can allocate resources more efficiently, potentially reducing the need for emergency responses and allowing firefighters to focus on other critical tasks.
- Economic Benefits: Preventing fires can save money for both the community and the fire department by avoiding the costs associated with fire damage and emergency response.
- Improved Insurance Rates: A community with a strong fire prevention program may benefit from lower insurance premiums due to reduced risk.

- Community Trust: Demonstrating a commitment to fire safety through proactive inspections and code enforcement can build trust and confidence in the fire department.

The hiring of a Public Education Officer and an additional Fire Prevention Officer will aid the department in delivering the services stipulated in the municipality's E&R By-law, as the upcoming Fire Prevention Policy. Additional full-time staff who are also qualified firefighters would benefit the department in meeting weekday/daytime personnel response. Overall, hiring more full-time office staff can enhance the efficiency, effectiveness, and overall performance of a fire department, ultimately leading to better service and safety for the community.

### End Goal

Enhance community safety and well-being through proactive education and engagement and the health and safety of firefighters by ensuring consistent, high-quality training that meets industry standards and legislation.

### Plan

#### Step 1: Review Current Staffing and Workload

- Action: The Fire Chief will conduct a comprehensive review of the current staffing levels, workload distribution and availability, and operational demands to meet service requirements.
- Outcome: A detailed report highlighting current staffing gaps, workload challenges, and areas needing additional support.

#### Step 2: Assess Future Needs

- Action: Analyze projected population growth, anticipated increase in call volume, and the impact of mandatory certification requirements and effects to current service delivery expectations.
- Outcome: A forecast report outlining future staffing needs based on population growth and regulatory changes.

#### Step 3: Develop Job Descriptions and Requirements

- Action: Create detailed job descriptions and qualification requirements for the Training Officer, Fire Prevention Officer, and Public Education Officer positions.
- Outcome: Clear and comprehensive job descriptions ready for recruitment.

#### Step 4: Budget Planning and Approval

- Action: Work with the municipal Council and finance department to secure budget approval for the new positions.
- Outcome: Approved budget allocation for the new full-time positions.

#### Step 5: Recruitment and Hiring

- Action: Initiate the recruitment process for the Training Officer, Fire Prevention Officer, and Public Education Officer positions.
- Outcome: Successful hiring of qualified candidates for each position.

#### Step 6: Onboarding and Training

- Action: Implement onboarding for the new hires to ensure they are fully integrated into the department.
- Outcome: New staff members are well-prepared and integrated into their roles.

#### Step 7: Monitor and Evaluate

- Action: Continuously monitor the performance and impact of the new hires on the department's operations and community safety. This will primarily be captured in quarterly department reports to Council.
- Outcome: Regular performance reports and adjustments to staffing strategies as needed.

## Recommendation 21: Regional Training Centre

### Recommendation

The Fire Chief and staff should evaluate the current Regional Training Centre and develop a business plan to explore its expansion opportunities.

### Current Status/Timeline

The Mississippi Mills Fire Department operates a training facility for comprehensive hands-on programs. These include live fire training and other specialized courses that extend beyond the capabilities of most fire stations. This facility ensures firefighters receive the advanced training necessary to handle a wide range of emergencies safely and effectively.

Currently, the Mississippi Mills Fire Department conducts approximately 11 NFPA courses annually through our Training Centre. These courses are attended by firefighters from Mississippi Mills, as well as from Lanark County, Renfrew County, and other fire departments.

The revenue generated from these courses is reinvested back into the Training Centre or used to supplement the training costs for the department's members. This reinvestment helps maintain the high standards of the department's training programs and ensures that firefighters are always prepared to respond to emergencies.

## Cost

The cost of this recommendation will be divided into three distinct parts:

1. Initial Assessment: This includes staff time dedicated to evaluating the future structure of the Regional Training Centre (RTC). This phase involves gathering all necessary data to complete the business plan and drafting a Request for Proposal (RFP) for both the business plan and an engineering assessment.
2. Business Plan and Engineering Evaluation: This part covers the expenses associated with developing the business plan and having an engineer assess the facility. These costs are intended to be covered by the revenue generated from the RTC with no additional budgetary requirements.
3. Implementation of Recommendations: This final part encompasses the costs of implementing any recommendations from the engineers, including improvements, repairs, or corrections to the facility to mitigate any liability risks for the municipality. Additionally, this may include costs related to changes proposed in the business plan, such as logo design marketing the RTC, and purchasing any equipment that is required. These costs will be laid out in the business plan and be presented to the council for any additional budgetary request plus any recommendations and approval.

## Discussion

MMFD has a unique opportunity to leverage the current fire service training climate to expand the department's Regional Training Centre. The department should capitalize on these following circumstances listed below to enhance the facility, its instructors, and course offerings.

### Ontario Fire College Closure

The closure of the Ontario Fire College in Gravenhurst has given the Mississippi Mills Fire Department a unique chance to further establish itself as a Regional Training Centre. This new role allows the department to offer essential training, both classroom-based and practical scenario-based, not only to its own members but also to firefighters from surrounding fire services. This collaborative approach enhances the overall preparedness and effectiveness of regional fire services.

## Mandatory Certifications

In Ontario, mandatory firefighter certification was introduced to ensure that all firefighters meet specific training and performance standards. The certification process aligns with NFPA standards and includes both written exams and practical evaluations. This move aims to enhance the safety and effectiveness of fire services across the province by ensuring that all personnel are adequately trained and qualified. Firefighters must complete the first round of mandatory certification by July 1, 2026. Volunteer departments across the province will feel the pressure of the deadlines stipulated in the new legislation.

## Live Fire Training Requirements

The objective of live fire training is to deliver realistic fire scenarios under safe and controlled conditions. These training evolutions are designed to replicate the actual fire environments that firefighters may face, including fire spread, high temperatures, humidity, limited visibility, and smoke conditions. Industry best practices recommend that firefighters engage in live fire training exercises at least once a year. This hands-on training and exposure to heat and smoke should be regarded as an essential element of the fire department's comprehensive training program. When it comes to live fire scenario-based training, very few departments can offer this to their own members let alone offer it to other fire departments.

The Mississippi Mills Fire Department's Regional Training Centre facility features six burn cans which can be configured in various ways to create realistic fire scenarios. This setup allows the training centre to simulate a wide range of emergency situations, providing invaluable hands-on experience for firefighters in a controlled and safe manner. Not only does the department's facility have live fire capabilities for fire attacks, but it also offers a more realistic approach to ventilation, ladder operations, search and rescue for victims, and firefighter survival which includes window bailouts.

## Firefighter Rapid Intervention Training

The department recently acquired a 48-foot transport trailer and with the help of its members, ingeniously converted the interior of the into a two-story confidence maze. This innovative maze is designed to simulate real-life emergency conditions, such as little or no visibility, a combination of reduced profiles, wire entanglement situations as well as different changes in elevations. This provides firefighters with a challenging and immersive training environment. Overall, this upgraded training facility is a valuable asset, boosting firefighters' skills and preparedness, and ensuring they are ready to face any challenge.



## Fire Training in Mississippi Mills

The Mississippi Mills Fire Department is dedicated to providing top-notch training that exceeds emergency response standards, ensuring community safety and preparedness. The Regional Training Centre is committed to significantly mitigating risks and enhancing safety through professional training and improved service levels. Additionally, it aims to foster industry partnerships, which can lead to the development of innovative training

programs and resources. By offering these training services, the facility also has the potential to generate a revenue stream that can help offset its annual costs and operating expenses, ensuring its sustainability and continued contribution to firefighter education and public safety. By expanding its offerings and adding a full-time instructor, the center can grow into a leading fire training institution in Ontario, benefiting the fire department and the broader community by improving safety, creating jobs, and boosting the local economy.

### End Goal

The department aims to expand the center to become a Fire College, offering a wider range of courses, and attracting trainees across the province. This expansion would not only enhance the skill set of local and regional firefighters, but also contribute to the economic growth of Mississippi Mills. The center's focus on training quality and techniques, its potential for job creation, and enhancing the reputation of the department further underscore its value to the community.

### Plan

#### 1. Engineering Stamp

- **Facility Assessment:** Conduct a thorough assessment of the current facilities to identify any structural, electrical, or mechanical upgrades needed.
- **Hire a Licensed Engineer:** Engage a licensed professional engineer to review the existing infrastructure and provide recommendations for improvements. Ensure they provide the necessary stamps and certifications for any modifications.
- **Compliance Check:** Ensure all upgrades comply with local building codes and safety regulations.

## 2. Logo Design

- **Brand Refresh:** The current logo that is typically used at the training centre is our current Fire department logo. Define the updated brand identity, including any new mission, vision, and values.
- **Hire a Designer:** Engage a professional graphic designer or internal staff to create a new logo. We will ensure the design reflects the center's identity and purpose.
- **Feedback and Revisions:** Review initial designs and provide feedback. Work on the design until it meets the expectations.
- **Final Approval:** Approve the final logo design and ensure it is available in various formats for different uses (e.g., print, digital).

## 3. Business Plan

- **Review and Update:** Create a new business plan for the training centre and future needs and requirements, and update it to reflect current goals, market conditions, and financial projections as they change.
- **Market Analysis:** Conduct a new market analysis to identify any changes in demand for firefighter training and potential new competitors.
- **Services Expansion:** Consider expanding the range of training programs and services offered based on market needs and feedback from current clients.
- **Financial Plan:** Update the financial plan to include any new investments, projected revenues, and a revised break-even analysis.
- **Operational Plan:** Review and update the operational plan to ensure efficient day-to-day management of the centre.
- **Risk Management:** Reassess potential risks and update strategies to mitigate them.

## 4. Marketing

- **Marketing Strategy:** Develop a comprehensive marketing strategy to promote the updated training center. This should include both online and offline marketing tactics.
- **Website and Social Media:** Update the website and social media profiles to reflect the new logo and any changes in services. Ensure the website is user-friendly and provides all necessary information.
- **Advertising:** Invest in targeted advertising campaigns, such as Google Ads, social media ads, and local media. Highlight any new or improved services.
- **Partnerships:** Strengthen existing partnerships and establish new ones with local fire departments, educational institutions, and community organizations.
- **Events and Open Houses:** Host events and open houses to showcase the updated facilities and training programs to potential students and partners.

## 5. Staffing

- Staffing Review: Review the current instructor staffing levels and identify any gaps or areas for improvement.
- Recruitment Plan: Develop a recruitment plan to hire additional qualified instructors, administrative staff, and support personnel as needed.
- Job Descriptions: Update job descriptions for each position, outlining responsibilities, qualifications, and expectations.
- Training and Development: Implement ongoing training and development programs for staff to ensure they are well-equipped to deliver high-quality training.
- Performance Management: Establish a performance management system to regularly evaluate staff performance and provide feedback.
- Retention Strategies: Develop strategies to retain top talent, such as competitive salaries, benefits, and opportunities for professional growth.

## FSRMP Tracking

Department staff will utilize the municipality's Project Management Office's (PMO) tracking spreadsheets to upload the recommendation's initiatives and regularly update with the latest information. By utilizing the PMO tracking sheets, the department will effectively track project progress and ensure that the stay on schedule.