

Municipality of Lakeshore – Report to Council

Community Health and Safety

Fire Services



To: Mayor and Members of Council

From: Jason Suchiu – Fire Chief

Date: November 1, 2024

Subject: 10 Year Staffing, Fleet and Station Needs Based on Fire Master Plan and Community Risk Assessment

Recommendation

This report is presented at the December 10, 2024 Council meeting, for information only.

Strategic Objectives

3b) Modernizing and Enhancing Municipal Functions - Revise business processes to establish and employ a risk management framework, improved workflow management, and financial modelling to inform management of reserves

Background

The 2023 Fire Master Plan identifies key challenges we face as calls for service continue to increase, and the community continues to grow. The plan identifies the need to recruit a contingent of career (full time) firefighters to ensure 24-7 community coverage. The Lakeshore Fire service is made up of a tremendous group of dedicated volunteer firefighters that will continue to be a valuable asset to the community for decades to come. The challenge is as call volumes continue to increase, availability of volunteer firefighters to respond are impacted. There is a need to include a complement of career staff to support volunteer firefighters to ensure the current level of service can continue to be provided.

Lakeshore is serviced by five fire stations located in areas that protected respective communities' pre-amalgamation. These stations house a fleet of 11 fire apparatus. Stations are aged needing various degree of repair, lack modern amenities such as shower and cleaning capabilities, struggle to fit modern fire apparatus and are not all near locations where emergencies are occurring today. Fire apparatus currently serve the community for a period of 20-25 years. Most of the fleet (eight) apparatus will be reaching the end of their service life over the next eight years.

At the September 9, 2024, meeting, Council approved the following resolution:

297-09-2024

Receive the Fire Master Plan (FMP) 2023 prepared by Emergency Management Group Inc. and direct the Fire Chief to utilize this plan as a reference document to support fire protection service delivery within the Municipality of Lakeshore over the next 10 years (2023-2032);

Direct the Corporate Leader – Chief Financial Officer to incorporate the financial investment recommendations within the 2023 Fire Master Plan, as part of the multi-year budget, based on prioritization of funding as part of the revised long-term community investment plan; and

Direct the Fire Chief to report back to Council on various recommendations provided within the Fire Master Plan through additional staff reports and/ or the budget process, as required.

Comments

Staffing Pressures

NFPA 1720 is the Standard for the Organization and Development of Fire Suppression, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments. For suburban areas the minimum standard is 10 staff on scene (O) in 10 minutes, 80% of the time. For rural areas the standard is 6 staff on scene (O) in 14 minutes 80 % of the time. On scene times (O) is the total of the assembly time (A) for firefighters to respond to the station plus the time to respond (R) from the station with a staffed apparatus to the emergency scene (A+R=O).

*The table below shows only our annual average personal and assembly times (A) combined for all stations.

Response times begin at the completion of the dispatch. Assembly time only represents the time it takes for volunteer firefighters to arrive at the station, get dressed and leave on their responding apparatus. Assembly times have steadily increased over the last number of years which is consistent with other volunteer departments. Total response times vary depending on travel distance from the station to the location of the emergency.

Year	Average Personal on 1 st Responding Apparatus	Total Personal Responding	Assembly Time (95% of the Time)
2020	1	4	10:07
2021	4	8	10:09
2022	1	2	11:16
2023	3	7	10:54
2024	2	6	10:44

Note: 2024 is current to October 31, 2024

To assist with call volume increases and volunteer firefighter staffing vacancies, as of June this year, operational and response protocol changes were made to have two stations responding in several districts to address gaps. Even with these measures we continue to struggle to get staffing during weekdays. To staff an in-service apparatus requires four firefighters. We have supplemented this by utilizing our four Chief Officers and two fire prevention officers to assist with gap/overlap coverage for emergency responses during weekday, daytime responses (Monday to Friday 830am to 430pm) always guaranteeing a response of one apparatus to all areas of the municipality with four to five staff. Assembly times in comparison to the department average is approximately 60 seconds vs 10 minutes as full-time staff are already at the station. This has allowed for faster on road time and has proven to provide farther reaching coverage meeting a 14 min requirement in NFPA 1720 (see 14 Minute Full Time Coverage map). Comparatively, with station specific assembly and response times, the 14 minute Volunteer Coverage by Station map shows the areas that can be covered when the full time coverage is not available to assist.

These practices of dispatching multiple stations and supplementing weekday staffing with existing full-time staff to support volunteer firefighters are a short-term gap stop. We are asking more from the stretched volunteer and full-time staff by increasing their call volume. Maintaining these measures in place for a long period of time will accelerate volunteer fatigue and staff burn out. Adding designated career firefighters to ensure 24-7 coverage would aid in resetting a healthy and consistent balance of call volume for volunteer firefighters while also helping with long term recruitment and retention. The table below shows the total calls for service over the past five years. Calls for service are increasing at a rate of approximately 18-20% per year over this time.

Calls For Service - By Station

Year	1	2	3	4	5	Department Total
2020	168	52	123	47	91	481
2021	217	64	133	58	89	561
2022	294	92	161	69	104	720
2023	271	77	166	90	125	729
2024	239	86	160	110	130	725 (as of Oct 31/24)

The Staffing Model (Appendix A) proposes a phased hiring approach providing the ability to increase career staffing over the next ten years. At that point we will have the ability to have a complement of career firefighters on duty 24-7 which will provide a staffed apparatus responding to all calls for service throughout the municipality supporting our volunteer firefighters.

With the addition of every four career firefighters the overall number of volunteer firefighters per station may be able to be reduced which will help with the pressures of having multi station responses. This will also assist in managing the recruiting impact for Workforce Development as we have been experiencing a need to hire a minimum of 10 volunteer firefighters annually. Turnover of newer staff remains consistent due to

increased pressures with work, family, certification requirements and the decrease interest from the community in wanting to join as a volunteer firefighter. The average length of service for volunteer firefighter in Ontario has decreased to approximately 5 years of service. Lakeshore is very fortunate that we have over 30 staff with more than 20 years of dedicated service however this will add recruiting pressures as these members retire. For each new volunteer firefighter we hire into the service there is a minimum onboarding cost of \$20,000 to provide training, required certifications, protective equipment, uniforms and pagers.

The Staffing Model also illustrates the need for a full time training officer. Ontario Regulation 343/22 – Firefighter Certification establishes the requirement for fire service personnel (career and volunteer firefighters) that participate in the delivery of specific fire protection services to be certified to the corresponding NFPA Professional Qualification Standard (NFPA Pro-Qual). Firefighter training in Ontario has come under increased scrutiny due to firefighter injuries and fatalities, resulting in several inquests. To address some of the recommendations from the inquest and improve firefighter safety, the Ministry of the Solicitor General created O. Reg. 343/22 which came into force on July 1, 2022. Municipalities have four to six years to meet the requirements with the first deadline approaching in July of 2026. In the 2011 Fire Master plan it was recommended the consideration of one full-time trainer / public educator that would develop and deliver all Lakeshore fire suppression training, including delivery of public education programs. This would also provide one additional full-time fire administrative staff member available for emergency response, provide consistency in departmental training, provide capacity to enhance public education programs and prepare for the training needs of future full-time firefighters. Additionally, the 2023 Fire Master Plan recommendations "Add the position of Full-time/Career Training Officer to its compliment of FTEs to address immediate and future training needs; conduct on-going gap analysis and address deficits." The projected financial impact over the course of the next 10 years to add additional career staff is projected to be approximately \$2,440,000.

Fleet and Equipment

Fire Underwriters recommend vehicle replacement cycle of 20 years (Appendix B). As Lakeshore continues to grow as a medium sized municipality front line apparatus may need to be replaced at 15 years. Over the long-term, delaying the replacement of vehicles could add to overall maintenance costs and can influence insurance costs for residents based on the emergency service's Fire Underwriters rating. Our existing fleet is nearing the end of its lifecycle and there are numerous fire apparatus that will be coming due for replacement over the next eight years. Build times for fire apparatus typically take between 2 and 3 years. Additionally, fire apparatus costing has been increasing at a rate of 6-10% over the last several years. Costing beyond the next 10 years has been projected and provided (Appendix C). A review of the entire fleet is underway, however factors such as timing on station replacements could influence the type of apparatus replacement. There are opportunities to potentially reduce the fleet or reduce the cost of the overall fleet by relocating vehicles through the municipality to meet the current needs of the community in conjunction with the build of new fire

stations. The projected financial impact over the course of the next 10 years to the lifecycle fleet and equipment is projected to be approximately \$11,716,284.

Fire Stations

The current fire stations are located in the following areas, Station 1 (Puce), Station 2 (Maidstone), Station 3 (Belle River), Station 4 (Rochester) and Station 5 (Comber). The chart below shows the year these were constructed as well their current size.

Location	Year of Construction	Square Footage (ft ²)
Station 1	1962	5000
Station 2	1990	3575
Station 3	1992	4000
Station 4	1984	3200
Station 5	1965	4335

The two stations that need to be prioritized for replacement are Station 1 and Station 5. Both these stations were constructed in the 1960's, are located at the very east and west ends of the municipality and struggle to house modern firefighting apparatus. In 2012, Station 1 had a 350ft² addition added so that it could house the current aerial ladder that was purchased at that time. This aerial ladder comes due for replacement in 2026.

It was also noted in the 2023 Fire Master Plan that all stations are at the maximum capacity to store vehicles and equipment. The following are concerns that exist at all locations:

- Lack of adequate firefighter gear storage rooms with proper ventilation to protect against off-gases.
- Exposure of firefighting gear from vehicle exhaust contamination due to limited space.
- Lack of or inadequate laundering facilities for washing firefighting gear and contaminated clothing.
- No showers or lack of adequate shower capabilities for firefighters to properly decontaminate themselves immediately following any fire event. This results in the potential of contaminants to be taken into personal vehicles and home to their families.
- Lack of space to decontaminate and wash equipment after use as well as a lack of space in the station in the winter months to clean vehicles.
- Lack of drive through capabilities.
- Lack of storage for equipment and training resources.
- Lack of automatic emergency standby generators at all stations.
- Existing fire stations do not meet post disaster requirements mandated for any new emergency response facilities.
- Lack of adequate training rooms to house multiple station training sessions. Rooms are small and do not promote a conducive learning environment.
- Lack of appropriate office space for full-time administrative staff.

Emphasis should be placed on planning to replace Station 1 and Station 5 over the next three to five years. Fire stations being built to contain the adequate space for modern sized apparatus, decontamination and cleaning facilities, proper locker room and shower capabilities are approximately 12,000 to 16,000 ft² in size. Existing fire stations have been built as stand-alone structure however consideration could be given to the potential for shared use sites. Partnering with other stakeholders or combining with other municipal needs may be an option but should not delay any potential replacement. The financial impact to replace Station 1 and Station 5 is projected to be a minimum of \$17,600,000.

Financial Impacts

There are no immediate financial implications arising from this report. However, it serves as a foundation for future budget deliberations and long-term capital planning. The report highlights the critical need for proactive measures to address service demands driven by rising call volumes, regulatory compliance (e.g., O. Reg. 343/22), and the community's growth. Additionally, it identifies significant financial pressures and investment needs for the Lakeshore Fire Service over the next ten years. These include increased staffing requirements, fleet lifecycle replacements, and critical facility upgrades to maintain and enhance service delivery.

Below are the funding shortages for the 10-year Fire Master Capital Project Plan (2023-2032)

Category	Total Transfers to Reserve to 2032	Approximate Total Cost to 2032	(Shortfall)/Surplus
Fleet and Equipment- Funded through the Fire Vehicles and Equipment Reserve	\$3,616,000	\$13,616,000	(\$10,000,000)
Fire Stations - Funded through the Facility/Property - New Reserve	\$9,996,000	\$28,300,000	(\$18,304,000)
Totals	\$13,612,000	\$41,916,000	(\$28,304,000)

Additional Funding Requirements:

- **Increase to Reserve Transfers Needed:** An annual increase of \$3,538,000 (\$28,304,000 / 8 years remaining until 2032) is required to fund fire service projects until 2032. This aligns with the \$3,500,000 increase for Fire Reserves included in the Deferred Operating Section of the 2025 Budget. Had this request been included in the 2025 Budget, it would have resulted in an **8.5% tax levy increase**.

Operational Staffing Impacts:

- A **Fire Training Officer** position has been requested in the 2025 budget.
- The addition of **full-time firefighters** (\$250,000) has been deferred to 2026.
- Full-time firefighter staffing increases are projected to result in a **3.90% tax levy impact by 2029**.

While some immediate financial implications, such as staffing enhancements and lifecycle replacements, are included in the proposed 2025 budget, other considerations have been deferred and will be addressed in future budget cycles. Strategic planning will be essential to ensuring financial sustainability while maintaining the high level of fire service delivery that Lakeshore residents expect and deserve.

Attachments

14 Minute Full Time Coverage
14 Minute Volunteer Coverage By Station
Appendix A – Staffing Model
Appendix B – Fleet Equipment Facility Lifecycle
Appendix C - 25 Year Capital Lifecycle Projection

Report Approval Details

Document Title:	10 Year Staffing Fleet and Station Needs Based on Fire Master Plan and Community Risk Assessment.docx
Attachments:	<ul style="list-style-type: none">- 14 Minute Full Time Coverage.pdf- 14 Minute Volunteer Coverage By Station.pdf- Appendix A - Staffing Model.pdf- Appendix B - Fleet Equipment Facility Lifecycle.pdf- Appendix C - 25 Year Capital Lifecycle Projection.pdf
Final Approval Date:	Nov 27, 2024

This report and all of its attachments were approved and signed as outlined below:

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Submitted by Frank Jeney

Approved by Corporate Leadership Team