

THE MUNICIPALITY OF LAMBTON SHORES

Report FES 01-2022

Council Meeting Date: January 6, 2022

TO: Mayor Weber and Members of Council
FROM: Lawrence Swift, Chief – Fire, Protection and Emergency Services
RE: Lambton Shores Fire and Emergency Services 10 Year Vehicle Capital Plan

RECOMMENDATION:

THAT Report FES 01-2022 “Lambton Shores Fire and Emergency Services 10 Year Vehicle Capital Plan” be received; and

THAT the 2021 approved purchase of a replacement Pumper be revised to specify a multi-purpose Pumper/Tanker/Rescue unit.

SUMMARY

This report provides Council with information related to implementation of recommendations from the Fire Master Plan, particularly as they concern the municipality’s fleet of fire suppression and rescue response vehicles. This plan demonstrates an opportunity to reduce the overall number of vehicles in the fleet, while at the same time modernizing and increasing the utility of the vehicles that are obtained.

BACKGROUND

In 2021, Emergency Services Strategy and Solutions Inc. (Esssi) was retained by the Municipality of Lambton Shores to undertake a Community Risk Assessment (CRA) and develop a Fire Master Plan (FMP) for the municipality.

The Fire Master Plan is informed by the Community Risk Assessment and provides a roadmap to support future decision-making related to fire protection services. Section 7 (iv) of the Fire Master Plan discusses and provides recommendation regarding the fire vehicle fleet (apparatus), and this report is provided to more directly assist Council in understanding the impact of those recommendations.

Council will recall that the 2021 Capital Budget included \$550,000 for replacement of the Northville Pumper. Based on recommendations within the FMP, the path forward now will be to replace the aged pumper unit with a combination

Pumper/Tanker/Rescue vehicle. These multipurpose vehicles are valued at between \$500,000 and \$700,000 depending on size and equipment options.

Northville currently has a dedicated Rescue vehicle that is scheduled for lifecycle replacement in 2025. Although no action is required at this time, the acquisition of the new pumper/tanker/rescue will mean that this \$500,000 rescue vehicle replacement will no longer be required, with a shift to a significantly less expensive “Squad” type pickup truck providing more utility for station response.

The FMP contains a number of other recommended changes to the provision of fire-fighting and rescue apparatus, all of which can be phased and considered on an ongoing basis and in keeping with Council's annual budget process. The following section of this report will assist Council in understanding the positive fiscal impact of these recommendations as fire fleet replacements are considered across all 5 station locations in Lambton Shores.

CORE APPARATUS

The Fire Master Plan reviewed the current mix of fire apparatus used by the department. The current fleet mix is primarily a “legacy fleet” remaining from when 5 individual fire departments provided services to the municipality.

As outlined in the FMP, the table below outlines recommended future apparatus assignments that would position LSFES to sustain and improve on the delivery of fire/rescue protection services to the community.

Table from the Fire Master Plan

Station	Current	Proposed
Arkona	<ul style="list-style-type: none"> • Pumper • Tanker • Rescue 	<ul style="list-style-type: none"> • Pumper/Tanker/Rescue (multi-purpose)
Forest	<ul style="list-style-type: none"> • Pumper • Rescue/Pumper 	<ul style="list-style-type: none"> • Pumper Rescue with elevated master stream capability • Pumper/Tanker/Rescue (multi-purpose)
Grand Bend	<ul style="list-style-type: none"> • Pumper • Tanker • Rescue 	<ul style="list-style-type: none"> • Pumper Rescue with elevated master stream capability • Pumper/Tanker/Rescue (multi-purpose)
Northville	<ul style="list-style-type: none"> • Pumper • Rescue 	<ul style="list-style-type: none"> • Pumper/Tanker/Rescue (multi-purpose)
Thedford	<ul style="list-style-type: none"> • Pumper • Tanker • Rescue 	<ul style="list-style-type: none"> • Pumper/Tanker/Rescue (multi-purpose)
Support Vehicles		<ul style="list-style-type: none"> • Support Vehicles • Pick Up Trucks • Trailers / support units

Implementation of the Fire Master Plan recommendations will increase our suppression and response capability, and reduce the requirement for large apparatus across the fleet. Staff have reviewed the recommendations and developed an implementation plan that coordinates with the existing capital budget and scheduled lifecycle replacement of the existing fleet. The following information illustrates the impact of these changes over the next 10 years.

ARKONA

Arkona Station currently operates a Pumper/Rescue, a Tanker, and a Rescue Van. The pumper/rescue was newly purchased in 2020 and will remain in service. The current Rescue Truck is scheduled for replacement in 2022. This \$500,000 vehicle purchase will no longer be required, with a shift to a significantly less expensive “Squad” type pickup truck providing more utility for station response. The current Tanker will be retained for the duration of its lifespan.

Apparatus	Year of Purchase / Replacement	Description	Change from current Capital plan
Pumper/Rescue	2020/2040	Retained	0
Tanker	2011/2031	Retained	0
Rescue Van	1994/2022	Retired	-\$500,000
Squad	2022/2042	Purchase	+\$70,000
Net			-\$430,000

GRAND BEND

Grand Bend Station currently operates a Pumper, Rescue, Tanker, and a Squad. The current Rescue Truck is scheduled for replacement in 2028. This vehicle will be replaced.

Apparatus	Year of Replace / Purchase	Description	Change from current Capital plan
Pumper	2014/2034	Retained	\$ 0
Tanker	2018/2038	Retained	\$ 0
Rescue Van	2008/2028	Replaced	\$ 0
Squad	2020/2040	Replaced	\$ 0
Net			\$ 0

NORTHVILLE

Northville Station currently operates a Pumper and Rescue. The Pumper is scheduled for replacement now and will be replaced in 2022 with a pumper/tanker/rescue combination. The Rescue will not be replaced in 2025, however a significantly less expensive “Squad” pickup truck will provide more utility for station response.

Apparatus	Year of Replace / Purchase	Description	Change from current Capital plan
Pumper	1999/2022	Retired	-\$550,000
Pumper//Tanker/Rescue	2022/2042	Purchase	+\$700,000
Rescue	2005/2025	Retired	-\$500,000
Squad	2025	Purchase	+\$70,000
Net			-\$280,000

FOREST

Forest Station currently operates a Pumper, a Rescue Pumper, and a Squad. The Pumper is scheduled for replacement in 2024. This truck will be replaced with a “Ladder Truck” with capabilities of a pumper and transporting heavy rescue equipment. In the master Fire Plan, they referred to this as a “Pumper Rescue with elevated master stream capability”.

Apparatus	Year of Replace / Purchase	Description	Change from current Capital plan
Pumper/Tanker/Rescue	2013/2033	Retained	\$ 0
Pumper	2003/2024	Retired	-\$600,000
Pumper/Ladder	2023/2043	Purchase	+\$1,400,000
Squad	2013/2033	Retained	\$ 0
Net			+\$800,000

THEDFORD

Thedford Station Currently operates a Pumper/Rescue, Rescue and Tanker. The recently replaced Thedford Pumper was configured to perform both the pumper and rescue operations, thus eliminating the need for a replacement rescue truck. The current Rescue truck is currently scheduled to be replaced in 2028. It will not need to be replaced. The current Tanker is scheduled for replacement in 2022. This unit was purchased used and has been upgraded to remain serviceable. The Tanker will be maintained until not economically feasible or reliable at which point it will be retired and replaced by the tanker now located in Arkona. At the time that either the tanker or rescue is retired, a significantly less expensive "Squad" type pickup truck will be purchased to provide more utility for station response.

Apparatus	Year of Replace / Purchase	Description	Change from current Capital plan
Pumper/Tanker/Rescue	2018/2038	Retained	\$0
Tanker	2001/2022	Retired	-\$400,000
Rescue	2003/2028	Retired	-\$500,000
Squad	2023	Purchase	+\$70,000
Net			-\$830,000

SUPPORT VEHICLES

Pick-ups support the Fire Master Plan proposed new response model. Additionally, these vehicles provide operational assistance, move firefighters to emergency scenes, and support training/public education initiatives. The use of these vehicle provides for the ability for rapid response "skid units" for off road, field and wildfire emergencies. Pickup trucks are additionally capable of moving trailers with specialized response equipment such as an ATV, portable pumps, or spills mitigation materials as may be required.

Over the next 10-year an addition of Support Vehicles in accordance with the proposed plan would result in an increase cost of \$210,000.

Apparatus	Year of Replace / Purchase	Description	Change from current Capital plan
Support Vehicle	2022	Purchase	+\$70,000
Support Vehicle	2022	Purchase	+\$70,000
Support Vehicle	2022	Purchase	+\$70,000
Net			+\$210,000

NET CAPITAL PROJECTION

The proposed plan would result in a reduction of “major apparatus” from 13 to 11 apparatus in the first 10 years, and a further reduction to 7 total apparatus at the end of the 20-year replacement cycle. Financial indicators used within this staff report utilize 2021 replacement values.

Over the 10-year replacement of major apparatus in accordance with the proposed plan would reduce the capital expenditures of major apparatus from the current value of \$4,220,000 to 3,000,000. This results in a \$1,220,000 reduction in costs.

Summary

Station	
Arkona	-\$430,000
Grand Bend	\$0
Northville	-\$280,000
Forest	\$800,000
Thedford	-\$830,000
Support Vehicles	\$210,000
TOTAL	-\$530,000

The Net savings to implement this plan for the next 10-years is projected to be \$530,000, and so remains achievable within the current level of annual contributions to capital reserve.

Operationally the result would be:

- Maintain the number of apparatus capable of pumping.
- An increase in tanker availability with a small increase to the total water carrying capacity.
- Addition of a ladder apparatus with elevated features
- Maintaining of 5 vehicles with basic extrication capabilities while maintaining 2 apparatus with specialized extrication equipment.

ALTERNATIVES TO CONSIDER

This report is provided to illustrate implementation of fleet related recommendations from the Fire Master Plan. Council may decide not to accept staff’s illustration and request alternatives.

This report also seeks approval to advance the purchasing process for the new combination pumper unit for the Northville area, understanding that the \$550,000 approved for the purchase of a pumper in 2021 will need to be increased by up to \$150,000 in the 2022 capital budget.

RECOMMENDED ACTIONS

THAT Report FES 04-2021 “Lambton Shores Fire and Emergency Services 10 Year Vehicle Capital Plan” be received for information; and

THAT this plan be used to inform recommendations for the future capital purchase of fire vehicles at the time of Council's annual budget consideration; and

THAT the 2021 approved purchase of a replacement Pumper be revised to specify a multi-purpose Pumper/Tanker/Rescue unit.

FINANCIAL IMPACT

Based upon the illustrated 10-year vehicle replacement plan; there is an overall savings of \$530,000.

CONSULTATION

Fire Master Plan
Fire Service Station Chiefs, and other key members.