

**The Corporation of the City of Kawartha Lakes**  
**Council Report**

**Report Number FIRE2017-003**

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**Date:** November 14, 2017

**Time:** 2:00 p.m.

**Place:** Council Chambers

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**Ward Community Identifier:**

**Subject: Fire Truck Specification Review**

**Author Name and Title: Andrew Veale, Councillor**  
**Mark Pankhurst, Fire Chief**

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**Recommendation(s):**

**RESOLVED THAT** Report FIRE2017-003, **Fire Truck Specification Review**, be received;

**AND THAT** Council endorses the recommendation of the Fire Truck Specification Review Committee to continue with the purchase of City of Kawartha Lakes fire trucks to the current edition of the NFPA1901 standard including the items outlined in Table 1 of report FIRE2017-003;

**AND THAT** the Fire Truck Specification Review Committee be dissolved as it has completed its mandate.

**Department Head:** \_\_\_\_\_

**Financial/Legal/HR/Other:** \_\_\_\_\_

**Chief Administrative Officer:** \_\_\_\_\_

## **Background:**

At the Special Council Meeting of December 10, 2015, Council adopted the following resolution:

CR2015-1373

RESOLVED THAT given the Fire Chief has indicated that there will be no further fire truck purchase requests until 2019, with the exception of an aerial truck; THAT the Fire Chief be directed to review and modify fire truck specifications for a more affordable standard that can be manufactured in Canada; and

THAT the Fire Chief provide a report to Council on this issue prior to any further tanker, pumper or combination truck budget requests.

This report addresses that direction.

## **Rationale:**

The fire truck specification review committee consisted of the following members:

Andrew Veale, Councillor (Committee Chair)  
Andy Letham, Mayor  
Gerard Jilesen, Councillor, Volunteer Firefighter  
Mark Pankhurst, Fire Chief  
Ron Raymer, Deputy Fire Chief  
Bill Lockwood, Platoon Chief  
Dan Golde, Volunteer Firefighter  
Steve Rendell, Volunteer Firefighter  
Mike Cooper, Emergency Vehicle Technician  
Brenda Stonehouse, Strategy and Performance Specialist  
Valerie Knights, Executive Assistant

The objectives of the Fire Truck Specification Review Committee as stated in the terms of reference are as follows:

The Fire truck Specification Review Committee shall review the Kawartha Lakes Fire Rescue Service fire truck specifications to:

- Ensure that the City's Fire Service truck specifications upholds the legislated requirements under the *Provincial Fire Protection and Prevention Act (FPPA)*, NFPA 1901 and CANULC-S515,
- Ensure standardization of the fire truck fleet,
- Ensure the fire truck specifications meet the department's requirements to support suppression of fires and mitigation of other hazardous situations,
- Ensure the Fire Services capability to transport personnel and equipment for fire suppression and other hazardous situations.

It was discussed at the first meeting that standardization of the fire truck fleet refers to:

- Similar truck in all stations for a familiarity point of view from an operational standpoint (Occupational Health and Safety issue and Training Concern)
- Compartment/equipment similarity established through performance management greenbelt projects (Occupational Health and Safety issue and Training Concern)
- Truck movement/placement from station to station

At the first meeting several fire trucks were available for viewing by the committee members. Fire trucks with both chassis styles (custom and commercial) were available for viewing for the committee members to see the differences and ask questions. The main difference between the custom and the commercial chassis is built in safety features for the driver and passenger (roll protection) and maneuverability on the roads.

There are no longer any commercial or custom cab and chassis manufacturers in Canada. There are several fire truck body manufacturers in Canada that are mounted to either custom or commercial cabs and chassis. All of the previous fire truck tenders have been awarded to Canadian fire truck manufacturers however there may be a chance that portions of these builds may be sublet to American manufacturers of which is beyond our control.

The Kawartha Lakes Fire Rescue Service follows NFPA1901: Standard for Automotive Fire Apparatus for the specifications for new fire trucks. The NFPA 1901 standards undergo revisions every five years based on real-world incidents in order to provide better safety and effectiveness of fire prevention equipment. Updated standards define the minimum safety requirements for new automotive fire apparatus designed to be used under emergency conditions for transporting personnel and equipment, and to support the suppression of fires and mitigation of other hazardous situations.

The committee members, through consensus endorse the continuation of fire truck purchase specifications to the NFPA1901 standard.

The 6 items that are optional above the NFPA specifications were reviewed at the June 13, 2017 meeting and are itemized below in Table 1.

**Table 1**

ITEM	PROS/CONS	CONSENSUS
Trash Line	<p>This line is used for 90 percent of fires; it is fast and convenient deployment, out of the way of the pump operator.</p> <p>In Lindsay it is the most used line, Lindsay runs with smaller crews and the trash line is ground level, don't have to climb up on hose beds, easy to rebed – roll and stack, hooked into foam system for car fires.</p> <p>Emily always uses the cross lays, the trash line is not used in Emily and they didn't use to have this line on their trucks.</p> <p>Omemees uses the trash line for everything other than interior fire attack (car fires, dumpster fires, etc.)</p>	Keep in specifications
Second VMUX screen	<p>This was added to the spec as there used to be one screen that was swiveled between the driver and the passenger but this would break wires.</p> <p>Used to change climate control, open door warning, change lights.</p> <p>One screen on the swivel is easier to have someone other than the driver operating the screen; driver would have to know where everything is to operate it.</p> <p>The truck is usually pre-set at the start of the shift, driver is responsible for it, and the lights are on the main master screen.</p> <p>Need to have a passenger to run the second screen.</p> <p>Addressed through a standard operating guideline. It is up to the driver as to what is on.</p>	Remove from specification

ITEM	PROS/CONS	CONSENSUS
V-Mux Wiring Harness	Cost of V-Mux wiring is less than traditional wiring. Easier to diagnose issues with controls throughout the truck with V-Mux wiring.	Keep in specifications
Zico access ladder	Safer way up and down without having to feel for steps that may or not be in alignment.	Keep in specifications
Roll up compartment doors	Roll up doors are easier to get equipment out of and access. Safer when on a roadway in a live lane before roadway is closed.	Keep in specifications
Auto lubrication systems	This is one of the best options to have. The trucks always have weight on them and to try to manually grease is difficult. This option reduces maintenance costs of the vehicle.	Keep in specifications

Used Fire Truck Option

The task force reviewed the option of purchasing used fire trucks. Research was completed on the type of used trucks that are currently available and the cost.

The used trucks that were available do not comply with the current standardization specifications for a Kawartha Lakes truck. Although some items can be added or changed after purchase, if major items such as tank size and pipe threads are different then it would be cost prohibitive to do so.

There is the chance that the used trucks may not meet the current NFPA 1901 standard. Some standards can be grandfathered; others need to be brought up to standard when the truck is sold. As the task force has endorsed that Kawartha Lakes Fire Rescue Service trucks must meet current NFPA standards, purchasing a used truck would not comply with this requirement.

Used trucks were purchased in some municipalities prior to amalgamation. A truck in Fenelon was purchased from a large GTA Fire Service and required \$80,000 worth of work in order to make it road worthy.

Kawartha Lakes Fire Rescue Service currently recirculates trucks through the stations moving them to less busy stations to extend the life cycle. The Fire Service has 14 trucks that have been reassigned to stations that run fewer calls.

Over 25% of the fleet is made up of trucks that have been moved through the halls to extend their life. (See Appendix D – Reassigned Truck List)

The Fire Service is encouraged to continue reassigning trucks through the halls to extend their life cycle. The availability and suitability of used or demonstration fire trucks will be explored when there is a need to purchase a fire truck.

Leased Fire Truck Option

It is possible to lease a fire truck that has been built to Kawartha Lakes standards. The cost of the lease would be \$7,503.05 per month plus \$975.00 HST for a total of \$8,478.45 per month for 60 months. If the truck is not purchased at the end of the lease, the lease would cost \$508,707.00. The last tender that was awarded for a fire truck in 2016 was \$626,997.45.

Leasing does provide the opportunity to have a standard truck built with the city specifications however consideration needs to be given to the costs incurred to replace a truck every five years versus every 20 years.

Costs Avoided by 5 year replacement of trucks

	Pumper	Tanker
Year 6 to 10	\$ 6,900	\$ 8,900
Year 11 to 15	\$13,500	\$17,800

Costs Incurred by 5 year replacement of trucks

Decaling every 5 years	\$ 2,100
Undercoating every 5 years	\$ 500
Firefighter Training (OH&S requirement) 4 hours X 15 firefighters=	\$ 1,313
Taking truck out of service, Putting new truck in service 15 firefighters X 8 hours=	\$ 2,626
Remove and replace radios	\$ 1,000
Emergency Vehicle Technician Delivery Inspection – 35 hours=	\$ 3,500

Currently the trucks are funded through the fleet reserve with the appropriate portion funded through Development Charges. Development Charges can still be utilized through a lease as long as the capital portion of the payment is identified. In the past, trucks have been funded through debenture.

Although leasing does provide some limited cost avoidance opportunities, the costs incurred for of leasing a truck for 20 years would be approximately \$2,078,988 vs. \$626,997.45 for purchasing the truck outright from new.

## **Relationship of Recommendation(s) To The 2016-2019 Strategic Plan:**

This report is in alignment with the City's Strategic Plan with respect to effective asset management. This report ties in with Enabler 4 of the 2016-2019 Strategic Plan, Efficient Infrastructure and Asset Management.

## **Consultations:**

Fulltime and Volunteer Firefighters

## **Attachments:**

Appendix A – Terms of Reference



Terms of  
Reference.doc

Appendix B – Minutes of Meeting May 16, 2017



May 16 2017  
meeting minutes.docx

Appendix C – Minutes of Meeting June 13, 2017



June 13 2017  
meeting minures.docx

Appendix D – Reassigned Truck List



Reassigned Truck  
List.docx

**Department Head E-Mail: [mpankhurst@kawarthalakes.ca](mailto:mpankhurst@kawarthalakes.ca)**

**Department Head: Mark Pankhurst**