

Municipality of Lakeshore – Report to Council

Community Health and Safety

Fire Services



To: Mayor and Members of Council
From: Jason Suchiu – Fire Chief
Date: February 14, 2025
Subject: 2025 Fire Department Radio System Lease Agreement Extension

Recommendation

Approve the capital funding of \$46,000 + HST to be taken from the Fire Department Radio System Replacement Reserves; and

Direct the Clerk to read By-law 23-2025, being a by-law to authorize an agreement with Prairie Communications Ltd. operating as KELCOM Radio Solutions, during the Consideration of By-laws, all as presented at the March 25, 2025 Council meeting.

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 intent of this report is to provide some insight on the fire service radio system history, the challenges moving forward, the work being done to investigate collaborative options, and the need to extend the expiring radio lease agreement for another 3 years into February 2028.

From 1962 through to the early 2000s most of the Essex County fire departments communicated on one VHF radio channel that was used for both pager activation and two-way radio communications. Multiple fire departments responding to concurrent emergencies created confusion, radio congestion and safety concerns with only one channel to share.

Following amalgamation in 1999, a Regional Radio System Advisory Committee was established to review options and costs for a multi-channel, interoperable radio system that would allow fire services county wide to communicate on the same radio system while still maintaining their own operating channels. While this study was occurring,

some departments decided to stay with their own systems (Leamington, Kingsville and LaSalle). Recognizing that if Lakeshore had its own VHF system at the time, 100% street level radio coverage across the municipality could not be provided. As well at the time firefighter pager activation was inconsistent based on our geographical area location and staff responding could not hear or communicate because signal coverage was limited.

In 2006, KELCOM initiated their 400 MHz regionwide radio and paging system. Four county fire services (Lakeshore, Amherstburg, Essex and Tecumseh) agreed to connect to this six radio tower site system that provides overall geographical signal coverage for their user areas. This required a 10 year commitment from the participating fire services for KELCOM to invest in the radio infrastructure.

In 2013, KELCOM upgraded their network equipment with the technology of the day. In 2016, 2019 and 2021, lease agreement extensions were approved by Council with the last extension expiring in February 2025.

In 2025, KELCOM will replace existing radio infrastructure within the six tower sites with the newest technology upgrades and that system continues to have capacity for additional user groups. Essex, Tecumseh, Amherstburg and Lakeshore fire services continue to use the system today with Leamington Fire Service connecting to the system this year.

Comments

Lakeshore is the most disadvantaged in that our geographical size and signal coverage challenges are not experienced to the same degree by other municipalities. The current KELCOM tower placements across the region provide us with the regional paging and network radio coverage our volunteer firefighting staff need as they travel around Essex-Windsor and throughout the Lakeshore area. There are benefits of a cost shared system that provides geographical coverage and ability to talk to other fire services and the dispatch center on the same radio network.

There are ongoing discussions regarding the direction the fire service radio communications may go in the future however there is uncertainty of timelines for other options as well there is no concrete costing. Currently the City of Windsor operates their own 800 MHz radio system network through two radio tower sites that provides them with the necessary coverage area. Their geographical signal coverage area extends to approximately one third of the western portion of the Essex-Windsor region. A third site is currently under construction in Amherstburg for Windsor Police Service coverage. Once police services are operational, Amherstburg Fire will transition off the regional 400 MHz radio system onto the City's 800 MHz system. Based on the limited signal coverage area of the 800 MHz system, as well as infrastructure, equipment and airtime costs, there is no intent for other fire services to leave the 400 MHz system for the next three years.

Lakeshore's best option is to extend our current radio system agreement and invest in hardware upgrades (radios) and continue with the other county fire service users

(Essex, Tecumseh, and Leamington) on the upgraded KELCOM system for another three-year lease extension.

In 2020 Council approved \$100,000 in reserves in preparation for the fire radio network/hardware modernization. Additional, reserve requests will be brought forward in future budgets as Administration continues to evaluate and discuss with our regional partners a long term solution beyond 2028.

Others Consulted

Tim Schweyer – Service Director Kelcom Radio
Town of Essex Fire Chief Jason Pillon
Town of Leamington Fire Chief Don Williamson
Town of Tecumseh Fire Chief Wade Bondy

Financial Impacts

The following is a one-time capital investment purchase cost to upgrade the existing radio equipment.

Hardware Purchase

Quantity	Item	Total Price Per Unit (excluding HST)	Total Purchase Price (excluding HST)
20	UHF Portable Radios	\$699.00	\$13,980
20	UHF Portable Speaker Mics	\$130.00	\$2,600
19	UHF Mobile Radios	\$599.00	\$11,381
8	UHF Base Radios	\$599.00	\$4,792
8	VHF Mobile Radios	\$1,350.00	\$10,800
25	Upgrades to existing UHF Portable Radios	No Cost	No Cost
			\$43,553

Contingency		\$2,447
Sale of Existing Equipment	No resale value	\$0
Total Upgrade Cost		\$46,000

Radio Monthly Fees

The monthly airtime fee for each active UHF two-way radio unit (Base, Mobile and Portable) on the system will be \$41.00 instead of the current \$39.00.

Paging Monthly Fees

The monthly fee for paging support will be a flat rate of \$1179.20 instead of the current rate of \$1072.00 per month.

By extending the Master Digital Radio System Contract there will be a slight increase in radio and paging airtime for 2025 to \$35,424.00 for radio airtime and paging airtime of \$14,150.40. There are no operating budget impacts as the combined total of \$49,574.40 remains below the budgeted amount of \$67,900.

Report Approval Details

Document Title:	2025 Fire Department Radio System Lease Agreement Extension.docx
Attachments:	
Final Approval Date:	Mar 12, 2025

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

Prepared by Jason Suchiu

Submitted by Frank Jeney

Approved by the Corporate Leadership Team