

To: COUNCIL
Meeting Date: 10/22/2024
Subject: Fire Dispatch Agreement
Submitted By: Rob Martin, Fire Chief
Prepared By: Rob Martin, Fire Chief
Report No.: 24-053-CRS
File No.: 2024-FIR-06
Wards Affected: All Wards

RECOMMENDATION(S):

THAT Report 24-053-CRS Fire Dispatch Agreement be received;

AND THAT the Mayor and Clerk be authorized to execute the Agreement with the City of Kitchener Fire Department in a form set out in Appendix “A”.

EXECUTIVE SUMMARY:

Purpose

- Upon the conclusion of the four-year transition contract which consolidated Fire Dispatch Services in the Region of Waterloo. The Cambridge Fire Department (CFD) entered negotiations with the Kitchener Fire Department (KFD) with the goal of improving and enhancing the current level of service provided by KFD Dispatch and reducing annual fees to match market pricing.
- The agreement has achieved both objectives while maintaining interoperability between agencies and opening doors for additional service level improvements in the future, such as automatic aid, advanced vehicle location (AVL) dispatching and shared data analytics.

Key Findings

- An environmental scan indicated additional vendors have entered the dispatch services market, creating competition and advancing technology and industry services. Two providers were selected to engage with pricing and service comparisons. Remaining with KFD remains the recommended option, because of the proven service record, the higher service levels compared to other

options and the opportunities for increased integration in the future, despite KFD not having the lowest possible cost.

- Initial discussions and pricing from the alternative providers indicated that a more robust conversation with KFD Dispatch was needed.
- In addition to comparing service levels and prices, we reviewed the security and redundancy built into each provider's system. As critical infrastructures are becoming targets for both cyber and physical attacks, security and redundancy are critical to maintain our operations.
- The new KFD Dispatch agreement offers an enhanced level of service including Advanced Vehicle Location (AVL) Dispatching and Emergency Medical System Technology Interoperability Framework (EMS-TIF). This allows our resources to be dispatched based on the actual location of the closest available unit instead of by district and dispatches medical calls simultaneously instead in a consecutive tiered model. Neither of the other providers can currently offer this service.
- KFD Dispatch services are based on a cost-sharing model with other municipalities, and may decrease in the future, as other municipalities are serviced. It has been confirmed that another Fire Service has recently voted to contract services from KFD Dispatch and is currently in the transition process. It is also anticipated that another municipality will be joining the Waterloo Regional Police Service (WRPS) network to become a central dispatch. This change will create an infrastructure cost sharing model that will further the savings to all end users in the system.
- KFD Dispatch is embedded in the larger WRPS 911 system and therefore has the highest level of security and protection of all providers. Both WRPS and KFD have secondary backup dispatch centers creating multiple layers of redundancy over and above the other two providers.
- The new agreement includes a working group structure to improve sharing of business intelligence tools and analytics that will measure our performance and identify areas for improvement all while reducing the overall costs.

Financial Implications

- This agreement reduces the costs of fire dispatch services from an initial quote of \$140.00 per incident to \$95.00 per incident. At 10,000 calls per year that is a savings of approximately \$450,000.

- Staff recommend any savings realized be reallocated to offset service level enhancements, such as data analysis and contribution to capital equipment reserve funds.

STRATEGIC ALIGNMENT:

Strategic Action

Objective(s): Not Applicable

Strategic Action: Not Applicable

OR

Core Service

Program: Fire Services

Core Service: Communications

BACKGROUND:

Dispatch Services are a critical component to our emergency response system. They are required to process emergency calls and dispatch appropriate resources to the scene as quickly as possible.

In an in-camera meeting of May 28, 2012, Council directed staff to develop an implementation plan for consolidated dispatch and that the plan be brought to Council for consideration.

The 2014 Kimball Report recommendation of a common technology platform for Police and Fire dispatch was supported at the June 2014 All Council Meeting as the first step towards establishing a fully integrated emergency dispatch center. This report provides three options for adoption of a common Intergraph Computer Aided Dispatch (CAD) technology platform.

In January 2017, the CAO's and public safety leaders from Waterloo Region, and municipalities of Kitchener, Cambridge and Waterloo, convened to expedite implementation of a common technology platform for Police and Fire dispatch, as the first step forward in establishing a fully integrated emergency dispatch center.

The initiative was to have the Fire Communications centers of Cambridge and Kitchener migrate to the Intergraph CAD platform used by WRPS by the end of Q3 2018. In this model, the Intergraph CAD system used by WRPS was expanded to support the dispatch operations of the Cambridge and Kitchener fire departments.

A four-year transition contract was executed on March 25, 2019, and expired December 31, 2023.

Upon the conclusion of the four-year transition contract which consolidated fire dispatch, CFD entered negotiations with KFD. Dispatch services continued under a cost per call basis.

ANALYSIS:

- In September 2023, CFD gave notice to the City of Kitchener as required by the agreement to terminate the four-year transition contract and re-negotiate a fee for service contract, similar to the agreements of the other five fire services within the region.
- In the interest of due diligence, CFD engaged with two additional Dispatch Service Providers to seek service level and price comparisons.

1. Provider A

Provider A is a fulltime full-service Fire Department that provides dispatch services to other municipalities in Ontario. Their employees are unionized under the International Association Fire Fighters (IAFF) and the dispatch services are guided by the National Fire Protection Association (NFPA) standards.

Although the estimated costs in the initial year of the contract were substantially below the price paid in 2023 to KFD, they are similar to the KFD price quoted for 2024. Yet, the subsequent years of the contract have significant increases (4% per annum) and the agreement required a 15-year commitment.

In order to obtain service enhancements such as AVL dispatching, our radios and mobile data terminals would need to be a part of another Regional Police Services Voice/Radio replacement plan. Given CFD is embedded in the Region of Waterloo Voice Radio infrastructure it is not feasible to transition our radios and MDT's, eliminating AVL dispatching as an option with this vendor. Additionally, hardware technology to patch WRPS Public Safety Answering Point (PSAP) to the new provider would require a one-time capital investment estimated at approximately \$475,000. Therefore, the overall package was not a preferred option.

2. Provider B

Provider B is a volunteer/paid-on-call department that also runs a dispatch centre for 27 other municipalities in Ontario. Their employees are not unionized as part of the IAFF. Due to the difference in salaries and scheduling between a non-unionized workforce and a unionized workforce, this provider was able to quote a substantially discounted price when compared to the costs incurred in 2023 from KFD. However, as the only fire dispatching provider in the province that is non-union, the risk of unionization changing the business model is high. CFD would be the largest municipality this provider would serve, over twice the size as any of the other municipalities they currently serve. This provider currently manages approximately 10,000 calls per year from a total of 27 municipalities. There are concerns that they would not have the capacity to handle the approximately 10,000 calls per year that our department receives as this essentially doubles their workload.

A review of the municipalities this provider currently serves highlighted that CFD would be their first fire department staffed with only fulltime career firefighters. There are often substantial differences in services provided to the community between a fulltime fire department and a paid-on-call fire department. For example, CFD provides technical rescue services for Water, Ice, High Angle (rope), HazMat, Confined Space, Trench and Structural Collapse as outlined in our services by-law. The Standard Operating Guidelines required to provide these services are detailed and require an understanding of the complexities of the rescue operations. Dispatchers are required to remain actively engaged in the emergency response and often provide scribe duties and benchmarking. Additionally, they are integral in the emergency accountability system tracking on-air times and radio communications to the incident commander. These unique requirements could present a substantial learning curve for their dispatch staff and possibly create safety concerns for our staff.

As with provider A there are also initial one-time set up costs and capital investments required estimated at approximately \$475,000.

3. Recommended Provider C (KFD)

Kitchener Fire Dispatch is a fulltime full-service Fire Department that provides dispatch services to eight other municipalities including

Cambridge Fire Department. Their employees are unionized under the IAFF and the dispatch services are guided by the NFPA standards.

Through discussions with KFD and Kitchener Corporate Leadership, an agreement was reached to look at all technological advancements and review process enhancements in order to reduce response times, reduce duplicated response and improve situational awareness for frontline responders. As well as seek opportunities to share data, analytics and review borders where automatic aid agreements would significantly improve response times without adding additional fire stations and review cost sharing models to reduce overall costs. The following are features included in the new agreement.

Enhanced level of service provided in the new agreement:

- a. Advanced Vehicle Location (AVL) Dispatching. Utilizing AVL to dispatch resources ensures we are sending the closest unit to the emergency scene, reducing response times and the need for cross district travel. This allows CFD to both enhance its service response times and to lower costs.
- b. With the advancement of Emergency Medical System Technology Interoperability Framework (EMS-TIF), it replaces the previous pre-alert system and provides advanced notification of the incoming calls during the processing at the PSAP.
- c. Data sharing will be explored to identify areas where automatic aid agreements will be of mutual benefit. Automatic aid agreements can provide an improved level of service to the residents of Cambridge without the need to build additional fire stations.
- d. Status monitors will be installed in all stations to provide immediate situational awareness for responding crews, as well as tracking our key metrics such as turn-out times and travel times.

Compared Dispatch Services

- Service Features and Support

Compared Dispatch Services	Provider A	Provider B	Provider C
Minimum Term of Contract	15 years	5 years	4 years
Level of Service	NFPA 1225	NFPA 1225	NFPA 1225
NG911 Compliant	Yes	Yes	Yes
Advanced Vehicle Locator Dispatching	Not an option	Not an option	Included in this agreement
Analytics Support	Fee based	Not an option	Included in this agreement
6-Month Transition Period Required	Yes	Yes	No
Operational Benefits	No	No	Yes. Whether through mutual aid or as demonstrated during a recent river rescue/search, interoperability is a critical safety feature that benefits both the residents we serve and the first responders.
Capacity	Yes	Uncertain	Yes
Future Collaborations	N/A	N/A	Automatic Aid agreements have been discussed in the course of the negotiation with the intent to improve service response times and control the need to build new fire stations.

- Financials

Compared Dispatch Services	Provider A	Provider B	Provider C
Annual Price Quoted	\$846,426 with 4% increase annually	\$419,677	\$950,000 Additional cost savings are anticipated as other municipalities join the network.
Additional Infrastructure Required	Yes (\$475,000 one-time)	Yes (\$475,000 one-time)	No
Transition costs	Duplicated service overlap for 6 months	Duplicated service overlap for 6 months	No

EXISTING POLICY / BY-LAW(S):

There is no existing policy/by-law.

FINANCIAL IMPACT:

- This agreement reduces the costs of fire dispatch services by approximately \$450,000.
- Staff recommend any savings realized be reallocated to offset service level enhancements, such as data analysis and contribution to capital equipment reserve funds.

PUBLIC VALUE:

Collaboration:

- This agreement involves collaboration between the Cambridge Fire Department and Kitchener Fire Department to achieve common goals of safe and healthy cities. With this agreement we create opportunities to share common resources and/or support each other in under resourced areas. The new agreement coordinates the sharing of shared data, analytics and will review borders where

automatic aid agreements would significantly improve response times without adding additional fire stations and will review cost sharing models to reduce overall Fire Department costs.

ADVISORY COMMITTEE INPUT:

Not Applicable

PUBLIC INPUT

Posted publicly as part of the report process.

INTERNAL / EXTERNAL CONSULTATION:

There was no internal/external consultation undertaken.

CONCLUSION:

Our goal was to find and negotiate Fire Dispatch Services that provided the best value for the City of Cambridge. To do this we considered public safety, firefighter safety, security and redundancy, short term and long-term expenses and lastly the broader picture of interoperability with other emergency services in our region.

We were successful in negotiating service enhancements that will support faster response times to the residents we serve, sharing of business intelligence tools and analytics that will measure our performance and identify areas for improvement all while reducing the overall costs.

In future years when WRPS open their Communications Centre, Waterloo Regional Paramedics may co-locate, and Kitchener Fire is networked through this 911 PSAP. Signing this four-year agreement allows CFD the opportunity to be part of the discussions and receive all the interoperability benefits that could come from a co-location.

Lastly, this agreement opens the door to begin dialogue about automatic aid agreements in the areas of Cambridge and Kitchener where our respective response times fall well short of the industry standard. If successful, it could reduce the need for additional staff or stations required beyond 2033.

Although other options may at first glance appear to be cheaper, the new agreement offers an improved level of service over the level of services offered by either Provider A or Provider B, and the limitations within the services offered by Provider A and B may, in fact, compromise CFD's ability to service the community. Accordingly, staff recommend signing the new agreement with KFD.

REPORT IMPACTS:

Agreement: **Yes**

By-law: **No**

Budget Amendment: **No**

Policy: **No**

APPROVALS:

This report has gone through the appropriate workflow and has been reviewed and or approved by the following as required:

Director

Deputy City Manager

Chief Financial Officer

City Solicitor

City Manager

ATTACHMENTS:

1. 24-044-CRS Appendix A – 2024-2027 Fire Dispatch Agreement.