



SUBJECT: Fire Dispatch Services - Town of Halton Hills

TO: Committee of the Whole

FROM: Fire Department

Report Number: BFD-02-18

Wards Affected: Not applicable.

File Numbers: 755-05

Date to Committee: July 9, 2018

Date to Council: July 16, 2018

Recommendation:

Authorize the Mayor and City Clerk to sign a tri-party agreement for the City of Burlington to provide fire dispatch services to the Town of Halton Hills, subject to the satisfaction of the City Solicitor; and

Authorize the Fire Chief to procure capital infrastructure, in accordance with the city's Procurement By-law, estimated at \$200,000 with 100% recovered from the Town of Halton Hills.

Purpose:

A City that Grows

- Promoting Economic Growth
- Focused Population Growth

An Engaging City

- Good Governance

City of Burlington senior fire staff are recommending council approval to enter into a tri-party agreement for the City of Burlington fire department to provide fire dispatch services to the Town of Halton Hills and continue to provide fire dispatch services to the Town of Oakville.

Acronyms and Definitions:

- AHJ - Authority Having Jurisdiction. An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.
 - APCO – Association Public-safety Communications Officials is an international leader committed to providing complete public safety communications expertise.
 - CRTC - Canadian Radio-television and Telecommunications regulates the telecommunications carriers who supply the network needed to direct and connect 9-1-1 calls to 9-1-1 public safety answering point (PSAPs).
 - E911 (Enhanced 911, E-911 or E911) is a system used in North America to automatically provide dispatchers with the location of callers to 911, the universal emergency telephone number in the region.
 - FPPA – Fire Protection and Prevention Act.
 - IP – (Internet Protocol) phone technology uses voice over IP technologies for placing and transmitting telephone calls over an IP network, such as the Internet, instead of the traditional public switched telephone network (PSTN).
 - NG911 (referenced as Next Generation 911) will enhance emergency number services by creating a faster, more resilient system that will allow for digital information using IP technology to communicate by voice, photo, video or text message through the NG911 network infrastructure.
 - PST – Public Safety Telecommunicator (commonly referenced as dispatcher)
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Background and Discussion:

Background:

Municipalities are authorized by subsection 2(5) of the *Fire Protection and Prevention Act* S.O. 1997 Chap. 4 to enter into agreements with other municipalities to provide and to receive fire protection services, and section 20 of the *Municipal Act, 2001*, S.O. 2001, Chap 25. to enter into an agreement with one or more municipalities. The provision of dispatch services has been recognized by the Office of the Fire Marshal and Emergency Management (OFMEM) Public Safety Guideline PFSG 04-09-12 as a fire protection service that can be provided to a participating municipality through an established agreement, in accordance with the authority granted under both Acts.

In 2002, all four (4) of the Halton Region fire departments City of Burlington (“Burlington”), Town of Oakville (“Oakville”), Town of Halton Hills (“Halton Hills”) and the

Town of Milton (“Milton”) explored the possibility of amalgamating their respective fire dispatch centres into one (1) centre to achieve resource and cost efficiencies. Following the conclusion of this study, Burlington and Oakville amalgamated their fire dispatch centres into a single centre, through a formalized service agreement (BFD-05-02). The Burlington fire department became the host department providing dispatch services to Oakville. Halton Hills and Milton indicated that they were not prepared to proceed at that time. However, an open invitation was extended in the event that either municipality was interested in participating in the future. For the past 16 years, Oakville and Burlington have re-established the fire dispatch agreement for a term of five-years at a time; the current Fire Dispatch Agreement (BFD-05-16) term is 2016 to 2020. Both Burlington and Oakville’s respective councils have authorized the fire dispatch service agreements over the years.

In May 2017, Halton Hills approached the Burlington fire department to explore the possibility of Burlington fire department providing fire dispatch services to Halton Hills. In November 2017, Council approved confidential report (BFD-03-17) for Burlington to enter into discussions to execute a fire dispatch agreement with Halton Hills, whereby Burlington fire department will provide fire dispatch services to Halton Hills. As part of these discussions, staff committed to seeking mutual benefits, operational and cost efficiencies through these discussions and to provide information in a subsequent report, hence this report.

Discussion:

Following respective Council’s approvals, Burlington and Halton Hills senior fire staff started discussions focusing on the logistics for the provision of fire dispatch services to be provided to Halton Hills. These discussions included operational and technology requirements, staffing needs, costs and associated cost recoveries for the initial implementation and ongoing requirements.

Respectfully, Oakville was informed at this time that both Burlington and Halton Hills had received respective council approvals to start discussions for Burlington to provide fire dispatch services to Halton Hills. Oakville senior city staff requested that separate discussions be coordinated between all parties (Oakville, Halton Hills and Burlington) to agree to terms and conditions for Halton Hills to be added as a party and a tri-party agreement be established. The current Agreement between Burlington and Oakville has a contractual clause that states;

“No person may be added as a party to the Agreement without the consent of the Town of Oakville and only on such terms and conditions as are agreed to by both parties.”

It was necessary to have all parties agree to the terms and conditions of a new tri-party agreement, which was successfully undertaken and completed on May 31, 2018.

Tri-party Agreement 2018

To establish a new tri-party agreement, Burlington senior fire staff worked with Burlington legal to draft a new tri-party agreement using the current 2016 Fire Dispatch Agreement, between Burlington and Oakville, as a draft starting point. Discussions took place between the Fire Chief and legal representation from each of the three (3) municipalities (Oakville, Halton Hills and Burlington) to establish the new tri-party agreement. All parties have agreed to the tri-party agreement that is being recommended in this report, and is attached as Appendix A. The newly established tri-party (2018-2022) Fire Dispatch Agreement will be signed and distributed between all parties following Council's approval of the recommendations provided in this report.

The new tri-party agreement echoes the current agreement between Burlington and Oakville and has only been changed as follows:

- Town of Halton Hills has been added as a party to the Agreement,
- Each party (Oakville, Halton Hills and Burlington) has been identified as a Participating Municipality,
- Halton Hills will join the existing Senior Joint Operating Committee, which supports input into standard operating guidelines and performance for the Burlington fire dispatch centre,
- Cost recovery model has been altered to break out human resource, operating and capital costs, which is provided in more detail in confidential Appendix B and the financial section of this report,
- A section was added to outline that Burlington may add any other municipality or entity to the Agreement without the consent of any of the Participating Municipalities. This permits Burlington to consider any future requests/ opportunities to provide fire dispatch service to another municipality or entity in the future,
- A section was added to outline that Burlington will determine and maintain all technology hardware, software, devices, configuration and any related systems that are used to provide fire dispatch services, which ensures all technologies are structured by Burlington to ensure fire dispatch service delivery.

All other sections in the new tri-party agreement echo the existing Agreement between Burlington and Oakville.

Benefits:

The benefits are provided in detail in this report and have been summarized in the bulleted points below.

- Shared operating costs.

- Future cost avoidance will be achieved for planned capital replacement items, new initiatives and mandatory 9-1-1 technology advancements (e.g. IP based Next Generation 911 (NG911) infrastructure).
- Having a fire communications centre that services three (3) of the four (4) municipal fire services within Halton Region will provide for greater regional situational awareness at any time. Shared information for mutual-aid and automatic-aid will also be better realized through a single communications centre set-up.
- Improved call routing process from the Primary Public Safety Answering Point (P-PSAP), which locally is the Halton Regional Police, and the Secondary Public Safety Answering Points (S-PSAP), which is based on the specific needs of the emergency call (e.g. ambulance or fire).
- Compliance with new Fire Protection and Prevention Act (FPPA) legislation changes for mandatory certification of Public Safety Telecommunicators (PST) that meet NFPA 1061 skill and knowledge requisites.
- The P25 emergency radio system provides inter-agency communication between all the municipal fire departments within the Region, a single dispatch centre servicing three (3) of the four (4) Regional fire departments supports improved emergency coordination occurring along municipal boundaries or during multi-jurisdictional emergency incidents (e.g. major weather events).
- The existing space and infrastructure within the City of Burlington fire dispatch centre was planned to allow for future expansion. Burlington fire can accommodate the operational requirements to provide dispatch services to the Halton Hills and continue to provide fire dispatch services to Oakville, without any deterioration to the service already being provided.
- Additional shared PST support during major and/or multi-jurisdictional incidents.

Standards for Fire Communications Centre

In 2013, the OFMEM announced adoption of National Fire Protection Association (NFPA) Standards to Ontario fire departments. There are two (2) NFPA standards that outline best practice recommendations for the provision of fire dispatch services.

1. NFPA 1221 Standard for the Installation, Maintenance and Use of Emergency Service Communications Systems. This standard applies to communications systems that support emergency dispatching systems, telephone systems, public reporting systems, one-way and two-way radio systems between the public and emergency response agencies, within a single emergency response agency, and between multiple jurisdictional emergency response agencies.
2. NFPA 1061 for the Standard for Professional Qualifications for Public Safety Telecommunications (PST) Personnel is the standard that identifies the minimum job performance requirements for personnel working in public safety

telecommunications role. This standard ensures that persons providing fire dispatch services are qualified to serve in public safety communications centers.

NFPA standards are revised and updated every three (3) to five (5) years, which may impact budget requirements in the future. Any costs that are required in the future based on revisions made will be shared between all parties.

New Fire Protection and Prevention Act (FPPA) Regulations

On May 8, 2018, the Minister of Community Safety and Correctional Services, signed and filed new Regulations made under the Fire Protection and Prevention Act (FPPA), one (1) of which outlines the mandatory certification of firefighters. The FPPA definition of a firefighter;

“means a fire chief and any other person employed in, or appointed to, a fire department and assigned to undertake fire protection services.”

As previously mentioned, the provision of fire dispatch services has been recognized by the OFMEM Public Safety Guideline PFSG 04-09-12 as a fire protection service.

This new legislation is a significant amount of work and additional cost for fire departments. The OFMEM certification program for public safety telecommunicators (PSTs) must be coordinated in all Ontario fire dispatch centres by January 1, 2020. Burlington fire dispatch centre PSTs are already certified as Fire Service Communicators through the Association of Public-Safety Communications Officials (APCO). APCO certification aligns to NFPA 1061, referenced above. This puts the Burlington fire dispatch centre in a good position to meet the new FPPA legislative and OFMEM certification requirements by the end of 2019. At this point in time, recertification to NFPA 1061 has not been communicated by the OFMEM; however, Burlington fire has already established that recertification every two (2) years will be required by all PSTs providing fire dispatch services in the Burlington fire dispatch centre, which will ensure staff skill and knowledge set remains current and aligned to any NFPA standard changes.

This statutory requirement would have placed an operational and financial burden on all three (3) participating municipalities, had they remained with separate dispatch centres. The proposed consolidated model provides for future costs sharing opportunities.

CRTC Next Generation 911 (NG911) Directive

In 2016, the Canadian Radio-television and Telecommunications Commission (CRTC) announced its plans to modernize 9-1-1 networks to meet the public safety needs of Canadians. The CRTC regulates the telecommunications carriers who supply the network needed to direct and connect 9-1-1 calls to 9-1-1 public safety answering points (PSAPs). In the next five (5) years (2018-2023), telecommunications networks across Canada, including the networks used to make 9-1-1 calls, will transition to Internet

Protocol (IP) technology. In the Telecom Regulatory Policy CRTC 2017-182 decision, the Commission set out its determinations on the implementation and provision of NG9-1-1 networks and services in Canada. This change will require coordination and collaboration between telecommunications service providers, federal, provincial, and municipal governments; emergency responders; and PSAPs. While the CRTC has committed to covering costs for the 9-1-1 service providers infrastructure to all primary and secondary PSAPs, after that point all NG9-1-1 infrastructure costs will be the responsibility of a municipality. PSAPs are required to adapt and/or purchase technology that will support NG9-1-1 by 2023.

The fiscal impact to update technology infrastructure, to align to the CRTC's transition to IP networks, may be substantial for PSAP's. With an established tri-party agreement, these costs will be shared equally between Oakville, Halton Hills and Burlington, which will provide a cost avoidance benefit for all three (3) municipalities. Any required changes to infrastructure will be included in the Capital Budget and coordinated between all parties.

Options considered

There are two options for council's consideration;

1. Approve the recommendations to establish a new tri-party Fire Dispatch Agreement for fire dispatch services to be provided to Halton Hills and continue to be provided to Oakville. This option will provide operational and additional cost share benefits immediately upon implementation and long-term cost avoidance for future operating and capital expenditures. The existing fire dispatch agreement between Burlington and Oakville will end when the new tri-party agreement is signed by all parties. This is the preferred option as it supports all parties Strategic Plans for good governance decisions and fiscal responsibility.
2. Do not approve the recommendations provided in this report. A tri-party agreement will *not* be established, and Halton Hills will be informed of Council's decision. The existing fire dispatch agreement between Burlington and Oakville will continue as approved by council. This is not the preferred option as it does not support all parties Strategic Plans for good governance decisions and fiscal responsibility.

Financial Matters:

Currently the costs to staff, operate, maintain, repair and replace the fire dispatch centre are shared between Burlington and Oakville, based on emergency (9-1-1) call volume. Historically, the cost share has been very close to a 50/50 split (50%) between the two (2) municipalities, with a current call volume difference of 39 calls in 2017. The

emergency (9-1-1) call volume continues to be the preferred way to calculate the cost share split because it takes into consideration future growth and allows for costs to be shared based on actual growth of each municipality.

To provide fire dispatch services to Halton Hills it was important to adapt the cost share model, so it would be financially feasible for Halton Hills and wouldn't create additional costs for either Burlington and Oakville. It was determined and agreed to by all municipalities that the most equitable cost share solution is as follows;

- Each municipality will pay all human resource (HR) costs that are attributable to the staff that are scheduled for the purpose of providing fire dispatch services to that municipality. These HR costs include salary, professional development, training and any certification and membership requirements. This ensures that any HR costs to provide service to each of the participating municipalities are recovered by the municipality the service is being provided to. This also ensures that Burlington and Oakville will not be paying additional HR costs to provide Halton Hills with fire dispatch services. The HR cost model may be adapted in the future if it is agreed to and benefits all parties.
- Annual operating costs will be shared between participating municipalities on the basis of their proportion of emergency (9-1-1) incident call volume processed in the fire dispatch centre. The annual emergency incident information report provided to the Office of the Fire Marshal and Emergency Management (OFMEM) each year from all fire departments in Ontario will be used to verify each municipality emergency (9-1-1) incident calls.
- Each participating municipality shall pay its equal share of the capital (new and renewal) costs based on the actual costs incurred for the project when the project has been completed, including any additional costs that were not forecasted. Burlington will ensure any capital costs are coordinated through Burlington capital budget process along with the participating municipalities to ensure the integrity and delivery of fire dispatch services.

Operating Budget

Staffing

Reference confidential Appendix B.

There will be no additional budget requirements for Burlington.

Operating, Minor Capital and Purchased Services

The operating budget provides funding to operate and maintain the fire dispatch centre. This includes minor capital equipment (i.e. telephones, office furniture, office supplies, etc.) and purchased services (i.e. software and telecommunication maintenance agreements, utility costs), etc. The shared costs to operate and maintain the fire

dispatch centre are calculated based on the emergency (9-1-1) call volume for the municipality for which the emergency (9-1-1) calls were processed. The recommendation is to maintain and continue with this cost share formula. This formula takes into consideration the projected growth, and likely resultant increase in emergency (9-1-1) calls, that will be experienced differently in each municipality. It allows for costs to be shared based on the actual individual municipality's growth experienced over the coming years. When there is an increase in population typically there is an increase in the number of emergency (9-1-1) calls.

Sharing costs between three (3) municipalities versus two (2) municipalities will provide additional operational cost savings for each municipality. For example purposes, using the 2017 emergency (9-1-1) call volume experienced for Oakville, Halton Hills and Burlington, the cost share formula would be calculated as follows.

Table 1: 2017 9-1-1 Call Volume Percentage by Municipality

Municipality	9-1-1 Call Volume %
Oakville	46.9%
Burlington	46.9%
Halton Hills	6.3%

Currently Burlington and Oakville share these costs at approximately a 50% split, which totals approximately \$269K in costs for Burlington. Taking into consideration the recommended tri-party agreement and using the 2017 emergency (9-1-1) call volume percentages provided in the table above, these same costs would total approximately \$252K for Burlington, with an estimated savings of approximately \$17K in minor capital and purchased services alone. While these savings don't seem significant at this point in time, the ability to share costs between three (3) municipalities provides a long-term fiscally responsible approach to managing growth and associated costs.

Capital Funding – 2018 Implementation Project

All capital costs for initial implementation that will be incurred over the remainder of 2018, estimated to be \$200K, will be recovered 100% from Halton Hills. The majority of the implementation costs are for associated equipment in order for the provision of fire dispatch services to be provided to Halton Hills. This will include the station alerting system, network connections, volunteer pagers, etc.

Capital Funding – Future New and Renewal Projects

Capital funding is required to ensure the fire dispatch centre is meeting operational requirements, this includes life-cycle renewal planning and new capital needs (i.e. legislative, improved performance, technology enhancements, etc.).

Capital New – NG9-1-1 Legislative

As previously mentioned, the next five (5) years will see some cost impacts to be ready for the NG9-1-1 technology infrastructure enhancements. This is not optional and is required by all PSAPs in Canada. While the total cost impact is not completely known at this time (additional information is to be provided to PSAPs in September 2018). Capital funding may be required to alter or replace existing infrastructure and associated equipment by 2023. Sharing any required costs between three (3) municipalities versus two (2) municipalities will provide cost avoidance for all municipalities. Any capital budget funding requirements will be provided based on the information provided in September 2018.

Capital Renewal - Records Management System (RMS)

The existing ten (10) year (2018 – 2027) fire department capital budget forecast shows a line item for the replacement of a computer aided dispatch (CAD) system and records management system (RMS) in 2019, in the amount of \$2M. Due to the planned early replacement of the CAD system (BFD-01-18) in 2018, only the RMS will need to be replaced in 2019. The estimated cost for a full RMS solution is anywhere from \$500K to \$1M.

Based on the discussion that have taken place to date between interested parties (Oakville, Burlington and Halton Hills) all fire departments are at end-of-life with their current RMS and are looking to replace it with a new RMS solution in 2019. Sharing the estimated \$1M cost to replace the RMS will equate to approximately \$333K for each municipality. This will be an estimated cost avoidance in the amount of \$167K for Burlington in comparison to the current 50/50 cost share. The 2019 capital budget will be adjusted to show a \$1M records management solution project, with a recovery of \$333K from Oakville and \$333K from Halton Hills, pending council approvals.

The long-term benefits for sharing capital (new and renewal) costs between all municipalities will provide immediate (2019) and future cost avoidance opportunities for all municipalities, which supports good governance and fiscally responsible decisions.

Total Financial Impact

The financial model being recommended will have a favourable fiscal impact for all municipalities due to costs being shared between three (3) municipalities versus two (2) municipalities.

Further details are provided in confidential Appendix B.

Source of Funding

All operating and capital budget requirements will be provided as part of the regular budget process for councils' consideration.

Other Resource Impacts

Not Applicable

Connections:

Halton Hills and Oakville will be providing their independent reports to their respective council's. Both municipalities require Burlington Council's approval before moving forward with their own respective council approvals. Based on the discussions between senior city and fire staff there is no conceived objections that have been communicated. All parties support the recommendations made in this report.

Conclusion:

Staff are highly recommending Council's approval of the tri-party agreement between Oakville, Halton Hills and Burlington. Operating a fire dispatch centre that dispatches to three (3) of the four (4) municipalities, within the Region of Halton, makes operational and fiscal sense. The long-term cost avoidance supports fiscally responsible decisions.

Respectfully submitted,

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Appendices:

- A. Tri-Party Fire Dispatch Agreement (2018-2023)
- B. Confidential

Report Approval:

All reports are reviewed and/or approved by Department Director, Director of Finance and Director of Legal. Final approval is by the City Manager.