



**To:** Community Safety Committee

**Date:** May 1, 2015

**From:** John McGowan  
Fire Chief

**File:** 09-5130-01

Anne Stevens  
Senior Manager, Community Safety Policy &  
Programs

**Re:** **Emergency Communications Service Delivery in British Columbia - Strategic Vision and Discussion Paper from the Ministry of Justice**

**Staff Recommendation**

That the staff report titled “Emergency Communications Service Delivery in British Columbia – Strategic Vision and Discussion Paper from the Ministry of Justice” be forwarded to the Ministry of Justice, in response to their request for written feedback by May 15, 2015 and Metro Vancouver and UBCM for information.

That the Ministry of Justice be advised that the City of Richmond would be pleased to participate in further consultation and stakeholder meetings.

John McGowan  
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(604-303-2734)

Anne Stevens  
Senior Manager, Community Safety Policy & Programs  
(604-276-4273)

Att. 1

<b>REPORT CONCURRENCE</b>	
<b>CONCURRENCE OF GENERAL MANAGER</b> 	
<b>REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE</b>	<b>INITIALS:</b> 
<b>APPROVED BY CAO</b> 	

## Staff Report

### Origin

This report supports Council's Term Goal #1 Community Safety:

- 1.5. Improved perception of Community Safety by the community.*

### Findings of Fact

In July 2013 UBCM circulated a report titled "9-1-1 Service in British Columbia" and requested comments from Local Municipalities.

The UBCM report highlighted a number of service gaps and technological changes in the delivery of 911 services that would require new revenue sources to meet public demand (i.e. video, pictures, text etc.). The UBCM requested municipalities to provide comments and suggestions in support of the Call Answer Levy (CAL) initiative.

In December of 2013 Council adopted the following resolutions with respect to the report which were forwarded to UBCM:

*That UBCM be advised that should the Province establish a province-wide CAL, the City of Richmond would request the following:*

- 1. Municipalities would continue to be included in the discussion, development, implementation and funding allocation of a province-wide 911 CAL.*
- 2. The province-wide levy would be cost neutral for municipalities and any new additional revenue sources (such as from mobile phones) would be used to fund system improvements and integration.*
- 3. Scope for the province-wide 911 CAL levy be strictly for the provision of 911 services, and administrative overhead from the telephone companies would be limited to a minimal amount.*

In March 2015 the Ministry of Justice submitted a discussion paper on "Emergency Communications Service Delivery in British Columbia – Police Communications Centres and 911 PSAP".

The Ministry of Justice is "seeking input in order to inform the future of emergency communications across the Province". The Province's vision includes a consolidated 911 Public Service Answering Point (PSAP) and police communications service delivery model with enhanced support from a provincial call answer levy on wireless devices.

There are a number of questions the Ministry is posing to key stakeholders and would like the City's feedback by May 15, 2015 on the following two discussion areas.

- 1) Consolidated 911 PSAP and police dispatch service delivery model*

British Columbia has 10 PSAPs under local government authority, and 17 police communication centres across the province. From both a public interest and public safety perspective, the Ministry is interested in exploring options to develop a more streamlined service delivery model.<sup>1</sup>

### *Discussion Questions*

**Vision:** Is the current service delivery model as efficient as it could be?

**City's Response:** Currently Metro Vancouver contracts the service to E-COMM for 911 PSAP. Police and fire dispatch services are contracted by the City through E-COMM. Yes, the City feels the delivery model of E-COMM is efficient.

**Service Delivery:** What are the key factors to consider in consolidating 911 PSAP and police communications across the province?

**City's Response:** The key factors to consider for consolidation are to ensure public interest and safety is maintained, and the funding structure is equitable for users. Any system established should have built in redundancy. This will allow for full back up for any operational centre in the event of a failure of any one centre

**Funding:** How does local government in your community currently fund 911 PSAP?

**City's Response:** The 911 PSAP service delivery for Richmond is under the authority of Metro Vancouver. The funding of Richmond's 911 PSAP is collected through property taxes, on behalf of Metro Vancouver and this amount is a direct flow-through to E-COMM with no administrative overhead.

**Funding:** Will local government be able to fund these and enhanced services such as NG911 in the future?

**City's Response:** As this is a technical/operational matter, this would be a discussion between Metro Vancouver and E-COMM. Annual E-COMM budgets are established by the E-COMM board, and as a stakeholder of E-COMM the City has a representative appointed to the Board.

**Funding:** What funding model options exist and would be successful? Why or why not?

**City's Response:** The 911 report commissioned by the UBCM indicated that six Canadian provinces have established, or are introducing, a province-wide CAL: Alberta, Saskatchewan, Québec, New Brunswick, Prince Edward Island and Nova Scotia. In five of those provinces, the CAL applies to all devices which can connect to 911 services. Alberta has also introduced a CAL which is limited to wireless devices. The Maritime Provinces and Saskatchewan approach 911 services as a provincial responsibility. In Québec and Alberta, 911 services remains the responsibility of local governments. In the Québec system, the provincial government set detailed requirements ranging from location and infrastructure, to operational requirements, procedures and quality assurance processes.

The local government's perspective on a province-wide CAL must:

- A. provide new revenue to assist in the development of local 911 services;

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<sup>1</sup> Emergency Communications Services Delivery in British Columbia – Police Communication Centres and 911 PSAP, Ministry of Justice B.C., March 2015, pg 5

- B. ensure that all users of the local 911 service help pay for the service, both wireless and landlines; and
- C. respect the delivery of 911 services by local government.

In principle, the above provincial and local government perspectives are sound. The establishment of a province-wide 911 CAL would enhance public safety and it is envisioned that the system would improve the integration of the province's emergency response strategy.

**Funding:** With respect to existing funding for emergency communications, what works well, needs improvement, or could be done differently?

**City's Response:** The current funding for emergency communications works well for the City of Richmond, where the 911 PSAPs are collected through property taxes and is a direct flow-through to E-COMM with no administrative costs. The police and fire dispatch is funded through City's tax revenue.

**Next Generation 911:** What is the most appropriate response to infrastructure and technological pressure related to Next Generation 911?

**City's Response:** As stated in the Ministry report "NG911" "refers to ongoing efforts to improve the capacity of PSAP's to leverage increasing powerful internet protocol (IP) based systems, sensors and devices in a manner that enhances 911 services and emergency response. Examples of NG 911 functionality include text messages, integrated photo /video and global positioning systems (GPS)." A technical/operational matter, this would be a discussion between Metro Vancouver and E-COMM. To ensure adequate funding the cost will not be insignificant.

**Resiliency:** How can resiliency of emergency communications best be addressed (e.g. appropriate back-up, redundancies)?

**City's Response:** As this is a technical/operational matter, this would be a discussion between Metro Vancouver and E-COMM.

**Governance:** What is an appropriate method for emergency communications governance and regulations in British Columbia? Would standardization be of benefit to emergency communications? If so, in what areas (e.g. policies, procedures, standards, education, other)?

**City's Response:** A provincial emergency communications standard that applies for all 911 PSAPs in British Columbia is ideal. A local governance board would oversee the policies, procedures and standards as specific to the local needs, such as Metro Vancouver currently is for the Greater Vancouver region. It is suggested this model be used for the remainder of the Province.

## 2) Modernizing funding model

Local governments currently rely on a wire line (landline) call answer levy and property taxes to fund 911 PSAP services. With the increase of cell phones, 67% of 911 calls originated from cell phones, the Ministry is of the view that it would be reasonable for cell phone users to contribute to funding the emergency communication system.<sup>2</sup>

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<sup>2</sup> Emergency Communications Services Delivery in British Columbia – Police Communication Centres and 911 PSAP, Ministry of Justice B.C., March 2015, pg 6

*Discussion Questions*

**CAL Scope:** What scope of services would be appropriate to be funded by a provincial CAL? Emergency communications only or broader services? If broader services, what else should be included?

**City's Response:** As previously reported, the province-wide levy would be cost neutral for municipalities and any new additional revenue sources (such as from mobile phones) would be used to fund system improvements and integration. The scope for the province-wide 911 CAL levy be strictly for the provision of 911 services, and administrative overhead from the telephone companies would be limited to a minimal amount.

**CAL Administration:** What would be the most effective process for administering the CAL? How should the revenue be managed?

**City's Response:** There is currently no proposed framework or information on how a province-wide 911 CAL would be implemented in British Columbia. In the event that a province-wide 911 CAL is to be implemented, it is envisioned that devices that have access to 911 services would be charged. This would increase the funding sources to not only property taxes and landlines, but also to mobile or internet-based phones.

One option, the collection of the 911 CAL, could be the responsibility of the telecommunication service providers that is overseen by the CRTC. Under this proposal, the telecommunication service provider has the ability to claim \$0.07 per line per month<sup>3</sup> for the administration of the program. Currently, the funding sources collected for 911 PSAPs have no administrative overhead. Staff feels this administration overhead collected by telecommunication is high and should be negotiated to a lower rate.

An alternative source to fund 911 PSAP improvements is through the provincial sales tax and other provincial revenue sources such as the Maritime Provinces and Saskatchewan.

**CAL Amount:** What would be the most appropriate way to determine the amount of the CAL?

**City's Responses:** The province-wide levy would be cost neutral for municipalities and any new additional revenue sources (such as from mobile phones) would be used to fund system improvements and integration.

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<sup>3</sup> This amounts to approximately \$4.2M additional revenue for telecommunication service providers (based on estimated 5 million subscribers provided in the UBCM 911 report, p.27)

**Financial Impact**

None at this time.

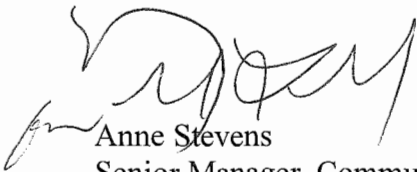
**Conclusion**

In December 2013, staff submitted a report titled “*Province-wide 911 Levy in British Columbia*” to UBCM. The City’s position on a CAL has not changed.

This report titled “*Emergency Communications Service Delivery in British Columbia - Strategic Vision and Discussion Paper from the Ministry of Justice*” be submitted to the Ministry of Justice in response to their discussion paper.



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Att. 1: Emergency Communications Services Delivery in British Columbia – Police Communication Centres and 911 PSAP, Ministry of Justice B.C.

# **EMERGENCY COMMUNICATIONS SERVICE DELIVERY IN BRITISH COLUMBIA**

**Police Communication Centres and 911 PSAP**

**STRATEGIC VISION  
DISCUSSION PAPER**

MARCH 2015



Ministry of  
Justice

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## INTRODUCTION

The Ministry of Justice (the Ministry) is seeking input from key stakeholders in order to inform the future of emergency communications across the province. This Discussion Paper outlines the background, challenges, and strategic vision for emergency communications service delivery involving 911 PSAP (Public Safety Answering Point). Specifically, the vision includes a consolidated 911 PSAP and police communications service delivery model, with enhanced support from a provincial call answer levy on wireless devices.

911 PSAP is the initial service a caller, requiring immediate emergency services, reaches when dialling 911. The PSAP creates an immediate link between individuals in crisis and their local emergency response agencies (police, fire, ambulance). 911 operators function in a crisis environment where incoming calls must be handled promptly and information conveyed in an accurate and timely manner. In this context, 911 PSAP is an integral component of the overall emergency communications system, and plays a significant role in public safety.

911 PSAP is a local government responsibility in British Columbia and is optional. Local governments have worked to manage and improve service since the 911 system was implemented in the late 1980s, when the technology was predominantly wireline telephone services (landlines). Three decades later, the system faces new and distinct challenges related to:

- Migration of households from wireline services to mobile wireless service;
- Implementation of Next Generation 911 (NG911) technologies;
- Gaps in the provision of 911 service;
- Ensuring resiliency of the 911 system amid major catastrophic events.

Given these challenges, there is a need – indeed, an opportunity – to revisit and renew the overall approach to 911 service delivery in British Columbia. By modernizing the current approach to a more streamlined, equitable and resilient system, the emergency communications system will be better positioned to enhance service province-wide.

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## BACKGROUND

There are currently ten 911 PSAPs in British Columbia under local government authority, with a patchwork of different service providers. Local governments voluntarily contract with the RCMP Provincial Police Service, deliver the service through E-Comm (Emergency Communications for BC, Inc), or provide the 911 service themselves.

1. E-Comm
2. Nanaimo (RCMP)
3. West Shore (RCMP)
4. Chilliwack (RCMP)
5. Prince George (RCMP)
6. Victoria Police
7. Saanich Police
8. Nelson Police
9. Abbotsford Police
10. Prince Rupert Fire Rescue

E-Comm is governed by the *Emergency Communications Corporation Act*, and has integrated emergency communications in much of the Lower Mainland. E-Comm handles 80% of the 1.5 million 911 calls in the province each year.

Many PSAPs are co-located with police dispatch services. There are currently seventeen police communication centres across the province, and similar to 911 PSAPs, is a patchwork of RCMP, E-Comm and independent municipal police departments. Funding of the two functions (911 PSAP and police dispatch) is separate. There are two general funding sources available to local governments for 911 PSAP: a call answer levy (CAL) on wireline telephone services and a levy charged on residential property taxes.

In the past the Union of British Columbia Municipalities (UBCM) endorsed a number of resolutions calling for the Province to introduce legislation that would allow the implementation of a province-wide 911 CAL on wireless devices. In July 2013, UBCM released a report on the issue and requested that local governments provide further input on the provincial call answer levy issue. In May 2014, UBCM advised there was not sufficient support for the CAL among local governments.

*The Ministry would like to acknowledge the work of UBCM on this issue and the July 12, 2013 report by Dave Mitchell and Associates Ltd. "911 Services in British Columbia: Background Review in Relation to a Province-Wide Call Answer Levy". The report is an invaluable resource on issues related to 911 PSAPs and can be found at:*

<http://www.ubcm.ca/assets/Resolutions~and~Policy/Policy/Community~Safety/911%20Services%20in%20BC.pdf>

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## CHALLENGES

When the 911 system was implemented several decades ago it reflected the organizational and technical realities of the day. For example, in the 1980s physical landlines served as the primary means of telephone communication, and mobile/cellular devices with embedded functionality (e.g., global positioning systems) were merely nascent technologies. Moreover, our awareness and readiness for natural and human-based threats to public safety – earthquakes, tsunamis, and terrorism, for example – was comparatively unrefined.

Now, some 30 years later, the pace of technological change has placed increasing and inevitable pressure on 911 PSAPs – not only in terms of how services are delivered, but also how the system and its constituent parts interact and function. In this context, several distinct challenges to the 911 PSAP status quo have emerged.

### **Changing landscape – wirelines to wireless**

The number of wireline (landline) telephones is declining as more people migrate from wireline to wireless services. This declining number means reduced revenue collected by local governments to support PSAPs in British Columbia. It also means that more and more calls to 911 are generated from cell phones – in fact 67% of 911 calls are from cell phones.

### **The wave of Next Generation 911 (NG911) technology**

“NG911” broadly refers to ongoing efforts to improve the capacity of PSAPs to leverage increasingly powerful internet protocol (IP) based systems, sensors and devices in a manner that enhances 911 services and emergency response. Examples of NG911 functionality include text messaging, integrated photo/video, and Global Positioning Systems (GPS) to assist in conveying critical situational details from the location of an emergency directly to a 911 PSAP and first responders.

Despite the potential they offer, harnessing NG911 capacities remains a challenge as it involves considerable investments to upgrade and/or replace legacy infrastructure and associated business processes (e.g., staffing, training). Nonetheless, citizens are increasingly information-oriented and dependent on personal mobile devices, and with that transformation come reasonable expectations that public safety mechanisms such as 911 will be appropriately aligned to emergent technologies. As such, there is value in emphasizing the imperative to embrace and enable NG911.

### **Gaps in the provision of 911 service**

In some areas of the province there are gaps in 911 services. These gaps include areas where no landline or wireless connectivity is available, however the focus of this discussion is on areas where 911 services are not provided (regardless of whether connectivity exists). These areas include the Stikine Region, Central Coast Regional District, Northern Rockies Regional Municipality, and the Skeena-Queen Charlotte Regional District (outside the City of Prince Rupert).

Although much of the territory within these jurisdictions is vast, isolated and inaccessible, it nonetheless encompasses numerous, long-standing communities with typical emergency service needs. Moreover, their local economies are increasingly premised on burgeoning industries such as energy and tourism, which not only elevate demands on existing services but also create unique service pressures.

#### **Ensuring resiliency of the 911 system amid major catastrophic events**

The inherent critical nature of emergency situations necessitate that the supporting 911 system must be robust and resilient across the entire service continuum, fully capable of functioning amid wide-scale and severe emergency events. A system that falls short of these fundamental business continuity requirements threatens public safety, jeopardizes the lives and safety of citizens and emergency responders, and endangers private property and strategic assets.

Achieving the required measure of resiliency for 911 services, however, is an ongoing and costly pressure, and involves a number of aspects including human resources (e.g., appropriate staffing levels, training); information technology (e.g., capacity, redundancy, back-up systems); physical infrastructure (e.g., structural integrity of buildings, communications systems, powers connections); organizational preparedness (e.g., procedural, planning and response functions); and business continuity (e.g., work-flow maintenance).

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### **STRATEGIC VISION**

The following sections outline what is needed on a provincial level to address the challenges described above. The proposed approach is for discussion, and represents the strategic vision that the Ministry of Justice is currently considering. The Ministry welcomes comments and input on the discussion questions provided in the following sections.

## Strategic Vision

- Patchwork of 10 911 PSAPs, 17 police dispatch
- Operational and financial efficiencies not fully realized

Consolidated  
service delivery model  
Economies of scale province-wide

- Policies, standards inconsistent
- Infrastructure, technology not coordinated

Approach to technology,  
standards consistent  
Resiliency and interoperability improved

- Landline revenue declining
- Cellphone users not contributing

Modernized funding model  
New revenue stream for NG911,  
infrastructure, etc.

### 1. Consolidated 911 PSAP and police dispatch service delivery model

As described earlier, British Columbia has 10 PSAPs under local government authority, and 17 police communication centres across the province. From both a public interest and public safety perspective, the Ministry is interested in exploring options to develop a more streamlined service delivery model. Benefits of consolidation include economies of scale, and operational and financial efficiencies (for example, improved communication, reduced duplication, financial savings, volume purchasing, uniform policies and procedures, etc.).

There are a number of guiding principles to inform the vision:

- Enhanced public safety
- Improvements to resiliency, interoperability and capacity building
- Leverage existing efficiencies and economies of scale
- Equitable funding
- Cost-recovery for consolidation
- Consistency province-wide: approach to NG911, policies, standards etc.
- Accountability for performance

## Discussion Questions:

### *Vision*

- Is the current service delivery model as efficient as it could be?

### *Service Delivery*

- What are the key factors to consider in consolidating 911 PSAP and police communications across the province?

### *Funding*

- How does local government in your community currently fund 911 PSAP?
- Will local governments be able to fund these and enhanced services such as NG911 in the future?
- What funding model options exist and would be successful? Why or why not?
- With respect to existing funding for emergency communications, what works well, needs improvement, or could be done differently?

### *Next Generation 911*

- What is the most appropriate response to infrastructure and technological pressures related to Next Generation 911?

### *Resiliency*

- How can resiliency of emergency communications best be addressed (e.g., appropriate back-up, redundancies)?

### *Governance*

- What is an appropriate method for emergency communications governance and regulation in British Columbia?
- Would standardization be of benefit to emergency communications? If so, in what areas (e.g., policies, procedures, standards, education, other)?

## **2. Modernized funding model**

Local governments currently rely on a wireline call answer levy (CAL) and property taxes to fund 911 PSAP services. This varies by local government. With the proliferation of cell phones, and with 67% of 911 calls from cell phones, the Ministry is of the view that it would be reasonable for cell phone users to contribute to funding the emergency communications system. In fact, seven other provinces already have provincial CAL legislation in place.

As described earlier, UBCM had looked at a provincial CAL on all wireless devices that connect to 911 services, and the Ministry was part of a working group exploring the issue. Although UBCM withdrew the proposal, the Ministry considers there is still merit in considering a CAL on wireless devices.

Discussion Questions:

*CAL Scope*

- What scope of services would be appropriate to be funded by a provincial CAL? Emergency communications only or broader services? If broader services, what else should be included?

*CAL Administration*

- What would be the most effective process for administering the CAL?
- How should the revenue be managed?

*CAL Amount*

- What would be the most appropriate way to determine the amount of the CAL?

**Thank you in advance for your time and consideration of these important issues. Please provide written feedback via email to the following email address: [SGPSPB@gov.bc.ca](mailto:SGPSPB@gov.bc.ca)**

**All input is requested by May 15, 2015.**

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## **NEXT STEPS**

In addition to seeking feedback on this paper, the Ministry of Justice is meeting with select key stakeholders such as UBCM, local governments and police agencies. A summary of information received will be provided to those who submit feedback. The Ministry will consider the results of this targeted stakeholder engagement as part of the analysis of the strategic vision. Thank you for your feedback.