

PROVINCE OF BRITISH COLUMBIA



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VICTORIA POLICE DEPARTMENT

*POLICE ACT* AUDIT:

SERVICE LEVEL REVIEW

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POLICE SERVICES DIVISION

STANDARDS AND EVALUATION

MARCH 4, 2010

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## **EXECUTIVE SUMMARY**



## A. INTRODUCTION

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On January 26, 2009, then Solicitor General John van Dongen announced that Police Services Division would conduct an audit of the Victoria Police Department, under the authority of s. 40 of the *Police Act*. The terms of reference for the audit included three main components: (i) a focused inspection of the department, including compliance with specific *Provincial Standards for Independent Municipal Police Departments in British Columbia* and an examination of the department's use of force; (ii) a review of resource deployment, call load, response times and associated costs; and (iii) a review of the CREST communications system.

Police Services Division has completed the focused inspection and the service level review. An analysis of the effectiveness and suitability of the existing communications system, CREST, was originally planned as the third phase of the audit. However, after conducting key stakeholder interviews and reviewing the progress made toward addressing the CREST issues that has occurred since the audit was initiated, Police Services Division excluded the review of CREST from the audit plan. At the time of writing, CREST is actively working with the Victoria Police Department to determine their specific needs and options for moving forward.

This report – *Victoria Police Department Police Act Audit: Service Level Review* – presents the findings and recommendations from the service level review portion of the audit. The findings and recommendations from the focused inspection portion of the audit are provided under separate cover in the report *Victoria Police Department Police Act Audit: Focused Inspection and Use of Force Review*.

The *Service Level Review* concerns the Victoria Police Department's resource deployment, call load, response times, and associated costs. A key consideration was parity of service delivery between the City of Victoria and the Township of Esquimalt, the two communities policed by the Victoria Police department.

Police Services Division conducted the audit of the Victoria Police Department in the spring and summer of 2009. Methodology for the *Service Level Review* incorporated: analysis of data for calls for service; data on policing costs, strengths, and crime volume and rates; review of historical amalgamation documentation; and, a brief examination of funding allocation formulas utilized in other jurisdictions.

**Police Services Division requests that within 3 months of the date of receipt of the final version of this report that the Victoria Police Department provide to the Assistant Deputy Minister, Policing and Community Safety, Ministry of Public Safety and Solicitor General, a plan to implement the recommendations**



## B. KEY FINDINGS

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Analysis in the report is based on the following information:

- Data for all calls for service logged in the department's CAD system from January 1, 2006 to December 31, 2008.
- Data on policing costs, strengths, and crime volume and rates for the department and all independent municipal police forces from 2001 to 2008.
- Examination of current shift schedules for patrol.
- Brief examination of funding allocation formulas utilized in other jurisdictions.
- Review of historical amalgamation documentation.
- Interviews.

It is imperative to note that there are key components of any policing service – such as infrastructure, specialized forensic and investigation services, and community liaison, to name a few – that are difficult to quantify for the purposes of this review. As such, these policing functions are not fully reflected in the analysis. However, the intrinsic value of these services was considered in the audit team's major findings and recommendations.

Overall, the audit team concluded that the Victoria Police Department is providing an adequate and effective level of policing service to the communities of Victoria and Esquimalt. However, the audit team also identified opportunities for improving efficiency and satisfaction, in particular amongst Esquimalt residents and the Township Council.

Even though the audit did not reveal a substantive deficit in the level of service provided to the Township of Esquimalt by the Victoria Police Department, there is some evidence to suggest that there are differences (e.g., in response times, lack of clearly dedicated patrol, over representation of priority 1 calls). These differences, as well as a preferred approach to policing (such as "no call too small") have likely contributed to dissatisfaction on the part of some Township officials. Victoria's style of policing may not be the best match with the style preferred by Esquimalt. Moreover, the audit did reveal that key components of the Implementation Plan at amalgamation with respect to patrol functioning and funding allocation formulas have not been reviewed as per the terms of the Plan.

## 1. ANALYSIS OF CAD DATA

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The audit team received data for all calls for service logged in the department's Computer Aided Dispatch (CAD) system from January 1, 2006 to December 31, 2008. Three-year trend analysis was conducted for key variables including total call volume, calls cleared by dispatch, priority level and type of call. In addition, the audit team conducted a more detailed analysis of the department's 2008 data, including dispatch, travel, response and service times and call patterns by time, day and week of year. This analysis focused on dispatched calls for service only. Variations between the two communities served by the department were examined.

Highlights include the following:

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### a) *TOTAL CALLS FOR SERVICE (2006-2008)*

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- The volume of calls for service decreased each year from 63,859 in 2006 to 57,735 in 2008. The decreasing trend was consistent with changes in the crime rate and the number of *Criminal Code* offences for both the Victoria Police Department and all other independent municipal police forces.
- Changes in call volume were more pronounced in Esquimalt compared with Victoria and the department overall. For example, calls from Esquimalt fell 17.2% from 2007 to 2008, while calls from Victoria fell 6.7%.
- A higher than expected proportion of priority 1 calls occurred in Esquimalt each year. In 2008, while 8.6% of all calls for service were attributed to Esquimalt, 13.9% of all priority 1 calls originated there.
- A higher than expected proportion of *Criminal Code – Violent* calls also occurred in Esquimalt each year. In 2008, while 8.6% of all calls for service were attributed to Esquimalt, 13.2% of all *Criminal Code – Violent* calls originated there.
- Each year, approximately 30% of all calls for service were cleared by dispatch.

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### b) *DISPATCHED CALLS FOR SERVICE (2008)*

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- On average, the department dispatched four calls for service per hour and 105 calls per day in 2008. Broken down by hour of day and day of week, the average call volume varied considerably from a [Withheld as per S. 15(1)(k)(l) of FOIPPA].

- Call volume patterns differed only slightly between Esquimalt and Victoria in 2008. [Withheld as per S. 15(1)(k)(l) of FOIPPA].
- [Withheld as per S. 15(1)(k)(l) of FOIPPA].As with time of day and day of week, only slight differences emerged between the two municipalities: [Withheld as per S. 15(1)(k)(l) of FOIPPA].
- [Withheld as per S. 15(1)(k)(l) of FOIPPA].

- 4,877 (12.7%) of the dispatched calls for service in 2008 were identified as on-view incidents. A lower than expected proportion of these occurred in Esquimalt. While 8.7% of all dispatched calls for service occurred in Esquimalt, only 5% of on-view incidents occurred there. Traffic-related calls accounted for a larger share of on-view incidents in Esquimalt (38.2%) compared with Victoria (25.6%).
- The majority of on-view incidents (62%) were attributed to patrol members; however, there was considerable disparity between the four watches. Members of A watch accounted for 24.6% of all recorded on-view incidents while C watch accounted for only 10.9%.
- [Withheld as per S. 15(1)(k)(l) of FOIPPA].
- The average number of dispatched calls per sworn member in 2008 was 169. A lack of readily available data and variations in the definition of calls for service and policies governing call response (e.g., “no call too small”) make comparisons between the Victoria Police Department and other jurisdictions difficult.

In summary, the volume of calls for service from Esquimalt has been decreasing since 2006. There is evidence that indicates calls from Esquimalt are more serious, including an over-representation of calls from Esquimalt in the number of priority 1 calls, *Criminal Code – Violent* calls and calls to which more than 10 units were dispatched.

Average dispatch, travel and response times were longer for calls from Esquimalt but average service times (the length of time that officers spent dealing with the call) were also longer. Dispatch times were longer for calls reported through the department’s non-emergency line compared with 9-1-1.

## **2. ANALYSIS OF POLICING COSTS AND STRENGTHS**

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The audit team also examined data on policing costs and strengths for the department and all independent municipal police forces from 2001 to 2008. Highlights of this analysis include the following:

- The Victoria Police Department is the second largest independent municipal police force after the Vancouver Police Department. In 2008, the authorized strength of the department increased by 19 members to 241—the most significant increase in strength since amalgamation occurred in 2003. Prior to this increase, the department had been growing at about the same rate (average

of 1.6% per year from 2001-2008) compared with the average for all independent forces (average of 1.7%). More recently (2006-2008), the department's average annual percentage change (3.9%) has been slightly higher than the average for all independent forces (2.6%). The resident population served by the department is the fifth largest of all the independent forces. The population served per member was consistently the lowest of all the independent forces from 2001 to 2008.

- Case loads for all independent police forces, including Victoria, have been decreasing since about 2004. The department's case load was consistently among the highest of all the independent forces from 2001 to 2008 but the gap narrowed considerably with the increase in authorized strength in 2008.
- Crime rates have also been falling for the majority of jurisdictions in recent years, including in the jurisdiction served by the Victoria Police Department. The crime rate reported by Victoria Police Department was consistently the highest of all the independent forces from 2001 to 2008, but the gap was narrowing. For example, the average reported crime rate for all independent forces in 2001 was 103 *Criminal Code* offences per 1,000 population compared with 211 offences reported by the Victoria Police Department. In 2008, the average for all independent forces was 75 offences compared with 134 offences reported by the Victoria Police Department.
- Policing costs per capita increased across the independent forces, including Victoria, from 2001 to 2008. The department consistently had the highest costs per capita but, again, the gap was narrowing due to lower than average growth in costs for the department (average increase of 3.6% per year compared with 5% for all independent forces). In 2008, the cost per capita for the department was \$375 compared with an average for all independent forces of \$268. The department's total policing costs also increased at a slightly slower rate compared with the average for all independent forces (average increase of 5.4% per year from 2001-2008 compared with 6.2% for all independent forces).

In summary, the Victoria Police Department's reported crime rate and case load were consistently among the highest of all independent municipal police departments between 2001 and 2008. The population served per member was consistently the lowest of all independent departments between 2001 and 2008. Not surprisingly, during the same time period, the department consistently had the highest cost per capita.

### 3. EXAMINATION OF FUNDING ALLOCATION FORMULAS

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The breakdown of policing costs between Victoria and Esquimalt is based on each community's share of the total converted assessed value of properties each year. On average, Victoria has been responsible for 86% of the policing costs and Esquimalt 14% each year since amalgamation.

*Estimates* of the breakdown of policing costs between Esquimalt and Victoria using alternative formulas indicate that the percentage share attributed to Esquimalt using any single factor or combination of factors ranged from a low of 8.6% (dispatched calls for service alone) to a high of 17.7% (population alone). Blended formulas came out closer to the current breakdown of costs, with Esquimalt's share ranging from 13.5% to 16.2%.

A major finding with respect to the funding allocation formula is that it has not been reviewed since amalgamation. The original allocation formula appears to have been put forward as an interim formula for the first year of amalgamation but it has remained in place each year since that time without review.

### 4. OTHER ISSUES

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The audit team noted that the current management and deployment of patrol resources differs considerably from the Implementation Plan put forward by the Operational Sub-Committee at the time of amalgamation. The Implementation Plan envisioned a decentralized model wherein Inspectors assigned to each of three geographic zones would be responsible for managing resources within each zone. Patrol members would be clearly assigned to and work out of each zone. In practice, patrol is entirely centrally managed. While members may be assigned to a geographic zone the significance of zone assignments varied considerably among patrol members interviewed by the audit team.

The current shift schedule for patrol assigns equal resources to each hour of day regardless of fluctuations in demands for service. Throughout 2008, the audit team was advised that patrol operated at minimum strengths only, which provide some variation by day of week and day shift versus night shift in relation to demands for service. However, the minimum strengths have not been examined since 2003. In addition, the audit team's analysis of minimum strengths in relation to calls for service shows some potential inefficiencies (i.e., recurring times when there may be more or fewer officers than required).

As noted in the *Focused Inspection and Use of Force Review* report, the audit team identified a need for the department to clarify and strengthen its administrative reporting, planning and research, and crime analysis functions. Similarly, the

department does not currently have the capacity to monitor key performance measures for patrol that would help to determine service levels and the alignment of resources to demands for service. Examples include unallocated time or utilization rates and dispatch delay.



## **C. RECOMMENDATIONS**

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1. That the current service delivery model be revised to allow the Township of Esquimalt to contract for policing services with an independent municipal police department in the Capital Regional District. The terms of the contract should include, among others, requirements for:
  - a. minimum level of service required;
  - b. a mandatory dedicated patrol for the Township;
  - c. opting-in/out provisions for specific services; and,
  - d. a fixed schedule for contract review.
2. That, as part of the contract negotiations, a new funding allocation formula is developed. This formula must include a fixed schedule for review.
3. That the current police governance structure be revisited to ensure that:
  - a. the Township of Esquimalt has the capacity to form its own police governance structure to address policing issues within its jurisdiction;
  - b. the Esquimalt police governance is established as per current police board appointment processes;
  - c. the role of the Esquimalt police governance is to (1) manage the contractual relationship with its contracting partner; and (2) oversee policing service in its jurisdiction.
4. That the Victoria Police Department revise current policy concerning patrol activities that will clarify patrol area assignments and expectations of assigned officers.
5. That the Victoria Police Department consider acquiring software that can update minimum staffing levels based on current workload requirements and identify opportunities to improve the efficiency of the existing scheduling pattern.

6. That the Victoria Police Department establish performance measures for the patrol function that are regularly reported to the Police Board. The measures should be broken down by municipality policed and include:
- Number of calls recorded and dispatched;
  - Average dispatch, travel, total response and service time for priority 1, 2 and 3 calls (including variations between municipalities);
  - Average number of units and officers per call;
  - Proportion of two-officer units deployed;
  - Number of on-view incidents, by type;
  - Average proportion of unallocated time or utilization rates;
  - Average number of dispatched calls per member.

## **SERVICE LEVEL REVIEW**



## A. INTRODUCTION

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This report outlines the findings for the second phase of the audit, the Service Delivery review.

Where possible, a key focus of this report is the analysis of service parity in delivery between Victoria and Esquimalt. This focus was the result of ongoing concerns from the Township of Esquimalt around service delivery to its community.

Analysis in the report is based on the following:

- Statistical analysis of all calls for service logged in the department's CAD system from January 1, 2006 to December 31, 2008;
- Three-year trend analysis of key variables including total call volume, calls cleared by dispatch, priority level and type of call;
- Statistical analysis and significance testing of the department's 2008 data on dispatched calls for service, including dispatch, travel, response and service times and call patterns by time, day and week of year;
- Comparative analysis of calls for service by municipality (i.e., Victoria and Esquimalt);
- Examination of comparative data on policing costs, strengths and population served for the Victoria Police Department and all independent municipal police forces from 2001 to 2008;
- Department's budget and expenditures;
- Brief examination of funding allocation formulas utilized in other jurisdictions;
- Review of historical amalgamation documentation including the Order In Council, the Implementation Plan put forward by the Operational Sub-Committee, and notes from a Data/IT migration Sub-Committee meeting recommendations from the Finance Sub-Committee;
- Examination of current shift schedules for patrol, data on minimum strengths and records detailing patrol member attendance and assignment and Patrol Sgt's Detail Sheets; and
- Interviews with members of the department.

It is imperative to note that there are key components of any policing service – such as infrastructure, specialized forensic and investigation services, community liaison, to name a few – that are difficult to quantify for the purposes of this review. As such, these policing functions are not fully reflected in the analysis. However, the intrinsic value of these services was considered in the audit team's major findings and recommendations.



## **B. FINDINGS AND ANALYSIS**

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Overall, the audit team concluded that the Victoria Police Department is providing an adequate and effective level of policing service to the communities of Victoria and Esquimalt. However, the audit team also identified opportunities for improving efficiency and satisfaction, in particular amongst Esquimalt residents and the Township Council.

### **1. ANALYSIS OF TOTAL CALLS FOR SERVICE (2006-2008)**

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This section provides an analysis of all calls for service recorded in the Victoria Police Department's CAD system in 2006, 2007 and 2008. These included:

- Calls from the public to either the department's non-emergency line or 9-1-1 (including those cleared by dispatch);
- Reports made to the front counter;
- On-view (police detected) incidents; and
- Calls to assist another agency.

Overall, the total number of calls for service to the department decreased each year, from 63,859 calls in 2006 to 57,735 in 2008. While the drop was minor from 2006 to 2007 (-1.7%), the decrease was more pronounced from 2007 to 2008 (-8.1%). The decrease in call volume was also more pronounced in Esquimalt compared with Victoria. The number of calls from Esquimalt decreased by 9.6% from 2006 to 2007 and by 17.2% from 2007 to 2008. Calls from Victoria decreased by less than one per cent from 2006 to 2007 but, consistent with the overall trend, experienced a more noticeable drop from 2007 to 2008 (-6.7%).

The proportion of calls for service attributed to Esquimalt also showed a decreasing trend from 2006 to 2008. It fell from 10.2% of all calls for service in 2006 to 9.6% in 2007 and 8.6% in 2008. These trends are summarized in Table 1.

TABLE 1 TOTAL CALLS FOR SERVICE (2006-2008) – BY MUNICIPALITY<sup>1</sup>

	2006	2007	% Change 2006-2007	2008	% Change 2007-2008
<b>Department</b>	63,859	62,790	-1.67%	57,735	-8.2%
<b>Esquimalt</b>	6,536 (10.2%)	6,010 (9.6%)	-8.05%	4,975 (8.6%)	-17.2%
<b>Victoria</b>	56,878 (89.1%)	56,338 (89.7%)	-0.95%	52,552 (91%)	-6.7%

Comparative data on calls for service in other policing jurisdictions was not readily available to determine whether other areas experienced similar decreases in total calls for service. However, the downward trend in calls for service is consistent with a decreasing trend in police-reported crime rates and volumes experienced by the department and other policing jurisdictions in the province. Crime rates and the number of *Criminal Code* offences have been falling for the department and most independent municipal policing jurisdictions for many years.

For example, from 2006 to 2007 and 2007 to 2008, the crime rate for the department decreased by 12.9% and 15.1%, respectively. The total crime rate for all independent municipal policing jurisdictions decreased by 13.2% in 2007 and 7.4% in 2008. The trend in *Criminal Code* offences follows the department's calls for service pattern more closely, whereby the number of offences for the department and the average for all independent municipal police departments fell in 2007 and 2008 but the decreases were more pronounced in 2008. The number of *Criminal Code* offences for the department decreased by 9.3% from 2006 to 2007 and by 14.9% from 2007 to 2008. The average number of offences for all independent municipal policing jurisdictions decreased by 6.9% from 2006 to 2007 and by 12.7% from 2007 to 2008.

These trends are summarized in Table 2. Crime rate and total offence patterns are discussed further in this report under the heading, Policing Costs and Strengths (2001 – 2008).

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<sup>1</sup> The number of calls from Esquimalt and Victoria do not equal the total for the entire department as the total also includes a number of calls each year that occurred in other policing jurisdictions (e.g., calls to assist another police agency) and calls where the municipality could not be determined due to an invalid or unrecognized address being entered into the CAD system.

TABLE 2 CRIME RATE AND TOTAL CC OFFENCES (2006-2008) - VICTORIA AND OTHER INDEPENDENT MUNICIPAL POLICING DEPARTMENTS (IMPD)

	2006	2007	% Change 2006-2007	2008	% Change 2007-2008
<b>Crime Rate</b>					
<b>Department</b>	179	156	-12.9%	132	-15.1%
<b>IMPD Total</b>	106	92	-13.2%	85	-7.4%
<b>CCC Offences</b>					
<b>Department</b>	17,212	15,615	-9.3%	13,292	-14.9%
<b>IMPD Total</b>	128,102	114,333	-10.8%	106,296	-7%
<b>IMPD Average</b>	9,322	8,682	-6.9%	7,576	-12.7%

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*a) TOTAL CALLS FOR SERVICE (2006-2008) – PRIORITY LEVEL*

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When calls for service are broken down by priority level, other interesting trends emerge. First, the proportion of priority 1 calls<sup>2</sup> from Esquimalt each year is higher than expected (i.e., compared to its share of total calls for service). For example, in 2006 only 10.2% of the total calls for service were attributed to Esquimalt but 19.1% of the priority 1 calls originated there. Esquimalt also had a larger proportion of priority 2 calls<sup>3</sup> each year, though the over-representation was less pronounced. For example, in 2006 12.1% of Priority 2 calls originated in Esquimalt (compared with 10.2% of the total calls for service). In contrast, the proportion of priority 3 calls<sup>4</sup> from Esquimalt was close to expected values each year and Esquimalt was slightly under-represented in Priority 4 – 9 calls.

Second, the number of priority 1 calls has been increasing in Victoria (and thus overall) but decreasing in Esquimalt each year. For example, from 2006 to 2007, the number of priority 1 calls from Victoria increased by 7.7% (and 3.1% overall). The number from Esquimalt decreased by 86 calls or -16.2%.<sup>5</sup> From 2007 to 2008, the increase was even greater in Victoria and overall (10.2% and 8.1% overall), but the decrease in Esquimalt was less pronounced (13 fewer calls or -2.9%).

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<sup>2</sup> Priority 1 calls are the most serious emergency calls and require immediate police response. They involve a risk of loss of life or grievous bodily harm. Examples include: *in progress* abductions, assaults, domestic disputes, home invasions, robberies and sexual assaults; screams for help; shootings; stabbings; and suicidal persons.

<sup>3</sup> Priority 2 calls are urgent calls that require immediate police attention (e.g., residential break and enter in progress).

<sup>4</sup> Priority 3 calls are routine calls, not in progress (e.g., a violent offence reported after the fact).

<sup>5</sup> Caution must be exercised when comparing percentage increases or decreases between Victoria and Esquimalt due to the disparity in call volume (i.e., small changes in the number of any type of call from Esquimalt may appear as a more significant percentage increase).

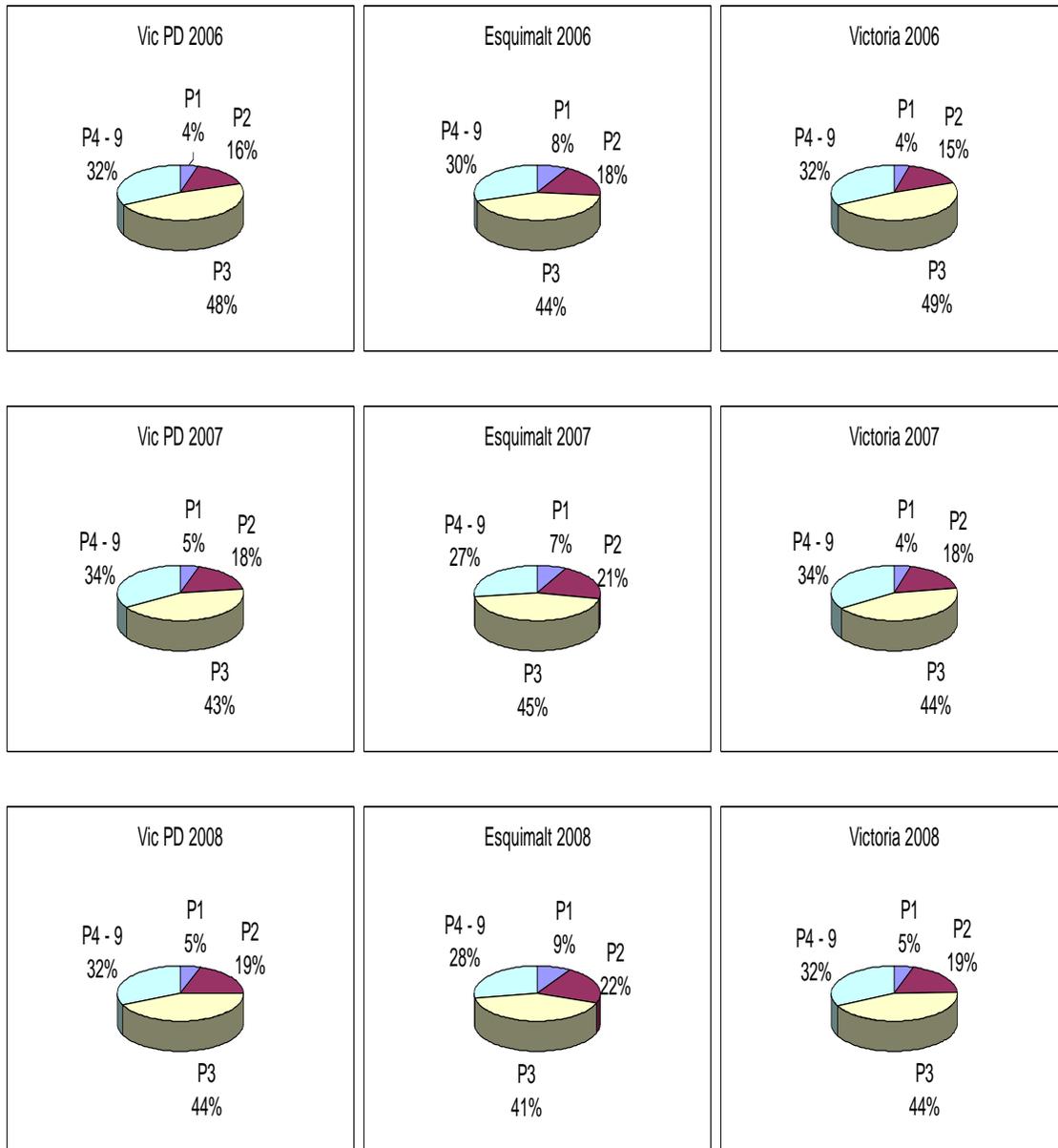
These trends are summarized in Table 3. The breakdown of calls by priority level is also depicted in Figure 1, which shows the proportion of priority 1, 2, 3 and 4 – 9 calls within the total calls for Esquimalt and Victoria.

Taken together, these trends indicate that while Esquimalt had a larger share of the most serious calls from 2006-2008, it is not clear how long this trend will hold or what the magnitude of the trend will be.

TABLE 3 TOTAL CALLS FOR SERVICE (2006-2008) – BY PRIORITY LEVEL AND MUNICIPALITY

	<b>2006</b>	<b>2007</b>	<b>% Change 2006-2007</b>	<b>2008</b>	<b>% Change 2007-2008</b>
<b>Priority 1</b>	2,771	2,858	3.14%	3,090	8.1%
<b>Esquimalt</b>	530 (19.1%)	444 (15.5%)	-16.2%	431 (13.9%)	-2.9%
<b>Victoria</b>	2,241 (80.9%)	2,414 (84.5%)	7.7%	2,659 (86.1%)	10.2%
<b>Priority 2</b>	9,840	11,413	16%	11,064	-3.2%
<b>Esquimalt</b>	1,192 (12.1%)	1,262 (11.1%)	5.9%	1,089 (9.8%)	-13.7%
<b>Victoria</b>	8,648 (87.9%)	10,151 (88.9%)	17.4%	9,975 (90.2%)	-1.7%
<b>Priority 3</b>	30,391	27,154	-10.7%	25,127	-7.5%
<b>Esquimalt</b>	2,845 (9.4%)	2,668 (9.8%)	-6.2%	2,076 (8.3%)	-22.2%
<b>Victoria</b>	27,546 (90.6%)	24,486 (90.2%)	-11.1%	23,051 (91.7%)	-5.9%
<b>Priority 4 - 9</b>	20,412	20,923	2.5%	18,246	-12.8%
<b>Esquimalt</b>	1,969 (9.6%)	1,636 (7.8%)	-16.9%	1,379 (7.6%)	-15.7%
<b>Victoria</b>	18,443 (90.4%)	19,287 (92.2%)	4.6%	16,867 (92.4%)	-12.6%

FIGURE 1 TOTAL CALLS FOR SERVICE (2006-2008) – BY MUNICIPALITY AND PRIORITY LEVEL



*b) TOTAL CALLS FOR SERVICE (2006-2008) – CALLS CLEARED BY DISPATCH*

Unlike priority level, the data did not reveal any relationships between municipality and calls cleared by dispatch. The proportion of calls cleared by dispatch in Esquimalt and Victoria each year was consistent with each municipality's share of the total calls for service. For example, in 2008, 8.9% of the calls cleared by dispatch were from Esquimalt and 91.1% were from Victoria. In this same year, 8.6% of the total calls for service were from Esquimalt and 91% were from Victoria.

For Esquimalt, Victoria and the department overall, the proportion of calls cleared by dispatch each year was approximately 30%. Data is presented in Table 4.

TABLE 4 CALLS CLEARED BY DISPATCH (2006-2008) – BY MUNICIPALITY

	<b>Department</b>	<b>Esquimalt</b>	<b>Victoria</b>
<b>2006</b>			
<b>Total Calls for Service</b>	63,859	6,536	56,878
<b>Calls Cleared by Dispatch</b>	19,789	1,885	17,904
<b>% of Total Calls for Service Cleared by Dispatch</b>	31%	28.8%	31.5%
<b>% of Calls Cleared by Dispatch by Municipality</b>		9.5%	90.5%
<b>2007</b>			
<b>Total Calls for Service</b>	62,790	6,010	56,338
<b>Calls Cleared by Dispatch</b>	18,866	1,784	17,082
<b>% of Total Calls for Service Cleared by Dispatch</b>	30%	29.7%	30.3%
<b>% of Calls Cleared by Dispatch by Municipality</b>		9.5%	90.5%
<b>2008</b>			
<b>Total Calls for Service</b>	57,735	4,975	52,552
<b>Calls Cleared by Dispatch</b>	16,794	1,492	15,302
<b>% of Total Calls for Service Cleared by Dispatch</b>	29%	30%	29.1%
<b>% of Calls Cleared by Dispatch by Municipality</b>		8.9%	91.1%

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c) *TOTAL CALLS FOR SERVICE (2006-2008) – TYPE OF CALL*

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More than 100 different values were used to describe the type of call in the department's CAD data. The audit team grouped these types into 8 categories:

- General Assistance, Alarms and Non-Offence Related Calls;
- *Criminal Code – Property*;
- *Criminal Code – Violent*;
- *Criminal Code – Other*;
- Drugs and Federal Statute Offence Calls;
- Non-Traffic Provincial Offence Calls;
- Traffic Related Calls; and
- Municipal Bylaw Calls.

These categories are meant to provide a general indication of the type of incident involved. It should be emphasized that many offence related calls such as *Criminal Code – Property*, *Violent* and *Other* would not necessarily have resulted in criminal charges. Further, the “general assistance” category includes situations that may prove to be high risk and resource-intensive; it should not be interpreted as representing minor incidents only.

From 2006-2008, most calls for service were grouped into the category of general assistance, alarms and non-offence related calls. On average, this category accounted for 42.1% of calls each year. The second most common types of calls were *Criminal Code – Property*, followed by *Criminal Code – Other* related calls (average of 20.1% and 9.8% of calls each year, respectively).

Some interesting variation was observed when examining calls by municipality. In particular, calls from Esquimalt represented a higher than expected proportion of *Criminal Code – Violent* calls. While calls from Esquimalt represented only 10.2% of all calls for service in 2006, they accounted for 18.9% of all *Criminal Code – Violent* calls. The trend continued in 2007 and 2008 but appeared to be weakening. As with the relationship between municipality and priority level, this suggests that while Esquimalt had a larger share of the most serious calls from 2006-2008, it is not clear how long this trend will hold or the magnitude of the trend should it continue.

The breakdown of calls by type and municipality is summarized in Table 5.

TABLE 5 TOTAL CALLS FOR SERVICE (2006 – 2008) BY TYPE OF CALL AND MUNICIPALITY

	2006			2007			2008		
	Esq.	Vict.	Dept	Esq.	Vict.	Dept	Esq.	Vict.	Dept
<i>General Assistance, Alarms, Non-Offence Related Calls</i>	2,680	23,253	26,043	2,551	23,833	26,506	2,131	22,729	24,923
% Type of Call	10.3	89.3	100.0	9.6	89.9	100.0	8.6	91.2	100.0
% of Municipality's Calls	41.0	40.9	40.8	42.4	42.3	42.2	42.8	43.3	43.2
<i>CCC – Property</i>	1,244	11,853	13,176	1,012	11,561	12,654	787	10,474	11,319
% Type of Call	9.4	90.0	100.0	8.0	91.4	100.0	7.0	92.5	100.0
% of Municipality's Calls	19.0	20.8	20.6	16.8	20.5	20.2	15.8	19.9	19.6
<i>CCC – Other</i>	593	5,328	6,008	653	5,569	6,339	502	5,126	5,650
% Type of Call	9.9	88.7	100.0	10.3	87.9	100.0	8.9	90.7	100.0
% of Municipality's Calls	9.1	9.4	9.4	10.9	9.9	10.1	10.1	9.8	9.8
<i>Traffic Related Calls</i>	543	4,760	5,391	494	4,074	4,647	453	3,778	4,278
% Type of Call	10.1	88.3	100.0	10.6	87.7	100.0	10.6	88.3	100.0
% of Municipality's Calls	8.3	8.4	8.4	8.2	7.2	7.4	9.1	7.2	7.4
<i>Municipal Bylaw Calls</i>	489	3,977	4,478	486	3,967	4,459	446	3,510	3,956
% Type of Call	10.9	88.8	100.0	10.9	89.0	100.0	11.3	88.7	100.0
% of Municipality's Calls	7.5	7.0	7.0	8.1	7.0	7.1	9.0	6.7	6.9
<i>Non-Traffic Provincial Offence Calls</i>	279	3,718	4,043	267	3,333	3,617	164	2,751	2,922
% Type of Call	6.9	92.0	100.0	7.4	92.1	100.0	5.6	94.1	100.0
% of Municipality's Calls	4.3	6.5	6.3	4.4	5.9	5.8	3.3	5.2	5.1
<i>CCC – Violent</i>	646	2,758	3,422	508	2,658	3,179	430	2,830	3,268
% Type of Call	18.9	80.6	100.0	16.0	83.6	100.0	13.2	86.6	100.0
% of Municipality's Calls	9.9	4.8	5.4	8.5	4.7	5.1	8.6	5.4	5.7
<i>Drugs and Federal Statute Offence Calls</i>	62	1,231	1,298	39	1,343	1,389	62	1,354	1,419
% Type of Call	4.8	94.8	100.0	2.8	96.7	100.0	4.4	95.4	100.0
% of Municipality's Calls	0.9	2.2	2.0	0.6	2.4	2.2	1.2	2.6	2.5
<i>Total Calls</i>	6,536	56,878	63,859	6,010	56,338	62,790	4,975	52,552	57,735
% Total Calls	10.2	89.1	100.0	9.6	89.7	100.0	8.6	91.0	100.0

## 2. DISPATCHED CALLS FOR SERVICE (2008)

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The audit team performed a more in-depth analysis of the department's 2008 CAD data. While the analysis described in the previous section dealt with *all* calls made to the department in 2006-2008, this analysis focused on dispatched calls for service only. In addition, a number of calls were removed from analysis in order to determine more accurate dispatch, travel and/or service times.

Of the 57,735 calls in 2008, a total of 19,195 were removed from further analysis. The audit team applied the same rules for excluding calls as identified by the department's Research and Audit Section in their own 2009 analysis of calls for service data. These included:

- The call was cleared by dispatch;<sup>6</sup>
- The time between dispatch and clearing the call was greater than 17 hours;<sup>7</sup>
- The date the call was cleared was two or more days from the date the call was made;<sup>8</sup>
- The time the call was dispatched was at least 11 minutes earlier than the time the call was made OR at least 10 minutes earlier and was a call to assist another agency;<sup>9</sup>
- The call was placed in the "hold queue";<sup>10</sup> or
- The call was identified as a bulk file.<sup>11</sup>

This left a total of 38,540 calls.

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<sup>6</sup> Calls for which 'time of dispatch' field was blank were considered to have been cleared by dispatch.

<sup>7</sup> The department advised that, in these cases, it was more likely that the 'clear time' was inaccurate than that police were on scene for 17 hours or longer.

<sup>8</sup> The department advised that, in these cases, the call was likely re-opened for re-attendance and any time data pertaining to the call may not be accurate (i.e., time data may pertain to re-attendance instead of a member's original arrival on scene). It was also difficult to determine which date certain CAD events occurred without opening each file.

<sup>9</sup> In some cases, a dispatch time earlier than time of call results from a time delay in loading CAD data to the RMS. The department identified a threshold for determining whether the time delay was acceptable to include in further analysis or likely the result of an error. The threshold was set at 11 minutes or more for most calls, and 10 minutes or more for calls to assist an outside agency.

<sup>10</sup> The hold queue is used for calls that do not require prompt response. The determination could be based on the complainant's wishes (e.g., they would like an officer to attend their home at a specific time) or the decision could be made by the complaint taker. As calls in the hold queue could skew the analysis of dispatch and response times, they were removed from further analysis.

<sup>11</sup> Bulk files created in advance to reduce officers' air time on busy days such as Canada Day and New Years Day may or may not have actually involved a police response and were excluded from analysis.

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*a) DISPATCHED CALLS FOR SERVICE (2008) – BY MUNICIPALITY*

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**Of the 38,540 calls included in the analysis, 35,133 (91.2%) were from Victoria and 3,339 (8.7%) were from Esquimalt.** In addition, 68 calls (less than one per cent) were from other jurisdictions (e.g., calls to assist an outside agency). The breakdown of calls between Victoria and Esquimalt is consistent with the distribution discussed in the previous section for all calls for service in 2008.

The breakdown of calls is summarized in Table 6.

TABLE 6 CALLS FOR SERVICE (2008) – BY MUNICIPALITY

	Frequency	Percent
<b>Esquimalt</b>	3,339	8.7
<b>Victoria</b>	35,133	91.2
<b>Other</b>	68	.1
<b>Total</b>	<b>38,540</b>	<b>100.0</b>

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*b) DISPATCHED CALLS FOR SERVICE (2008) – TYPE OF CALL*

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As noted earlier in this report, more than 100 different values were used to describe the type of call in the department's CAD data. Similar to the analysis for Total Calls for Service, the audit team grouped these types into the 8 categories listed below in Table 7. These categories are meant to provide a general indication of the type of incident involved. It should be emphasized that many offence related calls such as *Criminal Code – Property, Violent and Other* would not necessarily have resulted in criminal charges. Further, the "general assistance" category includes situations that could prove to be high risk and resource-intensive; this category should not be interpreted as representing minor incidents only.

Broken down by type of call, most calls for service were grouped into the category of general assistance, alarms and non-offence related calls (18,496 or 48% of calls). The second most common types of calls were *Criminal Code – Property*, followed by *Criminal Code – Other* related calls (10.1% and 9.6% of calls, respectively).

Similar to total calls for service, some interesting variation was observed when examining calls by municipality. For example, calls from Esquimalt represented a higher than expected proportion of *Criminal Code – Violent* calls. While calls from Esquimalt represented only 8.7% of dispatched calls for service in 2008, they accounted for 13.4% of all *Criminal Code – Violent* calls.

The breakdown of calls by type and municipality is summarized in Table 7.

TABLE 7 CALLS FOR SERVICE BY TYPE OF CALL AND MUNICIPALITY

	Dept	% of Total Calls	Esq.	% of Esq. Calls	% of Type of Call	Vict.	% of Vict. Calls	% of Type of Call
<b>General Assistance, Alarms, Non-Offence Related Calls</b>	18496	48.0%	1551	46.5%	8.4%	16925	48.2%	91.5%
<b>CCC - Property</b>	3910	10.1%	264	7.9%	6.8%	3641	10.4%	93.1%
<b>CCC - Other</b>	3693	9.6%	315	9.4%	8.5%	3367	9.6%	91.2%
<b>Traffic Related Calls</b>	3091	8.0%	310	9.3%	10.0%	2757	7.8%	89.2%
<b>CCC - Violent</b>	2859	7.4%	384	11.5%	13.4%	2471	7.0%	86.4%
<b>Municipal Bylaw Calls</b>	2772	7.2%	327	9.8%	11.8%	2445	7.0%	88.2%
<b>Non-Traffic Provincial Offence Calls</b>	2695	7.0%	145	4.3%	5.4%	2547	7.2%	94.5%
<b>Drugs and Federal Statute Offence Calls</b>	1024	2.7%	43	1.3%	4.2%	980	2.8%	95.7%
<b>Total</b>	<b>38540</b>	<b>100.0%</b>	<b>3339</b>	<b>100.0%</b>	<b>8.7%</b>	<b>35133</b>	<b>100.0%</b>	<b>91.2%</b>

*c) DISPATCHED CALLS FOR SERVICE (2008) – PEAK PERIODS*

On average, the department logged four calls per hour and 105 calls per day in 2008. However, the volume of calls varied considerably. [Withheld as per S. 15(1)(k)(l) of FOIPPA].

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

The breakdown of calls by day of week and hour of day is summarized in Figure 2.

FIGURE 2 AVERAGE NUMBER OF CALLS BY DAY OF WEEK AND HOUR OF DAY

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

FIGURE 3 AVERAGE NUMBER OF CALLS BY HOUR OF DAY

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

TABLE 8 AVERAGE NUMBER OF CALLS BY DAY OF WEEK

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

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*d) DISPATCHED CALLS FOR SERVICE (2008) – PEAK PERIODS BY MUNICIPALITY*

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There are slight differences between Victoria and Esquimalt with respect to call volume patterns. [Withheld as per S. 15(1)(k)(l) of FOIPPA].

Call patterns by day of week and time of day for Esquimalt are depicted in Figure 4.

FIGURE 4 NUMBER OF CALLS FROM ESQUIMALT BY DAY OF WEEK AND HOUR OF DAY<sup>12</sup>

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

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<sup>12</sup> While Figure 2 presented the average number of calls by day of week and hour of day, the number of calls from Esquimalt was too low to produce meaningful average numbers for this level of detail. Actual numbers are used instead.

It must be emphasized that the magnitude of the variation between Esquimalt and Victoria was minor. In all but three cases, the difference between the percentages of calls from each municipality occurring in each hour was less than one per cent.

The percentage of calls received during each hour of the day is shown in Figure 5.

FIGURE 5 PERCENTAGE OF CALLS BY HOUR OF DAY AND MUNICIPALITY

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

The distribution of calls by day of week is summarized in Table 9.

TABLE 9 CALLS BY DAY OF WEEK AND MUNICIPALITY<sup>13</sup>

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

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*e) DISPATCHED CALLS FOR SERVICE (2008) – WEEK OF YEAR*

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On average, the department received 738 dispatched calls for service per week in 2008. Throughout the year the volume of dispatched calls ranged from a high of 1,027 to a low of 550. [Withheld as per S. 15(1)(k)(l) of FOIPPA].

The average number of dispatched calls during this period was 820 calls per week.

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

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<sup>13</sup> The number of calls from Esquimalt and Victoria do not equal the total for the Victoria Police Department as the total also includes 68 calls that occurred in other policing jurisdictions.

The distribution of calls for service by week of year and municipality is summarized in Figure 6.

FIGURE 6 CALLS FOR SERVICE BY WEEK OF YEAR AND MUNICIPALITY

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

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*f) DISPATCHED CALLS FOR SERVICE (2008) – NUMBER OF UNITS RESPONDING*

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[Withheld as per S. 15(1)(k)(l) of FOIPPA].

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

The breakdown of calls by number of units responding and municipality is summarized in Table 10.

TABLE 10 CALLS FOR SERVICE BY NUMBER OF UNITS RESPONDING AND MUNICIPALITY

[Withheld as per S. 15(1)(k)(l) of FOIPPA].

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*g) DISPATCHED CALLS FOR SERVICE (2008) – DISPATCH TIME*

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The analysis described in this section is based on calls received by either the department's non-emergency line or 9-1-1 (total 33,554 calls). On-view incidents (4,877), calls reported directly to the front desk (108) and recurring calls (1) were excluded.

For the 33,554 dispatched calls included in this analysis, the average length of time between receiving and dispatching the call was [withheld as per s. 15(1)(k)(l) of FOIPPA].

Broken down by priority level, the average dispatch times for priority 1, 2 and 3 calls [withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>14</sup>

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<sup>14</sup> Statistical testing was applied to dispatch times for Victoria and Esquimalt to determine if the difference between them were significant. Testing confirmed that Esquimalt's average dispatch times for priority 1 and priority 3 calls were significantly different. Esquimalt's priority 2 *average* dispatch time did not prove to be significantly different than Victoria's, but testing confirmed that the

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

Dispatch times for priority 1, 2 and 3 calls by municipality are summarized in Table 11.

TABLE 11 DISPATCH TIME BY PRIORITY LEVEL AND MUNICIPALITY

[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>15 16</sup>

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

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distribution of Esquimalt's dispatch times is significantly different than Victoria's at the priority 2 level.

<sup>15</sup> Average and median times for the department also included 68 calls from other areas (e.g., calls to assist an outside agency).

<sup>16</sup> [Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

Average and median dispatch times by priority level, call source and municipality are summarized in Table 12.

TABLE 12 DISPATCH TIME BY PRIORITY LEVEL, CALL SOURCE AND MUNICIPALITY

[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>17</sup>

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*h) DISPATCHED CALLS FOR SERVICE (2008) – TRAVEL TIME AND RESPONSE TIME*

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As with the previous section dealing with dispatch time, the analysis described in this section is based on calls received by either the department's non-emergency line or 9-1-1. On-view incidents (4,877), calls reported directly to the front desk (108) and recurring calls (1) were excluded. In addition, travel time and/or response time could not be calculated due to missing or invalid data for 3,525 calls.

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

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<sup>17</sup> Figure in parentheses represents average time when the extreme outlier was removed.

Average and median travel times by priority level and municipality are summarized in Table 13.<sup>18</sup>

TABLE 13 TRAVEL TIME BY PRIORITY LEVEL AND MUNICIPALITY

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

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<sup>18</sup>[Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

Research into response times cited in the Vancouver Police Department Patrol Deployment Study indicates that police departments should aim for an average response time to priority 1 calls of 7 minutes. Generally, this should consist of 2 minutes dispatch time and 5 minutes travel time.<sup>19</sup> [Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>20</sup>

Average and median response times by municipality are summarized in Table 14.

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<sup>19</sup> Demers, S.; Palmer, A.; and Taylor-Griffiths, C. (2007) "Vancouver Police Department Patrol Deployment Study," p 20.

<sup>20</sup> [Withheld as per s. 15(1)(k)(l) of FOIPPA].

TABLE 14 RESPONSE TIME BY PRIORITY LEVEL AND MUNICIPALITY

[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>21</sup>

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*i) DISPATCHED CALLS FOR SERVICE (2008) – SERVICE TIME*

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Service time represents the amount of time between the dispatched members' arrival on scene and "clearing" or leaving the call. Unlike the previous two sections which only examined calls made to 9-1-1 or the department's non-emergency line, the analysis described in this section also includes on-view incidents, calls reported directly to the front desk and recurring calls. However, service time could not be calculated due to missing or invalid data for 3,358 calls.

Of the 35,002 calls included in this analysis, the average service time was [Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>22</sup>

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<sup>21</sup> Figure in parentheses represents average time when the extreme outlier was removed.

<sup>22</sup> [Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

Average and median service times by priority level and municipality are summarized in Table 15. Table 16 shows the same information by call source, for calls reported to 9-1-1 and the department's non-emergency line only (e.g., it does not include on-view incidents).

TABLE 15 SERVICE TIME BY PRIORITY LEVEL AND MUNICIPALITY

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

TABLE 16 SERVICE TIME BY PRIORITY LEVEL, CALL SOURCE AND MUNICIPALITY

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

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*j) DISPATCHED CALLS FOR SERVICE (2008) – RESPONSE TIME AND SERVICE TIME DURING PEAK PERIODS*

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[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>23</sup>

However, there were some time periods where either the average dispatch, travel and/or response time was considerably longer than the corresponding overall average. There were also some time periods where the average service time was considerably shorter than the overall average. These are highlighted in Table 17. [Withheld as per s. 15(1)(k)(l) of FOIPPA].

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<sup>23</sup> This analysis only examined priority 1 and 2 calls.

Other times of day and days of week where the average dispatch, travel, response or service times for priority 1 calls differed considerably from the corresponding averages for all priority 1 calls are listed in Table 18.

TABLE 17 AVERAGE DISPATCH, TRAVEL, RESPONSE AND SERVICE TIMES DURING PEAK PERIODS

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

TABLE 18 DAY OF WEEK AND HOUR OF DAY WHERE PRIORITY 1 DISPATCH, TRAVEL, RESPONSE OR SERVICE TIMES WERE ABOVE OR BELOW AVERAGE

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

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*k) DISPATCHED CALLS FOR SERVICE (2008) - RESPONSE TIME AND SERVICE TIME BY WEEK OF YEAR*

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[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>24</sup>

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

TABLE 19 AVERAGE DISPATCH TIME DURING WEEKS 29 AND 31, BY CALL SOURCE

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

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<sup>24</sup> [Withheld as per s. 15(1)(k)(l) of FOIPPA].

### 3. ON-VIEW INCIDENTS

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On-view incidents can be described as self-initiated calls for service by members. They typically result from incidents or behaviour members observe while patrolling a beat or during uncommitted time in between responding to calls for service assigned to them by dispatch.

Of the 38,540 calls for service included in this analysis, 4,877 (12.7%) were categorized as on-view incidents. Of these, 246 occurred in Esquimalt and 4,593 occurred in Victoria. The proportion of on-view incidents that occurred in Esquimalt was lower than expected, compared with its share of all calls for service: 5% of all on-view incidents occurred in Esquimalt compared with 8.7% of all calls for service. On-view incidents also made up a smaller proportion of all calls for service from Esquimalt. On-view incidents accounted for 7.4% of all calls for service from Esquimalt compared with 12.7% of calls for service for the department overall. These results are summarized in Table 20.

TABLE 20 ON-VIEW INCIDENTS BY MUNICIPALITY

	<b>Department</b>	<b>Esquimalt</b>	<b>Victoria</b>
<b>On-View Incidents</b>	4877	246	4593
<b>% of Total Calls for Service</b>	100.0%	8.7%	91.2%
<b>% of Total On-View Incidents</b>	100.0%	5%	94.2%
<b>% of Municipality's Calls for Service Categorized as On-View Incidents</b>	12.7%	7.4%	13.1%

Overall, most on-view incidents were categorized as *Criminal Code – Other*, traffic-related calls, or non-traffic provincial offence calls (e.g., *Liquor Control and Licensing Act* enforcement). Broken down by municipality, traffic-related calls made up the largest type of on-view incident in Esquimalt, accounting for 38.2% of on-view incidents compared with 25.6% in Victoria. The second largest category of on-view incidents in Esquimalt was general assistance calls (21.1%), followed by *Criminal Code – Other*. These findings are summarized in Table 21.

TABLE 21 ON-VIEW INCIDENTS BY TYPE

Type of Call	Dept.	%	Esquimalt	%	Victoria	%
CCC – Other	1,350	27.7	51	20.7	1,293	28.2
Traffic Related Calls	1,289	26.4	94	38.2	1,175	25.6
Non-Traffic Provincial Offence Calls	777	15.9	20	8.1	756	16.5
General Assistance, Alarms, Non-Offence Related Calls	757	15.5	52	21.1	696	15.2
CCC – Property	283	5.8	10	4.1	272	5.9
Drugs and Federal Statute Offence Calls	268	5.5	11	4.5	256	5.6
Municipal Bylaw Calls	86	1.8	4	1.6	82	1.8
CCC – Violent	67	1.4	4	1.6	63	1.4
<b>Total</b>	<b>4,877</b>	<b>100.0</b>	<b>246</b>	<b>100.0</b>	<b>4,593</b>	<b>100.0</b>

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

Broken down by priority level, the overwhelming majority of on-view incidents in both Victoria and Esquimalt were priority 3 and 4 calls. For the department overall, priority 4 calls accounted for 47.4% of all on-view incidents, followed by priority 3 calls at 45.2%. The pattern differed slightly in Esquimalt, where priority 3 calls accounted for 50.8% of all on-view incidents, followed by priority 4 calls at 40.2%. [Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>25</sup>

Most on-view incidents in both Victoria and Esquimalt took place on [Withheld as per s. 15(1)(k)(l) of FOIPPA].

These findings are summarized in Table 22.

<sup>25</sup> [Withheld as per s. 15(1)(k)(l) of FOIPPA].

TABLE 22 PEAK PERIODS FOR ON-VIEW INCIDENTS, BY MUNICIPALITY

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

[Withheld as per s. 15(1)(k)(l) of FOIPPA].<sup>26</sup>

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

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<sup>26</sup> Determined by call sign of first unit to respond to a call.

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

The breakdown of on-view incidents by detail and municipality is summarized in Table 23.

TABLE 23 ON-VIEW INCIDENTS BY DETAIL AND MUNICIPALITY

[Withheld as per s. 15(1)(k)(l) of FOIPPA].

#### **4. AVERAGE NUMBER OF DISPATCHED CALLS PER SWORN MEMBER**

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According to the 2008 Police and Crime Summary Statistics published by Police Services Division, the authorized strength of the Victoria Police Department in 2008 was 241 sworn members. Of the 57,735 calls for service in 2008, 16,910 were cleared by dispatch. Using the remaining 40,825 calls as the total number of dispatched calls for service, the number of dispatched calls per sworn member for 2008 was 169. According to figures from other Canadian police agencies cited in the Vancouver Police Department Patrol Deployment Study, this represents a higher call load than many of the country's largest independent police departments (see Table 24). However, three important cautions must be noted: (i) the figures provided for other agencies are based on 2005 data; (ii) the definition of calls for service can vary considerably between departments, so comparisons using calls for service may be imprecise; and (iii) large agencies may not be an appropriate comparison group for the Victoria Police Department.

TABLE 24 DISPATCHED CALLS PER SWORN MEMBER – OTHER CANADIAN POLICE AGENCIES<sup>27</sup>

Agency	Number of Dispatched Calls (2005)	Authorized Sworn Strength (2005)	Number of Dispatched Calls per Sworn Member
Ottawa Police Service	275,056	1,251	220
Vancouver Police Department	188,616	1,174	161
Toronto Police Service	799,151	5,227	153
Calgary Police Service	205,735	1,489	138
Peel Regional Police Service	185,232	1,669	111
Edmonton Police Service	142,787	1,342	106
Winnipeg Police Service	118,560	1,229	96
<b>Average</b>	<b>273,591</b>	<b>1,912</b>	<b>141</b>

Information on the number of dispatched calls received by other independent police forces was not readily available. According to reports posted on the Abbotsford and Delta police department websites, Abbotsford PD received 52,233 calls for service in 2008 that resulted in a general occurrence report (i.e., not completed in CAD) and Delta PD received 27,614 calls for service. It is unclear whether the latter includes all calls for service or dispatched calls only.

Using these figures and Police Services Division data on authorized strength, the number of calls per service per sworn member in 2008 was 256 for Abbotsford PD and 173 for Delta PD (see Table 25). Once again, comparisons between jurisdictions are tenuous due to variations in the definitions of calls for service. Different call response policies (e.g., “no call too small”) also make comparisons difficult.

TABLE 25 CALLS FOR SERVICE PER SWORN MEMBER – OTHER INDEPENDENT POLICE FORCES IN BC

Agency	Number of Dispatched Calls (2008)	Authorized Sworn Strength (2008)	Number of Dispatched Calls per Sworn Member
Abbotsford PD	52,233 <sup>28</sup>	204	256
Delta PD	27,614 <sup>29</sup>	160	173
Victoria PD	40,825	241	169

<sup>27</sup> Demers, S.; Palmer, A.; and Taylor-Griffiths, C. (2007) “Vancouver Police Department Patrol Deployment Study,” p 397.

<sup>28</sup> <http://abbypd.ca/files/File/Statistics/2008/2008-Year-End.pdf>, p. 9.

<sup>29</sup> [http://deltapolice.ca/crimereports/0901\\_crimebulletin.pdf](http://deltapolice.ca/crimereports/0901_crimebulletin.pdf), p. 5.

## 5. UNALLOCATED TIME

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Unallocated time can be described as the amount of time that is not spent responding to calls for service (after subtractions such as meal breaks, leave, training, among others, have been removed). Unallocated time allows officers to undertake proactive policing functions. Many police agencies set targets for the percentage of unallocated time for patrol members and use these targets to identify staffing requirements. For example, the RCMP has identified a range between 25 – 35% unallocated time as an acceptable target.

The audit team was provided with one report which implied a target of [withheld as per s. 17 of FOIPPA] unallocated time for the department’s patrol function.<sup>30</sup> In this report, a [withheld as per s. 17 of FOIPPA] target for unallocated time was one of the factors used to identify the number of patrol members required to meet the department’s current workload.

In contrast, interviews with members involved in the patrol function, as well as information obtained from the department, indicate that the department has not established targets for unallocated time, nor is unallocated time tracked or monitored. When asked to estimate the amount of unallocated time during any given shift, many patrol members interviewed either could not come up with an estimate or stated that it would vary greatly depending on the day of the week and time of day. On busier days, they described having virtually no unallocated time as members go from call to call.

## 6. PROPORTION OF TWO-OFFICER UNITS

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Some research into patrol deployment indicates that a deployment model that involves a mix of one- and two-officer units is more efficient and effective than either an exclusively one- or two-officer system.<sup>31</sup> The audit team had intended to examine the proportion of calls responded to by one- and two-officer units; however, in 2008 the department was restricted to two-officer units due to issues surrounding the CREST communications system.

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<sup>30</sup> [Withheld as per s. 17 of FOIPPA].

<sup>31</sup> Taylor, Philip E. and Huxley, Stephen J. (1989) “A Break from Tradition for the San Francisco Police: Patrol Officer Scheduling Using an Optimization-Based Decision Support System.” *Interfaces*: vol. 19 (pp. 4 -42).

## 7. ALIGNMENT OF RESOURCES TO DEMANDS FOR SERVICE

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### *a) PATROL SHIFT SCHEDULING PATTERNS*

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[Withheld as per s. 15 (1)(k)(l) of FOIPPA].<sup>32</sup>

[Withheld as per s. 15 (1)(k)(l) of FOIPPA].

Minimum strengths are outlined in Table 26. Interview data indicates that current minimum strengths were established by combining the minimum strengths required by both the Victoria and Esquimalt police departments at the time of amalgamation and have not been re-examined since.

TABLE 26 MINIMUM STRENGTH REQUIRED BY POLICY

[Withheld as per s. 15 (1)(k)(l)(c) of FOIPPA].

[Withheld as per s. 15 (1)(k)(l)(c) of FOIPPA].

In an effort to gain a clearer picture of the actual strength of the patrol function, the audit team identified a random sample of dates from 2008 for which patrol rosters were requested. Unfortunately, this information was difficult to obtain. While records detailing patrol member attendance and assignment were available through the [Withheld as per s. 15 (1)(k)(l)(c) of FOIPPA].

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<sup>32</sup> Prior to amalgamation, the patrol function at Esquimalt police department followed the same model.

In lieu of historical data, the audit team received a description of patrol scheduling and resources from the department. [Withheld as per s. 15 (1)(k)(l)(c) of FOIPPA].

At times, this may result in patrol being under- or over-resourced in relation to calls for service. When a patrol function is under-resourced, dispatch times can be expected to increase and members will have little unallocated time for proactive policing as they move from call to call. Over time, this can lead to burnout. When a patrol-function is over-resourced there is more time for proactive policing but there may also be inefficiencies in terms of operational costs. The goal in scheduling is to minimize shortages and surpluses while at the same time balancing conflicting considerations for citizen safety, operational costs and officer morale.<sup>33</sup> Figure 7 illustrates the number of officers available to respond to calls for service during 2008 (i.e., the minimum strength) against the average number of dispatched calls for service. [Withheld as per s. 15 (1)(k)(l)(c) of FOIPPA].

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<sup>33</sup> Taylor, Philip E. and Huxley, Stephen J. (1989) "A Break from Tradition for the San Francisco Police: Patrol Officer Scheduling Using an Optimization-Based Decision Support System." *Interfaces*: vol. 19 (pp. 4 -42).

[Withheld as per s. 15 (1)(k)(l)(c) of FOIPPA].<sup>34 35</sup>

There are a number of approaches to studying deployment and software solutions to assist with effective scheduling. Three of the leading models include the Police Allocation Model (PAM),<sup>36</sup> Managing Patrol Performance (MPP) and Staff Wizard, which are described in the Vancouver Police Department Patrol Deployment Study.<sup>37</sup> After reviewing the strengths and limitations of each model, the Vancouver Police Department developed its own approach, tailored to its specific needs and interests. Other commercially available scheduling solutions include inTime and TeleStaff.

The audit team is aware of the challenges in moving away from the existing shift scheduling pattern, including the preference of members and the constraints of the current collective agreement, which expires March 31, 2010. Chapter 22 of the 1992 Report of the Auditor General of Canada acknowledged similar barriers with respect to the 12-hour, equal-watch schedules used by large RCMP detachments throughout Canada. However, it concluded that “[g]iven the current fiscal constraints at all levels of government and the focus on meeting community expectations, the RCMP will need to balance members' morale with operational efficiency in approving various shift schedules.”<sup>38</sup> Consequently, it recommended that the suitability of the 12-hour, equal-watch system be assessed and that shift schedules be subject to period evaluation.

The observations regarding fiscal constraints and community expectations are equally relevant to the department's current situation.

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<sup>34</sup> In 2008, all units were two-officer units due to concerns with the CREST communications system.

<sup>35</sup> [Withheld as per s. 15 (1)(k)(l)(c) of FOIPPA].

<sup>36</sup> The PAM can be downloaded at no cost from the National Highway Traffic Safety Administration website at

<http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.9fa154a4d39f02e770f6df1020008a0c/>.

<sup>37</sup> Demers, S.; Palmer, A.; and Taylor-Griffiths, C. (2007) “Vancouver Police Department Patrol Deployment Study,” pgs 130-137.

<sup>38</sup> “Chapter 22—Royal Canadian Mounted Police—Provincial and Municipal Policing,” *1992 Report of the Auditor General*, paragraph 22.41.

Found at [http://www.oagbvg.gc.ca/internet/English/parl\\_oag\\_199212\\_22\\_e\\_8076.html](http://www.oagbvg.gc.ca/internet/English/parl_oag_199212_22_e_8076.html)

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*b) AVERAGE DISPATCH TIME*

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Another way of examining the alignment between demands for service and resources is to look at the percentage of calls dispatched without queuing or the probability that no unit will be available to be dispatched to a call when it is received. The latter measure is included in the RCMP's Police Human Resource Study (PHRS) methodology and the former is used by the Vancouver Police Department. Unfortunately, the data required to establish these measures for the department was not available.

Average dispatch times may also provide an indication of the alignment between demands for service and resources. Research into police response time indicates that police forces should aim for a 7-minute response time to priority 1 calls, which realistically implies a 2-minute average dispatch time and 5-minute average travel time.<sup>39</sup>

As noted in the analysis of the department's dispatched calls for service [withheld as per s. 15 (1)(k)(l) of FOIPPA].

[Withheld as per s. 15 (1)(k)(l)(c) of FOIPPA].

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<sup>39</sup> Demers, S.; Palmer, A.; and Taylor-Griffiths, C. (2007) "Vancouver Police Department Patrol Deployment Study," p 20.

FIGURE 7 PATROL STRENGTH AND AVERAGE DISPATCHED CALLS FOR SERVICE BY HOUR OF DAY AND DAY OF WEEK

[Withheld as per s. 15 (1)(k)(l) of FOIPPA].

Another aspect of patrol scheduling that merits discussion is the allocation of resources by patrol areas. [Withheld as per s. 15 (1)(k)(l) of FOIPPA].<sup>40</sup>

However, findings from the interviews suggest that the allocation of resources by patrol area is not entirely clear.

In particular, interview respondents varied in their responses as to whether patrol members are assigned to a particular patrol area and if so, the significance of that assignment. Many were of the view that call signs had very little meaning; for example, indicating that if an officer were available then they could be dispatched to a call in any part of the department's jurisdiction. Others described their assigned patrol area as their first priority for call response and proactive policing, acknowledging that they respond to calls outside of the assigned area when needed.

The audit team also noted that the current structure of the patrol function is markedly different from the Implementation Plan put forward by the Operational Sub-committee at the time of amalgamation.<sup>41</sup> The Sub-committee's overall recommendation was that the new police department take on a "mixed model" of centralized and de-centralized functions. Geographically, the department's jurisdiction was to be split into three zones: West (which would include Esquimalt, Vic West and Burnside); East and Core/Downtown. Each zone was to have a designated Inspector responsible for the overall management of the area including the resources (members, supervisors and vehicles) assigned to that area.<sup>42</sup> Centrally, another Inspector would be responsible for patrol resourcing across the entire jurisdiction. Other functions such as dispatch, Investigative Services<sup>43</sup> and Human Resources would also be centrally managed.

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<sup>40</sup> Averages are based on schedules from January 2, 2009 to May 8, 2009.

<sup>41</sup> Transition Committee for Victoria and Esquimalt Police Amalgamation (November 2002). "Implementation Plan: Victoria and Esquimalt Police Amalgamation," p 9. Found at <http://www.victoria.ca/police/newinfo/ImplementPlan9Ops.html>

<sup>42</sup> In addition to managing patrol within their district, these Inspectors would also be assigned a central responsibility. For example, the West Inspector would be responsible for Gang Unit, Youth Section, CPS Resources and a point of contact or liaison for Esquimalt Council. The East Inspector would be responsible for the Elite Major Crime Section. The core Inspector would be responsible for targeted patrol functions and contact person with Victoria City Council.

<sup>43</sup> Investigators would also be located throughout the geographic zones but would report to centrally based Inspector.

Within each geographic zone, patrol officers and supervisors would be clearly assigned to a zone and work primarily out of that zone. In the case of West, officers would work out of the Esquimalt building, which was intended to continue to operate 24/7 for uniform police functions. The front counter (including civilian complaint takers) would be open during weekdays from 8:00 a.m. to 6:00 p.m. According to various documents including renovation plans for the Esquimalt building and notes from a Data/IT migration Sub-Committee meeting, the intended police uses of the Esquimalt building included (but were not limited to):

- Breathalyser testing room
- Interview rooms
- Holding rooms
- Fingerprint room
- Mug shot capture station
- Evidence storage lockers (by end of shift all evidence and property would be lodged with Exhibit Control and Purchasing at headquarters)
- Report writing area including computer terminals with full connectivity to headquarters.

Under these plans, officers assigned to the West would be able to spend the majority of their shift within that zone, attending the Esquimalt building as needed in between calls. Attendance at Victoria Headquarters would be required throughout the shift to book prisoners into cells and at the beginning and end of each shift (e.g., for parade and to lodge evidence and property with Exhibit Control and Purchasing).

[Withheld as per s. 15 (1)(k)(l) of FOIPPA].

## 8. OTHER SERVICES

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In addition to the calls for service that have been analyzed above, the department provides services to the municipalities of Victoria and Esquimalt that are more difficult to quantify. It is extremely difficult to accurately quantify the value of these services to a community; however, the intrinsic value of these services must be taken into account in order to more fully understand the service to public that is provided by the department.

The department currently employs 257 sworn members, 91 civilian employees, eight Special Provincial Constables, 40 reserve constables and countless volunteers. The programs and the number of paid staff employed are included in Table 27.

The calls for service analyzed above take into account some of the service activities provided by Patrol and the Focused Enforcement Team (FET), which comprise a little over one-third (38%) of the department's 356 employees.

The calls for service analysis does not take into account the hours spent by Patrol and FET members doing proactive police work, the impact of officer visibility on crime reduction, and services provided by the other two-thirds of employees. These services include: jail functions, investigative services, information management, human resources, support services, executive functions, front desk services in both Victoria and Esquimalt, crime analysis, financial services, and a variety of other internal functions (audits, media communications, information requests, and internal *Police Act* investigations).

TABLE 27 LIST OF VICTORIA POLICE DEPARTMENT DIVISIONS AND UNITS

[Withheld as per s. 15(1)(c) and s.17 (1) (c) of FOIPPA].

In addition to staff and services shown in Table 27, the department maintains and several volunteer, reserve and/or community-based programs. Some of these programs include:

- Block Watch (with 273 volunteer Captains and Co-Captains);
- Crime Watch (roughly 100 volunteers) Foot/Bike/Van Patrols
- Speed Watch;
- Bike pick-up;
- Home Security Audits;
- Mature Drivers Program;
- Lock Out Auto Crime;
- Front Desk greeters;
- Stolen Auto Recovery Program;
- Graffiti reduction and removal;
- Crime Free Multi Housing (92 buildings in Victoria, 21 in Esquimalt);
- Distribution of flyers in areas where crime happens (for example, missing persons flyers) or distribution of a safe needle disposal kit; and
- Participation in community events and education to public and businesses.

The department also maintains community partnerships and active participation with the Insurance Corporation of British Columbia (ICBC), the Justice Institute of British Columbia, Neighbourhood Community Associations; and secondments to integrated teams such as: Combined Forces Special Enforcement Unit (CFSEU), Integrated Road Safety Unit (IRSU), Integrated National Security Enforcement Teams (INSET), Integrated Municipal Provincial Auto Crime Team (IMPACT), Drug Evaluation & Classification Program (DECP), and Critical Incident Stress Management Team (CISM).

## 9. FINANCIAL CONSIDERATIONS

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### a) DEPARTMENT BUDGET

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The department's budgeted expenditures are allocated to Victoria and Esquimalt based on the converted assessed value of properties within each municipality. Over the years, Esquimalt's contribution has comprised roughly 14% of the overall policing budget. The budget amounts required from both Victoria and Esquimalt from 2003 to 2009 are summarized in Table 28.

TABLE 28 VICTORIA POLICE DEPARTMENT BUDGET OVERVIEW

	2003	2004	2005	2006	2007	2008	2009	Ave
<b>Victoria</b>	86.05%	86.42%	86.31%	86.21%	85.91%	85.82%	85.34%	86.01%
	\$23,363,514	24,699,700	24,944,457	26,261,525	27,606,641	30,048,874	32,564,419	27,069,876
<b>Esquimalt</b>	13.95%	13.58%	13.69%	13.79%	14.09%	14.18%	14.66%	13.99%
	3,815,486	3,881,300	3,955,543	4,226,475	4,527,359	4,965,370	5,593,581	4,423,588
<b>Total</b>								
<b>Requested</b>	<b>27,179,000</b>	<b>28,581,000</b>	<b>28,900,000</b>	<b>30,488,000</b>	<b>32,134,000</b>	<b>35,014,244</b>	<b>38,158,000</b>	<b>31,493,463</b>

Analysis of the 2006 to 2008 expenses shows that the largest expenditures include salaries, overtime and benefits for police and civilian employees. Together, these three expenses make up roughly 85 to 90% of each budget (salaries comprise 65 to 73% on average of the total budget; overtime 5 to 7%; and benefits 14 to 15%).

During 2008, the department spent \$19,022,626 on police salaries and \$5,131,491 on civilian employee salaries, \$2,299,799 on overtime (the three-year average overtime expense is \$2 Million), and \$5,045,304 on benefits packages for all employees.

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b) *OVERTIME COSTS AND CONTROLS*

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The department's overtime budget is generally determined by calculating the average overtime costs from the previous 3 years. In 2009, the average from the previous 5 years was used as 2006 and 2008 were viewed as anomalous years for overtime expenditures.<sup>44</sup> Overtime budget and costs from 2006 to 2009 are summarized in Table 29.

TABLE 29 OVERTIME BUDGET AND COSTS (2006 - 2009)

		2006	2007	2008	2009
<b>Budget</b>	<b>Sworn</b>	\$867,000	\$1,210,000	\$1,264,000	
	<b>Civilian</b>	\$114,000	\$171,000	\$254,000	
	<b>Total</b>	\$981,000	\$1,381,000	\$1,518,000	\$1,618,000
<b>% of Total operating Budget</b>		3.7%	5.0%	4.6%	4.2%
<b>Actual Costs</b>	<b>Sworn</b>	\$1,861,964	\$1,303,832	\$1,914,577	
	<b>Civilian</b>	\$293,732	\$246,235	\$385,222	
	<b>Total</b>	\$2,155,696	\$1,550,067	\$2,299,799	
<b>Shortfall</b>	<b>Sworn</b>	-\$994,964	-\$93,832	-\$650,577	
	<b>Civilian</b>	-\$179,732	-\$75,235	-\$131,222	
	<b>Total</b>	-\$1,174,696	-\$169,067	-\$781,799	

Each officer is required to fill out a request for overtime on each occasion, which must be approved by the member's supervisor. Overtime is "billed" to the section for which it was incurred (e.g., if a FET member is called out to backfill patrol, the overtime is billed to patrol). The record keeping system for overtime is sufficiently detailed to permit an analysis of overtime by section and individual officer, (e.g., to identify potential mismanagement or officers at risk of burn-out).<sup>45</sup>

Policy governing overtime can be found in the collective agreement as well as specific sections of the department's policy and procedure manual.

The department's Controller prepares monthly financial forecasts and a year-end fiscal review for the Police Board which includes information on overtime spending. The year-end reviews offer brief explanations for significant overtime cost overruns.

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<sup>44</sup> Reasons cited included 6 murder investigations in 2006 and the lag time in hiring and training new members in 2008.

<sup>45</sup> It is not clear if such analysis is conducted.

Patrol has consistently incurred the largest share of the department's overtime costs. According to the 2007 Fiscal Year End Review, the average overtime cost attributed to patrol from 2003 to 2007 was \$707,591. More detailed data provided to the audit team for 2007, 2008 and the first half of 2009 indicates that the majority of patrol overtime costs resulted from call outs and statutory holiday pay. Patrol overtime costs decreased 7.3% from 2007 to 2008, yet difficulties keeping patrol at full strength were cited in the fiscal year end review as contributing to overtime cost over-runs. Patrol overtime costs are summarized in Table 30.

TABLE 30 PATROL OVERTIME COSTS BY REASON (2007 – 2009)

	2007	2008	2009 <sup>46</sup>
<b>Not specified</b>	\$9,090.86	\$4,179.45	\$6,550.18
<b>Court</b>	\$74,423.82	\$90,401.34	\$42,594.11
<b>Extended Tour</b>	\$61,065.37	\$45,335.89	\$33,515.77
<b>Call Out</b>	\$519,750.30	\$437,527.01	\$107,747.25
<b>Stat</b>	\$226,334.60	\$248,305.64	\$106,002.97
<b>Total</b>	<b>\$890,664.95</b>	<b>\$825,749.33</b>	<b>\$296,410.28</b>
<b>Percent of Total Sworn OT Costs</b>	<b>68.3%</b>	<b>43.1%</b>	

Overall, the audit team did not have significant concerns with respect to the department's use of overtime. However, controls could be improved by ensuring that overtime data is analyzed to compare trends with changes in work patterns (e.g., are regular hours and vacation hours decreasing when overtime and compensatory time off are increasing?) and workload (e.g., are dispatched calls for service and *Criminal Code* offences decreasing when overtime and compensatory time off are increasing?). Analysis of overtime data can flag potential areas of concern such as over-use and scheduling inefficiencies.

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*c) POLICING COSTS AND STRENGTHS (2001 – 2008)*

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This section examines Police Services Division data on policing costs and strengths for the Victoria Police Department and all of the independent municipal police forces in British Columbia, for the period 2001 to 2008.

(1) AUTHORIZED STRENGTH

Victoria is the second largest independent municipal police force after the Vancouver Police Department. It has held this position consistently since 2001. The next largest departments are Abbotsford and Delta.

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<sup>46</sup> January 1, 2009 to June 30, 2009.

In 2008, the authorized strength of Victoria increased by 19 members to a total of 241. This was the most significant increase in authorized strength since amalgamation in 2003 when the department acquired members from Esquimalt. Other increases occurred in 2005 (four members), 2006 (six members) and 2007 (one member).

Overall, from 2001 to 2008, increases in authorized strength for the department have been similar to increases for all independent municipal forces during this time. For example, the average annual percentage increase for the department was 1.6% a year from 2001 to 2008 while the average annual percentage increase for all independent municipal forces was 1.7%.<sup>47</sup> However, more recently the department has experienced more growth compared with other independent municipal forces. The average annual percentage increase for the department for the past 3 years was 3.9% compared with 2.6% for all independent municipal forces.

Authorized strength data for all independent municipal police forces from 2001 to 2008 is summarized in Table 31.

TABLE 31 AUTHORIZED STRENGTH – INDEPENDENT MUNICIPAL POLICE FORCES (2001 – 2008)

<b>Policing Jurisdiction</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Esquimalt	34	32						
Abbotsford	148	153	158	173	187	195	199	204
Central Saanich	21	21	21	21	21	21	21	22
Delta	143	139	141	145	151	151	160	160
Nelson City	17	17	17	17	17	17	20	21
New Westminster	106	106	106	105	107	107	109	107
Oak Bay	22	22	22	22	22	22	24	23
Port Moody	30	32	34	36	40	40	45	46
Saanich	138	141	141	144	147	147	147	149
Vancouver	1,096	1,096	1,124	1,124	1,174	1,214	1,235	1,239
Victoria	184	184	211	211	215	221	222	241
West Vancouver	77	77	77	79	79	79	80	82
<b>Total</b>	<b>2,016</b>	<b>2,020</b>	<b>2,052</b>	<b>2,077</b>	<b>2,160</b>	<b>2,214</b>	<b>2,262</b>	<b>2,294</b>
<b>Average</b>	<b>180</b>	<b>181</b>	<b>187</b>	<b>189</b>	<b>196</b>	<b>201</b>	<b>206</b>	<b>209</b>
<b>Median</b>	<b>106</b>	<b>106</b>	<b>106</b>	<b>105</b>	<b>107</b>	<b>107</b>	<b>109</b>	<b>107</b>

<sup>47</sup> Both figures control for the impact of amalgamation of the Victoria and Esquimalt police departments in 2003.

## (2) POPULATION

The resident population served by the Victoria Police Department was the fifth highest of all the independent municipal police forces from 2001 to 2007. In 2008, it was the fourth highest at 99,534.

Across the independent municipal policing jurisdictions, populations generally increased from 2001 to 2007. Many jurisdictions saw population figures decrease in 2008. The average annual percentage change for all independent jurisdictions from 2001 to 2008 was 1.4%. Growth was slowest between 2004 and 2006 and in 2008. Victoria experienced similar patterns.

It is worth noting that Victoria's daily population is much higher than its resident population. Census data from 2006 indicate that 25,850 people commuted to Victoria for full time employment from surrounding communities such as Saanich, Oak Bay and beyond.<sup>48,49</sup> An additional 16,445 commuted for part-time employment. Adding full time commuters to Victoria's resident population could increase its daily population by as much as 27%.<sup>50</sup> Tourism also has a significant impact on the daily population of Victoria.

The distinction between resident population and daily population is important to keep in mind when considering differences between the department and surrounding independent municipal police forces on measures that are based on resident population (e.g., police-reported crime rate and cost per capita).

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<sup>48</sup> Statistics Canada. "2006 Census, Commuting Flow Census Subdivisions: Work Activity (4) and Sex (3) for Employed Labour Force 15 Years and Over Having a Usual Place of Work, 2006 Census - 20% Sample Data." Extracted by BC Stats, July 29, 2009.

<sup>49</sup> Excludes persons commuting from Esquimalt.

<sup>50</sup> Does not account for Victoria residents commuting for full time work to surrounding communities.

TABLE 32 POPULATION SERVED BY INDEPENDENT MUNICIPAL POLICE FORCES  
(2001 – 2008)

<b>Policing Jurisdiction</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Esquimalt	16,419	16,903						
Abbotsford	116,078	125,613	127,712	127,334	128,165	129,685	132,514	133,637
Central Saanich	15,694	15,995	16,091	16,451	16,821	16,768	16,619	16,218
Delta	101,750	101,299	100,576	101,848	102,661	102,945	102,371	99,514
Nelson City	9,853	9,571	9,630	9,784	9,797	9,923	9,914	9,752
New Westminster	54,207	57,603	59,426	58,286	57,480	57,645	62,607	63,745
Oak Bay	17,494	18,360	18,207	18,357	18,313	18,059	18,795	18,085
Port Moody	24,162	25,545	26,690	26,613	28,458	30,120	30,004	31,573
Saanich	107,129	108,084	107,964	109,639	110,386	110,737	114,151	113,209
Vancouver	573,154	581,207	569,814	584,709	584,701	589,352	613,286	616,979
Victoria	75,369	77,941	93,097	94,576	94,525	96,066	100,407	99,534
West Vancouver	44,756	45,213	45,212	46,282	46,595	46,764	46,676	45,715
<b>Total</b>	<b>1,156,065</b>	<b>1,183,334</b>	<b>1,174,419</b>	<b>1,193,879</b>	<b>1,197,902</b>	<b>1,208,064</b>	<b>1,247,344</b>	<b>1,247,961</b>
<b>Average</b>	<b>103,604</b>	<b>106,039</b>	<b>106,765</b>	<b>108,534</b>	<b>108,900</b>	<b>109,824</b>	<b>113,395</b>	<b>113,451</b>
<b>Median</b>	<b>54,207</b>	<b>57,603</b>	<b>59,426</b>	<b>58,286</b>	<b>57,480</b>	<b>57,645</b>	<b>62,607</b>	<b>63,745</b>

### (3) CASE LOAD

There is considerable variation in case loads across the independent municipal forces. In 2008, case loads ranged from a high of 61 cases per member for New Westminster Police Service to a low of 28 cases for West Vancouver Police Department. The average for all independent municipal forces was 44 cases. The comparative figure for the Victoria Police Department was 55 cases per member.

The department's case load was consistently among the highest of all the independent municipal forces from 2001 to 2008. On average, each year it was 38.5% higher than the average for all independent municipal forces combined.

Across all independent municipal forces, case loads have been decreasing since about 2004. The average case load for all independent municipal police forces in 2001 was 61 cases per member compared with 44 cases in 2008. The downward trend has become more pronounced in recent years. For example, the average annual percentage change for the past 3 years was -8.5% compared with -3.0% from 2001 to 2008.

Case loads have followed a similar pattern for the Victoria Police Department: the average annual percentage change for the past 3 years was -12.0% compared with -5.8% from 2001 to 2008. It should be noted that the decrease in case load in 2008 (-20.2% from 2007) was largely the result of the increase in authorized strength by 19 members in 2008. Due to the lag time in hiring and training these members, they likely had a greater impact on case load statistics in 2008 than actual workload.

The decrease in *Criminal Code* offences province-wide has also contributed to the decrease in case loads.

TABLE 33 CASE LOADS – INDEPENDENT MUNICIPAL POLICE FORCES (2001 – 2008)

<b>Policing Jurisdiction</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Esquimalt	59	60						
Abbotsford	91	94	97	89	81	68	63	57
Central Saanich	37	36	35	41	39	35	40	32
Delta	53	47	51	45	50	49	41	43
Nelson City	76	93	92	88	80	68	54	51
New Westminster	83	79	87	97	87	76	67	61
Oak Bay	42	41	61	59	54	42	38	38
Port Moody	54	52	53	56	47	46	35	30
Saanich	45	43	44	46	43	43	41	39
Vancouver	68	65	65	68	58	56	48	45
Victoria	86	91	89	85	82	78	70	55
West Vancouver	36	45	44	38	35	35	31	28
<b>Total</b>	<b>67</b>	<b>66</b>	<b>68</b>	<b>68</b>	<b>61</b>	<b>58</b>	<b>51</b>	<b>46</b>
<b>Average</b>	<b>61</b>	<b>62</b>	<b>65</b>	<b>65</b>	<b>60</b>	<b>54</b>	<b>48</b>	<b>44</b>
<b>Median</b>	<b>57</b>	<b>56</b>	<b>61</b>	<b>59</b>	<b>54</b>	<b>49</b>	<b>41</b>	<b>43</b>

#### (4) CRIME RATE

As with case load, there is also considerable variation in police-reported crime rates across the independent municipal forces. In 2008, crime rates ranged from 44 *Criminal Code* offences per 1,000 population reported by Central Saanich Police Service to 134 offences reported by Victoria Police Department.

Overall, crime rates have been falling across the province and for all independent municipal police forces since 2005. The average annual percentage change for all independent forces for the past 3 years was -7.7%. From 2001 to 2008 it was -3.1%. Police-reported crime rates started falling in Victoria sooner (in 2003) and fell more dramatically compared to other jurisdictions in 2007 and 2008. As a result, the average annual percentage changes were larger for the jurisdiction (-10.3% for the past 3 years and -6.2% from 2001 to 2008).

Despite these decreases, the Victoria Police Department continued to report the highest crime rate of all the independent municipal police forces in 2008—a position it has held consistently since 2001. The crime rate for the jurisdiction ranged from a high of 211 *Criminal Code* Offences per 1,000 population in 2001 to a low of 134 offences in 2008. In comparison, the average for all independent forces ranged from a high of 105 offences per 1,000 population in 2003 and 2004, to a low of 75 offences in 2008.

In contrast, police-reported crime rates in the surrounding jurisdictions (Oak Bay, Central Saanich and Saanich) were consistently among the lowest of the independent municipal police forces.

TABLE 34 CRIME RATES – INDEPENDENT MUNICIPAL POLICE FORCES (2001 – 2008)

<b>Policing Jurisdiction</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Esquimalt	122	113						
Abbotsford	116	114	120	121	118	102	95	88
Central Saanich	50	47	46	52	49	43	50	44
Delta	74	65	71	63	74	71	65	69
Nelson City	132	165	162	153	139	116	110	109
New Westminster	162	146	154	175	162	142	117	103
Oak Bay	53	49	73	70	65	51	48	48
Port Moody	67	65	68	76	67	62	52	44
Saanich	58	55	58	60	57	58	52	52
Vancouver	131	123	129	131	117	116	97	90
Victoria	211	216	202	189	186	179	156	134
West Vancouver	63	77	75	65	60	59	54	50
<b>Total</b>	<b>118</b>	<b>113</b>	<b>118</b>	<b>119</b>	<b>111</b>	<b>106</b>	<b>92</b>	<b>85</b>
<b>Average</b>	<b>103</b>	<b>103</b>	<b>105</b>	<b>105</b>	<b>99</b>	<b>91</b>	<b>81</b>	<b>75</b>
<b>Median</b>	<b>95</b>	<b>95</b>	<b>75</b>	<b>76</b>	<b>74</b>	<b>71</b>	<b>65</b>	<b>69</b>

## (5) COST PER CAPITA

As with crime rates, the department also consistently had the highest policing costs per capita of the independent municipal police forces from 2001 to 2008. In 2008, the cost per capita for the department was \$375 compared with an average for independent municipal forces of \$268.

Costs per capita increased across all of the independent forces from 2001 to 2008. The average annual percentage increase was 5% a year, starting from \$199 per capita in 2001 to \$268 in 2008. Cost per capita also increased for Victoria during this period. The average annual percentage increase for the department was 3.6%, starting from \$294 in 2001 to \$375 in 2008.

TABLE 35 COST PER CAPITA - INDEPENDENT MUNICIPAL POLICE FORCES  
(2001 - 2008)

<b>Policing Jurisdiction</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Esquimalt	\$250	\$234						
Abbotsford	\$154	\$149	\$166	\$183	\$199	\$219	\$233	\$255
Central Saanich	\$168	\$167	\$174	\$184	\$181	\$189	\$215	\$233
Delta	\$163	\$176	\$182	\$194	\$205	\$218	\$228	\$266
Nelson City	\$219	\$233	\$228	\$238	\$201	\$221	\$275	\$286
New Westminster	\$253	\$249	\$245	\$264	\$276	\$287	\$281	\$290
Oak Bay	\$147	\$143	\$146	\$174	\$194	\$173	\$194	\$200
Port Moody	\$163	\$166	\$163	\$186	\$203	\$197	\$223	\$237
Saanich	\$154	\$163	\$166	\$175	\$176	\$183	\$185	\$205
Vancouver	\$228	\$236	\$282	\$276	\$291	\$312	\$312	\$331
Victoria	\$294	\$303	\$311	\$313	\$329	\$344	\$351	\$375
West Vancouver	\$193	\$187	\$198	\$208	\$222	\$229	\$253	\$267
<b>Total</b>	<b>\$209</b>	<b>\$214</b>	<b>\$241</b>	<b>\$244</b>	<b>\$257</b>	<b>\$273</b>	<b>\$279</b>	<b>\$299</b>
<b>Average</b>	<b>\$199</b>	<b>\$201</b>	<b>\$206</b>	<b>\$218</b>	<b>\$225</b>	<b>\$234</b>	<b>\$250</b>	<b>\$268</b>
<b>Median</b>	<b>\$181</b>	<b>\$182</b>	<b>\$182</b>	<b>\$194</b>	<b>\$203</b>	<b>\$219</b>	<b>\$233</b>	<b>\$266</b>

#### (6) COST PER MEMBER

The department's rank amongst the independent municipal police forces with respect to cost per member fluctuated from 2001 to 2008. In 2008, it was the third lowest at \$154,844. The average for all independent municipal forces in 2008 was \$159,495.

Per member costs generally increased each year from 2001 to 2008 for all of the independent municipal police forces. While a small number of independent forces experienced decreases in some years, these were followed by increases the next year in all but one case. The average annual percentage change for all independent forces was 4.1% from 2001 to 2008 and 4.5% for the past 3 years. The comparative figures for Victoria were 3.7% and 2.4%.

#### (7) TOTAL COSTS

Consistent with its ranking as the second largest independent municipal police force, the department consistently had the second highest total policing costs from 2001 to 2008.

Total costs generally increased each year from 2001 to 2008 for all of the independent municipal police forces. Similar to cost per member, annual decreases were rare and were always followed by increases the following year. The average annual percentage increase for all independent forces was 6.2% a year, starting from \$20,135,027 in 2001 to \$33,975,759 in 2008. In comparison, the total cost for the department increased an average of 5.4% a year from \$22,160,355 in 2001 to \$37,317,433 in 2008.<sup>51</sup> In recent years, the average annual percentage increases were greater at 7.1% for all independent forces and 6.3% for the department.

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<sup>51</sup> The average annual percentage increases for both Victoria and all independent forces were adjusted to account for the impact of the amalgamation of the Victoria and Esquimalt police departments in 2003.

TABLE 36 COST PER MEMBER – INDEPENDENT MUNICIPAL POLICE FORCES (2001 – 2008)

<b>Policing Jurisdiction</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Esquimalt	\$120,503	\$123,380						
Abbotsford	\$120,592	\$122,005	\$134,547	\$134,484	\$136,473	\$145,816	\$155,406	\$167,137
Central Saanich	\$125,721	\$127,382	\$133,163	\$144,399	\$144,958	\$150,700	\$170,248	\$171,492
Delta	\$115,747	\$127,976	\$130,167	\$136,194	\$139,345	\$148,600	\$146,048	\$165,380
Nelson City	\$126,647	\$131,267	\$129,183	\$137,252	\$115,769	\$128,719	\$136,338	\$132,753
New Westminster	\$129,326	\$135,446	\$137,530	\$146,284	\$148,511	\$154,842	\$161,132	\$173,045
Oak Bay	\$116,576	\$119,157	\$120,807	\$145,579	\$161,900	\$141,776	\$151,675	\$157,397
Port Moody	\$131,636	\$132,121	\$127,706	\$137,188	\$144,674	\$148,675	\$148,827	\$162,61
Saanich	\$119,798	\$125,094	\$127,173	\$133,248	\$132,133	\$138,132	\$143,505	\$156,033
Vancouver	\$119,331	\$125,171	\$143,197	\$143,420	\$144,938	\$151,459	\$154,786	\$164,828
Victoria	\$120,437	\$128,486	\$137,170	\$140,271	\$144,483	\$149,357	\$158,555	\$154,844
West Vancouver	\$112,069	\$109,806	\$116,010	\$121,834	\$130,956	\$135,581	\$147,431	\$148,926
<b>Total</b>	<b>\$119,851</b>	<b>\$125,465</b>	<b>\$137,886</b>	<b>\$140,344</b>	<b>\$142,502</b>	<b>\$148,941</b>	<b>\$153,734</b>	<b>\$162,918</b>
<b>Average</b>	<b>\$121,532</b>	<b>\$125,608</b>	<b>\$130,605</b>	<b>\$138,196</b>	<b>\$140,376</b>	<b>\$144,878</b>	<b>\$152,177</b>	<b>\$159,495</b>
<b>Median</b>	<b>\$120,470</b>	<b>\$126,277</b>	<b>\$130,167</b>	<b>\$137,252</b>	<b>\$144,483</b>	<b>\$148,600</b>	<b>\$151,675</b>	<b>\$162,610</b>

TABLE 37 TOTAL POLICING COSTS – INDEPENDENT MUNICIPAL POLICE FORCES (2001 – 2008)

<b>Policing Jurisdiction</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Esquimalt	\$4.10	\$3.95						
Abbotsford	\$17.85	\$18.67	\$21.26	\$23.27	\$25.52	\$28.43	\$30.93	\$34.10
Central Saanich	\$2.64	\$2.68	\$2.80	\$3.03	\$3.04	\$3.16	\$3.58	\$3.77
Delta	\$16.55	\$17.79	\$18.35	\$19.75	\$21.04	\$22.44	\$23.37	\$26.46
Nelson City	\$2.15	\$2.23	\$2.20	\$2.33	\$1.97	\$2.19	\$2.73	\$2.79
New West	\$13.71	\$14.36	\$14.58	\$15.36	\$15.89	\$16.57	\$17.56	\$18.52
Oak Bay	\$2.56	\$2.62	\$2.66	\$3.20	\$3.56	\$3.12	\$3.64	\$3.62
Port Moody	\$3.95	\$4.23	\$4.34	\$4.94	\$5.79	\$5.95	\$6.70	\$7.48
Saanich	\$16.53	\$17.64	\$17.93	\$19.19	\$19.42	\$20.31	\$21.10	\$23.25
Vancouver	\$130.79	\$137.19	\$160.95	\$161.20	\$170.16	\$183.87	\$191.16	\$204.22
Victoria	\$22.16	\$23.64	\$28.94	\$29.60	\$31.06	\$33.01	\$35.20	\$37.32
West Vancouver	<b>\$8.63</b>	<b>\$8.46</b>	<b>\$8.93</b>	<b>\$9.62</b>	<b>\$10.35</b>	<b>\$10.71</b>	<b>\$11.79</b>	<b>\$12.21</b>
<b>Total</b>	<b>\$241.62</b>	<b>\$253.44</b>	<b>\$282.94</b>	<b>\$291.49</b>	<b>\$307.80</b>	<b>\$329.75</b>	<b>\$347.75</b>	<b>\$373.73</b>
<b>Average</b>	<b>\$20.14</b>	<b>\$21.12</b>	<b>\$25.72</b>	<b>\$26.50</b>	<b>\$27.98</b>	<b>\$29.98</b>	<b>\$31.61</b>	<b>\$33.98</b>
<b>Median</b>	<b>\$11.17</b>	<b>\$11.41</b>	<b>\$14.58</b>	<b>\$15.36</b>	<b>\$15.89</b>	<b>\$16.57</b>	<b>\$17.56</b>	<b>\$18.52</b>



**(8) POPULATION SERVED PER MEMBER**

The department had the lowest ratio of population to police each year from 2001 to 2008. Prior to amalgamation, the Esquimalt police department had the second lowest.

Across the independent municipal police forces, the population served per member decreased slightly in most jurisdictions from 2001 to 2008. The average annual percentage change for all independent forces was -0.8%. The average population per officer for all independent forces in 2008 was 616.

Overall, the department experienced a slight increase in the population served per member during this time. The average annual percentage change from 2001 to 2008 was 0.2%. The population served per member in 2008 (413) was only slightly higher than the population per member in 2001 (410), but the figure rose to higher levels during this time. For example, in 2004 it was 448 and in 2007 it was 452.

**TABLE 38 POPULATION SERVED PER MEMBER – INDEPENDENT MUNICIPAL POLICE FORCES (2001 – 2008)**

<b>Policing Jurisdiction</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Esquimalt	483	528						
Abbotsford	784	821	808	736	685	665	666	655
Central Saanich	747	762	766	783	801	798	791	737
Delta	712	729	713	702	680	682	640	622
Nelson City	580	563	566	576	576	584	496	464
New Westminster	511	543	561	555	537	539	574	596
Oak Bay	795	835	828	834	832	821	783	786
Port Moody	805	798	785	739	711	753	667	686
Saanich	776	767	766	761	751	753	777	760
Vancouver	523	530	507	520	498	485	497	498
Victoria	410	424	441	448	440	435	452	413
West Vancouver	581	587	587	586	590	592	583	558
<b>Total</b>	<b>573</b>	<b>586</b>	<b>572</b>	<b>575</b>	<b>555</b>	<b>546</b>	<b>551</b>	<b>544</b>
<b>Average</b>	<b>657</b>	<b>669</b>	<b>666</b>	<b>658</b>	<b>646</b>	<b>646</b>	<b>630</b>	<b>616</b>
<b>Median</b>	<b>712</b>	<b>729</b>	<b>713</b>	<b>702</b>	<b>680</b>	<b>665</b>	<b>640</b>	<b>622</b>

## 10. FUNDING ALLOCATION FORMULAS

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The breakdown of the department's policing costs between Victoria and Esquimalt is based on each community's share of the total, converted assessed value of properties each year. On average, Victoria has been responsible for 86% of the policing costs and Esquimalt 14% each year since amalgamation. The breakdown of costs from 2003 – 2009 is summarized in Table 39.

TABLE 39 PERCENTAGE ALLOCATION OF VICTORIA POLICE DEPARTMENT BUDGET – VICTORIA AND ESQUIMALT (2003-2009)<sup>52</sup>

	2003	2004	2005	2006	2007	2008	2009	Ave.
<b>Victoria</b>	86.05%	86.42%	86.31%	86.21%	85.91%	85.82%	85.34%	86.01%
<b>Esquimalt</b>	13.95%	13.58%	13.69%	13.79%	14.09%	14.18%	14.66%	13.99%

This funding formula was put forward by the Finance Sub-Committee at the time of amalgamation, approved by the Transition Committee and the Solicitor General. The formula was submitted as an interim proposal for the first year of amalgamation. An issues note associated with the Finance Sub-Committee described a need to revisit the funding allocation formula post-amalgamation once usage data had been established. The note emphasized that the costing formula must balance the costs of operating a police department with the actual service to or usage by each jurisdiction.<sup>53</sup>

The provincial government Order in Council establishing the amalgamated department provides for future reconsideration of the funding formula. Section 6(2) of the Order states that the allocation of costs “is based on a converted assessment unless the 2 councils agree on a different allocation.” However, the allocation formula based on converted assessment has remained in place since amalgamation.

Other funding formulas considered by the Finance Sub-Committee prior to amalgamation included population alone, number of criminal code offences alone, a 50/50 blended rate of (i) assessment value and (ii) population, and a blended rate of (i) assessment value, (ii) population and (iii) criminal code offence (1/3 each). The

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<sup>52</sup> Victoria Police Department, Financial Services Division “Victoria Police Department 2009 Budget Request,” PowerPoint presentation, slide 6.

<sup>53</sup> *Amalgamation: Victoria Police Department and Esquimalt Police Department*, “Cost Allocation Model Issue Note,” Volume 2, Tab 27.

formula chosen (i.e., converted assessment value alone) was described as similar to other allocation formulas used in the Capital Regional District.

Funding formulas used in other jurisdictions include:

- Pro rata share of dispatched calls for service (used for contract policing by the King County Sheriffs Office prior to 1997);<sup>54</sup>
- Cities pay for specific policing services and staffing levels selected (used for contract policing by the King County Sheriffs Office since 1997);
- Average of each municipality's share of (i) population, (ii) households, (iii) municipal assessment and (iv) individual policing budgets prior to amalgamation;<sup>55</sup>
- A formula comparing (i) population, (ii) number of dwellings and (iii) the revenue base of both communities;<sup>56</sup>
- A formula taking into account (i) population, (ii) number of households and (iii) weighted assessment of the individual municipalities;<sup>57</sup>
- Each community's proportion of combined police budgets pre-amalgamation;<sup>58</sup> and
- A formula based on population and "determined population", adjusted for commercial assessment.<sup>59</sup>

In some cases, the amalgamation agreements establishing these formulas specifically required periodic review of the allocation formula.

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<sup>54</sup> Richardson, Harriet. "Overtime Audit of the King County Sheriff's Office." International Law Enforcement Auditors Association Conference, October 21, 2008.

<sup>55</sup> Formula used in the amalgamation of police services for the City of Peterborough and the Village of Lakefield, Ontario (<http://www.occps.ca/files/WV3W2003E502K1130908N243AI306H.pdf>).

<sup>56</sup> Formula used in the amalgamation of police services for the Towns of Port Elgin and Southampton, Ontario (<http://www.occps.ca/files/B2ZD20033Z025P13HJ10SR20F754V7.pdf>).

<sup>57</sup> Formula used in the amalgamation of police services for the City of Woodstock and the Villages of Norwich and Tavistock and their expansion into the Townships of Blandford-Blenheim, East Zorra-Tavistock, and Norwich, Ontario (<http://www.occps.ca/files/OXTG2003XP02CG127016F202S40133.pdf>).

<sup>58</sup> Formula used in the amalgamation of police services for the Towns of Bradford West Gwillimbury and Innisfil, Ontario (<http://www.occps.ca/files/9MCK2003HF02MV13F61068561A057Y.pdf>).

<sup>59</sup> Formula used in the amalgamation of police services for Lethbridge and Coaldale, Alberta.

In an effort to **estimate** the breakdown of policing costs between Esquimalt and Victoria using any of these alternative formulas, the audit team used the data outlined in Table 40. The data sources vary by year and are intended to serve as estimates only. As shown in the final column, the percentage share attributed to Esquimalt using any single factor or combination of factors ranged from a low of 8.6% (dispatched calls for service alone) to a high of 17.7% (population alone). Blended formulas came out closer to the current breakdown of costs, with Esquimalt's share ranging from 13.5% to 16.2%.

TABLE 40 APPLICATION OF ALTERNATIVE FUNDING ALLOCATION FACTORS AND FORMULAS TO ESQUIMALT AND VICTORIA

Data Type	Data Year	Municipality	Figure	%
<b>A: Total Revenue</b> <sup>60</sup>	2007	Esquimalt	24,903,149	12.9%
		Victoria	167,614,523	87.1%
<b>B: Population</b> <sup>61</sup>	2008	Esquimalt	17,660	17.7%
		Victoria	81,874	82.3%
<b>C: Total Private Dwellings</b> <sup>62</sup>	2006	Esquimalt	8,340	15.7%
		Victoria	44,783	84.3%
<b>D: Converted Assessed Value of Properties</b> <sup>63</sup>	2008	Esquimalt	\$386,618,028	14.7%
		Victoria	\$2,250,785,802	85.3%
<b>E: Share of Criminal Code Workload</b> <sup>64</sup>	2007	Esquimalt		10.3%
		Victoria		89.7%
<b>F: Share of Dispatched Calls for Service</b> <sup>65</sup>	2008	Esquimalt	3,483	8.6%
		Victoria	37,250	91.4%
<b>G: Share of Combined Policing Budgets Pre-Amalgamation</b> <sup>66,67</sup>	2003	Esquimalt	\$3,950,000	14.3%
		Victoria	\$23,640,000	85.7%

<sup>60</sup> Ministry of Community and Rural Development, Local Government Infrastructure and Finance.

Found at: [http://www.cd.gov.bc.ca/lgd/infra/library/Sch401\\_2007.xls](http://www.cd.gov.bc.ca/lgd/infra/library/Sch401_2007.xls)

<sup>61</sup> BC Stats "Population Estimates 1996 – 2008." Found at:

[http://www.bcstats.gov.bc.ca/DATA/pop/pop/mun/PopulationEstimates\\_1996-2008.xls](http://www.bcstats.gov.bc.ca/DATA/pop/pop/mun/PopulationEstimates_1996-2008.xls)

<sup>62</sup> Statistics Canada "2006 Community Profiles." Found at:

<http://www12.statcan.ca/censusrecensement/2006/dppd/prof/92591/details/page.cfm?Lang=E&Geo1=CSD&Code1=5917040&Geo2=PR&Code2=59&Data=Count&SearchText=Esquimalt&SearchType=Begins&SearchPR=01&B1=All&Custom=>

<sup>63</sup> Victoria Police Department, Financial Services Division "Victoria Police Department 2009 Budget Request," PowerPoint presentation, slide 5.

<sup>64</sup> RCMP E-Division (2009) "PHRS Worksheets".

<sup>65</sup> CAD/RMS data 2008 (total calls for service minus calls cleared by dispatch).

<sup>66</sup> Police Services Division (2004). "Police and Crime Summary Statistics 1994-2003," Appendix A-1, p 91.

<sup>67</sup> Based on formula used in the amalgamation of police services for the Towns of Bradford West Gwillimbury and Innisfil, Ontario

TABLE 40 (**CONTINUED**) APPLICATION OF ALTERNATIVE FUNDING ALLOCATION FACTORS AND FORMULAS TO ESQUIMALT AND VICTORIA

<b>Data Type</b>	<b>Data Year</b>	<b>Municipality</b>	<b>Figure</b>	<b>%</b>
<b>H: AVERAGE A, B and C<sup>68</sup></b>		Esquimalt		15.5%
		Victoria		84.5%
<b>I: AVERAGE B, C and D<sup>69</sup></b>		Esquimalt		16.0%
		Victoria		84.0%
<b>J: AVERAGE B, C, D and G<sup>70</sup></b>		Esquimalt		15.6%
		Victoria		84.4%
<b>K: AVERAGE B and D<sup>71</sup></b>		Esquimalt		16.2%
		Victoria		83.8%
<b>L: AVERAGE B, D and E<sup>72</sup></b>		Esquimalt		14.2%
		Victoria		85.8%
<b>M: AVERAGE ALL</b>		Esquimalt		13.5%
		Victoria		86.5%

The audit team’s primary concern with respect to the current funding allocation formula is that it has not been re-examined since amalgamation, despite its apparent intention as an interim solution. The audit team agrees with the observations made by the Finance Sub-Committee at the time of amalgamation that the funding allocation formula should consider both the costs of operating an independent municipal police department and the level of service provided to or usage by each community. That is, factors such as dispatched calls for service or share of *Criminal Code* offences should not be used alone to determine the breakdown of costs between Esquimalt and Victoria. The audit team also agrees with the practice in other jurisdictions of subjecting the funding allocation formula to periodic review, such as every three years.

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<sup>68</sup> Based on formula used in the amalgamation of police services for the Towns of Port Elgin and Southampton, Ontario.

<sup>69</sup> Based on formula used in the amalgamation of police services for the City of Woodstock and the Villages of Norwich and Tavistock, Ontario.

<sup>70</sup> Based on formula used in the amalgamation of police services for the City of Peterborough and the Village of Lakefield, Ontario.

<sup>71</sup> Alternative formula considered prior to the amalgamation of police services for Esquimalt and Victoria.

<sup>72</sup> Ibid.



## C. DISCUSSION

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The main purpose of the second phase of the audit was to review the Victoria Police Department's resource deployment, call load, response times, and associated costs. A key consideration was parity of service delivery between Victoria and Esquimalt, the two communities policed by the department.

Phase 1 of this audit, the *Focused Inspection and Use of Force Review*, examined the department's compliance with select *Provincial Standards for Independent Municipal Police Departments in British Columbia*. As noted in the *Focused Inspection* report, the department was found to be in compliance with the majority of these standards, including those governing detention, property and evidence, and criminal investigations.<sup>73</sup> These are key components of a policing service that are not fully reflected in the analysis of service delivery outlined in this report. The value of these services must be considered as they form part of the audit team's overall assessment that the department is providing adequate and effective policing to the communities it serves.

Overall, the audit team concludes that the department is providing an adequate and effective level of policing service to the communities of Victoria and Esquimalt but there may be opportunities to improve efficiency and satisfaction, in particular amongst Esquimalt residents and the Township Council.

Even though the audit did not reveal a substantive deficit in the level of service provided to the Township of Esquimalt by the Victoria Police Department, there is some evidence to suggest that there are differences (e.g., in response times, lack of clearly dedicated patrol, over representation of priority 1 calls). These differences, as well as a preferred approach to policing (such as "no call too small") have likely contributed to dissatisfaction on the part of some Township officials. It is important to note, however, that the Victoria Police Department is responsible for policing an extensive urban area with a downtown core area (which increases its daily population with commuters, tourists and individuals seeking entertainment opportunities). As such, Victoria Police Department's style of policing may not be the best match with the style preferred by Esquimalt.

The audit team recommends that the current service delivery model be revised to allow the Township of Esquimalt to contract for policing services with an independent municipal police department in the Capital Regional District. The

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<sup>73</sup> Examination of compliance with standards pertaining to the use of force had not been completed at the time of this report.

terms of the contract should include, among others, requirements for minimum level of service required, a mandatory dedicated patrol for the Township, opting-in/out provisions for specific services, and a fixed schedule for contract review.

Moreover, the audit team recommends that the current police board governance structure be revisited to ensure that:

- a. the Township of Esquimalt has the capacity to form its own police governance structure to address policing issues within its jurisdiction;
- b. the Esquimalt police governance is established as per current police board appointment processes;
- c. the role of the Esquimalt police governance is to (1) manage the contractual relationship with its contracting partner; and (2) oversee policing service in its jurisdiction.

Another key issue identified by the audit team during review was that some agreements that had been made and articulated in the Implementation Plan put forward by the Operational Sub-Committee at the time of amalgamation of the two police departments have not been fulfilled. Two big issues are represented here: lack of a dedicated patrol for the Township of Esquimalt and failure to review the funding model.

As noted, the breakdown of the department's policing costs between Victoria and Esquimalt is based on each community's share of the total, converted assessed value of properties each year. On average, Victoria has been responsible for 86% of the policing costs and Esquimalt 14% each year since amalgamation. The funding allocation formula has not been revisited since amalgamation as envisioned in the Implementation Plan. The audit team recommends that a new funding allocation formula be developed, as part of any contract negotiations that the Township of Esquimalt may undertake. This formula must include a fixed schedule for review.

The current management and deployment of patrol resources differs considerably from the Implementation Plan which envisioned a decentralized model wherein Inspectors assigned to each of three geographic zones would be responsible for managing resources within each zone. Patrol members would be clearly assigned to and work out of each zone. In practice, patrol is entirely centrally managed. While members may be assigned to a geographic zone the significance of zone assignments varied considerably among patrol members interviewed by the audit team. As noted in the Phase 1 Focused Inspection report, the audit team recommends that

policy outlining the expected activities of the patrol be revised. The revised policy should clarify patrol area assignments.

Currently, the Victoria Police Department shift schedule for patrol assigns equal resources to each hour of day regardless of fluctuations in demands for service. Throughout 2008, the audit team was advised that patrol operated at minimum strengths only, which provide some variation by day of week and day shift versus night shift in relation to demands for service. However, the minimum strengths have not been examined since 2003. In addition, the audit team's analysis of minimum strengths in relation to calls for service shows some potential inefficiencies (i.e., recurring times when there may be more or fewer officers than required). The audit team recommends that the department research and consider acquiring software to examine shift scheduling patterns for optimal alignment with demands for service and to determine appropriate minimum strengths for current workload. Adjusting the shift scheduling pattern may identify opportunities to improve satisfaction with services by ensuring consistent levels of service, providing more time for proactive policing or reducing costs.

In addition, in the separate Focused Inspection report, the audit team recommended that the department clarify and strengthen its administrative reporting, planning and research, and crime analysis functions. Similarly, the department does not currently have the capacity (resources or tools) to monitor key performance measures for patrol that would help to determine service levels and the alignment of resources to demands for service. The audit team recommends that performance measures be established for the patrol function and reported to the police board. As part of its role in determining the priorities, goals and objectives of the police department, the police board may wish to set targets for some of these measures, such as unallocated time or utilization rates.



## D. RECOMMENDATIONS

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1. That the current service delivery model be revised to allow the Township of Esquimalt to contract for policing services with an independent municipal police department in the Capital Regional District. The terms of the contract should include, among others, requirements for:
  - a. minimum level of service required;
  - b. a mandatory dedicated patrol for the Township;
  - c. opting-in/out provisions for specific services; and,
  - d. a fixed schedule for contract review.
2. That, as part of the contract negotiations, a new funding allocation formula is developed. This formula must include a fixed schedule for review.
3. That the current police governance structure be revisited to ensure that:
  - a. the Township of Esquimalt has the capacity to form its own police governance structure to address policing issues within its jurisdiction;
  - b. the Esquimalt police governance is established as per current police board appointment processes;
  - c. the role of the Esquimalt police governance is to (1) manage the contractual relationship with its contracting partner; and (2) oversee policing service in its jurisdiction.
4. That the Victoria Police Department revise current policy concerning patrol activities that will clarify patrol area assignments and expectations of assigned officers.
5. That the Victoria Police Department consider acquiring software that can update minimum staffing levels based on current workload requirements and identify opportunities to improve the efficiency of the existing scheduling pattern.

6. That the Victoria Police Department establish performance measures for the patrol function that are regularly reported to the Police Board. The measures should be broken down by municipality policed and include:
- Number of calls recorded and dispatched;
  - Average dispatch, travel, total response and service time for priority 1, 2 and 3 calls (including variations between municipalities);
  - Average number of units and officers per call;
  - Proportion of two-officer units deployed;
  - Number of on-view incidents, by type;
  - Average proportion of unallocated time or utilization rates;
  - Average number of dispatched calls per member.