

# RR-1



## CITY OF VANCOUVER

### ADMINISTRATIVE REPORT

Date: February 5, 2007  
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RTS No.: 6504  
VanRIMS No.: 05-1000-30  
Meeting Date: February 13, 2007

TO: Vancouver City Council  
FROM: City Manager and Chief Constable  
SUBJECT: Vancouver Police Department Operational Review

#### RECOMMENDATION

- A. THAT Council receive this report for INFORMATION and defer approval and funding of Recommendations B through G to the 2007 Interim Operating Budget.
- B. THAT Council approve an increase to the Vancouver Police Department's sworn strength by 65 police officers to be deployed as patrol officers (positions listed in Appendix G) at a net cost of \$1,936,960 for 2007, estimated at \$4,991,010 for 2008; on-going funding is estimated at \$6,684,120.

All vehicles are to be purchased by the Plant and Equipment Reserve (Plant Account), 12 in 2007, 31 in 2008, based on the VPD Master Schedule at a total cost of \$515,200 in 2007 and \$1,382,600 in 2008 and are to be funded by the Vancouver Police Department through increased rental rates of \$30,600 and budget offsets within the VPD Fleet Budget for 2007, and through increased rental rates of \$501,300 in 2008 and \$836,200 in 2009 and are included in the above annual estimates.

93 Radios and 43 patrol laptops are to be purchased through E-Comm and added to the annual levy at a cost of \$65,790 in 2007; \$274,560 in 2008 and \$483,740 in 2009 and are included in the above annual estimates.

- C. THAT the Steering Committee develop key performance measures for approval by the Police Board to be reported to Council by September 2007 that include all inputs, outputs and outcomes for both reactive and proactive policing; and that as proposed by the Police Board in its comments, the Police Board will conduct bi-annual evaluations to measure the effectiveness of the deployment strategy and will provide these status reports to Council for its information.
- D. THAT the Chief Constable in consultation with the Police Board and the City Manager report to Council on a full review of the deployment strategy after one year of implementation of the recommendations.
- E. THAT the Chief Constable report, in consultation with the Police Board, the confirmation of the Vancouver Police Union's agreement to the recommended shifting strategy or other shifting patterns that meet the operational and financial objectives outlined in this report. Further, THAT funding shall not be allocated for "Stage A3" of the recommendations until this confirmation is received by Council.
- F. THAT Council instruct the Joint City/VPD Steering Committee to report back prior to the 2008 Operating Budget on Phase 2 of the VPD Operational Review including further opportunities related to overtime, shared services, and deployment efficiencies to offset VPD resource requirements.

#### CITY MANAGER'S COMMENTS

This report represents another step in the process of reviewing all sectors of Vancouver's police operations, which is slated to be completed by mid 2007. This portion of the Vancouver Police Department Operational Review is critical in that it deals with the Department's Patrol operations, which consists mostly of uniformed patrol officers in marked vehicles. These officers, therefore, are the most visible police resource in the community.

Council has received reports in the past two years that have added resources to the Police Department. This includes adding funding to the Police fleet, to ensure that the fleet is financially viable, and increases in sworn and civilian strength (81 officers and 99 civilians).

The report before you is based upon empirical analysis of operational and calls for service data. The report also provides information and options on how to improve overall patrol service levels. The funding for these improved service levels need to be considered in the context of the overall City budget priorities. The ever increasing demands on the City's finances make it imperative that the City and VPD seek financial partnerships with other levels of government and pursue internal efficiencies and reallocation of resources to mitigate the impact of policing demands on the overall City budget. The recommendations

from the Joint Steering Committee strike a balance between the need to improve patrol performance and the need to mitigate the financial impact on the City's overall Operating Budget as set out below.

The report focuses on performance variables for proactive and reactive policing, and response times for police service (from Priority 1 to Priority 4 calls) and compares Vancouver Police operations to other large cities. The research suggests that as a best practice, police departments should aspire to a 7 minute response time to Priority 1 calls and split their time 50-50 between proactive and reactive policing. Priority 1 calls are the most urgent calls for police service and are usually responded to with lights and sirens. However, it is acknowledged that these best practice criteria look at the average, which is impacted greatly by human and operation factors such as traffic and travel time.

The report identifies eight key internal operational efficiencies which will improve the operational response time for all types of calls for service. These recommendations are supported for immediate implementation by the Steering Committee.

Further the report suggests a range of options to reduce response times and compares that with actual data from District 1 where 33 additional uniform patrol officers were authorized in 2005. The key improvement in District 1 to response time was due to introduction of the 33 new officers.

The Steering Committee, which is co-chaired by the Deputy City Manager, are recommending that the operational efficiencies identified be implemented along with introduction of a Metro Team and staff shift schedules to more closely match demand for service. It appears that an afternoon shift to cover the Wednesday - Saturday 6 pm - 4 am period is critical in all Districts.

The recommended total increase in sworn staff is 65 and is expected to result in a reduction in Priority 1 average response time of over 2 minutes city wide. Further, it is expected that the time officers are available for "Proactive Policing" is to increase from 35% to 46%. This helps greatly in the police role of preventing crime, resolving low priority calls, and dealing with many street disorder issues. This, together with "COMPSTAT" (an integrated statistical and operating approach to address criminal activities), will provide more police resources to deal with crime, and potential crimes, proactively. Reporting will be required to ensure the proactive policing time is being used effectively, and results are monitored.

The Recommendations are for uniformed patrol police officers who are expected to be on the street and in uniform. This is critical to effective policing as the officers are observed by citizens when actively doing their job.

It is anticipated that the increase in police proactive time will result in more tickets being issued for everything from traffic infractions to street disorder. To help address the street disorder and the tickets issued by Police, prosecution of offenders is essential. It is for this reason the City Manager recommends adding an additional Bylaw Prosecutor. This position should be added at the latest in January 2008 to ensure ticket processes are completed. It should generate also additional fine revenues to the City to help pay for the services provided. Therefore, the following RECOMMENDATION is proposed:

- G. THAT Council approve the creation of a Bylaw Prosecutor effective January 2008 with an annual cost of \$144,000; funding to be added to the 2008 Operating Budget without offset.

There is a concern about increasing staffing without the Police Union agreeing to the shifting model that matches the peak and service demand activity periods. Therefore, funding for the additional Delta shift staffing (33 officers) should not be advanced until there is agreement that meets the operational and financial criteria in this report.

Beyond these recommendations, the Steering Committee felt that it was important that the Department ensure that input, output, and outcome measures be developed and reported to Council on a bi-annual basis. The reason of this reporting requirement is to ensure that the assumptions in the study hold and that performance is evaluated and assessed on an on-going basis. It is suggested that these key performance measures be reported to Council in September 2007 and that a full review of this report be conducted one year after implementation of the recommendations to compare actual outcomes with those predicted. It is only after this full evaluation should consideration be given to further patrol resource increases to allow for a 7 minute response time and 50% utilization rate to ensure the assumptions in the Patrol Study hold.

Finally, the last phase of the Operational Review will be reported out in mid 2007 to Council. This final phase will bring all the pieces of the review together, including an examination of non-patrol staffing, to ensure that all opportunities for efficiencies are evaluated so that the Department can achieve its objectives in a manner that minimizes resource requirements. Included in this phase will not only be a comprehensive Operational Plan but recommendations on processes that need to be in place to ensure the Department continues to monitor and evaluate its performance on both a financial and non-financial basis so that it can be accountable to its Board, Council and the public.

Council at this point is being requested to receive this report for INFORMATION only with decisions to be deferred to the 2007 Operating Budget.

#### **VANCOUVER POLICE BOARD'S COMMENTS**

The Vancouver Police Department is employed by, and functions under the direction of, the Vancouver Police Board. The Board is responsible for financial oversight as well as the strategic and policy direction of the Department.

It is widely accepted that there are two key performance indicators used to measure the effectiveness of police departments. These are: 1) Response time - the ability to respond reasonably quickly to critical incidents, and 2) Allocated/unallocated time ratios - the amount of time officers spend reacting to calls versus engaging in proactive work designed to prevent crime.

When the joint staffing review applied these performance indicators to the Vancouver Police Department, some startling facts emerged:

- Vancouver has the slowest average response time to priority one calls (life threatening situations) of any major North American City;
- The average call load per officer (allocated time) in Vancouver far exceeds those of virtually all other comparable Canadian police departments (only Ottawa is higher - because Ottawa has half the crime rate of Vancouver, much of its call load is less serious incidents)
- Vancouver has the highest crime rate of any large urban centre in Canada;

It is clear from the staffing review that the Vancouver Police Department has fallen behind in terms of practices in other comparable cities. It has also fallen behind industry best practices. Research suggests a best practice performance target of a 7 minute (average) priority 1 response time; Vancouver Police has an 11 minute, 25 second (average) priority 1 response time. Research suggests a best practice performance target is for officers to have 50% of their time available for proactive policing; Vancouver officers have between 10% and 35% of their time available for proactive policing.

An adequate priority 1 response time is a leading overall indicator of police service levels. It is critical to citizen safety as the situations often involve threats to life. Further, improving the response to emergencies will also improve response times to all calls (i.e., priority 2 and 3), which also have elements of urgency that require a rapid response. For all calls, the ability to apprehend offenders, secure evidence, and identify witnesses increases with a faster response time. Priority 1 response time is also a critical benchmark of a police organization's capacity to engage in proactive policing and crime prevention. Finally, response time is an important indicator of a police organization's capacity to meet the overall workload demands. Increasing the VPD's resources will increase its capacity to fulfill its strategic plan objective of significantly improving community safety.

The Vancouver Police Board is committed to striking an appropriate balance between reasonably high policing standards and fiscally responsible management. The Board believes that the recommendations set out in this report strike that balance. The Board recognizes that 'best practices' are not always achievable given the realities of financial constraint. Nonetheless, to the extent best practices articulate the desirable industry standard, they represent an operational target to which the Department should aspire. The recommendations outlined in this report will move the Department closer to these industry targets, providing a reasonable level of service and bringing the Department in line with policing standards of other North American cities.

In relation to the recommendations in the Report, the Vancouver Police Board has resolved as follows:

1. That the Board supports recommendations A through G of the Council Report and notes that they will assist the Department in meeting its strategic goals and objectives;
2. That the Board is committed to ensuring that the recommended increase in sworn staff will be utilized to augment the uniformed Patrol Division, thereby enhancing a visible police presence throughout the City;

3. That the Board will continue to monitor the Department's deployment levels to ensure that Patrol deployment is maintained at the authorized levels contemplated in this Report;
4. That the Board will ensure the development of measurable performance outcomes, so that the implementation of A-1 through A-3 can be meaningfully evaluated by September 2007.
5. That the Board will conduct bi-annual evaluations to measure the effectiveness of the deployment strategy and will provide regular status reports to Council.
6. That the Board will conduct a full review of the deployment strategy outlined in this Report after one year of implementation and provide a status report to Council.

### CHIEF CONSTABLE'S COMMENTS

In July 2004, the Vancouver Police Board approved the Vancouver Police Department (VPD) Strategic Plan 2004 - 2008, which articulates the VPD's vision of becoming "Canada's leader in policing - providing safety for all." The strategic plan identified policing priorities including implementing best practices and improving community safety by:

- Reducing property crime
- Reducing violence against the vulnerable
- Reducing violence caused by gangs and guns
- Improving traffic safety
- Reducing street disorder

The exhaustive study summarized in this report identified the resources required to fulfill the VPD's Strategic Plan objectives around improving community safety. The current priority 1 response times are significantly higher than what is considered adequate in comparable cities. Adding the additional police officers as recommended in this report will reduce *all* response times and will also create more proactive policing time to focus on crime prevention, traffic safety, and problem solving. Obtaining these additional resources is critical to the VPD being able to achieve its strategic goals of making Vancouver safer.

The background to the study began in October 2004 when the Police Board, in partnership with the City of Vancouver, entered into an agreement with the University College of the Fraser Valley (UCFV) for an independent review of the VPD's staffing needs.

This study established an immediate need for an additional 92 sworn officers and 55 civilians. A major concern in the consultants' report was the unacceptably high response times for priority 1 calls (emergency calls that require immediate police attention). In addition, the consultants noted that the VPD had a serious deficiency in planning and analytical staff, and that this capacity was needed to conduct a patrol deployment study to determine the number of sworn officers required to appropriately staff patrol.

In March 2005, Council approved an increase of 50 police officers and 27 civilian staff for 2005. In April 2006, Council approved an increase of an additional 31 officers and 46 civilian staff for 2006.

Due to the recruiting and training lag, the officers approved in 2005 became operational in 2006. Patrol District 1 (downtown) received 33 of the new officers and many were utilized to police the downtown Entertainment District, reducing the need for overtime. Since the deployment of the 33 new officers, the average response time in District 1 to priority 1 calls has been reduced by approximately 1 minute and 33 seconds (a 14.8% reduction). Additional officers were also deployed to patrol support areas including traffic enforcement and the Forensic Identification Section (crime scene investigation). There were no increases in patrol staffing in the other three Patrol Districts. The staffing increase in 2006 was needed to bolster policing primarily in the investigative units including Domestic Violence, Homicide, Robbery/Assault, and Gang Crime, where the independent consultants identified immediate needs.

The work that has been accomplished by the joint City/VPD Steering Committee and staff for "Phase 2" is extraordinary. This type of patrol deployment study has never before been conducted and this work positions the VPD at the leading edge of police research in this area. This report sets out the resources required in Patrol to reach the best practice average response time of seven minutes for priority one calls, and to have 50% or less of patrol officer time allocated to responding to calls for service. This would increase the percentage of unallocated time to allow for increased proactive policing strategies. The VPD supports the findings of the study and is committed to implementing best practices in law enforcement. Implementing the recommendations of the joint Steering Committee would bring us much closer to meeting established best practice benchmarks and would significantly increase our ability to keep the community safe. This study was made possible because of the increased capacity created by the new civilian hires in 2005 in the VPD Planning and Research Section, as well as the excellent collaboration between City and VPD staff.

The VPD is looking forward to completing Phase 2 of the Operational Review in June 2007, which will include mini-business plans for all non-patrol units and further review the Department's use of overtime.

The joint Steering Committee agrees that there is an immediate need to increase the authorized strength of the Vancouver Police Department by 65 sworn officers from 1,214 to 1,279. All of the new officers would be assigned to uniform patrol operations.

## **COUNCIL POLICY**

It is Council policy that changes in staffing levels, either increases or reductions, be approved by Council. This includes the creation and deletion of regular positions and the re-allocation of funding from revenues or taxation.

Consultant contracts over \$30,000 are to be awarded by Council.

Council approves expenditures from Reserves, including the Truck and Equipment Plant Account.

Council approves all increases in service levels, including the addition of vehicles and equipment to the fleet.

## PURPOSE

The purpose of this report is to:

- Provide an update on the remaining items from Phase 1 of the Operational Review
- Discuss the results of the Patrol Deployment Study
- Present the recommendations of the Joint VPD/City VPD Operational Review Steering Committee for Patrol resources including reporting requirements to Council
- Outline the funding implications to implement the recommendations
- Outline the next steps in the VPD Operational Review

## BACKGROUND

In September 2003, the VPD embarked on a strategic planning exercise followed by a study to identify the Department's overall staffing requirements. The result was the creation of the VPD Strategic Plan 2004 - 2008.

The City and the Vancouver Police Board agreed to create a Steering Committee who hired a team of consultants from the University College of the Fraser Valley (UCFV) to conduct an independent staffing review. As well, independent reviews were conducted of the Department's Information Management Section, Information Technology Section, and the VPD Fleet Operations.

With these reviews, Council has increased the department's staffing and equipment resources as follows:

		Additional Funding (\$ millions)		
		2005	2006	2007
Information Mgmt Section	20 civilian	\$0.65	\$0.56	\$0.56
Information Technology	6 civilian*	\$0.33	\$0.51	\$0.51
2005 Staffing	50 sworn & 27 civilian	\$3.21	\$4.60	\$4.60
2006 Staffing**	31 sworn & 46 civilian	n/a-	\$4.03	\$5.78
2003/2006 VPD Fleet Review	19 vehicles	\$0.97	\$0.89	\$0.79
<b>Total</b>	<b>81 sworn &amp; 99 civilian</b>	<b>\$5.16</b>	<b>\$10.59</b>	<b>\$12.24</b>

\*2 positions approved for Corporate Services to provide shared services help desk functions

\*\*19 sworn positions were civilianized

The UCFV consultants identified, along with an immediate need for an increase of sworn officer and civilian staffing that, in some cases, there was insufficient linkage between the VPD's Strategic Plan and the staffing requests. Moreover, information such as operational plans, workload statistics, benchmarks and performance targets were not available. Specifically, the consultants identified a serious shortage of analytical and planning staff in the VPD's Planning & Research Section.



The consultants identified short and medium-term planning that needed to occur, including:

- Operational planning for major service areas
- Patrol staffing, deployment, scheduling and performance studies
- Organizational review
- Overtime utilization
- Civilianization
- Business plans for all units

With Council direction, in August 2005, the joint VPD and City Steering Committee approved an Operational Review that would achieve the project deliverables over a two year period. The Operational Review was scheduled to consist of two phases. The timelines for, and components of, each phase are as follows:

Phase 1 (August 2005 - March 2006) included:

- Completion of a Strategic Operational Plan
- Completion of a Civilianization Study and a shared services review
- Completion of an Overtime Review

Phase 2 (April 2006 - June 2007) includes:

- Completion of a Patrol Deployment Study
- Completion of mini-business plans for non-patrol units
- Further overtime review
- Development of an Operational Plan

The UCFV *Review of the Vancouver Police Department's Staffing Requirements* recommended that a study of patrol deployment be conducted in order to:

1. Determine the number of sworn officers and supervisors required (now and in the immediate future).
2. Prepare a plan for deploying the required number of patrol officers and supervisors most cost-effectively, by shift and patrol area, in response to temporal and geographic incidence of crime, demands for non-crime services, and the policing approach selected by the department.
3. Develop schedules for assigning required manpower most productively and equitably.

The Phase 1 components were reported back to Council in March 2006. This report follows-up on the changes that resulted from Phase 1 and presents the findings of the Patrol Deployment Study. The remaining Phase 2 components are scheduled to be completed by June of 2007.

Please note that, in addition to this Council Report, there are three accompanying reports that can provide further details (on file in City Clerk's Office):

1. *Vancouver Police Department Operational Review - Phase 1 Update Report*
2. *Vancouver Police Department Patrol Deployment Study*
3. *Vancouver Police Department Patrol Allocation Review - Phase 3 Report*

## DISCUSSION

### Update on Phase 1

On April 6<sup>th</sup> 2006, Vancouver City Council approved 31 new sworn officers for the VPD; Appendix A provides a detailed list of these positions. As a result of the Civilianization Study that was conducted as part of Phase 1, 19 sworn officer positions were identified for civilianization. The civilianization of these positions enabled the VPD to create an additional 19 sworn positions without requiring an increase in the authorized strength of its sworn staff. All of the 19 positions recommended for civilianization have either been filled or are in the process of being filled. An update on the civilianized positions and the new sworn positions that were created is provided in Appendix B. The combination of a staffing increase of 31 new officers and the civilianization of 19 positions enabled the VPD to create 50 new sworn positions in 2006. These 50 positions were identified for Council on March 21, 2006 (RTS No.: 5019) and closely followed the recommendations identified in the 2005 UCFV staffing review.

At the conclusion of Phase 1 of the Operational Review, the Steering Committee made 11 additional recommendations. Each of these recommendations and the progress that has been achieved is summarized in Appendix C.

In addition to the 19 positions that were recommended to be converted from sworn to civilian, the Civilianization Study recommended further examination of seven positions. As a result of the analysis that was conducted, it was determined that it is not currently feasible to civilianize these positions. Two of these positions, the Block Watch Coordinator and the Business Liaison Officer, will be reassessed once the VPD's community policing activities are reviewed during the mini-business plan process.

The Steering Committee recommended that the False Alarm Reduction Program (FARP) be transferred from the VPD to the City of Vancouver. Unanticipated issues arose in relation to the Vancouver Charter which will not make this transition feasible without a Charter change. The Steering Committee also agreed to explore implementing shared services in the area of Payroll. Several issues arose which are the subject of ongoing discussion. The Steering Committee has agreed to keep moving forward with this potential shared service to see if these obstacles can be overcome. The final recommendation will be provided at the completion of Phase 2 of the Operational Review.

### Update on Phase 2 - Patrol Deployment Study

The next portion of the report will present the findings of the Patrol Deployment Study and the recommendations of the Steering Committee. The remaining Phase 2 components will be completed by June 2007.

As part of the Operational Review, a Patrol Deployment Study has been completed. This study was based on historical patrol data, leading edge theoretical models, information on best practices, and research of academic literature on policing. This study extends the previously published research and provides a solid empirical basis from which to determine the VPD's patrol requirements. Compared to other methods, the VPD approach to patrol deployment is more comprehensive in the sense that it considers many

qualitative operational and managerial issues that are rarely considered elsewhere. The following topics were examined:

- Resource deployment
- Call load
- Response time
- Allocated (reactive policing) and unallocated (proactive policing) time
- Shifting and scheduling
- Deployment of two-officer units and one-officer units
- Minimum staffing levels
- District boundaries and the use of Global Positioning System (GPS)

In addition to the quantitative analysis, a comprehensive qualitative analysis was conducted which included:

- Interviews with VPD officers. The majority of these officers were from the Operations Division and assigned to patrol duties. This group included officers of all ranks from Constable to Deputy Chief Constable and with different levels of seniority and experience within the Department.
- Interviews with a variety of E-Comm dispatch personnel.
- A survey of 25 police agencies across North America to examine the current practices in the policing community. Each agency asked to participate was selected based on one or a combination of the following factors: the similarity of their organization to the VPD in terms of the number of officers working in patrol; their reputation as a best practice police department; a comparable workload; and the likeness of the communities that they police.
- A literature review of academic articles on policing and a comprehensive review of previous patrol deployment studies conducted by best practice police agencies in North America.

The Patrol Deployment Study addressed two interrelated areas of patrol operations:

1. The Study recommends changes to the existing deployment model that would lead to more efficient use of patrol resources.
2. The Study recommends the appropriate resource requirements for patrol operations.

#### **i) The Current Situation in Patrol**

An analysis of the empirical data and a review of the patrol deployment literature confirmed that the VPD patrol resources are efficiently utilized in the following ways:

- Patrol workload is shared relatively equitably between the existing patrol districts. Similar trends in call load are observed across all patrol districts.
- The VPD's operational policies and tactical guidelines are applied consistently across the existing four patrol districts. Overall, empirical evidence suggests that patrol officers and supervisors are able to effectively assess how many units should be assigned to each incident and how much time they should spend on each case.
- Patrol time is not wasted on unfounded or minor calls for service by patrol units. On average, patrol units spend approximately 1 hour and 20 minutes on each call for service they are dispatched to. The police agencies surveyed under the

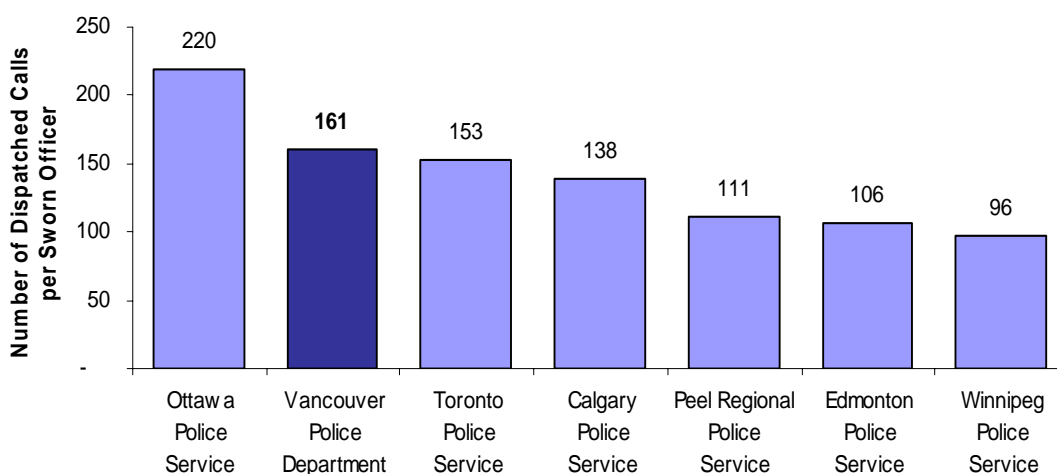
framework of the Patrol Deployment Study were spending an average of approximately 1 hour and 22 minutes per call.

- The current shifting pattern reasonably matches patrol resources to call load. However, further opportunities exist to deal with the high volume of calls that the department receives particularly during the evenings and later in the week.

Outside of these efficiencies, the key findings of the review of current practices are the following:

- The average call load per officer at the VPD is higher than most other comparable Canadian police agencies.<sup>1</sup>

#### Avg. No. of Dispatched Calls/Sworn Officer in Major Can. Police Agencies



- When a citizen calls the police to report an emergency situation between 3:00 a.m. and 7:00 a.m., there is a probability of 20% to 40% that no patrol unit will be available to be dispatched immediately. Between 4:00 a.m. and 5:00 a.m. on Friday and Saturday, the probability that no patrol unit will be available increases to more than 40%.
- On Friday and Saturday at midnight, there is an average of 20 calls for service waiting to be dispatched city-wide. Some of the calls waiting to be dispatched are serious and include break & enters in progress, assaults in progress, sexual assaults, robberies, thefts in progress, reports of domestic violence, suspicious circumstances, and motor vehicle accidents with injuries.
- Due to resource limitations, each year the VPD is unable to attend approximately 1,500 noise complaints, 1,400 annoying circumstances, 650 suspicious circumstances, 650 suspicious persons, 600 unwanted persons, 450 disturbing parties, 450 hazardous situations and 6,000 other calls for service. These calls

<sup>1</sup> While more calls are dispatched per officer at the Ottawa Police Service, Vancouver has twice the crime rate of Ottawa.

- represent quality of life issues that affect the citizens of Vancouver on a regular basis.
- There are not enough patrol resources to handle the current call load particularly during the evenings and later in the week.
  - Patrol Officers on average are spending 65% of their time answering calls which leaves little time for “proactive policing.”
  - There are opportunities for realignment of resources and changing shift patterns to improve overall patrol performance.
  - The Patrol Deployment Study team closely examined the types of calls for service that are received by the VPD. Approximately one-quarter of the calls that VPD handles are crimes as defined by the Criminal Code or other federal statutes. Examples of crimes include sexual assault, robbery and break and enter. The remaining 75% of the calls for service relate to non-criminal events that the public requires assistance with. These types of incidents include:
    - Suspicious circumstances
    - Suspicious persons
    - Suspicious vehicles
    - Prowlers
    - Noise complaints
    - Disturbances
    - Car accidents
    - Provincial Statutes (e.g. Motor Vehicle Act and Liquor Control and Licensing Act)
    - Municipal Bylaws
    - Street disorder issues
    - Aggressive panhandling
    - Licensed premises checks
    - Suicides
    - Missing children
    - Landlord/tenant disputes
    - Domestic disputes (non-assault)
    - Mentally disturbed people
    - Intoxicated people
    - Fights
    - People annoying
    - Road hazards
    - Sudden deaths
    - Assisting other emergency services

The table below categorizes calls for service into four different call priorities and their associated response time.

Priority	Description	Response Time (hrs:min:sec)
Priority 1 (P1)	These are the most serious emergency calls. Life threatening situations that can lead to death or grievous bodily harm.	00:11:25
Priority 2 (P2)	These are calls that require immediate police attention. An example would be a residential break and enter that is in progress.	00:34:37
Priority 3 (P3)	These are routine calls, not in progress. An example would include a sexual assault reported after the fact, when the suspect is no longer present.	02:06:00
Priority 4 (P4)	These are low priority calls. An example would be someone who comes home from work and discovers that their house has been broken into and the suspect is no longer present.	05:26:00

ii) **Deployment Evaluation**

Three major considerations when examining patrol deployment are discussed below:

- a) Reactive versus proactive policing time
- b) Response time to priority 1 calls for service
- c) Correlation between call load and staffing

*a) Reactive vs. Proactive Policing*

Patrol activities can generally be divided into two categories:

1. *Reactive policing* is where officers respond to criminal offences and other calls for service that are reported by the public. These types of incidents can either be in progress or reported after the fact. An example of reactive policing would be a citizen calling 911 to report a stranger crawling through their neighbour's window. The time spent investigating and reporting on such incidents is commonly referred to in the academic literature as "allocated time." In other words, the amount of time during an officer's shift that is allocated to reactive calls for service. Police response times to calls for service are recognized as being a good performance measure for reactive policing activities.
2. *Proactive policing* is where officers self generate their activities. An example of proactive policing would be an officer checking a suspicious person observed prowling in a laneway, looking into people's vehicles. This is commonly

referred to in the academic literature as “unallocated time” and is a means by which police officers can deal with street disorder issues. There are several ways to measure proactive policing activities which will be further discussed.

Several recognized bodies, including the International Association of Chiefs of Police (IACP), the International City/County Management Association (ICMA), and the Centre for Public Safety at Northwestern University, have set best practice standards for the amount of allocated (reactive) time officers should spend on calls for service during their shift. The most common benchmark in the literature suggests that officers should spend approximately 50% of their time answering calls for service. The remaining time should be spent on proactive policing activities. On average, VPD patrol officers currently spend 65% of their time on calls for service.

These two concepts, reactive and proactive policing, are closely tied together. A police department requires enough officers to appropriately respond to calls for service, while also providing officers with enough time to conduct proactive activities.

Proactive policing enables officers to focus their attention on problem areas, which is a proven method of reducing crime. Proactive policing is effective at targeting repeat offenders, problem premises, recurring crimes and other problems. Proactive policing enables officers to address community problems in a more concerted and focused manner.

See Appendix D for examples of the activities arising from proactive policing.

#### *b) Response Time*

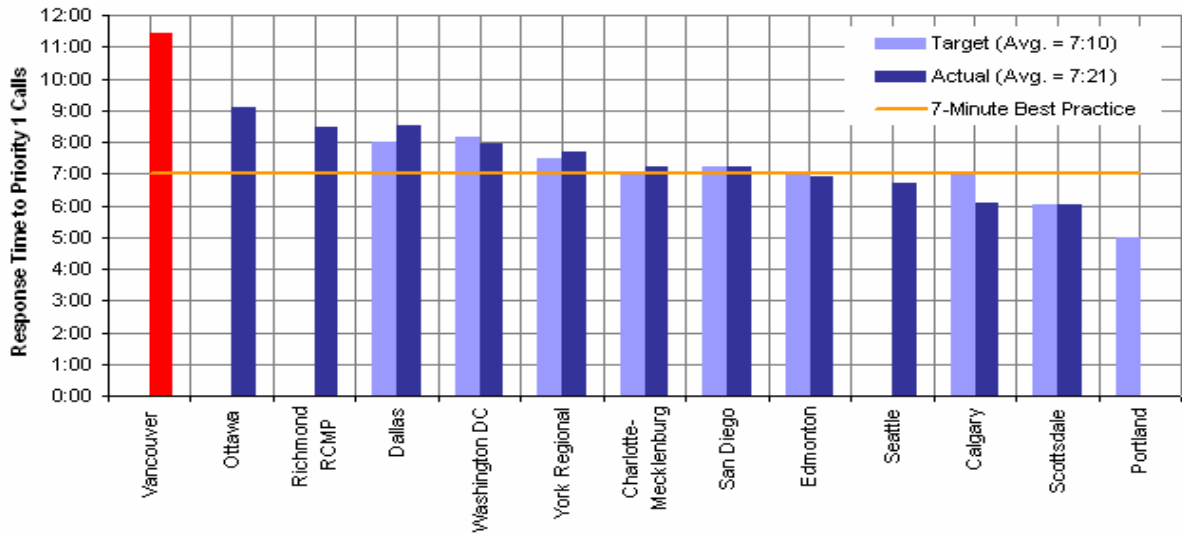
The literature on police response time indicates that the best practice response time that agencies should aspire to is 7 minutes for a priority one call. Priority one calls are emergency situations that require immediate police attention. They are life threatening calls that can lead to death or grievous bodily harm. A survey of 16 other police agencies showed that their average target response time was 7 minutes and 10 seconds, while their actual average response time to priority one calls was 7 minutes and 21 seconds. The average response time to priority one calls in Vancouver is 11 minutes and 25 seconds.

Examples of priority one calls include:

- Abductions in progress
- Assaults in progress
- Sexual assaults in progress
- Shootings
- Stabbings
- Home invasions
- Screams for help
- Domestic violence in progress
- Attempted suicides in progress
- Robberies in progress

The following figure compares the current priority one response time of the VPD to other North American police departments. This figure illustrates that the VPD has an average response time to priority one calls that is longer than other North American police agencies selected in the survey.

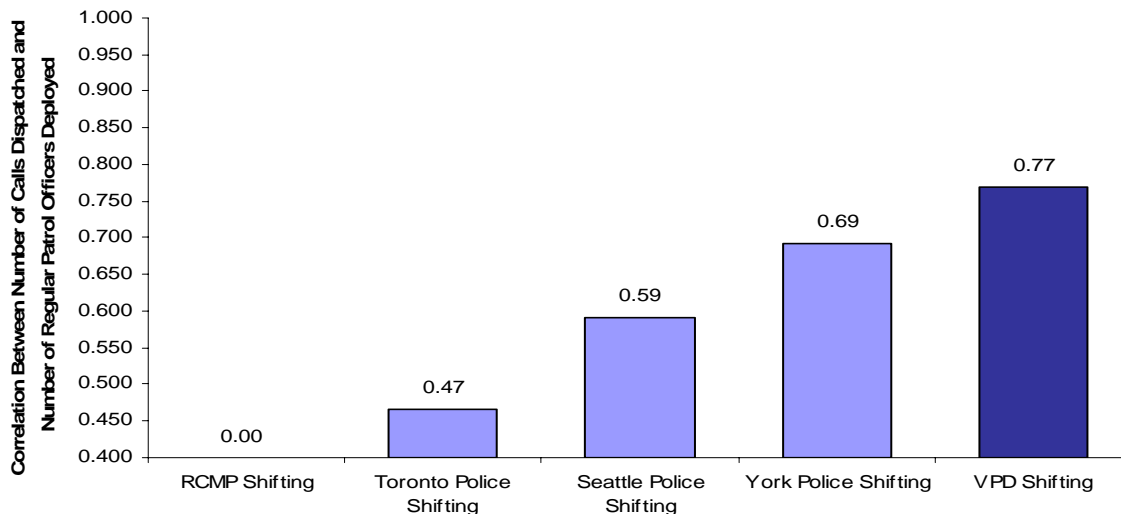
**Average Priority 1 Response Time in Select North American Police Agencies**



**c) Correlation between Call Load and Staffing**

The most efficient use of patrol resources results when officers are scheduled in accordance with the projected call load, as it is inefficient to have either too many or too few officers available. To examine the effectiveness with which resources are utilized, the correlation between the number of calls dispatched and number of officers deployed was examined. The figure below illustrates that the VPD's current shifting model is comparatively superior to those employed in other police departments examined, in terms of making efficient use of patrol resources, as the VPD has a higher correlation between the number of calls dispatched and the number of officers deployed.





### iii) Deployment Options

The Patrol Deployment Study outlines a number of different shifting options each including different stages of implementation. The focus of the study was an empirical evaluation of the three objectives outlined in section ii) above - utilization rates response time, and correlation between call load and staffing.

The Patrol Deployment Study outlined three different shifting options, each including different stages of implementation. All three options begin by making internal changes that would improve patrol efficiency.

- Option A - additional officers would be added to create a fixed late afternoon shift (Delta shift) working Wednesday to Saturday from 6:00 p.m. to 4:00 a.m. In addition, a roving Metro Team of patrol officers would be created to respond to calls throughout the city every day from 3:00 p.m. to 2:00 a.m. This deployment strategy would most closely correlate police resources with call load.
- Option B - additional officers would be added to create a fixed late afternoon shift working every day from 6:00 p.m. to 5:00 a.m. A roving Metro Team would also be created. This deployment strategy is effective, however, not as efficient as Option A.
- Option C - additional officers would be added to the existing teams and follow the existing shifting model. A roving Metro Team would not be created under this model. This deployment strategy is the least effective of the options.

The following table summarizes the results of the analysis that was conducted for the three deployment options. It shows how the VPD could improve the efficiency with which it responds to priority one calls, provide more time for proactive policing by reducing the utilization rate significantly, and increase the correlation between staffing and call load.

		FTE			Expected Performance				Annual Operating Costs
		Sgt.	Cst.	Total FTE	Average P1 Response Time	Decrease in Average P1 Response Time	Average Utilization Rate	Correlation Between Staffing and Call Load	
	Current				0:11:25		65.0%	0.77	
Option A	Stage A1	2	0	<b>2</b>	0:10:54	0:00:31	65.0%	0.81	\$ 529,785
	Stage A2	4	28	<b>32</b>	0:10:12	0:01:13	58.0%	0.82	\$ 3,855,795
	Stage A3	7	58	<b>65</b>	0:09:15	0:02:10	54.0%	0.84	\$ 7,865,535
	Stage A4	7	82	<b>89</b>	0:08:12	0:03:13	50.0%	0.84	\$ 10,419,015
	Stage A5	7	122	<b>129</b>	0:07:00	0:04:25	46.0%	0.84	\$ 14,602,410
Option B	Stage B1	3	0	<b>3</b>	0:10:53	0:00:32	65.0%	0.79	\$ 685,855
	Stage B2	5	26	<b>31</b>	0:10:13	0:01:12	59.0%	0.80	\$ 3,782,175
	Stage B3	11	82	<b>93</b>	0:08:41	0:02:44	50.0%	0.77	\$ 10,477,875
	Stage B4	11	122	<b>133</b>	0:07:28	0:03:57	46.0%	0.78	\$ 14,752,770
Option C	Stage C1	1	0	<b>1</b>	0:10:57	0:00:28	65.0%	0.77	\$ 373,595
	Stage C2	1	82	<b>83</b>	0:08:47	0:02:38	50.0%	0.76	\$ 8,947,725
	Stage C3	1	122	<b>123</b>	0:08:00	0:03:25	46.0%	0.76	\$ 13,077,235

iv) Recommendations of the Joint VPD/City VPD Operational Review Steering Committee

Of the three options, the Steering Committee deemed Option A as being the most efficient and effective deployment strategy. As new officers are phased in they would incrementally and systematically reduce response times, provide more time for officers to engage in proactive policing activities, and improve the correlation between staffing and call load.

Option A included five stages of potential implementation:

Stage A1 - internal changes	Includes a number of efficiency and effectiveness measures
Stage A2 - roving Metro Team	Establish a roving Metro Team to deal with call load throughout the city
Stage A3 - fixed Delta shift	Establish a fixed Delta shift in Districts 2, 3, &4
Stage A4 - achieving a 50% utilization rate	Increase staffing to achieve a 50% utilization rate (more proactive policing)
Stage A5 - achieving a 7 minute average response time to priority 1 calls	Increase staffing to achieve a 7 minute average response time to priority 1 calls

The Steering Committee looked at the five different stages and agreed that the priority should be to implement stages A1, A2, and A3 given that these three stages provide the highest rate of improved performance for the required increase in resources. Stages A4 and A5 have diminishing levels of performance improvement relative to the resources required for implementation.

The Steering Committee felt that it is important to validate the assumed performance improvements that have been modelled in the Patrol Study. Further, a more comprehensive assessment of the actual benefits of these recommendations needs to be completed. This would involve a much more holistic review of performance that would entail the identification of input, output and outcome measures.

Therefore, the Steering Committee also made the following recommendations:

- Any further consideration for additional patrol resources is dependent on the Department reporting back after one full year of implementation on the results of stages A1 through A3.
- The Steering Committee develops key performance measures for approval by the Police Board, to be reported to Council by September 2007, that include all inputs, outputs and outcomes for both reactive and proactive policing; and, that as proposed by the Police Board in its comments, the Police Board will conduct bi-annual evaluations to measure the effectiveness of the deployment strategy and will provide regular status reports to Council for its information.
- That the department utilize the increased resources only for patrol, other than on an emergency basis, and be accountable for those resources when reporting to Council.
- That the approval of the 33 officers, and the associated funding, required to implement Stage A3 Delta Shifts is to be subject to the Vancouver Police Union agreeing to the shift or to an alternative shift that achieves the same operational and financial objectives.
- That the Department is to develop a procedure to ensure that proactive policing activities are reported and monitored.

The following outlines the three recommended stages:

### **Stage A1 - Internal Changes/Efficiencies**

#### ***Global Positioning System***

The use of a Global Positioning System (GPS) is advantageous in that it increases officer safety and improves the efficient dispatching of patrol resources. GPS is a valuable tool that can improve the safety of the work environment for police officers while simultaneously enhancing the level of service provided to the public. Currently, the VPD Communications Section is exploring the potential use of this technology in police vehicles. The Patrol Deployment Study team supports the work of the Communications Section and recommends the use of GPS in VPD patrol vehicles.

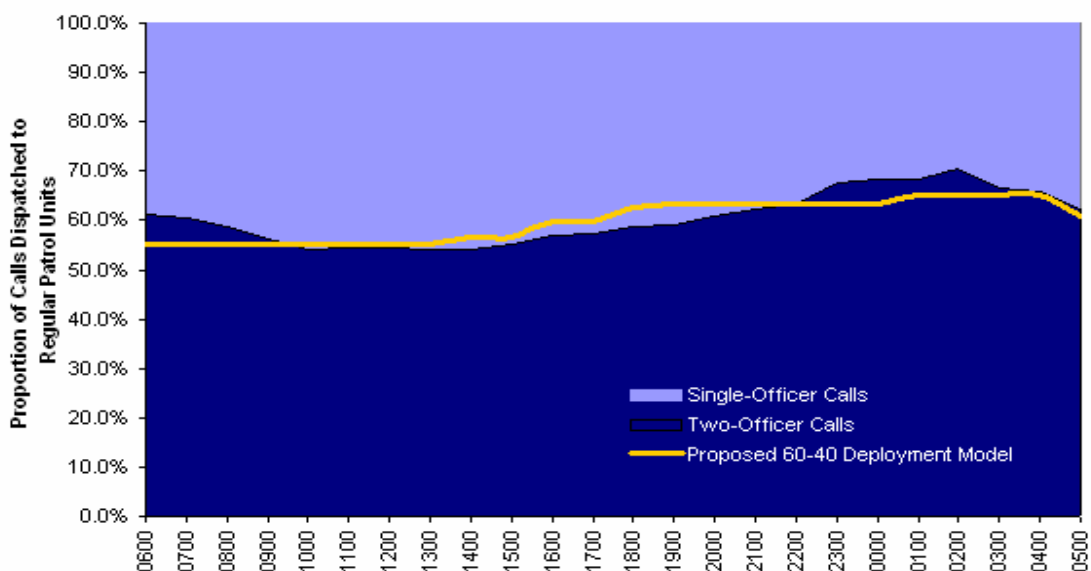
### *Internal Changes*

The Patrol Deployment Study team has identified some internal changes that can be made to maximize the efficient use of existing patrol resources. These internal changes include the following:

- *District Surveillance Teams* - Currently, the VPD makes use of four District Surveillance Teams (DSTs), three of which are drawn from existing patrol resources. After conducting an examination of these DSTs it was determined that, while these teams are beneficial at investigating certain types of crimes, it would be more efficient, in terms of responding to calls for service, for patrol to have two formalized DSTs at this time. The extra officers that were in these teams would be redeployed into a uniform patrol function. It should be noted that the capacity to target chronic offenders would be decreased, but this is an example of the resource management decisions that are necessary to ensure a reasonable balance of response to calls for service versus proactive crime fighting.
- *Fixed Delta Team in District 1* - The Patrol Deployment Study team recommends that a permanent fixed Delta Team be implemented in District 1 using existing resources. These officers would be drawn from the 33 officers that were added to District 1 as a result of the 2005 Council approvals. A team of 11 Constables would work Wednesday to Saturday from 6:00 p.m. to 4:00 a.m. This would provide more officers in the Entertainment District during the busiest days of the week and busiest hours of the day.
- *Extended Delta Shift* - The VPD began extending the late afternoon shift by one hour in February 2006 on a trial basis. The existing Delta shift was extended from 4:00 p.m. to 4:00 a.m. (as opposed to 3:00 a.m.). The extra hour comes from Paid Time Owed by the officers. This has proven to be a worthwhile experiment and provides additional staff coverage during a busy time of the evening. This extra hour adds the equivalent of 5.5 extra patrol officers on the street over a calendar year.
- *Special Patrol-based Projects* - The Patrol Deployment Study team recommends that special patrol-based projects (commonly referred to as Charlie or Delta projects) be reduced. While these projects can be effective at targeting specific crime problems, they reduce the number of uniform officers on patrol during the busiest times of the day. These projects should be limited to situations that require targeted action by patrol officers in plainclothes to address a serious crime problem. These projects should be accompanied by an Operational Plan that is evaluated and approved by the District Inspector and should not take place on Fridays or Saturdays between noon and 4:00 a.m.
- *Minimum Staffing Levels* - Based on an analysis of historical data, recommendations on how to improve minimum staffing levels have been made. In general, the new minimum staffing levels that have been recommended do not differ significantly from the current minimum staffing levels. The recommended minimum staffing levels are meant to ensure that enough patrol officers are

deployed to maintain a minimum level of public safety and to ensure the safety of on duty officers.

- *The Deployment of Two-Officer Units* - The 60-40 deployment model was found to be the most efficient option for patrol. This refers to 60% of the police units being deployed as two-officer units and 40% of the police units being deployed as one-officer units. The 60-40 model has the desirable property of harmonizing the proportion of two-officer units with the proportion of calls requiring two officers to attend. Moreover, the 60-40 model does not require any change in the number of patrol cars that need to be fielded and maintained. Two-officer partnerships tend to be more proactive, complete investigations faster, respond faster to high priority calls and generally do not have to wait for backup. This means that the proportion of two-officer patrol units deployed would decrease from approximately 65% in practice to 60%. The proportion of two-officer units would be slightly less during the day and slightly more during the evening, however, it would average out to approximately 60% over 24 hours. In addition, the 60-40 deployment model is already formalized in Section 22 of the 2003-2006 Collective Agreement between the Vancouver Police Board and the Vancouver Police Union. As such, no change in policy or in principle is required to enforce this deployment strategy. The following graph illustrates how the proposed deployment model efficiently matches the call load.



- *Authorized and Actual Strength Policy* - The Patrol Deployment Study team recommends that a new policy be introduced to ensure that managers and supervisors maintain their actual patrol strength as close as possible to the authorized strength (at least in the long-run). This would deter the loaning of patrol officers to other non-patrol duties.
- *Emergency Response Team* - The Emergency Response Team (ERT) assists patrol officers with the most serious types of calls. It is recommended that when ERT is not tied up on serious calls, training activities or special assignments, they reprioritize how they spend their unallocated time to handle more calls that do not

usually require a report or lengthy investigation. This would include calls such as alarms, annoying circumstances, disturbance calls, noise complaints and suspicious circumstances, persons and vehicles.

### **Stage A2 - Metro Team**

This is a mobile uniform crime suppression patrol team that would be deployed between 3:00 p.m. and 2:00 a.m. and would follow a 4-on-4-off schedule. Because the Metro Team would be a city-wide resource deployed daily, only two patrol squads with 14 Constables and one Sergeant each would be required to staff it. The Metro Team would allow the Duty Officer to deploy members throughout the city to wherever their presence would have the greatest impact. Having dedicated patrol resources that are able to flow between the four districts is an efficient way of smoothing out variations in the workload in each district. This unit is flexible in that the entire unit can be directed to a given district if there is an unforeseen event, such as a demonstration, or the unit can be split and sent to all or a combination of districts; this enables the VPD to ensure reasonable response times and equitable resources across all districts. This concept is based on a successful program that has been in place with the Los Angeles Police Department for many years. Compared to the alternative of adding patrol resources to each district, the Metro Team results in a greater reduction in priority one response times when an equal number of patrol resources are utilized. The Metro Team also allows for increased proactive policing time throughout the city by assisting districts that are particularly busy.

### **Stage A3 - Fixed Delta Teams in Districts 2, 3 and 4**

The creation of fixed Delta teams in Districts 2, 3 and 4 would enable the VPD to reduce priority one response times during the evening hours, when the call load is at its peak. In Option A, these fixed Delta teams are scheduled to work Wednesday to Saturday from 6:00 p.m. to 4:00 a.m.; this reflects the fact that call load increases throughout the week, building to a high on Friday and Saturday nights. Thus, Option A is much more effective at matching the patrol resources available to the expected demands for service.

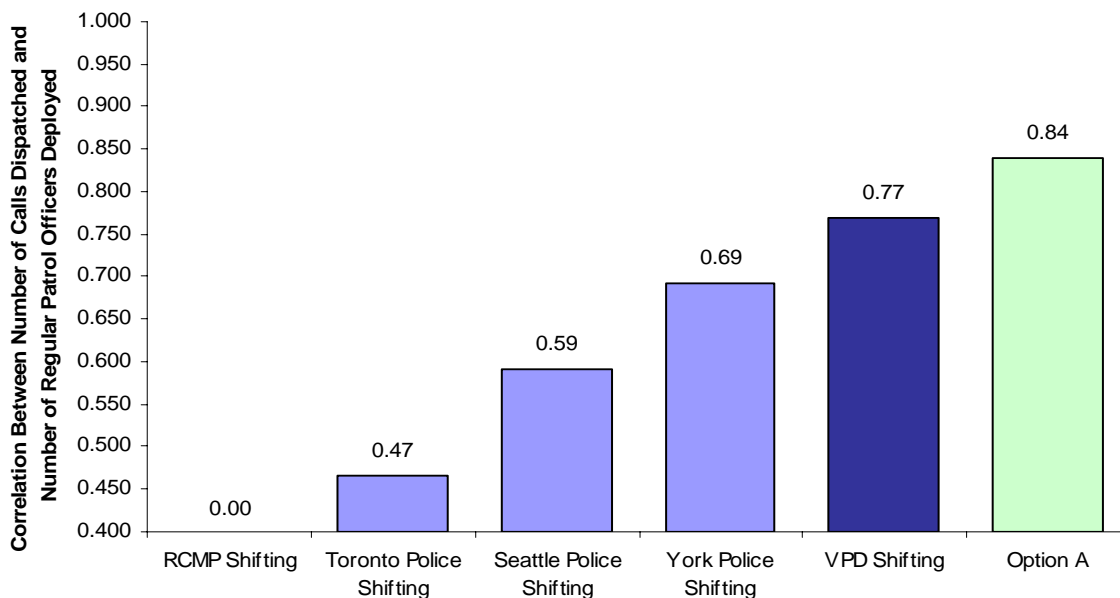
## **v) Expected Results of the Implementing Option A1 through A3**

The recommended increase in the number of officers in patrol has several benefits. First, there would be an increase in the correlation between the calls for service and the amount of resources available. This means that more officers would be working during the busiest days of the week and the busiest hours of the day. Second, there would be a reduction in the average response to priority one calls. This reduction in response time has been shown in criminology studies to reduce the risk of injury or death for violent crime victims, improve solvability, increase the apprehension of offenders, and enhance the number of witnesses that are located. The third benefit would be a reduction in the typical utilization rate of each officer. The abnormally high utilization rates that currently exist in patrol result in the following: long response times to all types of calls for service; the need to consistently cancel calls for service as there are not enough units available; and a lack of available police officers to engage in the proactive policing activities that were discussed earlier.

The following table summarizes the results of the analysis that was conducted. It shows how the VPD could improve the efficiency with which it responds to priority one calls, provide more time for proactive policing by reducing the utilization rate significantly, and increase the correlation between staffing and call load by implementing Stage A1, A2, and A3.

	FTE			Expected Performance			
	Sgt.	Cst.	Total FTE	Average P1 Response Time	Decrease in Average P1 Response Time	Average Utilization Rate	Correlation Between Staffing and Call Load
Current				0:11:25		65.0%	0.77
Stage A1	2	0	2	0:10:54	0:00:31	65.0%	0.81
Stage A2	4	28	32	0:10:12	0:01:13	58.0%	0.82
Stage A3	7	58	65	0:09:15	0:02:10	54.0%	0.84

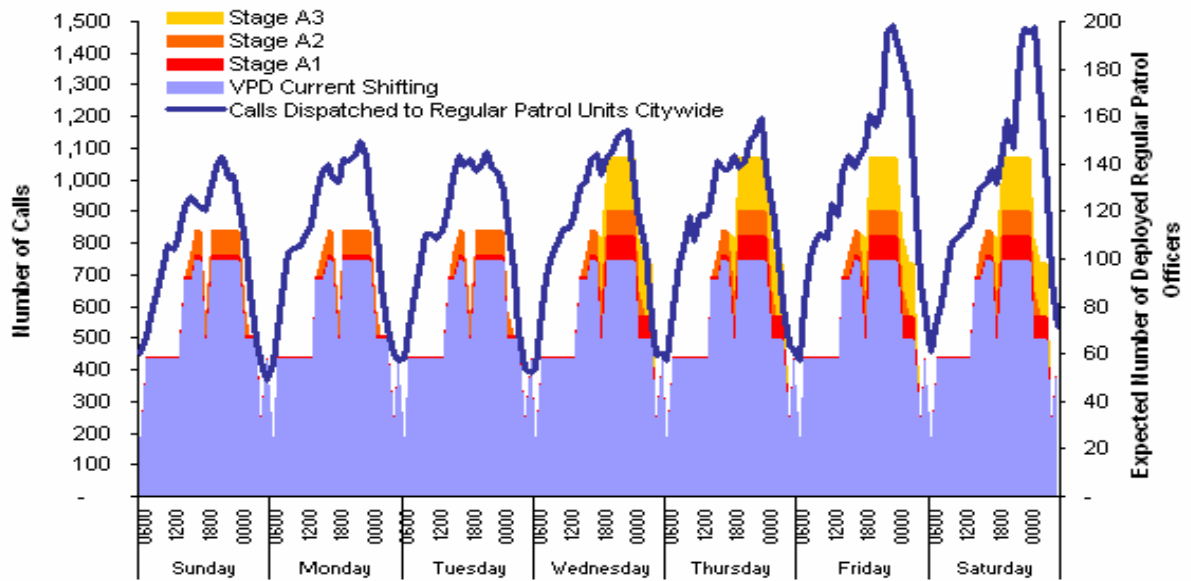
The most efficient use of patrol resources results when officers are scheduled in accordance with the projected call load, as it is inefficient to have either too many or too few officers available. The following figure displays the correlation between the number of calls dispatched and number of officers deployed. The figure illustrates that in terms of the three options that were considered, Option A results in the best improvement in this correlation.<sup>2</sup>



<sup>2</sup> The shifting pattern from other agencies was applied to VPD call load data.

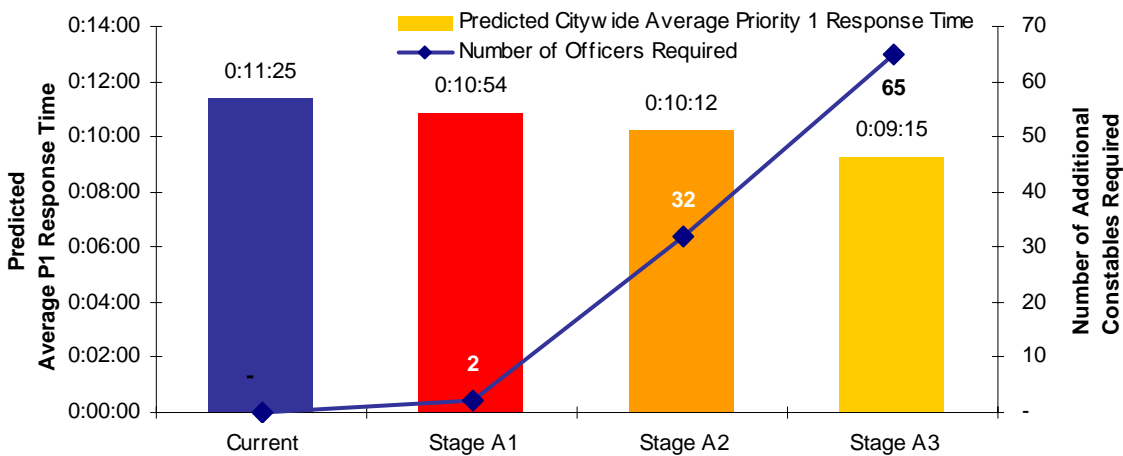
The creation of fixed Delta teams and a roving Metro Team was found to be the most efficient method of adding resources to patrol. The following figure illustrates how the addition of 65 new officers (indicated by A3 in the legend) would greatly assist in matching the number of officers deployed to the average call load for any given day of the week.

**Matching of Call Load to Deployment of Officers for Option A1 to A3**



The figure below shows how the addition of 65 new officers (58 Constables and 7 Sergeants) would reduce the predicted average response time for priority one calls from 11 minutes and 25 seconds to 9 minutes and 15 seconds (a net reduction of 2 minutes and 10 seconds).

**Predicted Average Response Time for Option A3**



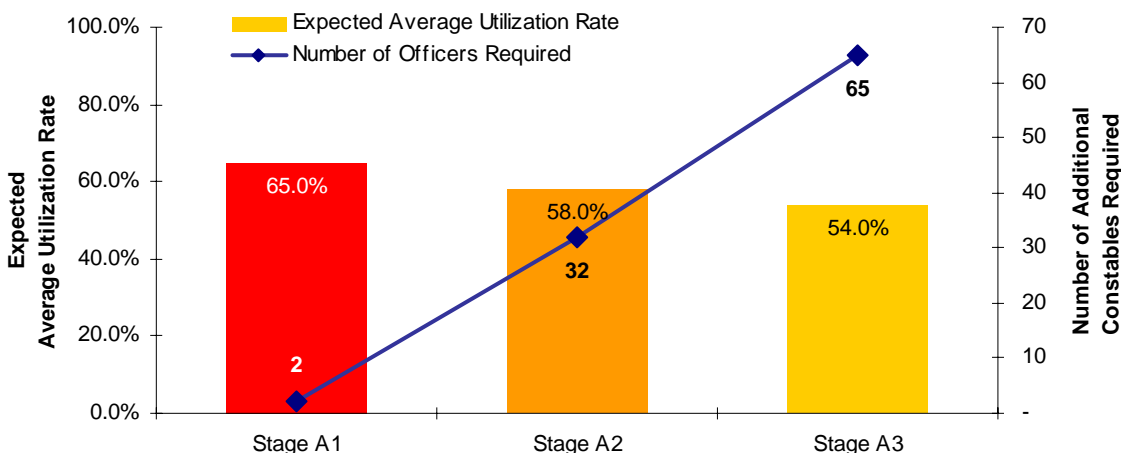


In addition to improving the average priority 1 response time, implementing Option A3 would also improve performance for all call priorities:

Priority	Current Response Time (hours:minutes:seconds)	Improved Response Time (hours:minutes:seconds)
Priority 1 (P1)	00:11:25	00:09:15
Priority 2 (P2)	00:34:37	00:29:22
Priority 3 (P3)	02:06:00	01:40:00
Priority 4 (P4)	05:26:00	03:56:00

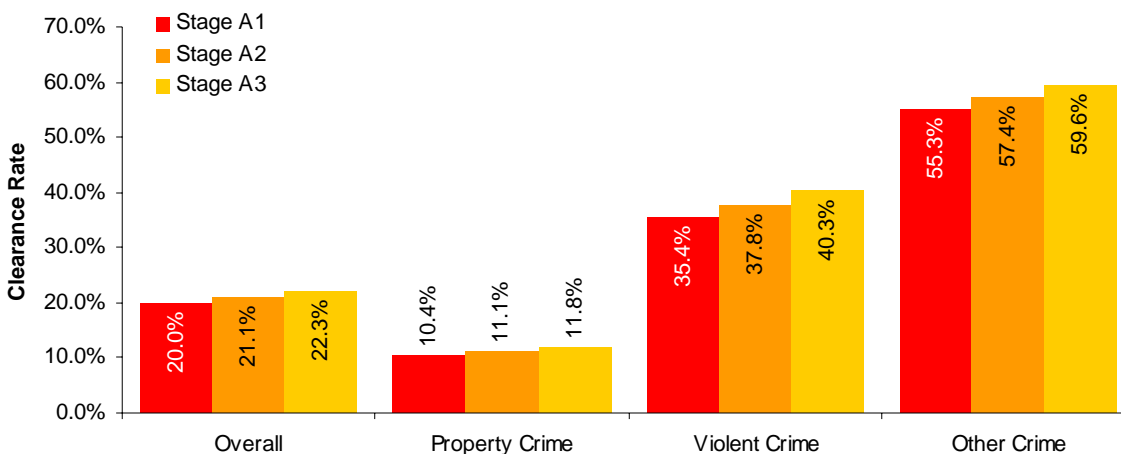
The following figure illustrates how the addition of 65 new officers would reduce the predicted average utilization rate (the amount of time spent on reactive policing) from 65% of officers' shift to 54%. This would allow for a significant increase in the amount of proactive time available to officers.

### Predicted Average Utilization Rate for Option A3



A key metric that is often used to convey the effectiveness of the police is clearance rate. A case is considered to be "cleared" when the investigation results in the identification of a person against whom a criminal charge could be laid. Clearance rates are a measure of police effectiveness at solving crime. Solving crime holds criminals to account for their actions, reduces victimization, increases public safety and gives people confidence in the police. Clearance rates only apply to the 25% of calls for service that are "crimes." The other 75% of calls for service are "solved" differently. The following figure depicts how the clearance rate of the VPD is predicted to increase as patrol resources are added.

### Predicted Clearance Rate for Option A3



#### vi) Performance Review and Reporting Back Mechanism

As noted previously, the Steering Committee will develop key performance measures for approval by the Police Board, to be reported to Council by September 2007, that include all inputs, outputs and outcomes for both reactive and proactive policing. The Police Board will also conduct bi-annual evaluations to measure the effectiveness of the deployment strategy and will provide regular status reports to Council for its information. In addition, the Chief Constable, in consultation with the Police Board, will report to Council on a full review of the deployment strategy after one year of implementation of the recommendations. This should be accomplished by the end of 2009.

Appendix E and F includes the baseline data for key inputs and outputs, including baseline on authorized patrol deployment that arise from the recommendations in this report. Some measures, mainly outcome measures, are still in development.

Since 2005, the VPD has made vast improvements in its ability to collect and analyze data and have collected baseline data on the following measures, included in Appendix E.

- Number of calls
- Total number of patrol officers deployed
- Proportion of two-officer units deployed
- Total allocated (reactive policing) and unallocated (proactive policing) time
- Average response time for priority 1, 2, 3 and 4 calls
- Average service time
- Average number of units per call
- Average number of officers per call
- Clearance rates
- Cancelled calls
- On-view calls
- On-view criminal offences
- Street Checks

- Traffic Tickets
- Number of report errors

The following outcomes can be expected by making internal changes and adding 65 new officers:

- Increased public safety
- Reduced response times to calls for service (more police = arrive faster)
- Increased apprehension of criminals
- Reduced injuries to victims
- Increased availability of witnesses
- Improved clearance rates
- Increased preservation of crime scenes/forensic evidence integrity
- Increased proactive policing
- Increased intelligence gathering
- Increased “on-view” and self initiated arrests
- Better customer service/able to attend some of the calls we currently have to cancel
- Reduced street disorder
- Improved traffic safety/more traffic enforcement
- Fewer report errors due to more thorough investigations
- Literature supports that more police equals less crime
- Increased police presence and visibility

In order to assess the benefits of implementing Stages A1, A2 and A3, the following will be reported to Council on a bi-annual basis:

- ◆ Baseline data prior to implementation of these stages for all inputs, outputs and outcomes
- ◆ Performance targets for all inputs, outputs, and outcomes
- ◆ Actual performance for all inputs, outputs and outcomes.

### Phase II - Next Steps

As noted in the background section the completion of the Operational Review will include the development of mini-business plans for all business units in the VPD, development of an operational plan that will result in a prioritization of all VPD services and a further review of overtime. Also included will be an update on payroll shared services.

## FINANCIAL IMPLICATIONS

The overall resources required for each of the stages is as follows:

Stage	Sworn FTE			Equipment		
	Sergeants	Constables	Total	Fleet	Radios	Laptops
Stage A1	2	0	2	12	14	12
Stage A2	2	28	30	10	25	10
Stage A3	3	30	33	21	54	21
<b>Total</b>	<b>7</b>	<b>58</b>	<b>65</b>	<b>43</b>	<b>93</b>	<b>43</b>

The funding implications will be based on the implementation schedule of A1 through A3 which are currently expected as follows:

- A1 recommendations in April 2007
- The first Metro Team would be created in February 2008
- The second Metro Team would be created in June 2008
- Delta Teams for Districts 2, 3 and 4 would be created during August and September 2008

The table below highlights these financial implications.

Operating Budget Summary	One Time Cost 2007	On-Going Costs 2007	Total Costs 2007	One Time Cost 2008	On-Going Costs 2008	Total Costs 2008	Est 2009
Salaries & Benefits	\$26,000.00	\$1,141,840.00	\$1,167,840.00	\$0.00	\$4,029,610.00	\$4,029,610.00	\$4,889,160.00
Administrative Costs	\$35,180.00	\$3,240.00	\$38,420.00	\$0.00	\$41,090.00	\$41,090.00	\$295,340.00
Uniform & Equipment	\$446,160.00	\$0.00	\$446,160.00	\$0.00	\$48,150.00	\$48,150.00	\$137,330.00
Specialised Equipment	\$24,000.00	\$0.00	\$24,000.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
Facilities Related Costs	\$121,550.00	\$0.00	\$121,550.00	\$0.00	\$0.00	\$0.00	\$33,950.00
Information Technology Costs	\$26,400.00	\$0.00	\$26,400.00	\$0.00	\$400.00	\$400.00	\$400.00
Fleet Operating Costs	\$0.00	\$30,600.00	\$30,600.00	\$0.00	\$501,300.00	\$501,300.00	\$836,200.00
<b>Direct VPD Costs</b>	<b>\$679,290.00</b>	<b>\$1,175,680.00</b>	<b>\$1,854,970.00</b>	<b>\$0.00</b>	<b>\$4,628,550.00</b>	<b>\$4,628,550.00</b>	<b>\$6,200,380.00</b>
E-Comm & PRIME	\$16,200.00	\$65,790.00	\$81,990.00	\$87,900.00	\$274,560.00	\$362,460.00	\$483,740.00
<b>Total Operating Costs</b>	<b>\$695,490.00</b>	<b>\$1,241,470.00</b>	<b>\$1,936,960.00</b>	<b>\$87,900.00</b>	<b>\$4,903,110.00</b>	<b>\$4,991,010.00</b>	<b>\$6,684,120.00</b>
Incremental Costs			\$1,936,960.00			\$3,054,050.00	\$1,693,110.00
% Tax Increase			0.40%			0.64%	0.35%

Truck And Equipment Plant Account		# of Units			# of Units		
Marked		2	\$ 89,200		31	\$ 1,382,600	
Unmarked		10	\$ -				
		12	\$ 89,200		31	\$ 1,382,600	

*\*Capital Costs associated with the VPD fleet are to be funded from the Plant Account with the exception of 10 surveillance vehicles as discussed below.*

Included in the recommendation under Stage A1 are 10 vehicles for the amalgamated surveillance units. These costs are not included in the estimates in that for 2007 as they will be absorbed within the VPD fleet budgets. At the completion of the Operational Review an update of the overall fleet will be completed with agreed upon KVRs (Key Vehicle Ratio - ratio of vehicles to authorized strength).

## PERSONNEL IMPLICATIONS

Constable Tom Stamatakis, president of the Vancouver Police Union (VPU), is a member of the VPD Operational Review Working Group.

Constable Stamatakis has expressed some concerns over the proposed shifting pattern for the new late Delta Teams that would work Wednesday to Saturday from 6:00 p.m. to 4:00 a.m. These officers would be required to work four 10-hour shifts followed by three days off. This is different from the current patrol schedule where officers work four 11-hour shifts followed by four days off. In addition, these newly proposed teams would always be working from 6:00 p.m. to 4:00 a.m. (considered a night shift) and would not rotate through the other shifts like most other patrol officers do.

The newly proposed shift is currently a subject of discussion between the VPU and the VPD Executive. The working relationship between management and the VPU is healthy and productive, as demonstrated by coming to agreement on the 19 positions recommended for civilianization last year.

## IMPLEMENTATION PLAN

The 65 new officers would be hired in alignment with the following Police Academy classes scheduled for 2007:

- May - 15 new officers
- September - 12 new officers
- November - 22 new officers
- December - 16 new officers

With this recruitment schedule, initiatives are to be implemented as follows:

- A1 recommendations April 2007
- The first Metro Team is created in February 2008
- The second Metro Team is created in June 2008
- Delta Teams for Districts 2, 3 and 4 are created during August and September 2008

## CONCLUSION

In summary, the VPD's current average priority one response time of 11 minutes and 25 seconds is much slower than the best practice and the typical performance target for major North American cities of 7 minutes. Also, the average amount of time that VPD officers currently spend on reacting to calls for service is approximately 65% of their shift, which is well above the established best practice of 50%. Internal changes have been recommended in relation to the following areas:

- District Surveillance Teams
- Fixed Delta Team in District 1
- Extended Delta Shift
- Special Patrol-based Projects
- Minimum Staffing Levels

- Deployment of Two-Officer Units
- Authorized and Actual Strength Policy
- Emergency Response Team

The Steering Committee considered the findings of the Patrol Deployment Study and agreed to a joint recommendation of 65 new sworn officers for the VPD in 2007. This would increase the authorized strength of the VPD from 1,214 to 1,279 officers. Sixty-five new officers would enable the VPD to respond faster to priority one emergency calls, arriving in 9 minutes and 15 seconds on average. The new officers would also allow the VPD to engage in more proactive policing activities by reducing the amount of reactive policing time to 54% on average. There would also be an improvement in the correlation between the calls for service and the number of officers deployed. No additional civilian staff is required to implement these recommendations.

The VPD Executive is committed to ensuring that the new officers would all be assigned to uniform patrol duty and would not be used to create specialty squads. This would greatly enhance the visible presence of uniformed police officers on the streets of Vancouver.

Phase 2 of the Operational Review will be completed in June 2007, which will include mini-business plans for all non-patrol units and further review the Department's use of overtime. The resource implications from this final stage of the project will not be known until that time.

\* \* \* \* \*

**Appendix A - 2006 Council Approved Sworn Positions**

<b>2006 Approvals - 31 New Sworn Positions Created Due to Council Approval</b>		
1.	DCC Operations (Executive Officer)	Inspector
2.	District 2 (Beat Enforcement Team)	Constable
3.	District 2 (Beat Enforcement Team)	Constable
4.	District 2 (Beat Enforcement Team)	Constable
5.	District 2 (Beat Enforcement Team)	Constable
6.	District 2 (Beat Enforcement Team)	Constable
7.	Patrol Support Section (Identity Theft Task Force)	Sergeant
8.	Patrol Support Section (Identity Theft Task Force)	Constable
9.	Patrol Support Section (Identity Theft Task Force)	Constable
10.	Patrol Support Section (Identity Theft Task Force)	Constable
11.	Major Crime Section (Homicide Squad)	Constable
12.	Major Crime Section (Homicide Squad)	Constable
13.	Major Crime Section (Robbery/Assault Squad)	Constable
14.	Major Crime Section (Robbery/Assault Squad)	Constable
15.	Major Crime Section (Robbery/Assault Squad)	Constable
16.	Major Crime Section (Robbery/Assault Squad)	Constable
17.	Special Investigation Section (Domestic Violence and Criminal Harassment Unit)	Constable
18.	Special Investigation Section (Domestic Violence and Criminal Harassment Unit)	Constable
19.	Special Investigation Section (Domestic Violence and Criminal Harassment Unit)	Constable
20.	Forensic Services Section (Forensic Identification Unit)	Sergeant
21.	Forensic Services Section (Forensic Identification Unit)	Constable
22.	Forensic Services Section (Forensic Identification Unit)	Constable

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**2006 Approvals - 31 New Sworn Positions Created Due to Council Approval**

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23.	Forensic Services Section (Forensic Identification Unit)	Constable
24.	Youth Services Section (Gang Crime Unit)	Constable
25.	Youth Services Section (Gang Crime Unit)	Constable
26.	Youth Services Section (Gang Crime Unit)	Constable
27.	Criminal Intelligence Section (Counter Terrorism Unit)	Sergeant
28.	Criminal Intelligence Section (Counter Terrorism Unit)	Constable
29.	Criminal Intelligence Section (Counter Terrorism Unit)	Constable
30.	Property Office & Facility Planning Section	Inspector
31.	Training & Recruiting Section (Education & Training Unit - PRIME Trainer)	Constable



## Appendix B - Update Since the Civilianization Study

The officers who were in the 19 positions that were civilianized have either moved on to other positions within the Department, are waiting for civilians to take over their position, or have retired. It should be noted that none of the officers who were in the civilianized positions subsequently moved into one of the newly created sworn positions. As the new sworn positions were created, Department-wide postings for applicants were conducted and these positions were subsequently filled by people from throughout the organization. The 19 officers who were displaced due to their position being civilianized were reassigned to the following locations:

- Operations Division - 9
- Operations Support Division - 2
- Investigation Division - 2
- Support Services Division - 3
- Secondment - 1
- Retired - 2

Several of these people were accommodated employees prior to the civilianization of their position and therefore had to be re-accommodated to other positions in the Department.

In addition to the 19 positions that were recommended to be converted from sworn to civilian, the Civilianization Study recommended further examination of the following seven positions:

1. Constable, Business Liaison Officer
2. Constable, Block Watch
3. Constable, Forensic Identification Unit
4. Sergeant, Labour Relations
5. Sergeant, Attendance Management
6. Sergeant, Career Development Unit
7. Inspector, Human Resources

These positions were reviewed based on the information contained in the Civilianization Study and on the information that was collected as part of the creation of mini-business plans. The potential to civilianize these positions was assessed using the same decision-making grid that was used in the original Civilianization Study. This grid consists of the following questions:

1. Does the position require law enforcement powers? (i.e. powers of arrest, use of force, statutory requirement, carrying a firearm)
2. Are the skills, training, experience, or credibility of a sworn police officer required to fulfill the duties of the position?
3. Can the requirements of the position be fulfilled by a specially-trained civilian?

As a result of the analysis conducted, it was determined that these positions should remain sworn at this time. Two of these positions, the Block Watch Coordinator and the Business Liaison Officer, will be reassessed once the VPD's community policing activities are reviewed during the mini-business plan process.

2006 Approvals - 19 New Sworn Positions Created Due to Civilianization		
1.	Services Liaison Section (Station NCO)	Sergeant
2.	Services Liaison Section (Station NCO)	Sergeant
3.	Services Liaison Section (Station NCO)	Sergeant
4.	Services Liaison Section (Station NCO)	Sergeant
5.	Forensic Services Section (Financial Crime Squad)	Constable
6.	Forensic Services Section (Financial Crime Squad)	Constable
7.	Criminal Intelligence Section (Counter Terrorism Unit)	Constable
8.	Training & Recruiting Section (Force Options Training Unit)	Sergeant
9.	Special Investigation Section (Domestic Violence and Criminal Harassment Unit)	Constable
10.	Emergency Operations And Planning Section	Constable
11.	District 4 (Neighborhood Policing Officer)	Constable
12.	DCC Operations (Reader Sergeant)	Sergeant
13.	DCC Operations (Reader Sergeant)	Sergeant
14.	DCC Operations (Reader Sergeant)	Sergeant
15.	DCC Operations (Reader Sergeant)	Sergeant
16.	Patrol Support Section (Fugitive Squad)	Sergeant
17.	Patrol Support Section (Fugitive Squad)	Constable
18.	Patrol Support Section (Fugitive Squad)	Constable
19.	Patrol Support Section (Fugitive Squad)	Constable

<b>Status of the 19 Civilianized Positions</b>				
	<b>Section</b>	<b>Sworn (before)</b>	<b>Civilian (after)</b>	<b>Status</b>
1.	Planning & Research Section	Inspector	Director	Filled September 18, 2006
2.	Quality Assurance Section	Inspector	Manager - Audit	Posting closed December 22, 2006
3.	Human Resources Section (Safety & Health Coordination Unit)	Corporal (WSE)	Safety & Health Coordinator	Filled January 2, 2007
4.	Major Crime Section (Robbery/Assault Squad - Analyst)	Constable	Serious Crime Analyst	Posting closed October 27, 2006 Interviews in progress
5.	Special Investigation Section (Statement Analysis)	Constable	Statement Analyst	Filled November 27, 2006
6.	Special Investigation Section (ViCLAS)	Constable	ViCLAS Coordinator	Filled January 1, 2007
7.	Court & Detention Services Section (Document Services Unit)	Constable	Special Constable (Document Server)	Will be posted in February 2007
8.	Court & Detention Services Section (Document Services Unit)	Constable	Special Constable (Document Server)	Will be posted in February 2007
9.	Court & Detention Services Section (Document Services Unit)	Constable	Special Constable (Document Server)	Will be posted in February 2007
10.	Youth Services Section (Youth Referral Coordinator)	Constable	Youth Referral Coordinator	Have selected person, awaiting security clearance
11.	Information Management Section (Information & Privacy Unit)	Constable	Information & Privacy Analyst	Posting closed December 21, 2006
12.	Patrol Support Section (Crime Analysis Unit)	Constable	Serious Crime Analyst	Filled November 1, 2006
13.	Patrol Support Section (Crime Analysis Unit)	Constable	Serious Crime Analyst	Filled November 1, 2006
14.	Patrol Support Section (Crime Analysis Unit)	Constable	Serious Crime Analyst	Filled December 4, 2006
15.	Patrol Support Section (Crime Analysis Unit)	Constable	Serious Crime Analyst	Filled January 2, 2007
16.	District 1 (Analyst)	Constable	Serious Crime Analyst	Filled November 1, 2006
17.	District 2 (Analyst)	Constable	Serious Crime Analyst	Filled November 1, 2006
18.	District 3 (Analyst)	Constable	Serious Crime Analyst	Filled November 1, 2006
19.	District 4 (Analyst)	Constable	Serious Crime Analyst	Filled October 23, 2006

## **Appendix C - Other Recommendations from Phase 1 of the Operational Review**

At the conclusion of Phase 1 of the Operational Review, the Steering Committee made 11 additional recommendations. Each of these recommendations and the progress that has been achieved is summarized below.

- 1. THAT, the VPD Human Resources Section create a system to ensure periodic, regular reviews of all position profiles to ensure they are current.**

The position profiles for all sworn positions were reviewed during the Civilianization Study completed in March 2006. Several inaccuracies were identified at that time and were subsequently rectified by the Career Development Unit. The civilian profiles were all reviewed during 2006 in preparation for the fall launch of the civilian Performance Development Program. To ensure that all position profiles are kept current, the Career Development Unit has made a bi-annual review of all position profiles in the organization part of the Performance Development Program.

- 2. THAT, the VPD explores relocating the Crime Analysis Unit from the Patrol Support Section to the Planning and Research Section.**

This is being reviewed as part of the mini-business plan process and will be completed by June 2007. The mini-business plans and interviews with supervisory personnel have been completed and the analysis is still being conducted. An initial review of other police departments has shown that, across North America, there is no clearly established best practice, as roughly half of the departments surveyed have integrated these two units, while the other half decided against such action. The final results will be reported back during the mini-business plan project and recommendations will be made at that time on the viability of this potential change.

- 3. THAT, the VPD relocates the Quality Assurance Section to the Planning and Research Section and that the Planning and Research Section be re-named the Planning, Research and Audit Section.**

This is in progress and should be completed by February 2007. The new Audit Manager position was posted in December, 2006 and the interview process will take place in February. This newly civilianized position will report directly to the civilian Director in charge of the Planning and Research Section.

- 4. THAT, the VPD adopts the International Association of Chiefs of Police (IACP) Model Policy on Civilianization.**

The IACP Model Policy on Civilianization is a general guideline for agencies to manage civilian staff. It identifies a number of areas relating to:

- Maintaining civilian job descriptions
- Ensuring that civilians are not used to enforce the law
- Screening civilian applicants and conducting criminal records checks
- Issuing identification cards with up to date photographs that shall be worn at all times
- Providing pre-service training, in-service training and an orientation program
- Performing periodic performance appraisals

All of these items are currently in place and the VPD conforms to the IACP model on civilianization.

**5. THAT, the VPD creates a written policy on civilianization that includes the three questions comprising the decision making tree in the Civilianization Study.**

The VPD Human Resources Section is currently drafting a comprehensive policy manual. A written policy on civilianization has been included in this manual and it will be linked through the VPD Regulations and Procedures Manual - Section 51.01 - *Procedure for Change in Authorized Strength, Organizational Structure, or Resource Re-Allocation*.

**6. THAT, the VPD develops a tenure policy for secondments.**

The four year tenure rule for secondments was being developed while the Civilianization Study was being conducted. This rule was implemented in March 2006. As a result, any new MOU regarding secondments will ensure participation in the VPD Performance Development Program and will limit the tenure of all secondments to three years plus a potential additional year, which must be mutually agreed to by both organizations.

**7. THAT, the VPD consolidates all of its current policies on accommodation into one formal policy, such policy to be guided by best practices in other police departments and municipalities.**

The VPD Human Resources Section has established protocols in place that address accommodated employees. These protocols include:

- Disability/Absenteeism Management Program
- *2003-2006 Collective Agreement between the Vancouver Police Board Section and the Vancouver Police Union - Schedule C (e) Members with Limited Ability*
- Established labour law covering the employer's "duty to accommodate"

**8. THAT, the VPD develops a written policy on developmental positions which includes the objectives of developmental positions and potential areas of placement throughout the Department.**

The Career Development Unit in the Human Resources Section will be including a policy on developmental positions as part of the Performance Development Program. This is an evolving program that began with sworn officers and was expanded to include civilian staff in 2006.

**9. THAT, the VPD transfer the positions of False Alarm Reduction Coordinator and the four clerk typists to the City of Vancouver and a transition plan be prepared to effect this change by the end of 2006.**

The Steering Committee recommended that the False Alarm Reduction Program (FARP) be transferred from the VPD to the City of Vancouver. This would have included the civilian positions of the False Alarm Reduction Coordinator and the four clerk typists.

The VPD District 4 Inspector and the Co-Director of Licenses and Inspections were tasked with developing a transition plan to effect this change by the end of 2006.

Unanticipated issues arose which will not make this transition possible. Further research into this topic revealed that a change to the Vancouver Charter would be required. Section 279(B) of the Vancouver Charter, dealing with the "Regulation of Burglar Alarms," grants regulation authority for burglar alarms to the Vancouver Police Board.

**10. THAT, the VPD and the City of Vancouver create a working group comprised of VPD and City of Vancouver Payroll professionals to explore implementing shared services in the area of Payroll.**

A Payroll Working Group of eight people was established and is co-chaired by the VPD Inspector in charge of the Human Resources Section and the Acting Director of Financial Services for the City. The working group has been updating the Steering Committee on a regular basis and is still trying to resolve some outstanding issues.

The Vancouver Police Union has raised concerns over service delivery reduction and the resolution of collective agreement interpretation and pay disputes. Also, the Teamsters Union employees who currently work in Payroll have raised concerns over transferring to CUPE, which would be required for this to become a shared service. One of the main concerns for current staff is the potential loss of the compressed work week.

While these issues are not insurmountable, they will require more time to resolve. The Steering Committee has agreed to keep moving forward with this potential shared service to see if these obstacles can be overcome.

**11. THAT, the VPD continues to support the 311 Call Centre initiative and the opportunity for shared services with the switchboard telephone operators.**

The City is taking the lead on Vancouver's 311 Call Centre initiative. The system is designed to deal with non-emergency calls and improve public access to all municipal service information. The VPD continues to support this initiative and the Inspector in charge of the Communications Section has been involved in ongoing discussions between the City and E-Comm.

## Appendix D -Examples of Proactive Policing

Proactive policing allows officers to engage in self-initiated activities that include:

- Street disorder issues - these include the quality of life issues that affect people on a day-to-day basis. These are the issues that people often complain about and say that the police are doing little to address. Examples include: aggressive panhandling, open-air drug dealing, fights, noise, intoxicated people and problems in the Entertainment District. Reducing street disorder is one of the goals of the VPD Strategic Plan.
- More "on-view" arrests by officers - more proactive time would lead to more self-initiated arrests by officers, increased "solve" rates and intervening before incidents escalate in severity.
- Street Checks - these are routine checks where officers speak with known criminals or suspicious people. They help an officer get to know the people on their beat and can lead to an arrest, the gathering of intelligence information or general crime deterrence. Street check data is crucial to establish associations between people, vehicles and locations, and is used extensively by follow-up investigators to solve crimes.
- Traffic enforcement - this can be targeted enforcement in a problem area or on-view traffic violations. Similar to street checks, traffic enforcement can also lead officers to check suspicious vehicles and their occupants and provide important information to solve crimes. Improving traffic safety is one of the goals of the VPD Strategic Plan.
- Intelligence led policing - directed patrols to problem areas or crime "hot spots." This can be based on the officer's knowledge of the area, citizen generated complaints, or information received from the district crime analysts, and can lead to on-view arrests. Officers can also spend more time investigating problem premises, such as those contributing to problems in a neighbourhood.
- Informant development - this is where a person (usually someone involved in the criminal lifestyle) provides an officer with information on criminal activity. This valuable information can assist in solving crimes.
- Licensed premises checks - this is when officers conduct routine inspections of licensed establishments to look for violations under the Liquor Control and Licensing Act, such as minors consuming liquor or over-service. These types of checks allow the officers to become familiar with the staff and clientele, and develop sources and intelligence that can be useful during future investigations. Licensed premises checks contribute to reducing problems inside the licensed premises and street disorder issues.
- Problem Oriented Policing - this can take many forms. It usually involves the officer working in partnership with the community to address concerns affecting the neighbourhood. Examples would be a suspected drug house or a corner store selling contraband to minors.
- Community Policing - this is an over-arching philosophy. The police are part of the community and should get to know the businesses and residents whenever possible. This can include walking a beat, riding a bicycle, public speaking or assisting residents with programs such as Block Watch.
- Crime prevention - the police providing advice to businesses and residents about safeguarding their property and providing personal safety tips.

- More thorough investigations - increased proactive time would allow officers to conduct more thorough investigations, clear more cases and further assist citizens seeking justice.
- Fewer cancelled calls - if officers had more available time they would be able to handle some of the nuisance complaints relating to quality of life issues that VPD currently has to cancel.
- Increased police presence and visibility to reduce street disorder and increase perceptions of safety.



Appendix E - Performance Measurements Benchmark Data

<b>Benchmark Data</b>	
<b>Performance Measurements</b>	<b>2005-06-01 to 2006-05-31</b>
Number of Calls Recorded	280,048
Number of Calls Dispatched	188,616
Number of Calls Cancelled	38,295
Number of Officer-Initiated (On-View) Calls	46,916
Number of Officer-Initiated (On-View) Criminal Offences	12,659
Total Number of Regular Patrol Units (Shifts) Deployed	33,347
Total Number of Regular Patrol Officers (Shifts) Deployed	55,033
Proportion of Two-Officer Regular Patrol Units Deployed	65.0%
Utilization Rate for Regular Patrol Units	65.0%
Average Response Time for Priority 1 Calls	0:11:25
Average Response Time for Priority 2 Calls	0:34:37
Average Response Time for Priority 3 Calls	2:05:50
Average Response Time for Priority 4 Calls	5:25:36
Average Service Time by Regular Patrol Units	1:20:03
Average Number of Regular Patrol Units Dispatched per Call	1.6
Average Number of Regular Patrol Officers Dispatched per Call	2.7
Number of Street Checks by Patrol Units	6,853
Number of Traffic Tickets by Patrol Units	9,537
Percentage of Crown Counsel Queries (CCQs)	25.5%
Overall Clearance Rate	20.0%

Appendix F - VPD Patrol Staffing for Options A1 through A3

VPD Patrol Staffing														
			Current			Stage A1			Stage A2			Stage A3		
			Constables	Sergeants	Total	Constables	Sergeants	Total	Constables	Sergeants	Total	Constables	Sergeants	Total
Patrol North	District 1	Patrol	122	10	132	125	11	136	125	11	136	125	11	136
		Surveillance	9	1	10	9	1	10	9	1	10	9	1	10
	District 2 (Including BET)	Surveillance	7*	1*	8	9	1	10	9	1	10	9	1	10
		Patrol	147	14	161	151	14	165	151	14	165	161	15	176
Patrol South	District 3	Patrol	112	10	122	115	10	125	115	10	125	125	11	136
		Surveillance	7*	1*	8	9	1	10	9	1	10	9	1	10
	District 4	Surveillance	7*	1*	8	9	1	10	9	1	10	9	1	10
		Patrol	96	10	106	98	10	108	98	10	108	108	11	119
	Metro Team	Patrol	0	0	0	0	0	0	28	2	30	28	2	30
	<b>City Total</b>	<b>Surveillance</b>	<b>30</b>	<b>4**</b>	<b>34</b>	<b>18</b>	<b>2</b>	<b>20</b>	<b>18</b>	<b>2</b>	<b>20</b>	<b>18</b>	<b>2</b>	<b>20</b>
<b>Patrol</b>		<b>477</b>	<b>44</b>	<b>521</b>	<b>489</b>	<b>45</b>	<b>534</b>	<b>517</b>	<b>47</b>	<b>564</b>	<b>547</b>	<b>50</b>	<b>597</b>	

\* These surveillance positions are not currently formalized.

\*\* Only one (1) of the Sergeant surveillance positions is currently formalized.

Appendix G - Staffing Requirements for Option A3

Recommended Option A3 Staffing Requirements for Patrol			
Patrol Area	Constables	Sergeants	Total FTE
District 1	-	1	1
District 2	10	1	11
District 3	10	1	11
District 4	10	1	11
Metro Teams	28	2	30
Patrol South Surveillance Team	-	1	1
<b>Total</b>	<b>58</b>	<b>7</b>	<b>65</b>