

NO: *P011*

Committee DATE: **October 14, 2014**

POLICE COMMITTEE

TO: **Mayor & Council**

DATE: **October 9, 2014**

FROM: **Bill Fordy, Chief Superintendent
Officer in Charge Surrey RCMP**

FILE:

SUBJECT: **Surrey RCMP Service Delivery Review and Recommendations**

RECOMMENDATION

The Surrey RCMP recommends that the Police Committee:

- a) Receive this report and attachments as information; and
- b) Recommend that City Council endorse the proposed increase of an additional 47 Regular Members to the RCMP establishment, which is in addition to the 95 officers and 20 Community Safety Patrol personnel, as directed by Council during the budget process, and keeping with the Annual Reference Level Update (ARLU) process. The increase will bring the Surrey RCMP establishment to 815 Regular Members.

INTENT

The purpose of this report is to provide some background with respect to the establishment of the Surrey RCMP, and the results of the two independent research projects. The projects examined different aspects of the Detachment service delivery model with a view to identifying opportunities to enhance policing and public safety, and informed future resourcing and deployment decisions.

BACKGROUND

In April 2012, the City of Surrey and the Province of British Columbia entered the Municipal Police Unit Agreement for the use of employment of the Royal Canadian Mounted Police for the provision of municipal police services.

In September 2012, RCMP "E" Division, Lower Mainland District initiated a pilot project to examine General Duty staffing needs. The goal of the project was to use information obtained from the Computer Aided Dispatch (CAD) System to measure General Duty (GD) workload and evaluate GD deployment practices. Surrey RCMP was one of four detachments participating in the pilot and will be the first to action same.

In fall of 2013, Dr. Irwin Cohen of the University of the Fraser Valley (UFV) was engaged to initiate a comprehensive analysis of the Surrey RCMP service delivery model.

In April 2014, the Police Committee authorized an increase to the RCMP policing establishment of 95 Members and 20 Community Safety Patrol personnel, with 30 being requested in 2014/15.

On May 15th 2014, the City Manager submitted written correspondence to the Minister of Justice requesting an increase of thirty (30) members to the Surrey RCMP policing establishment effective April 1, 2014, following the precedent as set out in Article 6.0 of the RCMP Agreement. The Minister of Justice approved the request and forwarded it to the Minister of Public Safety and Emergency Preparedness. In turn, The Minister of Public Safety and Emergency Preparedness submitted written correspondence to the Minister of Justice advising that the 30 positions had been accommodated in the Annual Contract Policing Increment Funding Request for 2014-2015, at which point the authorized establishment of the Surrey RCMP was increased to 703 Members, that includes 54 members in the integrated teams.

DISCUSSION

General Duty Resource and Deployment Project

The primary goal for this assessment was to determine the number of General Duty Constables needed to deliver various levels of service to the community.

The primary measure of General Duty workload is time spent responding to calls for service from the public. Once the number of General Duty Constables to be fielded has been established, the number of supervisors and support staff can also be identified.

The Managing Police Performance (MPP) methodology seeks to align the number of General Duty Constables available with the number (and variability) of calls for service, operational objectives, and performance targets relating to service delivery, and public and police safety (e.g. the number of free General Duty units available and emergency response times).

While Surrey is the first RCMP Detachment to engage the MPP application, it is being adopted more broadly by other detachments in the Lower Mainland District. The RCMP E-Division, will be expanding the project to help guide recommendations with respect to resource deployment. In particular, it will be helpful to determine minimum staffing levels required to meet different performance objectives, to evaluate the impact of shift

schedule changes on workload and service delivery, to establish patrol district boundaries, to assess the impact of anticipated growth and development within a particular city or detachment area.

The results of that analysis are attached in Peter Bellmio's report (see Appendix I). To achieve the desired level of emergency response time, time dedicated to calls for service, and proactive policing, an increase to the establishment is recommended. The attached report depicts the relative relationship between these criteria. An increase to the establishment will allow for more proactive time.

UFV Research on Surrey RCMP Operations

Over the last year, the UFV research team has been conducting a series of formative evaluations of police practices within the context of the organization's structure and goals. The research has been both qualitative and quantitative in nature; methodologies have included semi-structured interviews, surveys, literature and file reviews, and comparative data analysis.

The UFV Operation review of the Detachment complements the GD Resource and Deployment Project and provides for a holistic assessment of the Detachment's service delivery model.

The UFV Research recommendations support an increase to the establishment of human resources and are congruent with the Bellmio report (see Appendix II).

RECOMMENDATION FOR ADDITIONAL MEMBERS

Based on the in-depth analysis of the two reports described above, the Surrey RCMP recommends that the Police Committee endorse a recommendation to increase by an additional 47 Regular Members to the RCMP establishment, which is in addition to the 95 officers and 20 Community Safety Patrol personnel. Although this will require a high number of new members, Article 6.0 of the Municipal Police Unit Agreement states that the Government of Canada will supply such members as soon as practicable within one year from receipt of the written request.

The RCMP has recently enhanced its recruiting efforts and is now targeting approximately 950 new Members per year.

SUSTAINABILITY CONSIDERATIONS

These detachment review projects will assist in achieving the overall objectives of the City's Sustainability Charter, and more specifically, creating a safe and secure environment for the City's residents, businesses and visitors. In particular, the project supports the Charter's goal to "Create a City that is, and is perceived as being safe and secure".

OTHER STRATEGIC CONSIDERATIONS

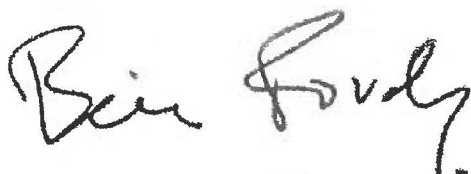
The Detachment review projects support two strategic priority areas within the Surrey RCMP 2013-2017 Strategic Framework, and the following objectives in particular:

1. Stewardship – leverage technologies and best practices to enhance operational effectiveness.
2. Capacity Building (Our People) – ensure efficient and effective deployment of human resources; provide a healthy, respectful workplace with opportunity for employee feedback; support and encourage employee wellness.

CONCLUSION

For planning purposes, I am respectfully requesting that the establishment of Surrey RCMP be increased by 47 Regular Members to the RCMP establishment, which is in addition to the 95 officers and 20 Community Safety Patrol personnel. The two streams of research activity demonstrate the Detachment's commitment to continuous improvement and evidenced-based decision making (intelligence-led policing). The research streams complement each other and provide a better understanding of pressures and performance gaps in terms of resource levels and deployment. They also identify opportunities to enhance the Detachment's service delivery and crime reduction efforts.

Moving forward, the detachment will continue to examine its operations for efficiencies and a framework for future resource needs, including: a more detailed analysis of Investigative Services; examination of high volume call types (e.g., False Alarms, Abandoned 911) with a view to gain efficiencies, through various tactics such as call diversion (alternate response) strategies or addressing underlying issues through regulatory instruments (Bylaws); enhancing partnerships; and/or public education and awareness campaigns.



Chief Superintendent Bill Fordy
Officer in Charge (OIC)
Surrey RCMP

Attachments:

- Appendix I General Duty Staffing Assessment
- Appendix II Dr. Cohen's Report "The Surrey Detachment – An Overview and Recommendations"

**Surrey Detachment
Royal Canadian Mounted Police**

**General Duty
Staffing Assessment**

By Peter Bellmio
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Surrey Detachment

General Duty Staffing Assessment

By Peter Bellmio
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September 2014

Introduction

This assessment was completed through a project partly funded by the E Division of the Royal Canadian Mounted Police (RCMP) to develop better methods for measuring General Duty Constable (GDC) workload, efficiency of deployment practices and GDC staffing needs. Surrey was a pilot site for the project along with detachments in North Vancouver, Burnaby and Mission. Surrey then funded an additional contract to undertake the final assessment.

This was a collaborative project that relied on extensive participation by staff from Surrey as well as the other three detachments. As a result, the study involved training and briefing sessions that engaged a wide range of personnel from patrol and communications. Feedback from Surrey staff was sought to help evaluate the accuracy of data being collected and the application of that information in measuring patrol staffing needs.

The primary goal for this assessment was to provide information that can be used by policy makers to fund General Duty staffing for Surrey. In the past, different measures for determining staffing needs have been used to justify staffing for front line policing services.

Total police officers per thousand population is sometimes used as a basis for comparing police staffing among communities. As a measure, officers per thousand population does not accurately define workload or service needs. Different communities have different rates of calls for service and crime problems even if they have the same population. Population characteristics and economic conditions have more impact on police service needs than just total population. In the end, officers per thousand population is an approximate measure of what a community is spending on law enforcement not what it needs.

Changes in levels of reported crime have been used as a basis for setting police staffing levels. Yet a great deal of police workload is not crime related.

Some neighborhoods can have few crimes reported but need traffic enforcement and order maintenance related to juvenile problems.

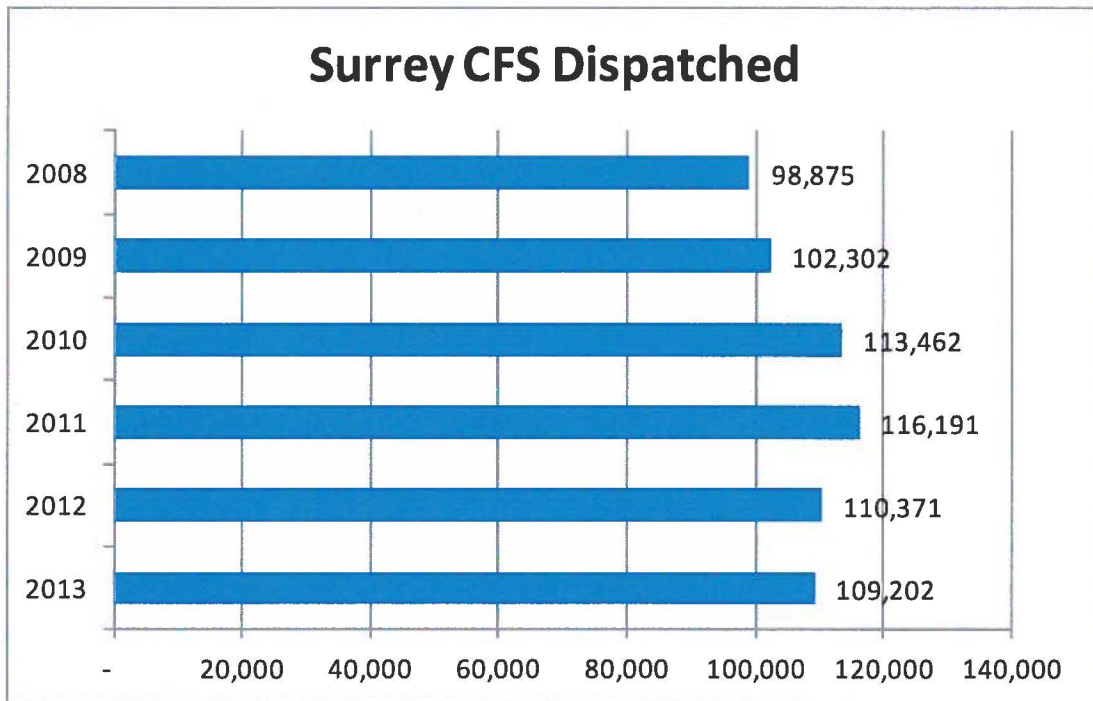
Just counting numbers of calls for service is not an adequate measure either. Some types of calls require more constables and take more time than others. The seriousness of calls also varies by hour of day and day of week. Some shifts might have the same or even fewer calls but more units may be needed to answer them.

In the end, setting levels of staffing for frontline police staffing is a public policy decision based on the number of GDCs needed on duty to provide an adequate level of service to the community. This report will present a range of staffing levels and service levels that can be used by policy makers to decide the return on investment for different levels of frontline police staffing in Surrey.

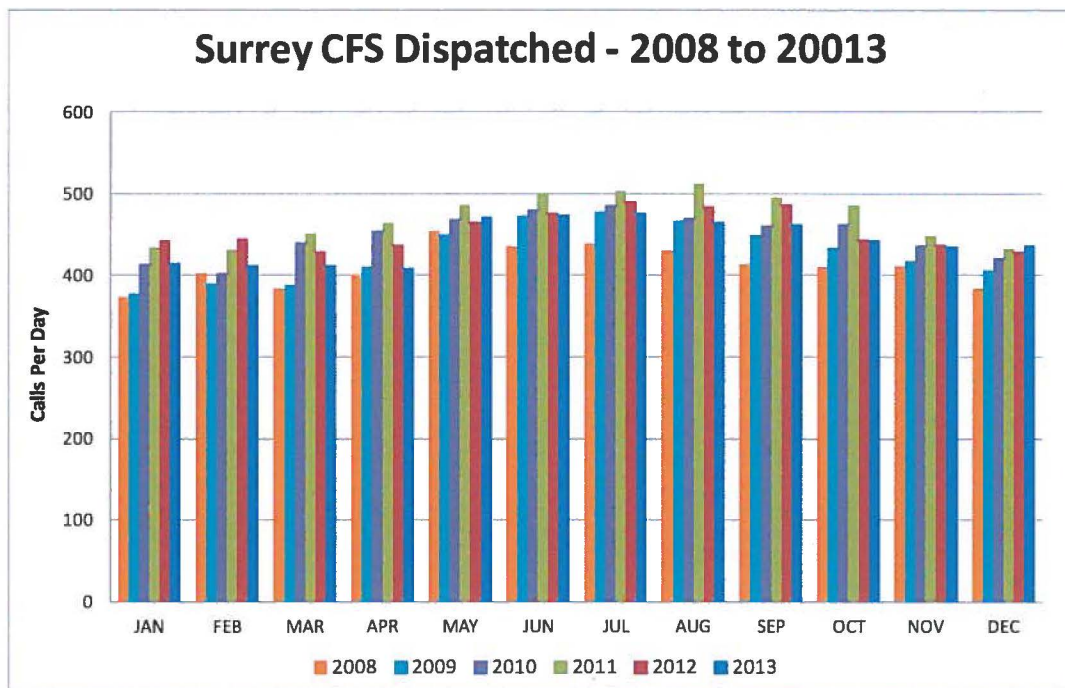
Once the number of GDCs to be fielded has been determined, the number of supervisors needed (based on a reasonable span of control) can be decided. Specialized units, investigators, support staff, and all other positions in a municipal police service, while an important consideration in determining total establishment, it falls outside the scope of this assessment of staffing the frontline policing services.

Call for Service Workload in Surrey

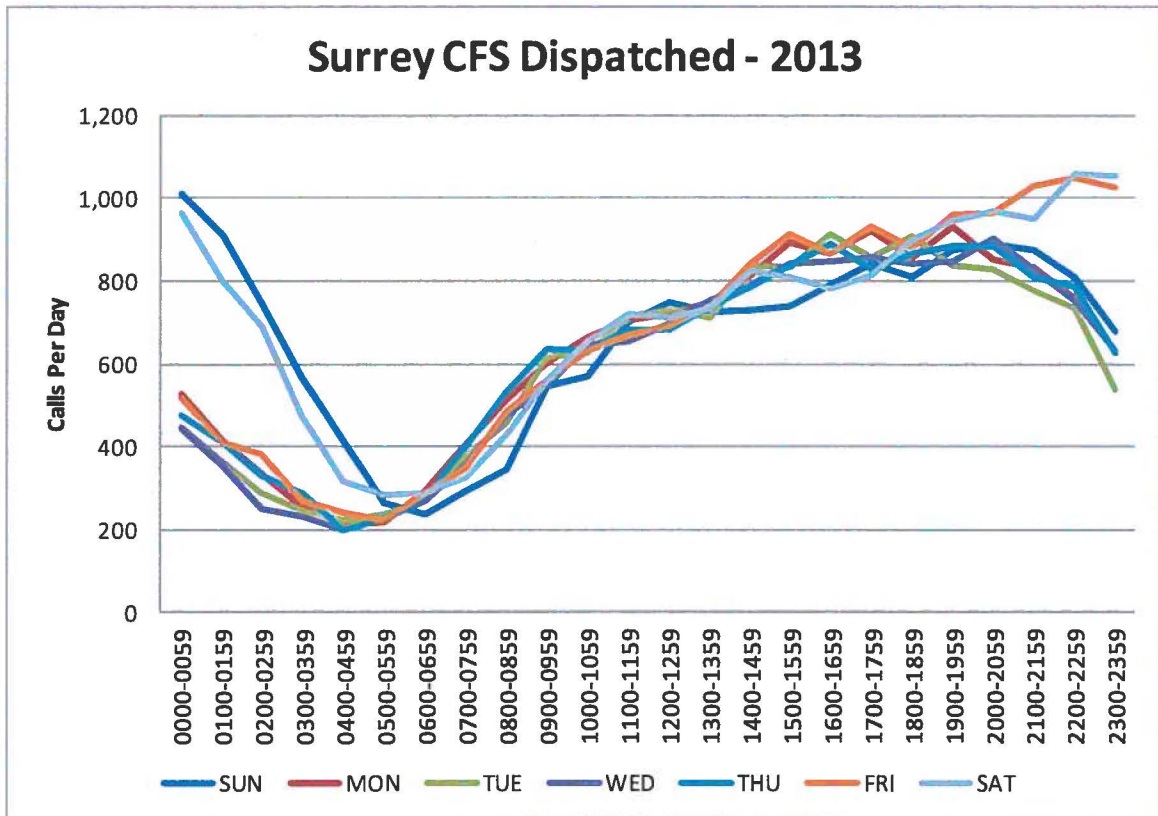
The primary measure of General Duty workload is time spent responding to calls for service from the public. The source of that data is information entered into the Computer Aided Dispatch (CAD) system within the provincial Police Records Information Management Environment (PRIME). The graph that follows shows that growth in calls for service on an annual basis has been slow but steady, since 2008. It is normal for these totals to fluctuate from year to year. From 2008 to 2013, calls for service grew by 10.4%.



Call rates are somewhat higher during warmer months. The graph that follows shows that there is about 16% variation between the lowest month, January, and the highest month, July. This variation should be taken into account in personnel policies and the deployment of GDCs.



The number of calls received by hour of day and day of week is an important factor in measuring staffing needs and for scheduling GDCs for duty. The graph that follows shows that weekends generate substantially more calls for service from 8 pm to 4 am. Daytime call rates do not vary as significantly. This pattern of calls received will be a theme that carries through this assessment. Later in this analysis the number of units and time needed to handle these calls will be factored into the staffing analysis.



Types of Calls for Service

The table that follows contains data on the 20 most frequent types of calls dispatched. That information suggests that there may be some opportunities to reduce the number of calls dispatched to patrol units and still provide good service to the public.

- Abandoned 911 calls and alarm calls make up almost 20% of calls for service dispatched in Surrey. Surrey has a false alarm ordinance in place

but it does not appear to be impacting the number of false alarms. Surrey has a very thorough policy for screening abandoned 911 designed to assess the risk to callers and the need for police response.

- GDCs were dispatched to 2,282 theft calls that were not crimes in progress. Those calls represent 69% of the total of 3,318 theft calls. Only 94 or 3% were diverted from dispatching.

| Top 20 Categories of Calls For Service Dispatched in Surrey - 2013 | | | | | | | | | |
|---|--------------------|-----------------------|-------------------|-------------------|-------------------|--------------------|--------------------|-----------------|--|
| Initial | Recommended | Dispatched as: | | | | | | | |
| Call Type | Priority | Priority 1 | Priority 2 | Priority 3 | Priority 4 | Priority 5+ | Total calls | Of Total | |
| AB911 | 2 | 60 | 14627 | 107 | 11 | | 14805 | 13.66% | |
| ALARM | 3 | 70 | 6620 | 33 | 4 | | 6727 | 6.21% | |
| DISTB | 3 | 55 | 5803 | 364 | 4 | | 6226 | 5.74% | |
| CHECK | 3 | 14 | 4144 | 623 | 5 | 1 | 4787 | 4.42% | |
| SUSPP | 3 | 14 | 3526 | 554 | 4 | | 4098 | 3.78% | |
| BNE | 4 | 9 | 463 | 3203 | 17 | | 3692 | 3.41% | |
| ASSPFA | 2 | 36 | 3104 | 454 | 72 | | 3666 | 3.38% | |
| SUSPC | 3 | 29 | 2519 | 1011 | 8 | | 3567 | 3.29% | |
| BYLAW | 4 | | 183 | 3352 | 13 | | 3548 | 3.27% | |
| UNWANT | 3 | 7 | 2776 | 671 | 1 | | 3455 | 3.19% | |
| THEFT | 4 | 5 | 937 | 2282 | 94 | | 3318 | 3.06% | |
| MVI | 3 | 14 | 2681 | 183 | | | 2878 | 2.66% | |
| ASSGP | 3 | 17 | 1619 | 1179 | 10 | | 2825 | 2.61% | |
| TRAFF | 3 | 2 | 2255 | 528 | 23 | | 2808 | 2.59% | |
| ASLT | 3 | 30 | 1827 | 834 | 5 | | 2696 | 2.49% | |
| THREAT | 3 | 7 | 774 | 1722 | 3 | | 2506 | 2.31% | |
| SUSPV | 3 | 7 | 1437 | 919 | 4 | | 2367 | 2.18% | |
| DRUGS | 4 | | 1086 | 562 | 74 | | 1722 | 1.59% | |
| MISSIP | 3 | 7 | 1403 | 212 | 14 | | 1636 | 1.51% | |
| SHOPL | 3 | 5 | 1437 | 53 | 2 | | 1497 | 1.38% | |

An analysis was conducted of the 10,149 alarm calls in Surrey during 2013 received and the 12,870 units that were dispatched to 6,727 calls. Appendix A contains more detailed data on the initial call type and final call type for alarm calls. Conclusions drawn from the analysis of false alarm calls were:

- ☑ Of the 10,149 calls, 92% were false and only 4% of the calls resulted in a burglary investigation.
- ☑ A total of 3,561 hours of GDC time was spent responding to false alarms which translate into 297 12 hour shifts which represents the cost of just over 2 GDCs for an entire year based on 139 shifts per year per officer.
- ☑ 491 of 5,738 or 9% of addresses with 4 or more alarms generated 3,238 or 32% of the total of 10,149 calls suggesting that targeted education and enforcement would be practical.
- ☑ 3,298 of the 5,738 addresses or 68% had only had one alarm related call during 2013.

Surrey Detachment staff completed a report in May of this year that evaluated options for dealing with false alarms. Amendments to the current City bylaw and modifications to all response protocols were proposed. A verified response protocol in which alarm companies would become first responders was one option described.

As part of this study, the City bylaw that addresses false alarms was evaluated. It was originally passed in 1997 and it addresses both fire alarms and security alarms. The bylaw was compared with the model ordinance developed by the Security Industry Alarm Coalition (SIAC). In most areas, the Surrey bylaw does not contain mechanisms that will reduce false alarms. Fines are being collected but they are not deterring false alarms.

Abandoned 911 calls were also analyzed to determine if they could be reduced. Handling these calls is a problem for many police agencies in North America.

During 2013, 19,574 calls were dispatched that had an initial type of AB911. Of those, 438 or 2% resulted in a report of an incident that required police service of those 438, 57 involved crimes or other situations that represented risks to people. The difficulty police agencies face is to develop some method for effectively screening these calls to dispatch those that represent threats to public safety and those that are just misdials. Unfortunately, call takers are provided with very little information when these calls come in.

Analysis of dispatched Abandoned 911 calls conducted by Surrey Detachment analysts revealed that more than 80% of the time the call is a "non-

event" (i.e., investigation did not lead to the discovery of an offence but rather confirmed the call was misdialed or otherwise made in error).

Surrey has in place a thorough screening process for evaluating these calls to assess the risk of harm to callers which represents the one of the best of these kinds of policies now in use. The table below shows that current policies and practices resulted in dispatching 51% of abandoned 911 calls received.

| Surrey AB 911 Calls - 2013 | | | | |
|-----------------------------------|----------------|-------------------|-----------------|----------------|
| Priority | Created | Dispatched | Diverted | Percent |
| P1 | 63 | 60 | 3 | 5% |
| P2 | 23,036 | 14,627 | 8,409 | 37% |
| P3 | 5,248 | 107 | 5,141 | 98% |
| P4 | 680 | 11 | 669 | 98% |
| P5 | 1 | - | 1 | 100% |
| | 29,028 | 14,805 | 14,223 | 49% |

A similar analysis of abandoned 911 calls was completed for North Vancouver and it showed that 67% of calls were diverted. Since the policies in both detachments are the same, it would be important to begin to monitor these calls to determine if more can be diverted from dispatch in Surrey without creating unacceptable risks to the people who make these calls.

Examination of non-emergency calls identified potential opportunities to reduce calls to which GDCs are dispatched. Appendix B contains a list of all calls for service dispatched which lists calls based on frequency. That information was used to identify a list of non-emergency calls that could be handled by telephone or by referrals and at the same time provide good service to the public. These seven categories of calls represent just over 6% of all calls dispatched during 2013.

Call Prioritization

Call prioritization is critical for identifying emergency calls that represent a risk to the welfare of people and non-emergency calls for which response time is vital to protecting lives or property. There are no standard criteria for priority categories for law enforcement in North America. Most agencies use four priority categories that identify:

- **Emergency (E)** – These are calls in which offenders and victims are in the same place under circumstances that represent a threat to the well being of people. These are usually crimes against persons in progress. Typically, response time goals for emergency calls hover around 7 minutes,
- **Urgent (U)** – These tend to be property crimes in progress during which there is no contact between offenders and people or risk to personal safety. There is a chance to arrest an offender but the risk to officers responding to these calls with the speed needed for emergencies is not justified to protect property and not people. Response time goals for urgent calls are in the 12 to 15 minute range so that, if possible, an arrest can be made or fresh evidence can be collected.
- **Routine (R)** – These are calls reported well after they occurred so patrol response has very little impact on making an arrest or protecting the public. Response time goals for these calls can range from an hour to the end of the shift based on public expectations and the degree to which some of these calls can be diverted to alternatives like telephone reporting or filing online.
- **Diverted (D)** – These are calls that are handled by means other than dispatching a patrol unit.

One of the issues addressed in this assessment was the impact of the RCMP definition for Priority 1 calls for service used by call takers and dispatchers in Surrey. That definition includes calls in which there is an immediate threat to someone's life. That narrow definition resulted in only 3 % or 2,828 of 107,145 calls for service were coded as Priority 1. This small number of calls does not reflect all calls in which there risk to the safety of individuals. North American police agencies that use a broader definition for emergency calls tend to have 8% to 12% of their calls coded as emergencies depending on the time of day and day of week.

An assessment of the types of calls coded Priority 1 and 2 showed that there were some Priority 2 calls that involved possible threats to persons that in other agencies would be coded as emergencies. Data on response time by type of call showed that GDC travel times for some of those Priority 2 calls were the same or even faster than calls coded as Priority 1. Based on this analysis of Priority 2 travel times, the Priority 2 calls listed below were reclassified by RCMP computer programmers and added to an Emergency call category for the purposes of this study. This methodology has also been adopted by the RCMP provincially and a detachment working group is examining call prioritization. This change resulted in 10,294 coded as Emergency compared with 2,828 classified as Priority 1.

- Abduction
- Annoyance
- Assault in progress
- Assist police, fire or ambulance
- Burglary in progress
- Home invasion
- Man down
- Robbery
- Robbery in progress
- Unwanted person

Response Time

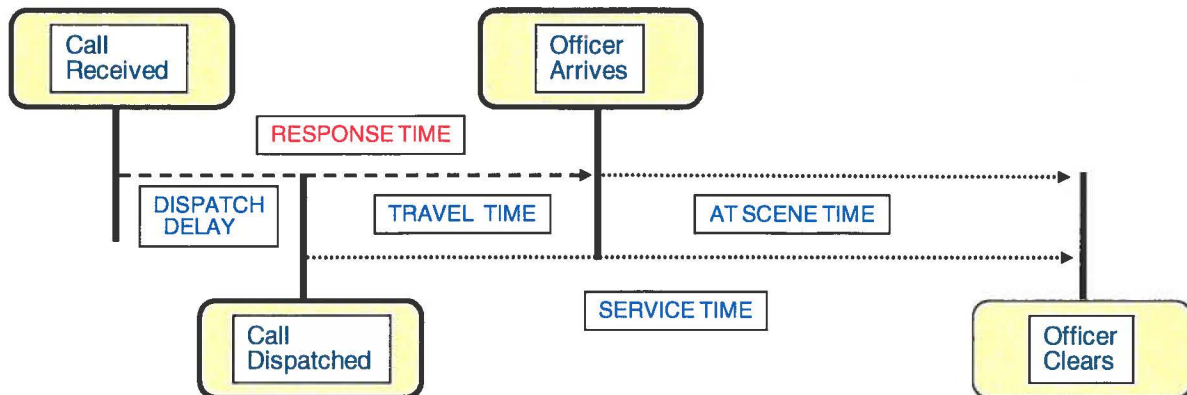
Since the Kansas City Response Time Study conducted by the Police Foundation in 1978, police agencies have recognized that calls for service need to be prioritized to provide the best response time to true emergencies. Response time is important in a small percentage of calls for service in which there is a chance to apprehend offenders and to protect property.

The study also concluded that public satisfaction is strongly influenced by expectations set by call takers for police response. Call takers who tell the public that a patrol unit will respond "as soon as possible" set vague expectations that are rarely met. Effective screening and prioritization can help identify calls where police response time could provide positive results.

Public expectations are better met by tying patrol staffing levels to a consistent level of service so that dispatchers can provide callers with a reasonable estimate of how long it will take an officer to arrive to answer calls. To reach that goal, the number of patrol constables on duty by hour of the day and day of the week must fit changes in workload during those times. By doing

so, a police agency can provide consistent service no matter how many calls are received during a certain time period.

Before addressing response times in Surrey, it would be useful to clarify some key terms that help describe response time. The figure that follows explains the definitions used for the time mileposts and time intervals that make up police response to a call for service.



- ❑ Dispatch delay: The time a call is held in the dispatch queue either because a unit cannot be found or because a call must be held until a unit assigned to a zone becomes available.
- ❑ Travel time: The time constables spend driving to a call when they are considered out of service.
- ❑ Response time: Dispatch delay plus travel time totaled together represent the delay citizens experience once the police commit to responding to their call for service.
- ❑ Service time: Travel time plus time at the scene of a call when a patrol unit is out of service and not available for another call.
- ❑ At scene time: Time constables spend after they arrive at the location of a call and before they leave or complete a preliminary investigation. Ideally, report writing time and prisoner processing should be included in at-scene time.

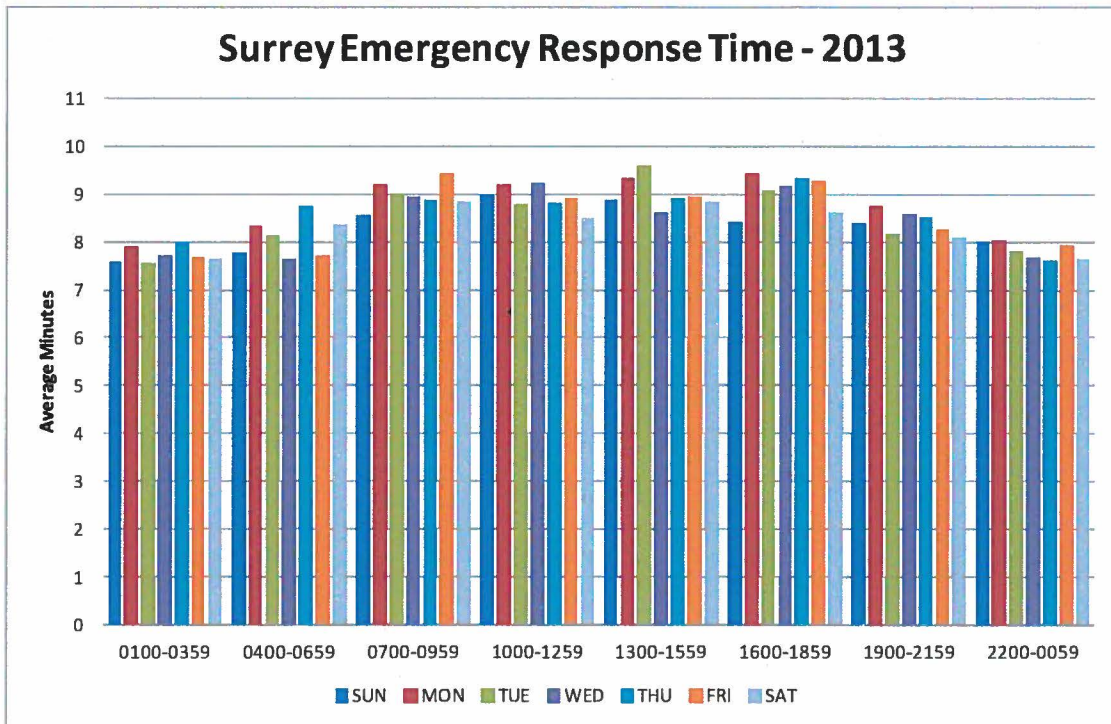
There is no formal standard for emergency response time. Many police agencies in North America (such as Calgary, Edmonton, Los Angeles and

Charlotte) have found that an average emergency response time of 7 minutes is a service level that can be achieved at a reasonable cost and provides adequate service to the public. The table that follows shows that emergency response times for 2013 averaged 8.5 minutes. Conclusions that can be drawn from this information are:

- ☒ Average dispatch delay was over 2 minutes for Emergency calls which may be caused by the lack of available units.
- ☒ Dispatch delay and response time for all three call priorities shows clear differentiation among the Emergency, Urgent and Routine categories.
- ☒ Response time for Routine calls is averaging an hour and a half which would suggest that they are being managed well by dispatchers so as to put more emphasis on responding to Emergency and Urgent calls.

| Priority | Total Calls Dispatched | Dispatch Delay (1) | Travel Time (2) | Response Time (1+2) | At Scene Time (3) | Service Time (2+3) |
|-----------|------------------------|--------------------|-----------------|---------------------|-------------------|--------------------|
| EMERGENCY | 10,294 | 2.29 | 6.40 | 8.45 | 38.64 | 55.65 |
| URGENT | 67,832 | 3.69 | 8.23 | 11.66 | 33.84 | 51.73 |
| ROUTINE | 29,653 | 75.50 | 25.61 | 92.94 | 38.14 | 60.98 |
| ALL | 107,779 | 27.16 | 13.41 | 37.68 | 36.87 | 56.12 |

The bar graph that follows contains data on Emergency responses times by time block and day of the week. That information shows that response times range from 7.5 minutes during the late evening and predawn morning to over 9 minutes during the day. There is limited variation by day of week. Ideally, Emergency response times should be consistent throughout the day.



Staffing Analysis

One of the baselines for staffing analysis is the calculation of the Shift Relief Factor (SRF) which determines the number of personnel that need to be assigned to General Duty to ensure a certain number can be fielded. Calculations for the SRF in Surrey will be explained below.

The next step in the process is to load input data into the Managing Patrol Performance (MPP) computer model and use it to evaluate current patrol performance. MPP is a Windows based version of a based program called PATROL/PLAN, which has been available to police agencies since 1975.

MPP is a mathematical model that can be used to decide on patrol staffing levels and plan the deployment of patrol personnel. The formulas used in MPP were developed by Dr. Richard Larson at the Massachusetts Institute of Technology. MPP calculates the amount of time calls of various priorities will wait in line or in a "queue" until patrol units on duty are free to answer them. In turn, MPP will determine the number of units needed to provide different levels of service in handling calls and completing proactive patrol work.

MPP will be used to evaluate current GDC performance and utilization of time on different kinds of tasks. Then MPP results will be used to recommend ranges of numbers of fielded GDC units needed in the field to reach certain levels of service.

Shift Relief Factor

The SRF is used to calculate the impact of leave, training and other assignments on the availability of officers for front line duty. The SRF requires information on training, leave or other duties that take officers away from being assigned to front line duty responding to calls for service.

Data was obtained from the CARMS time keeping system for 147 GDCs who worked for a full 12 months in that assignment. The number of scheduled days off provided by the current work schedule and shift patterns was added to leave data as well.

The table that follows contains the data and calculations used to generate the Surrey SRF. The result of a SRF of 2.62 means that if the detachment needs to field 70 GDCs per 24 hour period, a total of 183.4 or 184 GDCs need to be assigned to duty to ensure 70 are on shift.

SURREY DETACHMENT SHIFT RELIEF FACTOR (SRF) - 2013

1. Potential Staff Days Available

147 personnel working 12 months times 365 days = 53,655

2. Days Officers Unavailable

| | |
|-------------------------------|--------|
| Scheduled days off | 26,754 |
| Annual Leave | 2,158 |
| Stat. Holiday | 1,125 |
| Certified Sick Leave | 504 |
| Self Certified Sick | 439 |
| Adjustment Time | 383 |
| Other Training | 383 |
| Lieu Time Off | 314 |
| Light Duty | 277 |
| Block Training - Ops Skills | 217 |
| Annual Firearms Qualification | 102 |
| Wellness Leave | 87 |
| Compassionate Leave | 72 |
| PRTC Course | 70 |
| Away On Duty | 68 |
| Family Leave | 32 |
| Dive Team | 31 |
| Seconded | 25 |
| Bereavement Leave | 23 |
| Special Event | 22 |
| Tactical | 17 |
| Local Course | 17 |
| Air Marshall | 16 |
| Instructor | 14 |
| Conference | 8 |
| Other Activity | 7 |
| Travel Status | 6 |
| Range | 6 |
| Understudy | 3 |
| Justice Institute Course | 2 |
| Outside Agency Training | 2 |
| Special Leave | 1 |
| AFQ - Practice | 1 |
| Total Leave Days | 33,188 |

3. Actual Staff Days Available

Potential Days - Leave Days Taken = Actual Days Available
 53,655 Minus 33,188 = 20,467

4. Shift Relief Factor

Potential Staff Days Available
 Divided By = SRF
 Actual Staff Days Available

53,655
 Divided By = 2.62
 20,467

Before leaving the topic of GDC availability, it would be important to determine if any categories of leave or lost time could be reduced to improve officer availability. The table below organizes lost time included in the SRF into three main categories of leave, training, and non-field duties.

| Training | Shifts | Non-Field Duty | Shifts | Leave | Shifts |
|-------------------------------|---------------|-----------------------|---------------|----------------------|---------------|
| Other Training | 383 | Light Duty | 277 | Annual Leave | 2,158 |
| Block Training - Ops Skills | 217 | Other Activity | 7 | Stat. Holiday | 1,125 |
| Annual Firearms Qualification | 102 | Away On Duty | 68 | Certified Sick Leave | 504 |
| PRTC Course | 70 | Seconded | 25 | Self Certified Sick | 439 |
| Dive Team | 31 | Special Event | 22 | Adjustment Time | 383 |
| Tactical | 17 | Subtotal | 400 | Lieu Time Off | 314 |
| Local Course | 17 | Per Officer | 3 | Wellness Leave | 87 |
| Air Marshall | 16 | | | Compassionate Leave | 72 |
| Instructor | 14 | | | Family Leave | 32 |
| Conference | 8 | | | Bereavement Leave | 23 |
| Travel Status | 6 | | | Special Leave | 1 |
| Range | 6 | | | Subtotal | 5,138 |
| Understudy | 3 | | | Per Officer | 35 |
| Justice Institute Course | 2 | | | | |
| Outside Agency Training | 2 | | | | |
| AFQ - Practice | 1 | | | | |
| Subtotal | 895 | | | | |
| Per Officer | 6 | | | | |

One way to analyze lost time is to judge it in terms of shifts per officer. Using those criteria, 6 days of training per officer per year is reasonable considering the need to keep GDCs current in the skills and knowledge needed. Adding those two categories of sick time together results in sick leave of 6.4 per officer per year or one shift every two months. Only 3 shifts of duty outside the frontline is also not unusual. Overall, leave usage and officer assignment practices within General Duty are reasonable.

Current GDC Performance

With the SRF calculated, the next step in the staffing analysis process is to load Surrey data into the MPP computer model. That information was extracted from CAD records by E Division Information Technology staff using business rules for errors and exceptions developed by the General Duty Staffing Assessment Committee (GDSAC) during the pilot project. Appendix C contains MPP input data for 2013 for each Day of the week. Those data elements are:

- Average service time for units dispatched to calls for service.
- Number of units dispatched to respond to calls for service.
- Percentage of calls that are emergencies (E) requiring immediate response, urgent (U) requiring a prompt but not emergency response, and (R) routine calls in which fast response is not needed.
- Average travel time for all units dispatched to Priority E, U and R calls.
- Square kilometers within each district from which calls for service are received.
- Number of patrol units assigned zones and some other assignments in which they serve as primary response units for calls for service.
- Rate per hour of calls for service from the public that were dispatched.

This input data was then used to calibrate MPP. No measurement tool can be accurate unless it has a reference point. Results reported by blood alcohol testing devices, radar guns, and other testing devices have to be calibrated using baseline information so that the results those devices generate are accurate. The same is true for a computer model like MPP. If it is not calibrated, the results it generates do not relate to real world conditions.

MPP is calibrated by matching within 30 seconds the emergency response times calculated by MPP with those taken from the Surrey CAD data. The procedures used for calibration each time block and day of week in each district were:

- If MPP calculated emergency response times were faster than those in response time reports, fielded units were added because additional units must have supplemented primary response units to achieve those faster times.
- If MPP calculated emergency response times were slower, than those in Surrey response time reports, out of service time was

added on the premise that some units must have not been available because of non-call for service (NON-CFS) related work.

Time Spent on Tasks

Once MPP input information is calibrated, it can be used to measure how GDC time is now being utilized. While calls for service and response times are important, the ultimate measure of GDC workload is how time is spent on tasks. MPP can be used to calculate the percentage of time being spent on three main categories of time.

- ☒ **Calls for Service (CFS):** This is time spent by all GDCs dispatched to calls for service generated by the public from the time they are dispatched to the time they finish their preliminary investigation and are ready to take another call.

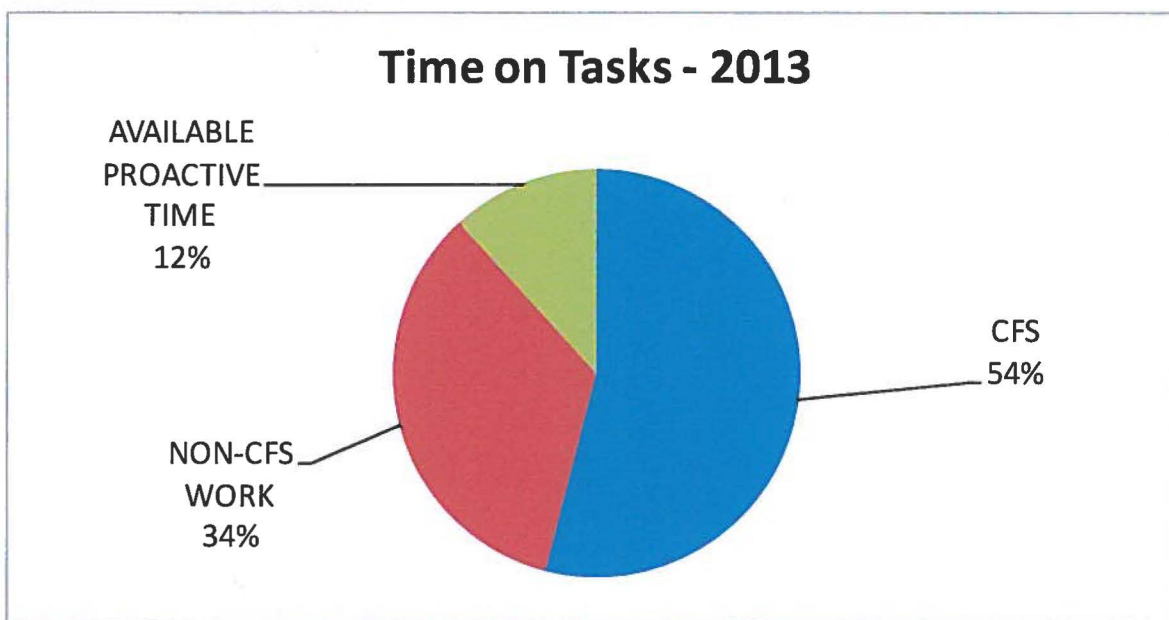
- ☒ **Non-Call for Service Work (NON-CFS) -** This time is made up of tasks other than calls for service that keep units from responding to calls. For example, some follow-up investigation tasks keep officers out of the field such as meeting with the Crown and court time. Classroom training that is less than the length of a shift would be included. The same is true for officer initiated activity like a traffic stop that results in an arrest or a serious event an officer comes upon during routine patrol. If these units were available for calls, response times would be faster and MPP can tell the difference when it is calibrated.

- ☒ **Available Proactive Time.** This is the time remaining when CFS and NON-CFS time are deducted from the work day. Proactive time is considered manageable because it includes a mix of lower priority administrative tasks, officer initiated activity, and uncommitted time.

The pie chart that follows shows that during 2013 Surrey GDCs spent more than half their time responding to calls for service. That is a very high percentage for a municipal patrol force. The result is that policing with this staffing level is more reactive rather than proactive because GDCs spend most of their time handling calls and conducting follow-up investigations related to reported crimes.

Time for NON-CFS work represents about 20 minutes per hour for tasks that are a necessary result of responding to calls. Over a 12 hour shift that percentage represents about 4 hours out of a work day that can be used as time allows.

Finally, only 12% available proactive time represents about 7 minutes per hour which is less than what is needed to conduct a car stop. Proactive time at that low level is difficult to use. It comes in small increments during the day and is not useful for any extensive proactive police work.

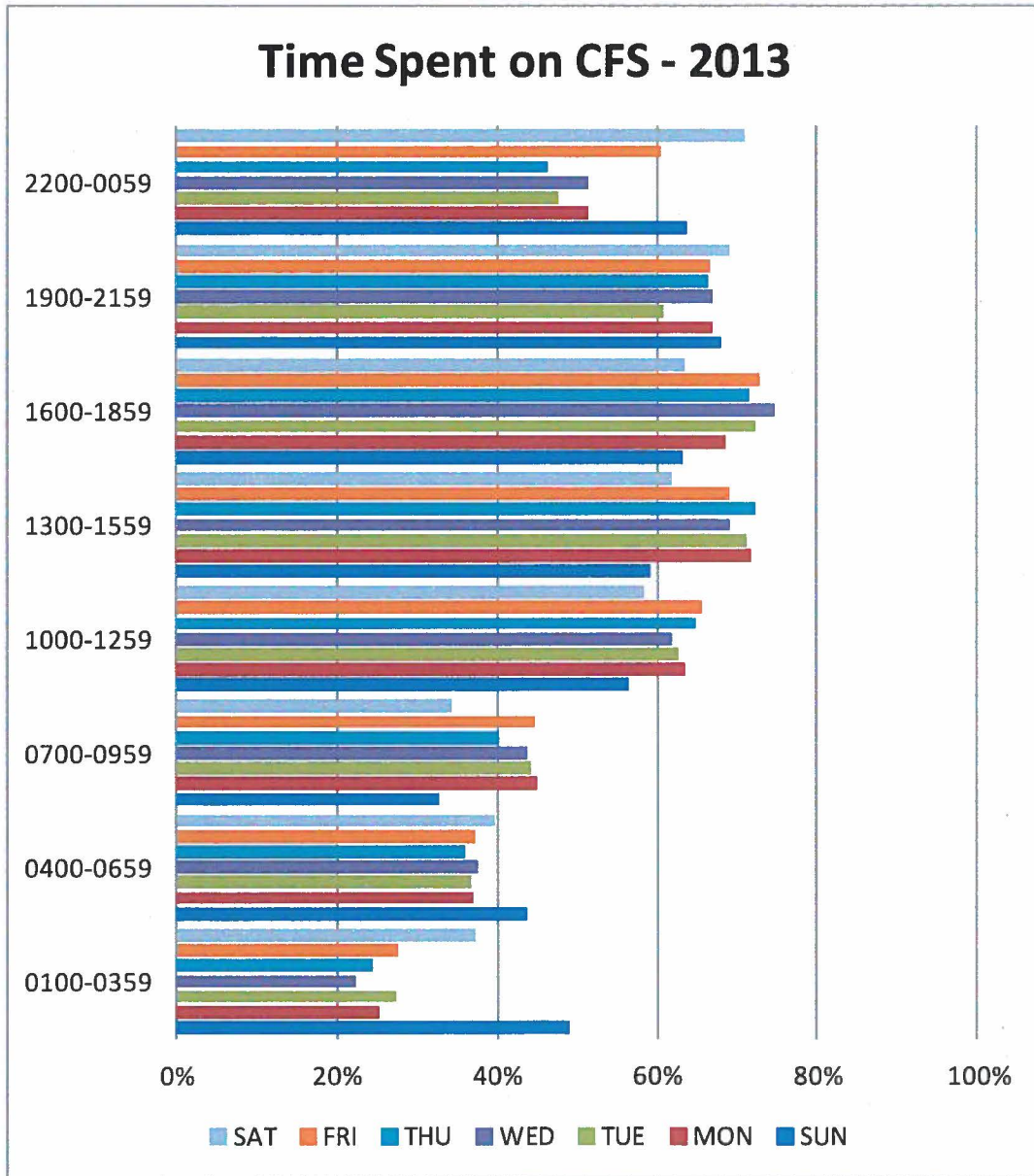


The next three bar charts show the distribution by hour of day and day of week of each of these three categories of time on tasks. Several issues are apparent in the information in those three graphs.

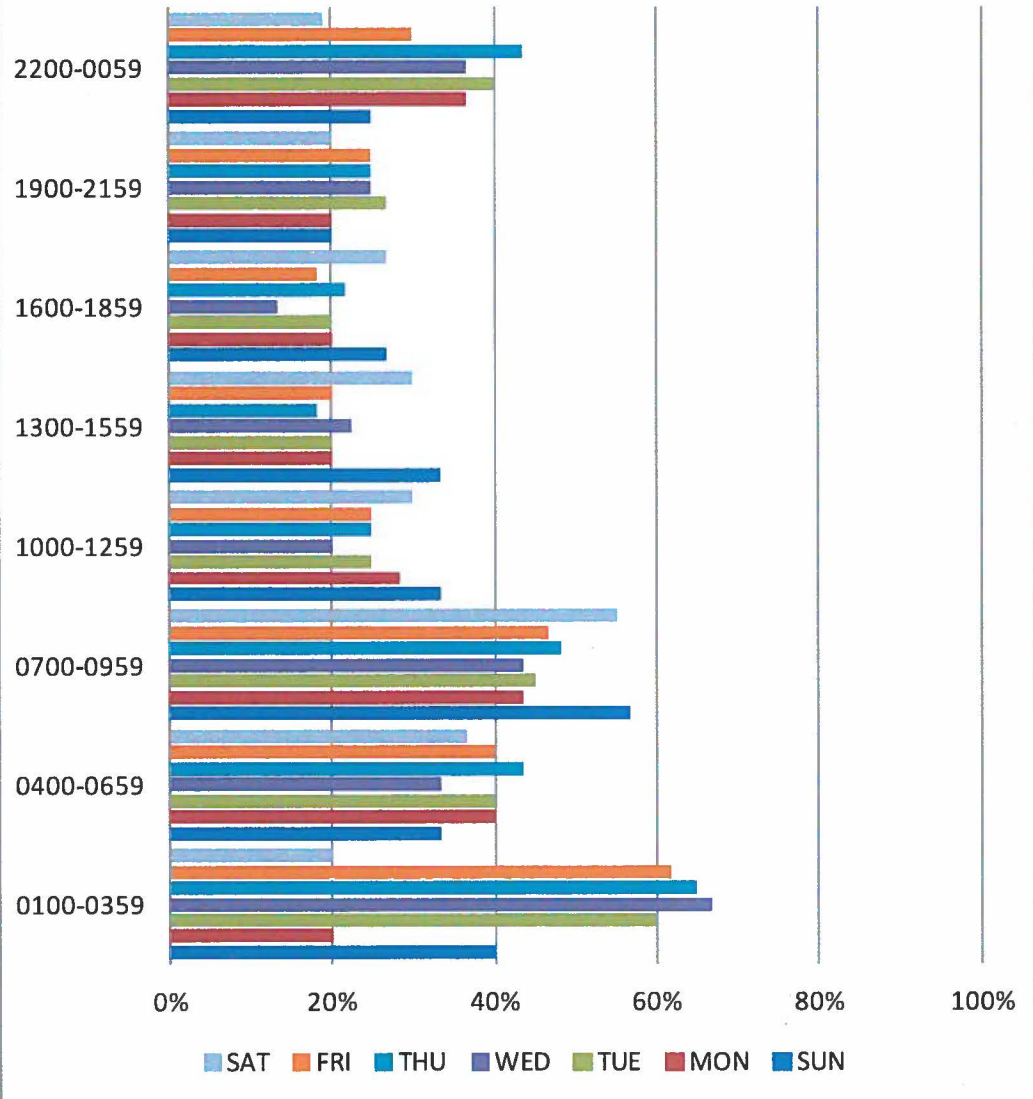
- ☑ A patrol force in which staffing levels fit workload patterns would have more even distribution of time spent on each category of task. Based on this data, the current work schedule does not evenly distribute work among officers.

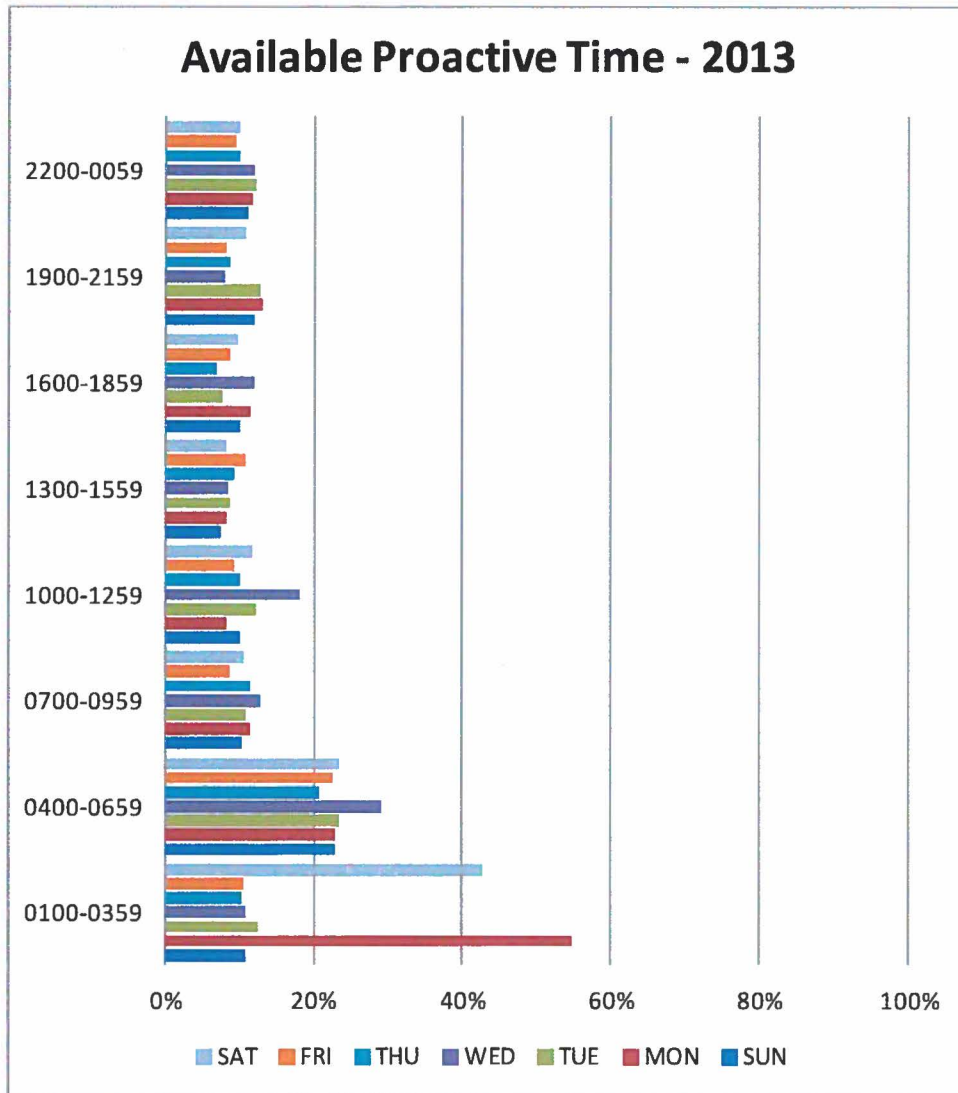
- ☑ The range of variation in CFS time shows some time blocks with time on calls reaching 70% which is excessive for frontline personnel.

- The most manageable time is in the predawn morning which has limited value because of the inaccessibility of the justice system and the general public at those hours.



NON-CFS Time- 2013





Service Times

Another measure of performance is service time (travel and investigation time) spent on calls for service. The table that follows shows that an average of almost 2 (1.8) GD units respond to calls for service and they each spend between 42 and 67 minutes on the average call.

The number of units per call may be caused by the high percentage of calls coded as Urgent. It may also be a supervisory issue or a case of self dispatching in which responders volunteer for calls and are added to them by dispatchers.

While there are no standards for service time, this level of time seems reasonable because GDCs are responsible for both preliminary and follow-up

investigation for the calls to which they respond. It is beyond the scope of this study to evaluate this level of time spent in terms of quality of preliminary investigations and clearances.

| Average Units/Call | | | | | | | | |
|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Time Blocks | SUN | MON | TUE | WED | THU | FRI | SAT | AVG |
| 0100-0359 | 2.0 | 2.0 | 2.1 | 2.0 | 2.1 | 2.0 | 2.0 | 2.0 |
| 0400-0659 | 1.8 | 1.7 | 1.8 | 1.8 | 1.7 | 1.8 | 1.9 | 1.8 |
| 0700-0959 | 1.7 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| 1000-1259 | 1.6 | 1.6 | 1.6 | 1.6 | 1.7 | 1.6 | 1.6 | 1.6 |
| 1300-1559 | 1.7 | 1.6 | 1.6 | 1.7 | 1.6 | 1.6 | 1.7 | 1.7 |
| 1600-1859 | 1.7 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 1900-2159 | 1.8 | 1.8 | 1.7 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 |
| 2200-0059 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 2.0 | 2.0 | 1.9 |
| AVG | 1.8 | 1.7 | 1.8 | 1.8 | 1.7 | 1.8 | 1.8 | 1.8 |
| Average Service Time/Call | | | | | | | | |
| Time Blocks | SUN | MON | TUE | WED | THU | FRI | SAT | AVG |
| 0100-0359 | 84.1 | 86.5 | 96.7 | 89.1 | 91.3 | 87.8 | 86.4 | 88.1 |
| 0400-0659 | 84.4 | 83.7 | 84.4 | 86.2 | 83.3 | 87.6 | 86.2 | 85.1 |
| 0700-0959 | 99.5 | 106.7 | 104.0 | 105.8 | 96.1 | 105.0 | 94.1 | 101.8 |
| 1000-1259 | 99.9 | 107.7 | 104.9 | 108.1 | 111.9 | 110.6 | 102.5 | 106.5 |
| 1300-1559 | 95.2 | 107.0 | 106.2 | 102.0 | 101.6 | 101.8 | 99.9 | 102.1 |
| 1600-1859 | 96.5 | 92.3 | 99.9 | 103.4 | 97.0 | 94.4 | 90.7 | 96.3 |
| 1900-2159 | 93.5 | 94.9 | 90.5 | 93.0 | 90.8 | 84.9 | 86.9 | 90.5 |
| 2200-0059 | 91.5 | 92.8 | 89.1 | 94.7 | 85.4 | 85.6 | 83.2 | 88.4 |
| Grand Total | 93.1 | 96.5 | 97.0 | 97.8 | 94.7 | 94.7 | 91.2 | 94.9 |
| Average Service Time/Unit/Call | | | | | | | | |
| Time Blocks | SUN | MON | TUE | WED | THU | FRI | SAT | AVG |
| 0100-0359 | 42.1 | 43.3 | 46.0 | 44.6 | 43.5 | 43.9 | 43.2 | 44.1 |
| 0400-0659 | 46.9 | 49.2 | 46.9 | 47.9 | 49.0 | 48.7 | 45.4 | 47.3 |
| 0700-0959 | 58.5 | 66.7 | 65.0 | 66.1 | 60.1 | 65.6 | 58.8 | 63.6 |
| 1000-1259 | 62.4 | 67.3 | 65.6 | 67.6 | 65.8 | 69.1 | 64.1 | 66.6 |
| 1300-1559 | 56.0 | 66.9 | 66.4 | 60.0 | 63.5 | 63.6 | 58.8 | 60.1 |
| 1600-1859 | 56.8 | 57.7 | 58.8 | 60.8 | 57.1 | 55.5 | 53.4 | 56.6 |
| 1900-2159 | 51.9 | 52.7 | 53.2 | 54.7 | 53.4 | 47.2 | 48.3 | 50.3 |
| 2200-0059 | 48.2 | 48.8 | 46.9 | 49.8 | 47.4 | 42.8 | 41.6 | 46.5 |
| AVG | 52.8 | 56.6 | 56.1 | 56.4 | 55.0 | 54.6 | 51.7 | 54.4 |

Staffing Needs

After it is calibrated, MPP can be used to determine the number of GDCs needed in the field to meet performance goals set by a police agency. There is no standard for frontline police staffing. Those levels are based on the role frontline officers are to play in providing service to the community.

Based on current workload and staffing, the role of GDCs is to just respond to calls for service and investigate crimes. This is a split force model in which specialized units do all proactive work to address crime problems and work with

the community. This kind of system has been implemented, abandoned and implemented again by police agencies over the last 35 years. It has strengths and weaknesses that should be evaluated as is the case with any policing strategy.

By contrast, communities that want neighborhood based policing need a larger pool of frontline officers who own territory and have time for proactive work within their assigned geographic areas. Frontline officers are vital to building community confidence in the police because those officers have the most face to face contact with the public.

A generalist based patrol force conducts directed patrol work to address neighborhood problems as part of their job. Special units only handle problems that are not feasible for frontline officers assigned to geographic areas to address. That division of labor helps set staffing levels for frontline personnel and special units. To help Surrey decide on the role of frontline officers, a range of staffing options was calculated using MPP. Performance criteria used were:

- Percentage of time spent on handling calls for service.
- Response time for Emergency calls.
- Average free units available.

The results of that analysis are shown in the table that follows. Given current GDO staffing, percent of time on CFS has the biggest influence on staffing levels recommended. To determine the number of personnel needed using that information, staffing levels should be selected that will meet all the performance goals selected. For example, to reach 40% time on CFS, 63 additional constables for each 24 hour period would be needed. At that level of staffing, any of the emergency response time goals can be met and an average of 8 units free can be met.

| RCMP Surrey MPP Analysis Staffing Options | | Emergency Response Time | | | | Percent of Time On CFS | | | | AVG Free Units | | | | |
|--|--------------------------|------------------------------------|---------------|---------------|---------------|-----------------------------------|------------|------------|------------|-------------------------------|------------|------------|------------|------------|
| Time Blocks | 2013 | 5 min. | 6 min. | 7 min. | 8 min. | 30% | 35% | 40% | 45% | 8 | 7 | 6 | 5 | 4 |
| | Units Fielded | | | | | | | | | | | | | |
| 0100-0359 | 39 | 47 | 43 | 40 | 37 | 41 | 36 | 31 | 26 | 49 | 47 | 44 | 42 | 39 |
| 0400-0659 | 20 | 27 | 23 | 21 | 20 | 25 | 21 | 19 | 17 | 25 | 23 | 20 | 19 | 18 |
| 0700-0959 | 39 | 51 | 46 | 42 | 39 | 53 | 45 | 40 | 35 | 47 | 45 | 43 | 41 | 39 |
| 1000-1259 | 39 | 47 | 43 | 41 | 39 | 80 | 68 | 60 | 53 | 44 | 42 | 41 | 40 | 39 |
| 1300-1559 | 39 | 46 | 43 | 41 | 39 | 87 | 77 | 60 | 59 | 45 | 43 | 42 | 41 | 40 |
| 1600-1859 | 39 | 46 | 43 | 41 | 39 | 90 | 75 | 66 | 59 | 44 | 43 | 41 | 40 | 39 |
| 1900-2159 | 39 | 45 | 42 | 40 | 39 | 86 | 74 | 65 | 57 | 45 | 44 | 43 | 41 | 40 |
| 2200-0059 | 39 | 44 | 41 | 39 | 38 | 72 | 63 | 53 | 48 | 45 | 43 | 42 | 40 | 39 |
| AVG GDCs Per Day | 73 | 88 | 81 | 76 | 73 | 132 | 114 | 97 | 89 | 86 | 83 | 79 | 76 | 73 |
| AVG GDCs X 2.62 SRF | 192 | 231 | 212 | 200 | 192 | 346 | 297 | 255 | 232 | 225 | 216 | 207 | 199 | 192 |
| Additional Constables | | 39 | 20 | 8 | 0 | 155 | 105 | 63 | 40 | 33 | 24 | 15 | 7 | 0 |

The table below shows the relative relationship of choices based on time spent on calls and additional proactive time. This analysis makes the assumption that 34% time on NON-CFS is reasonable and necessary.

| | | | | |
|-----------------------|------------|------------|------------|------------|
| GDOs Employed | 346 | 297 | 255 | 232 |
| CFS TIME | 30% | 35% | 40% | 45% |
| NON-CFS TIME | 34% | 34% | 34% | 34% |
| PROACTIVE TIME | 36% | 31% | 26% | 21% |

Conclusions and Recommendations

This analysis shows that GDCs spend a significant amount of their time on calls for service and investigations. Less time is available for proactive work in neighborhoods to anticipate and prevent crime and order maintenance problems. The Surrey Detachment and the City of Surrey should use the MPP results to decide on the type of police service that meets the needs of the community and can be funded by the City.

Along with limited proactive time, current GDC staffing results in emergency response times that are significantly longer than in other communities in Canada. That service level should be reduced to improve response to calls in Surrey that reflect threats to the welfare of people.

Fortunately, calls for service are growing slowly on an annual basis so there is time to add staffing in a well planned multiyear process. Data in this report also suggests that a long term staffing plan should include efforts to make the best use of GDC staff time. Efficient deployment practices and diversion of calls for service from dispatching would be two strategies that should be considered. Recommendations made here will promote a comprehensive approach to improving frontline policing and are in general order of priority.

1. Evaluate the role of General Duty Constables in delivering police services.

This work will be useful in setting goals for the percentage of time GDCs should spend on calls and have available for proactive work. The most efficient role for GDCs is that of a well rounded generalist who can apply prevention, intervention, and enforcement strategies to immediately respond to conditions identified in neighborhoods. That approach helps build community partnerships and encourages GDCs to deal with problems as they see them rather than just waiting to answer the next call being dispatched.

Well supervised, trained, and motivated generalist frontline officers will complement the work of specialized units. When ownership of territory can be established, ongoing pressure can be exerted citywide on crime and disorder problems. Frontline work should be an assignment that provides officers with good job satisfaction and not just a staging area for transfer to specialized units.

2. Modify the current GDC work schedule.

Along with increasing in GDC staffing levels, changes should be made to the current patrol work schedule to better fit staffing to workload (CFS and Non-CFS work) by hour of day and day of week. A work group should be created to include a cross section of General Duty staff to identify the kinds of changes that would meet the needs of officers, police managers and the public. Detailed MPP output data will be provided to the

3. Expand use of alternatives to dispatching non-emergency calls.

Police agencies all over North America have implemented methods for taking non-emergency reports by telephone and online. These methods can save frontline officer staff time and at the same time provide the public with prompt service that meets their needs. One well trained staff member can take up to 25 reports a day by phone or provide the same advice for some kinds of calls that an officer would in the field. Surrey Detachment should build upon its on-line and telephone reporting systems and continue to explore other opportunities to reduce GDC workload.

4. Adopt modified call priorities

Surrey should adopt the Emergency, Urgent and Routine priority criteria so as to more accurately identify in progress calls that involve risks to safety to people. Those criteria support utilization of MPP in the future for analyzing General Duty staffing needs.

5. Make use of RCMP Business Intelligence Reports

Use management data contained in these reports to set measurable goals for making good use of frontline staff time. The General Duty command staff should identify a set of key indicators for effective deployment and performance that are made known to all supervisors and managers. Business intelligence reports should be used to track those key indicators on a month to month basis. Training on how to use these information tools is available from E Division staff assigned to the business intelligence project.

6. Develop a Forecasting Process for Calls For Service

Surrey Detachment should be provided with information on planned development and redevelopment in the city once those projects are

approved. Then CAD data should be used to assess the potential impact of those projects on police service demands. Past data on calls by land use type and business could be used along with MPP to forecast demand from calls for service and related services once those developments are completed. This work and utilization of MPP would support development of a multiyear staffing plan for the detachment that is tied to workload and performance data.

Appendix A: 2013 Alarm Calls

| Final Type | Initial Type | | | | | | | | | | | | | | | Total | |
|------------|--------------|--------|--------|--------|------|-------|-------|-----|-------|------|--------|-------|-------|-------|-------|-------|-------|
| | ALARM | ALARMS | ALARMH | ASSPFA | BNEI | AB911 | SUSPC | BNE | INSEC | BAIT | ALARMD | ASSGP | CHECK | SUSPP | DISTB | | OCC |
| AB911 | 7 | 2 | | | | | | | | | | | | | | | 9 |
| ALARMD | 14 | 2 | | | | | | | 1 | | 4 | | | | | | 21 |
| ALARMF | 5636 | 335 | 129 | 23 | 19 | 14 | 9 | 6 | 5 | 4 | | 2 | 3 | 2 | 1 | 1 | 6189 |
| ALARMH | 5 | 3 | 63 | | | | | | | | | | | | | | 71 |
| ALARMS | 29 | 140 | 7 | | | | | 1 | | | | 2 | | | | | 179 |
| ALARMX | 3163 | 11 | | 1 | | | | | 1 | 2 | | | 1 | | | | 3179 |
| ARSON | 1 | | | | | | | | | | | | | | | | 1 |
| ASSGP | 9 | | | | | | | | | | | | | | | | 9 |
| ASSPFA | 5 | | | | | | | | | | | | | | | | 5 |
| BNE | 320 | 2 | | | | | | | | | | | | | | | 322 |
| BNEI | 8 | | | | | | | | | | | | | | | | 8 |
| BREACP | 1 | 1 | | | | | | | | | | | | | | | 2 |
| BYLAW | 1 | | | | | | | | | | | | | | | | 1 |
| CHECK | 1 | | | | | | | | | | | | | | | | 1 |
| DISTB | 1 | | 2 | | | | | | | | | | | | | | 3 |
| ERR | 21 | | | | | | | | | | | | | | | | 21 |
| FIGHT | | | 1 | | | | | | | | | | | | | | 1 |
| INSEC | 20 | | | | | | | | | | | | | | | | 20 |
| KPEACE | 1 | | | | | | | | | | | | | | | | 1 |
| MISCH | 38 | | | | | | | | | | | | | | | | 38 |
| MISCHI | 1 | | | | | | | | | | | | | | | | 1 |
| OCC | 3 | | | | | | | | | | | | | | | | 3 |
| PROWL | 1 | | | | | | | | | | | | | | | | 1 |
| ROBB | | 2 | 1 | | | | | | | | | | | | | | 3 |
| ROBBI | 1 | | 1 | | | | | | | | | | | | | | 2 |
| SHOPL | | 1 | 1 | | | | | | | | | | | | | | 2 |
| SUICID | 1 | | | | | | | | | | | | | | | | 1 |
| SUSPC | 22 | 2 | 1 | | | | | | | | | | | | | | 25 |
| SUSPP | 15 | | | | | | | | | | | | | | | | 15 |
| SUSPV | 2 | | | | | | | | | | | | | | | | 2 |
| THEFT | 3 | 1 | 2 | | | | | | | | | | | | | | 6 |
| THEFTI | 5 | | | | | | | | | | | | | | | | 5 |
| THREAT | | 1 | | | | | | | | | | | | | | | 1 |
| TRAFF | 1 | | | | | | | | | | | | | | | | 1 |
| Total | 9336 | 503 | 208 | 24 | 19 | 14 | 9 | 7 | 7 | 6 | 4 | 4 | 4 | 2 | 1 | 1 | 10149 |

Appendix B: 2013 Calls for Service Dispatched

| Initial Call Type | Dispatched AS | | | | | Total calls |
|----------------------|---------------|-------|------|----|-----|-------------|
| | P1 | P2 | P3 | P4 | P5+ | |
| AB911 | 60 | 14627 | 107 | 11 | | 14805 |
| ALARM | 70 | 6620 | 33 | 4 | | 6727 |
| DISTB | 55 | 5803 | 364 | 4 | | 6226 |
| CHECK | 14 | 4144 | 623 | 5 | 1 | 4787 |
| SUSPP | 14 | 3526 | 554 | 4 | | 4098 |
| BNE | 9 | 463 | 3203 | 17 | | 3692 |
| ASSPFA | 36 | 3104 | 454 | 72 | | 3666 |
| SUSPC | 29 | 2519 | 1011 | 8 | | 3567 |
| BYLAW | | 183 | 3352 | 13 | | 3548 |
| UNWANT | 7 | 2776 | 671 | 1 | | 3455 |
| THEFT | 5 | 937 | 2282 | 94 | | 3318 |
| MVI | 14 | 2681 | 183 | | | 2878 |
| ASSGP | 17 | 1619 | 1179 | 10 | | 2825 |
| TRAFF | 2 | 2255 | 528 | 23 | | 2808 |
| ASLT | 30 | 1827 | 834 | 5 | | 2696 |
| THREAT | 7 | 774 | 1722 | 3 | | 2506 |
| SUSPV | 7 | 1437 | 919 | 4 | | 2367 |
| DRUGS | | 1086 | 562 | 74 | | 1722 |
| MISSIP | 7 | 1403 | 212 | 14 | | 1636 |
| SHOPL | 5 | 1437 | 53 | 2 | | 1497 |
| THEFTV | 5 | 165 | 1303 | 18 | | 1491 |
| ASSOA | 2 | 720 | 693 | 37 | | 1452 |
| DOMI | 186 | 1240 | 11 | 1 | 1 | 1439 |
| IMPAIR | 5 | 1302 | 15 | 9 | | 1331 |
| SUICID | 392 | 925 | 7 | 2 | | 1326 |
| SIP | 1 | 1116 | 204 | 3 | | 1324 |
| MISCH | | 491 | 701 | 42 | | 1234 |
| FRAUD | 1 | 305 | 867 | 2 | | 1175 |
| RECVEH | | 37 | 1122 | 8 | | 1167 |
| MVIHR | 5 | 781 | 379 | | | 1165 |
| FIGHT | 32 | 904 | 8 | 3 | | 947 |
| WEAPON | 527 | 366 | 48 | 4 | | 945 |
| BREACH | 2 | 234 | 478 | 64 | | 778 |
| THEFTI | 8 | 712 | 22 | | | 742 |
| HARASS | 1 | 25 | 694 | 2 | | 722 |
| HAZARD | 1 | 557 | 111 | 2 | | 671 |
| BNEI | 95 | 548 | 5 | | | 648 |
| KPEACE | 1 | 36 | 607 | 4 | | 648 |
| PROP | | 19 | 571 | 49 | | 639 |
| SHOTS | 418 | 144 | 12 | 1 | | 575 |
| WARRAN | | 388 | 113 | 53 | | 554 |
| ABANDV | | 74 | 424 | 10 | | 508 |
| ALARMS | 31 | 459 | 1 | | | 491 |
| ROBB | 95 | 233 | 137 | 1 | | 466 |
| MISCHI | 1 | 427 | 21 | 1 | | 450 |
| PROST | | 98 | 337 | 6 | | 441 |
| ANIMAL | | 293 | 93 | 1 | 1 | 388 |
| DOMRPT | 2 | 229 | 154 | | | 385 |
| MAND | 6 | 329 | | 1 | | 336 |

| Initial Call Type | Dispatched AS | | | | | Total calls |
|----------------------|---------------|--------------|--------------|------------|-----------|---------------|
| | P1 | P2 | P3 | P4 | P5+ | |
| TRAFFS | | 43 | 96 | 197 | | 336 |
| ASLTSX | 5 | 72 | 241 | | | 318 |
| PANHA | | 143 | 165 | | | 308 |
| SUDDEN | 9 | 269 | 10 | | | 288 |
| INSEC | | 155 | 128 | | | 283 |
| YOUTH | | 96 | 165 | 1 | | 262 |
| EXPLOS | 22 | 94 | 137 | 1 | | 254 |
| FIREAR | | 12 | 238 | 1 | | 251 |
| MVIINJ | 41 | 194 | 13 | | | 248 |
| ASLTI | 59 | 173 | 2 | | | 234 |
| INDEC | 1 | 174 | 48 | | | 223 |
| ASSMHA | 1 | 153 | 62 | 1 | | 217 |
| ALARMH | 187 | 19 | | | | 206 |
| SCREAM | 92 | 102 | 1 | 2 | | 197 |
| OVERD | 1 | 177 | | | | 178 |
| MISSIC | 65 | 80 | 2 | 2 | | 149 |
| OCC | | 22 | 115 | 5 | | 142 |
| FOUNDP | 2 | 117 | 3 | | | 122 |
| ANNOY | | 17 | 82 | | | 99 |
| BORDR | 12 | 77 | 1 | | | 90 |
| ROBBI | 62 | 20 | | | | 82 |
| PARK | | 2 | 74 | 2 | | 78 |
| MVIPOL | 1 | 61 | 7 | 2 | | 71 |
| ARSON | | 36 | 32 | | | 68 |
| PURSUE | 22 | 39 | 4 | | | 65 |
| NOK | | 37 | 18 | | | 55 |
| PROWL | | 39 | 4 | | | 43 |
| LIQUOR | | 14 | 16 | 13 | | 43 |
| STALK | | 7 | 31 | | | 38 |
| EXTORT | | 3 | 29 | | | 32 |
| HOMEIN | 17 | 4 | 6 | | | 27 |
| COUNT | | 5 | 17 | 2 | | 24 |
| BAIT | 4 | 17 | | | | 21 |
| JUMPER | 19 | 1 | | | | 20 |
| ABDUC | 3 | 11 | 3 | | | 17 |
| BOMB | 5 | 4 | | 1 | | 10 |
| INTELL | | 1 | 7 | 2 | | 10 |
| SPAT | | 2 | | 3 | | 5 |
| 1033 | 2 | | 1 | | | 3 |
| AIREM | 3 | | | | | 3 |
| HOSTAG | 2 | | 1 | | | 3 |
| 911 | | 2 | | | | 2 |
| DEMON | | 1 | 1 | | | 2 |
| ARREST | | 1 | | | | 1 |
| TRANS | | | | 1 | | 1 |
| Total | 2842 | 74874 | 29744 | 928 | 3 | 108391 |
| | 3% | 69% | 27% | 1% | 0% | |

Appendix C: 2013 MPP Input Data

| | Sunday | Sunday | Sunday | Sunday | Sunday | Sunday | Sunday | Sunday |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Input Data | 0100-0359 | 0400-0659 | 0700-0959 | 1000-1259 | 1300-1559 | 1600-1859 | 1900-2159 | 2200-0059 |
| Service Time for 1 Unit | 48.1 | 50.6 | 67.6 | 67.3 | 63.0 | 61.7 | 56.0 | 53.4 |
| Service Time for 2 Units | 37.7 | 39.6 | 45.4 | 50.6 | 48.0 | 48.5 | 46.2 | 41.1 |
| Service Time for 3 Units | 36.8 | 40.7 | 47.3 | 49.6 | 46.5 | 45.6 | 46.2 | 40.6 |
| Service Time for 4 Units | 35.3 | 43.8 | 44.6 | 54.6 | 48.4 | 42.7 | 50.7 | 45.4 |
| Service Time for 5 Units | 34.0 | 55.4 | 54.9 | 52.8 | 43.2 | 58.3 | 46.6 | 47.3 |
| Service Time for 6 Units | 37.8 | 39.1 | 61.7 | 71.9 | 48.2 | 59.0 | 50.3 | 36.1 |
| % CFS for 1 Unit | 47.1 | 51.7 | 57.7 | 59.5 | 59.3 | 57.6 | 54.5 | 50.0 |
| % CFS for 2 Units | 28.3 | 29.1 | 26.1 | 26.2 | 24.6 | 25.0 | 26.2 | 27.5 |
| % CFS for 3 Units | 12.5 | 10.3 | 9.6 | 8.8 | 9.1 | 9.4 | 10.2 | 11.4 |
| % CFS for 4 Units | 6.2 | 4.7 | 3.8 | 3.1 | 3.9 | 4.4 | 4.6 | 5.5 |
| % CFS for 5 Units | 3.8 | 2.7 | 1.7 | 1.5 | 2.0 | 2.2 | 2.8 | 3.3 |
| % CFS for 6 Units | 2.1 | 1.5 | 1.0 | 1.0 | 1.0 | 1.4 | 1.6 | 2.2 |
| % CFS for Emergency | 11.6 | 14.2 | 10.4 | 7.5 | 8.7 | 9.1 | 9.4 | 10.1 |
| % CFS for Urgent | 65.2 | 63.8 | 54.2 | 57.8 | 63.5 | 66.7 | 67.0 | 66.6 |
| % CFS for Routine | 23.2 | 22.0 | 35.5 | 34.7 | 27.8 | 24.2 | 23.6 | 23.3 |
| Response Speed for Emergency | 71.9 | 65.4 | 62.1 | 58.9 | 71.9 | 64.1 | 58.2 | 73.1 |
| Response Speed for Urgent | 59.4 | 54.3 | 45.7 | 42.9 | 51.8 | 44.0 | 43.6 | 52.3 |
| Response Speed for Routine | 29.7 | 17.6 | 12.8 | 13.8 | 18.5 | 13.7 | 17.2 | 21.7 |
| Response Units | 39.0 | 20.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| Administrative Time per Unit | 24.0 | 20.0 | 34.0 | 20.0 | 20.0 | 16.0 | 12.0 | 15.0 |
| Patrol Area(sq.kilo.) | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 |
| Call Rate | 13.6 | 6.2 | 7.7 | 13.2 | 14.6 | 15.3 | 17.0 | 16.3 |
| | | | | | | | | |
| | Monday | Monday | Monday | Monday | Monday | Monday | Monday | Monday |
| Input Data | 0100-0359 | 0400-0659 | 0700-0959 | 1000-1259 | 1300-1559 | 1600-1859 | 1900-2159 | 2200-0059 |
| Service Time for 1 Unit | 49.7 | 52.1 | 71.4 | 73.2 | 70.9 | 61.8 | 58.7 | 56.5 |
| Service Time for 2 Units | 38.2 | 41.3 | 54.7 | 54.5 | 54.0 | 47.9 | 44.0 | 40.7 |
| Service Time for 3 Units | 31.1 | 45.1 | 53.5 | 53.8 | 59.2 | 47.9 | 49.2 | 41.9 |
| Service Time for 4 Units | 34.0 | 51.1 | 71.2 | 56.4 | 52.6 | 46.4 | 44.7 | 42.1 |
| Service Time for 5 Units | 46.6 | 41.1 | 63.7 | 66.1 | 72.7 | 50.3 | 47.1 | 42.1 |
| Service Time for 6 Units | 44.4 | 53.5 | 83.0 | 71.8 | 67.7 | 45.3 | 60.9 | 40.0 |
| % CFS for 1 Unit | 46.3 | 54.0 | 61.5 | 61.3 | 60.6 | 60.9 | 54.9 | 50.9 |
| % CFS for 2 Units | 28.2 | 29.6 | 24.6 | 24.2 | 24.7 | 24.4 | 26.6 | 27.4 |
| % CFS for 3 Units | 12.7 | 9.4 | 8.2 | 8.6 | 8.6 | 8.5 | 9.6 | 11.1 |
| % CFS for 4 Units | 6.6 | 4.5 | 3.0 | 3.4 | 3.3 | 3.5 | 4.6 | 5.6 |
| % CFS for 5 Units | 3.9 | 1.6 | 1.6 | 1.3 | 1.7 | 1.9 | 2.6 | 3.0 |
| % CFS for 6 Units | 2.4 | 1.0 | 1.1 | 1.1 | 1.2 | 0.9 | 1.8 | 2.0 |
| % CFS for Emergency | 13.1 | 10.4 | 6.3 | 7.7 | 9.3 | 8.0 | 10.3 | 12.5 |
| % CFS for Urgent | 69.1 | 61.9 | 51.4 | 53.4 | 57.3 | 63.4 | 65.5 | 65.7 |
| % CFS for Routine | 17.8 | 27.7 | 42.3 | 38.9 | 33.4 | 28.6 | 24.2 | 21.8 |
| Response Speed for Emergency | 30.1 | 59.2 | 57.3 | 69.6 | 69.9 | 56.0 | 51.8 | 66.8 |
| Response Speed for Urgent | 27.3 | 52.5 | 33.2 | 44.6 | 40.7 | 39.7 | 42.5 | 49.3 |
| Response Speed for Routine | 11.7 | 14.2 | 9.4 | 11.0 | 11.1 | 13.3 | 14.7 | 18.9 |
| Response Units | 39.0 | 20.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| Administrative Time per Unit | 12.0 | 24.0 | 26.0 | 17.0 | 12.0 | 12.0 | 12.0 | 22.0 |
| Patrol Area(sq.kilo.) | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 |
| Call Rate | 6.8 | 5.3 | 9.9 | 13.8 | 15.7 | 17.4 | 16.5 | 13.0 |

| | Tuesday | Tuesday | Tuesday | Tuesday | Tuesday | Tuesday | Tuesday | Tuesday |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Input Data | 0100-0359 | 0400-0659 | 0700-0959 | 1000-1259 | 1300-1559 | 1600-1859 | 1900-2159 | 2200-0059 |
| Service Time for 1 Unit | 53.3 | 53.8 | 70.0 | 73.3 | 72.1 | 66.6 | 57.3 | 54.5 |
| Service Time for 2 Units | 40.4 | 39.2 | 61.0 | 54.2 | 55.2 | 51.6 | 45.7 | 39.0 |
| Service Time for 3 Units | 41.4 | 40.5 | 55.4 | 51.2 | 56.0 | 47.3 | 43.5 | 37.4 |
| Service Time for 4 Units | 38.6 | 35.9 | 62.6 | 49.9 | 59.4 | 51.2 | 40.8 | 38.6 |
| Service Time for 5 Units | 38.4 | 33.3 | 42.5 | 45.5 | 52.8 | 54.0 | 46.8 | 44.2 |
| Service Time for 6 Units | 52.9 | 55.4 | 79.7 | 49.4 | 47.2 | 45.4 | 46.6 | 39.9 |
| % CFS for 1 Unit | 44.7 | 53.1 | 64.2 | 61.5 | 61.4 | 60.5 | 55.6 | 50.3 |
| % CFS for 2 Units | 27.6 | 28.0 | 23.5 | 25.0 | 24.7 | 23.8 | 26.9 | 27.9 |
| % CFS for 3 Units | 13.3 | 11.3 | 6.8 | 8.4 | 8.3 | 9.0 | 9.8 | 11.1 |
| % CFS for 4 Units | 7.2 | 4.0 | 2.9 | 3.1 | 3.4 | 3.8 | 4.5 | 5.4 |
| % CFS for 5 Units | 4.7 | 2.7 | 1.6 | 1.2 | 1.7 | 1.8 | 2.2 | 3.3 |
| % CFS for 6 Units | 2.5 | 0.9 | 1.0 | 0.7 | 0.6 | 1.1 | 1.1 | 1.9 |
| % CFS for Emergency | 12.6 | 12.0 | 6.6 | 8.3 | 8.1 | 9.1 | 10.8 | 11.2 |
| % CFS for Urgent | 70.1 | 61.8 | 51.2 | 55.3 | 58.7 | 62.3 | 66.6 | 65.8 |
| % CFS for Routine | 17.3 | 26.1 | 42.2 | 36.4 | 33.1 | 28.6 | 22.7 | 23.0 |
| Response Speed for Emergency | 65.6 | 63.1 | 57.4 | 53.8 | 61.3 | 67.8 | 60.9 | 62.5 |
| Response Speed for Urgent | 54.3 | 49.7 | 35.1 | 36.5 | 39.8 | 43.0 | 43.7 | 51.4 |
| Response Speed for Routine | 20.6 | 17.2 | 10.4 | 9.7 | 11.1 | 13.1 | 13.7 | 21.0 |
| Response Units | 39.0 | 20.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| Administrative Time per Unit | 36.0 | 24.0 | 27.0 | 15.0 | 12.0 | 12.0 | 16.0 | 24.0 |
| Patrol Area(sq.kilo.) | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 |
| Call Rate | 6.6 | 5.2 | 9.9 | 14.0 | 15.7 | 16.9 | 15.7 | 12.5 |
| | | | | | | | | |
| | Wednesday | Wednesday | Wednesday | Wednesday | Wednesday | Wednesday | Wednesday | Wednesday |
| Input Data | 0100-0359 | 0400-0659 | 0700-0959 | 1000-1259 | 1300-1559 | 1600-1859 | 1900-2159 | 2200-0059 |
| Service Time for 1 Unit | 50.7 | 52.3 | 69.9 | 75.8 | 69.5 | 66.5 | 58.7 | 56.1 |
| Service Time for 2 Units | 38.7 | 39.7 | 60.3 | 50.2 | 48.0 | 54.6 | 47.1 | 43.4 |
| Service Time for 3 Units | 37.2 | 49.9 | 61.6 | 53.1 | 48.2 | 53.8 | 44.0 | 38.4 |
| Service Time for 4 Units | 47.8 | 49.5 | 49.7 | 57.7 | 53.1 | 52.5 | 51.7 | 42.9 |
| Service Time for 5 Units | 46.6 | 56.2 | 70.4 | 50.8 | 50.8 | 76.7 | 42.2 | 43.6 |
| Service Time for 6 Units | 42.7 | 45.8 | 74.6 | 70.9 | 57.9 | 45.6 | 45.6 | 49.8 |
| % CFS for 1 Unit | 47.2 | 52.4 | 62.1 | 61.5 | 60.2 | 59.9 | 56.1 | 50.1 |
| % CFS for 2 Units | 28.8 | 29.9 | 25.1 | 24.1 | 24.6 | 24.6 | 26.3 | 27.0 |
| % CFS for 3 Units | 12.6 | 10.1 | 7.4 | 8.7 | 8.3 | 8.7 | 10.1 | 11.8 |
| % CFS for 4 Units | 5.8 | 4.3 | 2.7 | 3.3 | 3.6 | 3.6 | 4.3 | 5.9 |
| % CFS for 5 Units | 3.3 | 2.2 | 1.7 | 1.6 | 2.0 | 2.0 | 1.9 | 3.1 |
| % CFS for 6 Units | 2.3 | 1.2 | 0.9 | 0.9 | 1.3 | 1.2 | 1.3 | 2.1 |
| % CFS for Emergency | 12.4 | 10.9 | 6.5 | 9.0 | 8.6 | 9.4 | 8.2 | 10.3 |
| % CFS for Urgent | 65.6 | 61.0 | 51.1 | 54.0 | 59.0 | 62.7 | 67.7 | 66.4 |
| % CFS for Routine | 22.0 | 28.1 | 42.4 | 37.1 | 32.4 | 27.9 | 24.1 | 23.3 |
| Response Speed for Emergency | 67.4 | 54.7 | 52.8 | 40.1 | 72.7 | 53.9 | 73.5 | 66.4 |
| Response Speed for Urgent | 55.8 | 44.5 | 31.4 | 30.0 | 43.2 | 32.6 | 55.3 | 48.3 |
| Response Speed for Routine | 24.2 | 12.8 | 9.8 | 7.9 | 12.4 | 10.4 | 19.3 | 21.4 |
| Response Units | 39.0 | 20.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| Administrative Time per Unit | 40.0 | 20.0 | 26.0 | 12.0 | 13.5 | 8.0 | 15.0 | 22.0 |
| Patrol Area(sq.kilo.) | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 |
| Call Rate | 5.8 | 5.2 | 9.7 | 13.4 | 15.8 | 16.9 | 16.9 | 12.7 |

| | Thursday | Thursday | Thursday | Thursday | Thursday | Thursday | Thursday | Thursday |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Input Data | 0100-0359 | 0400-0659 | 0700-0959 | 1000-1259 | 1300-1559 | 1600-1859 | 1900-2159 | 2200-0059 |
| Service Time for 1 Unit | 49.8 | 53.4 | 65.9 | 75.2 | 68.6 | 63.1 | 58.1 | 51.9 |
| Service Time for 2 Units | 39.0 | 38.9 | 52.4 | 54.1 | 50.8 | 51.9 | 41.5 | 40.4 |
| Service Time for 3 Units | 36.8 | 42.8 | 51.8 | 57.9 | 48.4 | 47.7 | 45.0 | 40.2 |
| Service Time for 4 Units | 34.4 | 39.1 | 69.2 | 57.2 | 53.5 | 53.0 | 48.2 | 37.7 |
| Service Time for 5 Units | 39.8 | 53.8 | 58.0 | 65.5 | 52.6 | 45.6 | 51.6 | 37.5 |
| Service Time for 6 Units | 44.4 | 38.1 | 62.8 | 79.5 | 68.1 | 53.1 | 63.1 | 42.8 |
| % CFS for 1 Unit | 44.3 | 53.8 | 64.1 | 60.6 | 60.2 | 60.6 | 56.4 | 51.6 |
| % CFS for 2 Units | 28.2 | 29.5 | 24.1 | 24.5 | 24.5 | 24.0 | 25.9 | 28.2 |
| % CFS for 3 Units | 12.7 | 9.6 | 7.2 | 8.2 | 8.9 | 8.3 | 9.8 | 11.1 |
| % CFS for 4 Units | 6.9 | 4.2 | 2.5 | 3.6 | 3.8 | 3.8 | 4.3 | 4.8 |
| % CFS for 5 Units | 4.6 | 1.9 | 1.2 | 2.2 | 1.8 | 1.9 | 2.2 | 2.8 |
| % CFS for 6 Units | 3.3 | 1.0 | 1.0 | 1.0 | 0.9 | 1.4 | 1.4 | 1.6 |
| % CFS for Emergency | 14.4 | 11.0 | 8.1 | 8.5 | 7.9 | 8.9 | 9.6 | 11.1 |
| % CFS for Urgent | 65.4 | 64.6 | 54.0 | 55.1 | 62.4 | 64.6 | 64.8 | 63.6 |
| % CFS for Routine | 20.2 | 24.4 | 37.9 | 36.4 | 29.7 | 26.5 | 25.6 | 25.3 |
| Response Speed for Emergency | 69.9 | 59.9 | 56.6 | 64.1 | 63.9 | 72.8 | 69.2 | 73.4 |
| Response Speed for Urgent | 59.0 | 50.5 | 39.8 | 37.1 | 39.9 | 47.9 | 54.1 | 57.1 |
| Response Speed for Routine | 22.8 | 15.5 | 12.0 | 10.2 | 12.0 | 14.7 | 19.3 | 22.7 |
| Response Units | 39.0 | 20.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| Administrative Time per Unit | 39.0 | 26.0 | 29.0 | 15.0 | 11.0 | 13.0 | 15.0 | 26.0 |
| Patrol Area(sq.kilo.) | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 |
| Call Rate | 6.3 | 5.2 | 9.8 | 13.5 | 16.7 | 17.2 | 17.1 | 12.8 |
| | | | | | | | | |
| | Friday | Friday | Friday | Friday | Friday | Friday | Friday | Friday |
| Input Data | 0100-0359 | 0400-0659 | 0700-0959 | 1000-1259 | 1300-1559 | 1600-1859 | 1900-2159 | 2200-0059 |
| Service Time for 1 Unit | 51.2 | 53.8 | 70.3 | 75.5 | 68.2 | 61.2 | 54.2 | 49.0 |
| Service Time for 2 Units | 37.6 | 41.9 | 54.7 | 54.6 | 50.5 | 50.1 | 40.8 | 38.1 |
| Service Time for 3 Units | 37.7 | 37.1 | 53.5 | 58.9 | 53.1 | 49.4 | 40.5 | 35.7 |
| Service Time for 4 Units | 35.3 | 40.0 | 68.6 | 45.2 | 53.4 | 47.2 | 36.1 | 39.6 |
| Service Time for 5 Units | 38.7 | 37.5 | 62.9 | 59.0 | 51.6 | 61.9 | 44.5 | 44.4 |
| Service Time for 6 Units | 42.3 | 62.4 | 97.7 | 59.4 | 72.8 | 53.9 | 43.7 | 38.6 |
| % CFS for 1 Unit | 46.5 | 51.0 | 62.4 | 61.1 | 59.9 | 60.4 | 55.5 | 48.0 |
| % CFS for 2 Units | 29.1 | 28.9 | 23.8 | 24.4 | 25.4 | 24.1 | 26.0 | 27.7 |
| % CFS for 3 Units | 12.7 | 11.2 | 7.6 | 8.1 | 8.5 | 8.7 | 10.5 | 12.5 |
| % CFS for 4 Units | 6.0 | 4.9 | 3.8 | 3.5 | 3.5 | 3.6 | 4.6 | 6.0 |
| % CFS for 5 Units | 3.2 | 2.6 | 1.7 | 1.8 | 1.7 | 2.1 | 2.0 | 3.5 |
| % CFS for 6 Units | 2.4 | 1.3 | 0.8 | 1.1 | 1.1 | 1.1 | 1.4 | 2.3 |
| % CFS for Emergency | 14.6 | 12.0 | 7.3 | 9.6 | 8.3 | 9.9 | 9.8 | 10.1 |
| % CFS for Urgent | 66.4 | 63.9 | 54.0 | 55.8 | 62.9 | 65.1 | 67.8 | 66.0 |
| % CFS for Routine | 19.0 | 24.1 | 38.7 | 34.6 | 28.8 | 25.0 | 22.4 | 23.9 |
| Response Speed for Emergency | 71.6 | 65.0 | 63.7 | 64.4 | 57.5 | 62.1 | 74.0 | 72.1 |
| Response Speed for Urgent | 59.4 | 49.9 | 40.4 | 39.2 | 37.2 | 43.4 | 57.4 | 60.9 |
| Response Speed for Routine | 24.0 | 16.0 | 11.5 | 10.9 | 11.1 | 13.7 | 23.9 | 31.2 |
| Response Units | 39.0 | 20.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| Administrative Time per Unit | 37.0 | 24.0 | 28.0 | 15.0 | 12.0 | 11.0 | 15.0 | 18.0 |
| Patrol Area(sq.kilo.) | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 |
| Call Rate | 7.4 | 5.1 | 10.0 | 13.9 | 15.9 | 18.0 | 18.3 | 16.5 |

| | Saturday | Saturday | Saturday | Saturday | Saturday | Saturday | Saturday | Saturday |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Input Data | 0100-0359 | 0400-0659 | 0700-0959 | 1000-1259 | 1300-1559 | 1600-1859 | 1900-2159 | 2200-0059 |
| Service Time for 1 Unit | 47.8 | 51.6 | 63.2 | 68.0 | 66.4 | 58.6 | 52.8 | 49.1 |
| Service Time for 2 Units | 35.9 | 37.0 | 46.8 | 51.5 | 47.6 | 47.2 | 40.6 | 36.3 |
| Service Time for 3 Units | 36.2 | 40.2 | 44.1 | 51.2 | 49.0 | 45.3 | 39.0 | 34.1 |
| Service Time for 4 Units | 39.3 | 48.6 | 57.3 | 64.1 | 60.3 | 39.8 | 41.9 | 37.3 |
| Service Time for 5 Units | 49.2 | 38.5 | 59.0 | 62.7 | 55.9 | 45.1 | 45.1 | 35.4 |
| Service Time for 6 Units | 41.1 | 37.3 | 84.8 | 71.0 | 69.1 | 46.4 | 47.5 | 40.1 |
| % CFS for 1 Unit | 45.7 | 49.9 | 59.5 | 59.5 | 59.9 | 59.1 | 52.4 | 48.4 |
| % CFS for 2 Units | 27.6 | 29.1 | 25.7 | 25.9 | 24.6 | 24.5 | 27.0 | 27.8 |
| % CFS for 3 Units | 13.3 | 10.8 | 8.6 | 8.7 | 8.7 | 8.6 | 11.1 | 11.8 |
| % CFS for 4 Units | 7.0 | 5.0 | 3.8 | 3.3 | 3.7 | 4.2 | 5.2 | 6.4 |
| % CFS for 5 Units | 3.9 | 3.4 | 1.9 | 1.9 | 2.0 | 2.1 | 2.9 | 3.4 |
| % CFS for 6 Units | 2.5 | 1.8 | 0.5 | 0.8 | 1.2 | 1.5 | 1.5 | 2.2 |
| % CFS for Emergency | 12.0 | 13.7 | 7.2 | 7.6 | 9.3 | 8.8 | 10.7 | 10.0 |
| % CFS for Urgent | 66.1 | 65.9 | 55.9 | 60.8 | 63.4 | 67.9 | 68.8 | 61.2 |
| % CFS for Routine | 21.9 | 20.3 | 36.9 | 31.6 | 27.2 | 23.3 | 20.6 | 28.8 |
| Response Speed for Emergency | 33.1 | 58.4 | 58.7 | 59.1 | 70.8 | 65.0 | 65.3 | 74.7 |
| Response Speed for Urgent | 29.1 | 51.6 | 45.8 | 37.9 | 47.1 | 46.7 | 50.9 | 63.7 |
| Response Speed for Routine | 12.8 | 18.6 | 15.0 | 12.7 | 15.2 | 14.9 | 20.5 | 31.2 |
| Response Units | 47.0 | 20.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| Administrative Time per Unit | 12.0 | 22.0 | 33.0 | 18.0 | 18.0 | 16.0 | 12.0 | 11.4 |
| Patrol Area(sq.kilo.) | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 | 373.0 |
| Call Rate | 12.2 | 5.6 | 8.6 | 13.3 | 14.5 | 16.4 | 18.6 | 19.9 |

THE SURREY RCMP DETACHMENT: AN OVERVIEW AND RECOMMENDATIONS



Irwin M. Cohen, Lauren Freedman, Adrienne Peters, & Kevin Burk

Introduction

As part of the Surrey RCMP detachment's commitment to being the most effective and efficient detachment in British Columbia, the OIC commissioned this report to provide an overview of the Detachment's service delivery model and to identify opportunities for improved efficiencies that will support the goal of furthering the agency mandate to "enforce laws, prevent crime and maintain peace, order and security" (RCMP, 2012).

Project Methodology

This review consisted of an analysis of data provided by the Surrey RCMP, 55 structured interviews with regular and civilian personnel working throughout the Surrey RCMP detachment, and the incorporation of a report completed by Bellmio (2014) on the Surrey RCMP's calls for service data. Interviews were conducted with members of the senior management team, including the detachment's OIC, and managers, supervisors and members from all sections of the detachment, including Community Services, the Youth Section, Neighbourhood Liaison Units, Traffic Section, Operational Support, Planning and Research, Investigative Services, and General Duty.

A Brief Overview of Surrey RCMP Detachment

The Surrey Detachment is divided into four service lines (Operations, Operational Support, Investigative Services, Support Services) that are comprised of sections that are often further broken down into units or teams. With the exception of the Manager of Support Services, who is a Municipal Employee with dual reporting to both the General Manager of Human Resources at the City of Surrey and the OIC, the OIC oversees each of the service lines. The degree of specialization within the agency can be described as a double-edged sword. Since the detachment is so large, it can have multiple highly specialized units that have an impressive capability to target crime; this degree of specialization is typically not viable in smaller detachments. However, this specialization also increases the opportunity for communication silos that can hinder information sharing within the agency and result in a lack of efficiency as workloads can vary substantially between units or teams. The degree of specialization is best highlighted in the example of Investigative Services, which is comprised of two sections. The first includes the Property Crime and Drug Enforcement Sections that are each broken down into three and four more specialized units respectively. The second section is comprised of the Major Crimes Section and Special Projects Intelligence and Enforcement Section, each of which is broken down into three more specialized units.

Each of the units has a mandate outlining roles and responsibilities for the types of files that it will investigate and the activities it is expected to complete. However, the organization of the detachment is such that General Duty (GD) members act as first responders to calls for service and also investigate files unless those files meet the mandate for a specialized unit. On each shift, there is an established minimum number of GD constables, several non-commissioned officers (NCO's),

and members of specialized units. The size of the specialized units varies, but they have generally been comprised of 7 to 10 members each.

In considering the detachment as a whole, Surrey RCMP currently has 704 members. As is outlined later in this report, 30 members have very recently been added to the detachment and assigned to their various sections and units. When all these members are ready for duty, GD will be comprised of four watches with 66 members each in addition to the five-member Police Mental Health Intervention Unit that specifically responds to calls involving mental health issues. As mentioned above, Investigative Services is divided into Major Crimes with 107 members and Property Crime with 90 members. There are also 59 members assigned to Surrey's five districts in Community Policing Units, such as the Crime Reduction Units and the Neighbourhood Liaison Units, there are 34 members assigned to the Traffic Section, and 20 members are part of the Youth and Bike Sections. There are also 45 members assigned to integrated units, such as IHIT, 1 member was part of the First Nations Policing, and the remainder comprises the administration, training, member services, and other parts of the detachment. In effect, GD members comprise 38% of the detachment and Investigative Services comprises 28% of the detachment. The analyses provided below on calls for service, the number of files for each Section, and the Crime Severity Index of the detachment will put these proportions into some context.

The Context of Crime and Policing in Surrey

Crime statistics for the City of Surrey and the Surrey RCMP were available from the British Columbia Ministry of Justice, Police Services Division, as well as from the Canadian Centre for Justice Statistics, Statistics Canada. Although the data from Statistics Canada was more current, the data available from the British Columbia Ministry of Justice included key variables not readily available from Statistics Canada. As such, both sources of data were used in this report. However, there are slight variations and differences in the numbers that these sources provided on certain variables, such as population size, crime rates, and total number of offences. The data from each source is presented below (see Tables 1 and 2).

As demonstrated in Table 1, although the total number of criminal code violations in Surrey slightly increased between 2011 and 2012, the overall crime rate per 1,000 people has consistently decreased since 2008. Criminal code violations per capita decreased in every major category. Of note, this occurred while the City of Surrey experienced a population increase of more than 10%, from just over 430,000 residents to more than 480,000 residents, over the same five year period.

TABLE 1: CITY OF SURREY CRIME RATE 2008 TO 2012, INCLUDING OFFENCE TYPES B.C. MINISTRY OF JUSTICE, POLICE SERVICES DIVISION

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2008 to 2012 % Change |
|---|---------|---------|---------|---------|---------|--------------------------|
| Population | 434,887 | 447,390 | 462,519 | 473,923 | 483,091 | +11% |
| Total Criminal Code Offences | 45,596 | 44,330 | 42,735 | 42,913 | 43,162 | -5% |
| Total Crime Rate per 1,000 Population | 104.8 | 99.1 | 92.4 | 90.5 | 89.3 | -15% |
| Criminal Code Property Offences | 28,949 | 27,119 | 25,915 | 27,044 | 28,117 | -3% |
| CC Property Offence Rate per 1,000 Population | 66.6 | 60.6 | 56.0 | 57.1 | 58.2 | -13% |
| Criminal Code Personal Offences | 8,455 | 8,470 | 8,309 | 7,630 | 7,189 | -15% |
| CC Personal Offence Rate per 1,000 Population | 19.4 | 18.9 | 18.0 | 16.1 | 14.9 | -23% |
| Controlled Drug and Substance Act Offences | 2,710 | 2,310 | 2,418 | 2,221 | 2,011 | -26% |
| CDSA Drug Offences per 1,000 Population | 6.2 | 5.2 | 5.2 | 4.7 | 4.2 | -32% |
| Other Criminal Code Offences | 8,192 | 8,741 | 8,511 | 8,239 | 7,856 | -4% |
| CC Other Offences Rate per 1,000 Population | 18.8 | 19.5 | 18.4 | 17.4 | 16.3 | -13% |

British Columbia Ministry of Justice, Police Services Division. (2013). *British Columbia Policing Jurisdiction Crime Trends, 2003-2012*.

The data from Statistics Canada provided information on some of the same variables over the same time period with slight differences from that presented by the British Columbia Ministry of Justice. The data from Statistics Canada also showed an overall decline in both the total numbers of criminal code offences and the per capita crime rate between 2009 and 2013 (see Table 2). Of note, Statistics Canada data indicated an 11% decrease in the crime rate, compared to the 15% reduction presented in the British Columbia Ministry of Justice data.

TABLE 2: CITY OF SURREY CRIME RATE 2009 TO 2013, INCLUDING OFFENCE TYPES CANADIAN CENTRE FOR JUSTICE STATISTICS, STATISTICS CANADA

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2009 to 2013 % Change |
|---------------------------------------|--------|--------|--------|--------|--------|--------------------------|
| Total Criminal Code Offences | 48,758 | 47,433 | 47,591 | 47,261 | 47,416 | -3% |
| Total Crime Rate per 1,000 Population | 107.8 | 101.4 | 99.1 | 97.0 | 96.0 | -11% |

Statistics Canada. (2014). *Table 252-0081: Incident-based crime statistics, by detailed violations and police services, British Columbia*. CANSIM database.

As demonstrate in Table 3, Surrey has had a very large and fast population growth, has a large number of males under the age of 24 years old, has a substantial proportion of low income families, and a large proportion of the population with some degree of residential mobility. There is also a growing concern among the public and the police about the increasing number of people suffering from drug and alcohol addictions, the escalating rate of mental health issues, and a number of key social issues, including the large number of prolific offenders in the community, poverty, and the challenges that some people have integrating into the community.

TABLE 3: COMPARISON OF SOCIO-DEMOGRAPHIC FACTORS

| Factor | Surrey |
|--|-------------|
| Population Change 2001 to 2006 | 13.6% |
| Population Change 2006 to 2011 | 18.6% |
| Gender – Age Structure (% Males 15 – 24) | 7.0% |
| Low Income Families (Poverty) | 18.0% |
| Median Income | \$23,983.00 |
| Inequality | 22.5 |
| Income Assistance | 2.1% |
| Unemployment | 5.7% |
| Educational Attainment (% < High School) | 14.9% |
| Residential Mobility (% Same House Past 5 Years) | 48.6% |
| Racial Structure (% Visible Minority) | 46.1% |

COMPARISONS WITHIN BRITISH COLUMBIA

One way to determine the appropriate size of a police agency is to consider crime rates, as calls for more police officers have traditionally correlated with increases in crime rates. However, this may not be the best approach because it does not consider the key factor of effectiveness. Simply adding officers to any ineffective police force will not have the intended effect of reducing crime. In considering the relationship between crime rate and the size of the Surrey RCMP police force, the City of Surrey has seen a consistent decrease in per capita crime rates over the past five years.

TABLE 4: CRIME RATES PER 1,000 FOR SELECT CITIES IN BRITISH COLUMBIA 2008 TO 2012

| | Population (2012) | 2008 | 2009 | 2010 | 2011 | 2012 | 2008 to 2012 % Change |
|--------------------|-------------------|-------|-------|-------|-------|-------|--------------------------|
| Prince George RCMP | 76,286 | 149.4 | 160.6 | 168.6 | 157.8 | 154.2 | +3% |
| Abbotsford PD | 140,318 | 87.4 | 69.2 | 64.1 | 59.0 | 51.9 | -41% |
| Victoria PD | 101,999 | 138.8 | 133.0 | 136.3 | 112.5 | 99.1 | -29% |
| Vancouver PD | 668,465 | 89.9 | 82.2 | 77.1 | 74.7 | 70.0 | -22% |
| Burnaby RCMP | 231,811 | 80.6 | 81.8 | 70.7 | 64.7 | 64.8 | -20% |
| Delta PD | 101,300 | 67.5 | 65.8 | 59.6 | 55.1 | 53.9 | -20% |
| Kamloops RCMP | 87,647 | 118.2 | 111.9 | 112.5 | 105.8 | 98.3 | -17% |
| New Westminster PD | 68,534 | 102.5 | 95.6 | 90.1 | 83.8 | 85.4 | -17% |
| Kelowna RCMP | 122,455 | 123.1 | 120.9 | 112.6 | 98.8 | 104.0 | -16% |
| Surrey RCMP | 483,091 | 104.8 | 99.1 | 92.4 | 90.5 | 89.3 | -15% |
| Richmond RCMP | 199,949 | 67.7 | 62.6 | 62.3 | 56.7 | 57.4 | -15% |
| BRITISH COLUMBIA | 4,622,573 | 95.8 | 89.9 | 84.5 | 79.0 | 77.3 | -19% |

British Columbia Ministry of Justice, Police Services Division. (2013). *British Columbia Policing Jurisdiction Crime Trends, 2003-2012*.

While crime rate statistics, such as the per capita crime rate, measure the volume of crime, the crime severity index, created by Statistics Canada, measures the seriousness of crime. With per capita crime rates, each crime is counted as one offence, regardless of how serious or minor the offence. The crime severity index assigns a value or weight to each crime based on the seriousness of sentences handed down for the offence.

TABLE 5: CRIME SEVERITY INDEX FOR SELECT CITIES IN BRITISH COLUMBIA 2013

| | Crime Severity Index (2013) | 2012 to 2013 % Change |
|--------------------|--------------------------------|--------------------------|
| Prince George RCMP | 137.04 | -9.12% |
| Surrey RCMP | 114.32 | -1.34% |
| Kamloops RCMP | 112.24 | +7.38% |
| New Westminster PD | 105.97 | +1.79% |
| Vancouver PD | 105.18 | -2.76% |
| Kelowna RCMP | 104.15 | -12.25% |
| Victoria PD | 102.51 | -18.69% |
| Burnaby RCMP | 79.52 | -11.74% |
| Richmond RCMP | 73.51 | -9.26% |
| Abbotsford PD | 72.83 | +1.05% |
| Delta PD | 56.85 | -10.25% |
| BRITISH COLUMBIA | 89.18 | -6.15% |

Statistics Canada. (2014).

Another way to determine police force strength is the ratio of police officers per 1,000 citizens. While the International Association of Chiefs of Police does not recommend this method (McCabe, n.d.) because it does not accurately reflect workload or service needs, it remains a popular approach. As demonstrated in Table 6, Surrey had a lower than average cop-to-pop ratio and an above average case burden.

TABLE 6: POLICE STRENGTH FOR SELECT CITIES IN BRITISH COLUMBIA IN 2012

| | Population | Police Strength | Police per 1,000 Pop. | C.C. Case Burden |
|--------------------|------------|-----------------|-----------------------|------------------|
| Victoria PD | 101,999 | 243 | 2.38 | 42 |
| Vancouver PD | 668,465 | 1,327 | 1.99 | 35 |
| Delta PD | 101,300 | 170 | 1.68 | 32 |
| Prince George RCMP | 76,286 | 128 | 1.68 | 92 |
| New Westminster PD | 68,534 | 108 | 1.58 | 54 |
| Abbotsford PD | 140,318 | 214 | 1.53 | 34 |
| Kelowna RCMP | 122,455 | 174 | 1.42 | 73 |
| Kamloops RCMP | 87,647 | 124 | 1.41 | 70 |
| Surrey RCMP | 483,091 | 661 | 1.37 | 65 |
| Burnaby RCMP | 231,811 | 299 | 1.29 | 50 |
| Richmond RCMP | 199,949 | 217 | 1.09 | 53 |
| BRITISH COLUMBIA | 4,622,573 | 6,653 | 1.43 | 54 |

British Columbia Ministry of Justice, Police Services Division. (2013). *Police Resources in British Columbia, 2012*.

Recommendations

There are a series of steps that the Surrey RCMP can undertake to become more effective and efficient in their service delivery model and their ability to reduce crime and increase public safety.

1. ADDITIONAL MEMBERS ARE REQUIRED FOR GENERAL DUTY

While there have been several recent reports focusing on the increased costs associated with policing (Di Matteo, 2014; McCabe, n.d.), it is clear based on a variety of measures, such as the cop-to-pop ratio, the workload of members, the volume of serious and violent crimes, the quantity of calls for service, and the ability of the detachment to be more proactive rather than reactive, that additional members for GD are required. While demands for an increase in the number of members for the Surrey RCMP stand in contrast to a report portraying many Canadian police forces as over-funded and inefficient as the number of police officers in Canada increased while the crime rate decreased (Di Matteo, 2014), it is important to note that analysis for that report focused on census data and did not take the unique needs, characteristics, and police workloads of individual municipalities into consideration and did not include Surrey Detachment. Surrey is a growing municipality with crime problems that are underscored by substance abuse, mental health issues, and gang involvement. As Bellmio (2014) concluded, the current staffing levels in GD are insufficient given the workload demands.

While there have been calls for improved effectiveness and efficiency in the Surrey RCMP, these have not traditionally involved requests for a reduction in spending or a reduction in the number of members. Instead, in the context of Surrey, providing additional members should contribute to a reduction in individual member workload that will allow for a greater opportunity for members to engage in proactive policing to reduce crime and increase public safety. This conclusion is supported by the work of Bellmio (2014).

2. SURREY'S POLICING DISTRICTS AND PROACTIVE POLICING

Greater effectiveness and efficiencies may be gained by breaking down district lines for calls for service and creating smaller sectors that have dedicated police motor vehicles and members that focus on the calls for service and crime problems in that smaller area. As stated by Bellmio (2014), the most effective and efficient role for GD members occurs when they can focus on prevention, intervention, and enforcement strategies with the overall objectives of reducing crime and increasing public safety by working with the community to problem solve identified concerns in a specific area.

In terms of General Duty proactive policing, once staffing levels have increased, the detachment can increase the amount of proactive patrolling conducted by members. In order to avoid the more common occurrence that proactive patrolling is not intelligence or information-led, and that it occurs in very short segments when members have time between responding to calls for service, the detachment should allocate a portion of patrol time to proactive patrolling guided by the work of the crime analysts. In effect, members should be directed by the detachment's crime and intelligence analysts to patrol specific areas at specific times to be most effective at deterring crime, create a visible presence in the community, and engage in a number of proactive policing strategies as required by crime trend data or community needs. This would ensure that issues or locations that would benefit from proactive patrolling receive the necessary attention. Moreover, supervisors should analyse the driving patterns of members to ensure that they are in the right locations, at the right times, for the right amount of time to effectively and efficiently contribute to the proactive

policing orientation of the detachment. It should also be noted that all GD proactive policing initiatives should be tied into the efforts of other sections and units that also engage in routine proactive policing to better integrate the work, intelligence, and information collected, but to also recognize that proactive policing is not the sole responsibility of some members, but a core policing function across the detachment.

To further contribute to proactive policing, it is also recommended that the size of Traffic Services increase. Two examples of how Traffic Services can contribute to proactive policing are through the implementation of Data Driven Approaches to Crime and Safety (DDACTS) and Automatic License Plate Recognition (ALPR) technology. The DDACTS model has demonstrated empirically the benefits of traffic enforcement members policing specific areas where there is overlap between crime hot spots and traffic violation hot spots. The outcome of this is not only less collisions, less motor vehicle fatalities, and less unsafe driving behaviours in areas characterized by these outcomes, but also substantial reductions in crime and the apprehension of prolific offenders. The expanded use of ALPR can contribute to members making more arrests, is a cost effective policing and crime prevention strategy, and increases police efficiency and effectiveness in apprehending criminals.

One of the greatest challenges for police is managing and being proactive with their prolific and chronic offenders, locations, and problems. Within the Surrey RCMP's mandates, the detachment has designated many units to target these persons, locations, and problems, but the detachment's response to prolific offenders, locations, and problems requires the commitment of everyone in the detachment. Addressing prolific offenders, locations, and problems must be seen as a core policing function that involves the sharing of information and resources across the detachment.

The High Risk Location (HRL) team created in response to the homicide rate in 2033 demonstrated the effectiveness of multiple units within the detachment working together to address prolific offenders, properties, and problems. But, the HRL, coupled with the repurposing of specialized surveillance units to support the investigation, created the unintended consequence of property crimes increasing. However, given their threat to public safety, it cannot be overstated how important it is for the police to be effective against prolific offenders, locations, and problems. As such, the detachment requires additional resources to effectively address these challenges.

3. DIFFERENTIAL RESPONSE TO CALLS FOR SERVICE AND DISPATCHING MEMBERS

It remains critical for the detachment to reduce the workload on GD members and one way to do this would be a more efficient process of responding to low priority calls for service. As is discussed below, the standardization of how dispatch operates should include a process to determine, in the first instance, the best way to respond to a call for service, and should also include a more efficient system of assigning calls for service. With respect to the lower priority calls for service that do not require a member to attend immediately, the detachment might consider establishing an appointments-based response system. In addition, the detachment should evaluate its on-line and telephone reporting system to ensure they are effective for the public.

With respect to dispatching calls for service and the prioritization of calls, as identified by Bellmio (2014), some Priority 2 calls are not effectively being dispatched as Priority 2 calls since some of

them do not present with a threat of imminent danger. Underscoring this issue was the notion that the classification system may benefit from adjustment. The notion of reclassifying Priority 2 calls that do not involve imminent threat has already been raised in the detachment and several call types are under consideration for reclassification; it is recommended here that a formal review of the priority classification system be undertaken to ensure that call types are correctly classified.

4. DETERMINE THE APPROPRIATE LEVEL OF RESOURCES FOR INVESTIGATIVE SERVICES

With respect to Investigative Services, to date, the detachment has done a lot of work on the organizational charts, mandates, the development of units, supervision, and file allocation and review. The demand for investigative services is based, in part, on the number of criminal code and drug files that are generated in Surrey, which must allocate resources to confirm that the file is appropriate for the particular Section or Unit, and, if so, assign resources to conclude the file. As such, it is necessary that there be a sufficient number of members so that the intake of files is approximately equal to the closure of files over the course of a year.

Determining the need for a change in resources to Investigative Services requires accurate information about the potential number and type of files that the detachment should expect, and a clear understanding of the amount of time, in terms of members' hours, that each type of file will take. It should be noted that changes in the requirements associated to common tasks, such as disclosure or surveillance, would affect the amount of time needed to conclude a file and so it is sometimes difficult to estimate the amount of time files will take. While the Major Case Management model is commonly used to track the progress of files, it is, again, extremely difficult to estimate the resource needs of future criminal investigations because the complexity of investigations cannot be predicted. In many cases, human resource requirements are not clear even in the early stages of an investigation.

An internal report prepared by the detachment on the activities of all units within Investigative Services spoke to the nature of the work being done and an estimate of the mean amount of work hours that it takes to complete a variety of activities. In effect, the report speaks, in the aggregate, to what sort of tasks members from specific units typically undertake as part of their responsibilities, and provides ranges of estimates for how long individual tasks or groups of tasks might take. However, the detachment does not track the specific amount of time taken on each activity member's undertake when working on a file. As such, it is extremely difficult to determine whether there are adequate resources in Investigative Services.

In order to better determine the level of staffing needed in Investigative Services, it is recommended that the detachment undertake a pilot project with a limited number of units from within Investigative Services to develop a system and track all of the activities that members engage in and how long those actions take. This pilot project would determine what proportion of the detachment's files the participating units take ownership of or assist with, the degree to which the files accepted by the unit or section meet the mandates, what specific activities members undertake, how long does it take to complete each activity, and, given the current level of resources, how many files could be handled and what proportion is that of the total number of files that meet

the unit's or section's mandate. With the completion of the pilot project, it may be necessary for the detachment to consider how best to organize and staff Investigative Services.

5. IMPROVING ACCOUNTABILITY AND PERFORMANCE MEASURES

Enhanced accountability can be realized and measured in a variety of ways. While it is necessary for there to be a degree of oversight from senior management and members in middle management, which then filters down to all other members, the public must also be involved. While the police must have operational independence, the public can still keep the detachment accountable by having clear expectations of crime prevention and reduction ideas for the community and reporting crimes to the police, becoming involved in program development, provision, and management, and following-up when the police assess the progress of efforts. The City of Surrey and the Surrey RCMP are already engaging the public in a variety of programs and initiatives, and continuing to do so will provide greater opportunities for citizen engagement, and thus accountability.

One major tool that has promoted accountability in policing is the use of CompStat. Currently, Surrey Detachment is reintroducing CompStat as a key part of their accountability and performance measures. By holding regular meetings that incorporate timely crime statistics with those individuals who hold leadership positions, and by revisiting strategies to ensure their value, the police can establish achievable goals that can be realized through a combined effort of policing manpower and resources. Accountability measures should be incorporated into each policing initiative, so that performance can be assessed across all levels of the organization, and incorporated into daily decision-making and strategizing. No longer can police organizations simply state that they are effective and efficient. Instead, these claims must be validated with evidence. As a way of contributing to the accountability of all members and to ensure that police operate transparently, it is imperative that police have a clear and functional performance-based management system in place to hold members, programs, policies, and strategies accountable to the mandates, goals, and objectives of the detachment. It is recommended that a clear statement or statements of what success looks like be defined at the outset of any initiative. All members should be informed of the purpose of the initiative is, what the intended outcome is, how it will be measured, and how those responsible for success will be supported and held accountable.

The inclusion of comprehensive performance measures in member management and supervision is also essential to improving efficiencies in the detachment. While there is utility in maintaining a record of each member's day-to-day activities, such as the number of arrests, street checks, or warrants issued, the leaders in policing can best evaluate their members by utilizing a variety of indicators that can assess the same activity, while incorporating qualitative context to these numbers and a certain level of professional discretion. One of the most effective ways to achieve this is through frequent conversations between managers and their officers. The detachment would also be more successful if supervisors and managers addressed performance issues and successes early, based on measures collected by an information management system.

6. DETACHMENT COMMUNICATION

In order to improve detachment communication, it is recommended that the detachment's communication structure be reiterated to all members so that it is clear to everyone when information will be made available, who will deliver what kind of information, and whom they should approach with a given question, issue, or challenge. If members were better informed about what types of information they should expect from the OIC's office, managers, supervisors, and from others in the detachment or the broader RCMP organization, some of the communication challenges in the detachment may be relieved. In cases where the opinions of members are sought regarding potential changes, it may also be useful to explain what role these opinions played in any decision. Doing so may help address concerns that management has not been taking the views of the members into consideration, even when their opinions have been solicited directly.

There is a divide between GD and plainclothes units, but it is important to recognize that this is typically found in all police agencies and not a problem unique to the Surrey RCMP. Some tension appears to be rooted in a lack of understanding of the mandates of different units. Improved awareness of unit mandates may help to resolve this tension. Moreover, plainclothes members have been directed by the OIC to attend GD briefings and continuing to do so may provide opportunities for members in GD and plainclothes units to develop common ground and improve the lines of communication. To ensure that the appropriate level of resources are made available to the detachment and that the detachment is held accountable for their resource demands and their deployment, it is also important to maintain clear lines of communication between the OIC and the City of Surrey.

7. THE MANAGEMENT OF CHANGE

It is clear that the Surrey detachment has undergone a lot of change in the past two years and that there is a commitment from senior management to continue to explore and implement additional changes to increase the effectiveness and efficiency of the detachment. The challenge is in ensuring that leaders are able to include their people in the change process to the degree that members view change as part of their professional experience, view themselves as part of the change process and as agents of change, and can see and understand the benefits of the changes that are implemented. Management's plan, while reflecting and incorporating the concerns and interests of the membership, is extremely ambitious. Given the need to avoid either change paralysis or people feeling that the organization is constantly in a state of flux, it is critical that management focus on just a few issues. To date, the detachment has, among other things, clarified the mandates, roles, and responsibilities of members, their units, and sections, and is working on plans to align manpower with workload, and improve workflow and work processes. These are enormous tasks that if done right should make the detachment more effective and efficient, increase morale within and across the detachment, and address many of the issues raised by the membership.

Successful change initiatives should involve a strategy to respond to potential resistance from members, incorporate effective communication strategies, and include the appropriate training. By incorporating members in the change process through meaningful consultation that involves openly responding to their concerns, resistance to change may be reduced. However, effectively

responding to concerns and feedback will be of particular importance. It is necessary that communication be an ongoing process so that members feel valued and invested in the detachment and its goals on an ongoing basis.

Further, it is important for managers and supervisors to be transparent and communicate all elements of the change process, including the rationale for the change and how the change will affect the members. This information should be strategically presented to allay concerns associated with the unknown. It will be important to acknowledge any negative effect that individual changes may have on members, how those will be addressed, and how the benefits of the prescribed changes will exceed the costs and make the detachment more effective and efficient. This will be an important part of showing members that their interests have been acknowledged and taken into consideration.

8. SUPPORTING THE MENTAL HEALTH OF MEMBERS

Regular and civilian members experience strains pertaining to workload and exposure to files of a violent nature. By providing members with opportunities to develop improved coping skills, efficiency may be improved, as members will be less likely to burn out and will be better prepared to cope with emotionally charged crises. The mental health of members can be supported in a variety of ways, including encouraging members to develop a wellness plan that would include prosocial outlets for stress and emotional strain. Exposure to courses on wellness planning, prosocial coping, and mental health in policing may also help members develop strategies to prevent burnout or negative coping strategies, such as substance abuse, and to recognize and respond to early signs of poor coping among themselves and their colleagues, if they emerge. Access to these courses would be most beneficial early in the careers of members.

Although dispatchers are currently trained to respond to high-stress situations, they may benefit from additional training on how to respond to emotionally charged crises. In particular, they may not be prepared to respond to calls in which officers are in distress, as there is a close bond between members and dispatchers. Courses designed to prepare individuals for emotionally challenging crises and to learn how to respond objectively during those crises may be useful. Part of a complete mental health strategy will necessarily include services for members who have experienced workplace trauma. All members have access to Peer to Peer counseling that includes a 24-hour crisis and referral centre and a network of counsellors.

Auxiliary constables and volunteers may also be exposed to traumatic events. It is necessary that the detachment ensure that these people also have access to similar services in support of a more comprehensive mental health strategy for the detachment.

9. ACCESS TO TRAINING

As a result of members feeling that not all courses were being provided in a timely manner, and senior management's view that not only were available courses posted throughout the detachment, but also that it was not uncommon for courses to not be filled to capacity, the detachment should consider developing a more effective strategy to communicate to members which courses they

must take at which points in their career, what are the requirements for taking a particular course, what information must be included in any application to attend a course, and the circumstances under which they may be denied access or leave to participate in particular courses. This communication strategy may take the form of a brief information session for members.

An expansion of the courses currently available to members would promote a more knowledgeable and prepared workforce. In particular, in addition to the courses that are offered regularly, it may also be useful to expand the scope of refresher courses, as PRTC refreshers do not currently include courses on case law, warrants, or legal changes. Additionally, as members are promoted into supervisory roles, access to supervisory and management skills training may help ensure that supervisors have the soft skills they need to supervise, in addition to the technical experience required for the job. Moreover, it appears that the lack of time management skills may contribute to an inability of some members to complete their required tasks in a timely manner. Training on time management and report writing should assist in the ability of members to manage their workloads and reduce the number of errors in the reports they produce. As new technology is introduced or systems are upgraded, it may be useful to provide short demonstrations on the use of new or upgraded systems at shift briefings; however, demonstrations should not replace other mechanisms of communicating instructions on changes to technology, such as notifications via email or instructional sheets available at member workstations.

10. PUBLIC ENGAGEMENT AND COMMUNICATION

Particularly because crime problems in Surrey are so well publicized in the media, it is becoming increasingly important for the Surrey RCMP to openly communicate with the public about crime problems in their areas. While the detachment has undertaken a number of steps to increase the public's awareness about crime and the activities of the detachment, such as publishing crime data, educating the public on the differences between real and perceived threats in their communities should have a positive effect on better aligning the public's perception of crime with the reality of crime in the city (Cohen et al., 2014). There are a variety of mechanisms available to the Surrey RCMP to improve communications with the public. In addition to releasing information on the detachment website and in factsheets or pamphlets available at community stations, information can be circulated to large and small news sources, including local news sources that report in Punjabi, which according to the 2011 census, was the most commonly (with the exception of English) spoken language in the homes of Surrey residents.

It is also important for the detachment to continue to participate in those community-based programs that increase community engagement, increase public safety, and reduce crime. For example, the detachment could increase the use of "pop-up detachments" or mobile command centres, which provide Surrey RCMP members with an opportunity to engage with community members under positive circumstances and communicate strategies to help them contribute to the safety of their communities.

11. SCHEDULING THE YOUTH SECTION

While the Youth Section has undergone a lot of change in the past two years with respect to its mandate and how it functions, it is possible that shifting the schedule of members in the Youth Section could improve their ability to respond to school-related issues. Many altercations on school grounds break out shortly after the school day ends; however, this coincides with the time that members of the Youth Section return to the office to end their shifts at 4pm. If additional members were assigned to this section, it would allow for shifts to be assigned such that members could be available later into the evening. This would allow members to deal with issues that occur both during school hours, but also during those critical hours after school hours. Having Youth Section members available in the late afternoon and early evenings each day would also free GD members to respond to other types of calls during those hours.

12. CALLS INVOLVING MENTAL HEALTH ISSUES

Members commonly acknowledged their responsibility to respond to calls involving mental health issues, but expressed frustration that these issues do not represent true crime problems and thus should be addressed by others. Similarly, members described spending several hours at the emergency room waiting with those they bring to the hospital after an arrest under the *Mental Health Act*. This is significant because hospital wait-times may require members to spend large portions of their shifts tied to a single location where they are unable to respond to other calls. To address these issues, the Surrey RCMP has established the Vulnerable Persons Section to assist GD and others dealing with high risk and chronic domestic violence, missing persons, and mental health files. This initiative has resulted in the creation of a new unit, the Police Mental Health Intervention Unit, which includes Car 67. In addition to expanding the Car 67 program to reduce the frequency of GD members responding to calls involving mental health issues and the need for them to wait in the hospital, it is important for the detachment to evaluate the number and type of files this Section handles and, importantly, the effect that this Section has on GD members' workload associated to these types of calls for service.

Conclusion

In addition to the recommendations focusing on internal changes, improving the service delivery model of the detachment will involve increasing the number of members and recommitting the entire detachment to proactive policing strategies. Resolving these two challenges in the first instance will reduce the workload burden on members and increase public safety. It is simply inefficient and impractical for the detachment to be primarily a reactive force. Given this, it is necessary for the detachment to find additional ways to be much more proactive. As the detachment increases its number of members, modifications to the current scheduling of police officers' shifts should be further examined to better reflect workload expectations. In addition to staffing both General Duty and Investigative Services members to be much more reflective of the demand for service, a revised shifting model could build into it designated proactive tactics. In addition to intelligence and information-led patrolling, the detachment can also be more proactive by increasing their visibility in the community and allocating the necessary resources to focus on

the large number of prolific offenders in Surrey, and targeting holistically the prolific problems and prolific properties that continue to strain a reactive service delivery model. The detachment should also consider the benefits associated with increasing and integrating their Traffic Section and their Crime Reduction Unit into proactive crime reduction strategies targeting these prolific offenders, locations, and problems. Similar to GD, the staffing and scheduling of Investigation Services resources should ensure that it is sufficient to permit a contribution to crime reduction strategies. The continued use and development of partnerships with other agencies should also comprise a key part of the detachment's proactive policing approach.

It was very clear throughout this research project that the OIC had taken many opportunities to explain and outline to the detachment and the community his vision. It was also very clear that members have a high level of confidence in the OIC's approach to achieving that vision, including engaging members from all levels of the detachment for their ideas, their participation, and their support. Members in this study generally indicated that the OIC has made communication with his staff, particularly those on the frontlines, a priority. He was described as being focused on accountability and driven to identify ways to improve the effectiveness and efficiency of the detachment with the use of research and evidence. The OIC was also described as doing the best he could to strike a balance to improve efficiency and maintain morale by avoiding changes that might improve efficiency at the cost of significantly reducing member satisfaction, while working within the confines of resource shortages and existing policy. Moreover, members believed that the OIC was focused on getting the detachment the resources needed to reduce crime and increase public safety. In sum, members stated an overall satisfaction with the approach and style of the OIC and trusted in his ability to effectively manage the detachment.

It was also very clear that the Surrey RCMP is staffed with dedicated employees who are committed to their work and to doing everything they can to reduce crime and increase public safety. Nonetheless, the volume of crime and the seriousness of that crime demand that more members are needed to police Surrey effectively. There are a number of mechanisms that can contribute to reducing crime in Surrey, many of which are currently being used by the detachment. However, Surrey is an excellent example of the challenges in trying to substantially reduce crime without a full and sustained capacity to respond and prevent crime. Simply put, while there are a number of internal issues that the detachment must continue to work on, the detachment has the right leadership, but needs the right amount and arrangement of people and resources to most effectively and efficiently reduce crime and increase public safety.



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