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Police Statistics on Marijuana Drug Files in Surrey, the Lower Mainland, and the Rest of British Columbia 2004-2008: A Comparative Analysis

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Table of Contents

Introduction	1
Methodology	1
Research Results	2
The Nature of Drug Offences.....	6
Clearance of Drug Offences.....	8
Conclusion.....	14

List of Figures

Figure 1: Distribution of Marijuana Files from 2004 to 2008	3
Figure 2: Distribution of Marijuana Files by Jurisdiction	4
Figure 3: Proportion of Marijuana Files by Jurisdiction for each Year	5
Figure 4: Distribution of Marijuana Files from 2004 to 2008 by Jurisdiction.....	5
Figure 5: Distribution of Offence Type for Marijuana Files from 2004 to 2008.....	6
Figure 6: Distribution of Marijuana Offence Types between 2004 and 2008	7
Figure 7: Proportion of Clearances in Each Year between 2004 and 2008.....	8
Figure 8: Distribution of Clearance Status of Marijuana Files between 2004 and 2008.....	9

List of Tables

Table 1: Percentage Change in the Raw Number of Marijuana Offences between 2004 and 2008 by Jurisdiction..... 7

Table 2: Percentage Change in the Raw Number of Clearance Status between 2004 and 2008 by District..... 10

Table 3: Percentage Change in the Raw Number of Clearance Outcomes between 2004 and 2008 by Offence Type..... 10

Table 4: Percentage Change between 2004 and 2008 for Clearance Status by Offence Type in Surrey 11

Table 5: Percentage Change between 2004 and 2008 for Clearance Status by Offence Type in the Lower Mainland..... 12

Table 6: Percentage Change between 2004 and 2008 for Clearance Status by Offence Type in the Rest of BC..... 13

Introduction

This report is a companion to a report produced by Darryl Plecas, Irwin M. Cohen, Amanda McCormick, and Tara Haarhoff that examined the relationship between police drug files in British Columbia with submissions to the Health Canada Drug Analysis Service Laboratory for 2004 to 2008.¹ The main purpose of that report was to assess and consider explanations for the overall reduction in submissions to the Health Canada Drug Analysis Service Laboratory over that period of time.

The purpose of this report is to provide a closer examination of the marijuana drug files coming to the attention of police agencies, particularly to the RCMP detachment in Surrey, British Columbia between 2004 and 2008. More specifically, this report will analyse and compare the changes in the quantity of marijuana files, the nature of the associated offences, and the clearance status of these files between these time period and between Surrey, the Lower Mainland, and the rest of British Columbia.

Methodology

The analysis for this report was based on two datasets. The first dataset was constructed and provided by the RCMP (E Division, Operations Strategy Branch) and included all marijuana drug cases coming to the attention of all law enforcement authorities in British Columbia from 2004 to 2008. The RCMP dataset included information about the year of the marijuana drug file and the policing jurisdiction providing the file. The database also included information about the type of offence involved (i.e. possession, trafficking, production, and importing/exporting), and the nature of the police action associated with the file (i.e. cleared, cleared otherwise, or not cleared). The dataset was constructed by merging police data from the new police PRIME information system and its predecessor, the police OSR/PIRS information system. The merge was necessary given that not all police jurisdictions had switched over to the PRIME system by 2004 (although, by 2008, all police agencies in the province were working under the new system). From the merge, a total of 212,414 cases (including 1,934 Electrical Fire and Safety Initiative (EFSI) cases as discussed below being added later) were available for analysis.

The second dataset which was merged into the police dataset provided information about all marijuana grow operations attended to by fire departments in the Lower Mainland region of the province. This dataset was provided by the Surrey Fire Service and included

¹ Plecas, Cohen, McCormick, & Haarhoff. "Police Drug Sample Submissions to the Health Canada Drug Analysis Service Laboratory and Police Statistics on Drug Offences in British Columbia 2004 – 2008: A Comparative Analysis of the Decline", 2009.

data from seven policing jurisdictions in the Lower Mainland that had EFSI teams in place for at least some of the four-year period between when some of the teams first began in 2005 and 2008. The jurisdictions involved included Surrey, Coquitlam/Port Coquitlam, Ridge Meadows (Pitt Meadows only), Mission, Langley, Richmond, and Abbotsford.

Collectively, the teams involved in these jurisdictions attended: 267 grow operations in 2005; 270 in 2006; 980 in 2007; and 417 in 2008 for a total of 1,934 marijuana grow operations. Given the varied start-up years for each of the teams involved (e.g. Langley, Ridge Meadows, Richmond, and Coquitlam did not start until 2007, and Mission and Port Coquitlam did not start until 2008), it was not possible to do a meaningful comparative analysis of the data. Beyond that, the small numbers involved respecting most jurisdictions would have made an EFSI/non-EFSI analysis meaningless. Still, it seemed important for this particular report to include these cases as part of the police dataset as they do represent “cleared otherwise” drug files. That is, they are instances of marijuana production, but would not normally be included in police data given that, technically speaking, no offence has occurred. In this regard, it is important to remember that EFSI teams are not in place to take down marijuana grow operations. They are in place to respond to information (usually provided through BC Hydro consumption records) which suggests to them that a potential electrical or fire safety hazard exists at a particular location (some of which are accessed by the teams to have been locations of marijuana grow operations). Despite the assessments, there is never an intention to charge anyone involved; the team’s only interest is to ensure that the location is ultimately rendered safe.

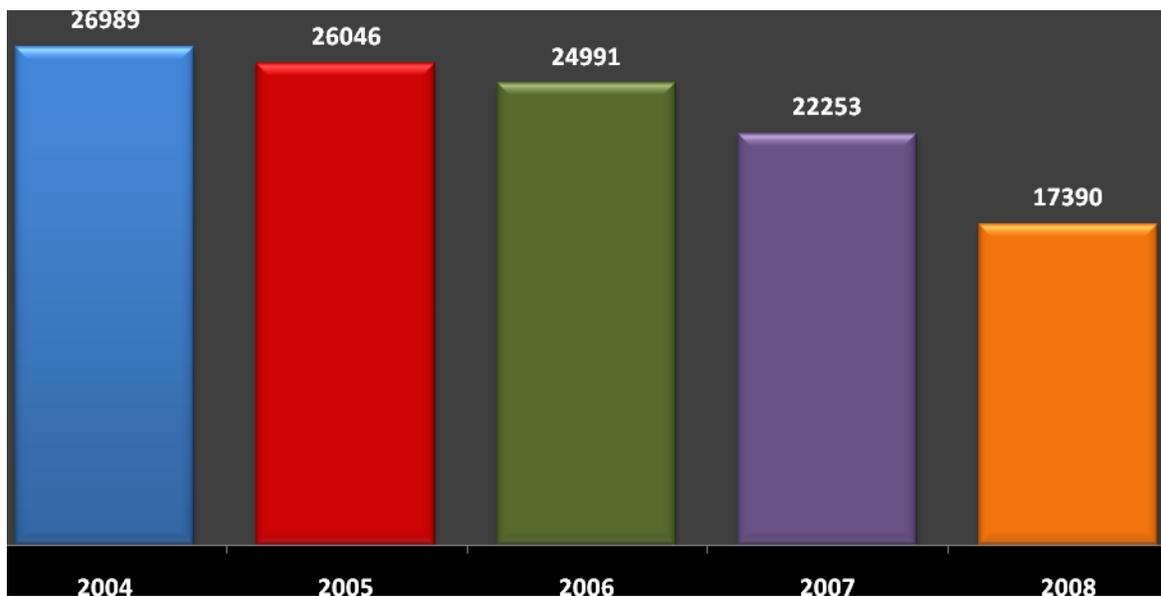
At the end of the day, grow operations discovered by EFSI teams should not show up in police statistics. The researchers’ decision to include them is based on the fact that, despite the technical issue, such instances are known instances of marijuana production that might have otherwise been attended to by police. To exclude them would, in effect, be knowingly underestimating the total number of marijuana production cases. Furthermore, there are very good indications that the presence of an EFSI team does work to significantly decrease grow operations in jurisdictions where they are in place (Girn, 2007). At the same time, the researchers recognize that adding these cases to the database may result in an over counting of the number of production cases to the extent that there may be some instances where such cases have already been counted by police as “cleared otherwise”. However, the researchers included them so as to err on the side of caution.

Research Results

In total, there were 117,669 marijuana files generated in British Columbia between 2004 and 2008. As indicated by Figure 1, while there were a relatively consistent number of files

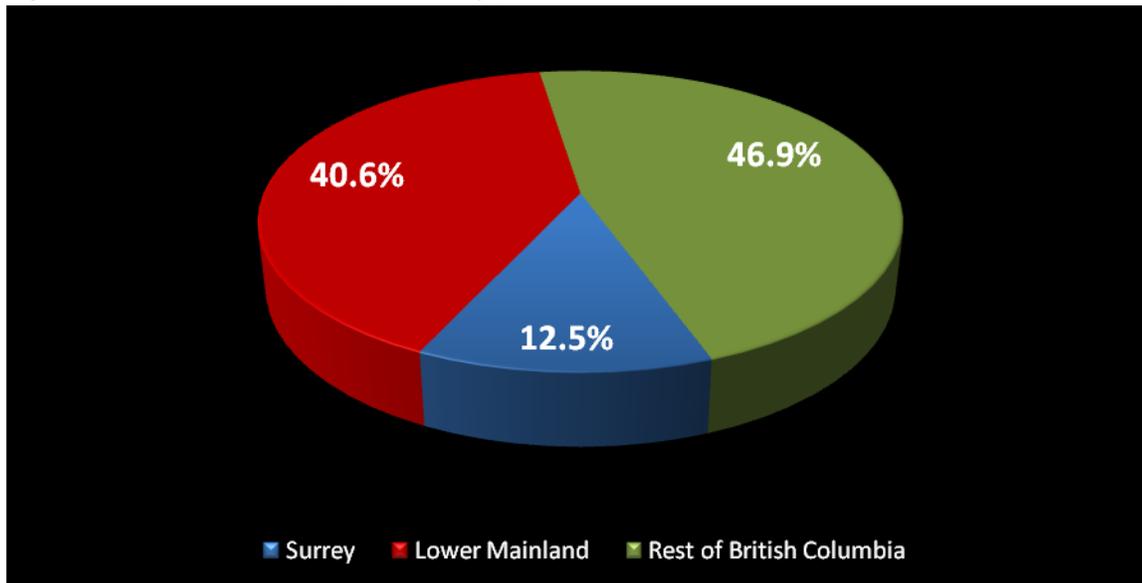
generated between 2004 and 2007, there was a notable reduction in the overall number of files in 2008. In fact, comparing 2004 to 2008, in addition to a consistent decrease in the raw number of files generated each year, there was a 35.6% reduction overall in marijuana files in 2008 compared to 2004. In effect, with the exception of 2008, which contributed 14.8% of all the marijuana-related files over the five year time period, the other four years each contributed nearly equal proportions ranging from a high of 22.9% in 2004 to a low of 18.9% in 2007.

Figure 1: Distribution of Marijuana Files from 2004 to 2008



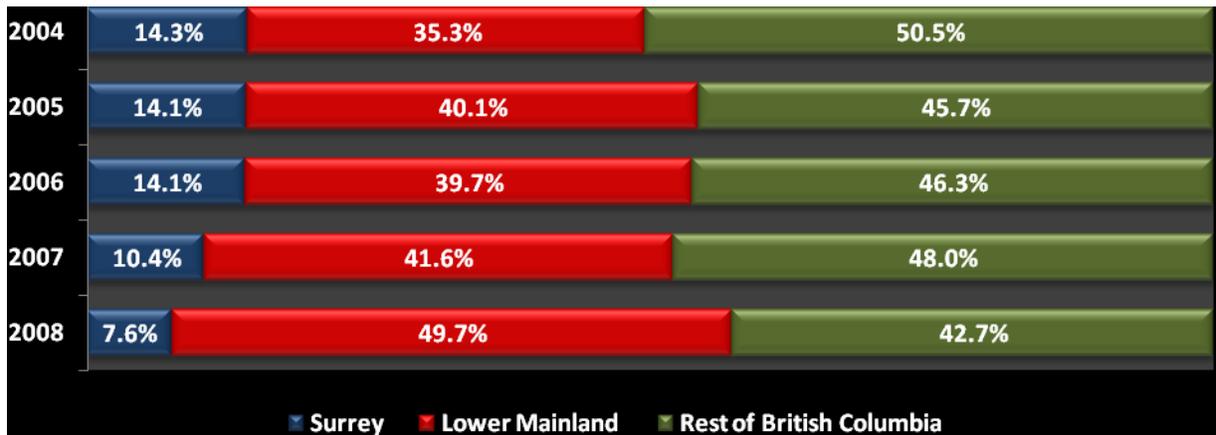
As mentioned above, in order to highlight Surrey in this report, the files were coded as originating in Surrey, the Lower Mainland, or the rest of British Columbia. Overall, Surrey contributed the smallest proportion of marijuana files over the entire time period when compared to the Lower Mainland and the rest of British Columbia. Specifically, Surrey contributed 12.5% of files, while the Lower Mainland and the rest of British Columbia contributed 40.6% and 46.9%, respectively (see Figure 2).

Figure 2: Distribution of Marijuana Files by Jurisdiction



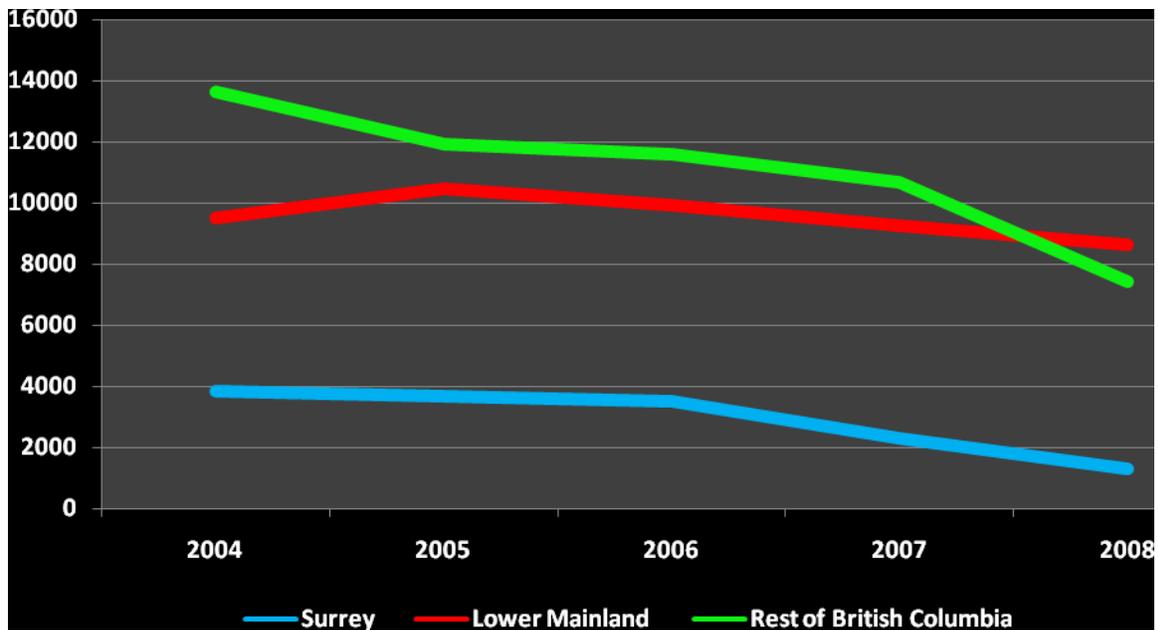
In considering the proportion of files over time, there were some interesting variations, although all jurisdictions saw a decline in the number of marijuana files from 2004 to 2008. Specifically, there was a sharp decline in the number of marijuana files in Surrey between 2004 and 2008 (-65.9 per cent). Moreover, while there was a slight decline in the raw number of marijuana files in the Lower Mainland over the same time period (-9.2 per cent), the proportion of all marijuana files within 2008 that came from the Lower Mainland (49.7 per cent) was much higher than the proportion of files from 2004 (35.3 per cent) (see Figure 3). There was also a sharp decline in the number of marijuana files from the rest of British Columbia between 2004 and 2008 (-45.4 per cent).

Figure 3: Proportion of Marijuana Files by Jurisdiction for each Year



Again, as demonstrated in Figure 4, while there were some minor increases between subsequent years, for the most part, there was a steady decline in the number of marijuana files generated in each of the three jurisdictions over the time period.

Figure 4: Distribution of Marijuana Files from 2004 to 2008 by Jurisdiction

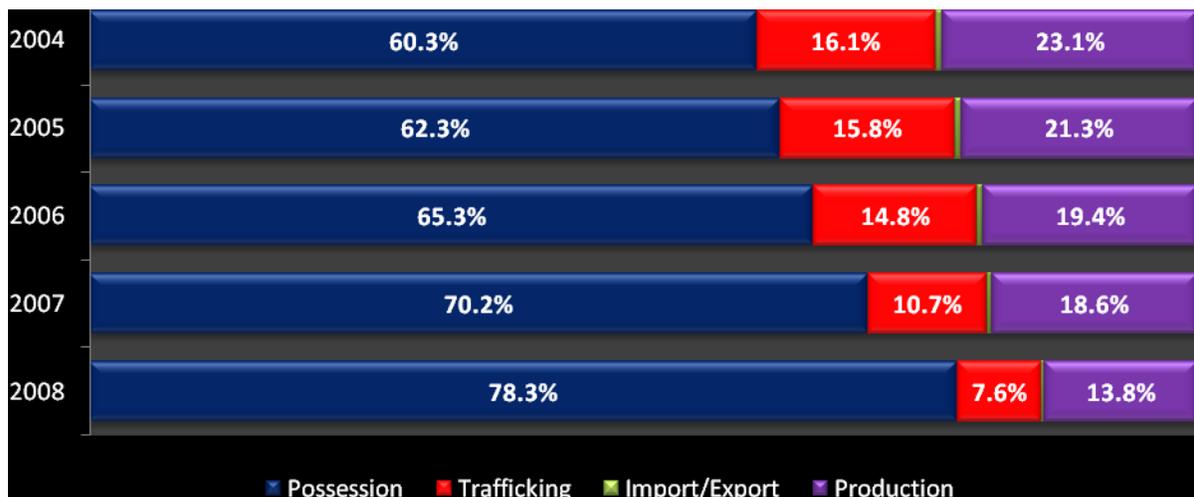


The Nature of Drug Offences

All marijuana files were analysed for the type of offence they were related to. The files were designated one of four classifications: (1) Drug Possession Files; (2) Drug Trafficking Files; (3) Drug Import/Export Files; and (4) Drug Production Files. Two-thirds of all files (66.3 per cent) were marijuana possession files. By way of contrast, marijuana production files comprised nearly one-fifth (19.7 per cent) of the sample, 15.3% of marijuana files were for trafficking, while far fewer files were for marijuana importing/exporting (0.5 per cent).

Comparing the proportion of offence types over time produced some interesting results. For example, possession files comprised 60.3% of all marijuana files in 2004, but increased to more than three-quarters (78.3 per cent) of all marijuana files in 2008. Conversely, trafficking files made up 16.1% of all files in 2004, but only 7.6% of all files in 2008. There was also a marked reduction in the proportion of files for production of marijuana in 2004 (23.1 per cent) compared to 2008 (13.8 per cent) (see Figure 5).

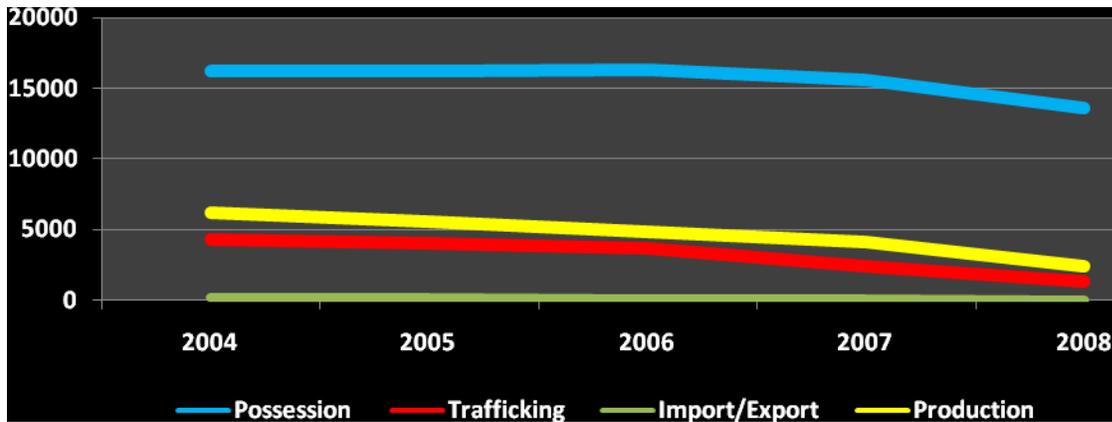
Figure 5: Distribution of Offence Type for Marijuana Files from 2004 to 2008



Although there were changes in the relative proportions of marijuana offences over the designated time period, there was a consistent pattern of decreases in the number of files for each drug offence over time. As indicated in Figure 6, there was a 16.3% decrease in the number of marijuana possession files between 2004 and 2008, and there was a very large decrease (-69.6 per cent) in trafficking files. Although, as mentioned above,

importing/exporting offences made up a very small proportion of the total number of marijuana files (0.5 per cent), there was a similarly large decrease (-69.7 per cent) in the number of importing/exporting marijuana files from 2004 to 2008. There was also a 61.3% decrease in the number of marijuana production files from 2004 to 2008 (see Figure 6).

Figure 6: Distribution of Marijuana Offence Types between 2004 and 2008



When considering the changes in the raw number of files over time for each jurisdiction based on the nature of the marijuana offence, there were consistent reduction in 2008 from 2004, with one notable exception (see Table 1). For Surrey, there were large reductions for all offence types. In particular, there was a 61.8% reduction in the number of marijuana possession files, a similar reduction (-60.3 per cent) for production files and a very large reduction in trafficking files (-82.7 per cent).² Of note, each of the jurisdictions was very different with respect to possession files. For example, while Surrey had a large reduction, the Lower Mainland had an increase in files (+24.3 per cent). Moreover, while the rest of British Columbia also experienced a reduction (-31.9 per cent), this reduction was much smaller than Surrey's.

Table 1: Percentage Change in the Raw Number of Marijuana Offences between 2004 and 2008 by Jurisdiction

	Possession	Trafficking	Import/Export	Production
Surrey	- 61.8%	- 82.7%	- 98.6%	- 60.3%
Lower Mainland	+ 24.3%	- 65.6%	- 16.7%	- 56.6%
Rest of BC	- 31.9%	- 68.1%	- 89.7%	- 65.2%

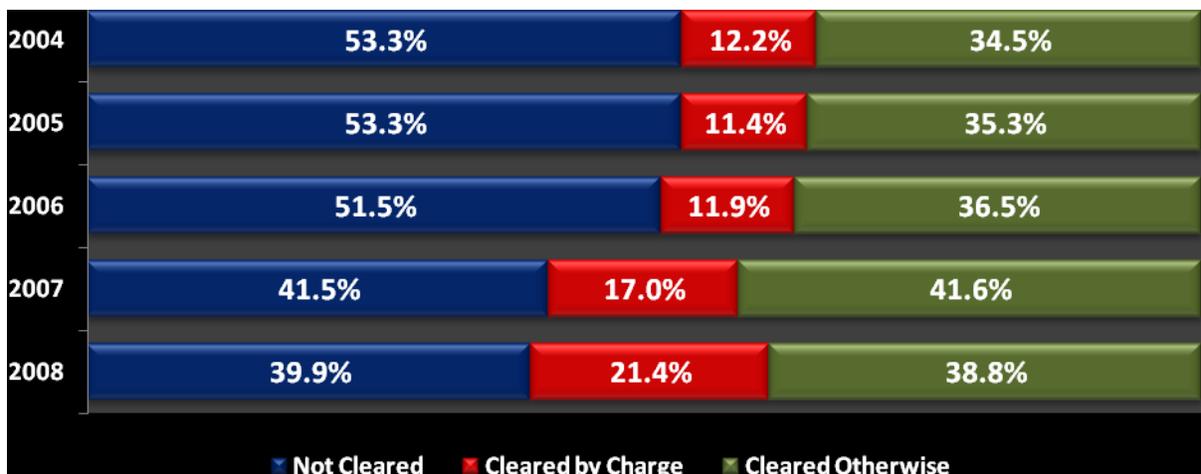
² The extremely large reduction in import/export marijuana files in Surrey was the result of having 72 files in 2004, but only one file in 2008. As an aside, there was also only one file in 2007.

As demonstrated in Table 1, all three jurisdictions had large reductions in marijuana trafficking files and marijuana production files. Specifically, Surrey had the largest reduction in trafficking files (82.7 per cent compared to a 65.6 per cent reduction for the Lower Mainland and a 68.1 per cent reduction for the rest of British Columbia), while the rest of British Columbia had the largest reduction for marijuana production files (65.2 per cent compared to a 60.3 per cent reduction in Surrey and a 56.6 per cent reduction in the Lower Mainland).

Clearance of Drug Offences

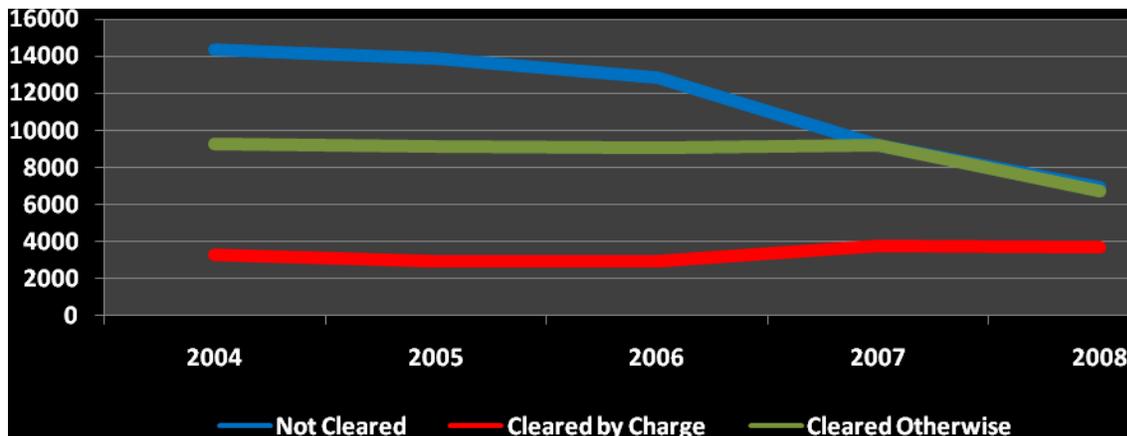
In terms of clearance status, nearly half of all the marijuana files (48.7 per cent) between 2004 and 2008 were not cleared. Of the remaining files, nearly one-third (37.1 per cent) were cleared otherwise and a much smaller proportion (14.2 per cent) were cleared by charge. There were some interesting variations when clearance rates were considered over the five years. For example, while the proportion of cases cleared otherwise remained relatively stable over the time period (a low of 34.5% in 2004 to a high of 41.6% in 2007), there was a general increase for cleared by charge (a low of 11.4% in 2005 to a high of 21.4% in 2008) (see Figure 7). The proportion of marijuana files not cleared declined from a high of 53.3% in 2004 to a low of 39.9% in 2008. This represented a 51.8% decrease in the raw number of files not cleared over this time period.

Figure 7: Proportion of Clearances in Each Year between 2004 and 2008



Again, while the overall number of files decreased between 2004 and 2008, there was an increase (+12.4 per cent) in the number of files cleared by charge. Over the same time period, there was a substantial decrease in the number of files cleared otherwise (-27.5 per cent) and, as mentioned above, there was a decrease in the proportion of marijuana files not cleared (-51.8 per cent) (see Figure 8). In effect, it would appear that as the volume of files decreased over time, the ability of the police to clear files increased slightly.

Figure 8: Distribution of Clearance Status of Marijuana Files between 2004 and 2008



In considering the change over time of clearance status by jurisdictions, each of the clearance outcomes had different patterns (see Table 2). First, there was a wide disparity within the three jurisdictions with respect to offences cleared by charge. Specifically, while there was very little change in the raw number of marijuana files cleared by charge between 2004 and 2008 for the rest of British Columbia (+8.4 per cent), there was a large increase in the number of marijuana files cleared by charge in the Lower Mainland (+51.6 per cent) and in Surrey (+53.4 per cent). For charges cleared otherwise, while both Surrey and the rest of British Columbia had somewhat similar increases (+52.4 per cent and +44.9 per cent, respectively), the Lower Mainland experienced only a slight increase (+11.6 per cent) in marijuana files cleared otherwise. With respect to the not cleared files, all three jurisdictions saw substantial decreases, with a range of a 33.1% reduction in the Lower Mainland to a 74.7% reduction in Surrey. In effect, it would appear that as the overall number of files decreased, Surrey had less files not cleared and experienced an increase in more marijuana files cleared by charge and cleared otherwise over the five year period (see Table 2). In other words, the substantial reduction in the number of files not cleared corresponded to an increase in the number of files cleared by charge or cleared otherwise in Surrey.

Table 2: Percentage Change in the Raw Number of Clearance Status between 2004 and 2008 by District

	Not Cleared	Cleared by Charge	Cleared Otherwise
Surrey	- 74.7%	+ 53.4%	+ 52.4%
Lower Mainland	- 33.1%	+ 51.6%	+ 11.6%
Rest of BC	- 59.1%	+ 8.4%	+ 44.9%

The data was varied with respect to offence type and clearance status over time. For example, over the five year period, there was an overall decrease in the number of drug possession files that were not cleared (-21.7 per cent), but only a small increase in the number of drug possession files cleared otherwise (+9.9 per cent). However, there was a very large increase in the number of marijuana files cleared by charge (+89.9 per cent) (see Table 3). Similarly, with respect to drug trafficking marijuana files, there was a decrease in the raw number of files not cleared (-80.3 per cent), but a corresponding increase in the number of files cleared by charge (+47.2 per cent) and cleared otherwise (+42.8 per cent). There was also a 71.3% decrease in the number of drug production files not cleared between 2004 and 2008 with a corresponding increase in the number of files cleared by charge (+51.6 per cent) and cleared otherwise (+17.6 per cent). It is important to keep in mind that there were few files associated to marijuana import/export. This was reflected in the extremely large increase in the percentage change for cleared otherwise files.³

In effect, regardless of the offence type, there was a trend towards a decrease in the number of files not cleared. Conversely, there were increases in the number of files cleared otherwise or cleared by charge for all offence types (see Table 3).

Table 3: Percentage Change in the Raw Number of Clearance Outcomes between 2004 and 2008 by Offence Type

	Not Cleared	Cleared by Charge	Cleared Otherwise
Possession	- 21.7%	+ 89.9%	+ 9.9%
Trafficking	- 80.3%	+ 47.2%	+ 42.8%
Import/Export	- 84.7%	- 42.8%	+ 2,100%
Production	- 71.3%	+ 51.6%	+ 17.6%

Of particular interest is the relationship between offence type and clearance status by jurisdiction. Given the widely different number of files generated in each jurisdiction, Surrey, the Lower Mainland, and the rest of British Columbia will be analysed separately before general conclusions are made.

³ There was only one case cleared otherwise in 2004, but 22 cases in 2008.

With respect to Surrey and possession of marijuana files, in 2004, there were 2,247 files. Of these files, nearly half (48.2 per cent) were not cleared, a similar proportion (43.0 per cent) were cleared otherwise, and the remaining 8.8% were cleared by charge (see Table 4). In comparison, in 2008, there were 858 possession of marijuana files in Surrey; a reduction of 61.8%. However, in 2008, while a similar proportion of files were not cleared (47.6 per cent) and a smaller proportion of files were cleared otherwise (32.9 per cent), there was an increase in the proportion of files cleared by charge (19.6 per cent).

For marijuana trafficking files in Surrey, there were 681 files in 2004 and only 118 in 2008; a reduction of 82.7%. However, for trafficking files, while nearly two-thirds of files (63.6 per cent) in 2004 were not cleared, this proportion decreased to less than half (44.9 per cent). Moreover, the proportion of trafficking files in Surrey that were cleared by charge increased in 2008 to nearly half (48.3 per cent) compared to approximately one-third (33.5 per cent) in 2004. There was also a slight increase in the proportion of files cleared otherwise from 2.9% in 2004 to 6.8% in 2008 (see Table 4).

The major shift occurred when considering marijuana production files in Surrey over this time period. In 2004, there were 849 marijuana production files generated in Surrey. Of these, the vast majority (83.5 per cent) were not cleared. In fact, only 15.3% were cleared by charge and 1.2% was cleared otherwise. However, in 2008, while there was a substantial reduction in the total number of files generated (n = 337)⁴, the proportion of files not cleared dropped to 35.3%. Interestingly, and perhaps a testament to the success of EFSI, while the proportion of files cleared by charge also dropped to 10.1%, the proportion of files cleared otherwise rose substantially to 54.6% (see Table 4)

Table 4: Percentage Change between 2004 and 2008 for Clearance Status by Offence Type in Surrey

	Number of Files	Not Cleared	Cleared by Charge	Cleared Otherwise
POSSESSION				
2004	2,247	48.2%	8.8%	43.0%
2008	858	47.6%	19.6%	32.9%
TRAFFICKING				
2004	681	63.6%	33.5%	2.9%
2008	118	44.9%	48.3%	6.8%
PRODUCTION				
2004	849	83.5%	15.3%	1.2%
2008	337	35.3%	10.1%	54.6%

In the Lower Mainland, in 2004, there were 5,708 marijuana possession files generated (see Table 5). This number increased to 7,096 files in 2008; an increase of 24.3%. However, while the proportion of files not cleared remained relatively stable and there was a slight

⁴ This represented a 60.3% reduction in files in 2008 from 2004

increase in the proportion of possession files cleared otherwise, there was a larger proportion of files cleared by charge in 2008 (16.6 per cent) compared to 2004 (8.0 per cent).

There was a large reduction in the number of trafficking files generated in the Lower Mainland between 2004 and 2008. Specifically, there was a 65.6% reduction in the number of files. Likely related to this substantial reduction, there was a large reduction in the proportion of files not cleared from slightly more than two-thirds (67.3 per cent) of the files in 2004 to just over one-quarter (26.3 per cent) of the files in 2008. Inverted proportions were found for files cleared by charge as the proportion of Lower Mainland marijuana trafficking files increased from 25.9% in 2004 to 65.1% in 2008. The proportion of files that were cleared otherwise remained relatively stable between these two time periods (see Table 5).

There was also an overall decrease in the number of marijuana production files generated in the Lower Mainland between 2004 and 2008 (see Table 5); a reduction of 56.6%. Again, this reduction was joined by a reduction in the proportion of marijuana production files not cleared from 79.9% in 2004 to slightly more than half (53.1 per cent) in 2008. Similar to Surrey, while there was a modest increase in the proportion of files cleared by charge (11.9 per cent in 2004 compared to 17.6 per cent in 2008), the large gains were made in the proportion of marijuana production files cleared otherwise; 8.1% in 2004 compared to 29.3% in 2008.

Table 5: Percentage Change between 2004 and 2008 for Clearance Status by Offence Type in the Lower Mainland

	Number of Files	Not Cleared	Cleared by Charge	Cleared Otherwise
POSSESSION				
2004	5,708	44.5%	8.0%	47.5%
2008	7,096	41.3%	16.6%	42.0%
TRAFFICKING				
2004	1,415	67.3%	25.9%	6.8%
2008	487	26.3%	65.1%	8.6%
PRODUCTION				
2004	2,346	79.9%	11.9%	8.1%
2008	1,019	53.1%	17.6%	29.3%

Finally, for marijuana possession files generated in the rest of British Columbia, between 2004 and 2008, there was a 31.9% reduction in the number of files. Similar to Surrey and the Lower Mainland, this reduction in possession files only resulted in a small positive change in the proportion of files not cleared. In fact, while there was a reduction in the

proportion of possession files cleared otherwise, there was a substantial increase in the proportion of files cleared by charge from only 9.3% in 2004 to nearly one-quarter (24.2 per cent) of all marijuana possession files in 2008 (see Table 6).

Again, similar to the other two jurisdictions, a substantial reduction in the number of marijuana trafficking files generated between 2004 and 2008 (-68.1 per cent), resulted in a reduction in the proportion of files not cleared. For the rest of British Columbia, marijuana trafficking files not cleared dropped from three-quarters of all files in 2004 to 59.4% in 2008. Correspondingly, the proportion of trafficking files cleared by charge increased from slightly more than one-fifth (21.0 per cent) of all trafficking files in the rest of British Columbia in 2004 to nearly one-third (32.8 per cent) in 2008. There was also a minor increase in the proportion of files cleared otherwise in 2008 (7.8 per cent) compared to 2004 (3.8 per cent).

Interestingly, while there was an overall reduction in the number of marijuana production files in the rest of British Columbia (-65.2 per cent) similar to that of Surrey, and much lower than that of the Lower Mainland, the effect of this reduction on clearance status was very different. In the other two jurisdictions, the reduction in marijuana production files led to a substantial reduction in the proportion of files not cleared and a large increase in the proportion of files cleared otherwise. However, for the rest of British Columbia, this reduction in the overall number of marijuana production files had very little effect on the proportions of files not cleared, cleared by charge, or cleared otherwise. In effect, there was only a small decrease in the proportion of marijuana production files not cleared between 2004 (76.4 per cent) and 2008 (70.8 per cent). Similarly, there were only modest gains made in the proportion of files cleared by charge in 2008 (16.7 per cent) over 2004 (13.0 per cent) or files cleared otherwise; 12.5% in 2008 compared to 10.6% in 2004 (see Table 6).

Table 6: Percentage Change between 2004 and 2008 for Clearance Status by Offence Type in the Rest of BC

	Number of Files	Not Cleared	Cleared by Charge	Cleared Otherwise
POSSESSION				
2004	8,311	31.7%	9.3%	59.0%
2008	5,659	27.5%	24.2%	48.4%
TRAFFICKING				
2004	2,240	75.2%	21.0%	3.8%
2008	714	59.4%	32.8%	7.8%
PRODUCTION				
2004	3,027	76.4%	13.0%	10.6%
2008	1,052	70.8%	16.7%	12.5%

Conclusion

Given the analyses of police agency marijuana files, there are several key findings with respect to Surrey. There was a large decrease in the overall number of marijuana files generated in Surrey (-65.9 per cent) between 2004 and 2008; a much larger decrease than found for the Lower Mainland or the rest of British Columbia over the same time period. Moreover, in Surrey, this decrease in the number of files generated held for all four marijuana offence types. Again, with the exception of production files for the rest of British Columbia, Surrey percentage decrease was larger than the Lower Mainland's and the rest of British Columbia for the four marijuana offence types.

While there was a decrease in the proportion of files not cleared in Surrey between 2004 and 2008, there were corresponding increases in the proportion of files that were cleared by charge and cleared otherwise. Moreover, regardless of the offence type, Surrey saw decreases in the proportion of marijuana files not cleared. Critically, for the most part, Surrey saw modest increases in the proportion of files cleared by charge, regardless of the offence type. However, there was a substantial increase in the proportion of production files that were cleared otherwise in 2008 compared to 2004.