



MOWAT RESEARCH #169 | AUGUST 2018

# Sharing the Costs of Cannabis in Canada

How the federal and provincial  
governments should split  
cannabis tax revenues

BY ERICH HARTMANN

## Mowat Centre

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# Acknowledgements

The author would like to thank Colin Busby, Luan Ngo and Adrienne Davidson for their valuable feedback on this report. The author would also like to thank Elaine Stam for her design work on this report as well as Reuven Shlozberg, Sunil Johal, and Andrew Parkin for their helpful contributions.

All content and any remaining errors are the sole responsibility of the author. The views and opinions expressed in this report are those of the author and do not necessarily reflect the official position of any other organization or agency.

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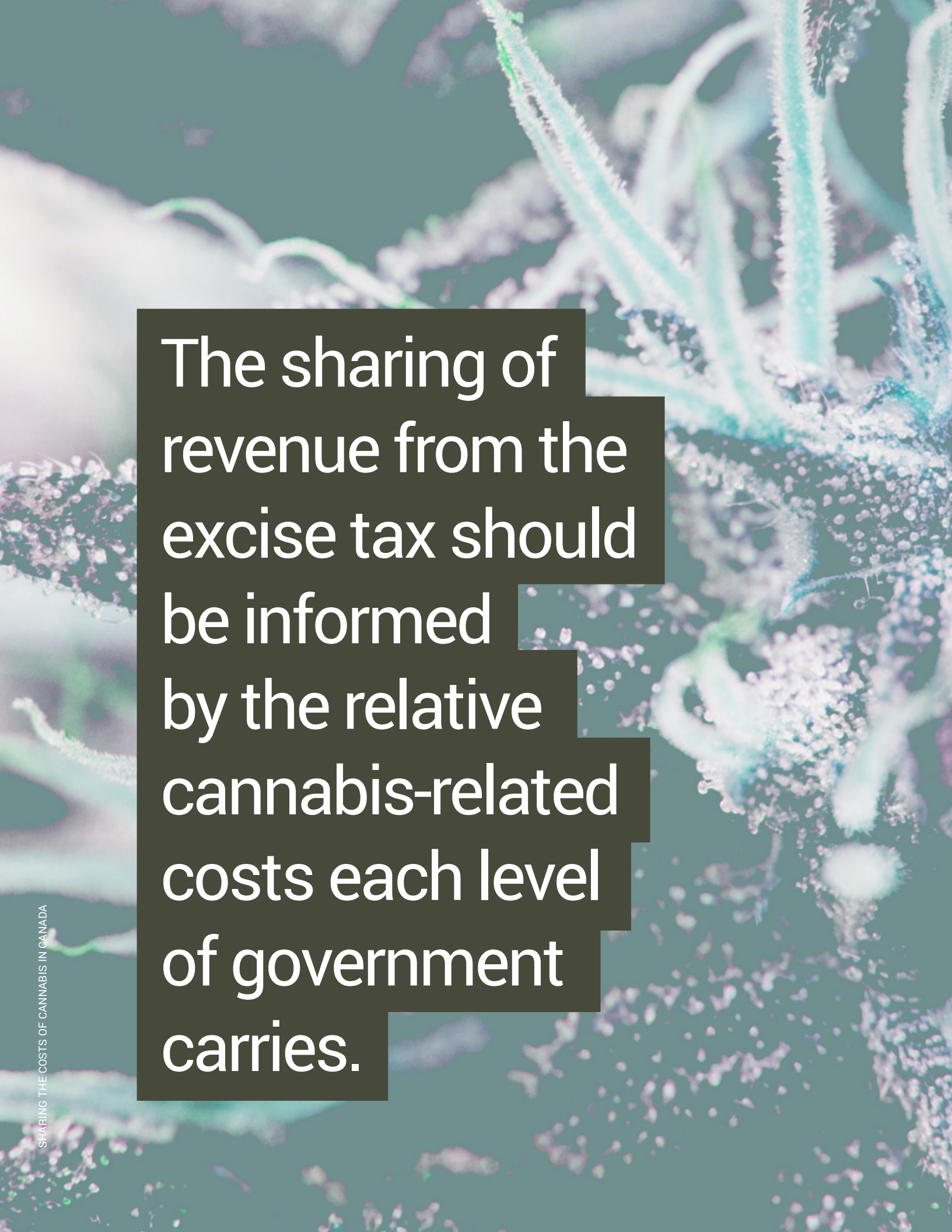
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©2018 ISBN 978-1-77259-069-2

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A close-up photograph of cannabis plant buds, showing the intricate structure of the trichomes and the fuzzy texture of the flowers. The image is overlaid with a semi-transparent teal color. A large black rectangular area is positioned in the center, containing white text.

The sharing of revenue from the excise tax should be informed by the relative cannabis-related costs each level of government carries.



# EXECUTIVE SUMMARY

Canada is scheduled to legalize recreational cannabis on October 17, 2018. As part of the legalized cannabis framework, governments will levy an excise duty on cannabis products. Revenues from that excise duty will be shared between orders of government, with 75 per cent going to the province or territory raising the revenue, and 25 per cent retained by the federal government. The federal government's share will initially be capped at \$100 million. Any federal revenue in excess of that amount will be provided to the provinces and territories. This revenue-sharing arrangement will be subject to review following a two-year period.

While this paper takes no position on the legalization of cannabis, it will argue that the sharing of revenue from the excise tax should be informed by the relative cannabis-related costs each level of government carries. To establish a benchmark, this report first seeks to estimate the cannabis-related costs the federal, provincial-territorial and municipal governments bear prior to legalization.<sup>1</sup> This is done for the health and criminal justice sectors, with sub-estimates for youth justice and cannabis-impaired driving in particular. The paper then discusses how those costs are likely to change post-legalization, and seeks to assess whether the revenue-sharing model will continue to map to those costs.

Overall, it is estimated that the total direct costs to governments of all levels attributable to cannabis use prior to legalization were over \$830.3 million in 2015-16. Over 70 per cent of those costs were borne by provincial-territorial and municipal governments. The single biggest cannabis-related expense by category was the criminal justice sector in which municipalities bore the greatest share of costs.

Legalization will not affect all spending categories or levels of government in an even fashion. The impact legalization will have will be subject to numerous variables unique to each sector that will lead to increased costs in certain instances and decreases in others. Overall, however, provincial-territorial and municipal governments will be exposed to the greatest degree of fiscal risk associated with the legalization of cannabis. In the short-term, a revenue-sharing weighted heavily toward the provincial and territorial governments is warranted compensation for the assumption of that risk. Over the longer term, a flexible approach to revenue-sharing should be taken until the full impacts of cannabis legalization on government spending patterns bear themselves out. For at least the first decade of the cannabis taxation regime, the revenue-sharing mechanism should be subject to ongoing reassessment cycles tied to estimates of which governments bear the costs of cannabis.

<sup>1</sup> Indigenous governments will also be impacted, but a review of the implications for cannabis legalization for Indigenous governments is out of the scope of this report.

# 1 METHODOLOGY

This report will attempt to measure the direct costs that cannabis entails for governments, set out which levels of government bear how much of that cannabis-related cost and how legalization is likely to affect those cost structures. This report limits its analysis only to costs borne directly by governments and not indirect costs attributable to cannabis use such as productivity losses resulting from premature death, disability or prison time and private costs such as vehicle damage. Where possible, cost estimates were taken from a survey of academic literature and government sources. In many instances where recent cost estimates were not readily available, particularly for cannabis-abuse treatment, cannabis-impaired driving and for the entire criminal justice sector, this report created its own estimates based on publicly-available data and academic sources. The 2015-16 fiscal year was chosen as a reference point for this report because, while more recent data do exist in some cases, it is the latest year for which most relevant data are available.

Specific methodologies used to generate cost estimates are discussed in their respective sections. Where possible, this report created intensity-based cost estimates, and otherwise employed bottom-up usage-based and incidence-based approaches where intensity-based cost estimates were not possible. In the creation of this report, numerous data gaps were encountered. These were catalogued and assumptions used to overcome them are outlined. Multiple approaches to modelling the impacts of cannabis on government spending are possible.<sup>2</sup> The cost estimates outlined in this report are at the low end of the range.

With respect to the criminal justice sector specifically, there is no single source of data in Canada which outlines in granular detail how

much federal, provincial-territorial and municipal governments spend on the various elements of the criminal justice system. To generate an estimate of total federal, provincial-territorial and municipal spending for the criminal justice system, this report replicated the methodology used by the Parliamentary Budget Officer's 2013 report "Expenditure Analysis of Criminal Justice in Canada"<sup>3</sup> for 2015-16. The methodology outlined in that report includes only crime-specific spending by governments, and nets out costs such as those associated with the administration of civil law. To estimate that impact of cannabis-related spending on the criminal justice system, data from a series of Statistics Canada and Corrections Canada surveys were applied to these spending data.

2 For example, a 2018 study by the Canadian Substance Use Costs and Harms Scientific Working Group entitled "Canadian substance use costs and harms (2007–2014) estimated the direct costs of cannabis to be \$2.5 billion in 2014.

3 Office of the Parliamentary Budget Officer. (2013). "Expenditure Analysis of Criminal Justice in Canada." [http://www.pbo-dpb.gc.ca/web/default/files/files/Files/Files/Crime\\_Cost\\_EN.pdf](http://www.pbo-dpb.gc.ca/web/default/files/files/Files/Files/Crime_Cost_EN.pdf)



Provincial-territorial  
and municipal  
governments will  
be exposed to the  
greatest degree  
of fiscal risk  
associated with  
the legalization of  
cannabis



# 2 OVERVIEW

Canada is scheduled to legalize recreational cannabis on October 17, 2018. When embarking on any new policy initiative, a standard best practice is to look to examples in other jurisdictions for policy learnings. With cannabis legalization, however, these opportunities are somewhat limited. Uruguay is the only other country to have legalized recreational cannabis, and its distribution model is quite different from Canada is contemplating.<sup>4</sup>

Other subnational jurisdictions have also legalized cannabis. For example, production and retail sale recreational cannabis has been legalized in Colorado, Washington, Alaska, Oregon, Nevada, Massachusetts and California. Cannabis has not been legalized federally in the US, however, which creates a different set of challenges. For example, cannabis producers will have less certainty and cannot operate nationally. State governments are also barred from setting up government-run cannabis retail monopolies since states cannot order their employees to violate federal law.<sup>5</sup> Legalization of cannabis is also a relatively new phenomenon internationally, and has only been implemented in the last few years. The full implications of policy changes may not manifest for a full decade or more.<sup>6</sup>

Other jurisdictions have opted to decriminalize rather than legalize cannabis. Though particular laws vary, decriminalization generally means that possession of a certain amount of cannabis will not lead to criminal charges. Spain, Italy, Portugal, Belgium, Luxembourg, the Netherlands, Germany, Switzerland and Denmark have all adopted measures to “decriminalize” possession of cannabis.<sup>7</sup> Legalization entails legal possession of cannabis but also lifts certain prohibitions on distribution and production.<sup>8</sup>

With nationwide legalization of cannabis, therefore, Canada is running a fairly unique experiment. As such there are no international analogues that map neatly onto the Canadian context. The ability to make precise forecasts of what will happen following the legalization of cannabis are therefore limited. Canada’s decentralized federal system will also present challenges as federal, provincial, territorial and

4 In Uruguay, recreational cannabis can only be purchased through licensed pharmacies or produced through co-ops.

5 Kilmer, Beau. (2014). “Policy designs for cannabis legalization: starting with the eight Ps.” *The American Journal of Drug and Alcohol Abuse*: 40(4), pp. 259–261.

6 Pacula, Rosalie, et al. (2014). “Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco.” *American Journal of Public Health*: Vol 104, No. 6, pp. 1021-1028.

7 [https://lop.parl.ca/About/Parliament/LegislativeSummaries/bills\\_ls.asp?Language=E&ls=C10&Parl=37&Ses=3&source=library\\_prb#6](https://lop.parl.ca/About/Parliament/LegislativeSummaries/bills_ls.asp?Language=E&ls=C10&Parl=37&Ses=3&source=library_prb#6).

8 <https://www.economist.com/the-economist-explains/2014/06/18/the-difference-between-legalisation-and-decriminalisation>.

municipal governments will all be impacted by cannabis legalization.<sup>9</sup> Cannabis has direct impacts on government spending in areas such as health, criminal justice, regulation, taxation and distribution. The issues will affect each level of government in an uneven fashion. This report will attempt to set out which levels of government bear how much of that cannabis-related cost and how legalization is likely to affect these cost structures.

9 Indigenous governments will also be impacted, but a review of the implications for cannabis legalization for Indigenous governments is out of the scope of this report.

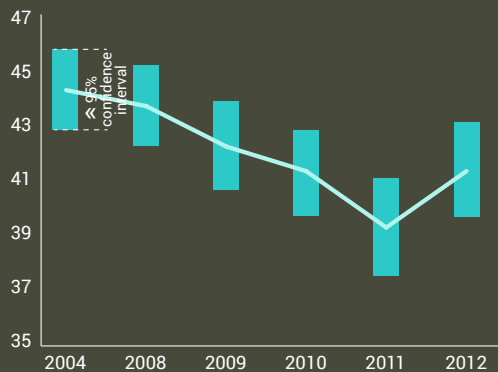


# Cannabis Usage in Canada

Cannabis is the most commonly used illicit drug in Canada.<sup>10</sup> In 2012, 41.5 per cent of Canadians reported having used cannabis at least once in their lifetime, through that figure is somewhat lower than it was in 2004 (see Figure 1). Canadians reporting cannabis use in the past year is also generally on the decline. In 2012, 11.4 per cent of Canadians reported having used cannabis in the past year compared to 15.1 per cent in 2004 (see Figure 2). Those reporting use of cannabis at least once in their lifetime varies from province to province, with a high of 48.7 per cent in British Columbia and a low of 36.4 per cent in New Brunswick (see Figure 3). Past-year use also varies from province to province, with British Columbia again representing the highest reported use at 13.8 per cent. Past-year use was the lowest in Quebec, at 9.0 per cent.

**FIGURE 1**

Percentage of Canadians Reporting Using Cannabis At Least Once in Their Lifetime, 2004 to 2012



Sources: Canadian Addiction Survey 2004, Canadian Alcohol and Drug Use Monitoring Survey 2008 - 2012.

**FIGURE 2**

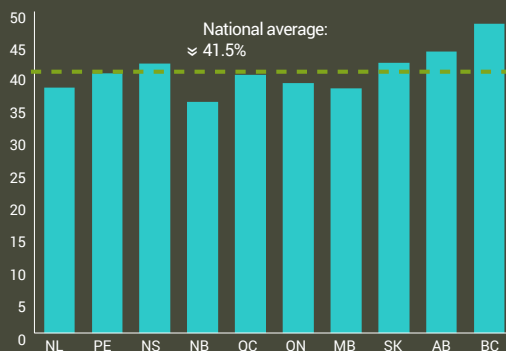
Percentage of Canadians Reporting Using Cannabis At Least Once in the Past Year, 2004 to 2012



Sources: Canadian Addiction Survey 2004, Canadian Alcohol and Drug Use Monitoring Survey 2008 - 2012.

**FIGURE 3**

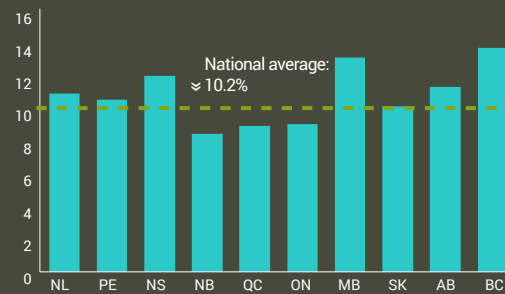
Percentage of Canadians Reporting Using Cannabis At Least Once in Their Lifetime, by Province, 2012



Canadian Alcohol and Drug Use Monitoring Survey 2012.

**FIGURE 4**

Percentage of Canadians Reporting Using Cannabis At Least Once in the Past Year, by Province, 2012



Canadian Alcohol and Drug Use Monitoring Survey 2012.

<sup>10</sup> Canadian Alcohol and Drug Use Monitoring Survey (CADUMS) 2012. Cannabis will not be considered illicit following legalization.

# Revenue

Upon legalization, cannabis products will be subject to both an excise duty and the Goods and Services Tax/Harmonized Sales Tax (GST/HST). Excise duties will be imposed at the higher of either a \$1 flat rate per gram, or 10 per cent of a product price, through a federally administrated coordinated framework (see Figure 5). Excise duties will be levied at the manufacturer level. Revenue from the excise duty will be shared between federal and provincial-territorial governments. Provinces and territories will receive 75 per cent of the excise duty, and the federal government will retain 25 per cent. Any federal revenue in excess of \$100 million will be provided to the provinces and territories. This revenue-sharing arrangement will be subject to review following a two-year period.<sup>11</sup> Cannabis product sales will also be taxable under the GST/HST and is paid directly by consumers at the point of sale.<sup>12</sup>

Revenue generation is not the sole or even main factor how governments will price legal cannabis. Price is an important factor in a user's decision to participate in legal or illegal market.<sup>13</sup> As such, the government's ability to appropriately price legal cannabis will be a key tool to achieving the policy goal of getting consumers to substitute away from black market product. If the after-tax price of legal cannabis is too high, fewer buyers are likely to opt for legal cannabis. The lower the government can price legal cannabis, the more market share they will be able to occupy. In a 2016 report, the Parliamentary Budget Officer (PBO) estimated that at the outset of legalization, the government may have little fiscal space to apply tax without pushing the legal cannabis price significantly above the illegal market price. The scope for revenue generation for governments from cannabis sales, therefore, will not be large in the years immediately following legalization. In the same report, the PBO

**FIGURE 5**

## Excise Duty Framework for Cannabis Products

Cannabis Plant Product	Federal Rates: Higher of the Two Rates Apply		Provincial-Territorial Rates: Higher of the Two Rates Apply	
	Federal Flat Rate	Federal Ad Valorem Rate	PT Flat Rate	PT Ad Valorem Rate
Flower	\$0.25/ gram	2.5 per cent of the dutiable amount of a cannabis product packaged by a cannabis licensee to a purchaser.	\$0.75/ gram	7.5 per cent of the dutiable amount of a cannabis product packaged by a cannabis licensee to a purchaser.
Trim	\$0.075/ gram		\$0.225/ gram	
Seed	\$0.25/ seed		\$0.75/ seed	
Seedling	\$0.25/ seedling		\$0.75/ seedling	

11 <https://www.fin.gc.ca/n17/17-123-eng.asp>.

12 [https://www.fin.gc.ca/n17/data/17-114\\_2-eng.asp](https://www.fin.gc.ca/n17/data/17-114_2-eng.asp).

13 Office of the Parliamentary Budget Officer. (2016). *Legalized Cannabis: Fiscal Considerations*.

estimated that prices for legal cannabis that were roughly in line with prices for illicit cannabis could generate a total tax revenue in the range of \$600 million.<sup>14</sup>

There is little certainty about precisely how much revenue these taxes will generate for governments, even in the short-term. Some provinces are forecasting initial net losses as they absorb initial start up costs. As the system of legalized cannabis production matures, however, greater scope for revenue generation may emerge. Much of this increased margin is likely to come from efficiencies in production. Medical marijuana notwithstanding, cannabis is currently so expensive to produce because prohibition forces producers to operate inefficiently.<sup>15</sup> Additionally, those involved in the illicit cannabis trade require a high rate of return “due to the high risk of imprisonment, confiscation of capital, and unenforceable contracts.”<sup>16</sup> The premium for that risk must be built into the price of the illicit product. In the medium term then, more fiscal space for governments to generate revenue from the sale of legal cannabis may well emerge.

14 The PBO projected that, if the federal and provincial governments apply only sales tax (HST/GST/PST) to legal cannabis, the final after-tax price would be between \$7.48 and \$9.34 per gram, with a best estimate of \$8.41 in 2018. This projection does not take into account difficult-to-predict factors that could affect the price, such as regulatory burden, supply shortages, industry competition, choice of distribution model and industry response to illicit market prices.

15 Caulkins, et al. (2016). *Marijuana Legalization: What Everyone Needs to Know*. Oxford.

16 Ekins, Gavin and Joseph Henchman. (2016). “Marijuana Legalization and Taxes: Federal Revenue Impact.” *Tax Foundation*, No. 509.

## Costs of Cannabis

Whether or not the revenue generated will be sufficient to offset all the costs that cannabis creates is not the main issue. As with all sin taxes, “society pays all the costs regardless of legality but tax revenues help offset those costs.”<sup>17</sup> The revenue they generate should help, at least in part, to cover the societal costs created by the behaviour subject to the tax. Furthermore, the revenues should be allocated between governments according to the degree to which each level of government bears those cannabis-related costs.

Many of those costs are the indirect costs associated mainly with productivity losses resulting from premature death and disability,<sup>18</sup> but also include productivity losses from prison time and private costs such as vehicle damage. This report, however, will examine only the direct costs that cannabis creates and to what degree each level of government carries those costs. To establish a benchmark, this report first seeks to estimate the cannabis-related costs the federal, provincial-territorial and municipal governments bear prior to legalization. This is done for the health and criminal justice sectors, with sub-estimates for youth justice and cannabis-impaired driving in particular. The paper then discusses how those costs are likely to change post-legalization, and seeks to assess whether the revenue-sharing model will continue to map to those costs.

17 Ekins, Gavin and Joseph Henchman. (2016). “Marijuana Legalization and Taxes: Federal Revenue Impact.” *Tax Foundation*: No. 509.

18 Rehm, J., Baliunas, D., Brochu, S., Fischer, B., Gnam, W., Patra, J., Popova, S., Sarnocinska-Hart, A. & Taylor, B. (2006). “The Costs of Substance Abuse in Canada 2002.” *Canadian Centre on Substance Abuse*.

Overall, it is estimated that the total direct costs to governments of all levels attributable to cannabis were over **\$830.3 million** in 2015-16 (see Figure 6).<sup>19</sup> Over 70 per cent of those costs were borne by provincial-territorial and municipal governments. The single biggest cannabis-related expense by category was the criminal justice sector in which municipalities bore the greatest share of costs.

**FIGURE 6**

**Estimated Direct Costs of Cannabis to Federal, Provincial-Territorial and Municipal Governments, 2015-16 (\$ millions)**

	FEDERAL	PROVINCIAL	MUNICIPAL	SUB-TOTAL	SHARE
<b>Health</b>					
Acute Care, Physicians and Prescriptions	31.0	104.9		135.9	
Abuse/Dependence Treatment	15.9	54.1		70.0	
Motor Vehicle Accidents	5.7	19.3		25.0	
<b>Sub-Total</b>	<b>52.6</b>	<b>178.3</b>		<b>230.9</b>	<b>27.8%</b>
<b>Criminal Justice</b>					
Policing	63.9	67.7	216.9	348.5	
Courts	48.0	57.1		105.1	
Corrections	64.9	30.8		95.7	
<b>Sub-Total</b>	<b>176.7</b>	<b>155.6</b>	<b>216.9</b>	<b>549.2</b>	<b>66.1%</b>
<b>Youth Justice</b>					
Courts	4.5	7.6		12.1	
Corrections	1.7	8.8		10.5	
<b>Sub-Total</b>	<b>6.2</b>	<b>16.4</b>		<b>22.6</b>	<b>2.7%</b>
<b>Cannabis-Impaired Driving</b>					
Policing	2.1	2.3	7.2	11.6	
Courts	3.0	11.0		14.0	
Corrections		2.0		2.0	
<b>Sub-Total</b>	<b>5.1</b>	<b>15.3</b>	<b>7.2</b>	<b>27.6</b>	<b>3.3%</b>
<b>Total</b>	<b>240.6</b>	<b>365.6</b>	<b>224.1</b>	<b>830.3</b>	
<b>Share</b>	<b>29.0%</b>	<b>44.0%</b>	<b>27.0%</b>		<b>100.0%</b>

19 This estimate does not include any expenses incurred by the Canada Border Services Agency related to cannabis enforcement, as there were insufficient data to create an estimate. For a full discussion, see [Section 7: Border](#).

# The Burden of Cannabis-Related Costs by Level of Government (\$ millions)

Total Direct Costs to Governments (pre-legalization) **\$830.3**



**Provinces, Territories & Municipalities**

\$580.7

**71%**

**29%**

\$240.6

**Federal Government**



**\$178.3** ▲

**Health**

**\$52.6** -



**\$327.5** ▼

**Criminal Justice**

**\$176.7** ▼



**\$16.4** ▲

**Youth Justice**

**\$6.2** ▲



**\$22.5** ▲

**Cannabis-Impaired Driving**

**\$5.1** ▲



Degree of risk post-legalization:

▲ INCREASED COSTS  
▼ DECREASED COSTS

▲▲ LARGER INCREASED COSTS  
▼▼ LARGER DECREASED COSTS

— NONE



Though provincial-territorial and municipal governments are estimated to have shouldered over 70 per cent of those costs, this does not necessarily imply that they should therefore receive 70 per cent of the new excise tax. The estimate of the cannabis-related direct costs on government above reflects a benchmark prior to legalization. Legalization will substantially alter the cost profile outlined in Figure 6 above both by sector and by level of government.

Governments will need to incur several new costs to manage the regulation, distribution and zoning elements of the legalization framework. All governments will face these new types of costs. While spending in these areas will affect the relative shares of spending between levels of government, they will be fairly predictable or controllable in nature. How legalization will affect more open-ended health and justice costs, however, involves many unknowns. It is unclear exactly how and when changes brought on by legalization will manifest themselves in these sectors.

The experience in other jurisdictions and with other substances has shown that it takes years, if not decades for such changes to take root and fully stabilize. Predicting exactly how and when the health and criminal justice costs will change as a result of legalization is certain to be inaccurate. It is possible, however, to outline what the high-level risks are, both upside and downside, and which governments will benefit from them or bear them. In light of a lack of data, these risks should also be taken into account in determining the division of revenues as they will inform the likeliest direction in which costs will change.

# Risk Assessment

## Upside Risks

### **Criminal Justice:**

The largest upside risk, or potential for cost savings, is in the criminal justice sector. The sector is currently the largest contributor to direct cannabis-related costs, with municipalities carrying the largest share. Municipalities should also be the primary beneficiary of the potential cost savings. Pre-legalization, possession offences were responsible for over 60 per cent of cannabis-related criminal justice costs. In the short-term, the relaxation of possession limits should lead to fewer offences and tangible fiscal savings. Municipalities should realize over half of the fiscal benefit from a reduction in possession.

In the longer term, supply offences, which are less frequent but more expensive to enforce, should also decline. This will largely depend on the success of the myriad policy approaches to eliminate the market for illicit cannabis, including pricing. These costs, particularly with respect to corrections, are borne mostly by the federal government. Overall, attempts to forecast how legalization will affect the mix between possession and supply offences, and which governments will reap the associated cost savings are doomed to be inaccurate. More time, and importantly more data, will be needed to measure the actual effects of legalization on the justice sector.

### **Border:**

Estimating the costs of cannabis-related border enforcement is difficult due to lack of data. However, legalization will lead to a dramatic increase in the domestic production of legal cannabis, which should drastically alter the value proposition of attempting to import illicit cannabis over the border.

## Downside Risks

### **Health:**

More ready access to cannabis could lead to increases in health costs, if high-risk cannabis use rises. Provinces are solely responsible for administering the public health system. While federal transfers support provincial health spending, they are not reflective of actual health costs and will not be responsive to any risks that legalization might create. Provincial governments, therefore, will be exposed to the all of the risk from the potential for increased health costs.

### **Youth Justice:**

Under legalization, a separate category of criminal possession offence will exist for youth that will not exist for adults. If this differential treatment increases youth exposure to the criminal justice sector, provinces and territories will disproportionately bear the associated youth justice costs.

### **Cannabis-Impaired Driving:**

While cannabis-impaired driving does not currently have a large impact on the criminal justice system, studies suggest that the practice is disturbingly prevalent, and may be approaching the same level of alcohol-impaired driving. While legalization per se may not affect the prevalence of cannabis-impaired driving, improvements in roadside-testing tools and criminal prosecution practices are likely to emerge post-legalization. Should cannabis-impaired driving indeed prove to be anywhere near as prevalent as alcohol-impaired driving, the increased criminal justice costs could be staggering. These costs could potentially become the largest cannabis-related expense for the criminal justice system post-legalization, and the increased law enforcement and court costs would be borne disproportionately by municipal and provincial

governments, respectively. A considerable investment by all governments in programs to educate and prevent cannabis-impaired driving would be worthwhile to increase public safety and help forego these potential costs.

## New Predictable or Controllable Costs

### **Regulation:**

The legalization of cannabis will also entail other costs that did not exist before. The federal government will be responsible for the costs of regulating the production of cannabis, as well as its taxation.

### **Distribution:**

Provinces and territories will be responsible for wholesale and retail distribution. Individual provinces have opted for different distribution models which entails a trade-off between cost and policy control. Regulation of private retailers represents less cost for government, while government-run monopolies retain control of more policy levers.

### **Municipal Zoning:**

Municipalities will play an important role in updating zoning and building codes, and in the enforcement of smoking restrictions. In some provinces, they will also play an active role in advising on locations for retail locations and business licensing

### **Research, data and public education:**

Finally, the legalization of cannabis will also lead to demands for increased discretionary spending in research, public education and data. All governments will be involved in these efforts to some degree.

## Allocation of Revenues

Overall, provinces and municipalities bear both the greatest cost of cannabis-related spending pre-legalization and the preponderance of downside fiscal risk associated with legalization. From that perspective, a revenue-sharing arrangement significantly weighted in their favour is entirely justifiable for the time-being.

In determining how legalization will ultimately impact cannabis-related costs to governments, many variables will be at play. When the current intergovernmental revenue-sharing arrangement for cannabis taxes comes up for review in two years, an approach that is both a measured and flexible should be taken.

First, the revenues should be allocated according to an updated assessment of the degree to which each level of government bears cannabis-related costs. This assessment, rather than being tied to actual costs, should be updated to reflect

changing patterns in underlying cost drivers. This would remove any incentive for either order of government not to contain costs and thus increase their share of revenue going forward.

However, two years will not be enough time to establish a definitive picture of which governments will carry the cost burden over the long term, so a commitment to flexibility will be important. Secondly, therefore, the revenue splits should be re-evaluated on an ongoing basis, and updated to reflect evolving cost structures as the system develops and ultimately matures.

These evaluations should be tied to established reassessment cycles, perhaps occurring every five years, similar to how federal-provincial fiscal arrangements have traditionally been renewed. This re-evaluation process should last for at least the first decade of the cannabis taxation regime, if not longer, as it will take time for the effects of legalization to fully materialize.

### FIGURE 7

#### Risk Assessment

Upside Risks	
Risk	Government Benefitting from Upside Risk
Decrease in possession offences	Provincial and Municipal
Decrease in supply offences	Federal
Decrease in importation	Federal

Downside Risks	
Risk	Government Bearing Downside Risk
Increase in health costs	Provincial
Increase in youth justice costs	Provincial
Increase in enforcement of cannabis-impaired driving	Municipal
Increase in prosecution of cannabis-impaired driving	Provincial

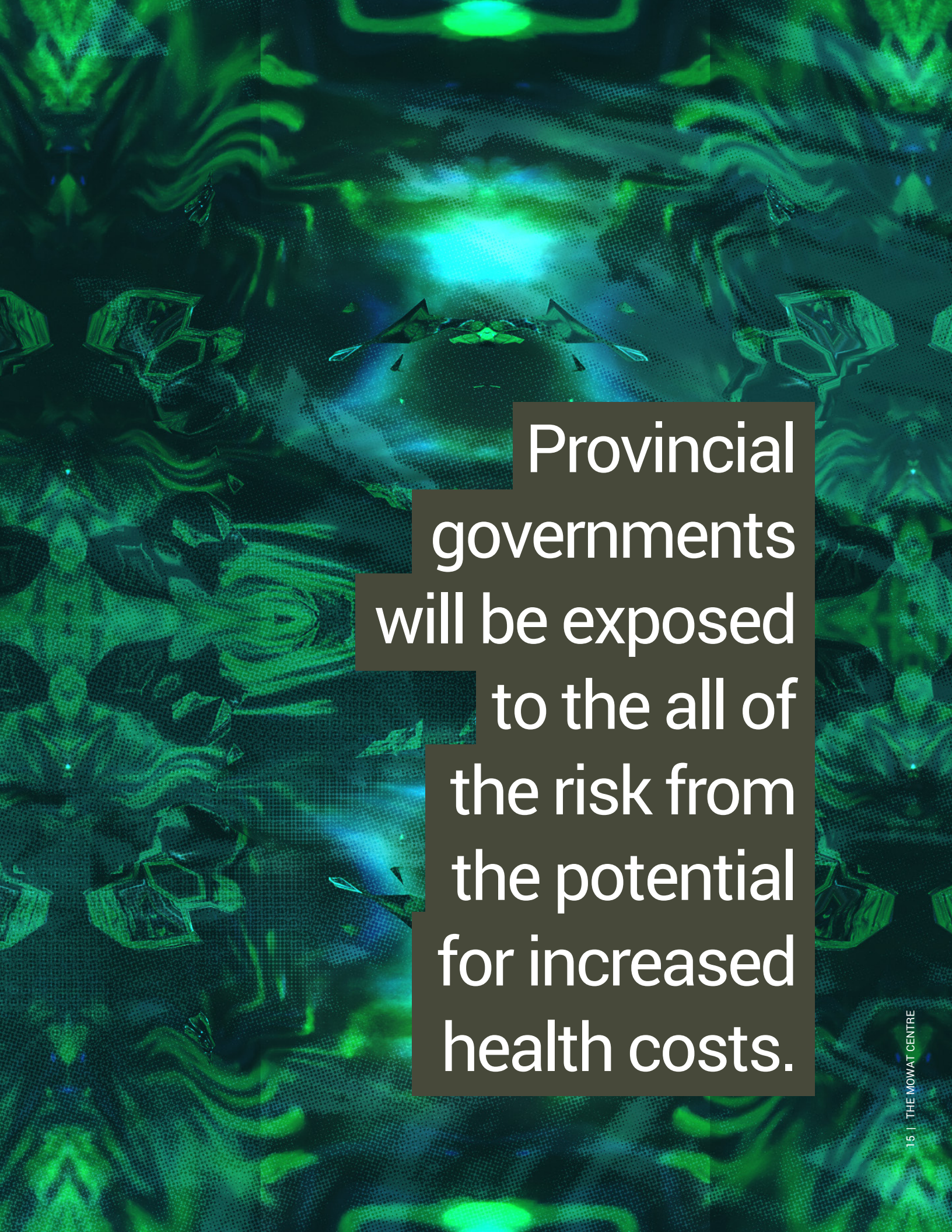
Predictable or Controllable Costs	
Cost	Government Bearing Cost
Regulation of production	Federal
Wholesale and retail distribution	Provincial
Municipal zoning	Municipal
Research, data and public education	All governments



Governments will also have access to more detailed data than the publicly-available data that were used for this report. It is hoped, however, that this report will serve as a useful guide to informing a process to measure the direct costs that cannabis creates for governments, the degree to which each level of government bears those costs, and how legalization is likely to impact those underlying costs structures.

Agreeing on a process to measure cannabis-related costs in advance of the next review of the revenue-sharing arrangement will be important to depoliticize a potentially contentious federal-provincial negotiation. While the time horizons for measuring the impacts of legalization on the underlying cost structures are long, the time to start laying out a process for accurately measuring them is now.





Provincial  
governments  
will be exposed  
to the all of  
the risk from  
the potential  
for increased  
health costs.



# 3 DIRECT HEALTH CARE COSTS

In general, the health risks posed by cannabis use are modest, especially at the levels and patterns of use reported by most adult cannabis users.<sup>20</sup> The evidence suggests that the risks and harms of cannabis are also lower than those of either tobacco or alcohol.<sup>21</sup> That said, “cannabis is not a benign drug: there are risks and harms associated with its use.”<sup>22</sup> Cannabis use, especially heavy use, is associated with disorders that can lead to hospitalization requiring acute care, and can contribute to other long-term health issues. Cannabis is also frequently identified as a problem substance for those seeking addiction treatment in public facilities, second only to alcohol. Cannabis-impairment also significantly increases the risk of motor vehicle accidents. Driving while impaired by cannabis is surprisingly prevalent in Canada. All of the above create significant direct costs for the public health system. This report estimates that the direct health costs attributable to cannabis use were \$231 million in 2015-16 (see Figure 8).<sup>23</sup>

**FIGURE 8**

**Estimated Impact of Cannabis on Direct Health Care Costs by Sector and Order of Government, 2015-16 (\$ millions)**

	Federal	Provincial	Total	Share
Acute Care, Physicians and Prescriptions	31.0	104.9	135.9	58.9%
Abuse/Dependence Treatment	15.9	54.1	70.0	30.3%
Motor Vehicle Accidents	5.7	19.3	25.0	10.8%
<b>Total</b>	<b>52.6</b>	<b>178.3</b>	<b>230.9</b>	<b>100.0%</b>
<b>Share</b>	<b>22.8%</b>	<b>77.2%</b>	<b>100.0%</b>	

20 Centre for Addiction and Mental Health. (2014). *Cannabis Policy Framework*.

21 Room, Robin, et al. (2010). *Cannabis Policy: Moving Beyond Stalemate*. Oxford.

22 Canadian Centre on Substance Use and Addiction. (2017). "Cannabis." Canadian Drug Summary. <http://www.ccsa.ca/Resource%20Library/CCSA-Canadian-Drug-Summary-Cannabis-2017-en.pdf>.

23 For a point of reference, Rehm, Jürgen et al. (2006). *The Costs of Substance Abuse in Canada 2002*. Canadian Centre on Substance Use and Addiction, estimated that the direct health costs associated with cannabis use were \$73 million in 2002. Adjusted for inflation, this would have been \$92 million in 2015-16.

Because of their role in administering the public health system, provinces directly bear these costs. The federal government does help support provincial health spending through the Canada Health Transfer. In 2015-16, federal transfers represented 22.8 per cent of provincial-territorial health spending. However, federal transfers are not reflective of actual health costs and will not be responsive to any increased health costs that legalization of cannabis might create. Although it is not clear what exactly what effect cannabis legalization might have on health costs, provincial governments will be exposed to all of the fiscal risk associated to health costs that it might create.

## Acute Care, Physicians and Prescription Drugs

While fatal overdoses resulting from cannabis use are exceedingly rare, “a significant number of people end up in hospital emergency departments every year for reasons related to their marijuana use.”<sup>24</sup> According to a 2014 Canadian Centre on Substance Abuse (CCSA) study on the impact of substance-abuse disorders on the hospital system, the number of hospital stays for those with a primary diagnosis of disorders due to the use of cannabinoids rose by approximately 44 per cent between 2006 and 2011.<sup>25</sup> While the number of hospital stays due to cannabinoid-related disorders (1,582 in 2011) were a fraction of those attributable to alcohol-use disorders (19,617), both represented as average hospital stay of about 9-11 days. Moreover, the total amount of days spent in hospital due to cannabinoid-

24 Caulkins, et al. (2016). *Marijuana Legalization: What Everyone Needs to Know*. Oxford.

25 Canadian Centre on Substance Abuse. (2014). “The Impact of Substance Use Disorders on Hospital Use.” <http://www.ccsa.ca/Resource%20Library/CCSA-Substance-Use-Hospital-Impact-Report-2014-en.pdf>.

related disorders increased by 39 per cent from 12,321 to 17,196 between 2006 and 2011. Given these factors, the CCSA estimated that the total direct costs associated with hospitalizations due to cannabinoids was \$14 million in 2011. In a 2018 report, the Canadian Substance Use Costs and Harms Scientific Working Group updated this estimate to be \$38.8 million in 2014. An additional \$95.6 million in physician time and prescription drugs costs were also added to the estimate.<sup>26</sup> Adjusted for inflation, this represents a cost of \$136 million in 2015-16. Cannabis use has also been associated with increased risk for myocardial infarction among older adults with hypertension, ischaemic or cerebrovascular disease,<sup>27</sup> and for other diseases such as lung cancer and schizophrenia.<sup>28</sup> These risks are not included in this estimate.

## Cannabis-Abuse/ Dependence Treatment

Mental health and substance use conditions represent a high burden of disease due to the early age of onset – typically before age 24 – and need for ongoing treatment and support across a patient’s life span.<sup>29</sup> Cannabis occupies a complicated space within the universe of substance use conditions. Cannabis poses less addictive risk than other drugs such as tobacco,

26 Canadian Substance Use Costs and Harms Scientific Working Group. (2018). “Canadian substance use costs and harms (2007–2014). Prepared by the Canadian Institute for Substance Use Research and the Canadian Centre on Substance Use and Addiction.

27 Fischer, Benedikt et al. (2011). “Lower Risk Cannabis Use Guidelines for Canada (LRCUG): A Narrative Review of Evidence and Recommendations.” *Canadian Journal of Public Health*: 102(5), pp. 324-27.

28 Imtiaz, Sameer, et al. (2015). “The Burden of Disease Attributable to Cannabis-Use in Canada in 2012.” *Addiction*: 11, 353-362.

29 British Columbia Ministry of Health. (2014). *Setting Priorities for the B.C. Health System*. <https://www.health.gov.bc.ca/library/publications/year/2014/Setting-priorities-BC-Health-Feb14.pdf>.

alcohol, cocaine, stimulants or heroin, in terms of both likelihood and degree of dependence.<sup>30</sup> That said, cannabis use is particularly prevalent, and as a result, many people do struggle with dependence. While most cannabis users will not become addicted, studies suggest that approximately one in ten lifetime users progress from chronic use to a cannabis dependence syndrome.<sup>31</sup> According to the 2012 Canadian Community Health Survey: Mental Health Profile,<sup>32</sup> almost 2 million Canadians were estimated to have experienced cannabis abuse or dependence sometime in their lives compared to the 12 million Canadians estimated to have engaged in cannabis use. In 2012, 1.3 per cent of Canadians aged 15 and older met the criteria for cannabis abuse or dependence.<sup>33</sup>

Provinces offer addiction treatment services for a wide array of substance abuse problems, including for cannabis dependence, and in most provinces over 90 per cent of these services are publicly funded and in some cases are fully covered.<sup>34</sup> There is considerable interprovincial variation in the demand for treatment for cannabis use disorders.<sup>35</sup> For example, a 2007 study found that admissions into addiction

treatment programs where cannabis was reported as a problem substance ranged from 16 per cent in British Columbia 41 per cent in Quebec, with a mean of 26 per cent across Canada.<sup>36</sup> In 2010-11 in Ontario, 32.6 per cent of admissions into treatment reported cannabis as a problem substance.<sup>37</sup>

However, the above statistics account for the percentage of admissions where cannabis is one of potentially multiple identified problem substances, as patients are often admitted for concurrent addictions. As such, attempting to estimate the share of provincial-territorial addictions treatment spending attributable to cannabis use from numbers that include it as one of multiple problem substances would overestimate its impact. For a clearer picture on how prevalent cannabis use disorders are in addiction treatment programs, one must better isolate for its impact.

The Centre for Addiction and Mental Health's Drug and Alcohol Treatment Information System (DATIS) has detailed data on admissions by substance in Ontario that makes isolating for the impact of cannabis use disorder possible. Between 2006-07 and 2010-11 the client population measured by DATIS averaged 104,405, and this population averaged 1.9 problem substances per client. On average, cannabis was reported as a problem substance in 33,586 incidences, or 16.7 per cent of the total reported incidence of a problem substance requiring addiction treatment (see Figure 9). This is roughly consistent with literature from over a decade ago which indicates that cannabis was a primary problem substance in approximately 13 per

30 Room, Robin, et al. (2010). *Cannabis Policy: Moving Beyond Stalemate*. Oxford.

31 Urbanoski, Karen, Carol Strike, and Brian Rush. (2005). "Individuals Seeking Treatment for Cannabis-Related Problems in Ontario: Demographic and Treatment Profile." *European Addiction Research*, 11: 115-123.

32 The Canadian Community Health Survey: Mental Health Profile conducted 25,113 valid interviews and weighted to survey data to be representative of the covered population and not just the sample itself. <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5015>.

33 Canadian Centre on Substance Use and Addiction. (2017). "Cannabis." Canadian Drug Summary. <http://www.ccsa.ca/Resource%20Library/CCSA-Canadian-Drug-Summary-Cannabis-2017-en.pdf>.

34 Rush, Brian and Karen Urbanoski. (2007). "Estimating the Demand for Treatment for Cannabis-related Problems in Canada." *International Journal of Mental Health and Addiction*, 5: 181-186.

35 Rush, Brian and Karen Urbanoski. (2007). "Estimating the Demand for Treatment for Cannabis-related Problems in Canada." *International Journal of Mental Health and Addiction*, 5: 181-186.

36 Rush and Urbanoski. (2007).

37 CAMH DATIS Database Client Characteristics of Open Admissions to Substance Abuse Treatment Programs in Ontario, 2006-11.

cent of clients in Ontario’s treatment system.<sup>38</sup> Extrapolating from Public Accounts data from Ontario, Quebec and Alberta, it is estimated that provinces collectively spent over \$400 million total on addiction treatment services in 2015-16. Cannabis use disorders therefore, would have accounted for \$70 million, or 16.7 per cent of that total.

## FIGURE 9

### Incidence of Cannabis Reported as a Problem Substances as Share of Total Problem Substances Identified at Admission into Addiction Treatment in Ontario, 2006-07 to 2010-11

	2006-07	2007-08	2008-09	2009-10	2010-11	Average	
Total Clients	102,040	103,345	102,272	109,954	104,413	104,405	
Number of Clients Reporting Problem Substances, by Substance							
Cannabis	32,851	33,116	33,780	34,182	34,001	33,586	
Alcohol	69,786	70,244	70,539	72,242	71,689	70,900	
Tobacco	19,002	19,283	20,629	22,798	22,285	20,799	
Other Substances <sup>39</sup>	77,514	79,136	76,610	75,269	72,609	76,228	
					Average problem substance per client		1.9
					Cannabis share of total problem substances		16.7%

Source: CAMH DATIS Database Client Characteristics of Open Admissions to Substance-Abuse Treatment Programs in Ontario, 2006-11.

This estimate could be considerably refined using detailed treatment program admissions data from all provinces and territories. While this estimate does not attempt to measure the complexity of cannabis cases compared to those of other addictions, it also does not count other direct treatment-related costs such as supportive housing, due to insufficient data.

38 Urbanoski, Karen, Carol Strike, and Brian Rush. (2005). "Individuals Seeking Treatment for Cannabis-Related Problems in Ontario: Demographic and Treatment Profile." *European Addiction Research*; 11: 115-123.

39 Other Substances includes: cocaine, crack, stimulants, benzodiazepines, barbiturates, heroin, opium, prescription opioids, over-the-counter codeine, hallucinogens, glue & other inhalants, steroids, ecstasy, other psychoactive drugs, and methamphetamines. Detailed information on the prevalence all of these substances with respect to admissions are available in CAMH's DATIS.

# Cannabis-Related Motor Vehicle Accidents

Many cannabis users underestimate the risks of driving while under the influence of the drug, however, cannabis-impairment affects driving performance.<sup>40</sup> According research based on simulated closed-course driving, “being stoned seems to interfere more with the mechanical process of driving and the ability to respond to unexpected situations than it does with judgement.”<sup>41</sup> Yet cannabis-impaired driving is surprisingly prevalent (for a full discussion, see Section 6). A lack of awareness about the risks of driving after drug use and a lack of fear of being charged and convicted are contributing factors to the prevalence of this behaviour.<sup>42</sup>

The risks, however, are substantial. Compared to sober driving, cannabis use increases the risks of a crash. Estimates of exactly how much cannabis-impairment increases the risk of a motor vehicle accident vary<sup>43</sup>, but a recent meta-analysis of studies concluded that cannabis doubles the risk of crash involvement. This risk increases significantly if cannabis is combined with alcohol.<sup>44</sup>

To estimate the direct health costs of cannabis-impaired driving, two pieces of data are needed: the health costs of motor vehicle accidents and the incidence of cannabis-impaired driving leading to motor vehicle accidents. A 2016 study conducted for the Government of Ontario attempted to estimate the cost of public health care services provided to Ontario residents injured as a result of a motor vehicle accident.<sup>45</sup> It was observed that per patient health care costs in the initial year of the motor vehicle accident averaged approximately \$3,000 with hospital and physician services representing most of those costs. Motor vehicle accidents typically require multiple years of medical intervention and interaction with the health system, so the stock of accident victims from previous years also represents a flow in patient interactions into

40 Caulkins, et al. (2016).

41 Caulkins, et al. (2016).

42 Asbridge M, Poulin C, Donato A. Motor vehicle collision risk and driving under the influence of cannabis: Evidence from adolescents in Atlantic Canada. *Accid Anal Prev.* 2005;37:1025–1034.; Fischer B, Rodopoulos J, Rehm J, Ivsins A. Toking and driving: characteristics of Canadian university students who drive after cannabis use—an exploratory pilot study. *Drug-Edu Prev Polic* 2006;13: 179–187.; Patton D, Brown D, Broszeit B, Dhaliwal J. Substance Use Among Manitoba High School Students. Winnipeg, MN, Canada: Addictions Foundation of Manitoba; 2001.; Patton D, Mackay T-L, Broszeit B. Alcohol and other Drug Use by Manitoba Students. Winnipeg, MN, Canada: Addictions Foundation of Manitoba; 2005.

43 Gerberich SG, Sidney S, Braun BL, Tekawa IS, Tolan KK, Quesenberry CP. Marijuana use and injury events resulting in hospitalization. *Ann Epidemiol* 2003;13(4):230-7 estimates the increase in collision-related morbidity and mortality is 1.5 times; Mura P, Kintz P, Ludes B, Gaulier JM, Marquet P, Martin-Dupont S, et al. Comparison of the prevalence of alcohol, cannabis and other drugs between 900 injured drivers and 900 control subjects: results of a French collaborative study. *Forensic Sci Int* 2003;133(1-2):79-85 estimates the increase in collision-related morbidity and mortality is threefold.

44 Beirness DJ, Beasley EE, Boase P. A comparison of drug use by fatally injured drivers and drivers at risk. In: *Proceedings of the 20th International Conference on Alcohol, Drugs and Traffic Safety T-2013; Brisbane, Australia: International Council on Alcohol, Drugs, and Traffic Safety (ICADTS); 2013.*

45 Bai, Yu Qing, Goncalo Santos and Walter Woodchis. (2016). “Cost of Public Health Services for Ontario Residents as a Result of a Motor Vehicle Accident.” *Health System Performance Research Network.*



the current year, albeit at lower average costs in years subsequent to the incident. The study's calculation of the present value of future health costs attributable to motor vehicle accidents was \$5,495 on average per incident in 2013. This cost would increase to \$5,665 in 2015-16 after adjusting for inflation. Multiplying this by an estimated 4,437 traffic injuries attributable to cannabis use country-wide,<sup>46</sup> indicates that the direct health costs attributable to cannabis-impaired driving was \$25 million in 2015-16. This estimate could be low as it does not attempt to measure incidents resulting in fatalities.

## What is likely to happen next?

It is not clear how legalization will affect the health costs associated with cannabis use. Canada is running a fairly unique experiment with nationwide legalization, so there are few international analogues to learn from. A lesson from the tobacco and alcohol experience, however, "is that the full implications of policy changes may not manifest within the first 10 years – let alone the first few years. There can be important consequences that accumulate slowly over time, through generational replacement and industry adaptation."<sup>47</sup>

More ready access to cannabis could lead to increases in higher-risk use, which could in turn lead to increases in health costs. Governments are taking steps, however, to mitigate against these potential health risks (see Text Box).

While it is not clear whether legalization will lead to increased health costs, it is clear that the risk of those increased costs are not shared equally between governments. Provinces are solely responsible for administering the public health system. While federal transfers support provincial health spending, they are not reflective of actual health costs and will not be responsive to any risks that legalization might create. Provincial governments, therefore, will be exposed to the all of the risk from the potential for increased health costs.

46 A midpoint between the 4,407 cannabis-related motor vehicle accidents estimated by Wettlaufer, Ashley et al. (2017). "Estimating the Harms and Costs of Cannabis-Attributable Collisions in the Canadian Provinces." *Drug and Alcohol Dependence*: 173 (2017) pp. 185-190, and the 4,481 estimated by Imtiaz, Sameer, et al. (2015). "The Burden of Disease Attributable to Cannabis-Use in Canada in 2012." *Addiction*: 11, 353-362, was taken.

47 Pacula, Rosalie, et al. (2014). "Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco." *American Journal of Public Health*: Vol 104, No. 6, pp. 1021-1028.



## Mitigating Potential Health Risks of Cannabis

A key to mitigating the potential adverse health effects of cannabis will be governments' ability to limit access to it within a legalized framework. The experience with alcohol and tobacco has shown that two key policy levers to limit access are price and retail density. Increases in minimum prices of alcoholic beverages have been shown to substantially reduce alcohol consumption.<sup>48</sup> The experience with tobacco, however, has also shown that increases in price also lead to substitution to contraband and untaxed product.<sup>49</sup> This is in direct tension with the policy goal of stamping out the illicit market for cannabis, so pricing cannabis products will be a delicate balancing act that will require constant readjustment. As an interim step, research suggests that approaches to limit retail density will help, as "inconvenience is a cost that helps constrain consumption."<sup>50</sup>

Restricting access to cannabis among youth will also be important. Young people are at a higher level of risk for experiencing negative health impacts from cannabis use. For example, heavy or regular cannabis use in early adolescence can have lasting effects on the developing brain.<sup>51</sup> Early age of initiation is also linked with heavy use and dependence. Evidence from longitudinal studies in the US estimate that the risk of developing cannabis dependence to be higher among users who initiated in adolescence.<sup>52</sup> To the greatest extent possible then, measures should be taken to delay use until late adolescence or better yet early adulthood.<sup>53</sup> For example, the alcohol and tobacco literature have demonstrated positive relationships between tobacco and alcohol advertising, promotion, sponsorship, and youth's use,<sup>54</sup> and as such, regulatory measures to limit advertising of cannabis products are likely to be effective.

48 Stockwell, Tim, et al. (2011). "Does Minimum Pricing Reduce Alcohol Consumption? The Experience of a Canadian Province." *Addiction*: 107, pp. 912-920.

49 Galbraith, John W. and Murray Kaiserman. (1997). "Taxation, smuggling and demand for cigarettes in Canada: Evidence from time-series data." *Journal of Health Economics*: 16(3), pp.287-301.

50 Pacula, Rosalie, et al. (2014). "Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco." *American Journal of Public Health*: Vol 104, No. 6, pp. 1021-1028.


51 Porath-Waller, Amy, et al. (2015). "Young Brains on Cannabis: It's Time to Clear the Smoke." *Clinical Pharmacology & Therapeutics*: Vol 97, No. 6, pp. 551-552.

52 Anthony, J.C. (2006). "The epidemiology of cannabis dependence." In: Roffman RA, Stephens RS, eds. *Cannabis Dependence: Its Nature, Consequences and Treatment* 58–105(Cambridge University Press, Cambridge,UK, 2006). In Porath-Waller, Amy, et al. (2015). "Young Brains on Cannabis: It's Time to Clear the Smoke." *Clinical Pharmacology & Therapeutics*: Vol 97, No. 6, pp. 551-552.

53 Fischer, Benedikt et al. (2011). "Lower Risk Cannabis Use Guidelines for Canada (LRCUG): A Narrative Review of Evidence and Recommendations." *Canadian Journal of Public Health*: 102(5), pp. 324-27.

54 Pacula, Rosalie, et al. (2014). "Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco." *American Journal of Public Health*: Vol 104, No. 6, pp. 1021-1028.





All governments should realize considerable savings in the criminal justice sector as a result of legalization.

# 4 CRIMINAL JUSTICE SYSTEM

In Canada, the parameters of the Criminal Code are set by the federal government. However, the federal, provincial, territorial and municipal governments all share in funding and administering certain aspects of the criminal justice system. The following section will briefly lay out the features of the criminal justice system, break down which governments do what within that system and outline the crime-related spending undertaken by each. That will be followed by an assessment of how cannabis-related offences impact each element of the justice sector and how legalization is likely to change that. The implications of cannabis legalization for the youth justice system, traffic offences and the border will all be dealt with separately.

Taken together, provincial-territorial and municipal governments bear the majority of the criminal justice costs associated with cannabis-related offences. Policing represents the single largest criminal justice sector expense associated with cannabis-related offences, with municipal governments shouldering over 60 per cent of that burden. The criminal court costs of trying cannabis-related offences are shared roughly equally between the federal and provincial-territorial governments. Due to the considerable expense of incarcerating more serious offences, which come with longer sentences, the federal government bears most of the burden of cannabis-related corrections costs (see Figure 10).

**FIGURE 10**

**Estimated Impact of Cannabis-Related Offences on the Criminal Justice System by Sector and Level of Government in 2015-16, (\$ millions)**

	Federal	Provincial	Municipal	Total	Share
Policing	63.9	67.7	216.9	348.5	63.5%
Courts	48.0	57.1		105.1	19.1%
Corrections	64.9	30.8		95.7	17.4%
<b>Total</b>	<b>176.7</b>	<b>155.6</b>	<b>216.9</b>	<b>549.2</b>	
Share	32.2%	28.3%	39.5%	100.0%	

All governments should realize considerable savings in the criminal justice sector as a result of legalization, however those costs will not completely disappear. How cannabis legalization influences criminal justice costs, and the relative burden of those costs across governments, will depend on a number of factors. With thresholds for legal cannabis possession set to increase under legalization, the number of police-reported incidents of cannabis-related offences should

decrease significantly. All things being equal, this should lead to substantial reductions in criminal justice sector costs. However, the degree to which the laws under the legalized cannabis regime will affect the complexity and length of court cases, and length of sentences for cannabis-related offences is less clear. Some time will need to pass to before it is possible to properly measure how legalization affects how these laws will be enforced, how courts will respond to the new environment and how sentencing practices for various classes of offence will evolve. Whether or not governments are able to effectively price illicit cannabis out of the market – and the more

serious crime associated with it – will also have a significant bearing on future criminal justice costs. Overall, it is very difficult to predict how all these factors will unfold. This analysis, however, is intended to provide a useful benchmark against which future costs can be measured as more data become available in the years following legalization.

## FIGURE 11

Police Officers by Level of Policing, by Province and Territory, 2016

Jurisdiction	Municipal Police Services	Provincial Police Services	Royal Canadian Mounted Police		Total
			Contract Policing	Federal & Other	
NL	–	409	409	92	910
PE	97	–	101	29	227
NS	869	–	789	164	1,822
NB	436	–	695	154	1,285
QC	9,495	5,476	–	898	15,869
ON	18,440	6,097	–	1,631	26,168
MB	1,584	–	797	177	2,558
SK	1,056	–	1,018	230	2,304
AB	4,303	–	2,640	369	7,312
BC	2,532	–	5,378	851	8,761
YK	–	–	119	19	138
NT	–	–	178	21	199
NU	–	–	116	15	131
<b>PT Total</b>	<b>38,812</b>	<b>11,982</b>	<b>12,240</b>	<b>4,650</b>	<b>67,684</b>
RCMP HQ	–	–	–	1,089	1,089
<b>Total</b>	<b>38,812</b>	<b>11,982</b>	<b>12,240</b>	<b>5,739</b>	<b>68,773</b>

Source: Greenland, Jacob and Sarah Alam. (2017). "Police Resources in Canada, 2016." *Juristat: Canadian Centre for Justice Statistics*.

Notes: The RCMP totals for Ontario and Saskatchewan exclude the RCMP Headquarters and Police Training Academy respectively.

The above numbers include police officers only and not civilian and other personnel such as civilian personnel, special constables, cadets or trainees.

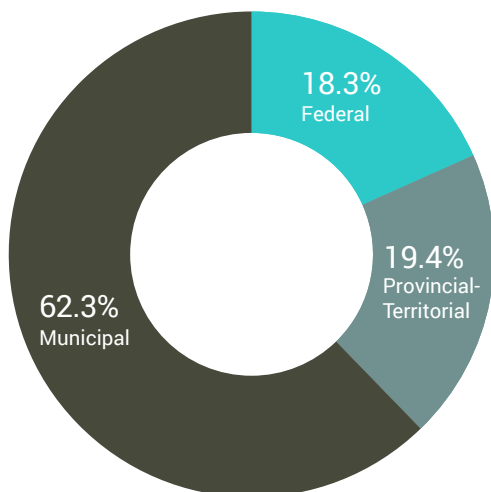


# Features of the Criminal Justice System

Policing is the largest and most expensive element of the criminal justice system, and all levels of government play a role in funding and administering it. The federal government is responsible for the Royal Canadian Mounted Police (RCMP), Canada's national police force. All provinces, except for Ontario and Quebec which have their own provincial police forces, contract with the RCMP for their provincial policing services. Newfoundland and Labrador both maintains its own provincial police force but also contracts with the RCMP. Yukon, Northwest Territories and Nunavut are policed solely by the RCMP. Municipalities are responsible for providing policing services and either have their own forces or subcontract provincial forces.<sup>55</sup>

**FIGURE 12**

**Estimated Share of Police Spending by Level of Government, 2015-16**



Source: Mowat calculation

Municipal police forces comprise over half of the uniformed officers in Canada (see Figure 11). As such, municipalities bear the largest share of policing costs. It is estimated that over 60 per cent of the crime-related police spending<sup>56</sup> in Canada is funded by municipalities, with the federal and provincial-territorial governments each picking up about a 18 per cent and 19 per cent of the costs respectively (see Figure 12).

Drug offences are prosecuted through the criminal court system. Canada has four levels of courts for criminal trial proceedings, which involve both federal and provincial governments to varying degrees. Provincial and territorial lower courts are established and funded by provincial and territorial governments. These courts handle most cases that come into the system. More serious criminal cases are heard by Provincial and Territorial Superior Courts, which also act as a court of first appeal for the provincial and territorial lower courts. Each province and territory also has a court of appeal, which can hear appeals from the decisions of the superior courts and the provincial/territorial courts.<sup>57</sup>

For courts at the federal level, only the Supreme Court of Canada hears criminal proceedings and is the country's final court of appeal. However, the federal government also plays a role in funding other aspects of the criminal court system (see Figure 13). Superior court justices are paid and appointed by the federal government, while the facilities and operations are paid by provinces and territories.<sup>58</sup> The federal government also plays an integral role in the prosecution of drug offences. While provincial Crown Attorneys

<sup>56</sup> Police budgets are not entirely dedicated to criminal enforcement. For a full discussion see: Office of the Parliamentary Budget Officer. (2013). *Expenditure Analysis of Criminal Justice in Canada*.

<sup>57</sup> <http://www.justice.gc.ca/eng/csj-sjc/ccs-ajc/02.html>.

<sup>58</sup> Office of the Parliamentary Budget Officer. (2013). *Expenditure Analysis of Criminal Justice in Canada*.

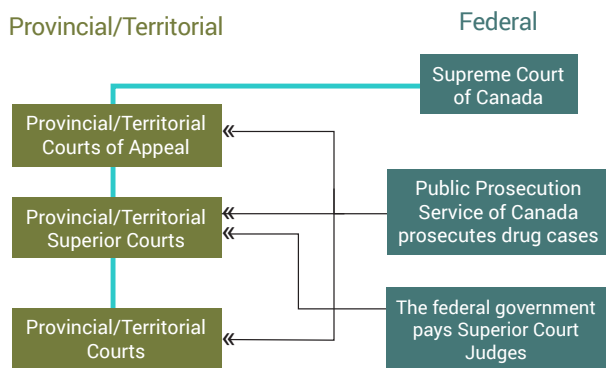
<sup>55</sup> Office of the Parliamentary Budget Officer. (2013). *Expenditure Analysis of Criminal Justice in Canada*.



prosecute the vast majority of criminal offences, the federal Public Prosecution Service of Canada (PPSC) prosecutes charges with respect to offences created by federal laws, including drug charges.<sup>59</sup> In all provinces except Quebec and New Brunswick, the PPSC is responsible for prosecuting all drug offences under the *Controlled Drugs and Substances Act* (CDSA).<sup>60</sup> The federal government also transfers funding to provinces and territories in support of legal aid and youth justice programming.

**FIGURE 13**

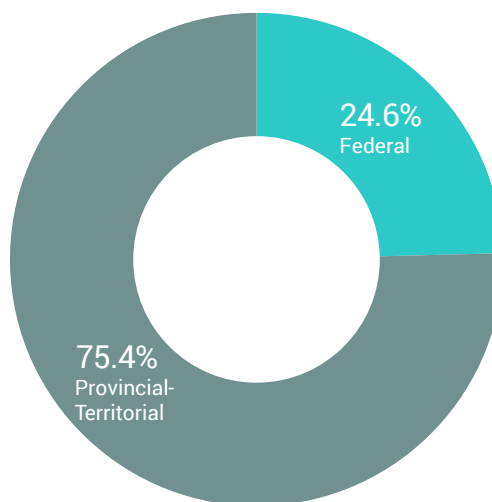
**Federal and Provincial/ Territorial Roles in the Criminal Court System**



Overall, provinces and territories are estimated to pick up about three quarters of the costs of administering the criminal court system with the federal government funding the other quarter (see Figure 14).

**FIGURE 14**

**Estimated Share of Criminal Court Spending by Order of Government, 2015-16**



Source: Mowat calculation

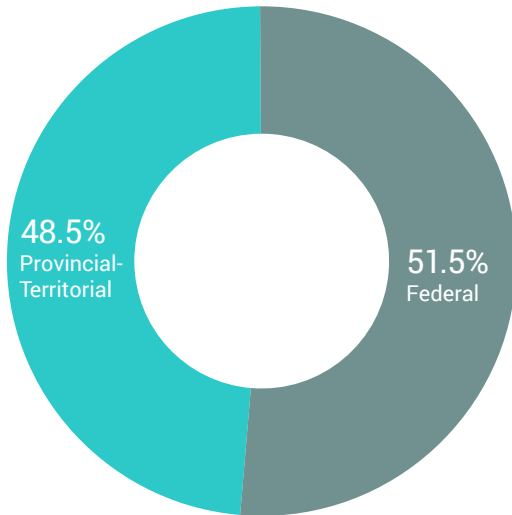
Jurisdiction for the corrections system is determined by the length of the sentence of the convicted party. The federal government is responsible for incarcerating adults sentenced to custody for two years or more. Provinces and territories are responsible for those sentenced to less than two years and for those on remand. In terms of spending, the federal and provincial-territorial governments share the costs of the corrections system on a roughly equal basis (see Figure 15).

59 Because of the role the PPSC plays in prosecuting drug offences, provincial spending on prosecution services was not included in the estimated impact of cannabis-related cases on the court system, except for Quebec and New Brunswick which prosecute most drug offences with provincial attorneys.

60 Director of Public Prosecutions. (2016). *Public Prosecutions Service of Canada Annual Report 2015-2016*.

**FIGURE 15**

Share of Adult Correctional System Spending by Order of Government, 2015-16



Source: CANSIM Table 251-0018, Adult Correctional Services Survey

## The Impact of Cannabis-Related Offences on the Criminal Justice System

Up until the point which Bill C-45 receives Royal Assent, cannabis, its preparations and derivatives<sup>61</sup> is an illegal substance unless regulated for production and distribution for medical purposes. The CDSA outlines four general categories of drug offences – possession, trafficking, importing and exporting, and production – all of which apply to cannabis. Legalization will change elements of what constitutes a cannabis-related offence, but details on that will be left to the following section. First, it will be important to establish a baseline for comparison and analysis to understand the effects cannabis legalization will have on the criminal justice system.

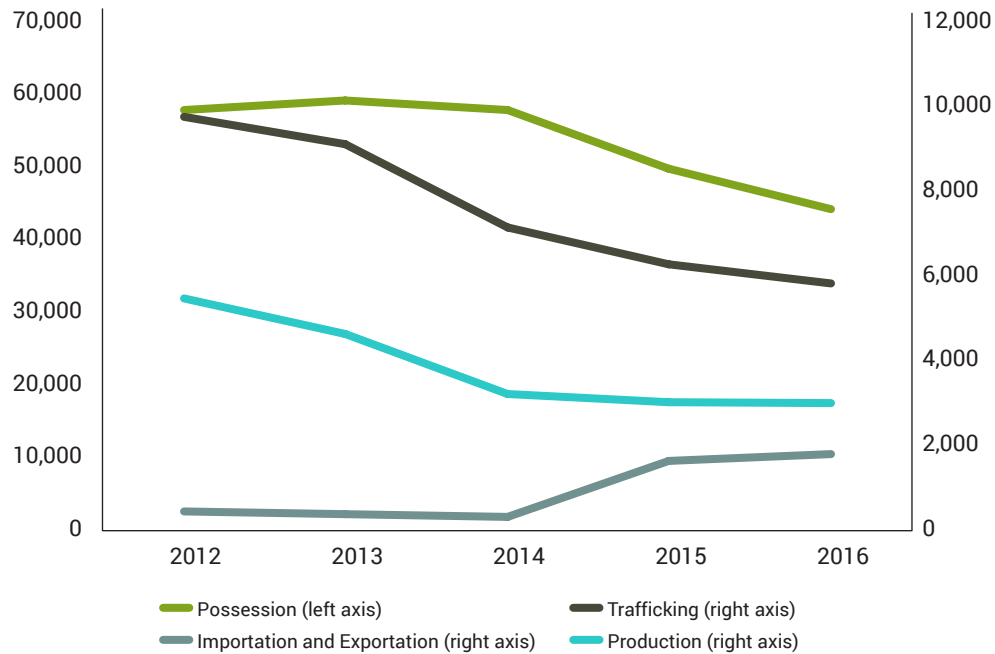
### Policing

Statistics Canada's Uniform Crime Reporting Survey (UCRS) outlines police-reported incidents of the four categories of drug offences outlined above. It does so for a range of drugs, including cannabis. In general, incidents of police-reported cannabis-related offences have been in decline in recent years, with the exception of importation and exportation (see Figure 16, see Section 7 for further discussion on importation and exportation). Between 2012 and 2016, possession offences averaged 81.2 per cent of total cannabis-specific offences.

<sup>61</sup> See Schedule II of the *Controlled Drugs and Substances Act* S.C. 1996.

**FIGURE 16**

**Incidents of Police-Reported Cannabis-Specific Offences, 2012 to 2016**



Source: CANSIM Table 252-0051 Incident-based crime statistics, by detailed violations, annual, Uniform Crime Reporting Survey

In 2015, there were nearly 61,000 total cannabis-specific incidents in 2015 which represents 2.9 per cent of total police-reported offences in that year. It should be noted that a purely incidence-based approach to estimate the impact of cannabis-specific offences on policing costs is subject to a key limitation. Unlike the estimates for court costs and corrections costs in this report, which are based on average length of case and sentence respectively, similar data to account for the relative complexity of enforcing cannabis offences – such as time spent on a case – do not exist. There is scope, therefore, to refine this estimate in the future should such data come available.

Another data limitation specific to the UCRS that can be overcome however, is that the police-reported incidents contained in it are classified according to the most serious violation within the incident. However, police are able to submit up to four violations in an incident, and it is not uncommon for more serious offences to be accompanied by a drug-related offence. The surface level incidents data presented in the UCRS therefore underestimate the degree to which drugs generally and cannabis specifically contribute to the total police workload. While these “co-incidents” are not published by Statistics Canada, they have estimated that in 2013, “6,855 police-reported incidents included a CDSA violation that was not the most serious.”<sup>62</sup>

62 Cotter, Adam, Jacob Greenland, and Maisie Karam. (2015). “Drug-Related Offences in Canada, 2013.” *Juristat: Canadian Centre for Justice Statistics*.

Assuming the share of incidents where the CDSA violation was not the most serious (0.33 per cent) remained relatively constant would mean that an additional 6,920 drug-related “co-incident” offences occurred in 2015. With cannabis offences representing 61.0 per cent of drug offences in that year, the data would indicate that an additional 4,223 cannabis-related violations occurred in 2015, increasing the share of cannabis-related violations to 3.1 per cent of total violations.<sup>63</sup>

As municipalities bear the largest share of policing costs in general, they also shoulder a significant degree of the burden of policing cannabis-related offences as well. It is estimated that in 2015-16, municipal police services spent \$216.9 million enforcing cannabis-related offences. Meanwhile, provinces spent \$67.7 million and the federal government spent \$63.9 million.

## Criminal Courts

Arriving at an estimate for the impact cannabis-related cases had on the criminal court system is a matter of calculating the share of total court time those cases take up. Statistics Canada’s Integrated Criminal Court Survey (ICCS) tracks the median elapsed case time in days by type of offence, including drug possession and other drug offences. These data can be used to calculate the share of total court time spent trying cannabis-related cases (see Text Box).

In 2015-16, the median length of the over 342,000 total criminal court cases was 127 days. That means Canada’s courts collectively spent more

63 The approach of grossing up to account for “co-incident” of drug offences where they were not the most serious offences was only undertaken for the policing estimate due to lack of data beyond that level. This approach increased the police spending estimates by 7 per cent compared to an approach that only used cannabis-specific offences as reported in the UCRS.

## Calculating Cannabis-Related Court Costs

**(Mean drug case length \* number of drug cases) / (Mean overall case length \* number of overall cases) = share of total court time represented by drug cases**

than 43 million days hearing criminal court cases. While that seems astronomically high, in the context of the more than 2 million police-reported criminal violations in that year, 342,000 cases indicates that many violations do not result in charges or cases. Across Canada, there is considerable variation of in the median length of a criminal court case, ranging from 100 days in British Columbia to 228 in Quebec. Given the considerable variation in per capita spending on courts across Canada, this is perhaps not surprising.

With respect to drug cases specifically, in 2015-16 drug cases made up about 6.1 per cent of the total number of criminal cases. While drug possession cases made up a larger share of drug cases (59.9 per cent), their median case length was only 99 days, considerably lower than the average criminal case. The far more complex “other drug offences” represented fewer cases, but they lasted much longer, a median length of 277 days.<sup>64</sup> As a result, “other drug offences” were a much larger drain on court resources than possession charges were, counting for 2.3 million court days, or 5.3 per cent of total court time, compared to 2.8 per cent for drug possession cases.

64 There is also considerable variation in median case length for drug cases across provinces, however, the data contain significant outliers and nation-wide median case lengths were used for the calculations in this report.

A key data limitation with respect to calculating the impact of cannabis-specific court costs crops up at this stage. An astute reader may have noticed that the discussion on median case lengths above reported data for “drugs” and not “cannabis” specifically. That is because offences by type of drug are only broken out as far as the charges level, the ICCS which contains data on data such as case length aggregates all CDSA cases into a general “drugs” category. Furthermore, while the data discussed above in the Policing section tracks data on incidents and charges in the four categories of possession, trafficking, importing and exporting, and production, the latter three are aggregated into a general “other drug offences” category, while possession is still reported separately (see Figure 18).

To estimate the number of drug cases that cannabis-related cases represent, the share of cannabis possession and other drug charges from the UCRS are used as a proxy for that share.<sup>65</sup> Cannabis offences are the most commonly charged, representing 47.2 per cent of all drug charges in 2015. These

65 Cotter et al. (2015) estimated that cannabis-related cases averaged 85 days for possession offences and 211 days for supply offences. An alternative modelling approach could take these data into account. However, Cotter et al. (2015) did not provide estimates as to the number of drug cases that were cannabis-related, so the approach described above was employed.

**FIGURE 17**

**Drug Possession and Other Drug Offences Cases as a Share of Total Court Time, Canada, 2015-16**

	Total Cases: Count	Median Case: Days	Total Cases: Days	Share of Total Days: Per Cent
Total Offences	342,274	127	43,468,798	100.0
Drug Possession	12,427	99	1,230,273	2.8
Other Drug Offences	8,319	227	2,304,363	5.3

Source: CANSIM Table 252-0055 Adult criminal courts, cases by median elapsed time in days, annual, Integrated Criminal Court Survey

**FIGURE 18**

**Level of Detail of Statistics Canada Drug Violations at Successive Stages of the Criminal Justice System**





**FIGURE 19**

**Cannabis-Related Cases as a Share of Total Court Time, Canada, 2015-16**

	Total Cases: Days*	Cannabis Share of Drug Charges: Per Cent**	Cannabis Cases: Days***	Share of Total Days: Per Cent
Possession	1,230,273	57.9	712,328	1.6
Other Drug Offences	2,304,363	28.9	666,109	1.5
<b>Total</b>			<b>1,378,437</b>	<b>3.2</b>

Sources: \* CANSIM Table 252-0055 Adult criminal courts, cases by median elapsed time in days, annual, Integrated Criminal Court Survey

\*\* CANSIM Table 252-0051 Incident-based crime statistics, by detailed violations, annual, Uniform Crime Reporting Survey

\*\*\* Author's calculation

charges are heavily weighted toward possession though, with cannabis offences making up 57.9 per cent of drug possession charges and only 28.9 per cent of other drug charges. Once this adjustment has been made to net out other drugs from case length data, cannabis-possession cases have a slightly larger impact than other offences. In total, it is estimated that cannabis possession and other cannabis-related charges represented 3.2 per cent of total court time in 2015-16 (see Figure 19).<sup>66</sup> The exception to this share is the federal PPSC.

Drug prosecution files represent the most significant portion of the PPSC caseload. In 2015-16, drug cases represented 41.5 per cent of PPSC's total number of case hours.<sup>67</sup> These cases ranged from "simple cases of possession

of small quantities of marijuana to complex schemes to import large quantities of cocaine or to manufacture methamphetamine for domestic use or for export."<sup>68</sup> The PPSC classifies its case loads as either high-, medium-, or low-complexity, and provides estimated hours spent on each case complexity level. While no information is given on exactly how cannabis-related cases fit into this classification scheme, certain assumptions can be made and tested. First, all possession cases are assumed to be low-complexity, which aligns with the much shorter median case lengths for possession cases compared to other drug charges discussed above. Estimates on the portion of cannabis-related prosecutions on the PPSC's workload are highly sensitive to assumptions on which type of offence is classified as medium- or high-complexity. To test this sensitivity, each of production, importing and exporting, and trafficking were assumed to be high-complexity, and a scenario in which no cannabis-related cases were high-complexity was also tested. Estimates for the amount of time the PPSC spent prosecuting cannabis-related cases ranged from a high of 24.5 per cent when trafficking cases were assumed to be high-complexity, to a low of 12.1 per cent where no cannabis-related cases were assumed to be high-complexity. The average of the four approaches produces an estimate of 18.2 per cent of PPSC's workload being cannabis-related. Netting out the cost of youth court cases (to be outlined in Section 5), it is estimated that \$28.3 million of the PPSC's budget can be attributed to adult cannabis prosecutions.

66 The impact of cannabis-related cases on provincial court systems vary between provinces, ranging from 2.4 per cent of total court days in British Columbia to 3.8 per cent in Quebec. Specific provincial-level estimates were used to estimate the share of court days for each Ontario, Quebec, Alberta and British Columbia and were subsequently grossed up to arrive at an estimate for all provincial-territorial cannabis-related court spending.

67 Author's own calculation based on data in PPSC Annual Report 2015-16: [http://www.ppsc-sppc.gc.ca/eng/pub/ar-ra/2015\\_2016/index.html#section\\_2\\_2](http://www.ppsc-sppc.gc.ca/eng/pub/ar-ra/2015_2016/index.html#section_2_2).

68 PPSC Annual Report 2015-16. [http://www.ppsc-sppc.gc.ca/eng/pub/ar-ra/2015\\_2016/index.html#section\\_2\\_2](http://www.ppsc-sppc.gc.ca/eng/pub/ar-ra/2015_2016/index.html#section_2_2).

Overall, the federal and provincial-territorial governments were estimated to have spent \$48.0 million and \$57.1 million respectively on court costs for cannabis-related offences in 2015-16. The federal share of cannabis-related costs is higher than its overall share of spending on the court system described in Figure 14 primarily because of the role of the PPSC.

## Corrections

To arrive at an estimate of the impact of cannabis-related offences on the corrections system, three pieces of data are required: the number of offenders serving sentences for cannabis-related offences, the average length of those sentences, and estimates for the daily costs for the federal and provincial governments to administer those sentences. Separate estimates will be for six broad categories of sentences: provincial incarceration, remand, provincial probation, conditional sentences, federal incarceration and federal community supervision.

### Calculating Cannabis-Related Corrections Costs

Number of offenders serving sentences for cannabis-related offences \* Average sentence length for cannabis-related offences \* Daily inmate costs = Impact of cannabis-related offences on the corrections system

The same data limitations with respect to calculating the impact of cannabis-specific court costs also apply at the corrections level. Data on guilty verdicts and average sentence length for probation sentences are broken out by possession and other drug offences, but both are aggregated for all drugs (see Figure 18). Unless better data were available for specific categories of sentence, the methodology that was used to estimate cannabis-related offences as a share of total drug offences for court costs was also used for corrections.

With respect to custody sentences, data sets for average sentence length have been suspended,<sup>69</sup> so older estimates from Statistics Canada's *Juristat: Canadian Centre for Justice Statistics* literature were used to estimate sentence lengths for provincial custody and remand. The Correctional Service of Canada's Federal Offender Population Profile (FOPP),<sup>70</sup> however, has detailed sentence length data for inmates in federal correctional facilities, so those data were used for federal custody and community supervision estimates.

The final element of the equation, average daily costs for administering sentences, was taken from a number of sources. Statistics Canada provides some high-level data for average daily custody costs. These data did not map perfectly when applied to FOPP data set, so minor adjustments were made in the case of average daily costs for federal custody and community supervision. For other types of sentences, more detailed breakouts taken from academic literature and were adjusted for inflation (see Figure 20).<sup>71</sup>

69 Email communication with Statistics Canada, April 13, 2018.  
70 <http://www.csc-scc.gc.ca/publications/005007-3033-eng.shtml>.

71 Day, David M. et al. (2015). *The Monetary Cost of Criminal Trajectories for an Ontario Sample of Offenders*.

In 2015-16, 5,850 adults were found guilty of drug possession and an additional 3,992 were found guilty of other drug offences. Those convicted of other drug offences were far more likely to be incarcerated, with 57.0 per cent of guilty verdicts resulting in custody sentences. Possession charges on the other hand, were more likely to result in probation (31.2 per cent) or a fine (49.3 per cent). Only 13.0 per cent of drug possession guilty verdicts resulted in custody sentences (see Figure 21).

## PROVINCIAL CUSTODY

According to a study examining Statistics Canada data on sentence length data for drug offences between 2008-09 and 2011-12, custody sentences for possession charges were usually short.<sup>72</sup> Over three-quarters (76.0 per cent) of cannabis-possession custody sentences were between one and 30 days, and a further 14.3 per cent were between 31 and 90 days.<sup>73</sup> Only 0.2 per cent of cannabis-possession sentences resulted in a sentence of over two years and as such, it is assumed that virtually all such sentences are served in provincial facilities.<sup>74</sup>

72 Cotter, Adam, Jacob Greenland, and Maisie Karam. (2015). "Drug-related offences in Canada, 2013." *Juristat: Canadian Centre for Justice Statistics*.

73 The study presented data on the percentage of sentences that fell within six different ranges for possession and supply offences. The study also broke these percentages out between cannabis-related offences and other drugs, but did not provide detail on the number of sentences underlying these data. As such, this report must still make assumptions on the share of total drug convictions that cannabis-related offences make up.

74 The study also found nearly identical sentencing patterns for possession of other drugs.

### FIGURE 20

Estimated Average Daily Cost of Various Sentence Types (\$), 2015-16

	Estimated Average Daily Inmate Cost
Provincial Custody and Remand <sup>1</sup>	203.00
Provincial Probation <sup>2</sup>	5.81
Conditional Sentences <sup>3</sup>	27.09
Federal Custody <sup>4</sup>	268.24
Federal Community Supervision <sup>5</sup>	76.43

Notes:

1. CANSIM Table 251-0018.

2. Day, David M. et al. (2015); adjusted for inflation.

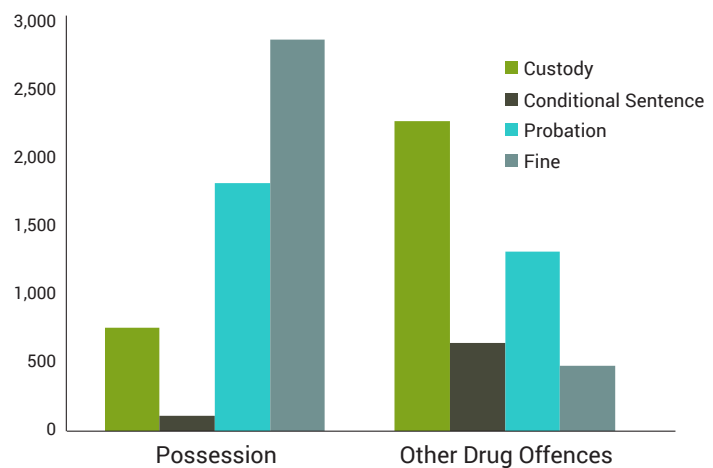
3. Day. (2015). Adjusted for inflation.

4. Average of CANSIM Table 251-0018 and author's calculation.

5. Average of Day et al. (2015); adjusted for inflation and author's calculation.

### FIGURE 21

Sentences for Drug Possession and Other Drug Offences, 2015-16



Source: CANSIM Table 252-0056 Adult criminal courts, guilty cases by type of sentence, annual, Integrated Criminal Court Survey.

Notes: Chart does not include restitution or other sentences (absolute and conditional discharge, suspended sentence, community service order and prohibition order among others). Multiple sentences for single offender are possible, so total sentences do not equal total guilty cases.

For other drugs offences, however, longer sentences are more typical. While the vast majority of sentences would have been served in provincial facilities, 5.2 per cent of sentences for other offences that were cannabis-related were longer than two years. This amount was therefore not included in the estimation of total days served for cannabis-related sentences in provincial institutions.

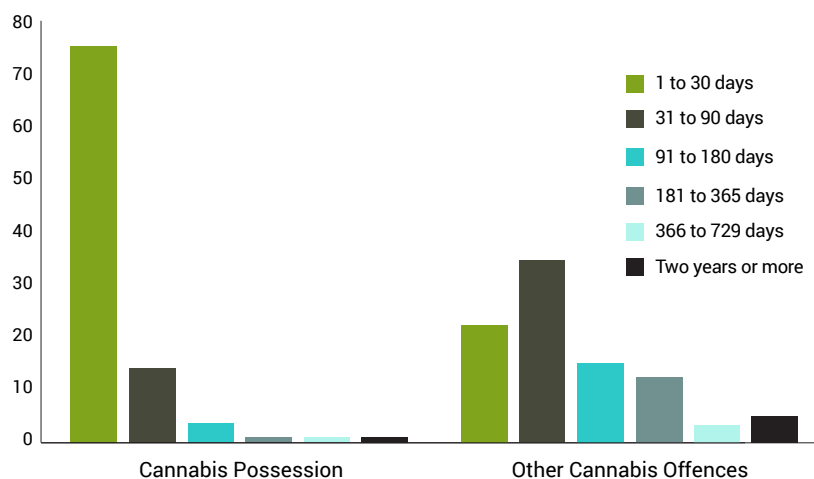
The data in the same study seem to indicate that the share of sentences over two years for drug offences skews more toward other drugs than charges-level data suggest. The share of cannabis-related sentences over two years for other drug offences was estimated to be closer to 22 per cent, lower than the 28.9 per cent assumed above for court cases. Because of the uncertainty around the data and to be conservative, an average of the two shares was used to estimate the cannabis share of sentences for all sentences related to other drug offences.

For sentences related to possession, however, the same methodology as was used for courts was retained. Application of these shares to the data outlined in Figure 21 indicates that 441 adults were serving sentences for cannabis possession and another 574 were in on other cannabis charges.

To calculate the total days served in provincial institutions for cannabis-related offences, the estimated number inmates for both categories of offences were run through the estimated sentence lengths described in Figure 22. For example, 76.0 per cent of possession sentences were assumed to be 15 days (the midpoint between 1 and 30 days). In total, this approach yields an estimate of about 79,000 days being served in provincial correctional facilities for cannabis-related offences. At \$203 per day (see Figure 20), total provincial-territorial spending on custody for cannabis-related offences was estimated to be \$16.3 million in 2015-16.

## FIGURE 22

**Completed Cannabis-Related Cases in Adult Criminal Court Sentenced to Custody, by Length of Custody and Type of Offence, Canada, 2008-09 to 2011-12 (Per Cent)**



Source: Chart 10 in Cotter, Adam, Jacob Greenland, and Maisie Karam. (2015). "Drug-related offences in Canada, 2013." *Juristat: Canadian Centre for Justice Statistics*.





## REMAND

Remand is the temporary detention of a person while awaiting trial, sentencing or the commencement of a custodial disposition. In 2015-16, admissions to remand made up 59.4 per cent of the custodial population, while those in sentenced custody or other custodial statuses comprised the remaining 40.6 per cent. This does not include those under community supervision arrangements (see Figure 23)

It is estimated that in 2015-16, there were nearly 141,000 admissions to provincial remand.<sup>75</sup> Data on the composition of the remand population by offence is no longer available, however, a 2011 Juristat report estimated that 6.2 per cent of the remand population was admitted for drug offences.<sup>76</sup> This share however, could be as high as 8.1 per cent if the consider percentage of those in remand for administration of justice offences equally composed of all types of offences in the remand population, or 11,400.<sup>77</sup> Using the same methodology to isolate cannabis from all drugs, indicates that there were roughly 5,400 adults admitted to remand for cannabis-related offences in 2015-16.

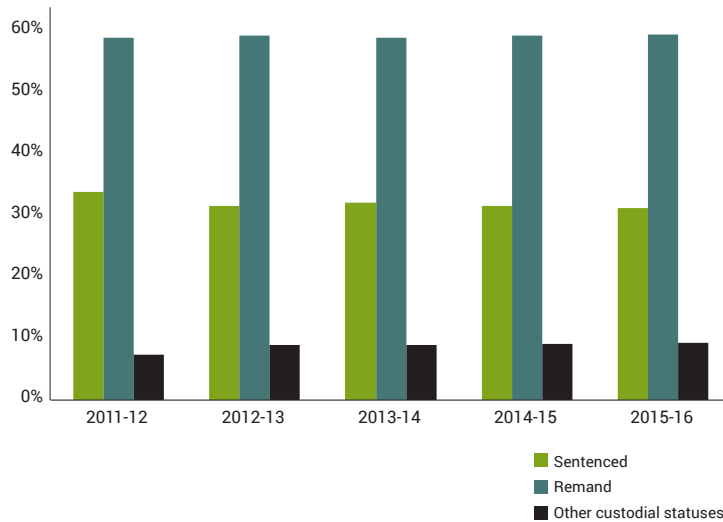
75 As of 2012-13, Alberta data for admissions to remand are not available in the Adult Correctional Services Survey (ACSS). To correct for this, Alberta's average share of the total remand population between 2008-09 and 2011-12 (15.1 per cent) was projected forward. It is estimated that, according to that share, Alberta's remand population was 21,262 in 2015-16, bringing the PT total to 140,887 (up from 119,625 reported in the ACSS).

76 Porter, Lindsay and Donna Calverley. (2011) "Trends in the use of remand in Canada." *Juristat: Canadian Centre for Justice Statistics*.

77 Author's own calculation. In 2008-09, 23.0 per cent of the remand population was being held for administration of justice offences, such as breach of probation or failure to comply with conditions.

**FIGURE 23**

**Share of Provincial-Territorial Custodial Admissions to Remand versus Custody and Other Custodial Status, 2011-12 to 2015-16**



Source: CANSIM Table 251-0020 Adult correctional services, custodial and community admissions to provincial and territorial programs, annual, Adult Correctional Services

**FIGURE 24**

**Count and Average Length of Probation and Conditional Sentences for Drug Offences, 2015-16**

	Probation Count		Conditional Sentences Count		Average Sentence: Days <sup>1</sup>
	All Drugs <sup>1</sup>	Cannabis <sup>2</sup>	All Drugs <sup>1</sup>	Cannabis <sup>2</sup>	
Possession	1,823	1,056	117	68	325
Other Drug Offences	1,324	383	650	188	444

Sources:  
 1. Table 252-0056 Adult criminal courts, guilty cases by mean and median length of probation, annual; Integrated Criminal Court Survey.  
 2. Author’s calculation based on share of chares.

While there are no data to indicate how long an offender would serve in remand for a cannabis-related offence, the latest data (2008-09) weighted across reporting jurisdictions<sup>78</sup> indicated that the average remand stay in Canada was 7.9 days. An average 8-day stay across 5,391 adults at a daily cost of \$203 means PT governments are spending \$8.7 million on remand for cannabis-related offences.

**PROBATION AND CONDITIONAL SENTENCES**

Data on mean probation sentence length for drug offences are thankfully much more readily available. For both possession and other drug offences, both median and mean probation are consistently well under three years, and as such as are assumed to be provincial costs. Data on the average length of conditional sentences is not available, so the data for probation sentences were used (see Figure 24).

Estimates for cannabis-related sentences as a share of total drug offences were taken according to the same methodology described in other sections and were applied to the average length of probation sentences. At \$5.81 per day for probation and \$27.09 per day for conditional sentences, provinces and territories are estimated to have spent roughly \$3 million on each for the administration of such sentences for cannabis-related offences in 2015-16.

78 Alberta, PEI and Nunavut did not submit data.

## FEDERAL CUSTODY

According to FOPP data for 2014-15, 22.3 per cent of the “in community” population and 14.2 per cent of the “in custody” populations in federal correctional facilities were serving sentences for drug-trafficking and importation. These data were projected forward to 2015-16 using data from Statistics Canada’s Corrections Key Indicator Report, producing estimates of about 1,800 and 2,100 drug offenders serving “in community” and “in custody” sentences respectively in federal institutions.

As outlined in the section on *Provincial Custody*, virtually no possession charges lead to sentences greater than two years. As such, all drug offenders in federal correctional facilities were assumed to be serving sentences for charges unrelated to possession. The share of those inmates serving sentence for cannabis-related offences was determined using the same methodology used for other drug offences outlined in the Provincial Custody section.

Minor adjustments were made to average daily costs figures from the Adult Correctional Services Survey. Applying those estimates to the total population in FOPP produced cost estimate much higher than total federal corrections spending so an average of that and the author’s estimate for were taken (see Figure 20). Admissions data for FOPP are annualized, so the annual sentence length for inmates in federal institutions for 2015-16 was assumed to be 365 days. At \$268.24 per day for custody sentences and \$76.43 for community supervision, the federal government is estimated to have spent \$64.9 million incarcerating cannabis-related offenders in 2015-16.

## What is likely to happen next?

The legalization of cannabis will not completely eliminate the criminal justice costs associated with cannabis-related offences. Even when cannabis is fully legalized,<sup>79</sup> it will be strictly regulated and there will still be plenty of laws to be broken. Under the legalized cannabis regime, a range of cannabis-related activities will be prohibited and violations of those prohibitions will be criminal offences punishable by imprisonment. Criminal offences for adults post-legalization will include:

- » Possession over the 30g limit.
- » Illegal distribution or sale.
- » Taking cannabis across international borders.
- » Production beyond home cultivation limits.
- » Giving or selling to youth.
- » Using youth to commit a cannabis-related offence.<sup>80</sup>

It will also be illegal for youth aged 12 to 18 to possess cannabis or an equivalent of more than 5 g of dried cannabis. The implications for youth justice will be discussed in greater detail in the next section.

Overall, all governments should realize considerable savings in the criminal justice sector as a result of legalization. Cannabis-related offences have been in general decline for years. How cannabis legalization influences criminal justice costs, and the relative burden of those costs across governments, will depend on precisely how it affects the number of incidents, the complexity and length of court cases, and length of sentences for cannabis-

<sup>79</sup> Scheduled for October 17, 2018 at time of writing.

<sup>80</sup> <https://www.canada.ca/en/services/health/campaigns/legalizing-strictly-regulating-cannabis-facts.html>.

related offences. So some time will need to pass to before it is possible to properly measure how legalization affects how laws will be enforced, how courts will respond to the new environment and how sentencing practices for various classes of offence will evolve. However, certain assumptions can be tested to assess the general direction of the change and how it will impact the federal, provincial-territorial and municipal governments.

Among the stated policy goals of legalization was to prevent Canadians from entering the criminal justice system for simple cannabis-possession offences and to reduce the burdens on police and the justice system associated with simple possession of cannabis offences.<sup>81</sup> If that goal is realized, the savings for all governments would be substantial, but would also impact each government differently. In the pre-legalization environment, possession charges generally represented over 80 per cent of total cannabis-related offences. The nature of those offences though, meant that they had a large impact on associated policing costs, less of an impact on the courts because possession cases are generally quicker than for other offences, and relatively small impact on corrections because custody sentences are rare and relatively short.

Using the same model employed to estimate the cannabis-related criminal justice costs above, an additional scenario was run whereby all possession offences were zeroed out to establish their impact on cost by sector and by level of government. One important caveat to this estimate is that it does not represent a projection of what the criminal justice costs will be post-legalization. It is however meant to be

demonstrative of the impact possession charges have had in the pre-legalization environment.

By far, possession offences have the largest impact on policing costs. Removing the incidence of cannabis-possession offences would have reduced associated policing costs by 80.4 per cent in 2015-16. Municipal governments, who shoulder the majority of the burden of policing costs, would have been the largest beneficiary of these savings. Cannabis-related court costs would have been reduced by 45.1 per cent, with the federal and provincial governments benefitting roughly equally. The smallest reduction by sector would have gone to corrections, which would have seen only a 12.9 per cent reduction in costs. The federal government would have seen no changes in its corrections costs because, as was discussed above, inmates serving cannabis-related sentences in federal institutions were assumed to be exclusively those found guilty of other drug charges.

Overall, removing cannabis-possession offences from the model has a significant bearing on which government bears the cannabis-related costs of the criminal justice system. Under the status quo, provincial-territorial and municipal governments bear the majority of the costs, but under the scenario under which possession offences are removed from the equation, that proposition flips because of the federal government's role in administering custody sentences for the most serious offences (see Figures 25 and 26).

81 Canada. (2016). "A Framework for the Legalization and Regulation of Cannabis in Canada: The Final Report of the Task Force on Cannabis Legalization and Regulation."



**FIGURE 25**

**Estimated Impact of the Elimination of Possession Offences on the Criminal Justice System by Sector**

	Possession Included		Possession Excluded		Change	
	\$ millions	% Share	\$ millions	% Share	\$ millions	% Change
Policing	348.5	63.5%	68.3	32.6%	(280.2)	(80.4%)
Courts	105.1	19.1%	57.6	27.5%	(47.4)	(45.1%)
Corrections	95.7	17.4%	83.4	39.8%	(12.3)	(12.9%)
<b>Total</b>	<b>549.2</b>	<b>100.0%</b>	<b>209.3</b>	<b>100.0%</b>	<b>(339.9)</b>	<b>(61.9%)</b>

**FIGURE 26**

**Estimated Impact of the Elimination of Possession Offences on the Criminal Justice System by Level of Government (\$ millions)**

	Possession Included			Possession Excluded			Change		
	Federal	Provincial	Municipal	Federal	Provincial	Municipal	Federal	Provincial	Municipal
Policing	63.9	67.7	216.9	12.5	13.3	42.5	(51.4)	(54.5)	(174.4)
Courts	48.0	57.1		29.1	28.6		(18.9)	(28.5)	
Corrections	64.9	30.8		64.9	18.5			(12.3)	
<b>Total</b>	<b>176.7</b>	<b>155.6</b>	<b>216.9</b>	<b>106.5</b>	<b>60.3</b>	<b>42.5</b>	<b>(70.2)</b>	<b>(95.3)</b>	<b>(174.4)</b>
<b>Share</b>	<b>32.2%</b>	<b>28.3%</b>	<b>39.5%</b>	<b>50.9%</b>	<b>28.8%</b>	<b>20.3%</b>	<b>20.7%</b>	<b>28.0%</b>	<b>51.3%</b>

None of this is to say that possession charges will disappear post-legalization. Bill C-45 includes a 30g limit to what an individual can possess. Bill C-45 will also make it illegal “for an individual who is 18 years of age or older to possess any cannabis that they know is illicit.” The potential sentence for such an offence is five years less a day. The impact these laws will have will depend largely on the extent to which they are enforced. “It’s open to question whether police will enforce the prohibition of such small amounts in the first place, especially since Canadians will be allowed to grow up to four plants of their own. But the provision could open up the possibility of arrest and prosecution for people carrying

cannabis in an ordinary plastic bag instead of a licensed sales container.”<sup>82</sup> So, while the overall incidence of cannabis-possession charges should decrease, possession cases could become far more complex and yield longer averages sentences post-legalization. Incidence of public consumption of cannabis is also likely to increase post-legalization, which will add to the enforcement burden of local police forces.

82 Jordan, Harrison. (2017). “Canada is legalizing possession of small amounts of marijuana, but it’s also introducing 45 new criminal offences. How will police and the courts react?” *Policy Options: Institute for Research on Public Policy*.

With respect to other drug offences – trafficking, importing and exporting, and production – the impact of legalization is less clear. Their impact on the criminal justice system will depend on factors such as sentencing practices as well as the success of other policies – pricing in particular – to eliminate the black market for cannabis.

As part of the effort to “to reduce illicit activities in relation to cannabis” many of the offences outlined in Bill C-45 carry a term of up to 14 years in prison for a variety of offences, including possession for the purpose of distribution, possession for use in production or distribution of illicit cannabis, and importing and exporting. This could lead to longer sentences because “the Criminal Code does not let judges give discharges or conditional sentences on any offences that carry a maximum punishment of 14 years, [and] judges will have fewer non-prison options when they sentence offenders.”<sup>83</sup> This would have implications for both court and correctional costs that will not be fully understood until sentencing patterns for the various classifications of offences start to emerge.

Another policy tool that governments will have at their disposal to reduce illicit activities related to cannabis is pricing, and is instrumental to achieving the goal of keep profits out of the hands of criminals, particularly organized crime. When the production of cannabis is criminalized, prices “are greatly inflated by the fact that marijuana growing is illegal.”<sup>84</sup> Those involved in the illicit cannabis trade – or the trade in any illicit good for that matter – require a high rate of return “due to the high risk of imprisonment, confiscation

of capital, and unenforceable contracts.”<sup>85</sup> That inflated rate of return must be built into the price of illicit cannabis, or someone in that production and distribution chain loses money. Legalizing the production of licit cannabis removes those risks for licit producers and drastically alters the value proposition for participating in the black market. Lower risk should also “increase the entrance of new entrepreneurs into the market, which increases supply and forces down prices.”<sup>86</sup> Legalization then, could play a significant role in pricing out black market activity. This will depend on governments ability to get the post-tax price of licit cannabis close to the illicit price. The Parliamentary Budget Office has estimated that prices would need to be between \$7.48 and \$9.34 per gram, with a best estimate of \$8.41 in 2018.<sup>87</sup>

Overall, it is very difficult to predict how all these factors will shake out. The costs for criminal justice system as a whole should decrease post-legalization, but by how much and for whom is far from clear. This analysis however is intended to provide a useful benchmark against which future costs can be measured as more data become available in the years following legalization.

83 Jordan, Harrison. (2017). “Canada is legalizing possession of small amounts of marijuana, but it’s also introducing 45 new criminal offences. How will police and the courts react?” *Policy Options: Institute for Research on Public Policy*.

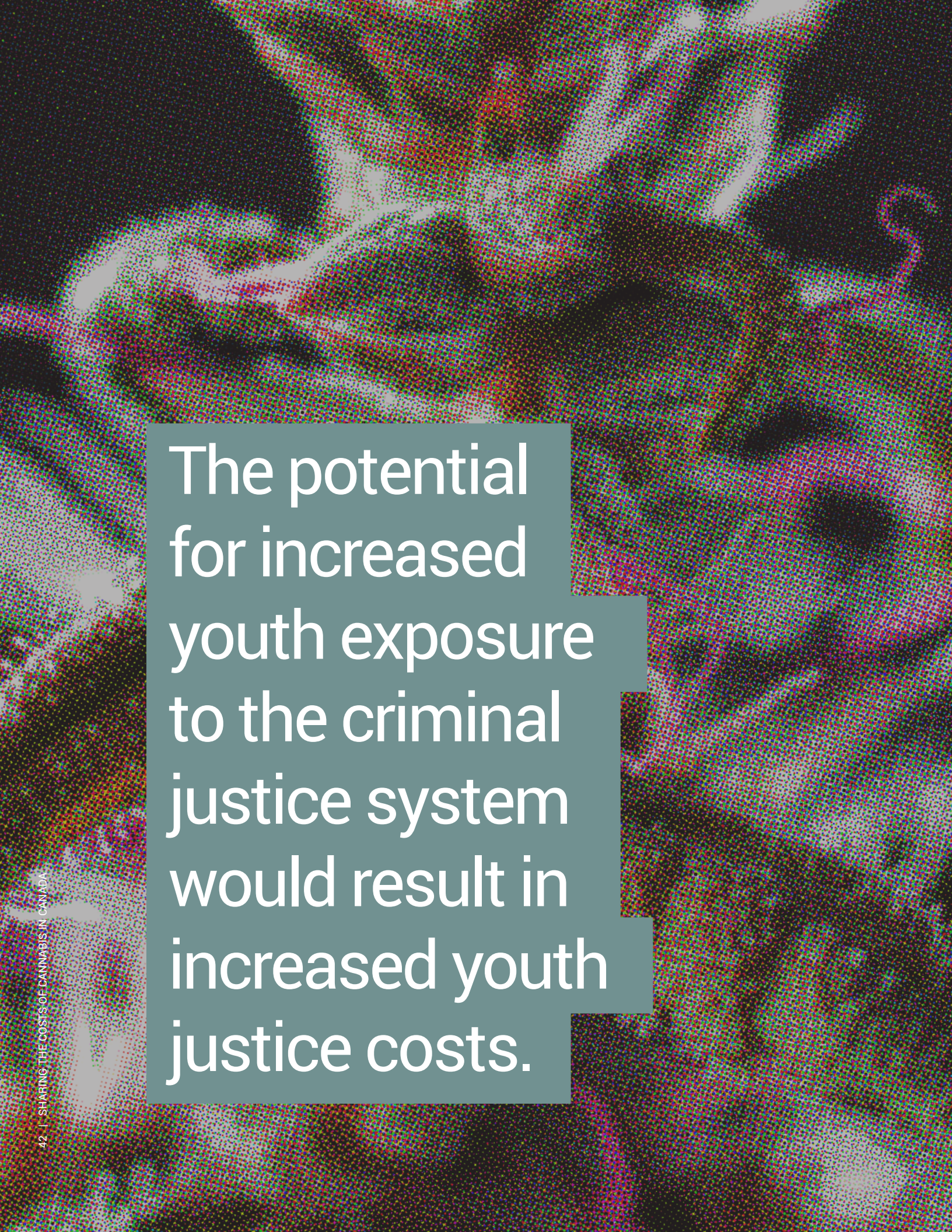
84 Caulkins et al. (2016).

85 Ekins, Gavin and Joseph Henchman. (2016). “Marijuana Legalization and Taxes: Federal Revenue Impact.” *Tax Foundation*, No. 509.

86 Ekins, Gavin and Joseph Henchman. (2016). “Marijuana Legalization and Taxes: Federal Revenue Impact.” *Tax Foundation*, No. 509.

87 Office of the Parliamentary Budget Officer. (2016). “Legalized Cannabis: Fiscal Considerations”.





The potential for increased youth exposure to the criminal justice system would result in increased youth justice costs.



# 5 THE YOUTH JUSTICE SYSTEM

In Canada, criminal law – including youth justice law – is a federal responsibility, though the administration of justice is a provincial responsibility. The manner in which youth aged 12 to 17 are dealt with by the criminal justice system is governed by the federal *Youth Criminal Justice Act* (YCJA). The *Act* is meant to ensure a criminal justice system for youth that is separate from that of adults, which emphasizes rehabilitation and reintegration while protecting the public by holding young persons accountable through measures that are proportionate to the seriousness of the offence and the degree of responsibility of the young person.<sup>88</sup> The approach outlined in the *Act* has largely been successful in diverting youth from the criminal justice system. “In 2003, the year the YCJA was implemented, there were substantial decreases in the number of youth charged by police, appearing before youth courts and entering correctional services. Declines continued in the subsequent years.”<sup>89</sup>

The process by which reduced youth exposure to the criminal justice system is achieved occurs at all levels. First, rather than pressing charges, police may take discretionary measures such as: taking no action, informal and formal warnings, involving the parents, arresting and taking the youth to the police station and then releasing him or her, and informal referral to a program. Informal action is used frequently with youth.<sup>90</sup>

If the youth is charged, the Crown prosecutor also has opportunity divert him or her from the court system through either, referral to a Youth Justice Committee (YJC), referral to a youth-mental-

health court worker, or recommend extrajudicial sanctions. The aim of any of these referrals is generally to connect youth to services and people in the community to provide supervision, mentoring and community-based programs. These programs are either directly administered by provinces or transfer payment agents, and tend to vary from province to province.

If neither the police nor the Crown divert the youth from the criminal justice system, the youth may face trial in youth court, which are elements of the provincial court system. Youth courts handle cases for young people 12 to 17 years old who are charged with an offence under federal youth justice laws. Any court at either the provincial/territorial or superior court level can be designated a youth court.”<sup>91</sup>

88 Youth Criminal Justice Act, S.C. 2002.

89 Calverley, Donna, Adam Cotter and Ed Halla. “Youth custody and community services in Canada, 2008/2009.” *Juristat: Canadian Centre for Justice Statistics*.

90 Carrington, Peter J. and Jennifer L. Schulenberg. (2003). *Police Discretion with Young Offenders: Report to the Department of Justice Canada*. <http://www.justice.gc.ca/eng/rp-pr/cj-jp/vj-ij/discr/pdf/rep-rap.pdf>.

91 Department of Justice Canada. (2015). *Canada's Court System*.

If convicted, the guilty party faces either custody in an open- or secure-custody facility, or community supervision which involves either a probation order, or community service. Community supervision typically includes regular reporting to a probation officer and may require counselling or rehabilitation.<sup>92</sup>

The focus on diverting youth from the criminal justice system, especially from criminal courts and custody, leads to a different cost profile than for adult offenders, with a greater emphasis on spending on probation and community-based programming for youth. As will be seen, this is especially true for drug offenders with very few youth serving custody sentences.

## Youth Justice Spending

Provincial-territorial spending data on youth justice services is not particularly detailed or comprehensive. Only Ontario fully breaks out its youth justice services spending in its Public Accounts. British Columbia does so on a partial basis. As was done in the previous section, the PBO's methodology for estimating total youth justice spending was employed.<sup>93</sup> Using this approach, it was estimated that total spending on youth justice services in Canada was roughly \$940 million in 2015-16. Of this amount, \$790 million (84 per cent) was comprised of provincial-territorial own-source spending and \$150 million was supported by federal transfers for youth justice services. These amounts do not include spending on youth courts, which will be dealt with separately.

Spending on cannabis-related offences represents a relatively small proportion of total youth justice spending. It is estimated that total youth justice sector spending on cannabis-related offences was \$22.6 million in 2015-16. This was split roughly equally between court costs and community-based corrections programs.

### FIGURE 27

**Estimated Impact of Cannabis-Related Offences on the Youth Justice System by Sector and Order of Government in 2015-16, (\$ millions)**

	Federal	Provincial	Total	Share
Courts	4.5	7.6	12.1	53.5%
Corrections	1.7	8.8	10.5	46.5%
<b>Total</b>	<b>6.2</b>	<b>16.4</b>	<b>22.6</b>	<b>100.0%</b>
Share	27.4%	72.6%	100.0%	

Due to the manner in which it is being implemented, the implications of cannabis legalization for the youth justice system could be quite different than for the adult criminal justice system, because possession will still be illegal for youth. Differential treatment of youth under the cannabis-possession provisions of the legalization framework could well result in increased exposure of youth to the criminal justice system, resulting in higher costs. The increased costs would be disproportionately borne by the provinces and territories.

92 Office of the Auditor General of Ontario. (2012). *2012 Annual Report of the Office of the Auditor General of Ontario*.

93 Office of the Parliamentary Budget Officer. (2013). *Expenditure Analysis of Criminal Justice in Canada*.



# The Impact of Cannabis-Related Offences on the Youth Justice System

## Policing

The Uniform Crime Reporting Survey (UCRS) outlines police-reported incidents of a wide range of offences. It does not however, break out whether violations were committed by adults or youth. As such, the policing costs for cannabis-related offences are captured in the previous section.

## COURTS: YOUTH JUSTICE COMMITTEES AND YOUTH COURTS

Despite the aim to divert youth from the criminal justice system, the rates at which youth are charged for either cannabis possession or other cannabis offences (trafficking, production or distribution) are higher than for those of adults (see Figure 28). However, charge rates per 100,000 for both youth and adults are on the decline, which is in line with the general decline in drug offences.

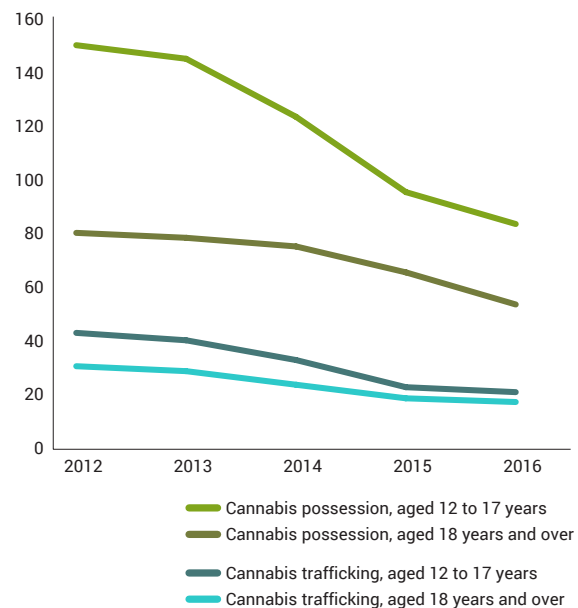
As discussed above, youth charged with an offence are ideally meant to either be referred to YJCs, be referred to a youth-mental-health court worker, or be recommended for extrajudicial sanctions if possible. While there is interprovincial variation on how YJCs are funded, provinces typically do not spend much money to support them. Some are YJCs are volunteer based, while some are paid honoraria. Some are funded by provinces and some are not.<sup>94</sup> For example, Ontario spent \$2.2 million in total on youth justice committees in 2015-16. Because cannabis-related spending on YJCs would only be

a fraction of spending on YJCs, no estimate will be produced for this report. Referrals to mental-health court workers will be dealt with as part of probation and community-based programs in a section to follow below.

Cases that are not handled by alternate means are referred to provincial youth courts. For youth court spending, the same methodology for calculating federal and provincial spending on courts was used, including the role of the PPSC in drug prosecutions everywhere but Quebec and New Brunswick. In 2016-16, there were 1,540 drug possession and 717 other drug charges

**FIGURE 28**

**Charge Rates for Cannabis Possession and Other Cannabis Offences for Youth Versus Adults, 2012 to 2016 (Rate per 100,000 for population aged 12 to 17 (Youth) and 18 and over (Adult))**



Source: Table 252-005: 1 Incident-based crime statistics, by detailed violations, annual, Uniform Crime Reporting Survey.

94 Hann & Associates. (2003). "A National Survey of Youth Justice Committees in Canada." Report prepared for the Department of Justice Canada. [http://www.justice.gc.ca/eng/rp-pr/cj-jp/vj-ij/rr03\\_yj7-rr03\\_jj7/rr03\\_yj7.pdf](http://www.justice.gc.ca/eng/rp-pr/cj-jp/vj-ij/rr03_yj7-rr03_jj7/rr03_yj7.pdf).

heard in youth courts. The median case length for those cases was 113 and 155 days for drug possession and other drug charges, respectively.<sup>95</sup> As discussed previously, offences by type of drug are only broken out as far as the charges level, so to estimate the number of drug cases that cannabis represents, the share of cannabis possession and other drug charges are used as a proxy. In 2015, cannabis offences represented 80.6 per cent of youth drug possession charges, and 55.6 per cent of other youth drug charges.<sup>96</sup> Taken together, these data indicate that in 2015-16, there were over 200,000 youth court days spent trying cannabis charges. This represents 0.43 per cent of total adult and youth court days across Canada.

## FIGURE 29

### Cannabis Charges as a Share of All Youth Drug Charges, 2015

Cannabis Share of Total Drug Possession Charges	80.6%
Cannabis Share of Total Other Drug Charges	55.6%

Source: CANSIM Table 252-0051 Incident-based crime statistics, by detailed violations, annual, UCRS.

95 CANSIM Table 252-0066 Youth courts, cases by median elapsed time in days, Integrated Criminal Court Survey  
 96 Offences by type of drug are only broken out as far as the charge level, after which data are aggregated "drug possession" and "other drug offences". The detailed breakout at the charges level is used as a proxy to estimate the share of cannabis offences at the court and corrections levels.

Applying this share to provincial-territorial spending on criminal court proceedings (excluding prosecution services, except in Quebec and New Brunswick), suggests that provinces and territories spent **\$7.6 million** trying youth cannabis-related offences in 2015-16. For its part, the federal government would have spent **\$4.5 million** in the same year, primarily through its spending on drug prosecutions through the PPSC (discussed in Section 4).

## Corrections

While the rates have increased in recent years, youth tried for drug possession are less likely to be found guilty than the general rate for youth offences. Guilty rates for other drug offences, however, are roughly in line with the rate for total offences.

## FIGURE 30

### Percentage of Youth Drug Cases Resulting in Guilty Decisions or Stayed or Withdrawn Charges Compared to Total Decisions for All Youth Cases, 2011-12 to 2015-16

	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Total Decisions</b>					
Found Guilty	56.6%	57.4%	56.4%	56.8%	55.4%
Charges Stayed or Withdrawn	41.4%	40.7%	41.5%	41.2%	42.7%
<b>Drug Possession</b>					
Found Guilty	29.0%	28.3%	27.8%	38.3%	37.0%
Charges Stayed or Withdrawn	70.6%	71.3%	71.5%	60.3%	61.9%
<b>Other Drug Offences</b>					
Found Guilty	50.2%	49.0%	53.6%	56.5%	55.9%
Charges Stayed or Withdrawn	48.5%	50.6%	46.1%	41.8%	42.1%

Source: Table 252-0064 Youth courts, number of cases and charges by type of decision, annual, Integrated Criminal Court Survey.

With the introduction of the YCJA in 2003, the trend has been a decrease in the use of custody and an increase in community-based programs to rehabilitate offenders under the age of 18.<sup>97</sup> For drug offences, the data certainly bear this out. Among those youth found guilty of drug charges, custody sentences are exceedingly rare. Between 2011-12 and 2015-16, an average of 15.1 per cent of total youth guilty verdicts resulted in custody sentences. Of youth found guilty drug possession or other drug charges over that same time period, only 1.4 per cent and 8.0 per cent of cases resulted in custody sentences, respectively. Probation sentences were far more common, and in the case of other drug charges far outstripped the general rate of probation sentences (75.5 per cent versus 57.4 per cent for all offences). In the case of possession charges, other sentences were the most common result of a guilty verdict, at 65.9 per cent. Other sentences include measures such as restitution, conditional discharge, deferred custody and supervision, intensive support and supervision, attendance at non-residential program, as well as other court imposed conditions such as apologies and essays.<sup>98</sup>

Reliance upon custody is comparatively much higher for adult offenders. Over the same time period discussed above, 36.5 per cent of total adult guilty offences resulted in a custody sentence. For those found guilty of drug possession and other drug offences, the rates were 11.7 per cent and 46.2 per cent respectively.<sup>99</sup>

97 Office of the Auditor General of Ontario. (2012). *2012 Annual Report of the Office of the Auditor General of Ontario*.

98 All of the statistics from the above paragraph were generated from data from CANSIM Table 252-0067 Youth courts, guilty cases by type of sentence, annual, Integrated Criminal Court Survey

99 CANSIM Table 252-0057 Adult criminal courts, guilty cases by most serious sentence, annual, Integrated Criminal Court Survey.

## CUSTODY

For youth found guilty through the youth court process, “custody sentences tend to be reserved for the most serious and repeat offenders.”<sup>100</sup>

As noted above, drug offences do not appear to meet that bar. In 2015-16, only 26 guilty verdicts for drug offences resulted custody sentences.<sup>101</sup> While cannabis-specific data is not available, if sentencing practices break out along the same lines at which cannabis charges are laid as a share of total drug offences, that would result in 16 youth cannabis-related offences resulting in custody. While on the surface of it, such a small number might indicate that a cost estimate is not warranted, the relatively high per day costs of operating youth custody facilities suggest a closer look is needed.

Estimates for the daily costs of youth custody facilities range widely. For example, the Auditor General of Ontario estimates that in 2011, the average daily cost per youth ranged from \$331 to \$3,012 for agency-operated open facilities, from \$475 to \$1,642 for agency-operated secure facilities, and from \$1,001 to \$1,483 for Ministry-operated secure facilities.<sup>102</sup> A 2016 study prepared for the Department of Public Safety Canada above data indicate that 2013 per day costs were \$526.03 for youth open-custody facilities- and \$751.50 for secure-custody ones.<sup>103</sup>

100 Office of the Auditor General of Ontario. (2012). *2012 Annual Report of the Office of the Auditor General of Ontario*.

101 Table 252-0064 Youth courts, number of cases and charges by type of decision, annual, Integrated Criminal Court Survey.

102 Office of the Auditor General of Ontario. (2014). *2014 Annual Report of the Office of the Auditor General of Ontario*.

103 Day, Davis, et al. (2016). *The Monetary Cost of Criminal Trajectories for an Ontario Sample of Offenders*.

The key piece of missing data, however, is average sentence length for drug offences. If there are few drug offenders in custody, but they are serving long and expensive sentences, the costs could be considerable. However, no evidence to support that scenario was found. While recent data are unavailable, the majority of youth custodial sentences in Canada appear to be relatively short. In 2008-09 for example, 43 per cent of custodial sentences for youth were for less than one month, and another 47 per cent were for from one to six months.<sup>104</sup> In Ontario, average stays are also very short. In 2013-14, detention sentences were 32 days on average and custody sentences were 71.3 days.<sup>105</sup> It is not clear how these trends would map onto cannabis offences. Even if sentences for cannabis offences skewed long for some reason and all cannabis offenders served sentences in the most expensive facilities to operate, this would still only result in the neighbourhood of \$1.5 million spending annually. Therefore, due to the lack of sentence length data and the likelihood that spending on youth custody for cannabis-related offences is small, no estimate will be created for the purposes of this report.

## PROBATION, COMMUNITY SUPERVISION AND COMMUNITY-BASED PROGRAMS

With the decreasing reliance on incarceration for youth on the part of the courts, provinces have developed a broad and extensive range of community-based alternatives to open and secure custody and detention. While provincial-territorial spending on these programs is not well-documented, it has been estimated that Ontario's spending on youth justice services breaks out two-thirds custody versus one-third on programs such as probation, community supervision and prevention.<sup>106</sup> Extrapolating that to a nationwide basis indicates that, of the not quite \$1 billion spent on youth justice services in Canada in 2015-16, approximately \$320 million of that would have been spent on probation, community supervision and other community-based programs. Using average probation length by offence as a proxy allowed for an estimate of how intensely these services are used for drug-related offences.<sup>107</sup> In 2016-16, the average probation sentence for the 244 youth found guilty of possession was 252 days, and 362 days for the 274 youth found guilty of other drug charges. This works out to 3.3 per cent of the total probation days over all youth offences, meaning \$10.5 million of spending on these programs was attributable to cannabis-related offences. Of this amount, 84 per cent or \$8.8 million was spent by provinces and territories and the remaining \$1.7 million would have been supported by the federal government through its Youth Justice Transfers to provinces.

104 Calverley, Donna, Adam Cotter and Ed Halla. "Youth custody and community services in Canada, 2008/2009." *Juristat: Canadian Centre for Justice Statistics*.

105 <http://www.children.gov.on.ca/htdocs/English/professionals/childwelfare/residential/residential-review-panel-report/youthjustice.aspx>.

106 Office of the Auditor General of Ontario. (2012). *2012 Annual Report of the Office of the Auditor General of Ontario*.

107 See Figure 29 for assumptions regarding cannabis share of total drug charges.

## REMAND

The final piece of the youth justice picture is remand and pre-trial detention. Since 2007-08, youth held in pre-trial detention have outnumbered those held in sentenced custody. In 2015-16, the rate of youth in pre-trial detention was 3 per 10,000 youth, while that for sentenced custody was slightly less at 2 per 10,000 youth.<sup>108</sup> Some data on the offences related to youth admissions into pre-trial custody are available, they are highly aggregated. In recent years, roughly half of the youth admissions to pre-trial custody are for either violent crimes or property crimes. The other half of admissions are for somewhat more nebulous “Other Criminal Code Offences”, “Other Offences” or for “Unknown” offences.<sup>109</sup> As such, detailed data on admissions for even high-level “drug offences” are not available.

And while youth serving pre-trial detention are remanded to custody in expensive separate facilities, the evidence suggests that these stays are not long, with just over half of youth released from remand in a week.<sup>110</sup> Therefore, similar to the case for custody, due to the lack of data, no estimate will be created for the purposes of this report.

108 Malakieh, Jamil. (2017). “Youth correctional statistics in Canada, 2015/2016.” *Juristat: Canadian Centre for Justice Statistics*.

109 CANSIM Table 251-0013, Youth admissions to correctional services, by most serious offence, annual, Youth Custody and Community Services.

110 Calverley, Donna, Adam Cotter and Ed Halla. “Youth custody and community services in Canada, 2008/2009.” *Juristat: Canadian Centre for Justice Statistics*.

## What is likely to happen next?

For adults, incidence of cannabis-related crime in all likelihood will decrease following legalization. For youth, however, the story may play out quite differently.

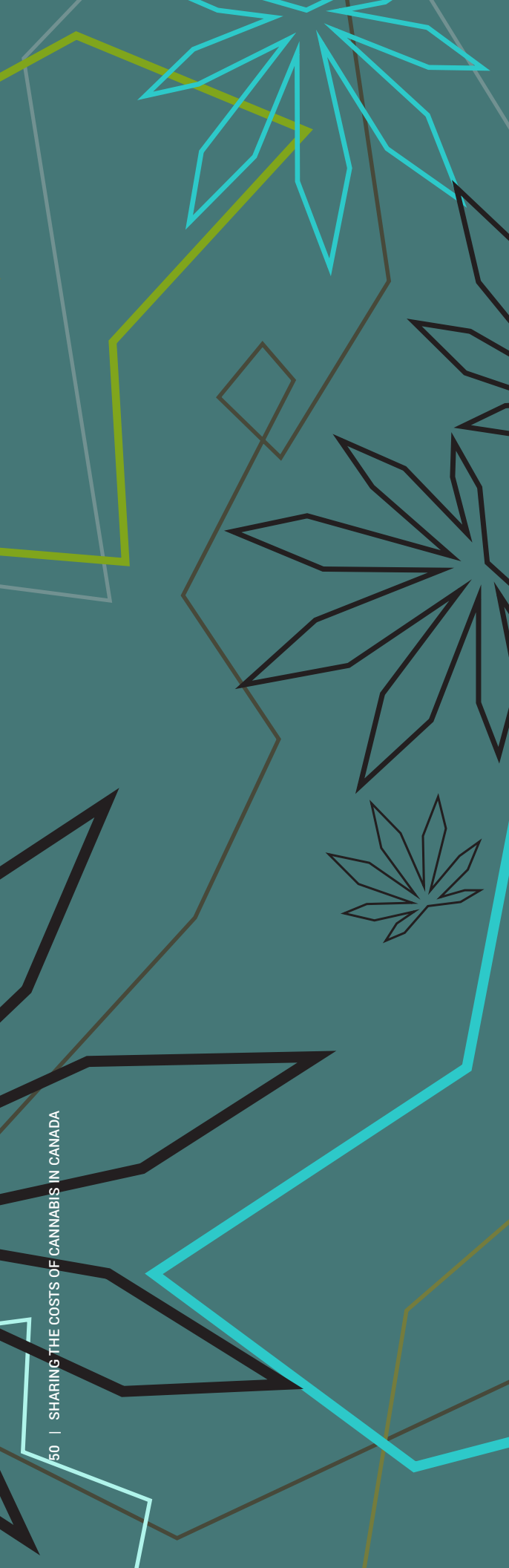
One of the stated policy objectives of cannabis legalization is to “protect young Canadians by keeping cannabis out of the hands of children and youth.”<sup>111</sup> As part of meeting that objective, the choice has been made to create a category of possession offence that will not exist for adults, thereby criminalizing the possession of cannabis differently for youth. Whereas adults over the age of 18 will be permitted to possess up to an equivalent of 30g of dried cannabis, Bill C-45 will prohibit a young person from possessing more than the equivalent of 5g of dried cannabis. In the case of a young person between the ages of 12 and 18, every person that contravenes that prohibition is guilty of an offence punishable on summary conviction and is liable to a youth sentence under the YCJA.

Depending on how strictly this law is enforced, this differential treatment of youth has the potential for increasing the incidence of youth exposure to the justice system. Not only are possession laws stricter for youth, but young people are also generally more likely to use cannabis than adults. Across Canada, 8.4 per cent of adults over the age of 25 report as having used cannabis in the past year, compared to 20.3 per cent of those under 25.<sup>112</sup> In the age group that would specifically be subject to the provisions of the YCJA, the Ontario Student Drug Use and Health Survey (OSDUHS) indicates that

111 Canada. (2016). “A Framework for the Legalization and Regulation of Cannabis in Canada: The Final Report of the Task Force on Cannabis Legalization and Regulation.”

112 Canadian Alcohol and Drug Use Monitoring Survey: 2012





19.0 per cent of Ontario students in Grades 7-12 reported using cannabis in the last year. Narrowed to students in Grades 9-12, 37.8 per cent report some drug use including cannabis in the past year.<sup>113</sup> Given the higher prevalence of cannabis use among youth, this differential criminalization of possession could potentially impact a large number of youth.

The potential for increased youth exposure to the criminal justice systems would result in increased youth justice costs. These costs would be borne disproportionately by the provincial and territorial governments.

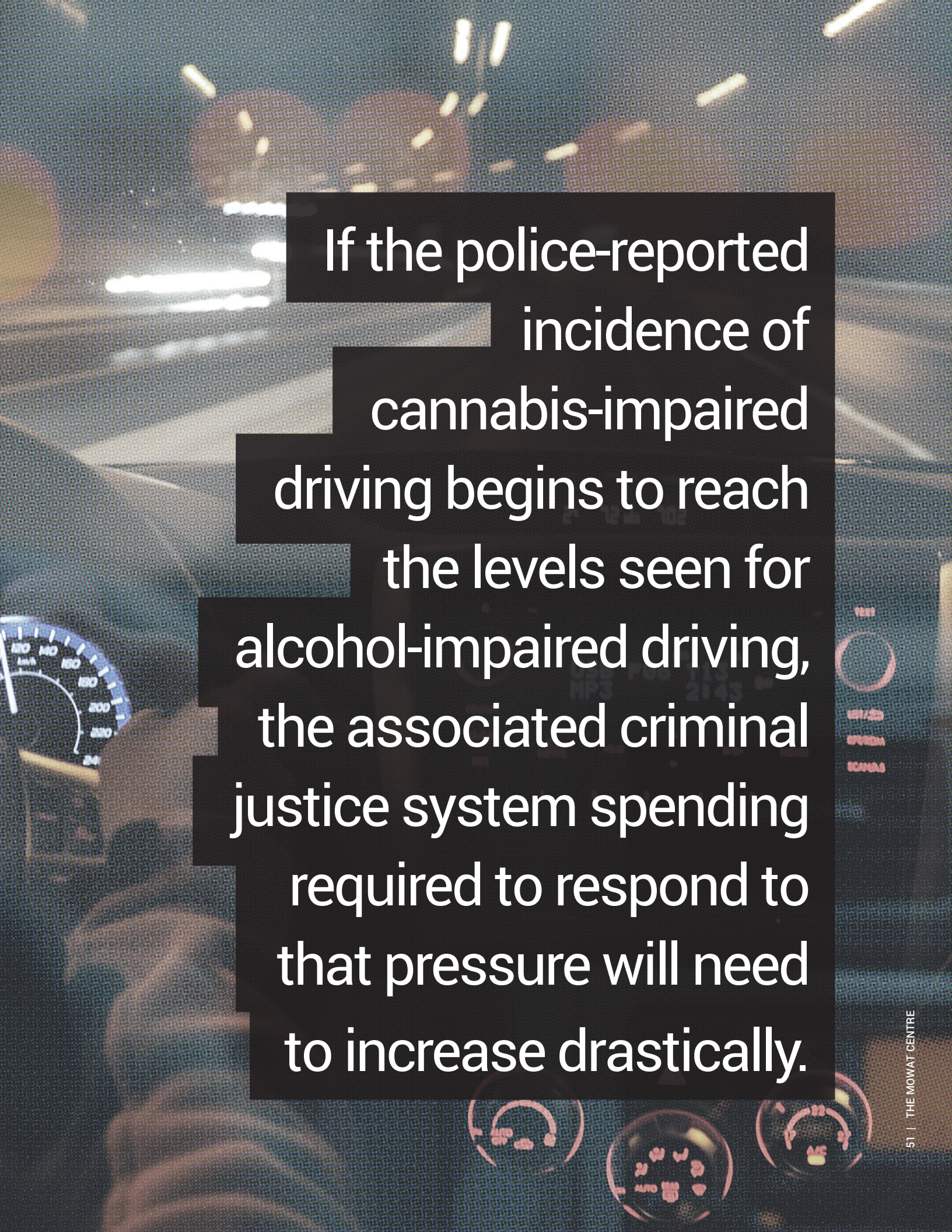
Increased exposure to the youth justice system would also have considerable knock on effects in the social harms it would create, “potentially barring them from opportunities to equitably advance in and contribute to society.”<sup>114</sup> For high school-aged youth a criminal record can be a barrier to volunteer opportunities, often required by school curriculums, and is a factor in scholarship decisions. A criminal record can also diminish career opportunities and contribute to poverty and poorer health outcomes.<sup>115</sup> These developments would result in increased pressure on all manner of social programs down the road.

113 <http://www.camhx.ca/Publications/OSDUHS/2017/index.html>.

114 Canadian Nurses Association. (2017). “Suggested Amendments to the Text of Bill C-45: An Act Respecting Cannabis and to Amend the Controlled Drugs And Substances Act, the Criminal Code and Other Acts.” *Brief Prepared for the Standing Committee on Health*.

115 Canadian Nurses Association. (2017). “Suggested Amendments to the Text of Bill C-45: An Act Respecting Cannabis and to Amend the Controlled Drugs And Substances Act, the Criminal Code and Other Acts.” *Brief Prepared for the Standing Committee on Health*.





If the police-reported incidence of cannabis-impaired driving begins to reach the levels seen for alcohol-impaired driving, the associated criminal justice system spending required to respond to that pressure will need to increase drastically.



# 6 CANNABIS-IMPAIRED DRIVING

On the face of it, the costs that cannabis-impaired driving presents for the justice system appears to be minimal (see Figure 31). Police-reported incidents of drug-impaired driving, along with charges and convictions for those offences, are significantly lower than similar statistics for alcohol-impaired driving.

However, a considerable body of research suggests that police-reported crime statistics are not capturing a significant amount of drug-impaired driving in general and cannabis-impaired driving in particular. In fact, research suggests that cannabis-impaired driving already comes close to matching the prevalence of alcohol-impaired driving, and that is prior to legalization. The lower police-reported incidence of cannabis-impaired driving is generally explicable by the current inadequacies of roadside testing methods for drug impairment, which in turn lead to lower rates of laying criminal charges and securing convictions for drug-impaired offences. If testing methods are improved, giving way to potentially more successful prosecution practices, the associated costs they could impose on law enforcement and the courts could be staggering. If the police-reported incidence of cannabis-impaired driving begins to reach the levels seen for alcohol-impaired driving, the associated criminal justice system spending required to respond to that pressure will need to increase drastically (see Figure 32). While the deterrence these improvements would provide against

drug-impaired driving would doubtless be a good investment from a public safety perspective, it is worth noting that the direct costs could potentially become the largest cannabis-related expense for the criminal justice system post-legalization. These increased law enforcement and court costs would be borne disproportionately by municipal and provincial governments, respectively (see Figure 32).

**FIGURE 31**

**Estimated Impact of Cannabis-Impaired Driving on the Criminal Justice System by Sector and Level of Government in 2015-16, (\$ millions)**

	Federal	Provincial	Municipal	Total	Share
Policing	2.1	2.3	7.2	11.6	42.0%
Courts	3.0	11.0	—	14.0	50.7%
Corrections		2.0	—	2.0	7.2%
<b>Total</b>	<b>5.1</b>	<b>15.3</b>	<b>7.2</b>	<b>27.6</b>	<b>100.0%</b>
Share	18.5%	55.4%	26.1%	100.0%	—

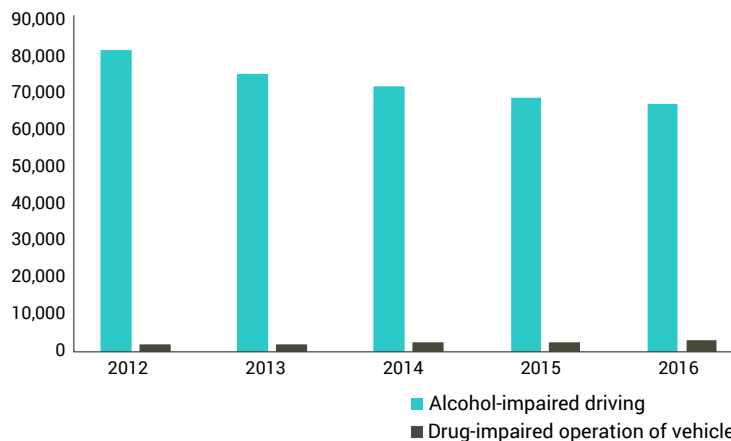
**FIGURE 32**

**Estimated Impact of Alcohol-Impaired Driving on the Criminal Justice System by Sector and Level of Government in 2015-16, (\$ millions)**

	Federal	Provincial	Municipal	Total	Share
Policing	65.4	69.3	222.1	356.9	57.0%
Courts	39.0	177.0	—	216.0	34.5%
Corrections	27.0	26.0	—	53.0	8.5%
<b>Total</b>	<b>131.4</b>	<b>272.3</b>	<b>222.1</b>	<b>625.9</b>	<b>100.0%</b>
Share	21.0%	43.5%	35.5%	100.0%	—

**FIGURE 33**

**Police-Reported Alcohol-Impaired Driving Violation Incidents Compared to Drug-Impaired Operation of Vehicle Incidents, 2012 to 2016, Canada**



Source: Table 252-0051 Incident-based crime statistics, by detailed violations, annual, UCRS.

## Policing

As was done in Section 4 to estimate the justice system costs associated with cannabis-specific criminal offences, this study also employed an incidence-based approach to estimate the current costs that cannabis-impaired driving imposes on the justice system. According to the available data in the Uniform Crime Reporting Survey (UCRS) and Integrated Criminal Court Survey (ICCS), police-reported incidents of alcohol-impaired driving as well as alcohol-impaired driving violations leading to criminal charges are far more prevalent than drug-impaired driving incidents or cases. For example, in 2016 there were 67,471 police-reported alcohol-impaired driving incidents across Canada<sup>116</sup> compared to 3,038 incidents of drug-impaired operation of a vehicle.<sup>117 118</sup>

116 70,509 total impaired-driving violations less 3,038 incidents of drug-impaired operation of vehicle.

117 Rates of overall police-reported impaired driving incidents are currently at their lowest levels since 1986 when such data was first collected, see Perrault, Samuel (2016) "Impaired Driving in Canada, 2015." *Canadian Centre for Justice Statistics, Statistics Canada*. <http://www.statcan.gc.ca/pub/85-002-x/2016001/article/14679-eng.pdf>; whereas police-reported incidents of drug-impaired operation of vehicle have seen a spike in recent years, increasing by nearly 60 per cent between 2012 and 2016, see Figure 33.

118 The number of youth charged with drug-impaired driving between 2012 and 2016 averaged under 25 charges per year and were not sufficiently large enough to generate a cost estimate. As such, the estimated costs to the criminal justice system associated with cannabis-impaired driving discussed in this section are for adult offenders only.

The UCRS does not split out drug-type in its reports of drug-impaired driving, so data on the relative prevalence of cannabis as a share of total illicit drug use were used to estimate the share of drug-impaired driving that cannabis represents.<sup>119</sup> Using this approach, the data suggest that while impaired driving in general represents a significant drain on police resources, cannabis-impaired driving only represents a small fraction of those costs at \$11.6 million in 2015-16, and significantly less than the policing costs associated with alcohol-impaired driving (see Figure 34). As discussed in earlier in Section 4, the policing costs of enforcing criminal justice are disproportionately borne by municipal governments. The same holds true for the costs associated with enforcing impaired driving laws.

### FIGURE 34

**Estimated Policing Costs Associated with Total Impaired Driving and Cannabis-Impaired Driving Incidents, by Government, 2015-16 (\$ millions)**

	Alcohol-Impaired	Cannabis-Impaired
Federal	65.4	2.1
Provincial	69.3	2.3
Municipal	222.1	7.2
<b>Total</b>	<b>356.9</b>	<b>11.6</b>

119 Using data on reported drug-use over the past year from the *Canadian Tobacco Alcohol and Drugs Survey (CTADS): 2015* it is estimated that cannabis use represents about 80 per cent of all illicit drug use. The *2012 Canadian Community Health Survey - Mental Health (CCHS)* estimates that cannabis represents 65.6 per cent of all illicit drug use among those who reported drug use over the past year. As such, an average of 72.2 per cent was taken to estimate the prevalence of cannabis use as a share of illicit drug use and was consequently assumed to represent the same proportion of drug-impaired driving incidents, charges and cases. This estimate maps closely to a 2014 Ontario roadside survey of oral fluid and breath samples which indicated that cannabis accounted for 75 per cent of drivers who tested positive for drugs.

## Criminal Courts

In line with the trend of lower police-reported incidents of drug-impaired driving in comparison with alcohol, drug-impaired driving offences are also less likely to result in criminal charges. Between 2012 and 2016, 58.1 per cent of drug-impaired driving offences resulted in charges being laid compared to 70.6 per cent for alcohol-impaired driving over the same period.<sup>120</sup> Unfortunately for the purposes of this analysis, beyond the charges level, alcohol- and drug-impaired driving statistics are aggregated under a single category. As such, making robust estimates to the specific impact of drug-impaired driving has on the justice system beyond policing becomes more difficult. The *Juristat* literature produced by Statistics Canada does offer some guidance, but with respect to interpreting the following cost estimates for the impacts of cannabis-impaired driving on the court and corrections system, a degree of caution should be taken.<sup>121</sup>

Representing roughly 10 per cent of cases, impaired driving cases are among the most frequently heard in adult courts.<sup>122</sup> And while alcohol-impaired driving cases tend to be almost exactly as long as the average Criminal Code offence hearing, drug-impaired driving cases last considerably longer and thus are a larger draw on court resources. According to a 2016 study from Statistics Canada's Canadian Centre for Justice Statistics, at 227 days, "the median time to complete a drug-impaired driving case was

120 See CANSIM Table 252-0051, Incident-based crime statistics, Uniform Crime Reporting Survey.

121 Due to the very low incidence of police-reported drug-impaired driving causing either death or bodily harm, and drug-impaired driving by youth, they were excluded from the following analysis.

122 <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/ccrso-2016/index-en.aspx>.



almost twice as long,<sup>123</sup> as a an alcohol-impaired driving case. Using this data and replicating the methodology for estimating the costs of cannabis-related crimes on the court system as discussed in Section 4,<sup>124</sup> it is estimated that the provinces spent \$11 million on cannabis-impaired driving court costs in 2016. This pales in comparison to the estimated \$177 million of court costs attributable to alcohol-impaired driving. The federal government is also estimated to contribute \$3 million and \$39 million to the prosecution costs of cannabis- and alcohol-impaired driving respectively, primarily through its remuneration of Superior Court Justices and support for Legal Aid (see Figure 35).

## FIGURE 35

**Estimated Court Costs Associated with Alcohol-Impaired Driving and Cannabis-Impaired Driving Incidents, by Government, 2015-16 (\$ millions)**

	Alcohol-Impaired	Cannabis-Impaired
Federal	39.0	3.0
Provincial	177.0	11.0
Total	216.0	14.0

123 Perrault, Samuel (2016) "Impaired Driving in Canada, 2015." *Juristat: Canadian Centre for Justice Statistics*. <http://www.statcan.gc.ca/pub/85-002-x/2016001/article/14679-eng.pdf>.

124 An important difference in the two methodologies is that, whereas provincial spending on prosecution services was excluded from provincial court spending in the previous analysis because of the role of the Public Prosecution Service of Canada in prosecuting drug crimes, for the purposes of impaired driving, they were included.

## Corrections

The same study indicates drug-impaired driving cases are considerably less likely to result in a conviction than alcohol-impaired driving. Only 61.3 per cent drug-impaired driving cases result in a guilty verdict, compared to 81.2 per cent for alcohol.<sup>125</sup> Of those found guilty, close to 90 per cent of both drug- and alcohol-impaired violations result in either fines or driving-prohibition orders. However, 14.2 per cent of drug- impaired cases result in probation and 9.8 per cent result in custody, which are both slightly higher than the rates for alcohol-related offences. Assuming an average probation of 400 days for impaired driving convictions,<sup>126</sup> and that 58 per cent of custody sentences for drug-impaired driving were for periods of less than 31 days, a conservative estimate is that provinces incurred about \$2 million in cannabis-impaired driving corrections costs in 2016. While the publicly-available data are not detailed enough to definitively state that there are no cases of drug-impaired drivers serving sentences over two years, and therefore in federal custody, the available data do suggest that the number of such offenders would be small enough to have only a negligible effect on federal corrections costs. As such, the corrections costs associated with cannabis-impaired driving is borne primarily by the provinces.

125 Perrault, Samuel (2016) "Impaired Driving in Canada, 2015." *Juristat: Canadian Centre for Justice Statistics*.

126 This is the mean probation length for all impaired driving convictions and is used to estimate the probation costs for both drug- and alcohol impaired probation and conditional sentencing costs. See CANSIM Table 252-0061 Adult criminal courts, guilty cases by mean and median length of probation, Integrated Criminal Court Survey.

The same does not hold true for alcohol-impaired driving however. While alcohol-impaired driving is less likely to result in either probation or custody, the absolute number of guilty verdicts resulting in either is far greater than for drug-impaired driving. According to the literature, the average sentences for alcohol-impaired driving appear to be longer, with only 51 per cent of sentences being for periods of less than 31 days,<sup>127</sup> with a mean sentence of 57 days.<sup>128</sup> The 2015 Federal Offender Population Profile also indicates that there were over 400 inmates in federal correctional facilities serving sentences for impaired driving. Just over half of that population was serving sentences “in custody” with the rest under “community supervision.” Given the available data then, the corrections costs associated with alcohol-impaired driving, including probation, conditional sentences and custody is shared roughly equally between the provincial-territorial and federal governments, at \$26 million and \$27 million respectively.

**TABLE 36**

**Estimated Corrections Costs Associated with Alcohol-Impaired Driving and Cannabis-Impaired Driving Incidents, by Government, 2015-16 (\$000)**

	Alcohol-Impaired	Cannabis-Impaired
Federal	27.0	–
Provincial	26.0	2.0
Total	53.0	2.0

127 Perrault, Samuel (2016) “Impaired Driving in Canada, 2015.” *Juristat: Canadian Centre for Justice Statistics*.

128 Belanger, Brenda. (2001). “Sentencing in Adult Criminal Courts, 1999-00.” *Juristat: Canadian Centre for Justice Statistics*; Ottawa Vol. 21, Iss. 10 (Dec 2001): 1.

## What’s likely to happen next?

It is not clear whether or not the incidence of cannabis-impaired driving will increase following legalization. Studies designed to measure the prevalence of cannabis-impaired driving before and after decriminalization in California<sup>129</sup> (2011) and legalization in Colorado<sup>130</sup> (2012) found no statistically significant increases. A similar study did, however, find a statistically significant increase in suspected impaired drivers testing positive for cannabis use following legalization in Washington<sup>131</sup> (2013). The methodology of all these studies has received at least some criticism for potential selection bias.<sup>132</sup> In the Canadian context, more can and should be done to measure and understand the impact legalization will have on cannabis-impaired driving. However, the degree to which cannabis-impaired driving will or won’t increase post-legalization may be a secondary point. A considerable body of evidence – evidence that is not being picked up in the police-reported crime statistics – indicates that cannabis-impaired driving is already troublingly prevalent.

129 Pollini RA, Romano E, Johnson MB, Lacey JH. (2015). “The impact of marijuana decriminalization on California drivers.” *Drug Alcohol Dependence*; 150:135-40.

130 Urfer S, Morton J, Beall V, Feldmann J, Gunesch J. (2014). “Analysis of DELTA9-tetrahydrocannabinol driving under the influence of drugs cases in Colorado from January 2011 to February 2014.” *Journal of Analytical Toxicology*; 38(8):575-81.

131 Couper FJ, Peterson BL. (2014). “The prevalence of marijuana in suspected impaired driving cases in Washington state.” *Journal of Analytical Toxicology*; 38(8):569-74.

132 Cadieux G, Leece P. (2017). “Evidence Brief: Driving under the influence of cannabis and risk of motor vehicle collision.” *Ontario Agency for Health Protection and Promotion (Public Health Ontario)*. Toronto: Queen’s Printer for Ontario.

As discussed in Section 3 the risks of cannabis-impaired driving appear to be underappreciated by cannabis users, and “surveys suggest that they actually get behind the wheel much more often than drinkers do when drunk.”<sup>133</sup> Data from Canadian Alcohol and Drug Use Monitoring Survey (CADUMS) reveal that “an estimated 632,576 persons who reported making 10.4 million trips after using cannabis, an average of approximately 16 trips per person per year. This compares with 2.04 million persons who made an estimated 13.3 million trips after consuming two or more drinks in the previous hour, an average of 6.5 trips per person per year.”<sup>134</sup> Drug-impaired driving is particularly prevalent among youth.<sup>135</sup> For example, according to the Centre for Addiction and Mental Health’s Ontario Student Drug Use and Health Survey (OSDUHS), 9 per cent of Grade 10-12 students reported using cannabis and driving in 2017, compared to 4 per cent who reported drinking and driving.<sup>136</sup> Other surveys and roadside tests also confirm the prevalence of driving following cannabis use,<sup>137</sup> with estimates ranging between 2 per cent and 4 per cent of the population having recently had driving episodes following cannabis use.<sup>138</sup> However, there are few drug-impaired driving charges relative to the prevalence of driving after drug use.<sup>139</sup> Given this

relative prevalence, the 2,000 to 3,000 annual police-reported incidents of drug-impaired driving<sup>140</sup> are shockingly low.

A series of studies also indicates that cannabis-impaired operation of a vehicle causing bodily harm in Canada is considerably more prevalent than the handful of police-reported incidents in the Uniform Crime Reporting Survey suggest (see Figure 37). Two recent studies<sup>141</sup> estimate that between 4,400 and 4,500 injuries are attributable to cannabis use annually, with another suggesting the possible range is much higher (see Figure 37).<sup>142</sup>

### FIGURE 37

**Comparing police-reported incidents of drug-impaired operation of a vehicle causing bodily harm and estimates of cannabis-impaired operation causing bodily harm: Uniform Crime Reporting Survey (UCRS) versus Select Studies**

UCRS	2012	2013	2014	2015	2016
Drug-related incidents	16	8	22	18	22
Study	Wettlaufer et al.	Imtiaz et al.	Fischer et al.		
Cannabis-related incidents (annual)	4,407	4,481	6,825 - 20,475		

133 Caulkins, et al. (2016).

134 Beirness, Douglas and Amy Porath. (2017). “Clearing the Smoke on Cannabis: Cannabis Use and Driving – An Update.” *Canadian Centre on Substance Abuse and Addiction*.

135 Solomon, Robert and Erika Chamberlain (2014) “Canada’s New Drug-Impaired Driving Law: The Need to Consider Other Approaches.” *Traffic Injury Prevention*: 15, 685–693.

136 <http://www.camhx.ca/Publications/OSDUHS/2017/index.html#section1>.

137 For example: Traffic Injury Research Foundation. (2014). “The road safety monitor 2013: drugs and driving.” And Beirness DJ, Beasley EE. (2010). “A roadside survey of alcohol and drug use among drivers in British Columbia.” *Traffic Injury Prevention*; 11(3):215-21.

138 Fischer, Benedikt et al. (2015). “Crude estimates of cannabis-attributable mortality and morbidity in Canada—implications for public health focused intervention priorities.” *Journal of Public Health*. 38(1): 183–188.

139 Solomon and Chamberlain. (2014).

140 CAMSIM Table 252-0051 Incident-based crime statistics, Uniform Crime Reporting Survey

141 See: Wettlaufer, Ashley et al. (2017). “Estimating the Harms and Costs of Cannabis-Attributable Collisions in the Canadian Provinces.” *Drug and Alcohol Dependence*: 173 (2017) pp. 185-190. And Imtiaz, Sameer, et al. (2015). “The Burden of Disease

Attributable to Cannabis-Use in Canada in 2012.” *Addiction*: 11, 353-362, estimated 4,481 cannabis-related traffic fatalities.

142 Fischer et al. (2015).

It is also likely that a considerable degree of cannabis use is going either undetected or unreported in fatal traffic incidents. The same studies discussed above estimate traffic deaths attributable to cannabis use are much higher than what the police-reported incidents suggest. Furthermore, evidence suggests that cannabis use is almost on par with alcohol as a cause of traffic deaths. A 2011 study of almost 6,000 fatally injured drivers across Canada indicated that “the extent of drug use among fatally injured drivers is comparable to that of alcohol use.”<sup>143</sup>

### FIGURE 38

Comparing police-reported incidents of drug-impaired operation of a vehicle causing death and estimates of cannabis-impaired operation causing death: Uniform Crime Reporting Survey (UCRS) versus Select Studies

UCRS	2012	2013	2014	2015	2016
Drug-related incidents	4	6	11	6	8
Study	Wettlaufer et al.	Imtiaz et al.	Fischer et al.		
Cannabis-related incidents (annual)	75	94	89-267		

The considerable gap in police-reported incidence of drug- and cannabis-impaired driving and the evidence borne out by surveys and empirical studies can be explained by two main factors: the difficulty testing for cannabis-impairment roadside and the high evidentiary bar of proving in court that cannabis use lead to impairment of driving.

143 Beasley, Erin, Douglas Beirness, and Amy Porath-Waller. (2011). “A Comparison of Drug and Alcohol-Involved Motor Vehicle Driver Fatalities.” Canadian Centre on Substance Abuse.

Determining and measuring the level of drug impairment can be more difficult and less reliable than the measures used to detect alcohol-impaired driving.<sup>144</sup> Cannabis’ metabolites stay in the body for a number of days after intoxication.<sup>145</sup> This complicates the assessment of impairment because, unlike alcohol, the mere presence of cannabis in the system does not necessarily imply intoxication at the time of testing. Testing for drug impairment also represents an appreciable drain on police time and resources. It can take about two hours to administer a roadside test, transport a suspect to the police station for further testing, allowing a suspect to consult with counsel, and then to conduct a Drug Recognition Evaluation.<sup>146</sup>

144 Owusu-Bempah, A. (2014). “Cannabis impaired driving: An evaluation of current modes of detection.” *Canadian Journal of Criminology and Criminal Justice*. Vol. 56, no. 2. p. 219-240.

145 Caulkins et al. (2016).

146 Solomon, Robert and Erika Chamberlain (2014) “Canada’s New Drug-Impaired Driving Law: The Need to Consider Other Approaches.” *Traffic Injury Prevention*: 15, 685–693

The difficulty in testing for drug- and cannabis-impaired driving results in fewer criminal charges being laid. In 2015, 59 per cent of police-reported incidents of drug-impaired driving were “cleared by charge,” compared to 71 per cent for alcohol-impaired driving incidents. Prosecuting drug-impaired driving offences is also difficult. The Canadian courts “remain sceptical about the link between the presence of drugs in a driver’s system and the actual impairment of his or her driving ability.”<sup>147</sup> Furthermore, for a successful conviction, it is important that police officers be well trained. A 2003 federal Department of Justice report indicated that “prosecuting a drug-impaired driving offence based on the observations of a non-expert police officer (such as one on routine patrol) was ‘nearly impossible.’”<sup>148</sup>

Since that report, the Criminal Code has been amended in 2008 to give law enforcement officers better tools to detect drug-impaired driving, including the Standardized Field Sobriety Test (SFST) and Drug Evaluation and Classification (DEC) protocols (see Text Box). The tests are accurate and trained Drug Recognition Experts are able to identify the class of drugs responsible for the impairment with

147 Solomon, Robert and Erika Chamberlain (2014) “Canada’s New Drug-Impaired Driving Law: The Need to Consider Other Approaches.” *Traffic Injury Prevention*: 15, 685–693

148 Canada, Department of Justice. (2003). *Drug-Impaired Driving: Consultation Document*. In, Solomon, Robert and Erika Chamberlain (2014) “Canada’s New Drug-Impaired Driving Law: The Need to Consider Other Approaches.” *Traffic Injury Prevention*: 15, 685–693.

## Testing for Cannabis-Impairment in Canada

In 2008, the federal government amended the Criminal Code to introduce new enforcement measures to test for drug-impaired driving.

To test for impairment, police officers must first look for one or more telltale signs of cannabis use such as distinct odour of marijuana in the vehicle, dilated pupils, lapses of attention and concentration, and reddened conjunctiva. This is often sufficient to form a reasonable suspicion of drug use, which in turn allows officers to proceed with a demand for the driver to perform the Standardized Field Sobriety Test (SFST).

Drivers who demonstrate impaired performance on these tests are required to accompany the officer to the station for evaluation by an officer trained in the Drug Evaluation and Classification (DEC) program. The DEC procedure involves a series of tests of coordination and divided attention, eye examinations, measures of blood pressure and temperature, observations of the suspect, and an interview. The purpose of the procedure is to provide the officer with the necessary evidence to determine whether the suspect is impaired, whether the observed impairment is due to drugs, and which category or categories of drugs are most likely responsible for the observed impairment.<sup>149</sup>

**Bill C-46 will also enable officers to demand samples of oral fluid, urine or blood following drug evaluation.**

149 Beirness, Douglas and Amy Porath. (2017). “Clearing the Smoke on Cannabis: Cannabis Use and Driving – An Update.” *Canadian Centre on Substance Abuse and Addiction*.



an accuracy rate of 95 per cent.<sup>150</sup> Oral fluid screening tests have also been proved to be reliable in detecting identified drugs.<sup>151</sup> The accuracy of these tests appears to be having an influence on the law enforcement to successfully lay charges, and “it may be that charge rates will increase as the system matures. Between 2009 and 2015, the proportion of drug-impaired driving incidents resulting in a charge rose from 53 per cent to 59 per cent. During the same period, the proportion of alcohol-impaired driving incidents resulting in a charge fell from 78 per cent to 71 per cent.”<sup>152</sup>

Drug Recognition Evaluations can only be conducted by a trained and accredited evaluating officer and Canada does not have many of them. As of 2017, there were only 800 trained drug recognition experts across Canada.<sup>153</sup> Training these officers is not cheap either. It costs \$17,000 to train one person to be a drug recognition expert.<sup>154</sup> Governments are, however, investing in more training to build law enforcement capacity in this area. For example, the federal government has committed up to \$161 million to tackle drug-impaired driving. From that pot of money, provinces and territories will have access to \$81 million to increase the percentage of SFST-trained officers from 15 per cent to 50 per cent in five years and to train approximately 150 additional DRE-certified police officers per year for the next five years.<sup>155</sup>

150 Beirness, Douglas, Erin Beasley and Jacques LeCavalier. (2009). “The Accuracy of Evaluations by Drug Recognition Experts in Canada.” *Canadian Society of Forensic Science Journal*, Volume 42, Issue 1, pp. 75-79.

151 Beirness, Douglas, and D’Arcy R. Smith. (2017). “An assessment of oral fluid drug screening devices.” *Canadian Society of Forensic Science Journal*, 50(2).

152 Perrault (2016).

153 <http://madd.ca/pages/madd-manager-says-legalization-of-marijuana-is-going-to-create-significant-issues/>.

154 <http://madd.ca/pages/madd-manager-says-legalization-of-marijuana-is-going-to-create-significant-issues/>.

155 <https://www.canada.ca/en/services/policing/police/community-safety-policing/impaired-driving/funding-research.html>.

For their part, provinces are also undertaking initiatives to increase local law enforcement capacity.

These investments are all welcome news from a public safety perspective. Improved testing protocols and increased capacity should provide prosecutors with better tools to successfully prosecute drug-impaired drivers. Increased citizen demand for further improvements are inevitable as this issue rises in profile. These improvements, however, will also come with a fiscal cost. As more cannabis-impaired driving incidents are detected, they will inevitably result in more police-reported incidents, more charges being laid, long and complicated court proceedings, and potentially increased incarceration rates for this category of offence (see Text Box: Sentencing for Drug-Impaired Driving). Canadian “drug-impaired driving law has proven to be very costly, time-consuming, and cumbersome to enforce and prosecute. Moreover, the cases that have proceeded to trial have been susceptible to legal challenge”<sup>156</sup> The additional law enforcement and court costs that will spring from this will be primarily be borne by municipalities and provinces respectively. If cannabis-impaired driving is, as the evidence suggests, anywhere near as prevalent as alcohol-impaired driving, those costs are likely to be significant. As outlined above, the policing, court and corrections costs associated with alcohol-impaired driving are estimated to have been \$625.9 million in 2015-16. A considerable investment in programs to educate and prevent cannabis-impaired driving would be a worthy investment in to increase public safety and help forego these potential costs.

156 Solomon, Robert and Erika Chamberlain (2014) “Canada’s New Drug-Impaired Driving Law: The Need to Consider Other Approaches.” *Traffic Injury Prevention*: 15, 685–693.



## Sentencing for Drug-Impaired Driving

Bill C-46 will permit the measurement of drug impairment for the purposes of operation of a motor vehicle through blood drug concentration. Presence of a drug below the blood drug concentration for the drug that is prescribed by regulation would lead to an offence punishable on summary conviction and is liable to a fine of not more than \$1,000.

A driver with a blood drug concentration that is equal to or exceeds the concentration prescribed by regulation and who causes an accident resulting in bodily harm to another person is guilty of an indictable offence and is liable to imprisonment for a term of not more than 10 years. Where such conditions are present and they cause an accident resulting in the death of another person, the driver is guilty of an indictable offence and is liable to imprisonment for life.

Previous convictions for impaired driving will lead to harsher sentences.

Because mixing alcohol and cannabis increases the likelihood of a motor vehicle accident than either substance on its own (see Section 3), lower blood drug and blood alcohol levels are deemed to render a driver impaired where both substances are detected.

Provinces will take their own approaches to amend their own legislation. In some instances, such as in Quebec, it is proposed that any driver that has tested positive for cannabis use as a result of drug evaluation would have their driver's license suspended for 90 days.

# 7 BORDER

Through the Canada Border Services Agency (CBSA) and RCMP, the federal government plays the primary role in preventing cross-border smuggling of narcotics. Preventing the entrance of contraband into Canada aligns with CBSA's Risk Assessment and Admissibility Determination lines of business, which together represented \$1.1 billion of program activity, or 61 per cent, of CBSA's total spending in 2015-16.

The RCMP's role in prevention of illicit merchandise across the border includes working with domestic and international law enforcement partners, maintaining a presence in the highest-risk border regions, and addressing inbound and outbound criminal threats.<sup>157</sup> The estimated cannabis-related costs of the RCMP have been captured in Section 4's discussion of policing costs.

While illegal cross-border importation and exportation of cannabis does occur, the evidence seems to suggest that illicit domestic production is the larger issue. According to a 2004 Canada-United States Border Drug Threat Assessment, the majority of marijuana cultivated in both the United States and Canada is produced to support domestic demand.<sup>158</sup> Further to this, the assessment indicates that most marijuana trafficking activity is southbound, although it is smuggled in both directions across the border.<sup>159 160</sup>

While it is not clear how much cannabis is smuggled across the border, the CBSA does report the number and value of total narcotics seizures in its annual departmental performance reports. For example, the CBSA reported 9,611 seizures of drugs valued at over \$310 million in 2015-16.<sup>161</sup> That amount nearly doubled in 2016-17 to over 18,000 seizures of narcotics of drugs worth more than an estimated \$404 million.<sup>162</sup> However, due to a lack of public data on for instance the percentage of persons or goods subject to CBSA examination or seizure or what percentage of those activities might be narcotics-related, let alone cannabis-related, estimating the proportion of CBSA activity dedicated to illegal cannabis importation and exportation is an extremely difficult task.

157 <http://www.rcmp-qrc.gc.ca/ibet-eipf/index-eng.htm>.

158 Public Safety Canada, Canada-United States Border Drug Threat Assessment. <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/archive-us-cnd-brdr-drq-2004/index-en.aspx>.

159 Ibid

160 This could also have implications for trade should legalization lead to increased inspections.

161 Canada Border Services Agency, 2015-16 Departmental Results Report. [https://www.cbsa-asfc.gc.ca/agency-agence/reports-rapports/dpr-rmr/2015-2016/report-rapport-eng.html#section3a\\_1.3](https://www.cbsa-asfc.gc.ca/agency-agence/reports-rapports/dpr-rmr/2015-2016/report-rapport-eng.html#section3a_1.3).

162 Canada Border Services Agency, 2016-17 Departmental Results Report. <https://www.cbsa-asfc.gc.ca/agency-agence/reports-rapports/dpr-rmr/2016-2017/report-rapport-eng.html>.

One option that was explored was to use narcotics importation and exportation violations reported in Statistics Canada’s Uniform Crime Reporting Survey (UCRS) to create an incidents-based estimate similar to the one created for policing. These data, however, do not square particularly well with reported the seizures data reported by CBSA (see Figure 39). While both data sets do reflect an increase in narcotics importation and exportation activity, the number of incidents reported are not comparable. For example, the UCRS reported 3,761 narcotics importation and exportation violations in 2016, which is dramatically out of line with the 18,000 seizures reported by the CBSA.

While it is clear that some portion of CBSA activity is dedicated to cannabis-related offences, particularly to prevention of smuggling, it is not possible to create a reliable estimate of how much CBSA spends on cannabis-related activity with the available data. As such, no estimate will be produced for the purposes of this report. This represents a gap that should be filled by future studies.

## What is likely to happen next?

The effect legalization will have on border enforcement costs will be almost entirely dependent on government’s ability to price cannabis appropriately in order to substantially eliminate the black market for the product. As discussed in Section 2 on revenue considerations, legalization of cannabis will drastically alter the value proposition of illegal production. This ought to similarly alter the risk proposition of illegally importing cannabis into Canada. Under the provisions of Bill C-45, an importer would be liable to imprisonment for a maximum term of 14 years, which is a high-risk proposition that would be priced into the product. Whether or not the addition of this risk premium associated with imported cannabis will be able to compete with legally produced domestic cannabis products will be borne out by the evidence over the coming years. Without other countries to compare to, difficult to say for sure, but on balance, the highest likelihood scenario is that cannabis-related border costs will substantially decrease post-legalization.

### FIGURE 39

**Police-Reported Incidents of Narcotics Importation and Exportation, 2012 to 2016**

	2012	2013	2014	2015	2016
Cannabis	446	401	316	1,654	1,800
Cocaine	301	261	265	240	314
Heroin	75	60	52	105	123
Methamphetamines	12	32	22	72	86
Methylenedioyamphetamine	9	18	13	91	96
Other Drugs	642	609	464	1,260	1,342
<b>Total</b>	<b>1,485</b>	<b>1,381</b>	<b>1,132</b>	<b>3,422</b>	<b>3,761</b>

Source: CANSIM Table 252-0051 Incident-based crime statistics, by detailed violations, annual: Uniform Crime Reporting Survey.

# 8

## OTHER SPENDING POST-LEGALIZATION

Governments will need to incur several new costs to manage the regulation, distribution and zoning elements of the legalization framework. All governments will face these new types of costs. While spending in these areas will affect the relative shares of spending between levels of government, but they will be fairly predictable or controllable in nature.

### Regulation and Taxation

The federal government will play the lead role in the regulation and licensing of legal cannabis production. This role will include strict requirements for producers who grow and manufacture cannabis, as well as the setting and enforcement of industry-wide standards for cannabis products. Product safety and restricting youth access to cannabis will be among the primary goals of the federal regulatory framework. To achieve these goals the federal government plans to regulate the types of cannabis products that will be allowed for sale, set packaging and labelling requirements for products, enforce good production practices and track cannabis from seed to sale to prevent diversion to the illicit market. According to the most recent federal Main Estimates, \$65.1 million will be made available in 2018-19 to implement and enforce the new federal legislative and regulatory framework.

The federal government will also play a lead role in administering and collecting the excise tax on cannabis products. Additional resources will be made available to the Canada Revenue Agency, topping out at \$24 million annually, to establish and administer the new excise taxation regime.

### Distribution

Regulation of the wholesale and retail distribution of cannabis products will fall to provinces and territories. Most provinces have opted to charge provincial Crown agencies with the responsibility for the wholesale purchasing of cannabis from federal licensed producers.<sup>163</sup> With respect to retail distribution, provincial plans fit into three broad models which roughly align with each province's approach to liquor distribution: government regulation of private retailers, government retail monopoly, or a mixed model (see Figure 40).

163 At the time of writing, Saskatchewan has opted to have the Saskatchewan Liquor and Gaming Authority issue permits to private cannabis wholesalers.



**FIGURE 40**

**Provincial Approaches to Retail Distribution of Cannabis**

Government Regulation of Private Retailers	Mixed Model:	Government Retail Monopoly
» Alberta » Manitoba » Newfoundland and Labrador » Saskatchewan » Ontario	» British Columbia	» New Brunswick » Nova Scotia » Prince Edward Island » Quebec

The models vary in terms of direct costs for government, the role of government and degree of policy control. In the short-term, there is currently insufficient information to create a cost estimate of what the direct costs of the retail distribution of cannabis will be for provinces. Some provinces are forecasting initial net losses as they absorb initial start up costs. As the system of legalized cannabis production matures, however, greater scope for revenue generation may emerge, especially if the policy goal of pricing out illicit product is achieved. Over the longer-run, if the cannabis market matures to levels similar to that of alcohol, both models may be able to return significant dividends to government.

## Municipal Zoning

Apart from policing, municipal governments will be faced with other unique costs. For example, they will play an important role in updating zoning and building codes, and in the enforcement of smoking restrictions. In some provinces, they will also play an active role in advising on locations for retail locations and business licensing.

## Research, Data and Public Education

To inform the ongoing development of policies, practices and programs involving cannabis, governments are making additional resources available for research data, education and prevention. For example, the federal government is funding research to help assess the impact of cannabis use on the mental health of Canadians. Provinces will continue their leading role in gathering statistics on drug use among school-aged children. And finally, all governments will engage in public education initiatives. These policies will all represent important investments that will help offset other cannabis-related direct costs.



With nationwide  
legalization  
of cannabis  
Canada is  
running a  
fairly unique  
experiment.

# 9 CONCLUSION & RECOMMENDATIONS

When recreational cannabis is legalized in October, it will be accompanied by an excise tax regime that will generate revenue for Canada's federal and provincial governments. For the first two years of this excise tax regime, governments have agreed to split the revenues from the cannabis excise tax, with 25 per cent going to Ottawa and the remaining 75 per cent destined for the provinces.

But is the arrangement to share the revenues 75-25 the appropriate split? Will it still be the right split in two years? What about ten years from now? How would we even begin to answer these questions? The answer lies with the premise behind sin taxes in general. That is, the revenue they generate should help, at least in part, cover the societal costs created by the behaviour subject to the tax.

Though generally agreed to be less harmful than other substances such as alcohol and tobacco, cannabis leads to substantial direct costs for governments. Cannabis use disorders lead to acute care hospitalizations and are an extremely common reason for admission into addiction treatment programs. Research indicates that motor vehicle accidents attributable to cannabis-impaired driving are surprisingly prevalent. All of these represent a material draw on Canada's publicly funded health care system.

The criminal justice costs created by the enforcement, prosecution and incarceration of cannabis-related offences under the *Controlled Drugs and Substances Act* are also a significant draw on public resources. Overall, these health and criminal justice added up to an estimated **\$830.3 million** in 2015-16. These costs, however, were not borne equally across governments. Provincial-territorial and municipal governments are estimated to have shouldered over 70 per cent of those costs, with the federal government picking up the remainder. This does not imply, however, that the federal government should therefore receive 30 per cent of the revenue.

The above estimate of the cannabis-related direct costs on government reflects a benchmark prior to legalization. Legalization will substantially alter that cost profile. Governments will need to incur several new costs to manage the regulation, distribution and zoning elements of the legalization framework. All governments will face these new types of costs, but they are largely predictable in nature. How legalization will affect more open-ended health and justice costs, however, involves many unknowns. It is unclear exactly how and when changes brought on by legalization will manifest themselves.

The experience with other substances and what little evidence is available from other jurisdictions and has shown that it takes years, if not decades for such changes to take root and fully stabilize. Predicting exactly how and when the health and criminal justice costs will change as a result of legalization is certain to be inaccurate. It is possible, however, to outline what the high-level risks are, both upside and downside, and which governments will benefit from them or bear them. In light of a lack of data, these risks should also be taken into account in determining the division of revenues as they will inform the likeliest direction in which costs will change.

The largest upside risk, or potential for cost savings, is in the criminal justice sector. The sector is currently the largest contributor to direct cannabis-related costs, with municipalities carrying the largest share. Municipalities should also be the primary beneficiary of the potential cost savings. Pre-legalization, possession offences were responsible for over 60 per cent of cannabis-related criminal justice costs. In the short-term, the relaxation of possession limits should lead to fewer offences and tangible fiscal savings. Municipalities should realize over half of the fiscal benefit from a reduction in possession. In the longer term, supply offences, which are less frequent but more expensive to enforce, should also decline. This will largely depend on the success of the myriad policy approaches to eliminate the market for illicit cannabis, including pricing. These costs, particularly with respect to corrections, are borne mostly by the federal government. Overall, attempts to forecast how legalization will affect the mix between possession and supply offences, and which governments will reap the associated cost savings are subject to many unknown variables. More time, and importantly more data, will be needed to measure the actual effects of legalization on the justice sector.

Legalization will also create downside fiscal risks. For example, more access to cannabis could lead to increases in health costs. Provinces are responsible for administering the public health system. While federal transfers support provincial health spending, they are not reflective of actual health costs and will not be responsive to any risks that legalization might create. Provincial governments, therefore, will be exposed to the all of the risk from the potential for increased health costs.

The biggest downside risk comes from cannabis-impaired driving. While cannabis-impaired driving does not currently have a large impact on the criminal justice system, studies suggest that the practice is disturbingly prevalent, and may be approaching the same level of alcohol-impaired driving. While legalization per se may not affect the prevalence of cannabis-impaired driving, improvements in roadside-testing tools and criminal prosecution practices are likely to emerge post-legalization. Should cannabis-impaired driving indeed prove to be anywhere near as prevalent as alcohol-impaired driving, the increased criminal justice costs could be staggering. These costs could potentially become the largest cannabis-related expense post-legalization. The resulting increases in law enforcement and court costs would be borne disproportionately by municipal and provincial governments, respectively. A considerable investment by all governments in programs to educate and prevent cannabis-impaired driving would be a worthy investment in to increase public safety and help forego these potential costs.



**FIGURE 41**

**Risk Assessment**

Upside Risks	
Risk	Government Benefitting from Upside Risk
Decrease in possession offences	Provincial and Municipal
Decrease in supply offences	Federal
Decrease in importation	Federal
Downside Risks	
Risk	Government Bearing Downside Risk
Increase in health costs	Provincial
Increase in youth justice costs	Provincial
Increase in enforcement of cannabis-impaired driving	Municipal
Increase in prosecution of cannabis-impaired driving	Provincial
Predictable or Controllable Costs	
Cost	Government Bearing Cost
Regulation of production	Federal
Wholesale and retail distribution	Provincial
Municipal zoning	Municipal
Research, data and public education	All governments

Overall, provinces and municipalities bear both the greatest cost of cannabis-related spending pre-legalization and the preponderance of downside fiscal risk associated with legalization. From that perspective, a revenue-sharing arrangement significantly weighted in their favour is entirely justifiable for the time-being.

In determining how legalization will ultimately impact cannabis-related costs to governments, many variables will be at play. When the current intergovernmental revenue-sharing arrangement for cannabis taxes comes up for review in two years, an approach that is both a measured and flexible should be taken.

First, the revenues should be allocated according to an updated assessment of the degree to which each level of government bears cannabis-related costs. This assessment, rather than being tied to actual costs, should be updated to reflect changing patterns in underlying cost drivers. This would remove any incentive for either order of government not to contain costs and thus increase their share of revenue going forward.

However, two years will not be enough time to establish a definitive picture of which governments will carry the cost burden over the long term, so a commitment to flexibility be important. Secondly, therefore, the revenue splits should be re-evaluated on an ongoing basis, and updated to reflect evolving cost structures as the system develops and ultimately matures.

These evaluations should be tied to established reassessment cycles, perhaps occurring every five years, similar to how federal-provincial fiscal arrangements have traditionally been renewed. This re-evaluation process should last for at least the first decade of the cannabis taxation regime, if not longer, as it will take time for the effects of legalization to fully materialize.

Governments will also have access to more detailed data than the publicly-available data that was used for this report. It is hoped, however, that this report will serve as a useful guide to informing a process to measure the direct costs that cannabis creates for governments, the degree to which each level of government bears those costs, and how legalization is likely to impact those underlying costs structures.



