



Parliament of Australia
Parliamentary Budget Office

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Senator David Leyonhjelm
Liberal Democratic Party
Parliament House
CANBERRA ACT 2600

Dear Senator David Leyonhjelm

Please find attached a response to your costing request, *Legalising marijuana* (letter of 9 October 2015).

As requested, this response has not been prepared on a confidential basis and will therefore be posted on the Parliamentary Budget Office website.

If you have any queries about this costing, please do not hesitate to contact Andrew Watterson on (02) 6277 9543 or Tony McDonald on (02) 6277 9590.

Yours sincerely

Phil Bowen

17 December 2015



COSTING – OUTSIDE THE CARETAKER PERIOD

Name of proposal:	Legalising marijuana
Summary of proposal:	<p>The proposal would legalise all marijuana/cannabis/hemp use by adults, as well as possession, cultivation, processing, transport, trade, import and export. No excise would be imposed on marijuana.</p> <p>This proposal would also reduce the budgets of relevant federal agencies including the Australian Federal Police (AFP), Australian Crime Commission (ACC), and the Australian Border Force (ABF) by the level of funding directly associated with marijuana law enforcement.</p> <p>An estimate of the effect of this proposal on total marijuana usage was also requested.</p> <p>The proposal would have effect from 1 July 2017.</p>
Person/party requesting costing:	Senator David Leyonhjelm, Liberal Democratic Party
Date costing request received:	9 October 2015
Date costing completed:	17 December 2015
Did the applicant request the costing be confidential?	No.
Expiry date for the costing:	Release of the next economic and fiscal outlook report.

Costing overview

This proposal would be expected to increase the underlying cash balance by \$209 million and the fiscal balance by \$259 million over the 2015-16 Budget forward estimates period. This reflects the net impact of an increase in GST revenue and a decrease in federal law enforcement expenses over this period.

The fiscal balance impact of this proposal differs from the underlying cash balance impact because the expense accrued in relation to GST payments to the states and territories is based on GST cash collections each month, which lag behind the accrual of GST revenue that occurs when consumer spending occurs.

As a result of a reduced requirement for law enforcement, this proposal would be expected to decrease the expenses of the AFP and the ABF by \$209 million over the forward estimates period on both an underlying cash and fiscal balance basis. Impacts on other federal agencies are unlikely to be material or are unable to be quantified.

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A detailed breakdown of the financial implications of this proposal over the 2015-16 Budget forward estimates period is presented at Attachment A. This proposal would have an ongoing impact that extends beyond the forward estimates period.

This costing is considered to be of **low reliability**. There is uncertainty regarding the price and quantity of marijuana currently consumed, and the price and quantity of marijuana that would be consumed in a newly legalised market. It is also difficult to separately identify marijuana law enforcement activities, as these are often integrated within broader law enforcement activities.

Table 1: Financial implications (outturn prices)^(a)

Impact on	2015-16	2016-17	2017-18	2018-19	Total
Underlying cash balance (\$m)	-	-	104	105	209
Fiscal balance (\$m)	-	-	154	105	259

(a) A positive number for the underlying cash balance indicates an increase in revenue or a decrease in expenses in cash terms. A negative number for the underlying cash balance indicates a decrease in revenue or an increase in expenses in cash terms.

Key assumptions

- All states and territories would align with the Commonwealth in fully legalising marijuana, hemp growing, and the production of hemp for human consumption.
- There would be no restrictions on marijuana production, for example quotas or restrictive licencing.
- The proportion of supplies made by producers of marijuana under the registration threshold for GST is the same as the proportion of sales in the general economy.
- This proposal would result in an increase in marijuana supply and demand. It is estimated that marijuana consumption would increase from approximately 333 tonnes in 2016-17 to 378 tonnes in 2017-18 and 395 tonnes in 2018-19.
 - The legalising of marijuana would result in a significant increase in the supply of marijuana, either through Australian production or imports, with a commensurate reduction in the price.
 - The legalising of marijuana would result in increased demand for marijuana, reflecting the impact of lower prices and the lifting of penalties on marijuana use.
- There would be no impact on excise collections from the sale of alcohol or tobacco.
 - A number of studies have analysed whether marijuana is a complement to, or substitute for, alcohol and tobacco. However the literature has not reached a consensus, with the findings of different studies in conflict.¹
- While hemp seeds are currently used in a variety of food products in countries where it is legal to do so, including in foods such as margarines, cereals and hemp milk, or consumed raw, the level of consumption is relatively small². Therefore the impact of legalising the production of hemp seed for human consumption has not been included in this costing.

¹ Clements et al (2010).

² Crawford et al (2012)

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- Expenditure on marijuana increases at the same rate as CPI across the forward estimates period.
- The AFP and ABF are the only federal agencies where a material amount of funding directly associated with marijuana law enforcement is able to be separately identified.
 - As outlined in its 2014-15 annual report, the Australian Crime Commission (ACC) high risk and emerging drugs intelligence operations primarily focus on drugs other than cannabis.
 - Any reduction in staffing numbers in federal agencies would be managed through natural attrition across the forward estimates.
 - The vast majority of the budget impact of marijuana law enforcement on the court and prison systems (including revenue raised from penalties) would be on state and territory governments.
- The PBO has assumed that the proportions of the total budgets for the AFP and ABF that are directly relevant to illicit drug law enforcement are the same as those used in the National Drug and Alcohol Research Centre's June 2013 paper Government Drug Policy Expenditure in Australia 2009-10. This amount was then adjusted to reflect the estimated proportion of law enforcement activities that are directly relevant to cannabis.

Methodology

The GST impact of this proposal is calculated by applying the 10 per cent GST rate to estimated household consumption expenditure on marijuana under the proposal.

The proportion of AFP and ABF law enforcement budgets directly relevant to cannabis was estimated by multiplying total illicit drug law enforcement spending by the proportion of all illicit drug arrests that related to cannabis.

The PBO has not made any assessment of the impact of this proposal on state and territory government budgets.

Revenue estimates have been rounded to the nearest \$50 million. Departmental expenses have been rounded to the nearest \$1 million.

Data sources

- Australian Bureau of Statistics Information Paper - The Non-Observed Economy and Australia's GDP, 2012.
- Australian Institute of Health and Welfare National Drug Strategy Household Survey 2013.
- Williams, J 2004, 'The effects of price and policy on marijuana use: what can be learned from the Australian experience?' *Health Economics*, vol. 13, no. 2, pp 123-137.
- Australian Crime Commission Illicit Drug Data Report 2011-12 and 2013-14.
- Budget 2015-16 parameters and forecasts of GST administration costs.
- Attorney General's 2015-16 Portfolio Budget Statements.
- Department of Immigration and Border Protection 2015-16 Portfolio Budget Statements.
- Australian Crime Commission 2014-15 Annual Report.

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- Australian Federal Police 2014-15 Annual Report.
- Australian Customs and Border Protection Service 2014-15 Annual Report.
- Australian Public Service Commission - APS Statistical Bulletin 2014-15.
- Government Drug Policy Expenditure in Australia 2009-10. National Drug and Alcohol Research Centre - June 2013.

References

- Clements, K, Lan, Y, Zhao, X 2010 'The demand for marijuana, tobacco and alcohol: inter-commodity interactions with uncertainty' *Empirical Economics*, vol. 39, no. 1, pp 203-239.
- Crawford, F, Deards, B, Moir, B, Thompson, N 2012 'Human consumption of hemp seed: prospects for Australian production, ABARES report to client prepared for FSANZ' Department of Agriculture, Fisheries and Forestry, Canberra.

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ATTACHMENT A: DETAILED FINANCIAL IMPLICATIONS

The following table provides a breakdown of the estimated impacts of legalising marijuana from 1 July 2017 over the 2015-16 Budget forward estimates period on an underlying cash balance basis.

Table A1: Legalising marijuana from 1 July 2017 (underlying cash balance)^(a)

<i>GST impacts</i>	2015-16	2016-17	2017-18	2018-19	Total
GST receipts	-	-	300	300	600
GST payments to the states and territories	-	-	-297	-297	-594
ATO administration expenses	-	-	-3	-3	-6
Net GST impact	-	-	-	-	-
Reduction in funding for AFP	-	-	54	54	108
Reduction in funding for ABF	-	-	50	51	101
Net law enforcement impact	-	-	104	105	209
Net financial implications	-	-	104	105	209

(a) A positive number for the underlying cash balance indicates an increase in revenue or a decrease in expenses in cash terms. A negative number for the underlying cash balance indicates a decrease in revenue or an increase in expenses in cash terms.

The following table provides a breakdown of the estimated impacts of legalising marijuana from 1 July 2017 over the 2015-16 Budget forward estimates period on a fiscal balance basis.

Table A2: Legalising marijuana from 1 July 2017 (fiscal balance)^(a)

<i>GST impacts</i>	2015-16	2016-17	2017-18	2018-19	Total
GST revenue	-	-	350	300	650
GST payments to the states and territories	-	-	-297	-297	-594
ATO administration expenses	-	-	-3	-3	-6
Net GST impact	-	-	50	..	50
Reduction in funding for AFP	-	-	54	54	108
Reduction in funding for ABF	-	-	50	51	101
Net law enforcement impact	-	-	104	105	209
Net financial implications	-	-	154	105	259

(a) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses in accrual terms.

‘..’ Indicates not zero, but rounded to zero.