



OFFICE OF THE
PARLIAMENTARY
BUDGET OFFICER
BUREAU DU DIRECTEUR
PARLEMENTAIRE DU
BUDGET

Budget 2016 Tax and Transfer Calculator

Ottawa, Canada
1 September 2016
www.pbo-dpb.gc.ca

The mandate of the Parliamentary Budget Officer (PBO) is to provide independent analysis to Parliament on the state of the nation's finances, the Government's estimates and trends in the Canadian economy; and, upon request from a committee or parliamentarian, to estimate the financial cost of any proposal for matters over which Parliament has jurisdiction.

The PBO has developed an interactive online tool that estimates the household fiscal impact of some changes to the federal system taxes and transfers that were introduced in Budget 2016. This document provides an overview of the measures, as well as the interactive tool.

This application is not suitable for the calculation of total taxes payable or exact benefit payments. Additionally, PBO makes assumptions which in some cases may not represent the actual circumstance of a particular user. Many credits and deductions are not included in the calculations below. This may produce a discrepancy between results listed below and a user's actual taxes payable.

Under no circumstances should an individual consider the output of this application to represent the actual change in their taxes payable. This application is provided for informational purposes only.

This tool does not use cookies to store/collect personal information.

This report was prepared by the staff of the Parliamentary Budget Officer. Duncan MacDonald and Carleigh Malanik wrote the report. Suad Gazali contributed to the analysis. Jason Jacques provided comments. Jocelyne Scrim and Nancy Beauchamp assisted with the preparation of the report for publication. Please contact pbo-dpb@parl.gc.ca for further information.

Jean-Denis Fréchette
Parliamentary Budget Officer

Table of Contents

Executive Summary	1
1. Budget 2016 Measures Included in the PBO Calculator	2
2. Using the Tool	4
2.1. Step 1: Taxable Income	5
2.2. Step 2: Federal Taxes	6
2.3. Step 3: Estimated changes resulting from Budget 2016	7
3. Notes and Disclaimers	8
4. Examples	9
4.1. Family of three with one adult student	9
4.2. Single-person family; attending school full-time	9
5. Tables	10
Notes	17

Executive Summary

The PBO's new interactive web application allows individuals to examine the impact of many new tax and transfer measures presented in Budget 2016.¹ This includes:

- Changes to personal income tax rates;²
- Repealing the Family Tax Cut Credit, the Universal Child Care Benefit, the Canada Child Tax Benefit, Textbook Tax Credit, Education Tax Credit;
- Introducing a new Canada Child Benefit, as well as a Teacher and Early Childhood Educator School Supply Tax Credit;
- Reducing the eligible amounts for the Children's Fitness Tax Credit and the Children's Arts Tax Credit; and,
- Enriching Canada Student Grants, the Northern Residents Deduction, the Guaranteed Income Supplement, and Charitable Donation Tax Credit.³

This report outlines the above changes and provides a user guide for the interactive tool.

1. Budget 2016 Measures Included in the PBO Calculator

Budget 2016 announced new measures that will affect families' personal income tax owing and transfer income. Specifically, the new measures will:

1. **Change personal income tax rates**⁴

- Reduce the second tax bracket rate from 22.0% to 20.5%.
- Introduce a new tax rate of 33.0% on income over \$200,000.

2. **Repeal the Family Tax Cut credit**

- Repeal a non-refundable tax credit available to families with children under the age of 18.

3. **Halve the Children's Fitness and Children's Arts tax credits**⁵

- Halve the refundable tax credit for eligible fitness expenses for children under 16 years of age (18 if eligible for the disability tax credit).
- Halve the non-refundable tax credit for eligible fees for programs of artistic, cultural, recreational and developmental activity for children under 16 years of age (18 if eligible for the disability tax credit).

4. **Replace the UCCB and CCTB with the CCB**

- Repeal the taxable monthly Universal Child Care Benefit (UCCB) paid to families with children.
- Repeal the non-taxable monthly Canada Child Tax benefit (CCTB) paid to families with children.
- Introduce the monthly Canada Child Benefit (CCB) for families with children.

5. **Adjust the Charitable Donation tax credit**⁶

- Allow individuals with annual income above \$200,000 to claim a 33.0 % tax credit rate on donations above \$200, to a limit of total federal income tax paid at the 33.0% rate.

6. **Repeal the Textbook and Education Tax Credits**

- Repeal the 15.0% non-refundable tax credit of \$65 per month of full-time enrolment in a qualifying educational program and \$20 per month of part-time enrolment in a specified educational program at a designated educational institution.
- Repeal the tax credit that provides a 15.0% non-refundable tax credit of \$400 per month of full-time enrolment in a qualifying

educational program and \$120 per month of part-time enrolment in a specified educational program at a designated educational institution.

7. Enhancing Canada Student Grants

- Increase Canada Student Grant by 50 per cent:
 - from \$2,000 to \$3,000 per year for students from low-income families;
 - from \$800 to \$1,200 per year for students from middle-income families; and
 - from \$1,200 to \$1,800 per year for part-time students.

8. Increasing the Guaranteed Income Supplement (GIS)

- Increase the GIS provided to low-income seniors by up to \$947 annually.

9. Increases to the Northern Residents Deduction

- Increase the maximum per-day residency deduction from \$8.25 to \$11.00 for those individuals living in prescribed Northern Zones. Those living in Intermediate Zones can claim half of the new amount.

10. Introduce the Teacher and Early Childhood Educator School Supply Tax Credit

- Allow eligible educators to claim a 15.0% refundable tax credit of up to \$1,000 in eligible school supplies.

2. Using the Tool

The interactive tool is posted on the PBO website (http://www.pbo-dpb.gc.ca/en/2016_tax_changes) and requests users to enter information regarding characteristics of the household they wish to examine.⁷

The tool is divided into three steps: a calculation of taxable income, a calculation of federal taxes, and a visual display of the resulting change in household disposable income. The tool is designed to be more accessible than federal tax forms while retaining a measure of comprehensiveness.⁸

The three steps are describes below.

Total income includes the income reported by the user, and benefits paid by the federal government, such as the Guaranteed Income Supplement or Canada Student Grant. The tool calculates the amount of federal benefits. A portion of this income is taxable. The change in total income represents the change in federal benefits, resulting from relevant Budget 2016 measures.

Federal taxes payable is the amount of taxes owed to the federal government, based on the amount of taxable income. Deductions such as the Northern Residents Deduction can lower taxable income, while tax credits such as the textbook tax credit can reduce the amount of taxes payable. A change in federal taxes payable represents a change in tax credits, taxable income, or a combination of the two.

Disposable income is the amount of income left after taxes are paid. A change in disposable income represents a change in federal benefits, a change in federal taxes payable, or a combination of the two.

2.1. Step 1: Taxable Income

Users of the tool must first choose a province/territory of residence and input their total income (Figure 2-1). These two pieces of information are the only required fields in Step 1. There is a lower income limit of \$0 and an upper limit of \$500,000.

Figure 2-1 Step 1, condensed fields

Step 1: Taxable Income

What is your province/territory of residence ?

Your income :

Do you have a partner/common-law partner ?

Do you have eligible dependents aged 0 - 17 years ?

Source: Parliamentary Budget Officer.

Users can further indicate the existence of a partner (and associated income), and any number of dependents, along with their respective ages. As users indicate additional details regarding their household of interest, additional fields will appear (Figure 2-2).

Figure 2-2 Step 1, expanded fields

Step 1: Taxable Income

What is your province/territory of residence ?

Your income :

Do you have a partner/common-law partner ?

Your partner's income :

Do you have eligible dependents aged 0 - 17 years ?

Dependents :

Source: Parliamentary Budget Officer.

2.2. Step 2: Federal Taxes

In the second step of the tool users can indicate information regarding tax credits that have been changed or introduced in Budget 2016 (Figure 2-3). Users can click the toggle buttons to the right of each credit to activate the credit (Figure 2-4). If no credits are toggled, users are only required to provide age values for themselves and partner (if applicable).

Figure 2-3 Step 2, condensed fields

Step 2: Federal Taxes

Your age :

Your partner's age :

Are you a student ?

Is your partner a student ?

Claiming Children's Arts Tax Credit ?

Claiming Children's Fitness Tax Credit ?

Claiming Charitable Donations Tax Credit ?

Is your partner claiming the Charitable Donations Tax Credit ?

Claiming the Northern Resident Deduction ?

Are you an eligible teacher or early childhood educator ?

Source: Parliamentary Budget Officer.

Figure 2-4 Step 2, expanded fields example

Claiming Children's Arts Tax Credit ?

Amount :

Claimant :

Source: Parliamentary Budget Officer.

2.3. Step 3: Estimated changes resulting from Budget 2016

After users have entered all relevant information, pushing the Calculate button (Figure 2-5) at the bottom left of the screen will display the changes in total disposable income (that is, income after transfers and federal taxes) associated with the indicated scenario.⁹

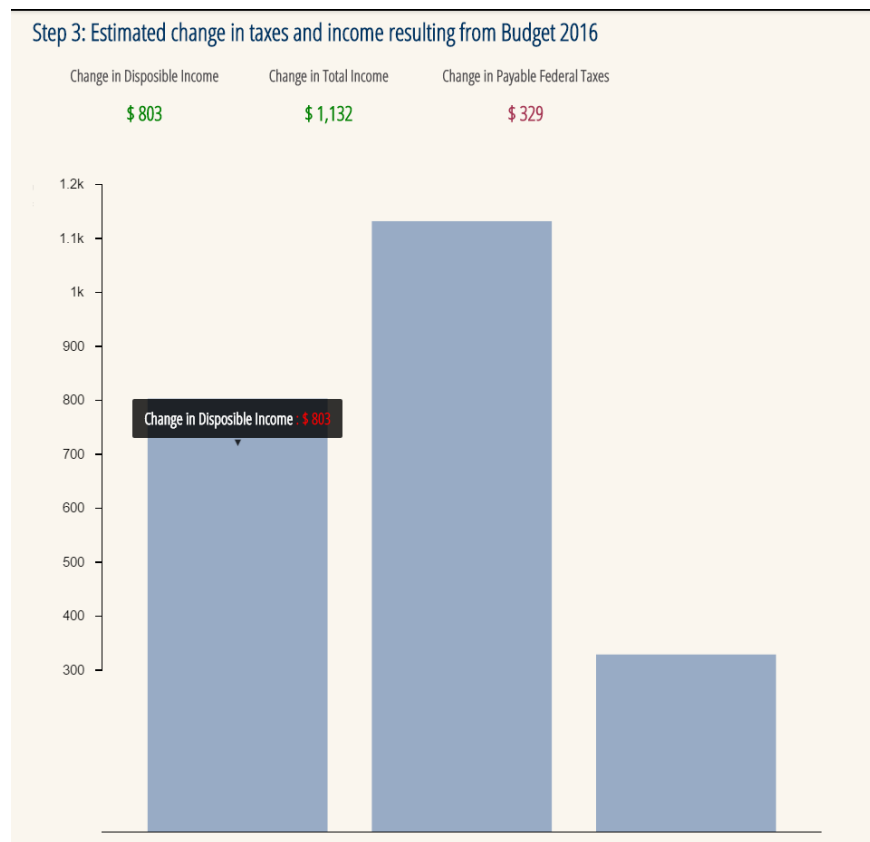
Figure 2-5 Calculate and Reset buttons



Source: Parliamentary Budget Officer.

After the scenario has been calculated, a graphic display will be presented below the utility (Figure 2-6). If users would like to examine an alternate scenario, they can push the Reset button and re-enter alternative values.

Figure 2-6 Graphical output



Source: Parliamentary Budget Officer.

3. Notes and Disclaimers

This tool allows users to estimate the impact the changes from Budget 2016 listed above will have on their federal monthly benefits, disposable income, and their federal income taxes payable. This tool is not suitable for the calculation of total taxes payable or exact benefit payments. Additionally, PBO makes assumptions which in some cases may not represent the actual circumstance of the particular user (see Section 4 for more details).

Some of the Budget 2016 measures will have an impact on the amount of provincial benefits payable to the user, or the amount of provincial taxes payable. For example, the UCCB is considered taxable income on provincial tax forms and may be deducted from provincial social benefit payments. However, this tool does not estimate these impacts.

The tool uses the province of residence to determine eligibility and the amount for some of the federal Budget measures, including the Canada Student Grant and the Northern Residence Deduction. See Section 4 for a list of tables providing more detail.

4. Examples

4.1. Family of three with one adult student

Jesse, Jamie and their only child Kelly live in Saskatchewan. Jesse and Jamie are in their 30s, and their child Kelly is 5 years old. Jesse is employed and makes \$73,000 a year. Jamie also works, and makes \$24,000 a year. Jamie is also enrolled for 8 months of university for part-time studies, and paid \$7,800 in tuition this year.

Jesse and Jamie are eligible for the new Canada Child Benefit, and Jamie will no longer have to pay taxes on Children's Benefits. Jesse is eligible for the reduction to the second tax bracket tax rate, however can no longer split income with Jamie. Jamie will no longer be able to claim the textbook and education tax credits, but can still claim the tuition amount. Jamie will also receive additional money from the Canada Student Grant.

Overall, Jesse and Jamie will pay an additional \$652 in taxes, but will receive \$1,521 more from the government due to the increase in Children's Benefits. This leaves them with \$869 more in after-tax income than they would have had without the Budget 2016 measures applicable to them.

4.2. Single-person family; attending school full-time

Kelly is a 27 year old student from the Yukon. Kelly paid \$15,000 for 8 months of tuition, and with an income of \$20,000 is eligible for the Canada Student Grant.

Kelly will no longer be eligible for the education and textbook tax credits, but did not make enough to have to pay taxes anyway. On the other hand, Kelly will receive \$1,000 more from the Canada Student Grant this year, due to the Budget 2016 increase to the monthly amount.

5. Tables

Table 5-1 Personal Income Tax Rates

Taxable income threshold	Rate	
	Baseline	Budget 2016
<i>taxable income</i> < \$45,283	15.0%	15.0%
\$45,283 ≤ <i>taxable income</i> ≤ \$90,563	22.0%	20.5%
\$90,563 < <i>taxable income</i> ≤ \$140,388	26.0%	26.0%
\$140,388 < <i>taxable income</i> ≤ \$200,000	29.0%	29.0%
\$200,000 < <i>taxable income</i>	29.0%	33.0%

Note: The tax tool calculates the Quebec abatement for residents of Quebec.

Table 5-2 Family Tax Cut Credit (Income Splitting)

	Baseline	Budget 2016
Maximum amount of notional income transfer to partner	\$50,000	NONE
Maximum tax savings	\$2,000	NONE

Note: Only persons with a partner and at least one child under the age of 18 were eligible.

Table 5-3 Fitness Tax Credit

	Baseline	Budget 2016
Maximum eligible claim amount	\$1,000	\$500
Tax credit rate	15%	15%

Note: Budget 2016 halves the maximum eligible claim amount for the 2016 tax year. For 2017 the fitness tax credit will be fully repealed.

Table 5-4 Children's Arts Tax Credit

	Baseline	Budget 2016
Maximum eligible claim amount	\$500	\$250
Tax credit rate	15%	15%
Note:	Budget 2016 halves the maximum eligible claim amount for the 2016 tax year. For 2017 the arts tax credit will be fully repealed.	

Table 5-5 Universal Child Care Benefit (UCCB)

	Baseline	Budget 2016
Amount per child under the age of 6 per year	\$1,920	NONE
Amount per child between the ages of 6 and 17 per year	\$720	NONE
Note:	The UCCB is taxed in the hands of the lower-income partner. If the lower-income partner has little to no income, it is possible zero taxes are paid. Additionally, PBO assumes that a user who does not have a spouse but is eligible for the UCCB will not pay tax on the UCCB amount. That is, PBO assumes that single-parents choose to have the UCCB benefit claimed by their dependent. See CRA's tax forms for more information (link: http://www.cra-arc.gc.ca/tx/ndvds/tpcs/ncm-tx/rtrn/cmpltng/rprtng-ncm/lns101-170/117-eng.html)	

Table 5-6 Federal Portion of the Canada Child Tax Benefit (CCTB)

	Baseline	Budget 2016
Base amount per child per year (1st and 2nd child)	\$1,490	NONE
Base amount per child per year (3rd and each subsequent child)	\$1,594	NONE
Supplement amount per child per year (1st child)	\$2,308	NONE
Supplement amount per child per year (2nd child)	\$2,042	NONE
Supplement amount per child per year (3rd child)	\$1,943	NONE
Note:	The Alberta government varied the CCTB amounts based on the age of the child. Only children under the age of 18 were eligible for the CCTB. The calculation for the CCTB uses adjusted family net income, which is parental net income less UCCB and children's disability benefits, based on previous years income. PBO assumes family adjusted net income is equal to employment income plus transfer income - excluding the UCCB - multiplied by a factor of 0.97838 to approximate previous years' income. Therefore, actual CCTB	

payments will vary. The CCTB is not taxable. PBO does not calculate a child disability benefit.

Table 5-7

Canada Child Benefit (CCB)

	Baseline	Budget 2016
Amount per child under the age of 6 per year	NONE	\$6,400
Amount per child between the ages of 6 and 17 per year	NONE	\$5,400
<i>Portion of Income less than \$30,000</i>		
Phase-out rate	-	-
<i>\$30,000 < Portion of Income < \$65,000</i>		
Phase-out rate (1 child)	NONE	7.0%
Phase-out rate (2 children)	NONE	13.5%
Phase-out rate (3 children)	NONE	19.0%
Phase-out rate (4 or more children)	NONE	23.0%
<i>\$65,000 < Portion of Income</i>		
Phase-out rate (1 child)	NONE	3.2%
Phase-out rate (2 children)	NONE	5.7%
Phase-out rate (3 children)	NONE	8.0%
Phase-out rate (4 or more children)	NONE	9.0%

Note: The calculation for the CCB uses adjusted family net income, which is parental net income less UCCB and children's disability benefits, based on previous years income. PBO assumes family adjusted net income is equal to employment income plus transfer income - excluding the UCCB - multiplied by a factor of 0.97838 to approximate the previous years' income. Therefore, actual CCB payments will vary. The CCB is not taxable. PBO does not calculate a child disability benefit.

Table 5-8

Charitable Donation Tax Credit

	Baseline	Budget 2016
Tax Credit rate for donation from individual with income greater than \$200,000	29%	33%
Maximum donation amount claimable	75% of income	75% of income

Note: The first \$200 of charitable donations are eligible for the 15% rate. A rate of 29% is applied to subsequent donations above \$200, and 33% is applied to the portion of donations made from income that is subject to that tax rate (that is, individuals paying tax on income above \$200,000).

Source: PBO adapted code from Statistics Canada's SPSPD/M to calculate the value of this tax credit.

Table 5-9 Textbook and Education Tax Credits

	Baseline	Budget 2016
Textbook tax credit amount (full-time student)	\$65 per month	NONE
Textbook tax credit amount (part-time student)	\$20 per month	NONE
Education tax credit amount (full-time student)	\$400 per month	NONE
Education tax credit amount (part-time student)	\$120 per month	NONE
Rate for these credits:	15%	-

Note: The tax tool does not validate the selection of full-time/part-time input against the number of months of study. For example, if users indicate they are a full-time student, but enter only one month of study, the tool will calculate the Education tax credit amount as \$400 (that is, \$400 * one month of study) and the total value of the tax credit as \$60 (that is, \$400 * 0.15).

Table 5-10 Canada Student Grant

Low income thresholds (for pre-tax incomes)

Loan year 2016-2017

Family size	Province										Territory		
	AB	BC	MB	NB	NL	NS	ON	QC	PEI	SK	YT	NT	NU
1 person	24,880	24,144	24,921	20,937	21,205	21,041	24,747	24,400	20,975	21,512	24,362	24,790	24,690
2 persons	30,976	30,059	31,027	26,064	26,397	26,194	30,811	30,378	26,111	26,781	30,329	30,863	30,738
3 persons	38,081	36,955	38,143	32,041	32,451	32,203	37,878	37,345	32,102	32,924	37,287	37,943	37,789
4 persons	46,234	44,866	46,310	38,904	39,400	39,099	45,987	45,343	38,976	39,975	45,270	46,066	45,879
5 persons	52,439	50,887	52,524	44,123	44,687	44,344	52,159	51,427	44,205	45,338	51,345	52,248	52,036
6 persons	59,142	57,392	59,238	49,765	50,400	50,015	58,827	57,999	49,856	51,134	57,908	58,926	58,687
7 or more	65,846	63,898	65,953	55,405	56,112	55,683	65,495	64,574	55,507	56,929	64,472	65,606	65,339

Middle income thresholds (for pre-tax incomes)

Loan year 2016-2017

Family size	Province										Territory		
	AB	BC	MB	NB	NL	NS	ON	QC	PE	SK	YT	NT	NU
1 person	48,008	41,898	38,504	33,850	34,181	38,693	44,751	38,795	35,382	38,166	45,768	46,593	46,363
2 persons	67,212	58,659	53,904	47,392	47,855	54,172	62,652	54,315	49,534	53,433	64,075	65,229	64,907
3 persons	80,560	76,206	67,511	58,810	59,788	67,407	77,779	68,645	62,973	66,926	75,309	76,665	76,287
4 persons	90,022	88,651	77,163	66,914	69,104	76,792	88,515	78,806	72,511	76,492	83,282	84,782	84,363
5 persons	97,373	98,303	84,655	73,198	76,325	84,075	96,846	86,699	79,904	83,912	89,464	91,075	90,626
6 persons	103,372	106,191	90,777	78,331	82,229	90,029	103,643	93,138	85,950	89,982	94,525	96,226	95,752
7 or more	108,446	112,862	95,950	82,674	87,218	95,060	109,401	98,585	91,055	95,108	98,793	100,572	100,076

Enhancements to Canada Student Grant**Baseline****Budget 2016**

Full-time student from low-income family	\$250 per month of study	\$375 per month of study
Part-time student from low-income family	\$1,200 per year	\$1,800 per year
Full-time student from middle-income family	\$100 per month of study	\$150 per month of study
Part-time student from middle-income family	\$200 per month of study	\$250 per month of study

Note: The tax tool does not estimate the taxable portion of the Canada Student grant; rather PBO assumes the full amount is non-taxable. See the Income Tax Act for information on taxable portions of the Canada Student Grant. Users must have at least \$100 of claimed tuition. The Canada Student Grant is considered income for the purposes of calculating the CCTB and the CCB, where applicable. The tax tool does not calculate the additional Canada Student Grant for students with dependents, and therefore this amount is not included as income for the purposes of calculating the CCTB and CCB. Residents of Quebec, Nunavut and the Northwest Territories are not eligible to receive the Canada Student Grant (see http://www.esdc.gc.ca/en/student_loans/provincial.page).

Table 5-11 **Guaranteed Income Supplement**

	Baseline	Budget 2016
Annual maximum top-up benefit	\$645	\$1,592
Note: The Budget's announced \$947 annual increase to the GIS top-up for 2016 does not account for indexation that occurs every three months. To be consistent with that estimate, the tax tool assumes the monthly top-up benefit (that is, 947 / 12) remains static for a duration of 12 months.		

Table 5-12 **Northern Residents Deduction**

	Baseline	Budget 2016
Maximum per-day deduction (Northern Zone)	\$8.25 per person; \$16.59 per person living alone;	\$11 per person; \$22 per person living alone;
Maximum per-day deduction (Intermediate Zone)	\$4.125 per person; \$8.25 per person living alone;	\$4.125 per person; \$8.25 per person living alone;

Table 5-13 **Teachers and Early Childhood Educator School Supply Tax Credit**

	Baseline	Budget 2016
Maximum claim amount for eligible teaching supplies	NONE	1000
Rate for this tax credit:	NONE	15%

Table 5-14 Other Tax Credits

	Baseline	Budget 2016
2016 basic personal amount	\$11,474	\$11,474
Spousal or common-law partner amount*	\$11,474 - spouse's or common-law partner's net income	\$11,474 - spouse's or common-law partner's net income
Age Amount	\$7,125	\$7,125
CPP contributions**	0.0495* the lesser of: • \$54,900 - \$3,500; • Employment income - \$3,500	0.0495* the lesser of: • \$54,900 - \$3,500; • Employment income - \$3,500
QPP contributions**	0.05325* the lesser of: • \$54,900 - \$3,500; • Employment income - \$3,500	0.05325* the lesser of: • \$54,900 - \$3,500; • Employment income - \$3,500
Canada employment amount	The lesser of: • \$1,161; • Employment income;	The lesser of: • \$1,161; • Employment income;
Employment insurance premiums	The lesser of: • \$50,800 * 0.0188; • Employment income * 0.0188	The lesser of: • \$50,800 * 0.0188; • Employment income * 0.0188
Minimum claim amount for tuition***	\$100	\$100
Rate for these tax credits:	15%	15%

* The tax tool allows for the transfer of this tax credit.

** The tax tool calculates QPP for residents of Quebec and CPP for all others.

*** The tax tool does not validate the tuition amount against the number of months of study. For example, users can claim tuition with 0 months of study. The tax tool assumes that the person attending school is the claimant for tax purposes. The tax tool does not accommodate the transfer of tuition tax credits, or carry-forward amounts.

Notes

1. References to Budget 2016 measures include the measures that were introduced in Bill C-2, An Act to amend the Income Tax Act.
2. This measure was presented in Bill C-2, An Act to amend the Income Tax Act.
3. The Charitable Donation Tax Credit was presented in Bill C-2, An Act to amend the Income Tax Act.
4. This measure was presented in Bill C-2, An Act to amend the Income Tax Act.
5. Budget 2016 proposes halving the maximum eligible expenses in 2016, with a full repeal by 2017. PBO's calculations reflect the 2016 values (that is, half of the values used on the 2015 tax forms).
6. This measure was presented in Bill C-2, An Act to amend the Income Tax Act.
7. No information entered into the fields on the website is retained by the Parliamentary Budget Officer, or by any other third party. This utility is a client-side application. As such, the information remains locally with the user.
8. The resulting change in household disposable income is reported for informational purposes only. The values produced by this tool should not be considered as indicative of any actual change in disposable income. Realized changes are subject to individual circumstances.
9. Changes in provincial taxes are not included in the calculation.