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A Distributional Analysis of a National Guaranteed Basic Income

Update

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

The Parliamentary Budget Officer (PBO) supports Parliament by providing economic and financial analysis for the purposes of raising the quality of parliamentary debate and promoting greater budget transparency and accountability.

This report provides an update of PBO's distributional analysis of a Guaranteed Basic Income.

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Highlights

In this update, the Parliamentary Budget Officer (PBO) provides fiscal and distributional impacts of the GBI using two different definitions of the family unit, that is the nuclear family and the economic family.

The gross cost of the GBI, excluding behavioural costs, is estimated at $107 billion in 2025 under the nuclear family unit definition. The same cost measure is roughly cut in half to $53 billion when using the broader economic family unit.

The GBI affects household disposable income progressively for both family types. The largest benefit is observed in the lowest income quintile, while higher income quintiles experience a loss in disposable income due to adjustments to the tax system and relatively lower GBI transfers.

At the national level, GBI would reduce poverty rates, as measured by the Market Basket Measure (MBM), by 34% for the nuclear family definition and 40% for the economic family definition in 2025.

The behavioural cost of GBI under the nuclear family definition would amount to $5 billion, compared to $3.6 billion under the economic family definition.

Summary

This report provides an update to the Parliamentary Budget Officer's (PBO) previous distributional analysis of a guaranteed basic income (GBI) in response to ongoing interest from parliamentarians. The updated analysis captures changes in economic and demographic conditions in recent years while maintaining the GBI program parameters used in our previous reports.

Since PBO's previous report published in 2021, the use of the nuclear family unit for GBI eligibility has raised fairness concerns among parliamentarians and stakeholders, leading to interest in using a broader family definition. In response, this analysis provides fiscal and distributional impacts of the GBI using two different definitions of the family unit, that is the nuclear family and the economic family.

PBO estimates that the gross cost of the GBI, excluding behavioural costs, rises to $107 billion in 2025 under the nuclear family unit definition. The same cost measure is roughly cut in half to $53 billion when using the broader economic family unit. Consistent with previous analysis, PBO assumes that existing federal and provincial tax credits targeting low-income individuals would be eliminated to offset these costs.

For both family definitions, the GBI and its fiscal offsets have a progressive impact on household disposable income. The largest benefit is observed in the lowest income quintile, while higher income quintiles experience a loss in disposable income due to the elimination of various tax credits and relatively lower GBI transfers.

Based on the Market Basket Measure (MBM), the GBI would reduce poverty rates in Canada in 2025 by 34 per cent under the nuclear family definition and by 40 per cent under the economic family definition. The updated poverty impact is lower than the 49 per cent previously reported by PBO in 2021. This reflects both a significant upward revision of the MBM threshold and that earnings of low-income families have not kept pace with the increased threshold in recent years. This finding suggests that more families are now classified as living in poverty according to the updated official rates, highlighting the growing challenges of meeting basic living standards.

In 2025, the cost of the behavioural response to the GBI under the nuclear family definition would amount to $5 billion, compared to $3.6 billion under the economic family definition. As noted earlier, all other gross GBI costs would be fully offset by adjusting the tax system, leaving the behavioural cost of the GBI as the only net cost for the government.

Introduction

This report provides an update on the PBO's 2021 distributional analysis of a guaranteed basic income (GBI) in response to ongoing interest from parliamentarians.[1] This interest is reflected by the introduction of House Bill C-223 and Senate Bill S-233 in the first session of the 44th Parliament, which propose the development of a national framework for a guaranteed livable basic income.[2]

The updated analysis includes projections for 2025, capturing changes in economic and demographic conditions since 2021 and their subsequent impact on poverty levels in the country.[3]

How is GBI defined?

Consistent with previous analysis, PBO uses the parameters set out in Ontario's 2017 basic income pilot project. The project ensured that participants received up to 75 per cent of the low-income measure (LIM).[4] In 2025, this would amount to $21,903 for a single person and $30,975 for a couple. The GBI amount is then reduced as a family's net income increases, at a rate of $0.50 for every additional dollar.[5] Moreover, individuals with a disability would receive a universal additional amount of $7,355 per year.[6]

The Ontario pilot uses the nuclear family as the basis for determining eligibility and administering the guaranteed basic income. Boadway et al. (2023) argue that this approach is consistent with the goal of simplicity because the nuclear family is already used by the Canada Revenue Agency to administer benefits such as the Canada Child Benefit and the GST/HST credit.[7]

Defining the family unit

The nuclear family consists of an individual, their spouse or common-law partner (if applicable) and their children under the age of 18 residing in the same dwelling. Other family members (such as grandparents and adult children) sharing the same residence are considered separate nuclear families.

The economic family consists of a group of individuals related by blood, marriage (including common-law relationships) or adoption/guardianship who are living in the same dwelling.

Some parliamentarians and stakeholders have raised concerns about the fairness of using the nuclear family for GBI eligibility. Under that family definition, children over the age of 18 living with their parents are considered separate nuclear families and can independently qualify for the full GBI amount. Adopting a broader definition of the family unit, such as the economic family, would account for the net income of adult children and other relatives living in the same household as part of the family income used to determine GBI eligibility. To address these concerns, this report examines the fiscal and distributional impacts of the GBI using both the nuclear family and economic family definitions.[8]

PBO assumes that many federal and provincial programs and tax measures intended for low-income individuals and families would be cut to fund the GBI program.[9] Furthermore, the federal and provincial basic personal amounts are reduced to finance the remaining gross cost of the GBI (excluding the behavioural cost).[10] The fiscal offsets identified in this analysis are largely consistent with those in PBO's 2021 report.[11] Appendix A contains the updated list of federal and provincial tax credits used as offsets in this analysis.

The following section provides an overview of fiscal and distributional impacts of the GBI for calendar year 2025. Detailed breakdowns of the distributional and budgetary impacts of the GBI can be found in Appendices A through F.

Results

Gross static cost of GBI

Table 1 shows that the gross static cost of the GBI, that is the base amount and the disability supplement, using the nuclear family unit definition is estimated to be $107 billion.[12] This updated estimate is higher than the $90 billion projected for the same period in the 2021 report. The increase can be attributed to higher inflation rates and lower growth in earnings for low-income families in recent years than previously anticipated.

The base cost of the GBI is cut in half to $53 billion when the economic family unit is used instead of the nuclear family. This is because the economic family aggregates the earned income of all related individuals in a household, unlike the nuclear family, which considers only single adults, childless couples, and parents with children under 18. As a result, higher aggregated income leads to greater reductions in the GBI.

Table 1

GBI gross static cost in millions of dollars in 2025

Province	Nuclear family definition	Economic family definition
Newfoundland and Labrador	1,274	670
Prince Edward Island	437	244
Nova Scotia	2,599	1,555
New Brunswick	1,734	944
Quebec	20,434	10,728
Ontario	46,993	22,435
Manitoba	3,806	1,979
Saskatchewan	2,834	1,613
Alberta	12,759	5,805
British Columbia	13,852	7,105
Canada	106,721	53,077

Source:
Office of the Parliamentary Budget Officer.

Note:
These estimates reflect the GBI base amounts and the disability supplement, therefore excluding the behavioural costs of the program. Cost estimates are presented by calendar year.

PBO assumes that existing federal and provincial tax credits that target low-income individuals and families would be eliminated to fund the GBI. Further, basic personal amounts at both the federal and provincial level would be reduced as needed to fully offset the gross static cost of the GBI. These reductions would be more substantial when using the nuclear family unit compared to the economic family unit, as the gross cost associated with the GBI under the nuclear family definition is higher.[13]

In 2025, these adjustments would raise federal and provincial income tax revenues by approximately $56 billion and $50 billion, respectively, or $28 billion and $25 billion if using the economic family unit, covering the overall gross costs shown in Table 1. A provincial breakdown of these offsets is available in Appendix A.

Impact of GBI on household disposable income

For both family definitions, the introduction of the GBI and its fiscal offsets has a progressive impact on household disposable income. The average effect is broadly consistent across most income quintiles under both family definitions despite the notable difference in gross GBI costs between the two, as shown in Table 1. The greatest benefit is observed in the lowest income quintile, with an average amount around $6,100 (that is, about 21 per cent of average disposable income). However, higher income quintiles experience a loss in disposable income resulting from the elimination of various refundable and non-refundable tax credits combined with relatively lower GBI transfers. For a detailed provincial breakdown of GBI impacts, refer to Tables B-1 and B-2 in Appendix B.

Table 2

Average change in household disposable income by quintile in dollars and percentages, 2025

	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
Nuclear family definition	6,179	119	-1,358	-2,495	-2,445
	21.1%	0.2%	-1.7%	-2.2%	-1.1%
Economic family definition	6,069	-156	-1,448	-2,135	-2,332
	20.7%	-0.3%	-1.8%	-1.9%	-1.0%

Source:
Office of the Parliamentary Budget Officer.

Note:
The 1st quintile represents the lowest household income quintile; the 5th quintile represents the highest household income quintile.

The GBI impacts on household incomes presented in this table do not reflect the behavioural impact of the GBI.

Impact of GBI on poverty rates

At the national level, the GBI significantly reduces poverty rates in Canada, as shown in Table 3. Based on the Market Basket Measure (MBM), the GBI would reduce poverty rates in 2025 by 34 per cent using the nuclear family definition and by 40 per cent using the economic family definition, with variation across provinces.[14] Tables C-1 and C-2 in Appendix C provide the impact of GBI on low-income Canadians using different poverty lines: the MBM; the low-income cut-off (LICO); and the low-income measure (LIM).[15]

The updated poverty impact calculated using the nuclear family definition is lower than the 49 per cent previously reported in PBO's 2021 report, with a similar downward revision at the provincial level. This reduction is due in part to the significant upward revision of the MBM threshold, which now uses the 2018 base instead of the 2008 base.[16] The revised threshold reflects higher costs for housing, food, transportation, and other necessities, updated to account for inflation, modern consumption patterns, and regional cost variations.

In this analysis, GBI transfers are defined based on the LIM, consistent with the Ontario 2017 pilot project. The LIM is a measure of poverty based on household income rather than on the cost of goods and services. Therefore, the lower poverty impact of the GBI in 2025 also suggests that the earnings of low-income families have not kept pace with

the MBM threshold increase in recent years. As a result, while the poverty impact appears lower, the combination of higher MBM thresholds and the lower household income growth suggest that more families are now classified as living in poverty according to the updated official rates, highlighting the growing challenges of meeting basic living standards.[17]

Table 3 demonstrates that poverty reduction is greater when using the economic family definition (40 per cent reduction at the national level) compared to the nuclear family definition (34 per cent reduction). This can be attributed to two main factors:

a) For both family definitions, the GBI has a comparable impact on the average household disposable income in the first quintile, where poverty is most concentrated (as shown in Table 2), despite the substantial difference in gross costs (as shown in Table 1).

b) The reduced cost of the GBI under the economic family definition leads to a lower tax burden on individuals and families, reflecting the smaller reduction in basic personal amounts.

The varying impact of the GBI on poverty rates across provinces shown in Table 3 is due in part to differences in the distribution of earnings and provincial government transfers. In addition, while the GBI program parameters are defined at the national level in this analysis, the MBM poverty line varies across Canadian regions.[18]

Table 3

Change in poverty rates based on the Market Basket Measure in 2025, by province

Province	Nuclear family definition	Economic family definition
Newfoundland and Labrador	-31.2%	-43.3%
Prince Edward Island	-18.2%	-36.8%
Nova Scotia	-9.6%	-29.2%
New Brunswick	-15.9%	-33.7%
Quebec	-47.6%	-50.3%
Ontario	-40.8%	-41.1%
Manitoba	-51.5%	-53.1%
Saskatchewan	-29.9%	-32.3%
Alberta	-14.4%	-39.2%
British Columbia	-20.9%	-26.2%
Canada	-34.4%	-40.1%

Source:
Office of the Parliamentary Budget Officer.

Note:
The change in MBM is calculated using the 2018 MBM threshold.

The poverty impacts presented in this table do not reflect the behavioural impact of the GBI.

Behavioural impact of GBI

The behavioural impact of GBI was assessed at the intensive and extensive margins using labour supply elasticities from Green (2020), consistent with PBO's 2021 analysis.[19] These include:

1. Elasticity of hours worked with respect to after-tax wage.
2. Elasticity of participation with respect to after-tax wage.
3. Elasticity of hours worked with respect to after-tax income.
4. Elasticity of participation with respect to after-tax income.

The introduction of the GBI can affect labour supply by increasing both the marginal effective tax rate (METR) and participation tax rate (PTR). The increase in METR results in a reduction in hours worked from lower-wage workers, an intensive margin response.

The increase in the PTR results in some workers leaving the workforce entirely, an extensive margin response.

The behavioural impacts of GBI are smaller under the economic family definition compared to the nuclear family definition. Hours worked decrease by 1.1 per cent for the economic family definition versus 1.4 per cent for the nuclear family definition. Similarly, payroll decreases by 0.4 per cent compared to 0.5 per cent. This is because the introduction of a GBI under the economic family definition results in a smaller increase in METRs and PTRs, as shown in Tables E-1 and E-2 of Appendix E, due to the lower fiscal burden of funding the GBI under that definition.[20] The impact on payroll is less pronounced than on hours worked because the behavioural impact of GBI is more significant among low-wage workers, whose earnings represent a relatively small share of total payroll. Similar results are observed at the provincial level, as detailed in Appendix F.

The behavioural cost of GBI using the economic family definition amounts to $3.6 billion, compared to $5.0 billion for the nuclear family definition. This reflects smaller changes in hours worked and payroll under the economic family definition, showing how the lower fiscal burden of funding the GBI under that definition results in a reduced impact on labour supply.

Table 4

GBI impact on labour supply of working-age individuals and behaviour cost, 2025

	Nuclear family definition	Economic family definition
Total change in hours worked (%)	-1.4%	-1.1%
Total change in payroll (%)	-0.5%	-0.4%
GBI behavioural cost ($ million)	4,987	3,617

Source:
Office of the Parliamentary Budget Officer.

Note:
PBO calculations are based on estimated changes to METRs, PTRs and disposable income in response to GBI implementation and exogenous elasticities used in our 2021 report.

The impacts on hours worked are estimated assuming there is no change in the hourly average wage in response to the GBI.

To calculate the behavioural cost, the PBO calculates the change in federal/provincial income taxes due to the change in total payroll and the increase in GBI expenses due to the decrease in the employment earnings of low-income individuals.

Total gross cost of GBI

The total gross cost of the GBI includes costs related to the GBI base amount and the disability supplement (as shown in Table 1 for 2025), as well as the GBI behavioural cost (as shown in Table 4 for 2025). Combining those three components brings the total gross cost to $112.4 billion under the nuclear family definition and $57.0 billion under the economic family definition in 2025-26. By 2029-30, the total costs increase to $127.7 billion and $63.8 billion, respectively (Table 5).

As previously mentioned, the gross cost of the GBI base amounts and the disability supplement would be fully offset by eliminating existing federal and provincial tax credits that the GBI would replace. Consequently, the behavioural cost would remain as the only net cost for the government.

Table 5
Breakdown of the gross GBI cost

	$ million	2025-26	2026-27	2027-28	2028-29	2029-30
Nuclear family definition	**GBI base cost**	102,476	105,229	108,698	112,607	116,656
	Disability cost	4,906	4,996	5,104	5,233	5,364
	Behavioural cost	5,018	5,153	5,323	5,514	5,712
	Total gross cost	112,400	115,377	119,126	123,354	127,732
Economic family definition	**GBI base cost**	48,432	49,492	50,930	52,617	54,360
	Disability cost	4,906	4,996	5,104	5,233	5,364
	Behavioural cost	3,635	3,715	3,823	3,949	4,080
	Total gross cost	56,974	58,202	59,858	61,799	63,804

Source:
Office of the Parliamentary Budget Officer.

Note:
Cost estimates in this table are presented by fiscal year, and therefore differ from estimates presented in Table 1 and 4 for calendar year 2025.

The GBI base cost represents the gross cost of GBI benefits before using the fiscal offsets to fund the program.

Sources of uncertainty

The estimates presented in this report are highly dependent on the design of the GBI program and its fiscal offsets. The assumptions used to model the GBI for this analysis represent only one of many possible ways to structure the program.[21] Moreover, the government may consider different approaches to fund the GBI beyond the elimination of various tax credits and the adjustment of basic personal amounts. There remains considerable uncertainty surrounding how a national GBI would ultimately be structured and financed.

It is also important to note that the magnitude of the labour supply impact resulting from the GBI is subject to uncertainty. For instance, Boadway and al. (2023) use somewhat higher labour supply elasticities to estimate the change in payroll and hours worked from a provincial GBI for Prince Edward Island. The behavioural cost of a national GBI showed in this report may represent a lower bound estimate.

Lastly, the SPSD/M microsimulation data used in this analysis has notable limitations. The demographic and income data for certain vulnerable groups who stand to benefit from the GBI may not be fully represented or accurately reflected. As a result, SPSD/M likely does not capture the full scope of poverty in Canada.

Appendix A: Changes on tax payable and government transfers, by province

Table A-1

List of federal and provincial tax credits used as GBI fiscal offsets

Jurisdiction	Type	Tax measure
Federal	Non-refundable	Basic personal amount*
		Spouse or common-law partner amount*
		Amount for an eligible dependant
		Canada caregiver amount
		Disability tax credit
		Eligible medical expenses
	Refundable	Canada Workers Benefit
		Canada Workers Benefit disability supplement
		GST/HST credit
		Refundable medical expense supplement
Provincial	Non-refundable	Provincial basic personal amount*
		Provincial spouse or common-law partner amount*
		Provincial amount for an eligible dependant
		Provincial caregiver tax credit
		Provincial medical expenses tax credit
		Provincial disability tax credit
		NL, PE, NS, NB low-income tax reduction
		NS basic amount enhancement
		QC tax credit for career extension
		QC amount for living alone
		ON low-income workers tax credit (LIFT)
		ON tax reduction
		MB family tax benefit

		BC low-income tax reduction credit
	Refundable	Social assistance
		NL income supplement
		NL, NS home heating assistance rebate
		PE sales tax credit
		NS affordable living tax credit
		NS poverty reduction credit
		NB refundable HST credit
		QC work premium, adapted work premium and supplement to the work premium
		QC natural caregivers tax credit
		QC tax credit for caregivers
		QC refundable tax credit for medical expenses
		QC solidarity tax credit
		ON electricity support program
		ON energy and property tax credit
		ON sales tax credit
		SK low-income tax credit
		BC sales tax credit
		BC renters tax credit

Source:
Office of the Parliamentary Budget Officer.

Note:
*When defining GBI eligibility using the nuclear family unit definition, the federal basic personal amount and spousal or common-law partner amount are fully eliminated. The provincial equivalents of those amounts are reduced to 17 per cent of their reference value. Under the economic family definition, the federal basic personal amount and spousal or common-law partner amount are reduced to 57 per cent of their reference value and the provincial equivalent of those amounts are unchanged. The basic personal amount adjustments mentioned above (17 per cent and 57 per cent) were determined to ensure that the revenues generated from all changes made to the tax system are roughly equal to the gross static cost of the GBI.

Table A-2

Change in federal and provincial income tax revenues using nuclear family unit, in millions of dollars

Province	Federal income tax revenues	Provincial income tax revenues	Total offsets
NL	748	491	1,239
PE	281	173	454
NS	1,580	961	2,541
NB	1,217	816	2,034
QC	11,350	15,931	27,281
ON	22,682	15,983	38,666
MB	2,078	1,622	3,701
SK	1,657	1,609	3,267
AB	6,945	7,491	14,436
BC	7,790	5,303	13,093
CA	56,329	50,382	106,710

Source:
Office of the Parliamentary Budget Officer.

Note:
Federal (provincial) income tax revenues are calculated as the federal (provincial) income tax payable minus federal (provincial) transfer payments.

Table A-3

Change in federal and provincial income tax revenues using economic family unit, in millions of dollars

Province	Federal income tax revenues	Provincial income tax revenues	Total offsets
NL	373	268	641
PE	142	61	203
NS	781	507	1,288
NB	611	359	969
QC	5,856	5,820	11,676
ON	11,009	10,849	21,858
MB	1,031	586	1,617
SK	803	602	1,405
AB	3,339	2,602	5,940
BC	3,787	3,685	7,472
CA	27,732	25,337	53,069

Source:

Office of the Parliamentary Budget Officer.

Note:

Federal (provincial) income tax revenues are calculated as the federal (provincial) income tax payable minus federal (provincial) transfer payments.

Appendix B: Change in average household disposable income by province

Table B-1

Change in average household disposable income using nuclear family definition in Dollars and Percentages

Province	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
NL	5,064	1,188	-1,418	-2,017	-2,092
	17.5%	2.5%	-2.0%	-2.1%	-1.2%
PE	5,765	-327	-2,076	-2,207	-2,202
	22.3%	-0.7%	-2.9%	-2.2%	-1.1%
NS	6,788	612	-2,225	-2,258	-2,344
	25.3%	1.3%	-3.3%	-2.4%	-1.3%
NB	3,852	337	-1,765	-2,914	-3,485
	14.1%	0.7%	-2.6%	-3.1%	-2.0%
QC	4,311	-823	-2,871	-4,342	-4,425
	15.6%	-1.7%	-4.2%	-4.4%	-2.2%
ON	7,929	975	-231	-1,177	-1,137
	26.9%	1.7%	-0.3%	-1.0%	-0.5%
MB	7,395	27	-1,302	-2,114	-3,111
	25.7%	0.1%	-1.8%	-2.0%	-1.6%
SK	6,769	-986	-3,372	-3,972	-2,782
	24.3%	-1.8%	-4.2%	-3.4%	-1.3%
AB	4,817	-1,074	-2,278	-2,742	-3,037
	14.7%	-1.7%	-2.5%	-2.1%	-1.2%
BC	5,723	430	-330	-2,485	-1,725
	19.0%	0.8%	-0.4%	-2.0%	-0.7%
CA	6,179	119	-1,358	-2,495	-2,445
	21.1%	0.2%	-1.7%	-2.2%	-1.1%

Source:
Office of the Parliamentary Budget Officer.

Note:
The 1st quintile represents the lowest household income quintile; the 5th quintile represents the highest household income quintile.

Table B-2

Change in average household disposable income using economic family definition in Dollars and Percentages

Province	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
NL	4,704	688	-1,308	-1,583	-1,886
	16.2%	1.5%	-1.9%	-1.6%	-1.0%
PE	5,836	224	-1,460	287	-2,272
	22.5%	0.5%	-2.1%	0.3%	-1.2%
NS	7,022	691	-1,118	-1,857	-2,044
	26.2%	1.5%	-1.7%	-2.0%	-1.2%
NB	4,438	619	-1,171	-1,987	-2,232
	16.3%	1.3%	-1.7%	-2.1%	-1.3%
QC	4,546	-204	-1,200	-1,902	-2,373
	16.5%	-0.4%	-1.7%	-1.9%	-1.2%
ON	7,366	-272	-1,729	-2,439	-2,487
	24.9%	-0.5%	-2.0%	-2.0%	-1.0%
MB	7,366	664	-584	-1,900	-2,454
	25.6%	1.3%	-0.8%	-1.8%	-1.2%
SK	6,759	136	-1,145	-1,609	-2,050
	24.2%	0.3%	-1.4%	-1.4%	-1.0%
AB	5,029	-630	-1,528	-1,496	-1,734
	15.4%	-1.0%	-1.7%	-1.1%	-0.7%
BC	5,783	-20	-1,447	-2,623	-2,475
	19.2%	0.0%	-1.7%	-2.1%	-1.0%
CA	6,069	-156	-1,448	-2,135	-2,332
	20.7%	-0.3%	-1.8%	-1.9%	-1.0%

Source:
Office of the Parliamentary Budget Officer.

Note:
The 1st quintile represents the lowest household income quintile; the 5th quintile represents the highest household income quintile.

Appendix C: GBI impact on low-income Canadians using different poverty lines

Table C-1

GBI impact on poverty rates using nuclear family unit

Province	MBM	LICO	LIM
NL	-31.2%	-68.2%	-19.2%
PE	-18.2%	-72.4%	-7.4%
NS	-9.6%	-77.0%	-21.5%
NB	-15.9%	-64.2%	-6.7%
QC	-47.6%	-71.2%	-23.5%
ON	-40.8%	-84.0%	-40.3%
MB	-51.5%	-84.9%	-30.8%
SK	-29.9%	-76.3%	-28.4%
AB	-14.4%	-73.8%	-26.7%
BC	-20.9%	-76.5%	-30.5%
CA	-34.4%	-78.1%	-31.2%

Source:

Office of the Parliamentary Budget Officer.

Note:

The change in MBM is calculated using the 2018 MBM threshold.

Table C-2

GBI impact on poverty rates using economic family unit

Province	MBM	LICO	LIM
NL	-43.3%	-66.3%	-21.3%
PE	-36.8%	-76.1%	-15.0%
NS	-29.2%	-80.7%	-32.5%
NB	-33.7%	-67.2%	-20.5%
QC	-50.3%	-73.7%	-23.9%
ON	-41.1%	-82.7%	-34.6%
MB	-53.1%	-84.3%	-33.5%
SK	-32.3%	-79.2%	-26.5%
AB	-39.2%	-79.3%	-37.7%
BC	-26.2%	-77.1%	-33.4%
CA	-40.1%	-79.0%	-31.2%

Source:

Office of the Parliamentary Budget Officer.

Note:

The change in MBM is calculated using the 2018 MBM threshold.

Appendix D: 2025 MBM threshold for the economic family

Table D-1

2025 MBM threshold for the economic family in major Canadian cities in Dollars

City	MBM threshold 2008 base	MBM threshold 2018 base
St. John's, Newfoundland and Labrador	45,093	55,333
Prince Edward Island	44,804	54,510
Halifax, Nova Scotia	42,872	57,346
Saint John and Moncton, New Brunswick	42,244	53,145
Quebec, Quebec	40,603	49,835
Montreal, Quebec	41,610	50,520
Ottawa-Gatineau, Ontario part	47,905	58,912
Toronto, Ontario	48,563	60,022
Winnipeg, Manitoba	42,922	49,223
Saskatoon, Saskatchewan	44,564	56,642
Regina, Saskatchewan	44,442	55,632
Edmonton, Alberta	44,955	59,823
Calgary, Alberta	47,207	60,416
Vancouver, British Columbia	47,198	60,681

Source:
SPSD/M 28.0 and SPSD/M 30.2.

Note:
The MBM thresholds for 2025 are determined by adjusting the 2008 and 2018 thresholds for inflation using the Consumer Price Index (CPI).

Appendix E: GBI impact on METRs and PTRs for active working individuals, by quintile and by province

Table E-1

Change in METR and PTR by HH total income quintile and by province using nuclear family definition

Province		1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
NL	Change in METR	60.6%	29.9%	12.4%	9.2%	9.4%
	Change in PTR	72.8%	44.7%	17.8%	14.7%	6.7%
PE	Change in METR	55.5%	29.8%	14.1%	13.2%	14.3%
	Change in PTR	67.6%	32.1%	18.9%	6.2%	3.0%
NS	Change in METR	58.0%	28.8%	9.6%	9.5%	8.9%
	Change in PTR	71.7%	39.3%	19.0%	14.4%	3.9%
NB	Change in METR	58.2%	33.0%	12.8%	8.7%	8.1%
	Change in PTR	75.3%	38.7%	19.5%	13.9%	8.7%
QC	Change in METR	60.6%	28.0%	12.1%	9.1%	9.6%
	Change in PTR	73.5%	37.8%	22.7%	13.2%	8.9%
ON	Change in METR	58.8%	26.5%	13.1%	11.4%	10.7%
	Change in PTR	66.3%	35.3%	24.2%	17.3%	8.7%
MB	Change in METR	55.4%	30.1%	16.9%	14.0%	11.4%
	Change in PTR	70.3%	37.8%	23.7%	15.1%	6.8%
SK	Change in METR	59.6%	28.9%	9.8%	8.4%	12.1%
	Change in PTR	71.3%	28.1%	17.0%	12.2%	5.6%
AB	Change in METR	53.7%	18.4%	12.7%	12.4%	10.1%
	Change in PTR	61.0%	36.2%	24.2%	15.2%	9.6%
BC	Change in METR	51.8%	22.8%	13.2%	7.3%	10.1%
	Change in PTR	60.0%	32.8%	22.0%	14.1%	5.1%

CA	**Change in METR**	58.1%	26.1%	12.1%	10.6%	10.4%
	Change in PTR	68.4%	37.7%	23.3%	16.6%	7.9%

Source:

Office of the Parliamentary Budget Officer.

Note:

The estimates are for individuals aged 18 to 64.

Changes in METR and PTR do not account for variations in social assistance, as social assistance is not included in the SPSD/M model.

The 1st quintile represents the lowest household income quintile; the 5th quintile represents the highest household income quintile.

Table E-2

Change in METR and PTR by HH total income quintile and by province using economic family definition

Province		1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
NL	Change in METR	42.5%	22.6%	2.7%	0.7%	0.3%
	Change in PTR	57.3%	24.9%	4.1%	6.1%	2.0%
PE	Change in METR	42.4%	26.3%	4.4%	6.1%	0.0%
	Change in PTR	56.2%	14.0%	5.8%	2.1%	1.0%
NS	Change in METR	44.8%	25.8%	3.5%	1.9%	0.6%
	Change in PTR	57.3%	25.1%	9.4%	2.6%	0.3%
NB	Change in METR	45.4%	28.6%	6.3%	1.8%	0.3%
	Change in PTR	61.1%	21.3%	6.2%	2.0%	1.7%
QC	Change in METR	49.4%	24.5%	7.2%	1.4%	0.2%
	Change in PTR	57.8%	21.9%	6.9%	3.0%	0.7%
ON	Change in METR	40.7%	19.4%	3.2%	1.3%	0.4%
	Change in PTR	53.9%	18.3%	6.4%	2.1%	1.6%
MB	Change in METR	42.7%	26.3%	7.7%	1.2%	0.1%
	Change in PTR	55.9%	20.9%	7.7%	3.2%	0.5%
SK	Change in METR	43.3%	21.5%	3.8%	1.7%	0.8%
	Change in PTR	56.5%	15.4%	5.5%	2.4%	0.5%
AB	Change in METR	40.1%	11.8%	2.8%	2.6%	0.9%
	Change in PTR	46.1%	15.2%	4.8%	2.0%	0.9%
BC	Change in METR	43.1%	18.3%	5.7%	0.7%	0.5%
	Change in PTR	48.8%	20.3%	6.5%	1.6%	0.8%
CA	Change in METR	43.1%	20.9%	4.2%	1.4%	0.5%
	Change in PTR	54.8%	21.4%	6.2%	2.5%	1.1%

Source:

Office of the Parliamentary Budget Officer.

Note:

The estimates are for individuals aged 18 to 64.

Changes in METR and PTR do not account for variations in social assistance, as social assistance is not modelled in SPSD/M.

The 1st quintile represents the lowest household income quintile; the 5th quintile represents the highest household income quintile.

Appendix F: GBI impact on labour supply and behaviour cost, by province

Table F-1

GBI behavioural impact using nuclear family definition

Province	Total change in hours worked (%)	Total change in payroll (%)	GBI Behaviour cost ($ million)
NL	-1.3%	-0.5%	49
PE	-1.4%	-0.7%	22
NS	-1.6%	-0.7%	139
NB	-1.5%	-0.7%	103
QC	-1.1%	-0.4%	814
ON	-1.6%	-0.6%	2,166
MB	-1.7%	-0.8%	216
SK	-1.3%	-0.5%	121
AB	-1.1%	-0.4%	571
BC	-1.5%	-0.6%	787
CA	-1.4%	-0.5%	4,987

Source:

Office of the Parliamentary Budget Officer.

Note:

PBO calculations based on estimated changes to METRs, PTRs and disposable income in response to GBI implementation using 2021 report exogenous elasticities.

The impacts on hours worked are estimated assuming there is no change in the hourly average wage in response to the GBI.

To calculate the behavioural cost, the PBO calculates the change in federal/provincial income taxes due to the change in total payroll and the increase in GBI expenses due to the decrease in the employment earnings of low-income individuals.

Table F-2

GBI behavioural impact using economic family definition

Province	Total change in hours worked (%)	Total change in payroll (%)	GBI Behaviour cost ($ million)
NL	**-0.9%**	-0.3%	34
PE	-1.2%	-0.5%	17
NS	-1.5%	-0.6%	122
NB	-1.4%	-0.6%	90
QC	-1.1%	-0.4%	719
ON	-1.1%	-0.3%	1,386
MB	-1.5%	-0.7%	183
SK	-1.1%	-0.4%	100
AB	-0.8%	-0.3%	363
BC	-1.2%	-0.4%	603
CA	-1.1%	-0.4%	3,617

Source:

Office of the Parliamentary Budget Officer.

Note:

PBO calculations based on estimated changes to METRs, PTRs and disposable income in response to GBI implementation using 2021 report exogenous elasticities.

The impacts on hours worked are estimated assuming there is no change in the hourly average wage in response to the GBI.

To calculate the behavioural cost, the PBO calculates the change in federal/provincial income taxes due to the change in total payroll and the increase in GBI expenses due to the decrease in the employment earnings of low-income individuals.

Notes

[1] See PBO's April 2021 report, Distributional and Fiscal Analysis of a National Guaranteed Basic Income.

[2] For more details on the proposed legislation, refer to Bills C-223 and S-233.

[3] This analysis is based on data and calculations made through Statistics Canada's Social Policy Simulation Database and Model (SPSD/M). The assumptions and calculations underlying the simulation results were prepared by the PBO; the responsibility for the use and interpretation of these data is entirely that of the authors.

[4] The low-income measure (LIM) is 50 per cent of the median household income. It is often used to make international comparisons.

[5] Ontario Government. (2019). Archived - Ontario Basic Income Pilot.

[6] The universal additional amount for individuals with a disability used in this report is calculated by adjusting for inflation the $6,000 amount set in the Ontario Basic Income Pilot Project for the year 2018.

[7] Boadway, R., Corak, M., David, K., Emery, H., Forget, E., Halpenny, C., Koebel, K., Robidoux, B., Simpson, W., & Stevens, H. (2023). A Proposal For A Guaranteed Basic Income Benefit In Prince Edward Island.

[8] The economic family, as defined by Statistics Canada, includes all related individuals in a household and is commonly used to assess poverty.

[9] The fiscal offsets identified in this analysis would fully fund the gross cost of GBI, including the universal disability basic income. However, it would not cover the behavioural cost that may be incurred by the government as a result of the GBI program.

[10] Assumptions related to the federal and provincial basic personal amount vary depending on family unit definition. The adjustments are calibrated to ensure that the gross static cost of the GBI for each family unit definition is fully offset. Details are provided in Appendix A.

[11] See Appendix A of PBO's April 2021 report for a complete list of potential federal and provincial fiscal offsets, including base personal amounts.

[12] Boadway et al. (2023) (see note 9) point out that students from low-income families receive financial aid based on both family and student income. This means that GBI benefits may be further reduced by student loans and grants. However, because the SPSD/M does not fully account for these financial transfers, the gross cost of the GBI may be overstated if such grants and loans are included in the family's net income.

[13] See Appendix A for details on basic personal amounts adjustments.

[14] The MBM is a measure of low income, which is based on the cost of a basket of goods and services that individuals and families require to meet their basic needs and achieve a modest standard of living.

[15] The low-income cut-off (LICO) is the income threshold below which a family must devote 20 per cent more of its income than the average family spends on the necessities of food, shelter and clothing. Statistics Canada provides LICOs that vary by seven family sizes and five community populations.

[16] See Appendix D to compare 2008 and 2018 MBM thresholds in major Canadian cities.

[17] In 2018, Statistics Canada reported a national poverty rate of 8.7% using the 2008-base MBM. When recalculated using the updated 2018-base MBM, the poverty rate for the same year increased to 11.0%. See Canadian Income Survey, 2018.

[18] See note 16.

[19] Green, D. A. (2020). Labour Supply Issues Related to a Basic Income and Income Assistance.

[20] Tables E-1 and E-2 in Appendix E provide estimates of changes in PTRs and METRs for both nuclear and economic family definitions.

[21] For example, Boadway and al. (2023) (see note 9) propose a provincial GBI program for PEI with a maximum benefit set to 85 per cent of its regional MBM threshold for 2022.

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