

June 09, 2022



CANADA'S MILITARY EXPENDITURE AND THE NATO 2% SPENDING TARGET



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 presents fiscal analysis of achieving the North Atlantic Treaty Organization's 2% Defence Spending Target.

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RP-2223-010-S_e

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Executive Summary

Canada has been part of the North Atlantic Treaty Organization (NATO) since 1949. The purpose of NATO is to “guarantee the freedom and security of its members through political and military means”. As attested by the Government of Canada, NATO is a cornerstone of Canadian security and defence policy.

In 2006, NATO members agreed to the policy goal of setting their annual defence spending to at least 2% of GDP. This target is comprised of two elements: a country's total annual military expenditure and its annual economic output, or GDP.

NATO's most recent publication on the military expenditure of member nations indicates that:

- Nominal Canadian defence spending grew by 67 percent between 2014 and 2021;
- Canadian outlays as a share of GDP rose by roughly 40% - from 1.0% of GDP in 2014 to 1.4% of GDP in 2021; and,
- There was a slight increase in the proportion of spending allocated to equipment purchases.

This report presents an independent forecast of military expenditures under the NATO definition for the period of 2022-23 to 2026-27. These figures are compared to previous PBO projections of annual nominal economic output to derive a forecast of military expenditures as a percentage of GDP over this period.

The PBO forecast is based on publicly available NATO data¹ on total annual military expenditures for the Government of Canada, which includes expenditures from the Department of National Defence (DND) and other government departments. This forecast uses several methods to project the applicable cost categories contained in the historical data. Importantly, spending on capital projects is assumed to follow the data provided to the PBO by the Department of National Defence in December of 2021 and since referenced in a recent PBO report.²

Summary Table 1 presents an overview of the PBO projections of Canadian military expenditures from 2022-23 to 2026-27 and the share of GDP these figures represent, together with a forecast of the 2% NATO benchmark of military expenditure to GDP and the difference between the two totals.

The PBO forecast thus indicates that total Government of Canada military expenditures will increase from \$36.3 billion in the 2022-23 fiscal year to approximately \$51.0 billion in 2026-27. The corresponding increase in the share of military expenditure to GDP is from 1.33 percent in 2022-23 to 1.59 percent in 2026-27. In order for military expenditures to reach 2% of GDP, the Government of Canada would need to spend an additional \$18.2 billion

in 2022-23; \$15.5 billion in 2023-24; \$14.5 billion in 2024-25; \$14.1 billion in 2025-26; and \$13.0 billion in 2026-27.

Summary Table 1

PBO forecast of military expenditure as a percentage of GDP

	2022-23	2023-24	2024-25	2025-26	2026-27
Total military expenditure (\$ billions)	36.3	41.5	44.7	47.4	51.0
Military expenditure as a percentage of GDP (percent)	1.33	1.46	1.51	1.54	1.59
2% of nominal GDP (\$ billions)	54.5	57.0	59.2	61.5	64.0
Difference	18.2	15.5	14.5	14.1	13.0

Source: PBO calculations.

Notes: Data are presented on a fiscal-year basis. Totals may not add due to rounding.

1. What is NATO's 2% spending target?

Canada has been a member of the North Atlantic Treaty Organization (NATO) since its inception in 1949. The purpose of NATO is to "guarantee the freedom and security of its members through political and military means".³ As attested by the Government of Canada, NATO is a "cornerstone of Canadian security and defence policy".⁴

In 2006, NATO members agreed to the policy goal of setting their annual defence spending to at least 2% of GDP.⁵ While some NATO countries, most notably the United States, spent far above this target, most did not. NATO observes that the motivation for this goal was to both demonstrate the overall military readiness of the alliance to fulfil its objectives and the capacity of member states to demonstrate their "political will".⁶

Following eight years of limited progress, in 2014 NATO members reiterated their commitment to achieve the 2% of GDP defence spending target. Furthermore, this defence spending guideline was further refined to include a new goal that at least 20% of NATO states' defence budgets would be earmarked for spending on new equipment.⁷

1.1. Calculating the 2% target

NATO's 2% military expenditure target is comprised of two elements: a country's total annual military expenditure and its annual economic output, or GDP. While this is a simple ratio, both components present methodological issues regarding measurement – in particular, the question of what consists of "defence spending". NATO itself identifies that its own measurements can materially diverge from those reported by national governments.⁸

$$\frac{\text{Total Military Expenditure}}{\text{Total Economic Output}}$$

Total military expenditure includes not only the spending of a country's defence ministry but other governmental expenditures on paramilitary forces (such as the Canadian Coast Guard), pension payments and benefits for veterans, peacekeeping and humanitarian activities, and transfer payments to security agencies, both international and domestic. NATO receives submissions from member nations detailing their annual planned and actual expenditures. These figures are then regularly published by NATO in their *Defence Expenditure of NATO Countries* reports.⁹

With respect to the calculation of total economic output, NATO states that it uses national data on GDP compiled by the Organization for Economic Cooperation and Development (OECD).¹⁰ In general, there is a common international framework for the measurement of this metric. The OECD, in turn, indicates that its Canadian data are compiled by Statistics Canada, Canada's national statistical agency.¹¹

There are two evident shortcomings of using NATO's GDP target to assess either a country's military capacity or political will (which is the stated objective of the NATO target). First, the reported ratio will vary from year-to-year based on factors unrelated to defence capacity, such as inflation, fluctuations in exchange rates, and economic conditions both domestic and global. Second, defence expenditures are measured based on adjusted-cash accounting, where large changes in cash outlays (for instance, relating to large weapon platform procurements, or top-ups to pension plans) will introduce volatility into reported spending.

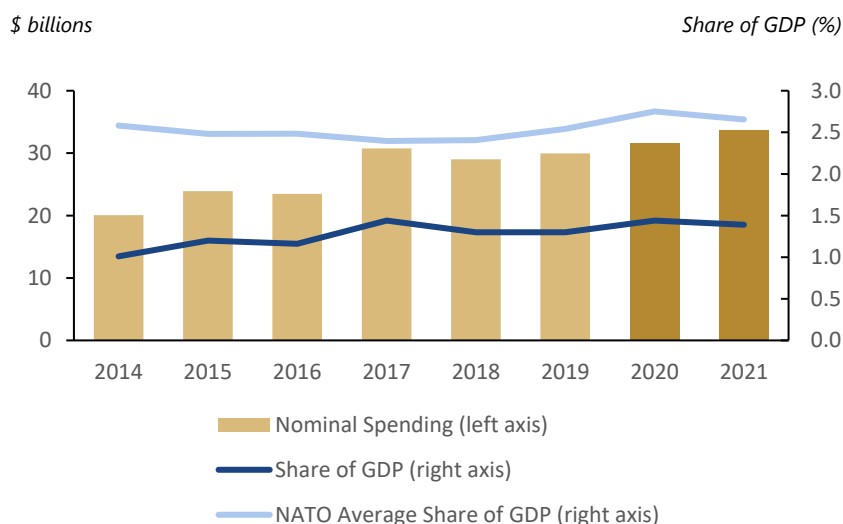
2. How has Canadian defence spending evolved?

NATO reports that nominal Canadian defence spending grew by 67 percent between 2014 and 2021 (Figure 2-1). This growth occurred in two specific periods:

- First, reported defence spending increased by roughly \$7 billion in 2017 compared to the previous fiscal year. This was attributable to more flexible guidance provided by NATO regarding what constitutes "defence" spending. As such, the Canadian spending figures were expanded to incorporate measures previously not considered "defence" (such as veterans' benefits).
- Second, there is additional \$4 billion of spending reported in 2020 and 2021. PBO notes that these figures are estimates, rather than actual disbursements, and therefore may not fully account for potential lapses in military spending by the Department of National Defence or other government departments.¹²

Figure 2-1

Canadian Defence Spending



Source: NATO (2021).

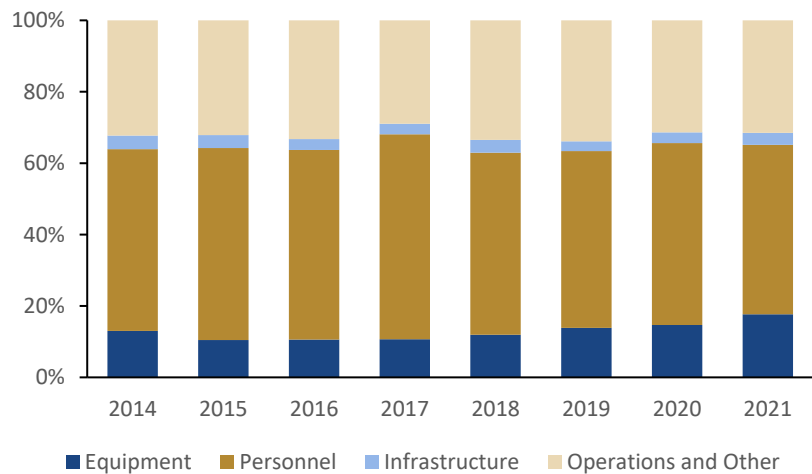
Notes: Data are presented on a calendar-year basis. Figures for 2020 and 2021 are estimates, and therefore do not reflect money that was budgeted but unspent (that is, "lapsed").

Notwithstanding the 67% overall nominal increase in spending, Canadian outlays as a share of GDP rose by roughly 40% - from 1.0% of GDP in 2014 to 1.4% of GDP in 2021. This lower overall growth rate reflects ongoing growth of the Canadian economy and therefore GDP. As the NATO spending gap declined (from 0.9% of GDP in 2014 to an estimated 0.6% of GDP in 2021), the gap between NATO average spending and Canadian spending decreased commensurately - from 1.6% of GDP to 1.3% of GDP.

While spending on defence rose over the past seven years, the overall composition of outlays remained mostly stable (Figure 2-2). Like other militaries, the majority of Canada's defence budget is spent on personnel, which is inclusive of both civilian and military members as well as defined classes of benefits for veterans. On average, these costs represented about half of total spending between 2014 and 2021.

Consistent with the 2014 NATO guidance that equipment outlays should represent at least 20% of overall spending, Canadian hardware acquisition costs rose from 13% to 18% of total defence expenditures. That said, most of the increase relates to 2020 and 2021, for which NATO uses budgeted rather than actual figures. As such, it may not fully account for delays in weapons platform acquisitions by the Government of Canada.¹³

Figure 2-2 Composition of Canadian defence spending



Source: NATO (2021).

Notes: Data are presented on a calendar-year basis. Figures for 2020 and 2021 are estimates, and therefore do not reflect money that was budgeted but unspent (that is, "lapsed"). The "Operations and Other" category includes operations and maintenance expenditure, expenditure on research and development, and expenditure not otherwise included in the other categories.

3. How close is Canada to reaching the 2% military expenditure target?

Under Canada's 2017 defence policy, Strong, Secure, Engaged (SSE), the government has committed to long-term investments in the Canadian Armed Forces with a view towards maintaining and enhancing its capability and capacity. The investments under this policy reportedly totalled \$553 billion over a 20-year span ending in the 2036-37 fiscal year, with \$164 billion earmarked for capital acquisition. SSE forecasted Canada's military expenditure as a percentage of GDP would reach 1.40 percent by the 2024-25 fiscal year, eight years into the policy.¹⁴

3.1. Forecasting military expenditures

The PBO forecast of total military expenditures is based on publicly available NATO data. Table 3-1 presents a breakdown of these figures, split into three categories: *DND capital*, *DND non-capital*, and *other governmental expenditures*.¹⁵

Table 3-1 Historical military expenditures under the NATO definition, 2017-18 to 2021-22

<i>billions \$</i>	2017-18	2018-19	2019-20	2020-21	2021-22*
DND Capital	3.8	4.1	4.2	4.9	5.9
DND Non-Capital	19.1	17.5	18.6	21.9	19.8
Other	7.9	7.4	7.1	4.8	7.9
Total	30.8	29.0	29.9	31.6	33.7

Sources: NATO (2021), PBO calculations.

Notes: Data are presented on a fiscal-year basis. Totals may not add due to rounding.

* 2021-22 totals are calculated based on estimates to date.¹⁶

To forecast expenditures under these categories, we adopt differing assumptions regarding the growth rates of each category and augment these totals with the confirmed amounts announced in Budget 2022. DND capital is assumed to follow a growth rate commensurate with the SSE capital expenditure profile, last reported to the PBO by DND in December of 2021.¹⁷ Non-capital expenditures for DND and all non-DND military expenditures (i.e., "Other" governmental expenditures, including those from other government departments) are assumed to grow evenly with nominal GDP. Forecasted GDP growth is based on figures reported in PBO's Economic and Fiscal Outlook – March 2022.¹⁸ The resulting forecast of military expenditures through 2026-27 is presented in Table 3-2.

Table 3-2 PBO forecast of military expenditures under the NATO definition, 2022-23 to 2026-27

<i>billions \$</i>	2022-23	2023-24	2024-25	2025-26	2026-27
DND Capital	7.2	10.8	12.3	13.7	14.8
DND Non-Capital	20.8	21.7	22.5	23.4	24.4
Other	7.5	7.9	8.2	8.5	8.8
Budget 2022	0.8	1.2	1.7	1.8	3.0
Total	36.3	41.5	44.7	47.4	51.0

Source: PBO calculations.

Notes: Data are presented on a fiscal-year basis. Totals may not add due to rounding.

As noted in the most recent PBO report on DND capital expenditures,¹⁹ delays on multiple projects involved in SSE have pushed spending from the first few years of SSE into later years, including those contained within this forecast. Any further delays or lapsing behaviour would have the effect of forcing planned capital expenditures further into the future, resulting in lower overall military expenditures. This forecast is therefore conditional on

DND accomplishing the stated capital expenditure profiles communicated to the PBO in December 2021.

3.2. Forecasting military expenditure as a percentage of GDP

Combining the above forecast of military expenditures with the PBO forecast of nominal GDP from the March 2022 edition of PBO's Economic and Fiscal Outlook, we produce an independent forecast of Canadian military expenditures as a percentage of GDP. Table 3-3 presents these results. Total military expenditures are thus forecast to increase from \$36.3 billion in 2022-23 to \$51.0 billion in 2026-27, with a corresponding increase in military expenditure as a percentage of GDP from 1.33 percent to 1.59 percent over this period.

Table 3-3 PBO forecast of military expenditure as a percentage of GDP

	2022-23	2023-24	2024-25	2025-26	2026-27
Total military expenditure (\$ billions)	36.3	41.5	44.7	47.4	51.0
Forecasted nominal GDP (\$ billions)	2,726.5	2,848.3	2,958.8	3,074.8	3,200.5*
Military expenditure as a percentage of GDP (percent)	1.33	1.46	1.51	1.54	1.59

Source: PBO calculations.

Notes: Data are presented on a fiscal-year basis. Totals may not add due to rounding. Nominal GDP projections sourced from the PBO Economic and Fiscal Outlook of March 2022, with the exception of 2026-27 nominal GDP.

* 2026-27 nominal GDP is calculated using the average forecasted growth rate of the previous 3 years.

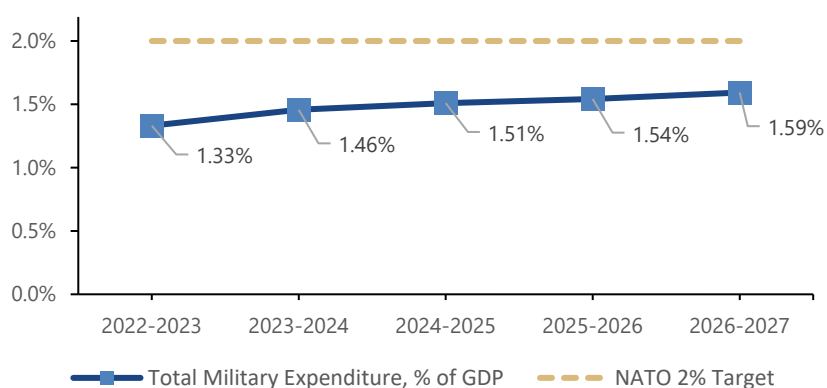
3.3. What is the gap between projected military expenditure and the 2% NATO target?

Our forecast indicates that the moving target of 2% of GDP remains out of reach over the medium term. However, we project that the gap between military expenditures as a percentage of GDP and the 2% benchmark will decrease over the next five fiscal years.

Figure 3-1 displays the projected evolution of Canadian military spending divided by GDP vis à vis the NATO 2% benchmark, while Table 3-4 lists projected military spending, military spending under a 2% of GDP assumption, and the difference between the two. According to our forecast, the gap between Canadian military expenditures and the 2% benchmark is expected to decrease from \$18.2 billion in 2022-23 to \$13.0 billion in 2026-27.

Figure 3-1

PBO forecast of military expenditure as a percentage of GDP versus NATO 2% benchmark



Source: PBO calculations.

Notes: Data are presented on a fiscal-year basis.

Table 3-4

Difference between PBO forecast of military expenditures and military expenditures equal to 2% of nominal GDP

	2022-23	2023-24	2024-25	2025-26	2026-27
Total military expenditure (\$ billions)	36.3	41.5	44.7	47.4	51.0
2% of nominal GDP (\$ billions)	54.5	57.0	59.2	61.5	64.0
Difference	18.2	15.5	14.5	14.1	13.0

Source: PBO calculations.

Notes: Data are presented on a fiscal-year basis. Totals may not add due to rounding.

Notes

1. North Atlantic Treaty Organization (2021). *Defence Expenditure of NATO countries 2014 to 2021*. https://www.nato.int/nato_static_fl2014/assets/pdf/2021/6/pdf/210611-pr-2021-094-en.pdf
2. Strong, Secure, Engaged - Canada's Defence Policy. Government of Canada (2017). <https://www.canada.ca/en/department-national-defence/corporate/policies-standards/canada-defence-policy.html>
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4. Government of Canada. (2022). <https://www.international.gc.ca/world-monde/international-relations-relations-internationales/nato-otan/index.aspx?lang=eng>
5. North Atlantic Treaty Organization (2022). *The 2% Defence Investment Guideline*. https://www.nato.int/cps/en/natohq/topics_67655.htm
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9. *Ibid.*
10. *Ibid.*
11. Organization for Economic Cooperation and Development (2021). *National Accounts of OECD Countries 2021*. <https://www.oecd-ilibrary.org/docserver/d57d1be0-en.pdf?expires=1649017579&id=id&accname=ocid195214&checksum=46D753C3D0EDD1D56F8ECB584FBE5A0A>
12. A detailed overview of historical budgetary "lapses" is presented in PBO's recent analysis of the Defence Budget: <https://www.pbo-dpb.ca/en/blog/news/RP-2122-033-S--planned-capital-spending-under-strong-secure-engaged-canada-defence-policy-2022-update--depenses-capital-prevues-titre-politique-defense-canada-protection-securite-engagement-mise-jour-202>
13. *Ibid.* The Public Accounts of Canada 2021 indicate that National Defence failed to spend about \$1 billion approved by Parliament for equipment acquisitions in 2020-21.
14. Strong, Secure, Engaged - Canada's Defence Policy. Government of Canada (2017). <https://www.canada.ca/en/department-national-defence/corporate/policies-standards/canada-defence-policy.html>
15. These figures are broken down by deducting DND-specific expenditures from NATO's reported total military expenditures and then removing DND's capital expenditures from the DND portion.
16. Government of Canada, *Supplementary Estimates (A)*, 2022-23.

17. For further information, consult the recent PBO report, *Planned Capital Spending Under Strong, Secure, Engaged – Canada's Defence Policy: 2022 Update*. <https://www.pbo-dpb.ca/en/publications/RP-2122-033-S--planned-capital-spending-under-strong-secure-engaged-canada-defence-policy-2022-update--depenses-capital-prevues-titre-politique-defense-canada-protection-securite-engagement-mise-jour-202>
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