

Incapacitated

Why Canada has a state capacity problem — and how to fix it

BY SEAN SPEER



SEPTEMBER 2024 PPFORUM.CA



The **Public Policy Forum** works with all levels of government and the public service, the private sector, labour, post-secondary institutions, NGOs and Indigenous groups to improve policy outcomes for Canadians. As a non-partisan, member-based organization, we work from "inclusion to conclusion" by convening discussions on fundamental policy issues and identifying new options and paths forward. For more than 30 years, PPF has broken down barriers among sectors, contributing to meaningful change that builds a better Canada.

www.ppforum.ca @ppforumca











Sean Speer is PPF's Senior Advisor, Strategic Competitiveness. He's also a fellow at Carleton University's Riddell Program in Political Management and the University of Toronto's Munk School of Global Affairs & Public Policy. He previously served as a senior economic adviser to former Prime Minister Stephen Harper.



DIGITAL EDITION Download a digital version of this report.

Executive Summary	6
Introduction	8
Chapter 1 What is state capacity?	10
Chapter 2 What is the status of Canada's state capacity?	14
Chapter 3 Why does strengthening our state capacity matter?	20
Chapter 4 How can we boost our state capacity?	26
Conclusion	34
Endnotes	36
Acknowledgements	41

EXECUTIVE SUMMARY

he COVID-19 pandemic
highlighted both the strengths
and weaknesses of Canada's
state capacity. It showcased the
federal government's ability to swiftly
implement large-scale income-support
programs and the provinces' innovative
service delivery models. However, it
also exposed significant weaknesses,
particularly in health-care capacity
and procurement processes, pointing
to a broader issue of state capacity
that transcends political affiliations or
preferences.

State capacity, defined as "the government's ability to effectively raise taxes, maintain order and provide public goods", is increasingly relevant amid today's complex challenges. This paper seeks to spark a conversation on how

Canada can bolster its state capacity, focusing on the federal level but with implications for other orders of government.

The paper explores the origins and evolution of state capacity in political science and economics, highlighting its critical role in economic development and governance. It emphasizes that while state capacity is not inherently tied to the size of government, it is essential for achieving efficient and effective policy outcomes.

Examining Canada's current state capacity, the paper acknowledges the country's strong public institutions and merit-based public service, but also identifies several areas for improvement. These include reducing

bureaucratic layers, modernizing outdated technologies and processes, enhancing policy co-ordination across departments and addressing a growing reliance on consultants.

Several key reforms are proposed to enhance Canada's state capacity:

1. Revising accountability and transparency rules: Streamlining these rules to empower government officials and reduce a risk-averse culture.

2. Expanding interchange programs:

Facilitating greater knowledge transfer between the public and private sectors to inject new ideas and perspectives into government.

3. Creating new public institutions:

Establishing experimental agencies with flexible structures to model innovative approaches and cultures.

4. Strengthening centralized policy and oversight capacity: Enhancing co-ordination and oversight for multi-departmental policy initiatives through a centralized mechanism similar to the U.S.

The need for these reforms is underscored by increasing demands on government to address aging demographics, climate change, technological advancements and geopolitical shifts. Strengthening state capacity is crucial not only for managing these challenges but also for maintaining public trust and confidence in governing institutions.

This paper aims to catalyze a broader policy discussion on boosting state capacity, inviting further ideas and suggestions to ensure Canada continues to be a global leader in public service efficiency and effectiveness.

INTRODUCTION

The COVID-19 pandemic required an extraordinary response from the Canadian state. Not only were governments forced to manage a once-in-a-lifetime public health crisis, but they also needed to design and implement large-scale income-support programs, oversee the acquisition and distribution of a new vaccine in record time to a massive share of the population and cope with an unprecedented demand surge on their health-care systems.

Canadian governments responded to these challenges reasonably well. The rapid development and implementation of new programs such as the <u>Canada Emergency Response Benefit</u>² and the <u>Canada Emergency Wage Subsidy</u>³ demonstrated policy creativity and nimbleness on the part of the federal government. The provinces similarly experimented with new and different service delivery models, including the use of <u>virtual judicial hearings</u>⁴, that have produced lasting improvements.

Yet the pandemic also exposed weaknesses in Canadian governance, including, most significantly, the country's lack of health-care capacity, from intensive care beds to personnel to medical technologies such as ventilators.

There were also major procurement delays, protracted wait times for services like immigration and passports, and an ArriveCAN app whose cost ballooned from \$4.5 million⁵ to nearly \$60 million⁶.

These weaknesses should not be understood merely as a series of contingent mistakes, the failures of a particular government or an indictment of government itself. They are also not an affliction of the left or right, but rather represent a broader challenge that increasingly characterizes policymaking and delivery in multiple jurisdictions featuring a range of governing arrangements. It is to a large extent a manifestation of the heightened complexity of today's issues and speed of government meeting

The pandemic exposed weaknesses in Canadian governance, including the country's lack of health-care capacity, from intensive care beds to personnel to medical technologies such as ventilators.

diminished skills and a chronic inability to harness the potential of new technologies. It reflects a "state capacity" problem that Canadian policymakers must now confront.

A solid working definition of state capacity is "the government's ability to do its iob effectively: to raise taxes, maintain order and provide public goods."

The idea, which finds its origins in political science scholarship, has received growing interest in recent years as we grapple with a series of big policy questions that include aging demographics, climate change, the rise of artificial intelligence and evolving geopolitics. One gets the increasing sense that in response to the combination of these mounting challenges — what political scientist and commentator Ian Bremmer calls⁸ a "polycrisis" — old debates about the

proper size and scope of government are being subordinated to new ones about the efficiency and effectiveness of state action.

A new focus on state capacity is only starting to manifest itself in Canadian policy and political discussions. The purpose of this paper is to catalyze greater attention on the subject and set out some recommendations on how we might boost the capacities of Canadian governments, with a particular focus on the federal level.

Both sides of the political divide have a stake in improving state capacity. Progressives who generally have a more ambitious view of the role of the state in the economy and society ought to be concerned about its effectiveness if for no other reason than it influences the public's willingness to embrace their priorities. Conservatives who tend to have a less activist view of the state should similarly be concerned with its basic efficiency and effectiveness — its ability to get things done in an affordable and timely manner and its ability to deliver these services to a high standard - to minimize the burdens and costs of government. And they both, of course, have an interest in maintaining public trust and confidence in our governing institutions.



WHAT IS STATE CAPACITY?

he idea of state capacity finds its origins⁹ in political science scholarship. It has since been applied by political economists and development economists as a basis for understanding uneven economic development between different jurisdictions. The literature points to the influence of state capacity (including institutions, processes and rules) in understanding how some countries become rich and others remain poor.

In particular, scholars have used a state capacity framework to analyze the interrelationship between high state capacity and what economist Deirdre McCloskey has called the "Great Enrichment," in reference to steepening of economic growth and living standards that began in the 19th century. There is a robust

consensus that improvements in state capacity provided protection from external threats and supported the market economy through property rights, transportation and such basic state-provided services as universal education. In so doing, it enabled accelerated economic development in high-capacity states around the world.

As economists Noel Johnson and Mark Koyama have put it: "The importance of the rise of high capacity states to this story is that these states helped to provide the institutional conditions that either enabled growth and innovation to take place or at least prevented their destruction through warfare or rent-seeking."

The two have written that a high-

High capacity states helped to provide the institutional conditions that either enabled growth and innovation or at least prevented their destruction through warfare or rent-seeking.

capacity state must possess the legal capacity to enforce its rules across the territory it claims to govern and the fiscal capacity to generate ample tax revenues from the economy to implement its policies. These two components work together to allow the state to support the early and continued functioning of a market economy.

This working definition of state capacity, it must be emphasized, is neutral on the size and scope of government. It is not a normative judgment so much as it reflects a method for judging whether the state can discharge the functions and responsibilities accorded it by the political process. As political scientist Mark Dincecco has explained:12 "state capacity [is the] state's ability to accomplish its intended policy actions - economic, fiscal, and otherwise,"

If state capacity as an academic concept found its origins in economic history and development economics, its usage has evolved in recent years to also analyze contemporary policy and governance shortcomings in developed countries. In a 2021 paper¹³ for the Niskanen Center. for instance, policy scholar Brink Lindsey argues that the decline of state capacity in the United States has undermined key economic and social outcomes (such as education and economic growth) and contributed to diminished public trust in the government itself.

According to this line of analysis, although state capacity can still be defined as the ability of the state to collect taxes, enforce law and order and provide public goods, it can also assume a qualitative and even quantitative dimension concerning the advantage of a given state relative to its peers.

The key argument here is that while the core competencies identified in development economics — namely, fiscal and legal capacity — are necessary preconditions for economic development in developing countries, they also remain crucial for developed nations seeking to sustain rising living standards, social cohesion and a broader sense of public trust in governmental institutions.

This is a critical point. State efficiency and effectiveness are not only key to evaluating a broad set of economic and social outcomes across jurisdictions but also for understanding the public mood and political circumstances within them.

Lindsey attributes the decline of state capacity (what he refers to as a "state capacity deficit") in advanced market democracies to two distinct yet mutually reinforcing intellectual movements on the left and right. The right-wing version can be expressed as an anti-statism that has not only sought to cut the size and scope of government but, in its most extreme forms, delegitimizes the state itself. The left-wing version has — in the name of expanding "citizen voice" in the world of public policy and governance — produced what he calls a "sclerotic vetocracy" that has come to undermine the state's ability to act more efficiently. His solution,14 therefore, is an intellectual one. As he writes:

What is needed most is a change in ideas: namely, a reversal of those intellectual trends of the past 50 years or so that have brought us to the current impasse. On the right, this means abandoning the knee-jerk anti-statism of recent decades, embracing the legitimacy of a large,

complex welfare and regulatory state. and recognizing the vital role played by the nation's public servants (not just the police and military). On the left, it means reconsidering the decentralized, legalistic model of governance that has guided progressive-led state expansion since the 1960s, reducing the veto power that activist groups exercise through the courts, and shifting the focus of policy design from ensuring that power is subject to progressive checks to ensuring power can actually be exercised effectively.

There are positive signs that such thinking is beginning to emerge. On the right, George Mason University economist Tyler Cowen has written¹⁵ about what he refers to as "state capacity libertarianism" to describe a limited-government conservatism that takes more seriously the basic functions of the state. On the left. New York Times columnist Ezra Klein has similarly written¹⁶ about the modern state's so-called *procedure fetish* and the need for a liberalism that builds.

The Public Policy Forum (PPF) has sought to cultivate a new Canadian consensus in favour of prioritizing state capacity in general and a modern supply-side policy agenda in particular. As Edward Greenspoon and I wrote in

our 2022 paper The Supply Rebuild:17

[What we need] is a new approach to state capacity — an economic policy paradigm in which the cumulative power of capital, technology and talent are applied to stimulating supply and ultimately moving society from a limitsof-growth, scarcity model to the fulfilment of the long-standing liberal vision of abundance, inclusion, and personal expression.

While one can agree with Lindsey that ideas are a major factor in influencing how we think and talk about state capacity, they must also be accompanied by a series of administrative, institutional and policy reforms to strengthen Canada's state capacity to better confront the big challenges facing the country in the short and long term.

State efficiency and effectiveness are key to understanding the public mood and political circumstances.



CHAPTER 2

What is Canada's state capacity?

efore considering possible reforms, however, it is useful to try to understand the strengths and weaknesses of Canada's state capacity and how they have evolved over time.

There is a huge body of Canadian public administration scholarship, commentaries on government spending and program delivery and evaluations of government institutions and programs themselves, but there has been limited analysis of Canada's contemporary state capacity as defined in the previous section. One can find academic papers on Canada's early state development, 18 or policy capacity 19 across the different orders of government, or intergovernmental arrangements. 20 Yet there is little scholarship focused on assessing or measuring Canada's state capacity.

One possible explanation is that Canadian public policy and governance are <u>widely viewed²¹</u> as a comparative advantage for the country and therefore not worth much scrutiny. The International Civil Service Effectiveness survey, for instance, has <u>previously ranked²²</u> Canada's public service as one of the world's top-performing.

There are indeed tremendous strengths inherent in Canadian public policy and governance, including an independent, merit-based, professional public service, and strong public institutions, as well as a public expectation for accountability and transparency that is generally met. As the 30th Annual Report to the Prime Minister on the Public Service of Canada recently put it:²³

Canada's Federal Public Service is one of our country's great institutions. A trusted, non-partisan and professional public service plays an invaluable role in a healthy democracy. Our Federal Public Service has dependably filled this role, acting as a source of stability while loyally serving governments and Canadians through periods of immense change.

It would be wrong, however, to assume our public institutions are immune to the challenges Lindsey sets out. The report itself identifies some of these challenges, including the federal government's performance during the pandemic. As the report acknowledges²⁴:

Canadians did not always receive the high-quality service they expected and deserved. As the world began to reopen and the effects of the COVID-19 pandemic began to recede, the Public Service faced challenges addressing backlogs, managing large influxes of applications, including passport and immigration applications, handling delays at airports during the busy summer travel season, and ensuring timely high-quality service.

The once-in-a-lifetime experience exposed some long-simmering structural trends that policymakers must confront in all orders of government. These include:

- A growing labyrinth of accountability and transparency rules that can disempower individual officials and contribute to an overall culture of risk aversion — particularly in a social media age in which the tyranny of the 24-hour news cycle has given way to a constant an unceasing flow of news and information;
- Outdated technologies and processes that can produce suboptimal outcomes for businesses and individuals and erode confidence in government;
- Regulatory processes imbued with a "precautionary principle" in place of a default openness to innovation or project construction (including housing, public transit and major energy projects), subject to basic environmental and human safety;
- A degree of insularity within
 Canadian governments that impedes management of cross-cutting files
 (e.g., climate change) or the incorporation of ideas and voices from outside the system;

- A lack of effective co-ordination within government or among different orders of government to bring greater coherence to policymaking and implementation;
- A growing use of consultants and third-party organizations for internal services and program delivery;
- Slow and cumbersome procurement processes that impede the effective delivery of government priorities, which are likely to get worse as the government layers on more oversight in response to the ArriveCAN controversy;
- Growing federal attention to provincial and local issues — including health care and housing — arguably at the expense of a focus on areas of exclusive federal responsibility such as defence and national security; and
- The breakdown of a multi-partisan policy consensus that has since contributed, with the aid of the internet, to rising polarization and a narrowing of the policymaking horizon.

It is important to emphasize here that this is not a critique of individual public servants or the system as a whole. Canadian public policy and governance are still comparative advantages for the country. But there is a hidden opportunity cost to the issues cited above. The Canadian state is impeded from reaching its full capacity. The result is suboptimal outcomes for Canadians.

Take, for instance, the issue of growing layers of approvals and reviews required for a decision to go forward. The risk is the substitution of the personal agency of individual public servants for essentially box-checking and the resulting weakening of accountability. As former clerk of the Privy Council Michael Wernick recently observed:25

Something happens, and the instinct of ministers is to add rules and constraints or to add oversight bodies. That's perfectly understandable. The problem is that we tend to add and add and add — and it's much more difficult to strip them away. Oversight is a good thing. I don't want to be

Another major challenge for Canadian governments is policy co-ordination and implementation on "crosscutting" files across multiple departments and agencies.

misunderstood... But there's this kind of axis that works between all of the feedback loops and their institutional media coverage, which tends to focus on the problems, opposition politics, and so on. There's a risk in which we see a chill — people get risk-averse. They don't want to get into trouble. That applies to ministers, and it applies to public servants. They become cautious and incrementalists.

Donald Savoie, a well-regarded public administration scholar, is more blunt in his assessment²⁶ of the costs and consequences of the federal government's culture of oversight, process and risk management:

In the search for a bottom line, governments have created an abundance of oversight bodies, management constraint measures and vapid performance and evaluation reports. It has only made the machinery of government thicker, more risk-averse and created a veritable army of public servants kept busy turning a crank not attached to anything. It has also given rise to a serious morale problem in the public service.

The point here is that these issues are not binary ones. They are about tradeoffs. And there is a growing sense that some of the trade-offs we have accepted about how Canadian governments function and operate may be coming at the expense of efficiency, effectiveness and internal accountability.

Another major challenge²⁷ for Canadian governments is policy co-ordination and implementation on "cross-cutting" files across multiple departments and agencies. Many of the big issues facing our society — including aging demographics, climate change, Indigenous reconciliation, economic growth and productivity, and so forth — do not fit nicely into a single department. They necessarily draw on policy levers across government. Yet the government's structure of ministerial responsibility is inherently siloed and can impose challenges for multi-departmental coherence and co-ordination.

Think, for instance, of the energy transition. It involves more than a dozen federal departments and agencies alone, including the departments of: Employment and Social Development; Environment and Climate Change: Finance; Global Affairs; Crown-Indigenous Relations and Northern Affairs: Innovation, Science and Economic Development: Natural Resources: and Transport — as well as: the Canada Energy Regulator; Major Projects Management Office; National Research Council: Office of Energy Research and Development: Sustainable Technology Development Canada; and various others. This does not even account for the various provincial departments and agencies with their own roles to play.

The government's decentralized structure means individual departments and agencies are carrying out their

Peer jurisdictions are grappling with questions of state capacity particularly in light of the common challenges we are facing.

respective parts of the energy transition but there is limited scope for balancing cross-departmental trade-offs, accounting for policy interactions, managing the sequencing of different policy interventions, or sometimes even sharing information

The 2024 federal budget essentially recognized this problem by providing new funds to establish28 a Clean Growth Office within the Privy Council Office. The budget states the new office will "reduce interdepartmental inefficiencies, including preventing fixation on well-studied and low-risk impacts, ensuring new permitting timelines are upheld throughout departments, and improving data sharing

between departments to reduce redundant studies."

This, too, involves a trade-off between centralization and decentralization that is the subject of great debate.²⁹ More centralization comes with the risk of slowing decision-making, elevating the role of non-elected officials inside the Prime Minister's Office or Privy Council Office, and working contrary to the principle of ministerial accountability. Yet, though there are pros and cons to tilting more in one direction than the other, there may be, in a world of more cross-cutting issues, a need for a stronger centralized capacity to co-ordinate and oversee the implementation of multi-departmental policy agendas.

It is important to note that these issues are not unique to Canada. Peer jurisdictions are similarly grappling with questions of state capacity - particularly in light of the common challenges we are facing. Researchers and scholars have sought to analyze state capacity on a cross-national basis.

A 2020 paper³⁰ by University of Gothenburg scholar Andrea Vaccaro and a 2021 paper³¹ by political scientist Jonathan Hanson and professor Rachel Sigman place Canada near the upper echelon of cross-national comparisons alongside developed countries such as New Zealand. Switzerland and the Netherlands, but behind top performers such as Denmark, Finland and Sweden. One way or another, the trendlines suggest room for improvement.

Hanson and Sigman have used their database to carry out cross-national comparisons between 1960 and 2015, with Canada's global ranking shifting between eighth and 12th highest state capacity in the world (see Table 1 below) and an unfavourable trajectory in the first decade-and-a-half of the millennium. (Unfortunately, no data are available for the past nine years.)

TABLE 1: CROSS-NATIONAL STATE CAPACITY RANKINGS, 1960 TO 2015

	1960	1970	1980	1990	2000	2010	2015
1	Denmark	Sweden	Denmark	Denmark	Denmark	Denmark	Denmark
2	Japan	Denmark	Sweden	Sweden	Finland	Norway	Norway
3	Sweden	Australia	Norway	Finland	Sweden	Finland	Australia
4	Netherlands	New Zealand	New Zealand	Belgium	Australia	Switzerland	Belgium
5	Norway	Finland	Finland	Australia	Netherlands	Belgium	Sweden
6	Australia	Japan	Israel	Norway	Belgium	Netherlands	Finland
7	Belgium	Belgium	Belgium	New Zealand	New Zealand	Australia	Germany
8	New Zealand	Canada	Japan	Canada	Norway	Austria	Switzerland
9	West Germany	Netherlands	Canada	Netherlands	Switzerland	Sweden	New Zealand
10	France	France	Switzerland	Switzerland	Canada	Canada	Australia
11	Canada	United Kingdom	Netherlands	Japan	Ireland	New Zealand	Netherlands
12	Austria	United States	France	West Germany	United States	Germany	Canada

Source: Jonathan K. Hanson and Rachel Sigman, "Leviathan's Latent Dimensions: Measuring State Capacity for Comparative Political Research." Journal of Politics, 2021. The data were most recently updated in October 2023.

These data reinforce the earlier point that the issue is that Canada does not necessarily face a state-capacity crisis, but rather that there are a series of challenges (many of which involve trade-offs) that have inhibited the country's relative state capacity in comparison to the top global performers. There is no reason Canadian governments should not aspire to be among those countries with the highest state capacity in the world.

CHAPTER 3

WHY DOES **STRENGTHENING OUR STATE CAPACITY MATTER?**

f the subject of state capacity is generating new attention in western policy circles, there are two principal reasons: first, as discussed above, there has been a bit of a reckoning about the strengths and weaknesses of the modern state; and second, due in large part to the meta issues facing advanced market democracies, the political debate seems to be shifting from one focused on the size of government to its capacity and competencies.

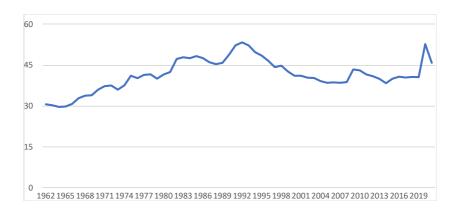
The evidence strongly suggests big government (or at least bigger government) is back. Previous PPF analysis³² has documented the new and emerging consensus in favour of more public spending on science and technology and even experimentation with modern industrial policy.

But it is also a function of basic arithmetic and contingent circumstance.

Canada's public spending as a share of GDP has gone from 30 percent in 1962 to as much as 46 percent in 2021 and roughly 41 percent in more normal times. Although there was a brief yet sustained period in the first decade of this century in which it fell back below 40 percent, the general trajectory has been in the direction of an ever-larger state (see Figure 1 below). We have also seen an accompanying increase³³ in federal government employment footprint by nearly 40 percent since 2015 - which returns it to early 1990s levels.

As mentioned above, the headwinds point further in that direction. Aging demographics, for example, will





Source: "Government expenditure, percent of GDP." International Monetary Fund.

necessarily impose significant upward pressure on public spending in the form of health care, pensions and other targeted areas. The Old Age Security program is projected to grow³⁴ from \$46.3 billion in 2020 to \$94.3 billion in 2035 and \$195.5 billion in 2060, due to the growing number³⁵ of beneficiaries.

Canada's public spending as a share of GDP has gone from 30 percent in 1962 to as much as 46 percent in 2021.

Another major pro-spending pressure is climate change. The goal of emissions abatement — including the net-zero target — will not be achieved by market forces alone. It is an inherently political goal that will require a mix of policy interventions to push the market to produce, adopt and scale the technologies required to reduce our carbon footprint. As a 2021 PPF paper argued:³⁶

Notwithstanding the necessary fervour in favour of decarbonization, its proponents have not suspended the laws of economics. Governments that want to achieve industrial change for real-time, non-market reasons will therefore need to bring a mix of policy tools to the table... In particular, government policy will need to close the gap between private investment that is justified based on conventional return-on-investment and investments that are primarily motivated by broader public considerations or what economists sometimes call "positive externalities."

There are various other forces pushing in a similar direction in terms of the size

and scope of government, including the rise of artificial intelligence, new and evolving cybersecurity threats and a complex geopolitical environment that is leading to growing calls for government to intervene in markets in favour of so-called "reshoring" or "friendshoring."

The key point here is that the preponderance of long-standing issues facing our societies will likely demand more from government in terms of attention, capacity and resources. These challenges are less about government getting out of the way and more about the state catalyzing or managing major economic and social changes.

It is imperative, therefore, that Canadian governments think about the incentives, rules and structures embedded within their public administration models and commit themselves to improving the overall functioning of the public system. The principal purpose of such an exercise is to better maximize scarce public resources to effectively confront these big challenges facing the country.



HOW CAN WE BOOST OUR STATE CAPACITY?

here are, of course, a lot of areas and issues that would need to be considered as part of a concerted effort to boost Canada's state capacity. This paper is meant to spur a policy conversation rather than serve as a definitive word. The recommendations set out here, therefore, are not intended to be exhaustive.

There is a growing body of thinking that one can draw upon for ideas and inspiration. Traditional scholars such as Donald Savoie have written extensively about the institutions and structures of Canada's public administration. Newer ones, such as PPF fellow Peter Loewen, are bringing the methods of behavioural economics to bear on the incentives and norms within the public sector.

My analysis here reflects a combination of engagement with this scholarship and my own personal experiences within the federal government to identify a suite of reforms that can strengthen the Canadian state. The focus is primarily on the federal government — though some recommendations could apply to other orders of governments.

The following pages set out four key areas for possible reform:

- Revisit accountability and transparency rules that disempower government officials:
- Expand interchange programs to inject new and different types of people into the government;

- 3. Create new governmental institutions that can permit greater experimentation and model different internal cultures; and
- 4. Strengthen centralized policy and oversight capacity to co-ordinate multi-departmental policy initiatives.

There are no doubt other areas of focus that could be added. One reviewer of this paper with senior government experience, for instance, noted that procurement reforms and IT modernization are keys to unlocking a better performing state. The ideas and proposals set out below, therefore, should not be interpreted as exhaustive.

1. Revise internal rules that disempower government officials, contribute to layers of internal process and undermine results

The Harper government's first piece of legislation in 2006 was a massive omnibus bill called the Federal Accountability Act³⁷, which created several new accountability and ethics bodies and established a panoply of rules around conflict of interest, ethics and lobbying for those working in the government. The act was a direct policy and political response to the sponsorship scandal.³⁸

Yet even if there may have been an initial case for greater accountability and transparency rules, there is a need to evaluate the trade-offs after more than a decade-and-a-half since the bill became law. As Donald Savoie wrote³⁹ to mark the act's 10-year anniversary:

In reality, the changes made government operations thicker, adding new management layers [and] increasing the cost of government overhead; made morale problems in the federal public service worse; and muddied accountability requirements. The federal government bureaucracy has become even more Ottawa-centric.

This is consistent with my own experience in government, as well as a broader body of scholarship that challenges the notion that accountability and transparency are necessarily normative ends⁴⁰ in themselves.

There is a tendency to assume the biggest constraint on bold ideas and thinking is the political arm of government. That is not what Lencountered. The system's internal culture too often preferences incremental thinking at the expense of more radical ideas and process outcomes. It sometimes felt like people were either knowingly self-censoring or, more often, unknowingly

constraining themselves based on the inherent incentives to not "rock the boat."

My thinking on these issues has been greatly influenced by American legal scholar Philip Howard, who has written extensively about behaviour and culture within governmental institutions, including his 2014 book, 41 The Rule of Nobody: Saving America from Dead Laws and Broken Government, which I reviewed42 for *Comment* magazine.

His major insight is that by permitting layers of prescriptive rules and reporting requirements, common sense and human judgment are too often subordinated to box-checking. This is arguably consistent with the post-Federal Accountability Act experience. New layers of oversight have contributed to excessive caution and a growing apart of government officials from stakeholders.

The biggest cost of this is unseen: It is

the opportunity cost of underutilizing the skills and strengths of the people who comprise the government. We ought to be better leveraging the extraordinary talent and public spiritedness within the public service. That, however, requires assembling the political wherewithal to reverse the trend of more and more accountability and transparency rules being placed on the system.

I recognize the inherent challenge here. Any policy or legislative changes that can be characterized as undermining accountability and transparency are bound to face criticism and can only be carried out in the early stages of a reformist government.

One possible political economy solution is to match such changes with attendant reforms to how public sector performance bonuses are determined and allocated. The main idea here is that if we are to empower public servants to exercise greater discretion and judgment at the front end, we ought to micromanage them less and better reward those who produce good outcomes. Another option would be to increase the budget of the Office of the Auditor General to emphasize that such reforms are not about reducing accountability and transparency in overall terms but rather about producing better governance.

2. Expand interchange programs to inject new ideas and people into government

The federal government's interchange program (known as Interchange Canada) enables public servants to take shortterm assignments with private sector firms or non-profit organizations and similarly for private sector or non-profit workers to fill temporary roles in the public service. The basic purpose is to permit knowledge transfer, networking and professional development across government and non-government sectors. The number of people⁴³ participating in the program in any given year may be a few hundred or so. Other iurisdictions such as France and the United States make much greater use of similar programs, including a twoway flow between government and the private sector.

There is growing consensus in Canadian policy circles that our own interchange program should be expanded. PPF published a report⁴⁴ in 2019, for instance, along these lines. In a recent interview, former clerk of the Privy Council Michael Wernick made a similar argument:45

I am an advocate of more interchange. It is a good idea to have people crossing from the public and not-for-profit sectors for a period of time and learning about what it is like on the other side. We only do handfuls of that a year. We should be doing probably 100 to 200 interchanges every year. And then people go back to their private sector careers or they do their government job with a lot more awareness of the rest of Canada.



In addition to expanding the program, we should also reconsider how we think about it. The primary goal should not be merely about giving public and private sector workers new and different experiences. Interchange Canada's mission should not be limited to building cross-sectoral understanding per se. It ought to be about injecting different ideas and people into the government itself and government employees into different organizational cultures and experiences.

The interchange program, in other words, is not merely a professional version of a semester abroad. It is a means by which we can diversify the experiences, perspectives and voices in the government itself and expose public servants to new ways of addressing issues, and, in turn, mitigate a tendencytowards groupthink and an Ottawa-centricity. This could be particularly useful as it relates to complex national files with regional or highly specialized dynamics, such as the energy transition.

The government should be using Interchange Canada to expand its pool of possible candidates for senior roles and bring expertise into the system on major issues or projects. It is something to be considered to fill major roles such as deputy ministers or Crown corporation executives or special advisers to the prime minister or key ministers.

There may even be room for the old-style dollar-a-year men⁴⁶ (and now women), who were crucial to Canada's war effort and post-war reconstruction in the context of the Second World War. We are going to see a significant glut of retirements in different parts of the Canadian economy and society. Canadian government should consider how to leverage that talent for ideas. mentorship and wisdom within the public sector. This would presumably involve some exemptions from typical hiring practices and the usual pay and compensation scales.

3. Create new public institutions to permit greater experimentation and models for broader reform

Canadian governments are generally marked by a high degree of institutional uniformity due to various factors, including expectations of the equal treatment of Canadians, fiscal and legal requirements, and high levels of unionization.

The interchange program is not merely a professional version of a semester abroad. It is a means by which we can diversify the experiences, perspectives and voices in government itself.

Standardization may have some benefits, but it also carries costs. One of the biggest challenges of public administration reform is the sunk costs of pre-existing institutions, norms and rules. They themselves become an impediment to change. It is often said the government is a "big ship" that is difficult to turn. This is consistent with my own experience in Ottawa, Ambitions to address issues like benefits and compensation, workforce culture, or the injection of new energy or ideas are overwhelmed by the inherent challenges of reform at scale, although there may be lessons to draw from the quickened pace of policymaking during the pandemic.

An alternative to trying to take on the system as a whole is to establish new governmental institutions that can be test beds for institutional experimentations and models for different approaches to public administration. This is not about growing the size of government; it is about creating small organizations within government that can model different approaches and cultures that, if effective, can ultimately seep into the broader system.

A key example in a 2021 PPF paper⁴⁷ I co-authored is to establish an advanced research projects agency similar to the U.S. Defense Advanced Research Projects Agency (DARPA) model. Similar proposals have been circulated for a health security DARPA modelled on the U.S. BARDA, or Biomedical Advanced Research and Development Authority.

The government could establish a relatively small agency — a Canada Advanced Research Projects Agency, or CARPA — with a high degree of independence, including exemptions from typical human resources and Treasury Board rules, to test out a new model for supporting research and development as well as public administration.

As public policy expert Robert Asselin and I wrote in the 2021 paper:

CARPA is not therefore a substitute for the existing panoply of departments. agencies and programs focused on innovation in Canada... [A] CARPA model should sit outside of federal departments and agencies and have the flexibility to hire, contract and select projects with minimal central agency or political oversight. The idea is to establish a small yet powerful agency with a mandate to essentially do things differently, including creating an internal culture of risk-taking and research excellence. That requires a

lean, agile and independent structure.

More generally, the government should experiment with establishing new and different institutions to advance its state capacity. One tool that could be useful is the "exempt staff" model.48 which described human resources exemptions from parts of the Public Service Employment Act used by the political arm of the government to staff the Prime Minister's Office and ministers' offices. The government could expand the definition of "exempt staff" in law or policy to enable it to bring more people into new agencies on a short- and medium-term basis outside of the conventional hiring and human resources approaches.

4. Establish a new centralized policy and oversight capacity to co-ordinate multi-departmental policy initiatives

Although there is common concern in a lot of policy and public administration commentary about the centralization of the federal government, there is a case, in my view, that, in the face of cross-cutting files that policymakers must grapple with, we need more institutional capacity at the centre of the government to co-ordinate and oversee implementation of multi-departmental policy initiatives.

This is a somewhat controversial view

and it comes with obvious trade-offs. But, as I have written elsewhere,49 strengthening the policy development and oversight capacity within the Prime Minister's Office/Privy Council Office could help overcome the inherent challenge of making progress on crosscutting files in a structure that does not lend itself to multi-departmental co-ordination. One model that could be applicable is the American experience with a National Economic Council inside the White House. The council was established⁵⁰ during the Clinton administration to "fix a process problem" — namely, to serve as an institutional mechanism for representatives from key departments and agencies who could "sit around a table, deliberate, co-ordinate, and solve problems."

A similar entity within the PMO/PCO comprised of relevant cabinet ministers, public servants, political staff and possibly even non-elected appointees, and supported by a dedicated staff, could help to institutionalize a whole-of-government approach to horizontal issues.

In practice, these policy councils would support cabinet decision-making and then serve as an institutional mechanism to co-ordinate and oversee the implementation of policy strategies that involve multiple departments and agencies — think, for instance, the energy transition, Indigenous reconciliation, or even the interaction between immigration and housing. Centralized policy councils could help bring greater coherence across different parts of the government.

In addition to institutional reforms that improve co-ordination across government departments, there should be similar attention paid to intergovernmental institutions. Even if one believes that intergovernmental overlap ought to be minimized, there is still plenty of scope, including, for instance, immigration policy, where there is a need for greater collaboration to ensure that immigration targets are matched with the necessary infrastructure and settlement programming by other orders of government. Intergovernmental institutions ranging from semi-regular first ministers meetings to ministerial working groups are key to ensuring federal, provincial and, increasingly, local policymaking is broadly aligned.

CONCLUSION

Although Canadian governments generally performed well during the COVID-19 pandemic, the experience exposed long-standing state capacity challenges facing the country. Policymakers must confront them in the face of such big issues as aging demographics, climate change, the rise of artificial intelligence and evolving geopolitics.

Boosting Canada's state capacity is not only essential to making progress on these challenges, it is key to maintaining the trust and confidence of Canadians in their governing institutions.

The primary goal of this paper has been to catalyze greater attention and discussion on the need to boost Canada's state capacity. I have put forward some recommendations that, in my judgment, represent steps in the right direction. They are not intended to be exhaustive. Readers may disagree with them or have others they believe Canadian governments should pursue. I look forward to hearing about these.

For Canada, the quality of public service has long been a competitive advantage. The key now is to set ourselves up to continue to be a global leader when it comes to the efficiency and effectiveness of the state, and the benefits that confers on the country and its population.

ENDNOTES

- Johnson, N.D., and Koyama, M. (2017). States and economic growth: Capacity and constraints. Explorations in Economic History. 64, 1-20. Elsevier. https://www.sciencedirect.com/science/ article/abs/pii/S0014498316301966
- Government of Canada. (n.d.). Canada Emergency Response Benefit (CERB). https://www.canada.ca/en/services/benefits/ei/cerb-application.html
- Government of Canada. (n.d.). Canada Emergency Wage Subsidy (CEWS). https://www.canada.ca/en/revenue-agency/services/wage-rent-subsidies.
- Jones, A. (Oct. 3, 2022). Virtual court options will remain essential, 2 Ontario chief justices say. CBC News. https://www.cbc.ca/news/canada/toronto/ont-courts-1.6605005
- Office of the Auditor General of Canada. Report 1

 Arrive CAN. Numeral 1.50. https://www.oag-bvg.gc.ca/internet/English/att e 44429.html
- 6. Ibid. Numeral 1.18.
- 7. Johnson, N.D., and Koyama, M. (2017). States and economic growth: Capacity and constraints. Explorations in Economic History. 64, 1-20. Elsevier. https://www.sciencedirect.com/science/article/abs/pii/S0014498316301966
- 8. GZERO staff. (Jan. 21, 2023). We're in "polycrisis" (and it's not as fun as it sounds). GZERO Media. https://www.gzeromedia.com/gzero-world-clips/hungarian-prime-minister-victor-orban-is-under-mining-western-unity-at-the-nato-summit
- 9. Johnson, N.D., and Koyama, M. (2017). States and economic growth: Capacity and constraints. Explorations in Economic History. 64, 1-20. Elsevier. https://www.sciencedirect.com/science/article/abs/pii/S0014498316301966
- Mokyr, J. (2019). Attitudes, Aptitudes, and the Roots of the Great Enrichment. The Handbook of Historical Economics. Elsevier. https://economics.harvard.edu/files/economics/files/attitudesaptitudes.pdf
- 11. Johnson, N.D., and Koyama, M. (2017). States and economic growth: Capacity and constraints.

- Explorations in Economic History. 64, 1-20. Elsevier. https://www.sciencedirect.com/science/ article/abs/pii/S0014498316301966
- Dincecco, M. (2017). State capacity and economic development: present and past. Cambridge University Press. https://librarysearch.library.utoronto.ca/discovery/
- Lindsey, B. (Nov. 18, 2021). State capacity: what is it, how we lost it, and how to get it back. Niskanen Center. https://www.niskanencenter.org/statecapacity-what-is-it-how-we-lost-it-and-how-toget-it-back/
- 14. Ibid.
- Cowen, T. (Jan. 1, 2020). What libertarianism has become and will become — State Capacity Libertarianism. Marginal Revolution Blog. https://mar-ginalrevolution/2020/01/what-libertarianism-has-become-and-will-be-come-state-capacity-libertarianism.html
- Klein, E. (May 29, 2022). What America Needs Is a Liberalism That Builds. New York Times. https://www.nytimes.com/2022/05/29/opinion/biden-liberalism-infrastructure-building.html
- Greenspon, E., and Speer, S. (November 2022).
 The Urgent Case for a Supply Rebuild. Public Policy Forum. https://ppforum.ca/wp-content/uploads/2022/11/TheUrgentCaseForASupplyRe-build-PPF-Nov2022-EN3.pdf
- Geloso, V., and Makovi, M. (2022). State capacity and the post office: Evidence from nineteenth century Quebec. Journal of Government and Economics, 5(spring 2022). Elsevier. https://www.sciencedirect.com/science/article/pii/s2667319322000076
- Baskoy, T., Evans, B., and Shields, J. (2011). Assessing policy capacity in Canada's public services:
 Perspectives of deputy and assistant deputy ministers. Canadian Public Administration, 54(2), 165-314. Wiley Online Library. https://onlinelibrary.wiley.com/doi/10.1111/j.1754-7121.2011.00171.x
- 20. Atkinson, M.M., et al. (2013). Governance and Public Policy in Canada: A View from the Prov-

- inces. University of Toronto Press, https://www. researchgate.net/publication/261875212 Governance and Public Policy in Canada A View from the Provinces
- 21. Lähteenmäki-Smith, K. (2018). The world needs Canada — also in managing and leading public administration, Sitra, https://www.sitra.fi/ en/blogs/world-needs-canada-also-managing-leading-public-administration/
- 22. Blavatnik School of Government, (n.d.), The International Civil Service Effectiveness (InCiSE) Index: Results Report 2019. University of Oxford, https://www.bsg.ox.ac.uk/sites/default/ files/2019-04/InCiSE%202019%20Results%20 Report.pdf
- 23. Charette, J. (Mar. 31, 2023). 30th Annual Report to the Prime Minister on the Public Service of Canada. Government of Canada. https://www. canada.ca/content/dam/pco-bcp/images/annrpt/30/30rpt-eng.pdf
- 24. Privy Council Office. (n.d.). Thirtieth Annual Report to the Prime Minister on the Public Service of Canada. Government of Canada. https://www.canada.ca/en/privy-council/corporate/transparency/annual-report-prime-minister-public-service/30th.html
- 25. Lang, A. (Aug. 1, 2023). Is the quality of our civil service deteriorating over time? Former top civil servant Michael Wernick argues things are better than they seem. The Hub. https://thehub. ca/podcasts/is-the-quality-of-our-civil-servicedeteriorating-over-time-former-top-civil-servant-michael-wernick-argues-things-are-betterthan-they-seem/
- 26. Savoie, D.J. (2015). Donald Savoie: How government went off the rails. National Post. https:// nationalpost.com/opinion/donald-savoie-howgovernment-went-off-the-rails
- 27. Speer, S. (Apr. 18, 2024). Sean Speer: The case for expanding the Prime Minister's Office. The Hub. https://thehub.ca/2024/04/18/ sean-speer-expanding-the-pmo/

- 28. Department of Finance Canada. (2024). Budget 2024: Fairness for Every Generation. Government of Canada. https://budget.canada. ca/2024/report-rapport/budget-2024.pdf
- 29. Cappe, M., Lynch, K. and Mitchell, J. (Apr. 10, 2024). Mel Cappe, Kevin Lynch, and Jim Mitchell: There's a right way and a wrong way to fix government. The Hub. https://thehub. ca/2024/04/10/mel-cappe-kevin-lynch-andjim-mitchell-theres-a-right-way-and-a-wrongway-to-fix-government/
- 30. Vaccaro, A. (September 2020). Measures of State Capacity: Same same, but different? Quality of Government Institute. University of Gothenburg. https://www.gu.se/sites/default/ files/2020-09/2020 9 Vaccaro 0.pdf
- 31. Hanson, J.K., and Sigman, R. (October 2021). Leviathan's Latent Dimensions: Measuring State Capacity for Comparative Political Research. The Journal of Politics, 83(4). University of Chicago Press. https://www.journals.uchicago. edu/doi/10.1086/715066
- 32. Asselin, R., and Speer, S. (Apr. 4, 2019). A New North Star: Canadian Competitiveness in an Intangibles Economy. Public Policy Forum. https://ppforum.ca/ publications/a-new-north-star/
- 33. Wherry, A. (Apr. 14, 2024). The federal government under Trudeau is bigger — but not as big as it used to be. CBC News. https://www.cbc.ca/news/politics/ trudeau-bureaucracy-public-service-1.7172339
- 34. Office of the Chief Actuary. (Oct. 21, 2020). Actuarial Report (16th) on the Old Age Security Program. Government of Canada. https:// www.osfi-bsif.gc.ca/en/oca/actuarial-reports/ actuarial-report-16th-old-age-security-program
- 35. Statistics Canada. (Sept. 8, 2022). Canada in 2041: A larger, more diverse population with greater differences between regions. Government of Canada. https://www150.statcan.gc.ca/ n1/daily-guotidien/220908/dg220908a-eng. htm

- Speer, S. Henderson, K., and Feenan, K. (2021).
 Climatetiveness: What it Takes For Canada to Thrive in a Net Zero Exporting World.
 Public Policy Forum. https://ppforum.ca/wp-content/uploads/2021/10/Climatetive-ness-PPF-Oct2021-EN.pdf
- Justice Laws Website. (2006). Federal Accountability Act. Government of Canada. https://laws-lois.justice.gc.ca/eng/acts/F-5.5/index.html
- CBC News Online. (2006). Federal sponsorship scandal. CBC News. https://www.cbc.ca/news2/background/groupaction/
- Savoie, D.J. (2016). The Accountability Act breeds its own problems. Policy Options. Institute for Research on Public Policy. https://policyoptions.irpp.org/magazines/april-2016/ the-accountability-act-breeds-its-own-problems/
- Pozen, D. (Nov. 10, 2019). Seeing Transparency More Clearly. Public Administration Review, 80, 326-31. https://ssrn.com/abstract=3478005
- 41. Howard, P.K. (2014). The Rule of Nobody: Saving America from Dead Laws and Broken Government. W.W. Norton & Company. https://www.philipkhoward.com/the-rule-of-nobody
- 42. Speer, S. (2017). Lost in the Aggregate: Our government doesn't need more rules, it needs more judgment. Comment. https://comment.org/lost-in-the-aggregate/
- 43. Murray, M., and Wesolowski, P. (n.d.). Career mobility in and out of the federal public service: 7 Interchange Canada facts CareerWise Weekly. CERIC. https://careerwise.ceric.ca/2020/02/24/ career-mobility-in-and-out-of-the-federal-public-service-7-interchange-canada-facts/
- 44. Turnbull, L. (2019). Skills at Speed: Why Canada's Public Service Should Grow Its Interchange Program to Build Skills and Networks. Public Policy Forum. <a href="https://ppforum.ca/wp-content/uploads/2019/01/Skills-at-Speed-Why-Canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Service-Should-Grow-at-mails-general-why-canada%E2%80%99s-Public-Barte-Grow-at-mails-general-why-canada%E2%80%99s-Public-Barte-Grow-at-mails-general-why-canada%E2%80%99s-Public-Barte-Grow-at-mails-general-why-canada%E2%80%99s-Public-Barte-Grow-at-mails-general-why-canada%E2%80%99s-Public-Barte-

- Its-Interchange-Program-PPF-JAN2019-EN.pdf
- 45. Lang, A. (Aug. 1, 2023). Is the quality of our civil service deteriorating over time? Former top civil servant Michael Wernick argues things are better than they seem. The Hub. https://thehub.ca/podcasts/is-the-quality-of-our-civil-service-deteriorating-over-time-former-top-civil-servant-michael-wernick-argues-things-are-better-than-they-seem/
- 46. Granatstein, J.I. (2006). Dollar-a-Year Man.
 Canadian Encyclopedia. https://www.
 thecanadianencyclopedia.ca/en/article/dollar-a-year-man#:::text=a%2DYear%20Man-,Dollar%2Da%2DYear%20Man%2C%20a%20
 term%2Oused%2Oduring%2OWWII,while%20
 Ottawa%20provided%20living%20expenses.
- 47. Speer, S., and Asselin, R. (December 2021).

 New North Star III: The Case for a Canada

 Advanced Research Projects Agency. Public

 Policy Forum. https://ppforum.ca/publications/
 new-north-star-iii/
- 48. Fisheries and Oceans Canada. (2020). Staff complement options. Government of Canada. https://www.dfo-mpo.gc.ca/transparency-transparence/mtb-ctm/2019/binder-cahier-2/b1-sco-oce-eng.htm
- 49. Speer, S. (Apr. 18, 2024). Sean Speer: The case for expanding the Prime Minister's Office.

 The Hub. https://thehub.ca/2024/04/18/sean-speer-expanding-the-pmo/
- Bledsoe, S., and Mayer, J.D. (n.d.). The National Economic Council. The White House Transition Project. https://whitehousetransitionproject.org/wp-content/uploads/2020/10/
 WHTP2021-35-National-Economic-Council.pdf

Acknowledgements

The PPF Scotiabank Fellow in Strategic Competitiveness is focused on producing and communicating policy research and ideas related to Canada's economic competitiveness. The ultimate goal, consistent with PPF's long-time prioritization of the social and economic determinants of growth, is to develop and popularize a policy agenda that will support higher rates of economic growth and productivity in Canada.



PPF TEAM

Edward GreensponPresident & CEO

Alison Uncles Vice-President, PPF Media & Communications

Marta Morgan Special Advisor to the President

Gareth ChappellDirector of Planning and Operations

Marian Campbell Jarvis

Former Public Service Senior Fellow

Allison Gifford

Former Vice-President of Policy and Programming

Kathleen Gnocato

Vice-President, Strategic Engagement

Kirsten Buttler

Former Policy Lead

Rodrigo BarbosaPolicy Associate

Colin Campbell Editorial Director

Leila El Shennawy Digital Editor

Naushin Ahmed Manager, Production & Brand

CONTRIBUTORS

Anita MurrayCopyediting

Jane Mitchell Translation

Elise Conlin Illustration & design

