Centre for International
Governance Innovation

Policy Brief No. 240 — June 2026

The Macroeconomics of Canadian Space

S. Mike Pavelec

Key Points

- Access to space is an important driver for the Canadian national economy.
- The Government of Canada has recently focused on the improvement and expansion of, as well as investment in, national sovereign space capabilities.
- The expansion of the Canadian space ecosystem will produce a positive economic and intellectual feedback loop for both Canadian economics and Canadian sovereignty.
- These points will stimulate an ongoing debate on the need for deterrence and defence of space access and capabilities.

Introduction: The Economic Importance of Space to Canadians

In a recent episode of the Canadian Defence and Security Network's Battle Rhythm podcast, Brigadier-General Chris Horner, commander of 3 Canadian Space Division, argued that losing access to space would result in the loss of $1 billion[1] a day for Canadians (Saideman and Kimball 2026). Echoing comments from the Prime Minister's Office that 20 percent of all of the Canadian economy is dependent on space access, communications and data, Horner's bold statement should be a wake-up call for Canadians regarding the importance of space for their economy. This policy brief argues that the importance of space is even more substantial than the Canadian government, the Department of National Defence (DND) or the Canadian population fully understands. That being said, the Government of Canada — specifically the Economic

1 All dollar figures are in Canadian dollars.

About the Author

S. Mike Pavelec earned his doctorate at The Ohio State University in 2004 in the history of science and technology with a military focus. His dissertation was the basis for his first book, *The Jet Race and the Second World War*. He taught at Hawaii Pacific University, the U.S. Naval War College, the School of Advanced Air and Space Studies, Air Command and Staff College (ACSC) and the Joint Advanced Warfighting School. He was back at ACSC before transitioning to the Department of Spacepower, which is now the Schriever Space Scholars at Johns Hopkins University. He was the director of the Schriever Space Scholars before returning to Montreal, Canada, in 2025. He currently teaches sessional classes at McGill University and is an advisor for the 3 Canadian Space Division for strategy and policy.

A prolific writer, Mike has eight books in print, including his latest study, *American Airpower: The History, Theory, and Art of Air Warfare* (Naval Institute Press, forthcoming 2026), and has written extensively on airpower, spacepower and technology. He has two books under contract, including his current research on a cultural comparison of air and space technology in its early years. He is a regular contributor to the History Channel and the Smithsonian Channel in his ongoing military history and aviation shows. When not teaching and writing, he enjoys riding his BMW motorcycle and visiting craft breweries.

Analysis and Research Team, Policy Branch, at the Canadian Space Agency (CSA) — prepares and releases a recurring report, State of the Canadian Space Sector: the latest version is from 2025, now in its twenty-eighth edition (Kanji, Dupuis and Parsons 2026). But while Canadians realize the importance of the internet and have a passing understanding of the role of space from anecdotal evidence, they do not grasp the nuances of the interconnectedness of space and the economy.[2]

Canada's GDP is currently around $2.25 trillion and expected to grow by 1.5 to two percent this year (2026). Therefore, on average, Canada generates $6.1 billion each day (if the total is divided by 365 days in the year). Of course, there are days of more economic exchange and days of less flow, but this is a starting point for the argument. This does not mean that all financial transactions flow through the space infrastructure, but space has a relevant role in enabling financial transactions through the precision navigation and timing function that the GPS constellations provide. There are a number of channels that effect the transfer of money and other economic benefits of space access and information; the aforementioned $1 billion a day effect of space is the starting point for this discussion. If we consider the vast expanses of Canada, the figures cited by the prime minister and Horner conform to the estimate of 20 percent per day, or $1 billion, more or less, that would be detrimentally affected by the loss of space access. Considering what space can do, what it is responsible for and the services that it provides, this brief argues that the 20 percent figure (loss of economy in the event of loss of space access) is actually low and needs reconsideration.

Today, space provides several significant capabilities that are unseen and that are poorly understood by the average Canadian. The US GPS, as well as the European Galileo Global Navigation Satellite System (GNSS) and the Russian GLONASS global navigation satellite system constellations, provide not only precision navigation but also precision timing. Canada relies on the US GPS European Galileo systems, but eschews the Russian GLONASS constellation, even though it is

2 For the anecdotal evidence, this author is relying on information from a recent cybersecurity class taught at McGill University, where the students appreciated the role of cyber and the internet in their lives, but did not realize the importance of space for cyber or the interconnectedness of space, cyber and the economy as a whole. This brief sets out to explain the nuances of space for the economy specifically to start that discussion.

available. For reasons of reliability and security, as well as part of the sanctions against them for their aggression in Ukraine, the Russian systems are not a significant part of the Canadian space ecosystem.

First and foremost, the GPS systems guide nearly all navigation on Earth with precision and speed, routing commuters on their way to work and school, truckers delivering goods to market and industry, aircraft flying through the skies and farmers planting and harvesting food. Before GPS all of this was done with maps and memorization for the average traveller, although there were ground-based electronic systems for aircraft guidance. Today, the GPS constellations guide nearly all navigation by providing fuel-efficient and time-saving routes that are low cost relative to other systems; the United States specifically does not charge to access the signal. Without getting into the specifics of the US GPS codes or the technical details, there are less precise "civilian" signals and more precise "military"-only secure signals, the L and the M codes, respectively. With route optimization, it is estimated that fuel savings are as high as 25 percent with real-time routing. Drivers are more efficient in their daily commute, while farmers are more precise with their planting, fertilization and harvesting (Li et al. 2018). With fuel prices on the rise, these savings translate directly to economic benefits. All the GPS constellations are free use for all and have been a benefit for societies around the globe since their first public release and acceptance beginning in the last years of the 1990s (the US system was the first to go online; Canada has integrated several systems for widespread coverage and use). The GNSS, GLONASS and Chinese BeiDou constellations were national responses to the American monopoly on GPS signals; several systems are tapped by the Canadian government and by industry for redundancy and reliability. In particular, the European Space Agency's GNSS Galileo constellation provides better coverage for high, far north elevations and has proven a better system for several Canadian uses (Banville 2019). There is even an argument for a dedicated Canadian GPS constellation, but for the short term, Canada will have to rely on US and European capabilities (Datta 2025).

Precision navigation is only one of the important components, albeit the most obvious capability, of GPS. The other, less recognized capability is precision timing. Generated by on-board atomic clocks, individual GPS satellites transmit precise timing signals to the ground, triangulated by multiple signals for each receiver (Wechsler 1990). The timing signals regulate navigation for precision and also provide timing signals for point-of-sale exchanges, banking transactions and everyday uses of cellular networks. Thus, when we consider all the banking transactions, internet activity and point-of-sale transfers that make up the aforementioned $6.1 billion in exchange every day in Canada, there is a strong argument that even more than 20 percent of the Canadian economy is reliant on space capabilities. Nearly all the data transferred on the ground is at least marked by timing signals coming from space, regardless of whether the information itself is sent through space networks, cellular signals or fibre-optic cable. It may be too much to say that space impacts nearly every aspect of the Canadian economy every day but the argument stands that a loss of space would be extremely detrimental to the daily operation of the entire complex system. Space has become the invisible infrastructure layer above modern civilization, a digital network serving as the backbone of the high-technology information and data system. This is one reason that the government has declared that space is a strategic national asset (Government of Canada 2019).

Satellite communications make up another substantial portion of the economic prosperity of the country. Whether it is satellite television or radio, voice over internet protocol networks, or encrypted signals, communications through the satellite constellations represent another marker of the economic benefits from and through space. Currently, of more than 70 operational Canadian satellites on orbit, six are dedicated communications satellites,[3] and Canada is expecting to launch another in 2026, the Quantum Encryption and Science Satellite.[4] In addition, the Canadian company Telesat is launching its Lightspeed constellation to provide high-speed satellite-based internet for the High North as well as international customers.[5] Toronto-based Kepler Communications has 18 satellites for in-space communications in sun-synchronous orbit.[6] These numbers, while impressive, pale in comparison to the

3 See www.asc-csa.gc.ca/eng/satellites/communications/.

4 See www.asc-csa.gc.ca/eng/satellites/qeyssat.asp.

5 See www.telesat.com/leo-satellites/.

6 See https://kepler.space.

congestion in space today with more than 15,000 active satellites on orbit; Elon Musk's Starlink accounts for more than 10,000 of these alone.

Space-based communications add to the transmission of data as well as the economic viability of the country by integrating diverse and dispersed communities throughout the land. As the second-largest country by land mass, yet only thirty-eighth largest by population, Canada presents a series of interesting challenges for communications, networking, commerce and supply. Space provides one way to overcome the challenges of distance and dispersion. Canada relies on other non-Canadian satellites for communications as well, predominantly US and European constellations; thus, there is a need for more Canadian hardware in space, discussed in more detail below.

In addition to communications satellites and carriers, Canada has three satellites in the RADARSAT Constellation Mission (RCM): Earth-observation machines that view the Earth with synthetic aperture radar (SAR), "a niche expertise of Canada's space sector."[7] RCM provides remote observation imagery of the Earth, specifically Canada's landmass, coastal areas and the Arctic. Although it is hard to prove a negative, RCM and other systems such as the pending WildFireSat[8] help prevent economic losses by monitoring for forest and wildfires, soil erosion, weather monitoring and flood warning. Valuable resources and time are saved through constant environmental oversight from space and quick reactions to pending disasters. With remote observation combined with computing power in space and through ground stations, the CSA and DND monitor, predict and prevent environmental disasters or at least mitigate damage, preventing loss of life and monetary disaster. The Canadian economy benefits not only from what space does, but also by the losses it prevents both in financial terms and in lives, safety and security.

In real economic terms, the loss of space access — temporary or permanent — would cost the Canadian economy dearly. According to the Organisation for Economic Co-operation and Development (OECD), "In OECD countries, space-based systems already support more than half of the most frequently designated critical infrastructures and services, such as transportation, energy, food supply and law enforcement" (OECD 2023). Without access to space systems, navigation, timing and weather monitoring would be upended. In addition, communications, especially in the Far North, would be hampered directly, resulting in the loss of contact with Far North and Indigenous communities for supply, education and health-care services. This of course would include DND monitoring of the Arctic for sovereignty and security, which is almost exclusively based on space satellite capabilities, communication and signals. Obviously, there are rangers on the ground and Royal Canadian Air Force planes in the air, as well as coast guard vessels in the water, but the bulk of continuous monitoring on a daily basis comes from space capabilities. All the terrestrial components still rely heavily on space for observation and communication. According to Jennifer Stewart (2026) in a recent *SpaceQ* article: "This dependence is already substantial and growing quickly…In practical terms, space is no longer a niche sector. It is part of the operating system of the modern Canadian economy." The direct impact on Canada's economy is high, but the ramifications of the loss of space access have greater effects beyond just the economic; space access is essential to the daily lives of millions of Canadians in a variety of ways. Stewart continues: "If those systems are degraded or denied, Canada does not experience a minor inconvenience. We experience a structural vulnerability" (ibid.).

Today, the domestic Canadian space industry is strong. Canada has built and is building a new Canadarm robotic arm for use in space. The first was on the now-retired space shuttle, and the second is going strong on the International Space Station. The planned Canadarm3 was scheduled for the Lunar Gateway station, which may no longer be in the works.[9] That said, Canada will continue producing and providing Canadian components for the Artemis Program as humanity reaches for the Moon and beyond. The Canadian space industry continues to grow (Kanji, Dupuis and Parsons 2026). Satellite manufacturers, large and small space companies, and university research

7 See www.asc-csa.gc.ca/eng/satellites/earth-observation/radarsat-plus/.

8 See https://natural-resources.canada.ca/forests-forestry/wildland-fires/wildfiresat-canadian-operational-mission.

9 The lunar-orbiting space station has seemingly been cancelled in favour of a direct-to-the-moon base with Artemis IV. See specifically www.nasa.gov/event/artemis-iv/, www.nasa.gov/event/artemis-v/, and Thomson Reuters (2026).

centres contributed $3.4 billion to Canada's GDP in 2023 (according to the latest 2025 figures) and the industry employs nearly 14,000 Canadians. From small cubesats and massive satellites to advanced components, a wide range of technologies and numerous university research centres, the Canadian space industry is strong and growing. The latest report lists 19 large companies (with more than 500 employees) and 146 small and medium companies (1–499 employees), as well as 42 universities and research centres across the country working on domestic space capabilities. Canada leads the world in space robotics and is highly competitive in optics, radars, communications components and satellite manufacture. The current government has devoted billions of dollars to the expansion and development of the Canadian space sector, naming it a national priority (Government of Canada 2026).

Is the Future of Space Launch Canadian?

But there is one segment that is still underdeveloped and lagging, although not without having attracted attention: to date, Canada relies on (and pays) other countries for launch facilities and lift into orbit. Canada's satellite constellations have been dependent on US rockets and National Aeronautics and Space Administration launch facilities for access to space. Today, Canada is beholden to others' launch schedules, in addition to spending money that could be directed instead toward Canadian companies.

There are two Canadian companies that are pursuing domestic launch to solidify Canadian sovereign launch capability so that Canada can truly join the community of space powers. The Carney government has recently dedicated itself to bolstering the efforts of Canadian space launch with corresponding legislation (Bill C-28) and budget allocation (Government of Canada 2025). Both NordSpace and Maritime Launch are racing to be the first company to launch rockets into low-Earth orbit (LEO) (Pavelec 2026). NordSpace[10] has its headquarters in Markham, Ontario, and has built launch facilities in Saint Lawrence, Newfoundland. The Atlantic Spaceport Complex will have two pads and is designed to launch Tundra, Taiga and Titan rockets, all designed and built by NordSpace, providing a Canadian product that is completely vertically integrated from design table to orbit. According to its website and Government of Canada documents, NordSpace was awarded $8.33 million in a Phase 1 grant in March 2026 to bolster funding for the Canadian launch company, which intends to have regular launch capabilities to LEO by 2028.

Maritime Launch[11] — based in Halifax with launch facilities in Canso, Nova Scotia — is also working toward routine, reliable LEO insertion in the near future. It will not build rockets but will provide the spaceport for Canadian and foreign rocket companies who are concerned with the two-year wait-list for American launch scheduling. The Government of Canada has dedicated $200 million — to be paid out in $20 million increments for 10 years (a $20 million investment in year one and quarterly payments of $5 million over 10 years) — to support operations for DND (Maritime Launch 2026).

In addition to the launch companies, the Canada Rocket Company, based in Toronto, and Reaction Dynamics, based in Longueuil, Quebec, deserve mention. They are two of the leading Canadian rocket manufacturers that are also supported by the new government initiatives. Both are also winners of the Launch the North Phase 1 competition and will benefit from government awards and recognition.

Arguably these companies are not receiving enough funding from the Canadian government alone; however, the investment and interest from Ottawa does show that the government is focused on and dedicated to these programs, which in turn will encourage other funding and investment. With the stability and dedicated resources of the government, Canadian space launch has official support that should spur commercial investment. In fact, this dedication and interest should invite more Canadian as well as international funding as companies realize that Canada can provide safe, secure, reliable LEO insertion, leading to more investment and the purchase of launch capabilities from a new and reliable partner. Canadian space launch will become a vertically integrated technological system and an attractive alternative for future space launch, adding to the economic prosperity of the Canadian space ecosystem and keeping Canadian money in Canada

10 See www.nordspace.com/.

11 See www.maritimelaunch.com/.

as well as attracting foreign investment. Importantly, the Canadian government and DND is supporting and funding a new capability for sovereignty and security. This will be the first time that Canada has developed domestic launch capabilities to orbit. In the new geopolitical climate and as the Canadian concept of sovereignty is changing, the emphasis on security through space has come to the forefront. The above-noted investments, along with launch regulatory modernization, demonstrate that the government is moving at speed to enable this sovereign capability.

Government Spending on Space

The evidence is overwhelming. In the most recent *State of the Canadian Space Sector* report, the CSA stated that the Canadian space sector contributed $3.4 billion to the GDP in 2023, an increase of 8.4 percent from 2019 to 2023 (Kanji, Dupuis and Parsons 2026). It is encouraging that the previous Trudeau administration and the current Carney Liberals are interested in, focused on and supportive of a domestic space program for the future of Canadian economic prosperity; today, there is an opportunity to expand Canadian sovereign capabilities to bolster the overall GDP. It will cost money but the rewards will be significant.

Canada has (or will soon have) all the components for sovereign launch capabilities. Canada has ground stations, computing power and communications technology, satellite industry and manufacture, and launch capability. The final pieces of the ecosystem for the government to consider will be education and research and development (R&D). For the latter, significant, coherent and rational suggestions come from a recent publication by the Council of Canadian Academies (CCA) on the present state of, and future recommendations for, Canadian technological development and funding (CCA 2025). The 251-page report is an overview of all Canadian science, technology and innovation, but the tangential references to the Canadian (aero)space sector are informative. Considering the argument above, this author's opinion is that space needs additional resourcing for support and success.

The other variable for consideration is the expansion and dedication to space-related R&D in higher education. Government funds for university programs in astronautical engineering — and all its constituent parts — as well as space security, space law and astrophysics need to be continued and expanded in higher education for the development of Canadian space sector workers for the future of the ecosystem (CSA 2020). It will not be enough to attract space workers from outside Canada; there needs to be educational opportunities in this country for the future of the Canadian space industry. Some encouraging initiatives include the BOREALIS (Bureau of Research, Engineering, and Advanced Leadership in Innovation and Science) initiative; the MINDS (Mobilizing Insights in Defence and Security) grants[12]; the IDEaS (Innovation for Defence Excellence and Security) Challenge[13]; and ongoing Social Sciences and Humanities Research Council grants, among other government funding opportunities. Canada needs a well-educated workforce for the development, sustainment and growth of the highly technological space sector, an investment into Canada's future. The money to support the space ecosystem will stay in Canada, which will build the entire network. Further, international partners and clients will bring more money, students, workers and industry into Canada, supporting the entire system with a positive feedback loop.

Fortunately, space has recaptured Canadian interest from the top down. Canada can and should capitalize on the recent overwhelming popularity of and support for Colonel Jeremy Hanson and the successful Artemis II mission around the Moon by continuing government spending on the space sector; promoting space education and science, technology, engineering and mathematics programs; and motivating the collective consciousness. Canadian space is not only exciting: it is a vital sector for the Canadian economy. The Canadian space ecosystem is a growth market, poised to expand exponentially with successful sovereign launch, and increased educational opportunities and industrial output. Canadians need to be aware of the vital importance of space to their everyday lives, from banking to navigation to security. Space touches on nearly all aspects of

12 See www.canada.ca/en/department-national-defence/programs/minds.html.

13 See www.canada.ca/en/department-national-defence/programs/defence-ideas.html.

the Canadian economy every day. Whether it is navigation, environmental monitoring, precision timing, or the day-to-day operations of the space industry, space is invaluable in all aspects of the Canadian economy. Now is the time for Canada to join the community of space-faring nations to help ensure economic prosperity and future growth.

Recommendations

Space is vital for the daily functioning of the Canadian economy. It is difficult to ascribe specific dollar amounts to the operating of space, but it quickly becomes obvious that reliable space access is important for a working economy. This brief has outlined the important contributions of space to Canada for economic well-being, sovereignty and growth. The following recommendations flow naturally from the analysis: The Government of Canada needs to continue interest in and emphasis on the expansion of the Canadian space ecosystem, including all aspects from education to manufacturing to launch. DND will be responsible for defence and monitoring of the space domain; Global Affairs Canada will be tasked with attracting allies and customers while at the same time deterring nefarious actors. And in the opinion of this author, Canadian citizens must expand their awareness and appreciation of the space domain for its continued efforts to build a better society, with the goal of Canada emerging as a preferred ally on the world stage in this regard. It will take efforts from all of us to make sure that Canada becomes a leading middle power and reliable partner in the space domain.

Works Cited

Banville, Simon. 2019. "Satellite Navigation: The familiar blue dot could soon mark a better spot." Simply Science, Natural Resources Canada, February 21. https://natural-resources.canada.ca/stories/simply-science/satellite-navigation-familiar-blue-dot-could-soon-mark-better-spot.

CCA. 2025. *The State of Science, Technology, and Innovation in Canada 2025 Expert Panel Report.* Ottawa, ON: Expert Panel on the State of Science, Technology, and Innovation in Canada, CCA. https://cca-reports.ca/wp-content/uploads/2025/11/The-State-of-STI-in-Canada-2025_FINAL.pdf.

CSA. 2020. *Book 4 – CSA Partners.* www.asc-csa.gc.ca/eng/transparency/briefing-materials/2020-book-4-csa-partners.asp#2.3.2.

Datta, Anusuya. 2025. "Navigating the Future: Why Canada Needs a Sovereign GNSS." GoGeomatics, May 8. https://gogeomatics.ca/navigating-the-future-why-canada-needs-a-sovereign-gnss/.

Government of Canada. 2019. *Exploration, Imagination, Innovation: A New Space Strategy for Canada.* www.asc-csa.gc.ca/pdf/eng/publications/space-strategy-for-canada.pdf.

———. 2025. *Canada Strong: Budget 2025.* November. https://budget.canada.ca/2025/report-rapport/pdf/budget-2025.pdf.

———. 2026. *Security, Sovereignty and Prosperity: Canada's Defence Industrial Strategy.* www.canada.ca/en/department-national-defence/corporate/reports-publications/industrial-strategy/security-sovereignty-prosperity.html.

Kanji, Shazmin, Alex Dupuis and Aaron Parsons. 2026. *State of the Canadian Space Sector Report 2025.* Canadian Space Agency, Government of Canada. www.asc-csa.gc.ca/eng/publications/2025-state-canadian-space-sector.asp.

Li, Zexue, Zhaoyun Ding, Qiuhong Qin, Hong Huang and Yujin Guo. 2017. "Research on Logistics Route Optimization Based on GPS and GIS Technology." 3rd International Conference on Electronic Information Technology and Intellectualization. https://doi.org/10.12783/dtcse/iceiti2017/18822.

Maritime Launch. 2026. "Government of Canada Selects Spaceport Nova Scotia as Dedicated Sovereign Launch Site for National Defence." Maritime Launch, March 16. www.maritimelaunch.com/news/government-canada-selects-spaceport-nova-scotia-dedicated-sovereign-launch-site-national.

OECD. 2023. *The Space Economy in Figures: Responding to Global Challenges.* Paris, France: OECD Publishing. www.oecd.org/content/dam/oecd/en/publications/reports/2023/12/the-space-economy-in-figures_4c52ae39/fa5494aa-en.pdf.

Pavelec, Mike. 2026. "A Country Without a Pad: Canada's Bid to Join the Sovereign Launch Club." *Canadian Defence Review* 32(1): 116–20. https://secure.viewer.zmags.com/publication/1d3e2962#/1d3e2962/117.

Saideman, Stephen and Anessa Kimball. 2026. "Episode 4.12: Space Lords with Commander of 3 Canadian Space Division, Brigadier-General C. J. Horner." March 19, in *Battle Rhythm*, podcast, 62:00. https://podcasts.apple.com/ca/podcast/episode-4-12-space-lords-with-commander-of-3/id1657199925?i=1000756227330.

Stewart, Jennifer. 2026. "Space isn't science fiction. It's Canada's sovereignty infrastructure." Opinion, *SpaceQ*, March 5. https://spaceq.ca/space-isnt-science-fiction-its-canadas-sovereignty-infrastructure/#:~:text=Every%20day%2C%20Canadians%20rely%20on,more%20competitive%2C%20and%20more%20contested.

Thomson Reuters. 2026. "NASA plans $20B moon base, but pauses lunar space station project." CBC News, March 24. www.cbc.ca/news/science/nasa-lunar-gateway-9.7140073.

Wechsler, Jill. 1990. "The Role of GPS in Precise Time and Frequency Dissemination." *GPS World* (July/August). NASA. https://ilrs.gsfc.nasa.gov/docs/timing/gpsrole.pdf.

About CIGI

The Centre for International Governance Innovation (CIGI) is an independent, non-partisan think tank whose peer-reviewed research and trusted analysis influence policy makers to innovate. Our global network of multidisciplinary researchers and strategic partnerships provide policy solutions for the digital era with one goal: to improve people's lives everywhere. Headquartered in Waterloo, Canada, CIGI has received support from the Government of Canada, the Government of Ontario and founder Jim Balsillie.

À propos du CIGI

Le Centre pour l'innovation dans la gouvernance internationale (CIGI) est un groupe de réflexion indépendant et non partisan dont les recherches évaluées par des pairs et les analyses fiables incitent les décideurs à innover. Grâce à son réseau mondial de chercheurs pluridisciplinaires et de partenariats stratégiques, le CIGI offre des solutions politiques adaptées à l'ère numérique dans le seul but d'améliorer la vie des gens du monde entier. Le CIGI, dont le siège se trouve à Waterloo, au Canada, bénéficie du soutien du gouvernement du Canada, du gouvernement de l'Ontario et de son fondateur, Jim Balsillie.

Credits

Research Director, Digitalization, Security & Democracy Aaron Shull
Director, Programs Dianna English
Senior Program Manager Jenny Thiel
Publications Editor Christine Robertson
Graphic Designer Abhilasha Dewan

67 Erb Street West
Waterloo, ON, Canada N2L 6C2
cigionline.org

CIGI