

# Artificial Intelligence and Workers

THREATS AND OPPORTUNITY

## **Contents**

Introduction03
What is Al04
Generative AI far more powerful than earlier systems04
How Al is being used in public services and how it could be used in the future
Potential benefits of Al06
Workplace issues with AI
Impact of AI on public services
Al can perpetuate discrimination
Data issues with AI
Al and privatization
Energy requirements for new AI systems an environmental issue
Al in public services in Canada
What are governments in Canada doing to ensure AI is used responsibly
Controls and safeguards needed on how AI is used in both the public and private sectors 12
Resources
Resolution
Therefore, the National Union of Public and General Employees will



### Artificial Intelligence and Workers— Threats and Opportunity

#### **INTRODUCTION**

Most of us are already using artificial intelligence (AI) on a daily basis. AI has been around for some time and many of the ways it's used do make life easier for people.

But like any technology, without controls on how it is used, there are dangers as well as benefits. As AI becomes capable of more and more tasks, so does the need for controls and for people to be made aware of the potential for problems.

Expectations of what artificial intelligence (AI) will be capable of are changing rapidly. During the time this paper was being written, the release of the DeepSeek AI system raised the possibility that it may be cheaper to develop AI systems than previously thought. It is also still far from clear what jobs will be most affected by AI.

While there is a lot we don't know about what AI will do, there are two things we can be certain of:

- 1. AI will affect the jobs and the lives of our members and other working people.
- 2. Whether AI benefits or harms working people will depend on the ability of the labour movement to respond to the challenges and opportunities that come with it.

What we also know is that government regulation of how people's data is used by AI and of people's rights when public bodies or businesses use AI is somewhere between weak and non-existent.

The increased use of AI does not have to be bad. Properly used, AI can perform monotonous tasks, make our jobs safer and help us deliver higher quality public services.

But for the increased use of AI to be positive, there needs to be controls on how it is used. Without those protections, too many decisions about how AI is used will be in the hands of the large tech giants and their political friends. AI will be used to privatize and weaken public services, undermine workers' and other human rights, and entrench racism and other forms of discrimination.

The controls needed to make sure that AI benefits everyone include language in collective agreements, laws and regulations, and public control when AI is used in public services. And if we're going to get the kind of protections we need, the labour movement will have to be involved.

#### WHAT IS AI

The definition from the Organization for Economic Cooperation and Development (OECD) shows how broadly AI is defined. Under the OECD definition,

An AI system is a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment.<sup>1</sup>

This includes types of AI that most of us already use. GPS systems in cars and trucks, the suggestions streaming services provide about the movies or TV programs people will like and facial recognition systems on smart phones.

But the definition of AI also includes AI systems that are widely expected to be capable of doing far more than the AI systems that are already in widespread use. These are the ones that have the potential to dramatically change our economy and our public services.

#### GENERATIVE AI FAR MORE POWERFUL THAN EARLIER SYSTEMS

What people often have in mind when they talk about the benefits and threats from AI is generative AI. As a report from Public Services International explains, "This category of AI is particularly powerful because it doesn't just learn patterns or analyse existing information—it produces new content based on the patterns it has learned from its training data." <sup>2</sup>

Generative AI can write articles, answer questions, produce videos and pictures and engage in conversation. ChatGPT, DALL-E, Copilot, Gemini, LLaMA and DeepSeek are all examples of generative AI.

Like other forms of AI, generative AI uses the data that has been fed into it to "train" it to make predictions. But what is very different is the volume of data fed into it and the degree of human involvement.

The data sets used for generative AI are far larger than the data sets used in previous forms of AI. To improve performance even larger data sets are seen as necessary. Until 2020, data sets of more than 100 billion words were rare. Now data sets with trillions of words are being developed.

These data sets come from content extracted from websites (a process known as scraping), books, articles and any other source that the large corporations producing AI believe that they can get away with using. This is believed to include materials that are under copyright and personal data.

Where generative AI is also different from other forms of AI is the degree to which systems are supposed to train themselves with unlabeled data. This is in contrast to other types of AI system where the data used is "labeled" to help produce the desired outcome. That said, vast numbers of people are still being hired to deal with the problem of generative AI systems producing inaccurate content.

#### HOW AI IS BEING USED IN PUBLIC SERVICES AND HOW IT COULD BE USED IN THE FUTURE

Al is already being used in a wide range of public services in Canada and around the world. The areas where Al is being used range from health care to law enforcement to customer service.

Many NUPGE members are already using AI in the course of their work. Even if members aren't using AI, there's a good chance that somewhere in Canada or elsewhere in the world AI is being used in their sector and plans are being made to expand its use.

The list below of where AI is being used is not meant to be complete. But it does provide a sense of where AI is already being used in the provision of public services.

#### **Health Care**

- Creating personalized reports
- Booking appointments
- · Providing treatment recommendations
- · Managing addictions and mental health treatment
- Determining where ambulances should be positions for predictive EMS dispatching
- Determining how many hours of home care people should receive
- Simulate emergency scenarios for training purposes

#### **Citizenship and Immigration**

Processing applications for student visas

#### **Education**

- Designing courses for colleges and universities (and at the primary and secondary levels)
- · Creating quizzes
- · Automated grading

#### **Environment**

- Monitoring wildlife populations and detecting potential problems
- Modeling the impacts of climate change

#### **Community and Social Services**

- Detecting instances of people receiving benefits to which they aren't legally entitled
- Child welfare identifying children at risk
- Recovering overpayments of benefits

#### **Justice and Corrections**

- · Analyzing crime patterns
- Use of facial recognition by law enforcement agencies
- Drafting legal documents

#### **Administration and Responding to Public Inquiries**

- HR, particularly screening applicants for positions
- Chat bots to respond to questions from the public about public services
- Capacity management systems to determine staffing levels and schedules
- Drafting policies

#### **POTENTIAL BENEFITS OF AI**

There are several potential benefits to the increased use of AI, if working people are able to get controls on how it is used.

Al can be used to perform tasks that workers find boring and tedious. It can be used to make dangerous jobs safer. Al also has the potential to improve the training workers can access and, for those who want it, make remote and hybrid work easier.

Properly used, AI can also help improve the quality of public services. The ability of AI to analyze vast amounts of data can be used to improve the quality of decision making. Public health and responding to problems like climate change are two areas where this is seen to be useful. There has also been the suggestion that AI can also be used for identifying environmental problems with one example being the use of AI to detect the venting of methane by the oil and gas industries.<sup>3</sup>

#### **WORKPLACE ISSUES WITH AI**

Even if AI is implemented in a responsible fashion, there will be a lot of changes to the jobs done by NUPGE members and other workers. And even changes that should be positive will become negative if there aren't adequate controls and safeguards on how AI is used.

The change that has received the most attention is that the tasks that can be done through AI will mean that work involved in many jobs will change and some jobs will be eliminated. Even if jobs are not eliminated, the possibility that AI could replace workers will be used by employers trying to reduce or undermine working conditions.

In cases where jobs change, workers may need to acquire new skills. If employers aren't willing to provide the necessary training, that will be an issue.

Because what AI can do in a cost effective and reliable manner is still changing rapidly, we can't be sure about which jobs will be affected and how. That means union members need to be keeping an eye out for developments in their workplaces. As a Statistics Canada paper

from 2024 found, the range of occupations affected by AI will be far greater than previous waves of automation.<sup>4</sup>

We also need to recognize that just because AI can't do a job well doesn't mean it won't be used to eliminate jobs. In an era when many people in positions of power aren't interested in the facts, it is hard to imagine them being worried about the fact that reports prepared with AI often contain serious errors.

Even human safety isn't always a concern. Problems with self-driving vehicles have meant that the predictions of 10 years ago that driving jobs would be replaced by AI have yet to prove accurate. But, as we're seeing in the United States, when politicians have close relationships with the billionaires, things like government investigations into crashes involving self-driving cars and a criminal probe of whether claims about the capabilities of self-driving cars were exaggerated can end up being cancelled.<sup>5</sup>

For workers the use of flawed AI systems poses a double-barrelled threat. In addition to the job losses, those workers who remain can find themselves with additional work having to deal with errors and problems caused by AI. And, depending on the type of work they are doing, some of those errors and problems may be making their jobs unsafe.

Another danger of AI in the workplace is its use for many management functions. The use of AI to manage workers with no controls or accountability is highly problematic. Like any supervisor, AI systems can make mistakes. But with AI the ability to explain that a mistake has been made or to appeal unfair decisions is often lost.

Among the management functions that are being performed by AI are scheduling, determining staffing levels, work allocation, absence management and performance evaluations. For hiring, AI is being used for screening and conducting job interviews.

Without very tight controls on how it is used and very effective guarantees of transparency and accountability, problems like employee surveillance will become worse. Even before AI, in some workplaces, management monitored employee communications and how much time employees spent on particular tasks. With AI that is even easier.

Gig workers are already experiencing what happens when management decisions are made using Al. Things like what they get paid, and their workload are already decided by Al and Al is also being used to monitor them.

There are few controls and, as these examples show, the results are exactly what one would expect. In December of 2024, the Globe and Mail reported that workers driving for Uber and Lyft were earning a median hourly wage of \$5.97—less than half the Ontario minimum wage.<sup>6</sup> A report from Britain found cases of drivers for Uber being fired because of information from surveillance systems that used Al—information that was subsequently found to be wrong.<sup>7</sup>

#### IMPACT OF AI ON PUBLIC SERVICES

The problems facing public services if AI is used without controls and safeguards are very similar to the problems workers and their unions will face.

Many of those championing the use of AI by governments see AI as a way to implement austerity policies. They will use the promise of services delivered using AI to justify cutting funding and laying off workers. We are seeing this already with the Trump administration's Department of Government "Efficiency" (DOGE) in the United States.

The reality is that services provided with AI won't match the services being cut. There are many aspects of public services, particularly ones where human qualities like empathy are required, where AI is not currently able to replace people.

One example is using AI to make medical appointments. When people needing medical appointments are speaking to a live person, it's possible to arrange for people with more serious conditions to be seen faster. That becomes more difficult when appointments are made through an automated process.

There is also the problem that AI can't be trusted to produce accurate information. It is common for AI to produce information that either contains errors or is completely untrue. As a result, information produced by AI either needs to be very carefully checked or the quality of public services will suffer.

These problems mean that, if AI is used to justify cuts, it will just increase the workload for the remaining staff and mean the public gets poorer service.

An indication of the problems that over-reliance on AI to deliver public services could cause is the number of cancelled projects and why they were cancelled. A 2022 report from the Data Justice Lab identified 61 projects that used AI to deliver public services that ended up being cancelled or paused.<sup>8</sup> In over half the cases, the reason the project was cancelled was concern about effectiveness, while in almost a quarter of cases there were concerns about privacy, fairness, bias or discrimination.<sup>9</sup>

Without controls, the use of AI for public services will also result in a loss of accountability and discriminatory decision making. When AI is used to make decisions about how public services are provided and who is eligible, it is often difficult to find out what those decisions are based on. There may also be no opportunity for appeal or review.

And as described in more detail below, because AI reflects both current and historical biases, the use of AI in public services has increased discrimination in public services. For example, where AI has been used to determine eligibility for things like housing or social supports, marginalized communities have suffered disproportionately.

#### AI CAN PERPETUATE DISCRIMINATION

The vast volume of data used to train AI systems includes content that reflects both biases that have existed in the past and biases that exist today. These biases include the fact that in the data used to train AI systems, certain groups of people can be over- or under-represented.

The problem with particular groups being over- or under-represented is that when AI systems are trained on skewed data, there are more likely to be errors. A well-documented example of this is facial recognition tools. Studies have shown that the data sets used to train these systems are composed disproportionately of white male faces.<sup>10</sup>

This means facial recognition tools are far less accurate when trying to identify people with darker skin. For example, in Delhi, India it was found that facial recognition tools were only accurate in 2% of cases.<sup>11</sup>

Another example is one of the cases mentioned above of an Uber driver being fired. Uber's surveillance system used AI, specifically facial recognition tools, and the driver is black. Even though he'd repeatedly uploaded selfies, as required by the company, the facial recognition technology was unable to match the photos he uploaded with the one on file and he was effectively fired. Given the well-documented problems with facial recognition tools, he should never have lost his job. He got his job back and was paid compensation, but that took over 2 years and the support of both the British Equality and Human Rights Commission and the App Drivers and Couriers Union.

These examples show how, far from being neutral or free from bias, AI systems include the same biases and prejudices that prevent people from equity deserving groups from reaching their full potential.

What makes matters worse is thatwhen AI is used to make decisions there is far less accountability and transparency. Because it is more difficult to see the basis for decisions and because AI systems have been portrayed as "neutral", it is harder to challenge policies or decisions that are racist, bigoted, homophobic, or transphobic.

#### **DATA ISSUES WITH AI**

With the huge quantities of data that AI systems need to train them, the quality of the data is an issue. AI is not exempt from the problem of "garbage in, garbage out." If there isn't quality data to train AI systems, these systems will make more mistakes—and they are already far from perfect.

Making the situation worse for tech companies is that as the amount of content produced using AI increases so does the possibility that it will end up being used to train AI systems. That is expected to increase the risk of AI systems generating inaccurate or completely fictitious information.

The efforts of the tech companies producing AI systems to find quality data have led to concerns about privacy and copyrighting. Both Google and OpenAI, which is backed by Microsoft,

have been accused of using people's personal information to train their Al systems.<sup>14</sup> There have also been lawsuits over copyright violations.

It's also quite possible our health care data is already being used to train Al systems. In 2019 the Toronto Star reported that a company that sells and supports electronic medical record software to primary care providers in Ontario was selling its data to IQVIA, an American data company. IQVIA claimed to have "potential access to the health records of five million Ontarians." While the original concern was the data being sold to pharmaceutical companies, IQVIA is now selling an Al system designed for use in the health care.

A guide to generative AI systems produced by Public Services International (PSI) suggests that there could also be privacy and copyright issues with content produced by AI systems. These include AI systems generating content that discloses private information from the data used to train them, AI systems re-identifying individuals whose information is in anonymized data sets and AI tools inadvertently generating content that violates copyright rules.<sup>16</sup>

PSI also warns that public sector workers need to be very careful using generative AI systems like ChatGPT. If sensitive material is uploaded to a generative AI system, it may become the property that of the company that owns the system.<sup>17</sup>

#### AI AND PRIVATIZATION

As with other new technologies, the focus of governments with AI has been on encouraging the creation of new jobs in the tech sector. How AI will affect public services is receiving little or no attention.

What has happened with virtual health care should provide a warning of what could happen with AI. The failure of the federal government and provincial government to provide for public delivery of virtual health care services means that the expansion of virtual health care has become a way for corporate Canada to privatize health care services.

Now, as governments in Canada look at making greater use of AI, we face a similar threat. If there is no plan for how public services will be protected, the use of AI could result in large tech US-based companies controlling the delivery of a growing number of public services in Canada.

#### **ENERGY REQUIREMENTS FOR NEW AI SYSTEMS AN ENVIRONMENTAL ISSUE**

While some uses for AI can help us address environmental issues, the energy requirements for new AI systems have the potential to undo any progress in reducing greenhouse gas emissions and conserving water.

Cooling electrical components in AI-related infrastructure will likely consume six times as much water as all of Denmark uses.<sup>18</sup> At the current rate of growth, AI data centres will soon use more energy than all of India.<sup>19</sup>

#### AI IN PUBLIC SERVICES IN CANADA

Al technology is already being used by the federal government and provincial governments for at least some services. What does vary is how widely Al is being used and where Al is being used.

The federal government has been the most enthusiastic about the use of AI in delivering public services. It has already set up an Artificial Intelligence (AI) Program and AI Centre of Excellence (AICoE) under Shared Services Canada to promote the use of AI.

In March 2025 Treasury Board released AI Strategy for the Federal Public Service. It hadn't been released at the time this paper was written, but federal public sector unions were concerned about the implications for public sector workers.

Because what happens at the federal level can easily be copied by other levels of governments, NUPGE is monitoring developments related to the AI Strategy for the Federal Public Service.

In several provinces, businesses and others developing new uses for artificial intelligence are receiving support through economic development funds. Alberta has gone as far as to set up GovLab.ai, a P3 privatization scheme to support the increased use of AI in the public sector.

#### WHAT ARE GOVERNMENTS IN CANADA DOING TO ENSURE ALIS USED RESPONSIBLY

To date, not enough thought has been given to how AI will be used. A paper released last year found that the focus of AI governance in Canada has been economic and industrial policy, and that governance is "uncoordinated, lacking clear mandates for consultation and effective mechanisms of feedback."<sup>20</sup>

Given the number of issues that need to be considered when looking at control on how Al is used, it would be good if the federal government was putting measures in place that could serve as models for provincial and territorial governments. Unfortunately, that isn't happening.

In 2022 the federal government introduced Bill C-27, the *Digital Charter Implementation Act, 2022*. This bill would have created an *Artificial Intelligence and Data Act (AIDA)*, but there were a number of serious weaknesses with what was proposed. The act would have failed to adequately protect human rights, privacy, and labour rights. And the use of AI by federal departments and agencies would have been excluded from these protections

Bill C-27 died when Parliament was prorogued on January 6, 2025. As it stands, there are no plans for federal legislation on Al.

Other federal government efforts to regulate the use of AI have been lacking. While the federal government claims to be promoting "responsible use of artificial intelligence" and has a set of guiding principles that are intended to ensure that happens, the reality is less impressive.

On the list of pre-qualified AI suppliers, it states that those suppliers are to commit to supporting the "Government of Canada's effort in leading the way on ethical AI." Then immediately below that is the statement that, "This commitment does not create and shall not be deemed to create any legally binding or enforceable obligations, contractual or otherwise, on the part of either party."<sup>21</sup>

What this means in practice is illustrated in a case study of one of the companies on the list of pre-qualified suppliers, Palantir.<sup>22</sup> While Palantir's services have been linked to infringements of human rights, apparently the company can still meet the federal government standards for ethnical AI suppliers.

The federal government has also championed the Voluntary Code of Conduct on the Responsible Development and Management of Advanced Generative AI Systems.<sup>23</sup> The problem with this code is that it is voluntary so companies can and do sign it and ignore it.

Progress has also been limited at the provincial level. Ontario has amended the *Employment Standards Act* to require employers that use Al in the hiring process post statements disclosing that fact. Manitoba, Ontario, and Quebec have passed legislation that addresses issues around privacy and Al.<sup>24</sup>

# CONTROLS AND SAFEGUARDS NEEDED ON HOW AI IS USED IN BOTH THE PUBLIC AND PRIVATE SECTORS

For AI to be positive, it's role needs to be limited to advising, as opposed to using it for decision making. As a participant in a recent NUPGE anti-privatization conference put it, "as long as we continue to treat AI like a chain saw we're fine; it's when we let AI run the tree farm that we have a serious problem."

But without controls on how AI is used, it's going to be running the tree farm.

There are several areas where the labour movement needs to be pushing for controls on Al

- Changes to legislation and regulation, including those related to employment standards, labour-relations and privacy
- Provisions in collective agreements to address how AI is used in our workplaces
- Public control AND delivery of services uses AI
- That environmental factors and the impact on the quality of public services and working conditions are part of decisions on when and where to use AI.

NUPGE members have a role to play in all of those areas, whether it's at the bargaining table or out campaigning. With the knowledge front line workers have, the input of NUPGE members can help in devising the controls needed to ensure Al is used to benefit everyone and not just the wealthy elite.

We also need to recognize that the fight to AI is used in ways that are transparent, accountable and benefit everyone, is just beginning. AI is evolving rapidly and NUPGE and the labour movement as a whole will need to be prepared to respond to those changes.

#### **RESOURCES**

Public Services International (PSI), an international federation of public sector unions which NUPGE belongs to, has produced some excellent materials to help workers respond to the challenges posed by artificial intelligence and other forms of digitalization. These include:

- A page with links to resources and tools, including information to help people understand exactly what we're dealing with, to help unions respond to digitalization
- A Digital Bargaining Hub with agreement language from around the world
- Generative AI: A Worker's Perspective, a report that explains how AI works

**CUPE**, **PIPSC** and **ACTRA** have produced information on AI for union members. While the ACTRA content is aimed specifically at concerns of ACTRA members, it provides a very good illustration of how AI can use people's images and voices—and, while this can be positive, it is not hard to imagine how this could be abused.

#### RESOLUTION

As with any new technology, how artificial intelligence (AI) is used and what controls are put in place will determine whether working people benefit from it.

Based on what has happened to date, there is good reason to be concerned. For the increased use of AI to be positive, governments need to be putting restrictions in place to prevent violations of human rights, privacy, and labour rights. These restrictions need to apply to both the public and private sectors.

Unfortunately, the potential abuses that could occur if restrictions are not put in place haven't received enough attention from the federal government or provincial governments.

To date, the federal government has been more concerned with encouraging a Canadian AI industry than with the impact on Canadians of increased AI use. The proposed *Artificial Intelligence and Data Act* will not adequately protect human rights, privacy, and labour rights. And the use of AI by federal departments and agencies would be excluded from these protections.

To date, no provincial legislation regulating the use of AI has been introduced.

#### THEREFORE, THE NATIONAL UNION OF PUBLIC AND GENERAL EMPLOYEES WILL

Support restrictions on the use of AI in both public services and the private sector that provide meaningful protection for human rights, privacy, and labour rights.

Call on the Canadian Labour Congress to lobby the federal government to adopt restrictions on the use of AI that are strong enough to protect human rights, privacy, and labour rights.

Support Components lobbying their provincial governments for restrictions on the use of AI at the provincial level.

Through the Collective Bargaining Advisory Committee (CBAC) share collective agreement language that helps address potential abuses of AI.

#### **Endnotes**

- 1 Organisation for Economic Co-operation and Development, "OECD AI Principles overview", 2025, https://oecd.ai/en/ai-principles.
- 2 Public Services International, Generative Al: A Worker's Perspective, October 30, 2024, https://publicservices.international/resources/digital-publication/generative-ai-a-workers-perspective-?id=15435&lang=en#1-what-is-generative-ai.
- 3 United National Environmental Programme, "Al has an environmental problem. Here's what the world can do about that", September 21, 2024, https://www.unep.org/news-and-stories/story/ ai-has-environmental-problem-heres-what-world-can-do-about.
- Tahsin Mehdi and René Morissette, "Experimental Estimates of Potential Artificial Intelligence Occupational Exposure in Canada", Statistics Canada, September 3, 2024, https://www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2024005-eng.htm.
- Kimberly Kindy and Brian Slodysko, "How Elon Musk's crusade against government could benefit Tesla", ABC News, February 11, 2025, https://abcnews.go.com/Technology/wireStory/elon-musks-crusade-government-benefit-tesla-118679175.
- Wanmala Subramaniam, "Rideshare drivers in Toronto earn median less than \$6 per hour, far below minimum wage: report", Globe and Mail, December 3, 2024, https://www.theglobeandmail.com/business/article-rideshare-drivers-in-toronto-earn-substantially-below-minimum-wage/.
- 7 Worker Info Exchange, Managed by Bots, Data-Driven Exploitation in the Gig Economy, December 2021, https://5b88ae42-7f11-4060-85ff-4724bbfed648.usrfiles.com/ugd/5b88ae\_8d720d54443543e2a928267d-354acd90.pdf.
- 8 Joanna Redden, Jessica Brand, Ina Sander and Harry Warne, "Automating Public Services: Learning from Cancelled Systems", Data Justice Lab, 2022, https://carnegieuk.org/publication/automating-public-services-learning-from-cancelled-systems/.
- 9 Ibid, 11.
- 10 UN Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia, and related intolerance, "Report of the UN Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia, and related intolerance", United Nations, June 3, 2024, 7, https://docs.un.org/en/A/HRC/56/68.
- 11 lbd.
- 12 *Managed by Bots, Data-Driven Exploitation in the Gig Economy*, 17, https://5b88ae42-7f11-4060-85ff-4724bbfed648. usrfiles.com/ugd/5b88ae\_8d720d54443543e2a928267d354acd90.pdf.
- 13 Shiona McCallum, "Payout for Uber Eats driver over face scan bias case", BBC, March 25, 2024. https://www.bbc.com/news/technology-68655429.
- Blake Brittain, "Google hit with class-action lawsuit over Al data scraping", Reuters, July 11, 2023, https://www.reuters.com/legal/litigation/google-hit-with-class-action-lawsuit-over-ai-data-scraping-2023-07-11/.
- 15 Sheryl Spithoff, "Privacy commissioner to investigate sale of health data", Toronto Star, February 21, 2019, https://www.thestar.com/news/investigations/privacy-commissioner-to-investigate-sale-of-health-data/article\_cf43dab3-bc4b-5307-8074-51787701b5ac.html.
- Public Services International, "Generative Al: A Worker's Perspective", October 30, 2024, https://publicservices.international/resources/digital-publication/generative-ai-a-workers-perspective-?lang=en&id=15435&show-Login=true#5-problems-with-generative-ai-in-public-services.
- 17 Ibid.

- 18 "Al has an environmental problem. Here's what the world can do about that", https://www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about.
- "Generative AI: A Worker's Perspective", https://publicservices.international/resources/digital-publication/generative-ai-a-workers-perspective-?lang=en&id=15435&showLogin=true#5-problems-with-generative-ai-in-public-services.
- 20 McKelvey, F., Toupin, S. & Roberge, J. (eds.) (2024) Northern Lights and Silicon Dreams: Al Governance in Canada (2011-2022). Shaping Al. Montreal, Canada, https://www.amo-oma.ca/wp-content/uploads/2024/04/ORA-CA-Policy.pdf.
- 21 Government of Canada, "List of interested Artificial Intelligence (AI) suppliers", https://www.canada.ca/en/government/system/digital-government-innovations/responsible-use-ai/list-interested-artificial-intelligence-ai-suppliers.html#wb-auto-4, viewed February 26, 2025.
- 22 Meaghan Webster, "Al Source List: The Ethics of Procurement, the Display of Responsibility, and the Production of Non-knowledge" in Northern Lights and Silicon Dreams: Al Governance in Canada (2011-2022), https://www.amooma.ca/wp-content/uploads/2024/04/ORA-CA-Policy.pdf.
- 23 Innovation, Science and Economic Development Canada. "Voluntary Code of Conduct on the Responsible Development and Management of Advanced Generative AI Systems", September 2023, https://ised-isde.canada.ca/site/ised/en/voluntary-code-conduct-responsible-development-and-management-advanced-generative-ai-systems.
- 24 University of Windsor Law Library, "Artificial Intelligence Regulation", check February 26, 2025, https://uwindsor-law.libguides.com/Al/Regulation.

