

Environmental Scan: Application of AI in Settlement Services

Submitted to Toronto East Quadrant Local Immigration Partnership

Submitted by Carolina Berinstein and John Saunders, CB Consulting

December 2024



Executive Summary

In October 2024, the Toronto East Quadrant Local Immigration Partnership commissioned an environmental scan on the application of artificial intelligence (AI) in the settlement services sector. This report discusses current AI tools, their use cases, costs, key strengths and limitations, and considerations for service provider organizations when implementing AI.

Key Findings

Settlement organizations across Canada, including those in the Greater Toronto and Hamilton Area, are increasingly interested in and using AI. AI tools are being utilized for a range of settlement services, including skill matching, improving service accessibility, and language support. Through a literature review, survey of TEQ partner members, and key informant interviews, a number of key findings were identified.

Benefits of AI:

- *Automation and service enhancement*: Using AI technology to carry out repetitive and mundane tasks can free up staff time for more direct client engagement
- *Improving accessibility*: Applications like chatbots can extend an organization's reach, providing access to information and services remotely and outside of operating hours
- Developing insights: Data analytics can provide insights for reporting and to optimize program delivery

Challenges and limitations of AI:

- *Maintaining a human-centred approach*: AI technology should supplement but not replace human interaction and staff positions
- *Aligning with organizational values*: AI applications should fit within the services organizations offer, as well as with their mission, goals, and values
- *Protecting data and privacy*: Data should be regularly monitored for security and accuracy, and organizations should develop guidelines for how they work with AI
- Managing costs: Costs can vary, depending on whether applications are custom-built or general-purpose, require integration with existing IT systems, or require ongoing subscriptions or other fees after their initial deployment

Guidelines and policies: Organizations are encouraged to develop guidelines to ensure ethical and responsible implementation, including:

- *Inclusivity*: Involve staff, leadership, and clients in discussions about AI.
- *Compliance*: Adhere to existing relevant legislation, such as laws regarding personal information, and look to rules and practices from other sectors if appropriate
- *Transparency*: Be transparent with stakeholders about the organization's AI practices

Opportunities for collaboration:

Organizations are interested in learning from and with each other. Regional and sector-based organizations, like Local Immigration Partnerships (LIPs), can play a key role in facilitating knowledge sharing and capacity building on AI in the settlement sector.

Table of Contents

Executive Summary	2
Introduction	4
Context	4
Working definitions	5
Methods	5
Relevant research, publications and resources	5
Toronto East Quadrant Local Immigration Partnership member survey	7
roduction	8
Application of AI: Costs, Strengths, Limitations	14
O Company of the comp	
••	
Current Implementation Practices in Settlement Organizations	21
Social Enterprise for Canada: The Smart Path	22
Deferences	26

Introduction

The Toronto East Quadrant Local Immigration Partnership (TEQ LIP), funded by Immigration, Refugees and Citizenship Canada (IRCC), provides a collaborative framework to facilitate the development and implementation of sustainable solutions for the successful integration of newcomers to Scarborough, with a local focus and regional collaboration.

The TEQ LIP involves diverse service providers, stakeholders and newcomers in the planning and development of collaborative and innovative solutions to enhance newcomer settlement in Scarborough while promoting efficient use of resources.

In October 2024, TEQ LIP contracted CB Consulting to undertake an environmental scan and produce a comprehensive report on the application of Artificial Intelligence (AI) in settlement services. TEQ LIP is interested in gaining a deeper understanding of the current landscape of Artificial Intelligence (AI) tools and applications, and how AI can be used in supporting newcomer service delivery.

This report discusses current AI tools, their use cases, costs, key strengths and limitations, and considerations for service provider organizations when implementing AI.

Specifically, project objectives included:

- 1. Conducting research on potential applications of AI in settlement services.
- 2. Identifying existing AI tools and analyze their use cases, costs, key strengths, and limitations.
- 3. Identifying guidelines and policies for service provider organizations to consider when using AI.
- 4. Examining current implementation practices of AI tools in service provider organizations.
- 5. Examining considerations service providers need to take into account when using AI, which may include legal, privacy, security, accessibility, staff training, etc.

Context

In the settlement sector, service provider organizations (SPOs) are increasingly looking at AI tools and resources to support their work. In the Greater Toronto and Hamilton Area, Local Immigration Partnerships have facilitated a number of opportunities for organizations to learn about and share experiences working with AI. For instance, the Peel Newcomer Strategy Group has hosted a series of webinars on the use of AI in the sector, while the Toronto South LIP has also hosted a webinar discussing AI fundamentals and applications in service delivery.

¹ Peel Newcomer Strategy Group. (n.d.). Learning Series on Artificial Intelligence for the Newcomer-Serving Sector. https://peelnewcomer.org/digital-equity-and-inclusion

² Toronto South Local Immigration Partnership. (2024). Navigating AI Exploring Fundamentals and Applications in Service Delivery. https://www.youtube.com/watch?v=NL iDpPIXQ8&t=5s

In July 2024, the TEQ LIP Partnership Council also discussed a potential role for AI, as well as what role the TEQ LIP could play in helping develop guidelines and practices for appropriate use among its partners, and whether/ how AI tools may already be in use among partner organizations in Scarborough.

Working definitions

This report draws on different terms and concepts currently in use. Specifically, we understand artificial intelligence to be a type of technology that carries out tasks that mirror human intelligence, drawing on the government of Canada's <u>Directive on Automated Decision-Making</u>:

"Information technology that performs tasks that would ordinarily require biological brainpower to accomplish, such as making sense of spoken language, learning behaviours or solving problems" (2023a).

We also discuss two forms of AI technology, *generative AI* and *predictive AI*. Generative AI produces content by drawing on large amounts of raw data, including text, code, images, and videos (Government of Canada, 2024). Predictive AI uses algorithms and statistical analysis to identify patterns and forecast future outcomes (Laborde, 2024).

Methods

The consulting team conducted an environmental scan on the use of AI tools and resources in the settlement sector, incorporating a range of methods. A search of relevant literature was conducted, drawing on scholarly and professional articles, as well as other materials, including webinar recordings, presentations (slide decks), blog posts, and other documents from settlement organizations.

A survey of TEQ LIP partner organizations was also conducted, asking respondents about their knowledge, experience, and attitudes towards the use of AI in the settlement sector.

Key informants who had knowledge or experience working with AI in the sector were also interviewed. In all, three interviews were held, with written comments supplied by a fourth key informant who was unavailable for an interview.

Relevant research, publications and resources

Work examining how service provider organizations in the settlement sector are approaching the use of AI is still somewhat limited, but scholarly and professional interest is growing. Research by Nejadgholi et al (2024a) is particularly insightful in establishing an overview of the Canadian landscape and providing a framework for how AI applications could fit within the settlement sector. It informs some of the approach in the next section, Applications of AI Tools and Resources in the Settlement Sector.

In Canada, recently published research considers the implications of sharing newcomer data across organizations and departments through emerging technologies (including AI). For instance, the implementation of AI solutions in human migration management needs greater scrutiny and oversight, and requires an equitable, rights-based approach, according to Roshan (2024). Similarly, organizations working with newcomer communities should adopt an ethics of care when sharing or working with their data, according to Shankar (2023).

The risks for newcomers working directly with generative AI applications (like ChatGPT) have also been studied, showing how users may be vulnerable to receiving wrong information (through biased data or AI-created "hallucinations") or fraud (Nejadgholi et al 2024b).

Other relevant research from outside of Canada identifies ways in which AI tools may contribute to higher levels of social and economic integration (via social or employment-related applications) (Sydoruk, 2024; Drydakis, 2020; Ojwang, 2022).

Perspectives on the use of AI are also emerging from the settlement sector itself. For instance, a recent series of webinars hosted by the Peel Newcomer Strategy Group provide a range of examples of AI in use among different settlement organizations, as well as descriptions of the types of tools and technologies available:

- Leveraging AI to Improve Service Efficiency
- From learning about AI to application for marketing
- Role of Generative AI in supporting newcomers
- Local experiences of using Artificial Intelligence (AI)

Other webinars have been held by the Toronto South Local Immigration Partnership, TechSoup,³ and Toronto Metropolitan University's CERC in Migration and Integration.⁴ Additionally, publicly available presentation decks from ACCES Employment Services, Social Enterprise for Canada, and Peel Newcomers Strategy Group provide detailed case studies and suggestions for organizations looking to implement AI technology. A comprehensive list of webinars, articles, and other resources on AI in the settlement sector has been compiled by Marco Campana on his website, km4s.ca.⁵

More recently, the Atlantic Region Association of Immigrant Serving Agencies and the Immigrant Services Association of Nova Scotia launched a series of webinars, running from September 2024 to March 2025, on the use of AI technology in the settlement sector.⁶

³ TechSoup. (2024). Harness the Power of Generative AI for Good. https://www.youtube.com/watch?v=zL6MRJcVFNk&t=82s

⁴ CERC in Migration and Integration. (2024). Virtual Bridge Workshop 2 - Connecting with newcomers online: How can AI help? https://www.torontomu.ca/cerc-migration/virtual-bridge/virtual-bridge/events/workshop-2/

⁵ See, specifically: https://km4s.ca/?s=artificial+intelligence.

⁶ See, specifically: https://araisa.ca/fa-i-r-for-all-ais-impact-on-settlement-language-learning

Toronto East Quadrant Local Immigration Partnership member survey

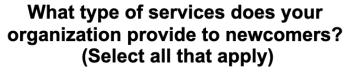
In October 2024, a brief survey of TEQ LIP member organizations was held to assess organizations' familiarity, comfort, and knowledge of AI tools and resources. In total, representatives from eight organizations participated, for a response rate of 14.8 per cent.

Respondents were asked to select from a list of services their organization provided, with multiple answers permitted. Seven of eight respondents worked with organizations that provide employment services, while health services, case management, and settlement services were selected by five respondents.

The majority of respondents (five of eight) were from organizations with more than 100 full time equivalent (FTE) employees. One was from an organization with between 51 and 100 FTEs, and two were from organizations with between 10 and 50 FTEs. There were no responses from organizations with fewer than 10 FTEs.

While not necessarily representative of the sector as a whole – or the region – responses did reflect a range of comfort levels and experience working with AI. These insights have been incorporated into the discussion.

Figure 1: Services Provided



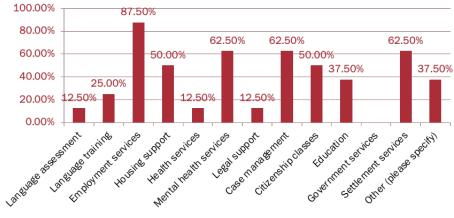


Figure 2: Number of Employees





Key informant interviews

Three half-hour interviews were conducted with key informants to provide additional perspectives on how to approach and use AI among settlement organizations, as well as challenges and opportunities for the sector as a whole. Interviewees included a representative of an employment services agency, an independent consultant, and a representative of a regional collaborative organization. Additional comments were supplied from another representative of a regional organization who was not available for a full interview.

Applications of Al Tools and Resources in the Settlement Sector

While there are no specific data for the percentage of settlement agencies or employees using AI technology, studies show growing rates of adoption among businesses and organizations in Canada. For instance, the number of businesses employing five or more people using AI more than doubled from 2021 (three per cent) and 2023 (seven per cent). Nearly three-quarters (73 per cent) of those using AI worked with generative AI technologies, followed by speech recognition applications (26 per cent), and decision-support applications (25 per cent).

Also significant was research conducted by KPMG in 2023, finding that 22 per cent of Canadians were using generative AI in their work – more than one in five.⁸

Currently, there is growing interest in the use of AI applications among international and national organizations regarding immigration, particularly regarding polices, population trends, and funding. While it is more difficult to gauge experience and attitudes among service provider organizations in the settlement sector, researchers are seeing growing interest in and use of AI tools.

8

⁷ Statistics Canada. (2024). Survey of Digital Technology and Internet Use, 2023.

⁸ KPMG. (2024). Generative AI Adoption Index.

<u>Nejadgholi et al</u> (2024a), for instance, provide a useful snapshot of the Canadian landscape, identifying three categories of AI tools in use:

- Data analytics tools, "for drawing insights from large datasets"
- Custom-built AI tools, "specifically tailored to assist in decision-making processes"
- General-use AI tools, which are available to the public at relatively low or no cost

Customized AI tools are being developed to assist with a range of services for settlement organizations, including:

- Skill matching
- Public service accessibility
- Identification of vocational domains
- Integration support
- Personal assistant for migrants
- Overcoming language barriers
- Employment-related skill training (Nejadgholi et al, 2024a)

General-purpose AI tools are also gaining ground among newcomers and settlement organizations alike. These include applications such as ChatGPT, Gemini (from Google), and Copilot (from Microsoft), and offer free and paid versions.

<u>Nejadgholi et al</u> (2024a) provide a comprehensive list of potential AI applications and tasks, categorized by specific settlement service, also noting the per centage of IRCC funding directed to each service.

Figure 3: Potential AI Applications (Nejadgholi et al, 2024).

Service (Fund %)	Example AI Application	Core AI Tasks
Language Training and Assessment (30)	Assisting language training via voice-enabled and text-processing AI tools Language proficiency assessment through automated testing and scoring systems Automatic creation of personalized study plans Automatic learning resource recommendations	 Machine translation Dialogue systems Automatic feedback and corrections Assessment algorithms Recommendation systems
Information and Orientation Services (19)	Automated, personalized information delivery in key areas AI-driven guides on finding further information and digital skill training	Information retrieval Question answering systems Conversational AI Personalized recommendation systems
Needs and Assets Assessment and Referral Services (NAARS) (11)	Automating routine data processing Analyzing client information to predict needs Automatic referral generation based on the needs and assets	Data processing automation Predictive algorithms Matching algorithms Recommendation systems
Support Services (9)	AI-coordinated childcare and transportation scheduling Adaptive technologies for disability support Automated translation and interpretation systems Expert-in-the-loop mental health support Fraud and scam detection	 Scheduling algorithms Machine translation Conversational agents Recommendation systems Classification
Employment-Related Services (9)	Automated job matching systems Resume and cover letter assistance tools Online training modules for skill development Personalized career advice and planning	Matching algorithms Generative AI Conversational assistants Personalized recommendation systems

Table 3: Potential AI applications in direct settlement services based on service types outlined in (IRCC 2023a).

In related work, <u>Nejadgholi et al</u> (2024b) discuss the growing use of AI tools by newcomers themselves. While their focus is on the risks newcomers face using open generative AI, their research echoes comments from different key informants, notably that whether or not settlement organizations are comfortable with AI, it is increasingly likely their clients are already using it.

"The reality is the clients are already using it, even if the staff are unsure how they can work with it" (key informant interview).

Indeed, a number of AI applications have been developed for immigrants to Canada. These include ImmigrateAI, a paid service which offers support for finding jobs and evaluating an applicant's likelihood of gaining permanent residency; Visto, also paid, which offers help completing immigration applications; and the INC News Immigration Chatbot from Immigration News Canada, which answers immigration-related queries (for free). As well, AI-based resume services, such as

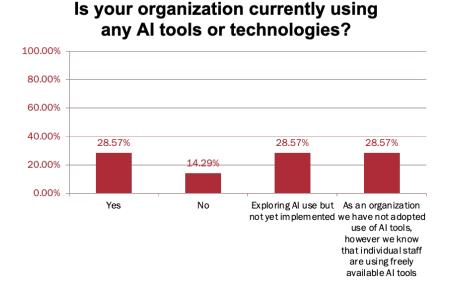
<u>Jobscan</u> (which can compare resumes with job postings to determine how well they fulfill requirements), were mentioned repeatedly in documents and interviews as tools already in use by newcomers and some settlement service providers.

Toronto East Quadrant Local Immigration Partnership members' use of Al

Moving to a more local perspective, survey respondents generally showed an interest in using AI but were somewhat divided in how they saw their organization's understanding of and comfort with AI applications.

Survey respondents noted an interest among their organizations to use – or consider using – AI technology. Of the seven respondents to a question on the use of AI tools, two noted their organizations were already using AI, while two are exploring it but haven't yet implemented it. Two respondents said they were aware of staff using freely available AI tools, even though their organization had not formally adopted them. Only one of the seven respondents said their organization wasn't using AI tools or technologies.

Figure 4: Use of AI Tools

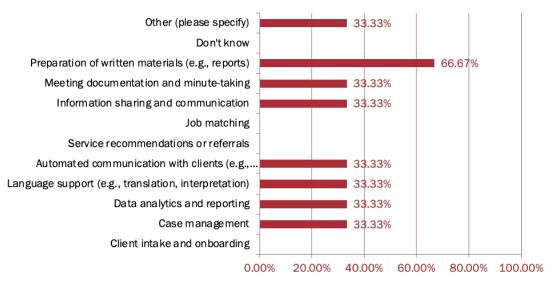


Respondents whose organizations are using AI listed a range of largely generative AI tools, including: ChatGPT, Copilot, Gemini, Magic School, Google Translate, Zoho, and customer relationship management (CRM) systems.

Only three respondents whose organizations were using AI identified specific tasks of services that were supported by AI tools. Using AI for preparing written materials was identified by two respondents, with a range of other largely administrative tasks also noted. AI was not being used for client intake and onboarding, service recommendations or referrals, or job matching. One respondent said AI was used for class activities and lesson plans.

Figure 5: Tasks or Services Where AI Is Being Used

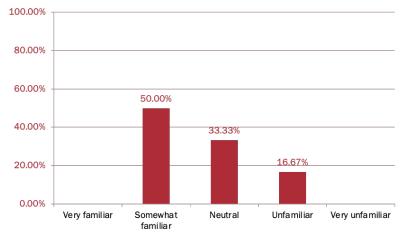
What specific tasks or services are these Al tools being used for? (Select all that apply)



Survey respondents were split when asked about their overall familiarity with AI and its potential applications for the settlement sector. Of the six who answered this question, three said they were somewhat familiar, while two were neutral and one was unfamiliar.

Figure 6: Familiarity with AI

How familiar are you with Al and its potential applications in the settlement sector?

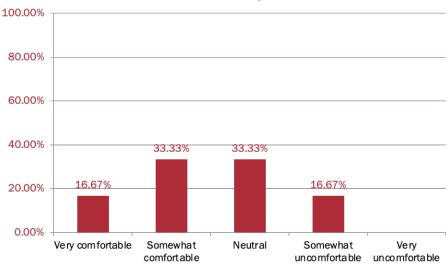


Respondents were also divided when asked about their organization's comfort level with using AI. Three of the six respondents to this question said their organization was either somewhat comfortable

(two responses) or very comfortable with AI. Two respondents were neutral, while one respondent said their organization was somewhat uncomfortable with AI.

Figure 7: Comfort with Using AI

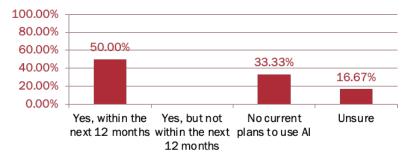
How comfortable is your organization with the idea of using Al as a tool?



Looking to future use of AI, respondents were again split. Half of those who responded said yes, their organization is considering AI, while a third said they had no plans.

Figure 8: Considering AI in the Future

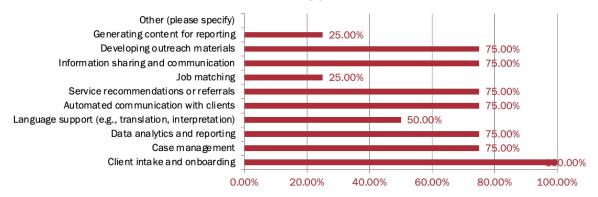
Is your organization considering using AI in the future?



As for the types of applications their organization would consider in the future, all respondents pointed to client intake and onboarding, with a strong interest in public-facing areas such as information sharing, service recommendations and automated communication with clients.

Figure 9: Potential Future Applications

If your organization is considering using Al, what areas would you like to explore? (Select all that apply)



Application of AI: Costs, Strengths, Limitations

Costs

Defining costs for using different AI applications can be difficult. There are few examples of pricing for custom-built solutions, which may require adapting or integrating existing tools, or developing new ones. They may also require working with consultants as well as software companies. Software licensing fees may also vary, based on the number of employees working with the AI tools, or the number of users accessing them. The case studies that follow provide more specific information on custom-build pricing and ongoing costs.

Many general-purpose AI applications offer free versions, sometimes with limits to functionality or data (for instance, not offering access to the most up-to-date information). These include generative AI tools such as Copilot, ChatGPT and Gemini. Paid versions of these tools are based on a monthly subscription and can offer more functionality, like allowing users to submit (and control) their own data.

Key informants and speakers with experience assessing or managing AI applications outlined a range of types of costs associated with using the technology. These include:

- Infrastructure costs: Equipment, storage (on or off-site, cloud, etc.)
- Data costs: Collecting and ensuring data is useable with the AI application (may require preparation or "cleaning")
- Development costs: Building an application or integrating it with current systems
- Operational costs: Ongoing expenses associated with running AI applications, including subscription fees, fees based on the number of users access the application, etc.
- Unexpected costs: Fixing problems (debugging), training, creating new positions

It may be possible to get initial funding to build or hire a third party consultant to put something in place. But once that particular funding is over, will you be able to afford the cost of the tool? (key informant interview)

Strengths

Potential benefits of using AI applications among settlement organizations can be grouped into three areas:

• Automation and service enhancement: Using technology to carry out repetitive and mundane tasks, or to support regular activities (such as onboarding) can free up staff time for more direct client engagement

"There's the idea of an omni channel service delivery model – where based on what we know about our clients, our systems generate messages to them about things they need to know about (via email, text message, etc.), pulling from a content database so it's personalized" (key informant interview)

• Improving accessibility: AI applications such as chatbots can extend an organization's reach by providing access to information or services outside of operating hours, eliminating the need for in-person visits, and can be provided on different platforms (web, phone, etc.).

"Any organization experiencing constraints in terms of demand for services and explaining how things work – AI is definitely useful for that" (key informant interview).

• Developing insights: Data analytics can provide insights for reporting, while also help optimize program delivery.

"There's a lot of data service providers collect and don't do much with other than reporting. There is great potential for AI applications to harness that data" (key informant interview).

Challenges

A number of challenges for settlement organizations looking to implement AI emerged from the research. These include:

• Intention: A note of caution emerges from the document analysis and key informant interviews - AI should supplement but not replace human interaction and staff positions.

"AI can help with administrative and repetitive tasks, but it doesn't replace empathy. It can actually give staff more time for that meaningful work" (key informant interview).

- Alignment with an organization's mission and values: AI applications should fit well with not only the specific types of services organizations offer, but also with their mission, goals, and values.⁹
- Planning and communication: Key informants recommended organization leaders consult with staff openly and transparently about potentially using AI. They also stressed the need for planning to ensure even small projects or tests can be monitored and evaluated in terms of how well they meet their intended use.

"You have to think about the problem you're trying to solve and evaluate whether or not it could be useful in solving that challenge" (key informant interview)

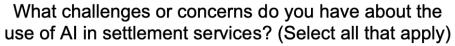
- Staff roles, responsibilities, and training: Like many technology projects, AI applications may require more time and attention from IT staff than anticipated, as well as requiring additional training for staff using the applications.
- Monitoring data: Not only do organizations need to ensure their data fits with the application
 they're working with, but they also need to monitor it regularly to ensure that it remains
 accurate and secure (if working with personal information). A number of specific concerns
 are outlined by Nejadgholi et al (2024b) for generative AI applications, including:
 - Bias: Information may reflect or reproduce biases (such as providing different information for job seekers in different countries)
 - Language: Generative AI applications tend to provide more comprehensive answers in English than other languages
 - Stereotypes: Biases and stereotypical representations of groups can be reflected in a range of data sources for generative AI, including text and images, which in turn affect results
 - Hallucinations or misinformation: On occasion, generative AI tools provide wrong answers or information, sometimes naming people or organizations that don't exist
- Ensuring accessibility and quality of services: Clients without access to technology should receive the same standard of care and same opportunities. Key informants stressed the need to provide services equitably, that is ensuring the same services and quality of services are available across different platforms, as well as in person.

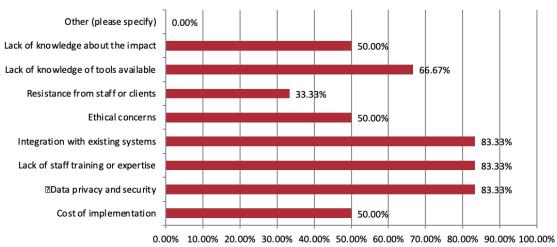
When asked to identify challenges their organization faced implementing AI, survey respondents selected data privacy and security, lack of training, and integration with existing systems as their top choices.

16

⁹ See, for instance, Furniture Bank's use of AI images to avoid stigmatizing clients at https://www.furniturebank.org/postcard.

Figure 10: Challenges or Concerns about AI





Other issues related to AI applications

More generally, a number of issues and concerns have emerged regarding the use of AI applications in the overall nonprofit sector. There appears to be little or no discussion of them with regards to settlement services specifically, but they may be of interest to organizations considering AI

- Environmental impact: Training AI applications can consume large amounts of energy and
 emit tons of carbon, contributing to climate change. It can also strain freshwater resources
 (water can be for server cooling) (Ren and Wierman, 2024). Proponents of the technology,
 however, argue that used effectively, AI can help address the need to work with large and
 complex data sets and develop solutions to environmental problems (Barenblat and
 Morenzoni, 2024).
- Intellectual property: Legal observers have emphasized the need for organizations to
 understand where their data for AI applications comes from, who owns it, and who owns the
 outputs produced through the technology. As <u>Garhart and Roland</u> (2024) note, for example,
 AI-produced materials are not eligible for copyright protection in the United States.
 <u>Kauffman and Farley</u> (2024) outline specific concerns for journalism, and include a number of
 recommendations, such as ensuring data used for AI is provided with consent of the
 creator/owner.
- Accessibility: Perspectives on how AI technology may intersect with people with disabilities
 are varied. Benefits can include tools such as voice-activated applications, customized
 learning applications, and resources that produce more accurate diagnoses and treatment
 options. At the same time, concerns have been raised over bias in data that can hurt
 applicants to employment or benefits programs such as the absence of people with

disabilities in organizations' data sets for training – as well as greater surveillance by systems designed to identify fraud (<u>Turin</u>, 2023; <u>O'Grady</u>, 2024; <u>Amnesty International</u>, 2024).

Guidelines and Policies

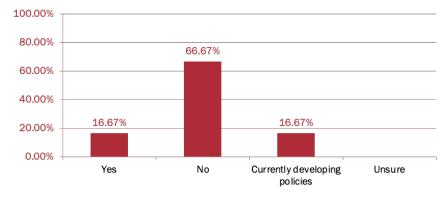
While there may be few examples of guidelines and policies for the use of AI specifically in settlement organizations, a number of relevant resources exist. Key informants also stressed the importance for developing guidelines even in the absence of sector-specific examples.

"We have to have a conversation about the ethical use of technology, including AI and other technologies. It doesn't have to be rigid. This is an evolving and emerging technology. Yes, we can write best practices, policies, but this is evolving – and lots of tools and information exist" (key informant interview).

At the local level, Toronto East Quadrant Local Immigration Partnership members who responded to the survey also showed that policies and guidelines on the use of AI are still emerging. Four of six respondents said their organizations had no policies, while one said their organization did, and another said their organization was currently developing them.

Figure 11: AI Policies





Overall considerations

From key informant interviews and reviewing webinars and other documents, a number of points for consideration emerged for organizations looking to develop guidelines on using AI.

Be inclusive: Key informants suggested that staff, leadership (including boards), and clients all participate in discussing how the organization should consider working with AI technology. This includes hearing fears or concerns, as well as ways people may already be using AI.

Extend or amend existing policies. Organizations may already have developed data or technology policies, which can be extended to include AI.

Borrow from others: Some sectors may have developed policies that are applicable to settlement organizations. For instance, AI-based note-taking applications have been discussed in relation to health care and other sectors, with recommendations for addressing privacy, accuracy, and bias (Campana, 2024).

Comply with relevant rules and legislation: There is currently no legislation in Canada specifically regulating the use of AI technology. In 2022, the federal government announced the Artificial Intelligence and Data Act (Bill C-27) to help ensure AI use in Canada was safe and non-discriminatory (Government of Canada, 2023b). While the bill is currently under review in Parliament, the federal government has promoted a voluntary code of conduct. As well, organizations have been encouraged to work with relevant legislation that currently exists, such as laws related to health or personal information (Office of the Information and Privacy Commissioner of Alberta, 2023). As one key informant explained, in the absence of specific laws, organizations should look for the highest relevant standard as a model.

Tools and examples

A number of resources provide good starting points for organizations looking to build AI guidelines:

- FundraisingAl's <u>Framework toward Responsible and Beneficial AI for Fundraising</u> outlines a
 number of areas to incorporate, including privacy and security, data ethics, inclusiveness,
 accountability, transparency, collaboration, social impact and sustainability
- TechSoup's *Using AI in Nonprofit Work: 3 Ethical Considerations* elaborates on the need for human oversight
- Global Giving's <u>Responsible AI Use: How and Why to Start Developing Policies</u> outlines the
 risks of using AI, as well as steps to take in training and establishing a "data hygiene routine"
 (including setting protocols and cleaning data regularly)

In Canada, recent publications offer a range of perspectives for nonprofit and other organizations. For instance, <u>Gibson</u> (2024) outlines key considerations for nonprofits, while encouraging leaders to "jump in the fray" to ensure their communities are included in policy-making. <u>Campana</u> (2024) provides two adapted tools for organizations looking to work with AI, including a planning template, and an AI transparency template for explaining how AI was involved in creating specific materials.

In November 2024, <u>The Law Commission of Ontario and Ontario Human Rights Commission</u> copublished a comprehensive tool for organizations to evaluate AI systems for compliance with human rights regulation. ¹⁰ The guidelines also serve as a workbook, allowing organizations to plan and describe their AI systems and objectives, while also asking specific questions on risk, differential treatment and accommodation.

Furniture Bank's Responsible Al Manifesto

"Furniture Bank's commitment to ethical AI is rooted in our desire to leverage technology in a manner that aligns with our values and enhances the lives of those we serve. Our AI guidelines serve as a moral compass, ensuring that our use of AI is transparent, human-centered, and accountable." 1

Furniture Bank, a Toronto-area charity and social enterprise, has developed a comprehensive set of guidelines governing its use of AI, connecting them with the organization's mission and values. It incorporates a number of principles, including taking a human-centred approach, ethical and transparent use of AI, privacy, and environmental and financial sustainability. Specific elements of the policy are outlined below.

Furniture Bank's AI Usage Policy:

- We remain committed to a human-centered approach to storytelling, creativity, and decision-making, with AI serving as an assistive tool rather than a replacement.
- We may use AI-generated images to ethically visualize the realities of furniture poverty while preserving the dignity of our clients.
- We do not use AI-generated text to replace human-written stories or narratives about our mission and impact.
- We may experiment with using AI to suggest headlines or captions for our social media posts and campaigns.
- We may explore the use of AI to generate ideas for fundraising campaigns, community initiatives, and outreach efforts.
- We may utilize AI as a research or analytical tool to assess our impact, optimize our programs, and identify areas for improvement.
- We do not use AI-generated video content to depict the experiences of our clients.
- We specifically do not use AI-generated images as a substitute for authentic photographs of our programs, clients, or team members.
- We and/or the artists we collaborate with may use AI tools to inspire creative ideas for our campaigns, promotional materials, and visual storytelling.
- We prioritize transparency and accountability in our use of AI technologies and ensure that our audiences and stakeholders are informed about our AI practices.

¹⁰ Law Commission of Ontario and Ontario Human Rights Commission. (2024). Human Rights Al Impact Assessment.

¹¹ Furniture Bank. (2023). Why Furniture Bank Has a Responsible AI Manifesto. https://www.furniturebank.org/why-furniture-bank-has-a-responsible-ai-manifesto

Current Implementation Practices in Settlement Organizations

In the Greater Toronto and Hamilton Area, settlement and other nonprofit organizations have shared their experiences working with AI tools and resources, providing information on the scope and costs associated with their implementation, as well as insights into challenges and opportunities AI presents. Two organizations, ACCES Employment and Social Enterprise Canada, are included here as case studies of current implementation practices in the settlement sector.

ACCES Employment: VERA¹²

ACCES Employment is a workforce development organization with seven offices across the Greater Toronto Area. The organization serves 56,000 clients annually, 86 per cent of whom are newcomers to Canada.

In 2021, ACCES Employment launched its Virtual Employment and Resource Attendant (VERA) chatbot. It was intended to manage large volumes of inquiries for information, which staff found took away from other services. Working with a \$1.1 million Accenture Global Grant, the organization deployed IBM's Watson natural language processing technology to build a web-based tool that could answer common job search questions and allow clients to register for workshops and seminars. Currently, VERA costs ACCES Employment about \$22,000 in subscription costs.

Based on more than 150 vetted responses, VERA's knowledge base has expanded to include other settlement topics, including legal and health information (funded through Immigration, Refugees and Citizenship Canada's Service Delivery Improvement initiative).

The project has had a significant impact. To date, more than 130,000 conversations have been had with VERA (now about 5,000 a month), freeing up staff for other work. In the past 12 months, more than 13,000 staff hours were offset. About 10 per cent of ACCES clients start with VERA, and about 50 per cent of conversations occur during operating hours.

(youtube.com/watch?v=1LCQT6oXeU4&t=372s&ab channel=PeelNewcomerStrategyGroup).

¹² The information here is drawn from two presentations by Aimee Holmes, VP, Data Strategy & Digital Solutions with ACCES Employment: Toronto South Local Immigration Partnership's Navigating AI: Exploring Fundamentals and Applications in Service Delivery webinar

^{(&}lt;u>youtube.com/watch?v=NL_iDpPIXQ8&t=149s&ab_channel=TorontoSouthLIP</u>), and Peel Newcomer Strategy Group's Local experiences of using Artificial Intelligence webinar

Social Enterprise for Canada: The Smart Path 13

Headquartered in Newmarket, Social Enterprise for Canada (SEC) also has offices and services in Peel, York, and Durham Regions. The organization offers services for families and parents, welcome centres for newcomers, and qualification and accreditation information services for internationally trained professionals and trades people.

Developed with \$200,000 in funding from IRCC (and built by Lemay.ai), The Smart Path is a large language model AI application to support the SEC's foreign credential information services. Through an online portal, clients register with SEC and book an appointment with an advisor. The AI application assesses the client's information with data culled from thousands of web sites based on more than 160 National Occupation Classification categories and develops an action plan, which is reviewed by the client and the advisor.

The AI system alerts a human staff member if new information appears or if information is changed on a web site, or if links are no longer active. The staff member then determines if changes need to be to the SEC system or if clients need to be notified.

The project has proven successful. Staff have been freed up from consulting manuals and other documentation, and the system regularly checks for accuracy and up-to-date resources. SEC employees also have an easier time finding information through the system's interface. However, the project did see increased pressure and workload for SEC's IT team, as well as the need to budget for operating costs, and training.

Considerations for Settlement Organizations

From our research, it is clear that AI technology will likely grow in use in the settlement sector, by staff or clients – or both. What we have heard is that organizations need to be intentional about how (or if) they are using AI. This could mean leadership engaging more directly with exploring or planning for AI applications, while also facilitating communication with staff and clients about AI – or looking to them for input.

Key informants also noted the importance of ensuring that AI supports the mission of the organization and that it fits within already existing systems (HR, IT, etc.). They also encouraged small-scale experimentation with AI to help build organizations' comfort and knowledge of different applications without significant financial or technical risk.

22

¹³ The information here is drawn from a presentation by Darcy MacCullum, CEO, Social Enterprise for Canada: Peel Newcomer Strategy Group's Artificial Intelligence (AI) to improve the efficiency of services for newcomer-serving sector webinar (youtube.com/watch?v=lvRvalqCDEQ&ab channel=PeelNewcomerStrategyGroup).

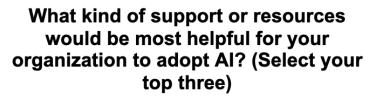
Opportunities for collaboration and capacity building

There is also growing interest in supporting broader collaboration and knowledge sharing across the settlement sector. For one key informant, this would help establish common understanding and approaches to AI:

"We all need to have a baseline understanding of what these tools mean and how they can apply to our work" (key informant interview).

When asked what resources would help them adopt AI, survey respondents said their top choices included legal guidelines, best practice guidelines, and training.

Figure 11: Support or Resources to Support AI Adoption





"Staff training would be welcome" (survey respondent)

"We need to be aware that it's going to be constantly changing – ongoing professional development would be beneficial" (key informant interview)

In terms of collaboration, key informants and survey respondents saw opportunities to engage regional and sector-based organizations.

"I think the LIPs can play a key role, especially if they coordinate with each other, as they can connect with settlement, employment, housing services – and they don't compete for funding and already provide capacity building opportunities" (key informant interview)

"The LIPS are great at knowledge dissemination and resource sharing – making sure the information that's already out there is readily available for folks" (key informant interview)

"We should have a conference on using AI for community agencies" (survey respondent). "We've learned how an AI governance knowledge-sharing would be helpful among organizations" (key informant interview)

There was also interest in engaging funders more directly in discussions about adopting AI in the settlement sector.

"Looking at IRCC calls for proposals, they recognize the value of digital tools and literacy and the costs of building expertise. I'm thinking there will be more funding for projects or aspects of existing programs that have more digital elements to them" (key informant interview)

"Bring funders into the discussion, as there will be additional costs involved" (survey respondent)

Appendix A: Selected Resources

PNSG webinar series:

- Artificial Intelligence (AI) to improve the efficiency of services for newcomer-serving sector
- Local experiences of using Artificial Intelligence (AI)
- From learning about AI to application for marketing | Dan Kershaw, ED, Furniture Bank
- Role of Generative AI in supporting newcomers | Isar Nejadgholi, National Research Council, Canada

Toronto South LIP webinar:

• Navigating AI Exploring Fundamentals and Applications in Service Delivery

Research on AI use in the settlement sector:

- Human-Centered AI Applications for Canada's Immigration Settlement Sector (Nejadgholi, Molamohammadi, Missaghi, and Bakhtawar, 2024)
- Social and Ethical Risks Posed by General- Purpose LLMs for Settling Newcomers in Canada (Nejagholi, Molamohammadi, and Bakhtawar, 2024)

Resources for developing guidelines on the use of AI in organizations:

- <u>Human Rights Impact Assessment for AI Technologies</u> (Ontario Human Rights Commission and the Law Commission of Ontario, 2024)
- Why Furniture Bank Has a Responsible AI Manifesto (Furniture Bank, 2023)

Web sites and resources on the use of AI in the settlement and nonprofit sector:

- Knowledge Mobilization for Settlement:
 - o <u>Information and resources on Artificial Intelligence for the settlement sector</u>
 - o AI experiment planning tool and AI transparency statement
- Nonprofit Tech for Good

References

Amnesty International. (2024). Denmark: Coded Injustice: Surveillance and Discrimination in Denmark's Automated Welfare State. https://www.amnesty.org/en/documents/eur18/8709/2024/en/

Barenblat, K. and Morenzoni, N. (2024). The AI-Powered Nonprofits Coding a Greener Future. Stanford Social Innovation Review, July 29. https://ssir.org/articles/entry/ai-nonprofits-climate#

Campana. (2024). Experimenting and Being Transparent with AI. https://km4s.ca/2024/06/experimenting-and-being-transparent-with-ai/

CERC in Migration and Integration. (2024). Virtual Bridge Workshop 2 - Connecting with newcomers online: How can AI help? https://www.torontomu.ca/cerc-migration/virtual-bridge/events/workshop-2/

Drydakis, N. (2020). Mobile applications aiming to facilitate immigrants' societal integration and overall level of integration, health and mental health. Does artificial intelligence enhance outcomes? Computers in Human Behaviour, 117. https://doi.org/10.1016/j.chb.2020.106661

Furniture Bank. (2023b). Why Furniture Bank Has a Responsible AI Manifesto. https://www.furniturebank.org/why-furniture-bank-has-a-responsible-ai-manifesto

Garhart, N. and Roland, C. (2024). It wasn't me, it was the AI: Intellectual property and data privacy concerns with nonprofits' use of artificial intelligence systems. Board & Administrator, 40(4), 1-2.

Gibson, K. (2024). What non-profits need to know about AI policy-making in Canada. The Philanthropist. https://thephilanthropist.ca/2024/11/what-non-profits-need-to-know-about-ai-policy-making-in-canada/

Government of Canada. (2023a). Directive on Automated Decision-Making. https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32592

Government of Canada. (2023b). Artificial Intelligence and Data Act. https://ised-isde.canada.ca/site/innovation-better-canada/en/artificial-intelligence-and-data-act

Government of Canada. (2024). Guide on the use of generative artificial intelligence. https://www.canada.ca/en/government/system/digital-government

Kaufman, C. and Farley, M. (2024). How to Develop an Ethical AI Use Policy for a Nonprofit. International Center for Journalists. https://www.icfj.org/news/how-develop-ethical-ai-use-policy-nonprofit

KPMG. (2024). Generative AI Adoption Index. https://kpmg.com/ca/en/home/services/digital/ai-services/generative-ai-adoption-index.html

Laborde, J. (2024). What is Predictive AI? How to Produce Data-Driven Insights https://www.bwf.com/predictive-ai/

Law Commission of Ontario and Ontario Human Rights Commission. (2024). Human Rights AI Impact Assessment.

 $\frac{https://www.ohrc.on.ca/sites/default/files/Human\%20Rights\%20Impact\%20Assessment\%20for\%20AI_pdf$

Nejadgholi Nejadgholi, I., Molamohammadi, M., Missaghi, K., and Bakhtawar, S. (20204a). Human-Centered AI Applications for Canada's Immigration Settlement Sector. https://arxiv.org/abs/2409.01461

Nejadgholi, I., Molamohammadi, M., and Bakhtawar, S. (2024b). Social and Ethical Risks Posed by General-Purpose LLMs for Settling Newcomers in Canada. https://doi.org/10.48550/arXiv.2407.20240

Office of the Information and Privacy Commissioner of Alberta. (2023). Guidance for Small Custodians on the Use of Artificial Intelligence. https://oipc.ab.ca/wp-content/uploads/2023/12/Guidance-for-Small-Custodians-on-the-use-of-Artificial-Intelligence-November-2023.pdf

O'Grady, E. (2024). Why AI fairness conversations must include disabled people. The Harvard Gazette. https://news.harvard.edu/gazette/story/2024/04/why-ai-fairness-conversations-must-include-disabled-people/

Ojwang, F. (2022). Accelerating integration of immigrants using artificial intelligence-driven solutions: The panacea for integration gaps in Finland. Technium Social Sciences Journal, 33, 549-568. https://doi.org/10.47577/tssj.v33i1.6794

Peel Newcomer Strategy Group. (n.d.). Learning Series on Artificial Intelligence for the Newcomer-Serving Sector. https://peelnewcomer.org/digital-equity-and-inclusion

Ren and Wierman. (2024). The Uneven Distribution of Al's Environmental Impacts. Harvard Business Review, July 15. https://hbr.org/2024/07/the-uneven-distribution-of-ais-environmental-impacts

Roshan, H. (2024). Exploring AI-Powered Migration Management in Canada through the Prisms of Algorithmic Governmentality, Technosolutionism, and Critical Data Studies. Working Paper for Canada Excellence Research Chair in Migration & Integration, Toronto Metropolitan University. https://www.torontomu.ca/content/dam/centre-for-immigration-and-settlement/tmcis/publications/workingpapers/2024-01-wp-roshan.pdf

Shankar, S. (2024). Caring for newcomer communities and their data: an inquiry into interdependence in information practices. PhD Dissertation, University of British Columbia. https://open.library.ubc.ca/media/stream/pdf/24/1.0429366/3

Statistics Canada. (2024). Survey of Digital Technology and Internet Use, 2023. https://www150.statcan.gc.ca/n1/daily-quotidien/240917/dq240917c-eng.htm

Sydoruk, T. (2024). How AI Can Reduce Unemployment Rate among Vulnerable Populations of New Immigrants: Assimilation Issues Resolved with AI. Economics and Education, 9(2), 20-25. https://doi.org/10.30525/2500-946X/2024-2-3

TechSoup. (2024). Harness the Power of Generative AI for Good. https://www.youtube.com/watch?v=zL6MRJcVFNk&t=82s

Toronto South Local Immigration Partnership. (2024). Navigating AI: Exploring Fundamentals and Applications in Service Delivery. https://www.youtube.com/watch?v=NL_iDpPlXQ8&t=5s

Turin, J. (2023). Artificial intelligence and its impact on the human rights of persons with disabilities. https://ennhri.org/news-and-blog/artificial-intelligence-and-its-impact-on-the-human-rights-of-persons-with-disabilities/