



# Impact of Technology Services in Ontario Public Libraries

## Bridge 2021/2022 Report

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Prepared by Nordicity and Toronto Public Library



# Contents

<b>The Vision</b> .....	<b>4</b>
Library Impact Ontario	4
Our suite of free services	5
<b>Project History</b> .....	<b>6</b>
The Role of Ontario Public Libraries	8
The Challenge and Opportunity	9
Actionable Data to Match Library Technology Services to (Evolving) Community Needs	10
<b>Report Findings</b> .....	<b>11</b>
<b>2021-2022 Project Methodology and Participation</b> . . .	<b>12</b>
What technology services does Bridge measure?	12
How does Bridge collect data?	13
Who participated in this data cycle?	13
<b>Contextual Factors</b> .....	<b>14</b>
COVID-19 Pandemic	14
Collective Advocacy	16
Report Objectives	18
<b>Patron Survey</b> .....	<b>19</b>
The Framework	19
Digital Inclusion & Equitable Access	20
Digital Literacy & Adoption	21
Community, Social & Civic Engagement	22
Creativity and Innovation	23
Entrepreneurship and Business	23
Workforce Development	24
<b>Staff Survey</b> .....	<b>25</b>
Summary Key Findings	25
<b>Availability and Usage</b> .....	<b>26</b>
Summary Key Findings	26
<b>Observations and Key Learnings</b> .....	<b>28</b>
Bridge Patron Survey	28
Staff Survey	28
Availability and Usage	29
<b>Recommendations</b> .....	<b>29</b>
<b>Acknowledgements</b> .....	<b>30</b>

## The Vision

That every Ontarian deserves convenient local access to the technology they want and need, and the comfort and confidence to use it, so they can access economic, educational, social, health and civic opportunities to achieve prosperity, advancement and overall well-being.

Since its inception in 2016, Bridge has evolved from a pilot project focused on developing an effective data collection and reporting tool, to a sustainable suite of data services and solutions – now called Library Impact Ontario. The data findings in this report are focused on results from the Bridge Data Solution Platform, gathered by participating Ontario libraries in 2021 and 2022.



Your library makes an impact.

We help you demonstrate it.

### Library Impact Ontario

Library Impact Ontario is an initiative that brings together Ontario public libraries to leverage data analytics, insights and training in order to advocate for the impact their digital services have on their communities.

Developed and supported by Toronto Public Library, a trusted industry leader in digital equity and inclusion, Library Impact Ontario helps libraries:

- **gain valuable insights** into technology impact;
- **make data-informed decisions** about the technology services libraries provide;
- **connect with similar libraries** to identify service gaps and leverage standardized comparable data for collective advocacy; and
- **build staff confidence**, regardless of their skill level.

### Together, libraries make the difference.

Library Impact Ontario is a coalition of libraries working together for a common goal, leveraging data to ensure responsive, adaptable and thriving libraries for everyone.

## Our suite of free services



**Bridge** provides libraries with an innovative, automated and practical data solution platform to help them measure the value and impact of their technology services. Bridge utilizes outcome measurement to empower libraries with evidence and insight through data dashboards, surveys and reports.

Partnering with libraries across Ontario, Bridge helps public libraries:

- **measure equity and demonstrate impact** to drive digital inclusion and respond to community needs;
- **provide critical feedback** to manage technology resources more efficiently and effectively, fostering continuous improvement and data-driven decision-making support; and
- **empower advocacy and accountability** in reporting requirements, with implications for meeting strategic priorities and securing sustainable funding.



Library Impact Ontario's data literacy learning and support services empower participating libraries with basic data skills, enable one-on-one connections, and provide networking opportunities for support and collaboration to ensure library success. During the 2021-2022 period, Library Impact Ontario provided Edge peer learning cohort programs developed by Urban Public Library Council as part of these services.

## Project History

Bridge has evolved since its launch in 2016, passing through distinct phases into its current iteration as the Library Impact Ontario initiative. Each phase engaged different levels of participation by Ontario public libraries, depending on their capacity, and culminated in a published report with findings and results for each phase.

### Phase 1 – Bridge Project Pilot (2017-2018)

In 2016, TPL engaged Nordicity to consult and collect relevant research on the needs of Ontario public libraries in the provision of technology services. The outcome of this consultation was the Bridge Project Pilot and the Bridge data solution platform. Phase 1 of the project included a pilot implementation of Bridge with the participation of **8 Ontario public libraries** in 2017. The data results were published in the report entitled <https://www.torontopubliclibrary.ca/content/bridge/pdfs/nordicity-full-report.pdf>

### Phase 2 – Bridge Project Beta (2019-2020)

Phase 2 of the Bridge project focused on improving the data solution platform and expanding library participation in the initiative. During this period, TPL and Nordicity assessed the Bridge Patron Survey data collected throughout 2019 from **38 Ontario public libraries** that contributed data, producing the report <https://www.torontopubliclibrary.ca/content/bridge/pdfs/meaningful-access-how-bridge-helps-reposition-the-public-library.pdf>. The main goals of this analysis were to understand and demonstrate the measurable effects of technology services at participating library systems, as well as identify areas of improvement. Recommendations focused specifically on data collection, analytics, and the overall user experience.

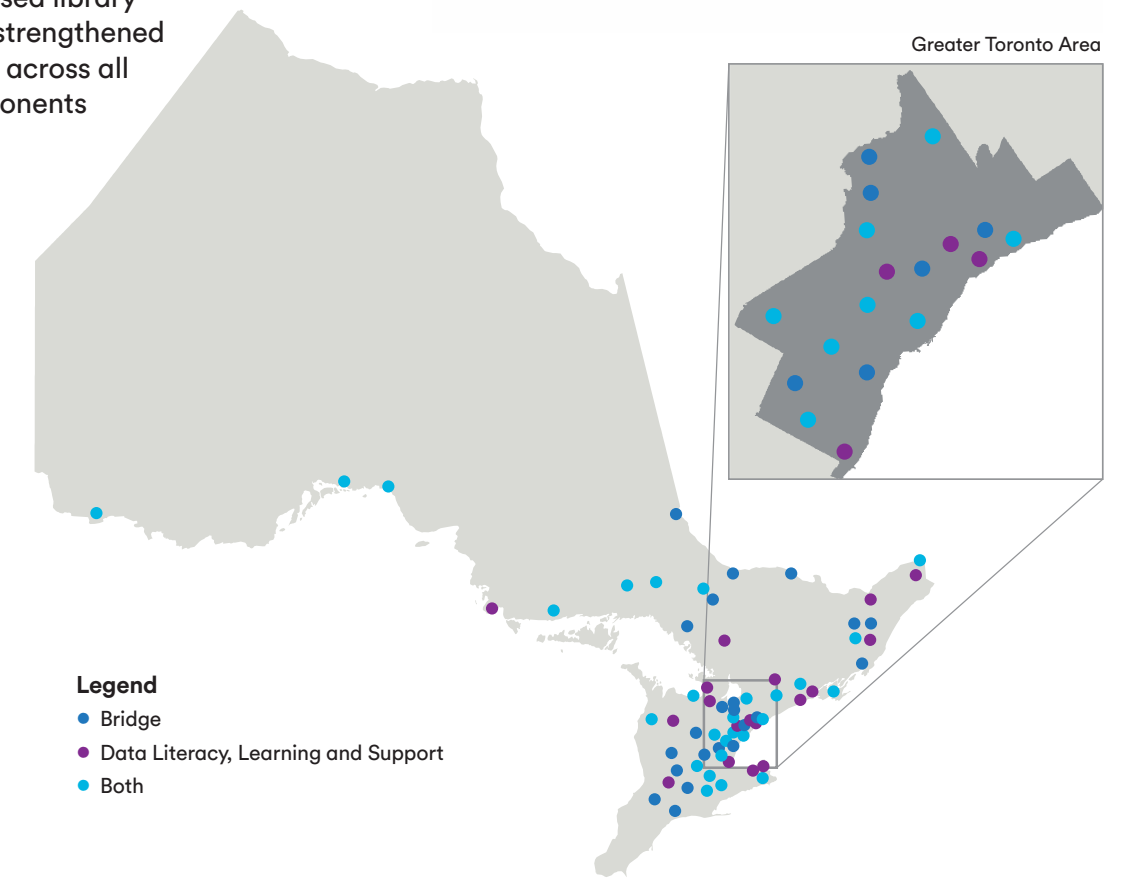
### Phase 3 - Library Impact Ontario (2021-2022)

During the 2021-2022 period, the Bridge Project evolved into Library Impact Ontario and expanded to include other tools and supports, including data literacy and learning for participating libraries. These additional services came out of direct feedback from previous participating libraries, and from recommendations from the 2019 report, to help build data enablement skills in library staff and provide guided support.

As a result of these increased levels of support and opportunities for peer-to-peer learning, the project saw increased library participation and strengthened data contributions across all three Bridge components (Patron Survey, Staff Survey, and Availability and Usage Indicators). Of the 67 participating libraries, **26 contributed Bridge data**.

#### Mapping participation

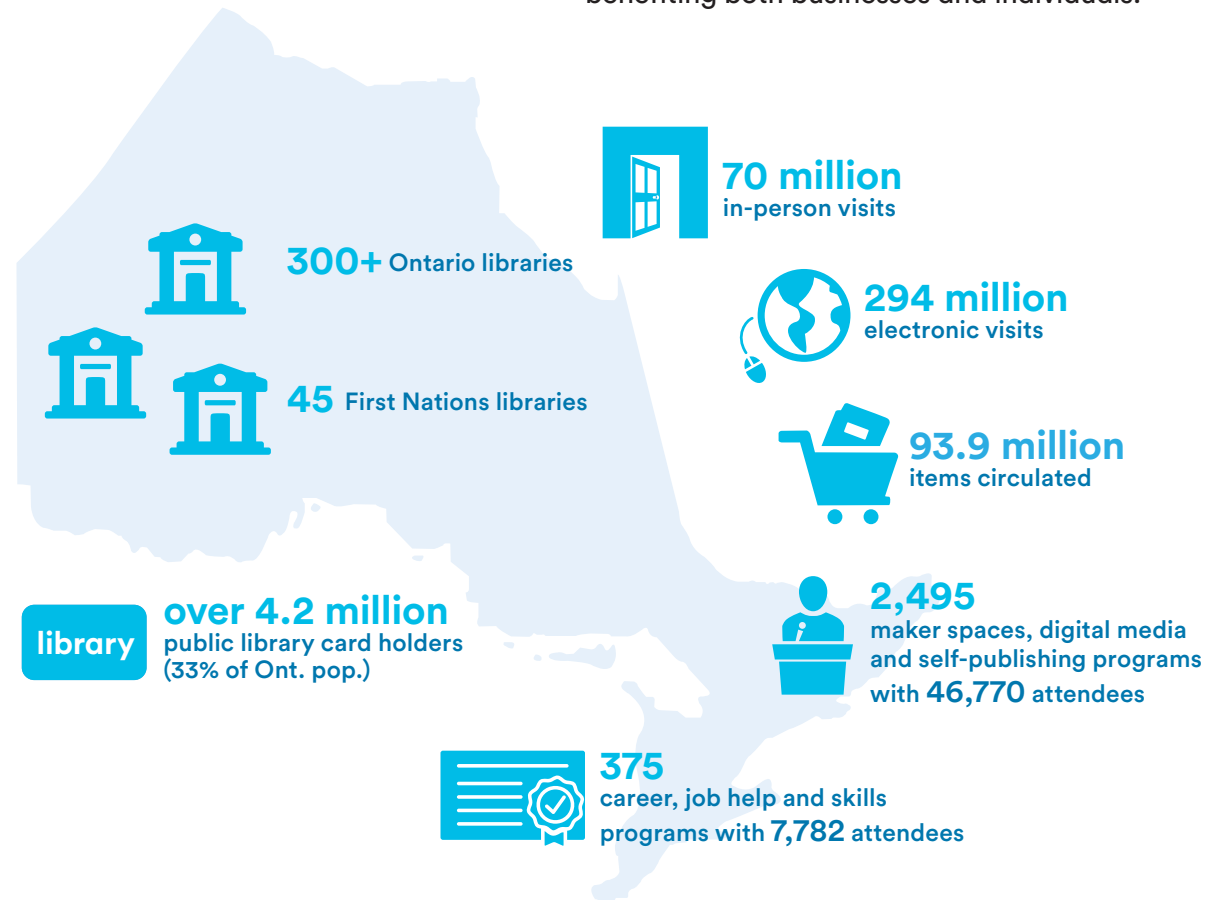
During the 2021-2022 period, 67 libraries used one or all of Library Impact Ontario's suite of services. Of those, 26 participated in Bridge, 17 participated in Data Literacy, Learning and Support, and 26 participated in both.



## The Role of Ontario Public Libraries

For many Ontarians, public libraries are the primary, and often only, access point for a variety of technology resources. With their unique mandate and reach, physical and technical infrastructure, staff expertise and local community presence, public libraries play a critical role in addressing the digital divide. As shown in the figure below, public libraries across the province are providing essential technology services to millions of Ontarians each year.<sup>1</sup>

Public libraries excel in providing information and skills to diverse individuals of all ages and backgrounds. They play a crucial role in addressing digital inclusion and literacy within their communities. Libraries offer access to the Internet, as well as to a wide range of basic and emerging equipment and technologies. Through these services, libraries foster digital comfort and skills development, and support social connections, civic engagement and democracy. Public libraries also drive economic growth and innovation by offering emerging technology services, entrepreneurial support, and market insights. They enable lifelong learning through digital platforms and technology training courses, benefiting both businesses and individuals.



<sup>1</sup> Government of Ontario. (2021) Ontario Public Library Statistics. Retrieved from [www.ontario.ca/page/ontario-public-libraries](https://www.ontario.ca/page/ontario-public-libraries)

## The Challenge and Opportunity

Bridge has the potential to position the public library sector in Ontario as a leader in the advancement of standardized comparable outcome measurement practices across geographic boundaries within the digital landscape.

In today's society, digital proficiency and access to technology are vital for social and economic advancement. Without these resources and skills, individuals risk exclusion from essential opportunities and achievements, creating a digital divide. Digital inclusion and literacy are now fundamental prerequisites for active participation in various aspects of life, whether personal, civic, social, or professional. Despite widespread broadband and mobile availability, connectivity gaps persist due to affordability and limited options, particularly affecting rural, remote, and low-income communities, including First Nations. Although libraries have made great progress in advancing digital inclusion and literacy, there is still a long way to go before digital equity can be achieved, and everyone is included in the digital world. As digital technology increasingly influences personal and professional growth, the challenge facing Ontario communities lies in providing equitable access to connectivity, up-to-date technologies, and training and support for full societal and economic integration.



### Digital Divide

The digital divide is the gap between those who have affordable access, skills, and support to effectively engage online and those who do not. As technology constantly evolves, the digital divide prevents equal participation and opportunity in all parts of life, disproportionately affecting people of color, Indigenous peoples, households with low incomes, people with disabilities, people in rural areas, and older adults.<sup>2</sup>

### Digital Inclusion

Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies (ICTs). Digital Inclusion must evolve as technology advances. Digital Inclusion requires intentional strategies and investments to reduce and eliminate historical, institutional and structural barriers to access and use technology.<sup>3</sup>

<sup>2</sup> National Digital Inclusion Alliance (n.d.) Definitions. Retrieved from <https://www.digitalinclusion.org/definitions/>

<sup>3</sup> Ibid

### Digital Equity

Digital Equity is a condition in which all individuals and communities have the information technology capacity needed for full participation in our society, democracy, and economy. Digital equity is necessary for civic and cultural participation, employment, lifelong learning, and access to essential services. It is important to note here the use of “equity” vs. “equality.” When we use the word equity, we accurately acknowledge the systemic barriers that must be dismantled before achieving equality for all.<sup>4</sup>

### Digital Literacy

Digital Literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.<sup>5</sup>

4 National Digital Inclusion Alliance (n.d.) Definitions. Retrieved from <https://www.digitalinclusion.org/definitions/>

5 American Library Association. (2012). ALA Connect Website, Digital Literacy Definition. Retrieved from <https://literacy.ala.org/digital-literacy/>

## Actionable Data to Match Library Technology Services to (Evolving) Community Needs

Technology services are rapidly becoming more sophisticated and varied, and public libraries continue to adapt to evolving ways of learning, creating and interacting with information. At the same time, the needs of each community in Ontario are vastly different. To develop responsive technology services, public libraries must plan services with their specific communities’ needs in mind, track the delivery and update of those services and consult patrons on their experiences.

Each step of this service delivery process should be driven by evidence. To achieve this aim, libraries must have access to current, reliable and actionable data, such as participation rates in technology training programs, or feedback from patrons on the activities they engage in through the available technology services at their local branch. A framework for measurement and evaluation enables informed decision-making, and easy-to-implement tools allow public library systems of all sizes and resource capacities to use data and patron feedback to better meet the specific needs of their communities.

A consistent, widely adopted approach also has the added benefit of comparability – public library systems would be able to track changes in performance over time and benchmark their technology services to those delivered by their peers across the province. Finally, access to reliable, timely and relevant data helps demonstrate the value of investments in technology to stakeholders.



## Report Findings



## 2021-2022 Project Methodology and Participation

### What technology services does Bridge measure?

Bridge enables libraries to collect and analyze various types of data to assess their technology services. This helps them prepare stakeholder reports and surveys, identify gaps, highlight strengths, and compare their performance over time or with peer libraries in Ontario (based on size or region). Bridge measures technology services across three technology categories:

**Connecting to Internet:** This category focuses on technology services related to Internet access at or through the library, including WiFi connectivity.

**Equipment and Software:** This category encompasses technology services that involve hardware, software, and technology equipment, such as lending laptops and tablets for general use.

**Digital Literacy Classes and Support:** This category pertains to technology services that provide structured classes, workshops, and one-on-one support to improve digital literacy skills, such as basic computer skills and digital design.

### How does Bridge collect data?

Bridge consists of three essential components that collect, measure and evaluate the impact of technology services on digital inclusion.

**Patron Survey:** This component involves collecting feedback directly from library users regarding their experiences with technology services to demonstrate how technology through the library changes lives. It helps assess the effectiveness of current services, identify areas for improvement, and gather valuable insights into users' digital needs and preferences. It further collects reasons for non-use, open qualitative feedback and voluntary equity data.

**Staff Survey:** This component allows library staff members to provide their perspectives on technology services. They can offer insights into the challenges faced while delivering services, identify training needs, and provide suggestions for enhancing the overall technology infrastructure and support within the library.

**Availability and Usage Indicators:** This component involves tracking data related to the availability and usage of technology services, such as the number of computers available, Internet access speed and digital resources accessed by patrons. These indicators help measure the utilization of technology services and identify patterns and trends in digital inclusion efforts.

### Who participated in this data cycle?

Bridge collected data from its three data components from August 2021 to December 2022 to assess library technology service impact in Ontario public library systems. By considering all three components together, the library can gain a comprehensive understanding of its role in digital inclusion. Patron insights from surveys, coupled with data on service delivery and inventory, provide a well-rounded perspective on the impact of technology services. This holistic approach allows the libraries to make informed decisions, allocate resources effectively, and continuously improve digital inclusion initiatives to better serve the communities they support.

Since the last report's release, Toronto Public Library has successfully implemented several key recommendations, leading to notable enhancements in data collection, analytics, and user engagement. The 2021/2022 report consists of the following data from:

#### Patron Survey

- 26 library systems in Ontario contributed data and a total of 17,169 responses were collected. (Aug 2021 to Dec 2022)

#### Staff Survey

- 21 library systems in Ontario contributed data and a total of 3,440 responses were collected. (Sept 2021 to Dec 2022)

#### Availability and Usage Indicators

- 23 library systems in Ontario contributed data and a total of 26 data metrics were collected. (Aug 2021 to Dec 2022)



## Contextual Factors

Two contextual factors emerged in our analysis that provide meaningful background and highlight relevant circumstances related to the report findings and objectives.

### COVID-19 Pandemic

Public libraries in Ontario have emerged as crucial pillars in delivering essential technology services, as demonstrated by data from Bridge. Their significance has been magnified and tested during the pandemic and throughout the subsequent recovery period. Bridge Patron Survey respondents were given the opportunity to provide open-text feedback, and many individuals emphasized the essential role played by library technology services during the pandemic. Respondents mentioned using library printing services for various health-related documents, such as COVID-19 vaccine certificates, health questionnaires, and other forms. Others praised the continued provision of Internet connectivity by libraries. Some mentioned connecting to library WiFi from outside the facilities during government-mandated closures, while others utilized borrowed hotspot devices in their homes. This qualitative data from Bridge provides important insights that make the platform essential for demonstrating public library impact.

During the spring of 2020, around 70% of Ontario libraries reported a reduced workforce, and 50% had to lay off or furlough staff.<sup>6</sup> The Bridge data indicates that these staffing challenges persisted throughout 2021, affecting library operations. Despite these obstacles, libraries swiftly transitioned to virtual operations, ensuring the continuation of essential services and programs for their communities. Throughout this period, libraries showcased their innovation. For example, Toronto Public Library pioneered the concept of a branch-based food bank, Stratford Public

Library partnered with United Way to disseminate public health information, and Hamilton Public Library's drivers conducted health check-ups across the city.<sup>7</sup> Additionally, many libraries offered curbside services for holds, pick-ups, and drop-offs of materials, along with providing access to computers and public washrooms. Several libraries even utilized their 3D printers to create personal protective equipment (PPE) in support of public health efforts.

In a time when many communities faced challenges in accessing basic technologies and alternative public spaces, libraries played a vital role in supporting their communities. Ontario's libraries have not only adapted to new realities but have also showcased remarkable flexibility and resilience amidst changing regulations. It's important to recognize the invaluable contributions of public libraries in Ontario during the pandemic, highlighting their innovative approaches, vital services, and unwavering commitment to their communities.

<sup>6</sup> Ontario Library Association. (2020, June). Ontario Public Library Response to COVID-19. Retrieved from <https://accessola.com/wp-content/uploads/2020/08/2020-06-PLResponsetoCOVID-19-SurveyReport.pdf>

<sup>7</sup> Federation of Ontario Public Libraries. (2020, March 30). COVID-19 Innovations in Ontario's Public Libraries. Retrieved from <http://fopl.ca/news/covid-19-innovations-in-ontarios-public-libraries/>





## Collective Advocacy

This report highlights the multifaceted role of libraries, extending beyond the provision of informational resources to patrons. Particularly during the COVID-19 pandemic, libraries' array of technology services has significantly contributed to individual and community outcomes. The participation and engagement of 67 libraries in Library Impact Ontario through these challenges underscore the importance of and interest in data support within Ontario libraries. By uniting and embracing additional responsibilities despite staff and capacity limitations, libraries have demonstrated the strength and significance of collective advocacy, exemplified by the success of Library Impact Ontario.

By collaborating with other libraries and learning from successful models implemented, each institution can improve its own practices and tailor them to the specific needs of its community. This fosters the development of strong networks and partnerships within Ontario. Building these relationships with libraries enables the establishment of a comprehensive support system for digital inclusion efforts, engagement in joint initiatives, and coordinated efforts for maximum impact. Collaboration facilitates a deeper understanding of community needs and challenges related to digital inclusion.

Moving forward, enhanced partnership and collaboration among Ontario libraries can amplify library impact, facilitating the benchmarking of robust standardized data comparisons. The sustained and widespread use of Bridge is crucial for meaningful data storytelling. With substantial data across all three Bridge components — Patron Survey, Staff Survey, and Availability and Usage Indicators — libraries can demonstrate impact and powerfully advocate for their value and sustainability.

## Bridge in action

Participating Ontario libraries have effectively leveraged the services offered by Bridge, utilizing data to inform action plans, needs assessments, and digital strategies. Markham Public Library, Milton Public Library, and Marathon Public Library serve as notable examples, showcasing how Bridge has shaped their technology services and empowered data-driven decision-making.

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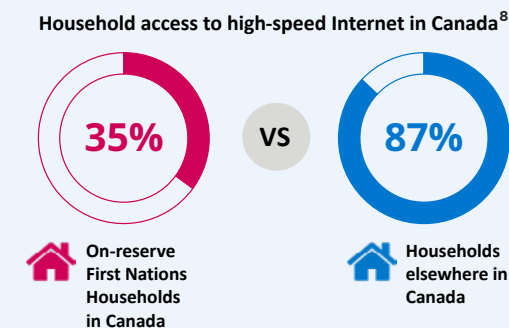
Markham Public Library has been a proud contributor to the Bridge Project since 2019. Bridge directly speaks to Markham Public Library's outcomes with our Digital Literacy Strategy and allows us to support those important goals in our reporting and communication with stakeholders. Without Bridge we wouldn't be able to have direct comparators for access and literacy with other libraries in Ontario. It is so helpful, empowering and inspiring to see the work the library does through access to technology, through Makerspaces and through staff instruction and knowledge collected through one reporting interface.

Markham Public Library (2022)

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## First Nations Libraries

In addition to understanding how the Ontario public library sector was affected by the pandemic, this report seeks to understand the unique experiences of Indigenous communities and the role of their public libraries. Nordicity conducted interviews with a selection of First Nations librarians to understand the specific needs of these facilities and their patrons. The COVID-19 pandemic disproportionately impacted Indigenous communities across Canada. Systemic economic and social inequities magnified the effects of the pandemic, highlighted already significant gaps, and widened the digital divide. For public libraries in Indigenous communities, the pandemic compounded ongoing funding and capacity challenges. Public libraries in First Nations communities, as in communities Ontario-wide, are key providers of technology services and digital resources. Many homes on First Nations reserves do not have the same quality of access to Internet or digital devices as elsewhere in the province and libraries help fill this gap by providing access to broadband, computers, and online information. Only 35% of households in First Nations reserves have access to high-speed Internet compared with 87% of households elsewhere in Canada. The First Nations libraries consulted recognized the increased relevance of digital knowledge and skills, both for their community members and their staff teams. The interest and motivation exist, but First Nations libraries cannot advance in this area without adequate support.



<sup>8</sup> Collier, Brittany. (2021, December 8). Broadband Internet in Indigenous Communities. Library of Parliament. Retrieved from <https://hillnotes.ca/2021/12/08/broadband-internet-in-indigenous-communities/>

“

The Bridge Toolkit provided us access to Patron and Staff Surveys that guided our future technological needs and helped us understand where we stand compared to other library systems. I am particularly impressed by how various meetings and workshops were organized to educate library staff throughout the implementation process.

Milton Public Library (2022)

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As a rural library, the Bridge program has helped us better understand patron experiences with our technology services. Bridge is an invaluable resource for small and rural libraries, which are often limited in what services they can offer; providing clear insight into what is working and what needs improvement.

Marathon Public Library (2021)

”

## Toronto Public Library's Leadership Role

The valuable impact of the Bridge platform on Ontario's libraries is evident through the experiences provided in this report. As the Toronto Public Library (TPL) continues to engage public libraries in Bridge through its advocacy efforts, there is an opportunity to build momentum and expand reach, thereby reinforcing the collective impact of libraries and advancing Ontario's journey toward digital inclusivity. Furthermore, TPL deserves recognition as the creator of the Bridge data solution platform in 2016, assuming a pivotal leadership role in fostering collaboration among libraries to enhance their data and digital objectives. TPL's dedication to advancing and automating outcome and performance measurement in the public library sector benefits all public libraries, as robust and reliable data allows libraries to articulate a compelling narrative about their collective impact.

## Report Objectives

In an era of rapid technological advancements, the role of public libraries in Ontario has undergone a profound transformation. This report delves into the impact of Ontario public library technology on library patrons, shedding light on the crucial link between technology and patron experiences. The report aims to:

1. Analyze the primary and secondary outcomes of the Bridge Patron Survey, to evaluate how technological advancements have shaped the library landscape and the benefits they offer to the community.
2. Emphasize the significance of staff digital enablement in the ever-evolving digital inclusion landscape. Through the Bridge Staff Survey, the report explores the importance of equipping library staff with digital skills and resources to provide the highest quality customer service that the community deserves and needs.
3. Gain a comprehensive understanding of the technological ecosystem within Ontario library systems. This report examines the overall availability inventory, and usage of technology services.

## Patron Survey

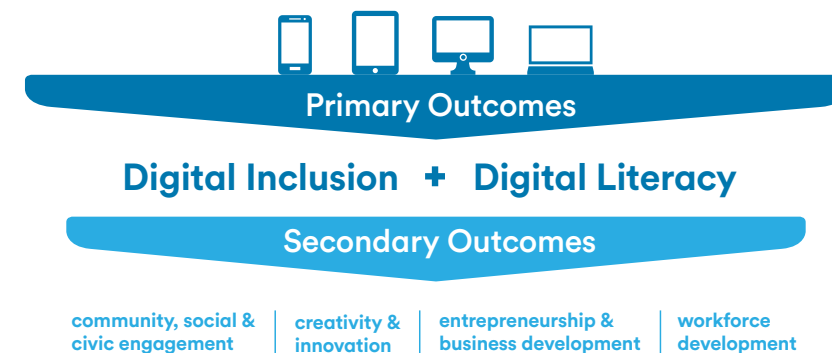
### The Framework

#### Outcomes, Impacts and Opportunities to Close the Gaps

One of the primary objectives of the research and consultation conducted in the project was to determine outcomes that would reflect the range of technology services offered by public libraries across Ontario, and how these services benefit Ontarians.

The framework developed is two-tiered. Providing **digital inclusion** through access to technology and **digital literacy** through skills training are the primary outcomes of the technology services offered by public libraries. These outcomes, in turn, enable a range of secondary outcomes, namely:

- **Community, social and civic engagement:** Increased community cohesion, and social and civic participation;
- **Creativity and innovation:** Engagement in the creative process enabling self-expression, and creative and innovative content;
- **Entrepreneurship and business development:** Support to start, manage, and grow small businesses which support employment;
- **Workforce development:** Preparation of job-seekers for the workforce through educational activities, employment, professional development and lifelong learning opportunities.



Together, these two primary and four secondary outcomes create a framework to measure and benchmark how technology access in public libraries improves the lives of residents across Ontario while advancing the broader impact of government strategies and programs.

This framework serves as the structural basis of the Bridge Patron Survey, allowing public libraries across Ontario to measure service performance and outcomes in each area in a way that is streamlined and comparable. Bridge also helps libraries understand and demonstrate not only how technology services directly benefit residents of their communities, but how these services align with and support social and economic priorities at multiple levels of governments.

*Libraries are essential to building digitally inclusive communities, bridging inequities to technology access.*

### Digital Inclusion & Equitable Access

The preliminary results suggest that most people who use library technology services would not otherwise have had access to at least some of that technology. More strikingly, a vast majority of the patrons who use technology services use them to access the Internet at or through the library, when they would not otherwise have been able to do so. Therefore, it appears that public libraries in Ontario make a significant contribution to bridging inequities of access to technology.

#### Overall top technology reported used

**77%** WiFi

**32%** library workstation

**12%** laptop or tablet

#### Respondents who would not have otherwise had access to technology:

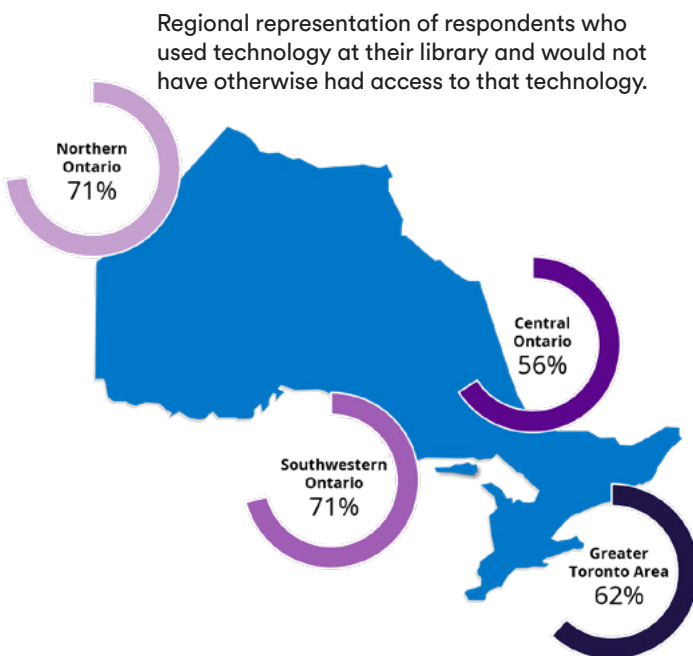
**61%** used technology at the library

75% among Indigenous patrons

73% among low-income households

71% among patrons in Northern and Southwestern Ontario

**81%** accessed the Internet at or through the library



*Libraries are responsive in supporting digital literacy in their communities.*

### Digital Literacy & Adoption

Public libraries facilitate the development of digital literacy that is critical to living and working in the digital age, especially for those most vulnerable. Ontario public libraries not only play a role in introducing patrons to new technologies, but the high rate of longer-term adoption indicates that these new technologies continue to be relevant to patrons even after their initial introduction.

**82%** of respondents reported increased digital comfort after using one or more service

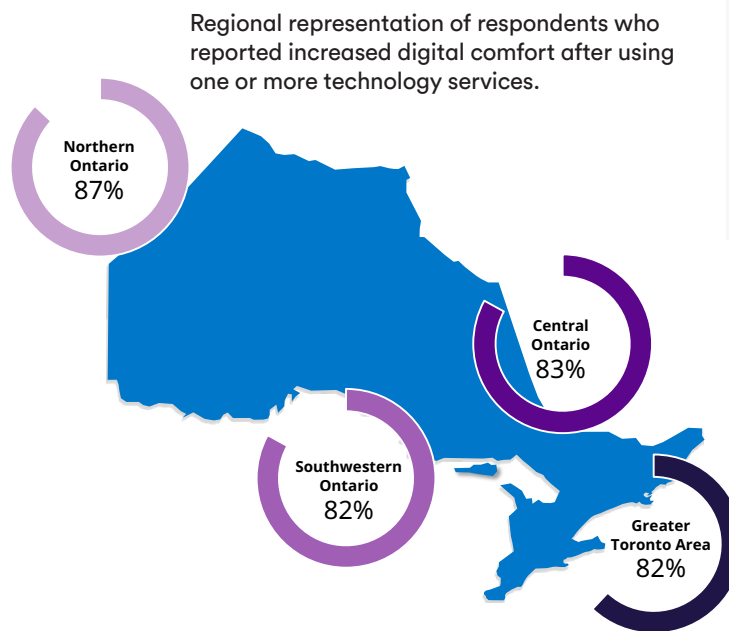
90% among Indigenous patrons

87% among immigrant patrons

87% among patrons in Northern Ontario

**29%** of respondents who used technology services were introduced to new technology

90% of those introduced to new technology continued to use it

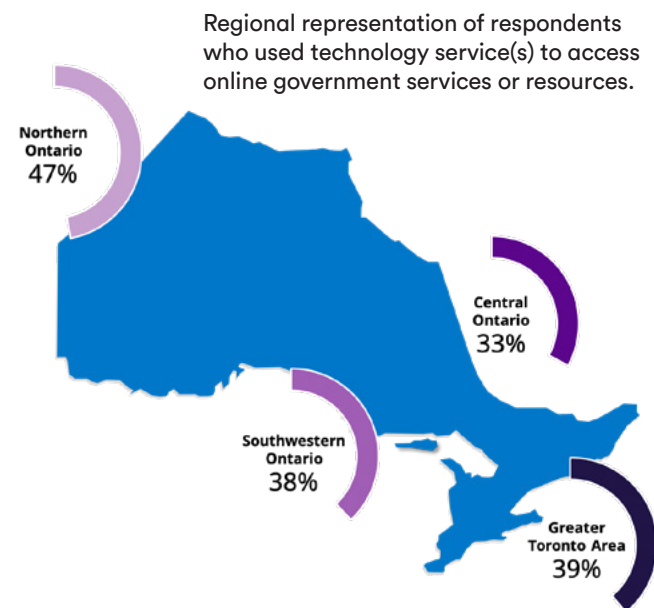


## Secondary Outcomes

*Libraries enable patrons to establish and maintain meaningful connections and provide critical access to public resources.*

### Community, Social & Civic Engagement

Activities associated with community, social and civic engagement span the full range of technology services. For example, through Internet access patrons are able to connect with friends and family, thus increasing their levels of social engagement. Similarly, accessing digital information resources using library technology helps patrons learn more about their local news and community events, thereby increasing their levels of community engagement. With the shift to digital and the pandemic, the need to have access to government resources online has been heightened, especially for vulnerable populations and equity-deserving groups, as the data indicates.



**73%** of respondents reported increased levels of community engagement

Top activities were **learning about current news/event** and **volunteering opportunities**.

**71%** of respondents reported increased levels of social engagement

Top activities were **communicating with friends and family** and **learning new skills**.

**37%** of respondents had used technology service(s) to access online government services or resources

**57%** among Indigenous patrons  
**51%** among low-income households  
**50%** among patrons with disabilities  
**47%** among patrons in Northern Ontario

The top activities were **obtaining and submitting government forms online** and **learning about services or programs**.

## Secondary Outcomes

*Libraries foster ideation and creative expression.*

### Creativity and Innovation

Public libraries are at the forefront of providing cutting-edge creative tools to amateur and professional creators alike. Digital tools and supports at public libraries foster creativity and innovation, in part through enabling collaborations and introducing community members to the potential of digital tools to advance creativity and innovation.

**27%** of respondents used technology service(s) to make a creative products

**45%** among Indigenous patrons  
**38%** among trans, non-binary and Two-Spirit patrons  
**33%** among patrons with disabilities  
 Top activities were **writing, film/video production, multimedia production** and **3D modeling**.

*Libraries provide essential supports for small businesses and entrepreneurs.*

### Entrepreneurship and Business

Digital literacy is foundational to participating in the knowledge economy. The public library's role in supporting entrepreneurship extends beyond basic digital skills training. Much support is available at libraries where staff direct patrons to appropriate business-related resources and help them navigate regulatory requirements online. Some public libraries also run programs that target business skills, many of which incorporate technology services including both on-site and virtual business resources. Public libraries also provide access to work spaces, which have the potential to spark networking and collaborations among the small businesses and entrepreneurs that use library services to start, manage or expand their businesses.

**15%** of respondents used technology service(s) for business-related activities

**91%** of these businesses employed fewer than 20 employees  
 The top activities were **performing business-related research** and **managing an existing business**.

## Secondary Outcomes

*Libraries facilitate education, enable employable skills and support the various stages of the job search process.*

### Workforce Development

In addition to providing opportunities for patrons to learn about technology (i.e., digital literacy), public libraries allow patrons to learn through technology. Technology services at public libraries assist people of all ages in updating their skills, finding work and excelling academically and professionally in a connected world. The technology access provided by the library to help patrons with their job search skills in employment success.

**55%** of respondents used the technology service(s) for educational activities

- 67% among trans, non-binary and Two-Spirit patrons
- 61% among immigrant patrons
- 60% among racialized patrons
- 60% among low-income households

Top activities were **coursework or homework** followed by **taking an online class or workshop**, and **learning about a degree or certificate program**.

**31%** of respondents used the technology service(s) to develop employable skills

- 40% among Indigenous patrons
  - 37% among low-income households
  - 37% among immigrant patrons
- Technical skills** was the most common skill developed

**24%** of respondents used the technology service(s) to develop job search skills

- 38% among Indigenous patrons
  - 37% among low-income households
  - 30% among patrons with disabilities
- Accessing job boards and listings, finding information about a profession, and resume building** were the most common skills developed.

**49%** of respondents who used the technology service(s) to improve their job skills were successful in landing employment.

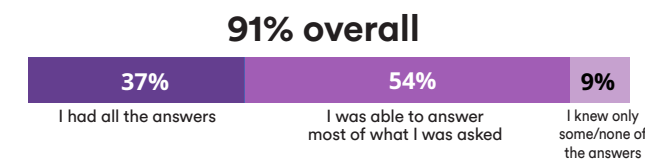
## Staff Survey

### Summary Key Findings

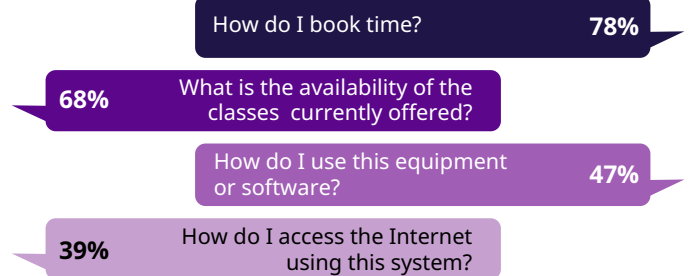
Staff play a crucial role in supporting digital literacy and digital inclusion outcomes since they serve as the front-line facilitators of library technology for patrons. Staff activities range from teaching classes to one-on-one support, as well as responding to general technology-related questions such as what types of technology services are available. Understandably, when staff lack confidence and proficiency in the provision of digital services, it may hamper library efforts to achieve primary outcomes for patrons. The Staff Survey, with 3,440 responses from staff at 21 different libraries, captured the ways in which library staff provide support to patrons.

The Bridge 2021/2022 Staff Survey revealed encouraging results regarding library staff comfort levels in providing technology support. **A remarkable 91% of respondents reported being fully equipped to handle all (37%) or most (54%) inquiries, including having access to the necessary resources to address them.** These

### Staff comfort in providing technology



**i** Library staff were most commonly asked **“how to”** and **“availability”** questions by patrons.



findings indicate that library staff are well-prepared to meet the technological demands of patrons.

The Bridge Staff Survey also asked staff about the types of questions most frequently posed by patrons, which were those related to how to use technology and the availability of technology.

Results from the staff survey also suggest that there is high patron demand for one-on-one support from staff, with 61% of respondents reporting that they provided this service.

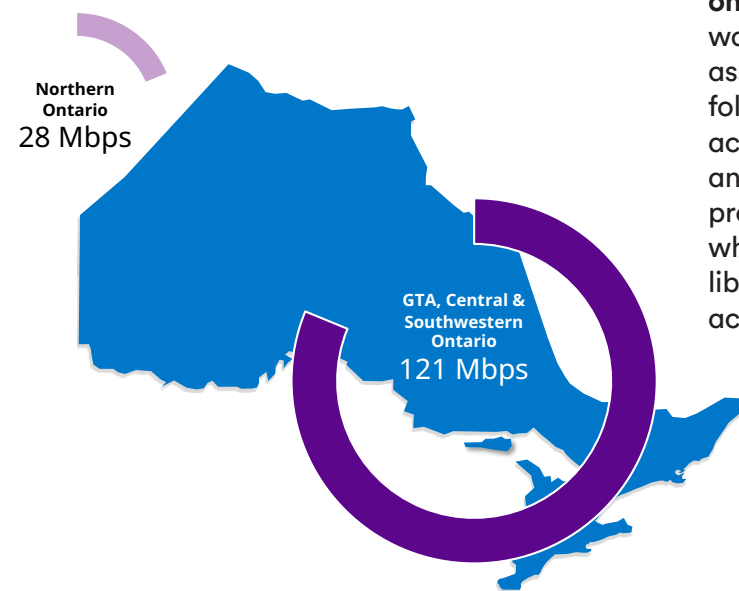
Staff were also asked what they would need to improve their ability to answer patron questions. Overall, more training on technology services was the most frequently reported answer (38%), followed by more time to use the services themselves (28%) and better documentation (26%). Staff respondents consistently reported a desire for more training, demonstrating staff interest in keeping pace with the rapidly changing digital landscape.

# Availability and Usage

## Summary Key Findings

The Bridge Availability and Usage Indicators collected data related to overall volume and uptake of technology services. A total of 23 library systems submitted responses across 26 data metrics. The Availability and Usage Indicators are reported by library staff in a number of key areas: WiFi bandwidth speed and usage by patrons; library hardware & software for patron use; and digital literacy programs. This data allows libraries to identify discrepancies in resource allocation and utilize standardized, comparable data to advocate for increased resources and sustained funding.

**In the case of WiFi, the average Northern Ontario in-branch wireless speed reported was 28 Mbps. In the rest of Ontario, in-branch wireless speed was reported to be an average of 121 Mbps.** This is a difference of over four times and suggests a discrepancy in average broadband speed access in rural versus urban Ontario libraries.



**Other types of devices** that were reported by libraries to be available are laptops and tablets, electronics, circuitry and robotics, audio-visual equipment, devices used for entertainment, and assistive technology equipment. Because laptops and tablets can have such a wide range of applications, their reported numbers are higher across library systems throughout Ontario.

Ontario library systems also offer a wide range of **digital literacy classes** for their patrons. Of the types of classes offered, digital design classes attract the highest enrollment rates, with a total of 8,433 users. Other popular classes include programming and coding, basic computer skills, and instruction on using Microsoft Office software. These statistics shed light on the specific areas of technology education that resonate with library patrons, allowing libraries to tailor their offerings to meet the demands and interests of their communities.

Availability and usage data related to **one-on-one** support provided by library staff to patrons was also collected. Library staff most frequently assisted their patrons with basic computer skills, followed by support for using web resources, accessing the library's electronic resources, and helping with mobile devices. These insights provide a deeper understanding of the areas in which library visitors seek assistance, enabling libraries to allocate resources and training accordingly to better serve their patrons.

## Top Digital Literacy Classes

- Digital design  
8433 users attended
- Programming and coding  
3281 users
- Basic computer skills  
2730 users
- Using MS Office software  
1652 users
- Accessing library resources  
1208 users

## Top Digital Literacy Supports

- Basic computer skills  
Offered by 7838 staff members
- Using web resources  
6534 staff
- Accessing library resources  
3160 staff
- Using mobile devices  
2871 staff
- Using email  
2560 staff



## Observations and Key Learnings

This report shows the continued impact libraries have on bridging the digital divide, enhancing digital literacy and increasing equitable access to technology for their communities and for the province. In particular, the findings suggest that equity-deserving groups gain more value from technology services than the general population, and see more positive outcomes. Libraries are seeing an increased need for these services particularly as their communities continue to recover from the COVID-19 pandemic.

We have also seen, through the Bridge results, that library systems across Ontario have benefited from increased opportunities for learning and collaboration with other libraries across Ontario. The report shows that the more libraries participate in Bridge, the richer and more meaningful data they can learn from and use. Libraries clearly demonstrated through this period that the Bridge platform – and Library Impact Ontario services more broadly – enabled cross-library learning and improved data practices that libraries were then able to tailor to the specific needs of their communities. These strong partnerships that Bridge fostered across Ontario’s public library systems enabled the establishment of a comprehensive support system for digital inclusion efforts, engagement in joint initiatives, and coordinated efforts for maximum impact. Collaboration also facilitated a deeper understanding of community needs and challenges related to digital inclusion and digital literacy.

### Bridge Patron Survey

The preliminary results suggest that most people who use library technology services would not otherwise have had access to at least some of that technology. This data shows the crucial role libraries play in connecting communities, especially some of Ontario’s most vulnerable, to digital services and digital literacy supports. Ontario public libraries not only play a role in introducing patrons to new technologies, but the high rate of longer-term adoption indicates that these new technologies continue to be relevant to patrons even after their initial introduction. Libraries also offer a wide range of exposure to new technologies, social engagement, civic connections, creativity and workforce development in ways that change lives and have lasting impact.

### Staff Survey

The findings from the Staff Survey suggest that library staff are getting more comfortable with providing support for technology services. The increased amount of data collected, as well as the increased number of participating library systems was particularly encouraging – especially so when considering that library systems were facing resource constraints during this period when the pandemic was still impacting resources and service levels.

Further data from the Bridge Staff Survey indicates the importance of digital enablement of library staff. By equipping their staff members with the necessary skills and confidence, libraries can ensure effective technology support for patrons.

To ensure library staff continue to be responsive to community needs, staff have to be equipped with the right tools, training and supports to deliver digital literacy training to their communities and to keep pace with the rapid evolution of technology. Therefore, it becomes essential for library leaders to prioritize workforce development and a culture of continuous improvement for their staff. In so doing, libraries can foster digital inclusion and create a more inclusive and accessible environment for all – both staff and patrons.

Given the ever-changing digital landscape, it is also crucial for libraries to work together and learn from each other in order to adapt, update, and maintain their essential technology services. Data storytelling requires sustained long term collaboration among a vast landscape of public libraries, from small rural to large urban. There needs to be a culture where technology and data literacy is normalized and prioritized in public library work.

### Availability and Usage

Data contributions from the Bridge Availability and Usage Indicators highlight uneven distribution of Internet bandwidth and technology services among library regions in Ontario. These barriers to access continue to contribute to the digital divide, particularly for small rural and First Nations libraries. The reality remains that not all libraries across Ontario can offer the same standard technology services that their community members may want and need.

## Recommendations

### 1. Encourage and enable increased participation and collaboration of Ontario libraries, with additional supports for small, rural and First Nations libraries.

Bridge – and Library Impact Ontario more broadly – has demonstrated that targeted attention and investment in library education, collaboration and ongoing digital literacy supports yields valuable outcomes and positive returns on those investments. Therefore strategies should be developed to encourage more libraries to participate in Library Impact Ontario. The effectiveness of the model and the value of benchmarking comparative data should continue to be emphasized, with a particular focus on supporting small rural and First Nations libraries that require increased assistance to improve their services for their communities.

### 2. Increase investment in Bridge and in library technology services to support pandemic recovery and improve the success and well-being of Ontarians and their communities.

The data demonstrates the significant impact libraries make in supporting the digital needs of their communities. It also demonstrates the unmet needs of many Ontarians, and the regional disparities in the availability and provision of these critical digital services. With further investment in Bridge – and in Library Impact Ontario more broadly – libraries and their funders have the tools and the data they need to make informed decisions about the equitable allocation of digital resources, and how best to meet the underserved needs of Ontario’s communities. With further investment in libraries, Ontario’s leaders can ensure that these needs will continue to be met in the most efficient and impactful way.

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Greater Sudbury PL	Niagara Falls PL	Whitstone-Hagerman Memorial PL
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Halton Hills PL	Oxford County PL	
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