



STAFF REPORT INFORMATION ONLY

Impact of Technology Services in Ontario Public Libraries: Bridge 2021/2022 Report – Toronto Public Library Results

Date: January 29, 2024

To: Toronto Public Library Board

From: City Librarian

SUMMARY

This report provides an overview of the Toronto Public Library (TPL) Bridge Patron Survey results for the period of August 2021 to December 2022. Bridge is one of three key service offerings of Library Impact Ontario, a comprehensive suite of services tailored to meet the specific needs and capacities of public libraries. Bridge is an advanced data solution platform for outcome measurement through data dashboards, surveys, and reports. It transforms complex statistics into compelling narratives, enhancing transparency, accountability, and understanding of the library's value.

The findings from the 2021-2022 Bridge Toolkit can be found in attachment 1 - *Bridge 2021/2022 Report: Impact of technology services in Ontario public libraries-Toronto Public Library Results*. A summary of the key findings are below and discussed in more detail in the *Impact of Toronto Public Library's Technology Services* presentation (attachment 2):

- TPL patrons continue to rely on technology services, with over 60% of respondents noting they used technology they would not otherwise have access to.
- Indigenous patrons experienced the highest level of positive outcomes accessing and utilizing TPL's technology services.
- Patrons who self-identified as low-income also experienced some of the most positive impacts of technology services provided by TPL.
- The data demonstrates the vital role TPL plays in bridging the digital divide in Toronto, particularly for Indigenous, low income, immigrant, and trans, non-binary and Two-Spirit patrons.

FINANCIAL IMPACT

There is no financial impact arising from the information in this report.

The Director, Finance & Treasurer has reviewed this financial impact statement and agrees with it.

ALIGNMENT WITH STRATEGIC PLAN

Bridge supports TPL's strategic priority of "Investing in Staff and an Innovative Service Culture". It also supports TPL's priority to "Increase Access to Technology and Digital Literacy", and helps the Library to "Make Informed Decisions through Enhanced Accountability".

EQUITY IMPACT STATEMENT

Bridge is a useful tool to help Ontario public libraries demonstrate the impact of their technology offerings. Public libraries play a critical role in driving digital inclusion and bridging the digital divide. The Bridge Toolkit helps libraries produce data and narratives demonstrating this critical equity role they play in their communities.

ISSUE BACKGROUND

Library Impact Ontario provides specialized services for Ontario public libraries, including Bridge—an advanced data solution platform for outcome measurement through data dashboards, surveys, and reports. Since its establishment in 2016, Bridge has transformed from a pilot project into a sustainable suite of data services known as Library Impact Ontario. This evolution occurred through distinct phases:

- **Phase 1 – Bridge Project Pilot (2017-2018):** Launched in 2016, the Bridge Project Pilot involved eight Ontario public libraries. Nordicity, a third-party evaluation consultant, was engaged to gather insights into the technology service needs of these libraries. The results were published in the Bridge 2017/2018 report [“Technology Access in Public Libraries – Outcomes and Impacts in Ontario Communities”](#).
- **Phase 2 – Bridge Project Beta (2019-2020):** Focused on refining the data solution platform and expanding library participation, this phase analyzed data from 38 libraries. The results were published in the Bridge 2019/2020 report [“Meaningful Access – How Bridge helps reposition the public library as a crucial technology enabler”](#) and demonstrated the measurable effects of technology services and provided recommendations for improvement.
- **Phase 3 – Library Impact Ontario (2021-2022):** Evolving into Library Impact Ontario, the project expanded its tools and supports, including data literacy and learning. With increased support, peer-to-peer learning, and broader participation, the initiative thrived. The Bridge 2021/2022 report, [“The Impact of Technology Services in Ontario Public Libraries,”](#) was released in June 2023. Out of 67 participating libraries, 26 contributed Bridge data, reflecting the project's success in strengthening data contributions across all components.

COMMENTS

The Bridge Patron Survey involves direct feedback from library users about their technology service experiences. It aids in evaluating current service effectiveness, pinpointing areas for enhancement, and acquiring valuable insights into the transformative aspect of library technology.

In the period of August 2021 to December 2022, TPL collected 11,121 total Bridge Patron Survey responses and below is a summary of the results.

Primary Outcomes – Digital Inclusion and Equitable Access

- TPL is essential to building a digitally-inclusive Toronto, bridging inequities to technology access. The preliminary results show that more than half (61%) of the people who use library technology services would not otherwise have had access to at least some of that technology.
- More strikingly, most of the people who use technology services with no other access, use them to access the Internet (81%) at or through the library.

Primary Outcomes – Digital Literacy and Adoption

- TPL is responsive in supporting digital literacy in Toronto. 82% of respondents reported increased digital comfort after using one or more technology services. Notably, the impact is more pronounced among underserved groups, specifically 88% among Indigenous patrons and 87% among immigrant patrons.
- TPL not only plays a role in introducing patrons to new technologies (29%), but a higher rate (95%) of longer-term adoption indicates that these new technologies continue to be relevant to patrons even after their initial introduction.

Secondary Outcomes – Community, Social & Civic Engagement

- TPL enables patrons to establish and maintain meaningful connections and provide critical access to public resources. 69% of respondents reported increased 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 (71% of respondents reported increased levels of community engagement).
- With customer preferences shifting to digital over the long-term, as well as with the pandemic, the need to have access to government resources online has been heightened (39% of respondents had used technology service(s) to access online and government services or resources). Notably, this impact is more pronounced for vulnerable populations and equity-deserving groups (63% among Indigenous patrons, 53% among low-income households and 52% among patrons with disabilities).

Secondary Outcomes – Creativity and Innovation

- TPL fosters ideation and creative expression. 25% of respondents used technology service(s) to make creative products. Notably, this impact is more pronounced for vulnerable populations and equity deserving groups (43% among Indigenous patrons and 34% among trans, non-binary and Two-Spirit patrons).

Secondary Outcomes – Entrepreneurship & Business Outcomes

- TPL provides essential supports for small businesses and entrepreneurs. 14% of respondents used technology service(s) for business-related activities. Digital literacy is foundational to participating in the knowledge economy.
- TPL also provides small businesses and entrepreneurs essential library services to start, manage or expand their businesses. 91% of those that used TPL technology services for business-related activities were in fact business that employed fewer than 20 employees.

Secondary Outcomes – Workforce Development

- TPL facilitates education, enables employable skills and supports the various stages of the job search process.
- In addition to providing opportunities for patrons to learn about technology (i.e. digital literacy), TPL allows patrons to learn through technology. 55% of respondents used the technology service(s) for educational activities.
- Technology services at TPL assist people of all ages in updating their skills, finding work and excelling academically and professionally in a connected world. 32% of respondents used the technology service(s) to develop employable skills. Notably, this impact is more pronounced for vulnerable populations and equity deserving groups (36% among low-income households, 36% among immigrant patrons and 35% among indigenous patrons)

CONCLUSION

This report shows the continued impact TPL has on bridging the digital divide, enhancing digital literacy and increasing equitable access to technology for its 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 outcomes that are more positive. Library staff will disseminate the Toronto report and its findings widely across TPL and share the report with contacts at the City of Toronto. In addition, staff will continue to

utilize the outcomes of the report to champion technology programs and services within TPL.

CONTACT

Shawn Mitchell; Director, Policy, Planning and Performance Management;
E-mail: smitchell@tpl.ca

Joseph Lalonde; Manager, Data and Analytics;
E-mail: jlalonde@tpl.ca

SIGNATURE

Vickery Bowles
City Librarian

ATTACHMENTS

Attachment 1:	Bridge 2021/2022 Report: Impact of technology services in Ontario public libraries- Toronto Public Library Results
Attachment 2:	Impact of Toronto Public Library's Technology Services

secondary outcomes

entrepreneurship & business outcomes

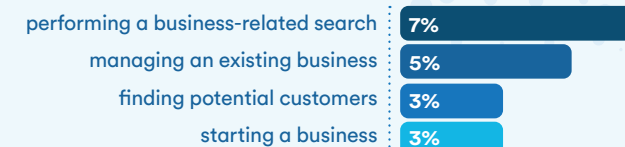
TPL provides essential supports for small businesses and entrepreneurs

Digital literacy is foundational to participating in the knowledge economy. TPL's role in supporting entrepreneurship extends beyond basic digital skills training. Much support is available at TPL where staff direct patrons to appropriate business-related resources and help them navigate regulatory requirements online. TPL also runs programs that target business skills, many of which incorporate technology services including both on-site and virtual business resources. TPL also provides 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.

14% of respondents used technology services for business-related activities

91% of these businesses employed fewer than 20 employees.

Top activities were performing business-related search, managing an existing business, finding potential customers and starting a business.



workforce development

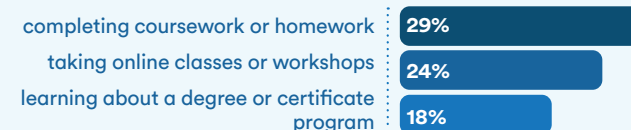
TPL facilitates education, enables employable skills and supports the various stages of the job search process.

In addition to providing opportunities for patrons to learn about technology (i.e. digital literacy), TPL allows patrons to learn through technology. Technology services at TPL 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 TPL helps patrons with their job search skills in employment success.

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

79% among youth patrons
70% among trans, non-binary and Two-spirit patrons
67% among racial minority patrons

Top activities were completing coursework or homework, taking online classes or workshops and learning about a degree or certificate program.



32% of respondents used the technology service(s) to **develop employable skills**

36% among low-income households
36% among immigrant patrons
35% among Indigenous patrons

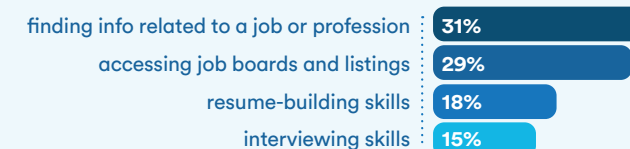
Most common skill developed was technical skills.



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

37% among low-income households
31% among patrons with disabilities

Most common skills developed were finding information related to a job or profession, and accessing job boards and listings.



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

Bridge 2021/2022 Report: Impact of technology services in Ontario public libraries

toronto public library results

key highlights

- TPL patrons continue to rely on technology services, with over 60% of respondents noting they used technology they would not otherwise have access to.
 - Of those respondents, over 80% noted TPL as their only place to access the Internet.
- Indigenous patrons experienced the highest level of positive outcome accessing and utilizing TPL's technology services.
- Patrons who self-identified as low-income also experienced some of the most positive impacts of technology services provided by TPL.
- The data demonstrates the vital role TPL plays in bridging the digital divide in Toronto, particularly for Indigenous, low income, immigrant, and trans, non-binary and Two-Spirit patrons.

primary outcomes

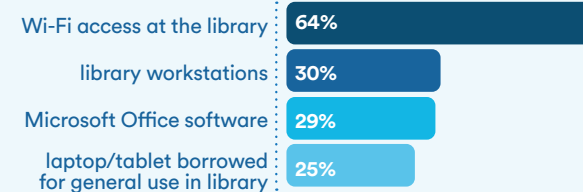
digital inclusion & equitable access

TPL is essential to building a digitally-inclusive Toronto, bridging inequities to technology access.

The preliminary results show that more than half of the people who use library technology services would not otherwise have had access to at least some of that technology. More strikingly, most of the people who use technology services with no other access, use them to access the Internet at or through the library.



overall top technology reported used

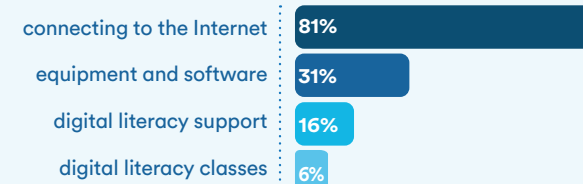


respondents who would not otherwise have had access to technology

61% used technology at the library

73% among low-income households

81% accessed the Internet at or through the library



digital literacy & adoption

TPL is responsive in supporting digital literacy in Toronto.

TPL facilitates the development of digital literacy that is critical to living and working in the digital age, especially for those most vulnerable. TPL not only plays 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 technology services

88% among Indigenous patrons

87% among immigrant patrons

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

93% of those introduced to new technology continued to use it.

secondary outcomes

community, social & civic engagement

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

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 customer preferences shifting to digital over the long-term, as well as with the pandemic, the need to have access to government resources online has been heightened, especially for vulnerable populations and equity-deserving groups.

71% of respondents reported increased levels of community engagement

72% among Indigenous patrons

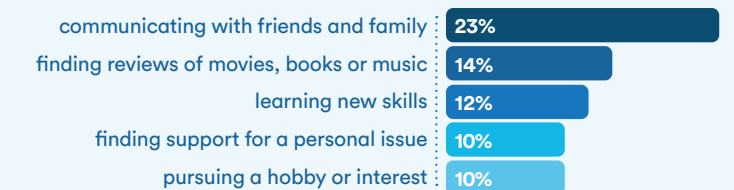
Top activities were learning about current news/events, learning about volunteering opportunities, and learning about politics.



69% of respondents reported increased levels of social engagement

78% among trans, non-binary and Two-Spirit patrons

Top activities were communicating with friends/family, finding reviews of books/movies/music, learning new skills and finding support for personal issues.



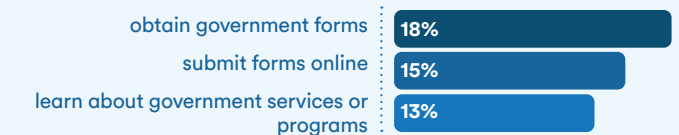
39% of respondents had used technology service(s) to access online government services or resources

63% among Indigenous patrons

53% among low-income households

52% among patrons with disabilities

Top activities were obtaining government forms, submitting forms online and learning about government services or programs.



creativity & innovation

TPL fosters ideation and creative expression.

TPL is 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.

25% of respondents used technology service(s) to make creative products

43% among Indigenous patrons

34% among trans, non-binary, Two-Spirit patrons

Top activities were writing, 3D modeling, film/video production and multimedia projects.





Impact of Toronto Public Library's Technology Services

Bridge 2021/2022 - TPL Results

January 29, 2024



Library Impact Ontario





Library Impact Ontario

A Shared Vision

Every Ontarian has **convenient, local access**
to the **technology they want and need**, and the
comfort and confidence to use it,
so that they can access **economic, educational,**
social, health and civic opportunities
to achieve **prosperity, advancement, and overall**
well-being

Library Impact Ontario

Mission

We help libraries:



Gain valuable insights



Make data-informed decisions



Connect with similar libraries



Build confidence in library staff



library
impact
ontario

Library Impact Ontario

Suite of Services



data literacy
learning and support

Data Literacy, Learning and Support – Empower participating libraries with basic data skills, enable one-on-one connections, and provide networking opportunities for support and collaboration to ensure library success.



Bridge - Advanced data solution platform for outcome measurement to empower libraries with evidence and insight through data dashboards, surveys and reports.



Bridge Data Solution Platform for Public Libraries



Bridge Measurement

Standard Technology Services

Bridge measures standard library technology services grouped in 3 technology categories:



1. Connecting to the Internet



2. Equipment & Software



3. Digital Literacy (Class or Support)

Bridge 2021/2022 Report

Patron Survey - Outcome Framework



Primary Outcomes

Digital Inclusion + Digital Literacy

Secondary Outcomes

community, social &
civic engagement

creativity &
innovation

entrepreneurship &
business development

workforce
development



**Bridge 2021/2022 Report: Impact of technology
services in Ontario public libraries**

toronto public library results

TPL Bridge 2021/2022 Results

structure & participation

TPL Bridge Patron Survey



11,110

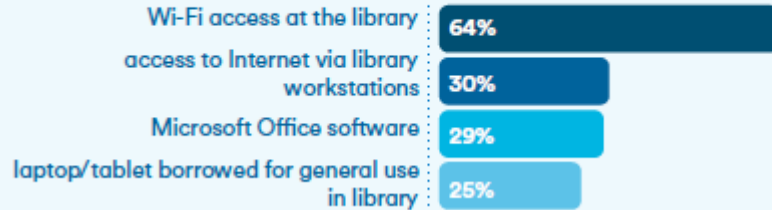
Bridge Patron Survey
responses from
Toronto patrons

primary outcomes

digital inclusion & equitable access

TPL is essential to building digitally inclusive communities, bridging inequities to technology access.

overall top technology reported used



61% of respondents reported they would not otherwise have access to technology

76% among Indigenous patrons

73% among low-income patrons

66% among patrons with disabilities

81% used internet services that they would otherwise not have access to

86% among youth, low-income and Indigenous patrons

primary outcomes

digital literacy & adoption

TPL is responsive in supporting digital literacy in Toronto.

82% of respondents reported increased digital comfort as a result of using one or more services

88% among Indigenous patrons

29% of respondents reported they were introduced to new technology

34% among patrons with disabilities

93% of those introduced to new technology, continued to use it

secondary outcomes

community, social & civic engagement

TPL enables patrons to establish and maintain meaningful connections and provide critical access to public resources.

71% of respondents reported increased **community engagement**

78% among trans, non-binary & Two-Spirit patrons

69% of respondents reported increased **social engagement**

39% of respondents had used technology service(s) to **access online government resources**

63% among Indigenous patrons

secondary outcomes

workforce development

TPL facilitates education, enables employable skills and supports the various stages of the job search process.

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

79% among youth patrons

32% of respondents had used technology service(s) to **develop employable skills**

24% of respondents had used technology service(s) to develop skills related to **finding a job**

49% of respondents had success finding a job

key takeaways

- **TPL patrons continue to rely on technology services**, with over 60% of respondents noting they used technology they would not otherwise have access to.
- **TPL is heavily relied on as a vital access point to the Internet**, with over 80% of respondents noting TPL as their only place to access this service.
- **Indigenous patrons experienced the highest level of outcomes** accessing and utilizing TPL's technology services.
- **Patrons who self-identified as low-income** also experienced some of the most positive impacts of technology services provided by TPL.
- **The data demonstrates the vital role TPL plays in bridging the digital divide** in Toronto particularly for Indigenous, low income, immigrants, trans, non-binary.

Questions