



So Much More: The Economic Impact of the Toronto Public Library on the City of Toronto

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***“There’s so much
more to a book
than just reading.”***

— Maurice Sendak



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Martin Prosperity Institute
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Overview – Toronto Public Library Delivers \$5.63 of Economic Impact for Every \$1 Spent



The results of Toronto Public Library's economic impact study clearly demonstrate that Toronto Public Library delivers a strong Return on Investment, through the delivery of library services that enhance Toronto's competitiveness and prosperity and contribute to a better quality of life for all. This study is the first Canadian public library study to measure in concrete economic terms the Return on Investment for library service.

Toronto Public Library creates over \$1 billion in total economic impact

For every dollar invested in Toronto Public Library (TPL), Torontonians receive \$5.63. This benefit results from the market value of services delivered, or direct tangible benefits and the stimulus to Toronto's economy from direct spending and re-spending (indirect tangible benefits).

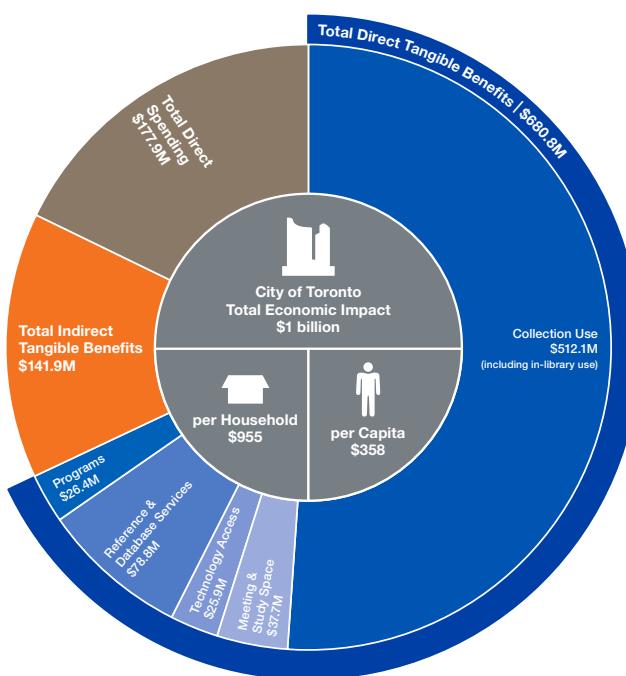
Direct tangible benefits represent a conservative measure of the market value of the services used. Direct spending represents institutional spending that directly impacts Toronto's economy and is the total funding received from the City of Toronto. Indirect tangible benefits represent the re-spending by those who are paid by the direct spending within Toronto's economy.

Exhibit 1 shows the breakdown of the total economic impact from the library. Direct tangible benefits for individual library services are provided along with the total direct spending and total indirect tangible benefits. Just over half of the total impact is from providing free access to books and other items of the 11 million in the TPL collection. The remaining total impact is divided between the value of the other library services, total direct spending, and the indirect tangible benefits created by the direct spending. The centre of the exhibit shows the value of the total economic impact for each household within the City of Toronto (\$955), and for each of Toronto's residents, of all ages (\$358).

The total economic impact and impact per dollar spent are impressive results, and are in the same range of values found in published studies of other library systems from around the world.

Toronto Public Library creates over \$1 billion in total economic impact

Exhibit 1



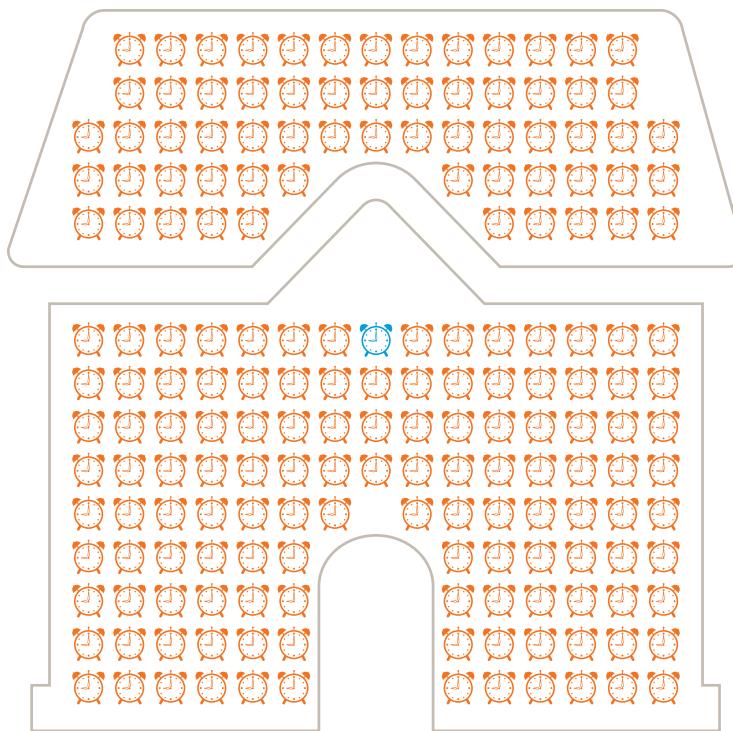
\$1 invested = \$5.63 of economic impact



Based on up to **\$1 billion** in total direct benefits and
use of the library by **72%** of Torontonians.

**Total direct benefit as much as \$500
per member**

For the 72% of Torontonians who use library services, the total direct benefit is as much as \$500 (\$502.15) per library member (**Exhibit 2**).



⌚ \$627 million

total value of all library hours in 2012.

⌚ \$2,515

average value of one open hour.

\$653

average cost of one open hour.

The average open hour at a branch generates \$2,515 in direct benefits

The analysis shows that on average one open hour at any of the library's 98 branches generates \$2,515 in direct benefits that are only possible because that branch is open.

Exhibit 3 summarizes the average benefit of a branch being open for one hour. The \$626.8 million in benefits is only those direct tangible benefits that require a branch to be open in order for the specified services to be available. In 2012, TPL branches were open for nearly 250,000 hours. Given \$162.8 million (minus capital and eTitles) in direct spending used to fund those benefit-generating services, the average open hour costs approximately \$653. Therefore, the average benefit is almost 4 times the average cost.

Return on Investment is 463%

The return from the City of Toronto's investment in the Toronto Public Library is 463%, which is the midpoint of a range very conservatively estimated to be 244% and is comfortably shown to reach 681%. **Exhibit 4** shows this range, as well as the itemization for the direct tangible benefits, direct spending, and indirect tangible benefits.

Torontonians receive \$680.8 million in direct tangible benefits from services used by residents across the city. Annually, Toronto Public Library spends nearly \$200 million with \$177.9 million provided by the City for direct spending. The difference includes monies received through provincial and other grants, the TPL Foundation, fines and fees, and other sources. The Toronto Public Library generates \$142 million in indirect benefits to Toronto's economy from library spending on infrastructure to improve local branches, collections to provide access to reading, and staff to support service delivery.

impact of the Toronto Public Library through a number of lenses, building on methodologies of other studies and introducing new measures to value library space. The study was written in response to a request from the Library Board and City Council to conduct an assessment of the economic impact of Toronto Public Library services and the incremental impact of one open hour.

Intangible benefits deliver value

The City of Toronto's strategic plan for economic growth focuses on Toronto's competitiveness and prosperity, and highlights the trends of an aging population and declining birth rate as creating a new reality for cities and regions across the world. The strategic plan emphasizes that, in order for the city to prosper in this reality, Toronto must foster collaborative strategies to develop workforce talent through education and lifelong learning, and attract workforce talent through immigration.

Toronto Public Library delivers services that contribute in many ways to the City's goals for economic growth and prosperity, and generate intangible benefits which do not have an easily quantifiable value, but create significant value for residents. This value includes opportunities for residents to improve their literacy skills, enhance their educational and employment opportunities, and improve quality of life for themselves and their families through library collections, services and programs. These outcomes deliver a lifetime of value to residents and increase the economic competitiveness and prosperity of Toronto. The library's strategic alignment with the City's plans for economic growth, combined with conditions that support livability and quality of life for residents, create an attractive climate for business investment and support a sustainable cycle of prosperity.

MPI followed a thorough, comprehensive approach to calculating the economic impact of TPL services

The Martin Prosperity Institute (MPI) conducted the study for Toronto Public Library using accepted valuation methodologies commonly used in studies in the library and public sectors, and standard library statistics collected for international and Canadian benchmarks. The study examined the economic

		Low* (\$)	Estimate* (\$)	High* (\$)
Direct Tangible Benefits	Collection Use	183.7	512.1	840.4
	Programs		26.4	
	Reference & Database Services		78.8	
	Technology Access		25.9	
	Meeting & Study Space		37.7	
	Total Direct Tangible Benefits	352.5	680.8	1,009.1
Direct Spending	Operations		25.3	
	Capital (annual average)		20.7	
	Employment		135.2	
	Materials		17.9	
	Total Gross Spending		199.1	
	Revenue Offsets to Costs		21.2	
	Total Direct Spending		177.9	
Indirect Tangible Benefits	Operations	10.1	17.7	25.3
	Capital (annual average)	8.3	14.5	20.7
	Employment	54.1	94.6	135.2
	Materials	7.2	12.5	17.9
	Pages Employment Experience Benefits	2.1	2.5	3.0
	Total Indirect Tangible Benefits	81.7	141.9	202.1
Total Economic Impact		612.1	1,000.6	1,389.1
Impact per Dollar Spent		3.44	5.63	7.81
Impact per Toronto Resident		219.30	358.49	497.68
Impact per Toronto Household		584.12	954.88	1,325.64
Total Benefits		434.2	822.7	1,211.2
Return on Investment		244%	463%	681%
Average Value of One Open Hour at a Branch			2,515	

*Millions of dollars

Direct Tangible Benefits – directly measurable

Direct Spending – budgeted investment

Indirect Tangible Benefits – multiplier benefits from direct spending

Total Economic Impact – all tangible benefits and direct spending

Total Benefits – sum of tangible benefits

Return on Investment – benefits divided by total direct spending

Average Value of One Open Hour – only includes benefits that require an open library

Assumes 2,791,140 Toronto residents and 1,047,880 households.

Results do not include intangible benefits.



Methodology and Background

The rigorous methodology quantified the total economic impact and Return on Investment of Toronto Public Library services, based on analysis of direct tangible benefits, direct spending, and indirect tangible benefits. The analysis drew on data from many sources. The study is a collaboration of the MPI and the Toronto Public Library and is a unique pathfinding research initiative.

Total economic impact is based on direct and indirect benefits

Total economic impact from the Toronto Public Library is the sum of three elements. First is direct spending, which is the money allocated to the institution and then spent for operations, capital, material, wages, and other expenses. In effect, this money flows through the institution. Second are direct tangible benefits. These are benefits that accrue to an individual or organization and can be reliably estimated. The final element of total economic impact is indirect tangible benefits. These benefits are the result of multiplier effects on direct spending – a dollar paid to a contractor for a branch renovation is re-spent in the community and so on. The single dollar creates additional benefits across the community. Multipliers are used to estimate the actual dollar amount (a tangible, but indirect, amount) based on the spending. Taken together, these three elements provide an estimate of the total impact on the economy.

Return on Investment is benefits less the cost of services

Return on Investment (ROI) is calculated by taking the total economic benefits – the sum of direct tangible benefits and indirect tangible benefits – to the city of Toronto, and dividing them by the cost to provide the service (direct spending).

Direct Tangible Benefits contribute to ROI

This study estimated the value of Toronto Public Library programs and services by estimating the direct tangible benefits. This analysis measured the monetary value of library services against the market cost of replacement for those services. For each program and service, usage data provided by Toronto Public Library were multiplied by conservative values for comparable programs and services provided by other organizations. In the case of assigning a value to circulated items, a discount rate was applied to account for the difference between borrowing and owning an item. While the total annual benefits of each quantifiable Toronto Public Library service were calculated on a service-by-service basis, the general methodology is the same.

The study analysed the five main categories of Toronto Public Library programs and services:

- Collection Use – books, eTitles, CDs, DVDs, magazines, newspapers, and the Sun Life Financial Museum + Arts Pass
- Programs – for children, teens, adults, and seniors to support literacy, culture, workforce development, and lifelong learning
- Reference & Database Services – to support study and business development
- Technology – access to computer technology and the Internet to support career development, personal research, and lifelong learning
- Space – used for reading, personal study, meeting, and collaboration.

Direct Spending and Indirect Tangible Benefits contribute to economic impact

Determining the economic impact of an institution includes the analysis of direct and indirect benefits generated in the economy as a result of the institution's activities. Direct spending includes items such as institutional spending and wages, which directly affect the local economy. Indirect tangible benefits, also known as the multiplier effect, include the re-spending of dollars within the local economy, which increases the total value of the direct spending.

Toronto Public Library stimulates Toronto's economy through direct spending on goods and services and staff wages, which then result in indirect re-spending of dollars in the local economy. Direct and indirect benefits include money spent on:

- Library operations
- Library capital
- Library employment
- Pages program for youth employment
- Library materials.

Toronto Public Library provided the data for the capital and operating expenditures used in this analysis to calculate the direct spending. To calculate the indirect benefit, MPI applied a multiplier range of 1.4 to 2.0, which is consistent with recent economic impact studies evaluating comparable services, and also with national and provincial multipliers used by Statistics Canada. (**Exhibit A-23**)

Value of an open hour

To determine the value of library open hours, the sum of direct tangible benefits delivered while the library was open was divided by the number of hours the Toronto Public Library was open in 2012. E-titles and database searches were not included in this calculation, since those services can be accessed during and outside of open hours. Direct spending and indirect benefits are also not included in this calculation. Also, note that the figures used for circulated items assume the estimated (midpoint) value of each item circulated or used in-house.

The majority of Toronto residents use the Toronto Public Library: in a survey conducted in 2012, 72% of Toronto's adult population reported using the library in the past year.

Intangible benefits are important

Measuring the value of programs and services in economic terms only tells part of the story. The report also includes information on some of the Toronto Public Library programs and services that make a difference in the city, going beyond the numbers.

As emphasized in the Toronto Public Library's strategic plan, "the library is unique in its ability to provide broadly accessible opportunities for learning beyond formal education. Toronto Public Library develops service strategies that maximize the potential of Toronto's aging population, contribute to a healthy lifestyle, and aging in place with dignity and respect, while supporting the best quality of life. Library programs enable self-directed learning and skills development to support Torontonians through all life's stages and journeys, including transitions from home to school, school to work, work to second careers, and retirement. These programs help learners of all ages to build information and digital literacy skills to access and use technology and information successfully."

Toronto is a city of neighbourhoods, and residents identify themselves in terms of their community's unique diversity and culture. Toronto Public Library is a neighbourhood-based system: local library branches design programs and services to meet the needs of their local communities. For each branch, collections are carefully selected to meet local needs, custom programs are scheduled, and services are provided to ensure culture and language needs are met.

With 98 branches located across the City of Toronto, most Toronto residents live within a two-kilometre radius of a Toronto Public Library branch; bookmobiles extend access to residents living outside of this radius. As Toronto grows, Toronto Public Library is keeping pace by preparing to open two new branches in 2014: one on the eastern side of the city at Scarborough Civic Centre, and a second branch in the downtown neighbourhood of Fort York. Both neighbourhoods have been rapidly growing and each represents a "library desert," a need that these new branches will address.

Library branches are integrated into the fabric of the city, embedded in neighbourhoods, and are a part of the streetscape. City streets are safer when more people are on them; in

The Death and Life of Great American Cities, Jane Jacobs described the benefits of busy streets: “This is something everyone knows: A well-used city street is apt to be a safe street. A deserted city street is apt to be unsafe.”¹ Library branches serving their neighbourhoods contribute to the health and vibrancy of the local community, resulting in an overall higher quality of life.

Data came from many sources

MPI collaborated with the Toronto Public Library over a five-month period to gather and analyze data and information on budgets and spending and on the volume of programs and services provided by the Toronto Public Library to the residents of Toronto. The Toronto Public Library provided data, including performance measurements that are publicly reported annually, as well as additional information gathered specifically for this report. All data are from 2012, except for renovations that have a more uneven spending pattern. For renovations, the average spending from 2007–2012 was used. Spending was assigned to the year the renovations work was completed.

The value of a service is based on the local comparative market price for a similar service. In the case of materials circulated or used in the library, the actual cost of the item was used along with a 20% (80% discounted) value to account for differences between borrowing and owning a book or other media item. Whenever possible and appropriate, local Toronto prices were used to determine the value. All prices used were clearly identified, along with the source for that price. As much as possible, the lower or more conservative price was used. If anything, the benefits valued in this report are ***under-estimated*** by design.

This innovative, landmark study is the first of its kind in Canada.² No Canadian public library studies were available to guide the research or to provide data for comparison. However, comparable economic impact studies, both in the public library sector in other countries and in other sectors, were reviewed in depth. While other studies have focused on library systems at the county and state level, this study focused on an urban library system. Toronto Public Library is unique in that it serves a growing and diverse metropolitan area that is truly a city of neighbourhoods, each with its own unique com-

munity needs. Toronto Public Library is the only Canadian system with a large reference library. This study’s strength and transparency are founded in its straightforward and clearly documented methodology applied with standard performance measures of library usage reported publicly to the Toronto Public Library Board and in benchmarking tools in the library sector, along with data gathered specifically for the study.

Studies produced by public library systems in the United States and Australia were consulted and helped to inform the methodological approach to this report. These studies used various analyses to estimate the value of library services and to calculate the return on investment (ROI) of library services. From this review, methodologies most applicable to Toronto and Toronto Public Library were adopted and new valuations were introduced. A list of studies reviewed for this report is provided in **Appendix B**.

The study is a collaboration of TPL and MPI

Toronto Public Library engaged the Martin Prosperity Institute in response to a motion by the Library Board and City Council to undertake a study to understand the economic impact of library services, the incremental value of library open hours, and the role the library plays in economic development. This report is a result of a comprehensive study conducted during the summer of 2013.

A growing body of research demonstrates the important role public libraries play in economic development and prosperity. Studies demonstrate that libraries are change agents and important learning environments, helping cities and their residents to adapt and prosper in a global knowledge-based economy. Public library systems in the United States, including Santa Clara, California, Philadelphia, Pennsylvania, Florida, and Texas, and library systems in Australia and England, have undertaken economic impact studies. The MPI team reviewed these studies and others, to help inform the approach to the Toronto Public Library study. Care should be taken in comparing the results of this study to other studies as analysis approach, assumptions, governmental level of control, and economic context all differ.

44% of the adult population are frequent or heavy users of library branches as defined by 11 or more visits in the last year.

The Toronto Public Library study is the first of its kind in Canada. While adopting and building from approaches in other studies, its unique contribution is to place economic value on a wide range of library services, including the value of public space and library open hours. The study also demonstrates how Toronto Public Library's promotion of literacy and other services are important supports for Toronto's economy, by contributing to factors that increase competitiveness and prosperity. Finally, the study demonstrates the value of library service in contributing to the livability and quality of life in Toronto's diverse communities and neighbourhoods through responsive services that are used by a high percentage of Toronto's population.

TPL literacy programs grow a city of readers

A 2009 study entitled *The Economic Benefit of Literacy: Evidence and Implications for Public Policy* asserts that "higher levels of literacy skill are associated with more stable employment, higher wages, better health, increased educational achievement, and higher levels of social engagement." Furthermore, literacy influences the performance of schools, businesses and communities.³

Toronto Public Library's promotion of literacy and reading at all stages of life is key to growing a city of readers, an important theme of the library's strategic plan. Reading is the foundation of learning, and children who are good readers are well positioned to manage life's challenges.

Toronto Public Library promotes early literacy through a comprehensive set of programs and services called Ready for Reading. As part of this program, the library recently launched a unique easy-to-use and interactive guide for families to support preschool children in developing early literacy skills. In 2012, Toronto Public Library conducted 6,032 Ready for Reading early literacy story time programs with over 181,627 children/adult participants.

The City of Toronto's Middle Childhood Strategy states that children aged 6 to 12 are in a critical period of development where they develop cognitive and social skills that help them transition into adolescence.⁴

Local branches deliver innovative programs that celebrate the joy of reading, support literacy, and build the foundations for lifelong and self-directed learning. One of the many quality out-of-school programs the library offers is the TD Summer Reading Club. In 2012, over 50,000 Toronto children participated in reading-related programs in-branch and online that kept them reading throughout the summer in a way that built their confidence in and excitement about reading, and helped them retain their reading skills as they headed back to school in the fall.

Toronto residents view Toronto Public Library as a relevant and trusted community information resource with an important role in supporting literacy.

Visitors to library branches use a wide variety of services, but browsing, borrowing, returning, or renewing library materials continue to be major reasons to visit a branch. In fact, more than half of library visitors come to TPL branches for these activities. The Toronto Public Library provides access to books and reading in a variety of formats, staff expertise that supports literacy and literary exploration, and reading and literary programs that introduce and promote the joy of reading for all Torontonians.



PUBLIC LIBRARY
RUNNEMEDE BRANCH

**Direct Tangible Benefits
are Significant**

Toronto Public Library provides services and programs that benefit Toronto residents and communities in five major areas: collection use, programs, reference & database services, technology, and space. Toronto Public Library offers Torontonians safe and welcoming places to read, study, borrow materials, and access the Internet. Toronto Public Library branches are also community hubs for every resident, and especially children and youth. Each of the five major categories contributes value to the city. The total contribution from programs and services is \$680.8 million (**Exhibit 4**).

Toronto Public Library programs and services are:

- Collection Use – books, eTitles, CDs, DVDs, magazines and newspapers
- Programs – for children, teens, adults and seniors to support literacy, culture, workforce development and lifelong education
- Reference & Database Services – to support study and business development
- Technology – access to computer technology and the Internet to support career development, personal research and lifelong learning
- Space – used for reading, personal study, meeting and collaboration.

The details of the direct tangible benefit estimation for each category follow.

Use of collections: circulation and in-library use

Toronto Public Library supports readers of all ages by offering broad and easy access to collections in a range of formats, languages, and reading levels. Use of library collections in a variety of formats supports literacy and literary engagement, lifelong learning, employment, and entrepreneurship. Collections include current and popular materials and research and archival materials including information about Toronto's economy, history and culture.

Toronto Public Library collections include 8.5 million items, which are available to be borrowed, and an additional 2.5 million items available for use only in library branches.

To calculate the economic benefit of the library's annual circulation and collection use, the total number of items borrowed or

accessed in the library was broken out into categories by format and reading level as these factors affect price. A retail value was assigned to each category of material using typical prices from a Canadian bookseller for specialized research items and the online retailer, Indigo Books & Music, for popular and current material. Previous library valuation studies have used a range of approaches; this study includes high and lower range scenarios for comparative purposes.

The economic value of annual collection use including borrowing and in-house use was calculated using two scenarios:

- the retail value discounted by 80% to factor that library materials are used not owned
- the full retail value of the book, with the assumption that the user would read the book once, and therefore experience its full value.

In 2012, Toronto Public Library circulated 32,032,036 items, including books, audio books, eTitles, CDs, DVDs, periodicals and other materials. This number was multiplied by a retail value, which differs according to the items' format and audience. Some studies have applied a discount of 80% to account for the difference between borrowing and owning an item, while other studies assume 100% of the value. To demonstrate this range and provide a more conservative estimate of the tangible benefit, both approaches are included in the calculation (**Exhibits A-1, A-2, A-3 and A-4**).

In 2012, Toronto Public Library circulated 32 million items, provided in-library access to 7.1 million items and over 5 million items in materials delivery, resulting in an economic benefit of \$512 million to the city of Toronto.

Sun Life Financial Museum + Arts Pass

The Sun Life Financial Museum + Arts Pass (MAP) provides Toronto families (2 adults and up to 5 children) with access to over ten of Toronto's museums and galleries for free. These passes are available at any Toronto Public Library branch, and provide access to the following institutions:

Art Gallery of Ontario
Bata Shoe Museum
Black Creek Pioneer Village
Casa Loma
City of Toronto Historic Museums (8 across the city)
Gardiner Museum
Museum of Inuit Art
Ontario Science Centre
Royal Ontario Museum
Textile Museum of Canada
Toronto Zoo

The value of the Museum + Arts Pass was determined by averaging the cost of the value of all the daily admission fees for the Toronto-area museums and galleries, for two adults and

45% of those who report taking a child to the library do so at least two or three times per month.

three children. This figure was then multiplied by the number of times the pass was used in 2012.

In 2012, Toronto residents borrowed the Sun Life Financial Museum + Arts Pass 73,033 times, resulting in an average economic benefit of \$5.1 million to the city of Toronto (Exhibit A-4B).

Programs

Lifelong learning is essential to making people successful, especially through life's transitions, and is a foundation for economic prosperity, social cohesion, and quality of life. The lifelong learning model emphasizes that people, throughout their lives, learn from experience, from non-formal instruction, and through self-directed and recreational learning.

To calculate the economic benefit of programs, program volume was broken down by type and the number of attendees per program type. A conservative value was assigned to each program type, derived from comparable programs and services provided by other organizations. Toronto Public Library provides programs for children, teens, adults and seniors to support literacy, lifelong learning, skill development, use of technology and access to culture. Programs engage members of the community with the library and its collections and services, and provide alternative ways of learning and accessing information.

To support access and broad participation, programs are delivered in branches and at outreach locations. Programs delivered in partnership with community-based agencies address mutual goals; for example, reaching children and youth at risk.

In 2012, Toronto residents – children, teens, adults, and seniors – attended 28,075 programs, including early literacy programs and reading clubs, career and workforce development sessions, cultural, health and wellness programs, author talks, and computer training. This number was multiplied by a conservative retail value, which differs according to the program's type (Exhibit A-5).

In 2012, 769,534 Toronto residents attended programs, resulting in an economic benefit of \$26.4 million to the city of Toronto.

Reference & database services

Toronto Public Library users have access to expert staff who support residents in finding and using authoritative information from the library's collections, or community or online resources. Reference service is provided in person, by appointment, online through the Virtual Reference Desk, or via phone through the Answerline service, depending on the user's needs. Questions asked typically go beyond those that can be answered via a simple Google or library catalog search. Directional ("where is ...?") questions were excluded.

In 2012, Toronto residents made 4,091,805 information requests and 1,746,241 database searches. This number was multiplied by a conservative retail value, based on comparable fee-for-service reference services available to residents of Toronto (Exhibits A-6, A-7 and A-8).

In 2012, Toronto residents' information requests resulted in an economic benefit of \$78.8 million to the city of Toronto.

Technology access

The Internet has become a major source of information and connects people and communities worldwide. Technology also provides new opportunities to deliver services in more efficient and personalized ways. Access to technology enables Torontonians to achieve goals related to education and employment and to access government information and services, locally improving their quality of life. Access to technology and digital information is essential to full participation in Canada's social, economic and community life, and the Toronto Public Library has an important role in providing that access freely, universally and equitably.

Computers and wireless Internet service in all branches provide access to collections, e-resources, and e-services. Technology education helps build information literacy skills, and ensures access for all.

Toronto Public Library provides free access to computers with office applications including Microsoft Word, Excel, and PowerPoint and accessibility software as well as wireless access for users bringing their own computers or devices. For some, the library is their only access to computers and the Internet; for others, the library provides an alternate

technology-enabled work and study space beyond school or work.

To calculate the economic benefit of these technology services, access to computer workstations and Wi-Fi Internet access were measured.

- The number of computer workstation sessions was calculated in hours, assuming each session is one hour in length. The number of hours was then multiplied by a conservative value derived from comparable costs of using a workstation in a Toronto-area Internet café.
- The number of Wi-Fi sessions was calculated using hours, assuming each session is one hour in length. The number of hours was then multiplied by a conservative value derived from the cost of a single hour of Wi-Fi access from Toronto-area provider OneZone.

In 2012, Toronto residents used 6,138,170 hours of workstation access, and 1,493,299 hours of Wi-Fi access. These numbers were each multiplied by a conservative retail value for workstation access and Wi-Fi access, respectively (**Exhibits A-9, A-10 and A-11**).

In 2012, Toronto residents used 7,631,469 hours of technology access, resulting in an economic benefit of \$25.9 million to the city of Toronto.

Meeting and study space

Toronto Public Library branches are vibrant community hubs, welcoming residents and community groups for individual study and collaboration. Zoned spaces respond to the needs of users of different ages and include reading lounges, teen areas, quiet study space, and KidsStop early literacy centres. These spaces fulfill the diverse needs of users of all ages and backgrounds.

Two types of public space are available for rental by residents, community groups, and businesses. Space includes meeting rooms at most branches, three theatres, and the Bram & Bluma Appel Salon, a premium event space located at the Toronto Reference Library.

To calculate the economic benefit of meeting space, the standard meeting rooms were valued based on a comparable Toronto District School

TPL workforce development initiatives support job seekers

Toronto Public Library enables self-directed learning and skills development to support Torontonians through all life's stages and journeys, including transitions from home to school, school to work, work to second careers, and retirement – supporting a better quality of life.

The City of Toronto's "Collaborating for Competitiveness: A Strategic Plan for Accelerating Economic Growth and Job Creation in Toronto" includes objectives to increase employment and improve job quality in Toronto.¹⁷ Toronto Public Library assists unemployed or under-employed Torontonians who are looking to increase their marketability and earn a higher wage by providing support in the form of skills improvement programs, collections and services, free of charge. All 98 library branches across the city provide support at all stages in the process of finding a job, understanding the job market, starting a small business, and networking, mentoring, and volunteering opportunities. Digital and technology literacy are key to succeeding in today's workforce. Toronto Public Library provides programming – both inperson and online – to support and strengthen technology skills.

The City's strategic plan also cites a need for "an integrated system to better connect and support job seekers and employers." Toronto Public Library has designed programs and built effective partnerships with City of Toronto departments, community agencies, and local businesses. Library branches host job and career fairs to help bring employers and job seekers together in a neutral environment. Work placements and mentoring opportunities are created in district and neighbourhood branches across the city, and volunteer skills and knowledge are developed through volunteer development conferences.

Toronto Public Library has established partnerships with Toronto's post-secondary educational institutions to offer community-based learning opportunities to address the needs of youth, those transitioning to new work arrangements, retirees, and seniors. Local needs are addressed through collections and information programs, programs in series, and programs for certificates or credits.

Board space, which can be rented at \$12.20 to \$50 per hour. The Bram & Bluma Appel Salon is a premier event space that is comparable to similar event venues such as the Bata Shoe Museum, Hockey Hall of Fame, and Ontario Science Centre. These venues are rented out at approximately \$2,500 per booking.

To calculate the economic benefit of branch meeting space, the number of meeting rooms booked was multiplied by Toronto Public Library's commercial rental rate. To calculate the economic benefit of study space, the number of visitors using the library for work or quiet study was multiplied by a conservative value for workspace in the city of Toronto (**Exhibits A-12, A-13 and A-14**).

In 2012, meeting spaces were booked 6,900 times, resulting in an economic benefit of \$1.4 million to the city of Toronto. In 2012, 9,058,842 visitors used library space for work or quiet study, resulting in an economic benefit of \$36.2 million to the city of Toronto. In total, meeting and study space created \$37.6 million in tangible benefits.

One in five Torontonians report using a library to validate information they found on the Internet.

Value of an open hour

For each hour the library is open, residents have access to a range of services in their local community. In 2012, Toronto Public Library branches were open for a total of 249,239 hours. When library branches are open, Toronto residents can borrow books and materials, attend programs, ask reference questions, use meeting and study spaces, and access the Internet via a workstation or Wi-Fi. To benefit from these programs and services, the library must be open. For branches that have had an increase in open hours either with or without a corresponding renovation, library usage increases in relation to the additional hours. If a branch is open more, its collection use, program attendance, workstation usage, and number of visits all increase. If a branch is open fewer hours, those decrease. However, this is an aggregate relationship and specific changes at specific branches may have varying results.

For every hour Toronto Public Library branches are open, residents have access to library services worth \$2,515 in tangible benefits (**Exhibit 3** and **Exhibit A-16**).

***TD Summer Reading Club,
developed by Toronto Public
Library in partnership
with Library and Archives
Canada, encourages children
ages 6 to 12 to continue
leisure reading over the
summer months.***



Indirect Tangible Benefits are Significant



The Toronto Public Library spends the majority of its budget through vendors located in the Greater Toronto Area: 93% of capital spending, 85% of operational spending, and 68% of library materials spending. Also, 84% of Toronto Public Library employees live in the city of Toronto. This local spending – in the form of salaries, library material purchases, capital, and operating expenses – directly and indirectly benefits Toronto's economy.

Library branch renovations refresh and update local branches to continue to meet the evolving needs of their neighbourhoods. In addition to the value of the renovation itself, the majority of the renovation dollars are spent at GTA businesses that provide the products and services which benefits Toronto's economy.

Capital spending also includes a significant technology component which helps to maintain the underlying infrastructure and hardware that allow for the continued efficient operations of the library system and the technology access whose benefits were discussed earlier.

From 2007 to 2012, the average annual direct economic benefit realized from capital spending was \$20.7 million; when using multipliers to include the indirect benefits, capital spending contributed \$29.0 to \$41.5 million to the Toronto economy (**Exhibit A-18**).

Library employees spend significantly in the city of Toronto

Toronto Public Library employs many individuals in diverse capacities, including librarians, clerical workers and students, in full-time, part-time, temporary and permanent roles. In 2012, Toronto Public Library employed 2,300 people, and 83.5% of these employees live in the City of Toronto. This means that employees are spending a significant proportion of their salary locally, supporting Toronto's economy.

In 2012, the direct economic benefit realized from local employee spending was \$135.2 million; when using multipliers to estimate the indirect effects, the additional indirect benefit was between \$54.1 and \$135.2 million. Combining the direct and indirect effects results in a total economic impact of between \$189.2 and \$270.3 million to Toronto's economy (**Exhibit A-19**).

Page employment program creates benefits

The youngest employees at the Toronto Public Library are library pages. A page is primarily responsible for shelving and retrieving books, minor repairs, and other duties. Pages must be at least 14 years of age, work part-time, and earn approximately \$11.33 per hour.

Based on a study⁵ that calculates a valuation of the experience gained through first employment in the library's Pages Employment Program, two years of job experience is worth \$1,123 in Canada. That effect does wear off over time, and is assumed to have a diminishing value over five years (**Exhibit A-20**).

In 2012, the direct economic benefit of page employment was \$1.49 million; applying an economic impact multiplier of 1.4 to 2.0, the total economic impact of page employment was between \$2.1 million and \$2.9 million.

Library operational spending is mostly in the GTA

Toronto Public Library spends most of its operational budget within the Greater Toronto Area. This figure excludes salaries. Using multipliers to include the indirect benefits, library operations contributed between \$32.5 and \$46 million to the economy (**Exhibit A-17**).

Library capital spending is mainly local

Library capital spending includes building renovations and investment in new technology.

TPL supports Toronto's book and publishing industries

Toronto's publishing industry is a major contributor to Ontario's economy. According to Statistics Canada, Ontario's book publishing industry generated \$1.3 billion in sales in 2008, accounting for 63.2 % of all national revenue for this industry. The majority (67.9 %) of Toronto Public Library's materials budget is spent with book vendors located within the city of Toronto and Greater Toronto Area.

The direct economic benefit realized from library materials spending was \$17.9 million in 2012; when using multipliers to estimate the indirect effects, library materials spending contributed between \$25.1 and \$35.8 million to the economy (**Exhibit A-21**).

In 2012, over 220,000 preschoolers and more than 216,000 other children attended literacy programs delivered by Toronto Public Library branches across the city.

TPL responds to Toronto's diversity

"Cities that promote diversity and tolerance also tend to become places that are open to new ideas and different perspectives, promoting creativity. This in turn builds cities that are attractive to individuals and businesses involved in the creation of new ideas, products and services."

*The Importance of Diversity to the Economic and Social Prosperity of Toronto,
Martin Prosperity Institute, 2010*

Toronto Public Library provides welcoming and accessible spaces with opportunities for participation, regardless of socio-economic background, in communities across the city, and supports social cohesion and tolerance; the success of its residents and enhancing Toronto's livability, which is a variable used in studies that benchmark city competitiveness.

Library collections include materials in forty languages, reflective of cultural experiences and diverse interests and needs. Focused collections include the Native Peoples and LGBT collections, collections available through the CNIB Partners program for patrons with print disabilities, and a new collection of over 360 circulating books and DVDs for adults with developmental disabilities. Specialized equipment and services are available through the Adaptive Technology Centre at the Toronto Reference Library.

At the branch level, the Library Settlement Program is a partnership between the library and 16 community based newcomer agencies, offering one-to-one assistance to almost 9,500 Toronto newcomer residents, and helping them gain access to the services and resources they need to settle in their new city. In addition, 25,787 newcomers have attended LSP programs. English as a second language collections and classes are available as well as extensive online resources including newspapers from around the globe, accreditation information and citizenship resources.

Each year Toronto Public Library celebrates the city's diverse communities by partnering in citywide events, including Asian Heritage Month, Black History Month and Aboriginal Celebrations. In addition, the library continues to attract and engage Torontonians of all ages, stages, and abilities with creative and innovative programs and services. By working with community partners the library provides access to a wide array of cultural experiences and artistic expression.



Economic Analysis

Total Economic Impact

The total economic impact of the Toronto Public Library ranges from \$612 million to \$1,389 million. This estimate includes direct spending, direct tangible benefits, and indirect tangible benefits. The range results from applying the 80% discount rate to collection use and the lower range of estimated regional multipliers on direct spending. The midpoint of the total economic impact is \$1,000.6 million. So, for every dollar invested in TPL, Torontonians receive \$5.63.

The total value of the library to city of Toronto residents is as much as \$1.2 billion, representing a Return on Investment of up to 681%

Return on Investment

Return on Investment (ROI) is calculated by taking the total tangible benefits – the sum of direct tangible benefits from all products and services and indirect tangible benefits – to the city of Toronto, and dividing by the cost to provide the service – the direct spending.

When the value of tangible benefits (collection use, programs, reference & database services, technology access, meeting and study space and the MAP pass) was added to the value of indirect benefits (multiplier effect), the total quantifiable value in 2012 ranged from at least \$434 million and up to \$1.2 billion.

By taking the total benefit and then dividing by the total direct spending of \$177.9 million, the Return on Investment ranged from 244% to 681%. The midpoint of this range is 463%. In other words, for every \$1 spent on the Toronto Public Library, Toronto taxpayers receive additional benefits ranging in value from \$2.44 to \$6.81 (**Exhibit A-22**).

However, economic impact studies measuring public library systems in the United States and Australia can provide general benchmarks to help understand how Toronto Public Library compares in terms of economic value delivered. Care should be taken in comparing the results of this study to other studies as analysis approach, assumptions, governmental level of control, and economic context all differ. The studies in **Exhibit 5** provide some comparison to help understand the context of the Toronto Public Library economic impact study.

TPL card has intrinsic value

Many approaches have been used to determine the value of a library card. The typical approach is to do a ‘contingent valuation’. Essentially, people are asked the value that they would assign to their library card. Sometimes experts’ opinions are used for the valuation; other times individuals provide their own value. Of course, when individuals are asked, it is

TPL results

This study is the first of its kind in Canada, as no other economic impact studies have been done for any Canadian public library systems. Consequently, these results cannot be compared in the context of other Canadian systems.

TPL's economic impact compares favourably

Exhibit 5

Library System	Annual Operating Budget*	Total Economic Impact*	Economic Impact per Dollar Spent
State Library of Victoria, Australia (2011) ⁶	\$191	\$681	\$3.56
Florida Public Libraries (2010) ⁷	\$668	\$4,290	\$8.32
Santa Clara County Library District (2013) ⁸	\$33.2	\$172	\$5.17
Texas Public Libraries (2011) ⁹	\$451	\$2,400	\$4.42
Toronto Public Library (2012)	\$178**	\$1,000.6	\$5.63

*Millions of dollars

** Figure include capital spending

not uncommon to hear things like “priceless” or “beyond value.” Recently, a vibrant discussion was started at an education conference when someone suggested that his library card “was more valuable than my bachelor’s degree.” Often, people are given some direction for their contingent valuation by being asked to value individual library services and estimate their annual usage of those services.¹⁰ The library card is then assigned the calculated value. Typically, this results in a value of hundreds, if not thousands, of dollars for a single library card.

A second approach, based around the analysis used in this report, is to assign the total benefit from a tangible benefit analysis to library cardholders only. In the case of Toronto, a library card for the Toronto Public

Library system would have a value of \$762. This results in a value higher than the reported per capita value of \$347. To be fair (and more conservative), the estimates were converted based on the number of residents in Toronto and not just those holding library cards. The Toronto Public Library only requires a library card for checking out many materials. However, library members use the library and library services without needing a library card.

A third approach to valuing a library card is to use ‘revealed’ preferences. Contingent valuation, as discussed above, is based on ‘stated’ preferences – you ask people for a value and essentially ‘take their word’ for it. However, occasionally, it is possible to determine the actual value that someone puts on something by looking at their actions – what they actually *do* instead of what they *say*.

In the case of valuing a library card, an interesting and previously unexplored opportunity presents itself. Customers of the Toronto Public Library pay overdue fines. Although collection

TPL provides pathways to culture

Toronto Public Library promotes and provides pathways to Toronto’s culture through resources, services, and programming. The Sun Life Financial Museum + Arts Pass program is an excellent example of the library facilitating access to culture.

The livability of a city is enhanced by the vibrancy of its cultural life. Library-initiated programs such as Keep Toronto Reading Festival and the One Book community read bring literary culture and the joy of reading to the entire city. Programs at Toronto Public Library’s premiere event space in the heart of the city, the Bram & Bluma Appel Salon, attract internationally renowned authors, thought leaders, and newsmakers. The Thought Exchange, History Matters, and the Human Library initiatives attract Toronto’s intellectually curious, and promote lifelong learning. In 2011, local and community cultural initiatives and partnerships took centre stage, bringing arts and cultural opportunities into neighbourhoods from Malvern to Rexdale.

In the 2011 report, *Creative Capital Gains: An Action Plan for Toronto*, recommendations for the city include providing more affordable spaces for cultural industries and community arts. “For community arts, taking a fresh look through a cultural lens at parks, schools, libraries, community centres, and other real estate portfolios, to determine if and how these spaces could be used for culture, would have a major impact.”¹⁸ Toronto Public Library addresses this need through providing meeting and collaborative spaces at local branches. The S.P.O.T. (Success Power Opportunity Teamwork), a community initiative supported by the Malvern library, is a media centre for young people. Located next to the library in the Malvern Community Centre, the S.P.O.T. is a safe place for young people ages 14-25 to create, whether through the use of the recording studio, dance space, media lab, or performance space.

Through partnerships, transformations of physical and virtual spaces, and the use of new and emerging technologies, Toronto Public Library creates cultural and creative destinations that stimulate and support creativity, encourage collaboration, and spark experimentation and innovation for creators and entrepreneurs of all ages.

The library offers programs in partnership with internationally renowned cultural institutions such as Canadian Opera Company, Toronto Symphony Orchestra, Orchestra Toronto, Roy Thomson Hall, Tafelmusik, Royal Ontario Museum, Stratford Festival, and the Canadian Stage Company.

agencies are used in some cases, most individuals are paying their fines solely to be able to use their library cards. Effectively, the fines paid *reveal* the minimum value that individuals place on their library cards.

In 2012, 279,296 cardholders paid \$3.15 million in overdue fines. The average was \$11.27. In 2012, one individual paid nearly \$150 in fines in a single instance. At a minimum, library patrons have shown that they value their library card at just over \$11. Given the 1,327,364 total cardholders, the library cards issued by the Toronto Public Library have a total value of \$14.9 million. While the value of services provided has already been estimated in this report, this valuation can be considered as generally independent from the previously valued services and would reflect an additional, specific value for all issued library cards.

TPL membership is highly valued

Other than borrowing materials and accessing online databases, most of the services that the library provides do not require a library card to take advantage of the service, which makes those services available to the public.

Based on a survey conducted by the Strategic Counsel in 2012, where 72% of respondents used the library in the past year, just over 2 million Toronto residents are members of the Toronto Public Library community. Given the \$1 billion in direct tangible benefits provided by the Toronto Public Library, each member receives as much as \$502 in total direct benefits.

The Toronto Public Library website is the easiest way to find the books Toronto reads; in 2012, residents placed over 5.1 million books on hold, to be picked up at the branch of their choice.

“The biggest user of library Internet access are Canadians aged 16 to 24, where 21.5% used Internet library access in 2012.”

Michael Geist

Statscan Data Points to Canada’s Growing Digital Divide
November 2013



**Intangible Benefits
are Important**

Beyond the tangible benefits outlined in this report, Toronto Public library delivers value to Toronto's communities and residents in ways that are not easily quantifiable. Through services, collections and programs, TPL plays an important role in supporting literacy, a love of reading and learning, workforce development, support for small business, and providing access to cultural experiences. Partnerships with community agencies, educational and cultural institutions and City of Toronto agencies and departments reduce duplication of services and meet common goals, including locating services where and when people need them.

Delivering services through branches embedded in neighbourhoods across the city provides easy access while building a sense of community and providing an anchor for local business development.

Toronto Public Library consists of four tiers of service: Research and Reference libraries (2), District branches (17), Neighbourhood branches (79) and city-wide services, which include bookmobile, home library and virtual branch services. The Research and Reference libraries provide comprehensive, specialized collections and services and preservation of resources for current customers and future generations. The neighbourhood branches are smaller and focused on providing services in the community. The seventeen district branches are larger, have larger collections,

may offer special collections and services not available at the neighbourhood level, and provide more study space and technology. **Exhibit 6** summarizes the average annual activity for the 79 neighbourhood branches, 17 district branches, and 2 Research and Reference libraries.

Neighbourhood branches provide unique Intangible Benefits for communities

Toronto Public Library branches deliver services and programs that are responsive to their local neighbourhoods and communities and the city as a whole. Each branch offers a unique blend of programs and services that reflect the demographic mix of the neighbourhood, while providing a gateway to the services of the library system.

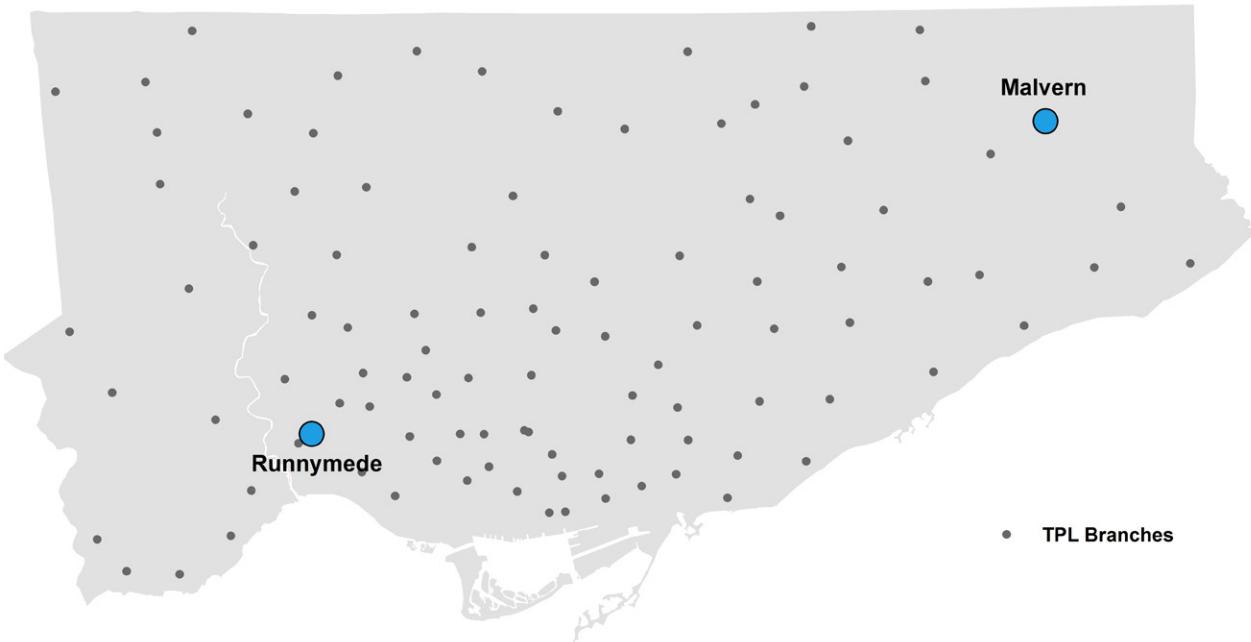
The Runnymede branch is a neighbourhood branch serving 11,000 residents. This 12,000-square-foot, stand-alone facility was first established in 1904 and relocated to its current location in 1930. It is a Heritage Toronto Property and an architectural landmark.

The community includes a relatively high percentage of residents who speak English at home (87.4%)¹¹ and representative language collections in Polish, Russian and Ukrainian reflect the local demographics. Runnymede has a strong focus on informational and literary programs for adult audiences to reflect the growing population of seniors (16%).¹² With an engaged reading population, book clubs and literary programs are of high interest and include the 'eh List' programs of Canadian author readings and a Polish book club. The branch also hosts programs with partners such as German storytelling for children with the Goethe Institute. Branch staff participate in

Average annual activity varies by branch type

Exhibit 6

Branch Type		Neighbourhood	District	Research & Reference
Count	Average Activity	79	17	2
Visits	Visits	135,539	328,912	1,315,406
	Collection Use	231,484	552,922	1,029,357
	In-Library Use	46,905	128,143	593,569
	Information Requests	46,271	145,853	435,695
	Holds Placed	46,478	89,186	189,831
	Holds Available for Pick Up	43,160	77,775	135,050
	Workstation Users	33,781	134,706	606,306
	Programs & Attendance	5,600	13,650	59,815



the local Business Improvement Association and take an active part in local events including the annual Ukrainian street festival.

On the other side of the city, the Malvern district branch is a large 26,000-square-foot branch co-located with the community recreation centre, creating a vibrant community hub. First established in 1958 as a deposit collection in a post office, the branch has grown with the Scarborough community and was reopened, after an extensive renovation in 2005, with a computer learning centre and enhanced community space, to serve a population of 77,000.

Collections offered at Malvern respond to the languages and cultures of the local community. Malvern has a relatively high number of residents who speak a language other than English or French at home (35.1%)¹³ (**Exhibit 9**). The branch collections reflect languages spoken in the community including Tamil, Gujarati, Urdu, Tagalog, Punjabi and Chinese. The Rita Cox Black and Caribbean Heritage Collection, which is housed at four branches across the city, including Malvern, celebrates the literary culture and history of the local community.

Malvern is a community with 35%¹⁴ of the population being children and youth. In response, the branch puts a particular focus on programming for youth (**Exhibit 8**). As examples, the branch has a youth advisory group and gaming nights and also offers youth employment workshops with local partners.

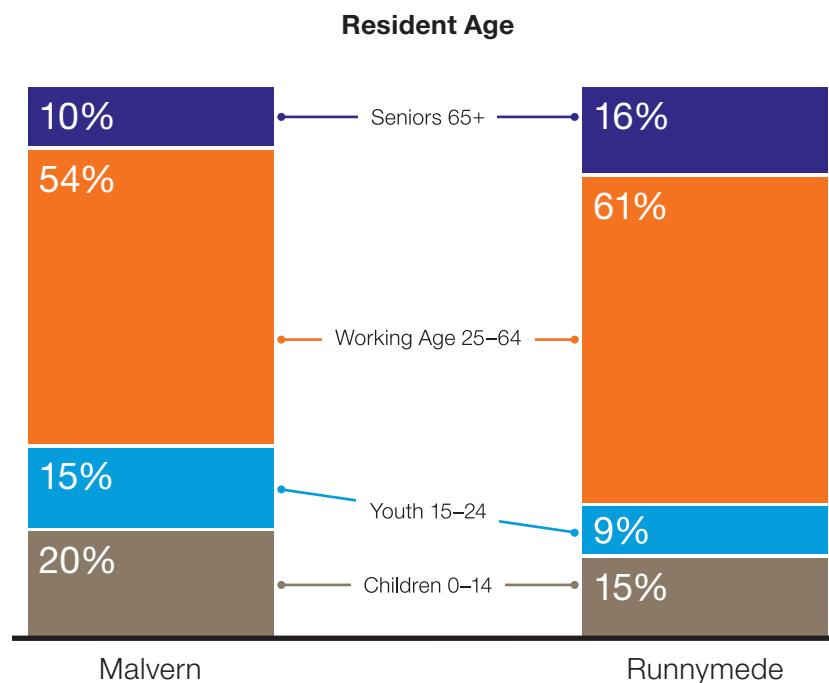
Malvern branch staff connect with groups and agencies to develop local initiatives that respond directly to community priorities. The Pro Tech Media Lab, S.P.O.T. (Success, Power, Opportunity and Teamwork), adjacent and connected to the library, are strong examples of the power of local partnerships.

This youth-led initiative provides a safe space for youth to meet, discover, create and connect, and also provides free access to technology which supports digital arts, animation, web design, photography, audio and video editing – all developing new skills and broadening career choices. Community partners, including East Metro Youth Services, the Malvern Family Resources Centre, Action for Neighbourhood Change, the United Way and On Track Career and Employment Services, support the space.

In 2012, Toronto Public Library circulated 1,073,340 eTitles, including eBooks, eAudio, and eVideo, an increase of 105% over 2011

Age profile of Malvern and Runnymede residents differs¹⁵

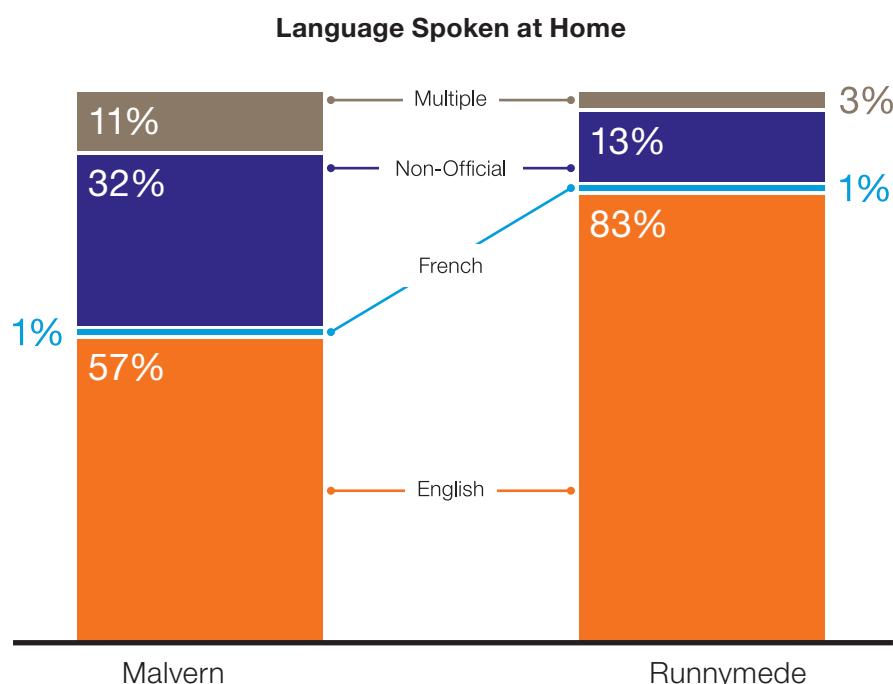
Exhibit 8



*Columns do not add up to 100% due to rounding

The Malvern and Runnymede communities speak different languages at home

Exhibit 9



*Columns do not add up to 100% due to rounding

“There’s so much more to a book than just the reading.” — Maurice Sendak

www.martinprosperity.org | 29

The Malvern branch also offers ESL classes and employment resources in association with the Toronto East Quadrant Local Immigration Partnership. The University of Toronto Scarborough campus delivers courses at the branch providing a bridge to university for local residents.

The intent of these two branch profiles is to demonstrate the closely integrated relationship between Toronto Public Library branches and their neighbourhoods. Programs and services offered in local library branches meet community needs. For each of the 98 branches located across the city, collections are built and programs delivered that provide customized value at the community level.

TPL supports small business development and entrepreneurship

Toronto's innovators, entrepreneurs and creators of today and tomorrow are participants in a global creative and knowledge economy. To succeed, they need information resources and strong technology support, as well as creative and collaborative spaces that encourage conversations, support co-working and co-creation, and stimulate and spark ideas. Also critical to fostering a creative economy are culture and cultural-related industries, which contribute to this city's economic success and enhance its residents' quality of life.

The City of Toronto's "Collaborating for Competitiveness: A Strategic Plan for Accelerating Economic Growth and Job Creation in Toronto" includes objectives to "help small and medium-sized enterprises form and prosper" and support "individuals with good ideas and the requisite entrepreneurial spirit, drive and perseverance to grow their business."¹⁹ Mentorship and guidance are needs that Toronto Public Library can fulfill through partnership-driven programs such as Business Inc.

The Business Inc. Series, featuring an eight-week program in six branches, is a partnership between the library, the Toronto Public Library Foundation, the Toronto Business Development Centre, and the City of Toronto's Economic Development & Culture Division. Successfully initiated in the spring of 2011, the partnership enables Toronto Public Library to offer access to professional business planning expertise at an affordable, subsidized cost.

During the series, participants network with other entrepreneurs, learn how to prepare a business plan, and have access to a business advisor along with other valuable business resources. At the conclusion of the program, candidates obtain a Business Seminar Series Certificate of Completion from the Toronto Business Development Centre and have an opportunity to apply for a small business loan. The program is also an excellent way for the library to increase awareness of business and financial services, which include a wide variety of books, eTitles, online databases, programs, and in-branch resources.

Toronto Public Library branches also provide flexible workspace that is in demand by many entrepreneurs and sole proprietors who need a space outside their home to get their businesses off the ground. These spaces facilitate collaboration as well as quiet study, and offer wired and Wi-Fi Internet access, a necessity for knowledge workers.



Appendices

APPENDIX A: DATA TABLES & CALCULATIONS

Collection Use

Market values for circulated items are derived from retail prices sourced from Indigo Books & Music. Since items range in price depending on format and audience, conservative values are used. Some studies have applied a discount of 80% to account for the difference between borrowing and owning an item, while other studies assume 100% of the value; to demonstrate this range, both approaches are included in the calculation on the following page.

It is important to recognize that Toronto Public Library has access to a much wider scope and diversity of items for purchase in comparison to retailers like Indigo. Many items in the Toronto Public Library collection are not available commercially, and many cannot be replaced, which represents a value that is not measured here.

2012	Circulation	Retail Value	Total Value with 80% Discount (Low)	Midpoint	Total Value without Discount (High)
Books					
Adult	8,831,710	\$21.00	\$37,093,182	\$111,279,546	\$185,465,910
Teen	795,006	\$18.00	\$2,862,022	\$8,586,065	\$14,310,108
Children	6,545,557	\$12.00	\$15,122,563	\$46,834,624	\$78,546,684
Total	16,172,273		\$55,077,767	\$166,700,235	\$278,322,702
Audio Books					
Adult	2,287,414	\$41.00	\$18,756,795	\$56,270,385	\$93,783,974
Teen	37,591	\$35.00	\$263,137	\$789,411	\$1,315,685
Children	143,656	\$30.00	\$861,936	\$2,585,808	\$4,309,680
Total	2,468,661		\$19,881,868	\$59,645,604	\$99,409,339
Periodicals					
Adult	1,763,324	\$7.00	\$2,468,654	\$7,405,961	\$12,343,268
Teen	22,245	\$7.00	\$31,143	\$93,429	\$155,715
Children	62,109	\$7.00	\$86,953	\$260,858	\$434,763
Total	1,847,678		\$2,586,750	\$7,760,248	\$12,933,746
CDs					
Adult	1,061,725	\$20.00	\$4,246,900	\$12,740,700	\$21,234,500
Teen	3,909	\$20.00	\$15,636	\$46,908	\$78,180
Children	104,514	\$20.00	\$418,056	\$1,254,168	\$2,090,280
Total	1,170,148		\$4,680,592	\$14,041,776	\$23,402,960
DVDs					
Adult	6,474,381	\$27.41	\$35,492,557	\$106,477,670	\$177,462,783
Teen	31,922	\$25.00	\$159,610	\$478,830	\$798,050
Children	1,883,221	\$21.54	\$8,112,916	\$24,338,748	\$40,564,580
Total	8,389,524		\$43,765,083	\$131,295,248	\$218,825,413
eTitles (books, audio, video)					
eTitles (books, audio, video)	1,073,340	\$16.00	\$3,434,688	\$10,304,064	\$17,173,440
ESL Learning Materials	689,516	\$28.00	\$3,861,290	\$11,583,869	\$19,306,448
Other Items (scores, VHS, pedometers)	147,863	\$5.00	\$147,863	\$443,589	\$739,315
Museum + Arts Pass	73,033	\$70.00		\$5,112,310	
Total Other Materials	1,983,752		\$12,556,151	\$27,443,832	\$42,331,513
Total Circulation	32,032,036		\$138,548,211	\$406,886,942	\$675,225,674

Formula:

[Circulation volume] x [retail value x 80% discount] = Economic Benefit (low)

[Circulation volume] x [retail value] = Economic Benefit (high)

*Note that this table does not include in-house use of materials or materials delivery, shown below.

In-house Use of Materials

Market values for in-house items are derived from retail prices sourced from Indigo Books & Music. Items used in-house most often are high-value reference materials, many of which are not available commercially. Since each item had a price range, in each case the conservative value is used. Some studies have applied a discount of 80% to account for the difference between borrowing and owning an item, while other studies assume 100% of the value; to demonstrate this range, both approaches are included in the calculation below.

In-house use of materials provided a value of \$30 million to \$150 million, 2012

Exhibit A-2

2012	In-house Usage	Retail Value	Total Value with 80% Discount (Low)	Total Value without Discount (High)
Reference & Other Materials	7,141,558	\$21.00	\$29,994,544	\$149,972,718

Materials Delivery

Toronto Public Library allows residents to place a circulating item on hold and delivers that item to the branch chosen by the resident for pick-up. This service is valued at the cost of a single TTC fare.

Materials delivery saves residents over \$15 million

Exhibit A-3

# Materials Delivered	TTC Fare	Total Economic Value
5,065,292	\$3.00	\$15,195,876

Total collection use provided an economic benefit of \$184 million to \$840 million, 2012

Exhibit A-4

2012	Volume	Total Value with 80% Discount (Low)	Midpoint	Total Value without Discount (High)
Circulation	32,032,036	\$138,548,211	\$406,886,942	\$675,225,674
In-Library Use	7,141,558	\$29,994,544	\$89,983,631	\$149,972,718
Materials Delivery	5,065,292	\$15,195,876	\$15,195,876	\$15,195,876
Total	44,238,886	\$183,738,631	\$512,066,449	\$840,394,268

Sun Life Financial Museum + Arts Pass

The value of the Sun Life Financial Museum + Arts Pass is determined by averaging the cost of the value of all the daily admission fees for the Toronto-area museums and galleries listed below, for two adults and three children. The pass allows for two adults and up to five children. Only three children were used in estimating the value of the pass in keeping with a more conservative and typical estimate. This figure was then multiplied by the number of times the pass was borrowed in 2012.

Art Gallery of Ontario	Museum of Inuit Art
Bata Shoe Museum	Ontario Science Centre
Black Creek Pioneer Village	Royal Ontario Museum
Casa Loma	Textile Museum of Canada
City of Toronto Historic Museums (8 across the city)	Toronto Zoo
Gardiner Museum	

Over 73,000 free museum family passes borrowed

Exhibit A-4B

2012	# of Borrows	Average Retail Value	Total Economic Value
Museum + Arts Pass	73,033	\$70.00	\$5,112,310

Formula:
[MAP usage] × [average value of daily admission for 2 adults, 3 children] = Economic Benefit

Programs

Market values for programs are derived from comparable market prices sourced from comparable programs offered in Toronto, such as literacy tutoring for children and computer training for adults. As each item had a price range, in each case the conservative value is used.

Programs generate \$26 million in benefits

Exhibit A-5

2012	Attendees	Market Value	Total Economic Value
Preschool	219,591	\$45.00	\$9,881,595
Child	216,086	\$45.00	\$9,723,870
Teen	58,213	\$45.00	\$2,619,585
Adult	260,703	\$15.00	\$3,910,545
Seniors	14,941	\$15.00	\$224,115
Total Programs	769,534		\$26,359,710

Formula:
[Program attendance] × [comparable value] = Economic Benefit

Reference & Database Services

An environmental scan of fee-for-service reference & database services reveals a wide range of costs. The Toronto Public Library's IntelliSearch service is designed for small businesses that need a dedicated research librarian; this service is \$100 per hour, with a minimum charge of \$25. For the purposes of valuating the average reference question, assume each reference question requires 10 minutes to understand, research, and provide the answer: a value of \$15.

Expert library staff answered 2.3 million questions

Exhibit A-6

2012	# of Questions	Market Value	Total Economic Value
Neighbourhood & District Branches	1,845,292	\$15.00	\$27,679,380
Reference Libraries	289,727	\$15.00	\$4,345,905
Citywide Services	136,820	\$15.00	\$2,052,300
Answerline	73,725	\$15.00	\$1,105,875
Total Reference	2,345,564		\$35,183,460

Formula:
[Information requests] × [comparable value] = Economic Benefit

The value of licensed web databases is based on the consumer pricing posted on these services' websites for annual subscriptions. The value of \$25 per search is consistent with comparable studies consulted for this report.

Database searches worth over \$43 million

Exhibit A-7

2012	Searches	Market Value	Total Economic Value
Licensed Web Databases	1,746,241	\$25.00	\$43,656,025

Nearly 4 million questions answered valued at \$78 million

Exhibit A-8

2012	Searches	Market Value	Total Economic Value
Total Reference	2,345,564	\$15.00	\$35,183,460
Licensed Web Databases	1,746,241	\$25.00	\$43,656,025
Total Searches	4,091,805		\$78,839,485

Technology Access

In 2012, Toronto Public Library visitors logged a total of 6,138,170 computer workstation sessions, with each session lasting just under one hour. Assuming the average time of each session is approximately 60 minutes, visitors used these workstations for approximately 6,138,170 hours. Based on market research looking at Toronto-area Internet cafés, assume a market value of \$3 per hour.

\$18 million in workstation usage

Exhibit A-9

2012	# of Session (60 minutes)	Market Value	Total Economic Value
Workstation Usage	6,138,170	\$3.00	\$18,414,510

In 2012, Toronto Public Library visitors logged a total of 1,493,299 Wi-Fi sessions across all branches. Based on market research looking at Toronto-based Wi-Fi provider OneZone, assume a market value of \$5.00 for 60 minutes of continuous access.

\$7.5 million in free Wi-Fi usage

Exhibit A-10

2012	# of Sessions	Hourly OneZone rate	Total Economic Value
Wi-Fi Usage	1,493,299	\$5.00	\$7,466,495

Over 7 million technology sessions worth \$26 million

Exhibit A-11

2012	Sessions	Market Value	Total Economic Value
Workstation Usage	6,138,170	\$3.00	\$18,414,510
Wi-Fi Usage	1,493,299	\$5.00	\$7,466,495
Total Access		7,631,469	\$25,881,005

Formula:

[Workstation hours] × [comparable value] = Economic Benefit
[Wi-Fi hours] × [comparable value] = Economic Benefit

Meeting & Study Space

Toronto Public Library rents meeting rooms to both commercial and non-profit groups, at different hourly rates. The value of room rentals is based on market research for a comparable room in the city of Toronto. Most branches offer standard meeting rooms, which are comparable to a Toronto District School Board classroom, which can be rented at \$12.20 to \$50.00 per hour. The Bram & Bluma Appel Salon is a premier event space that is comparable to venues such as the Bata Shoe Museum, Hockey Hall of Fame, and Ontario Science Centre. These venues are rented at approximately \$2500 per booking.

Meeting space booked 6,900 times

Exhibit A-12

2012	# of Bookings	1 Booking = 3 hours	Commercial Rate/hour	Total Economic Value
Small Meeting Room (0–30)	683	2,049	\$12.20	\$24,998
Large Meeting Space (30–250)	6,019	18,057	\$50.00	\$902,850
Bluma Appel Event Space	198		\$2,500.00	\$495,000
Total	6,900			\$1,422,848

In 2012, Toronto Public Library and The Strategic Counsel conducted a survey to determine how Toronto residents used library services. In 2012, 18,872,588 people visited a Toronto Public Library branch.

The survey reports that 30% of library users visit to find a quiet place to study or read, and 18% responded that they visited as a place to work. Based on these figures, assume that 48% of the 18,872,588 adult library visitors use the library to study, read or work.

To calculate the value of using Toronto Public Library space for reading or studying, a market rate based on the price of renting a “hot desk” at the Centre for Social Innovation was used. CSI charges \$75 per month for 20 hours of usage, which, rounded up, equals \$4 per hour.

Over nine million visitors use work/study spaces

Exhibit A-13

2012	# of Library Visitors	48% of Visitors use library for study or work	Market Rate/hour	Total Economic Value
Study or Work Space	18,872,588	9,058,842	\$4.00	\$36,235,369

2012	Bookings/Visitors	Market Value	Total Economic Value
Booked Space	6,900	\$12.00 – 2,500.00	\$1,422,848
Study Space	9,058,842	\$4.00	\$36,235,369
Total Benefits	9,065,742		\$37,658,217

Formula:

[Meeting Space usage] × [comparable value] = Economic Benefit

[Study Space usage] × [comparable value] = Economic Benefit

Value of an Open Hour

To determine the value of library open hours, the sum of benefits delivered while the library is open was divided by the number of hours the Toronto Public Library was open in 2012.

Note that eTitles and database searches were not included in this calculation, since those services can be accessed during and outside of open hours; data to calculate when these services are accessed are unavailable. Note that the figures used for circulated items assume a midpoint of the estimated value of each item.

In calculating the average value of an open hour, for the numerator we used the direct tangible benefits and removed the benefits from eBook uses and electronic databases, on the premise that these services can still be accessed even when the branch is closed.

One open hour at one branch has an average value of \$2,515

Exhibit A-16

Benefit	Value to Resident
Books	\$166,700,235
Audio books	\$59,645,604
Periodicals	\$7,760,248
CDs	\$14,041,776
DVDs	\$131,295,248
Other Materials	\$17,139,968
In-Library Materials Use	\$89,983,631
Materials Delivery	\$15,195,876
Children's & Teen Programs	\$22,225,050
Adult & Senior Programs	\$4,134,660
Reference Questions	\$35,183,460
Internet Workstations	\$18,414,510
Internet Wireless	\$7,466,495
Meeting Space	\$1,422,848
Study Space	\$36,235,369
Total	\$626,844,977
Hours	249,239
Value of One Hour	\$2,515

Library Operations Spending

Toronto Public Library spends the majority of its operational budget within the Greater Toronto Area. The expenditures below exclude salaries. **Exhibit A-17** illustrates the economic impact of library operational spending – not including salaries and library materials which are separately presented – according to geographic location. Multipliers were applied to demonstrate indirect economic impact.

Operations spending generates indirect tangible benefits

Exhibit A-17

Expenditure by Location	% Share	Multiplier: 1.4	Multiplier: 2.0
All Locations		\$35,440,797	\$50,629,710
GTA*	91.80%	\$32,537,852	\$46,482,646
Canada	5.50%	\$1,955,587	\$2,793,696
US	2.70%	\$947,358	\$1,353,368

*Note that a small portion of expenditures with an unknown location have been added to the GTA location.

Library Capital Spending

Library capital spending includes buildings and renovations and investment in new technology. The majority (92.7%) of Toronto Public Library's capital budget is spent within the Greater Toronto Area.

Capital spending generates indirect tangible benefits

Exhibit A-18

CAPITAL SPENDING					
	Building	Technology	Total	Multiplier (x 1.4)	Multiplier (x 2.0)
2007	10,657,046	4,065,577	14,722,623	20,611,672	29,445,246
2008	17,522,900	3,259,347	20,782,247	29,095,146	41,564,494
2009	13,439,184	5,177,768	18,616,952	26,063,733	37,233,904
2010	16,414,220	7,099,334	23,513,554	32,918,976	47,027,108
2011	18,570,237	6,556,881	25,127,118	35,177,965	50,254,236
2012	16,717,824	4,952,414	21,670,238	30,338,333	43,340,476
Annual Average	15,553,569	5,185,220	20,738,789	29,034,304	41,477,577

Library Employment Spending

The majority of Toronto Public Library employees live in the city of Toronto.

Employment spending generates indirect tangible benefits

Exhibit A-19

	2012 Salary Costs	Multiplier Benefit	Total Economic Impact
Multiplier: 1.4	\$135,151,436	\$54,060,574	\$189,212,010
Multiplier: 2.0	\$135,151,436	\$135,151,436	\$270,302,872

Library Pages Employment Program

In a 2007 report published by the IZA Institute for the Study of Labor (Polacheck, 2007), employment was valued based on years of experience. The MPI used this study to calculate a valuation of the library pages employment program. The resulting assumption is that two years of job experience is worth \$1,123 in Canada. That effect does wear off over time, but assume it has diminishing value over 5 years.

Pages must be at least 14 years of age, can work up to a maximum of 20 hours per week and earn approximately \$11.33 per hour. Also assume that the current number of pages (672) is two cohorts and they get two years of work experience, so half the pages have one year of experience and half just started their jobs. Assume the same cohort size of “graduates” from the program each year. Applying an economic impact multiplier of 1.4 to 2.0, the economic impact of page salaries was calculated in **Exhibit A-20**.

Work experience creates value for pages

Exhibit A-20

	Salary Increase	Number of Pages	Total Value
Year 0	0	672	
Year 1	\$1,123	336	\$377,328
Year 2	\$898.40	336	\$301,862
Year 3	\$673.80	336	\$226,397
Year 4	\$449.20	336	\$150,931
Year 5	\$224.60	336	\$75,466
Year 0 (1 year)	\$1,060	336	\$356,160
Total			\$1,488,144
Multiplier	× 1.4		\$2,083,402
Multiplier	× 2.0		\$2,976,288

Library Materials Spending

The Toronto Public Library spends the majority of its library materials budget within the city of Toronto and Greater Toronto Area. **Exhibit A-21** illustrates the economic impact of library spending according to geographic location. We applied multipliers to demonstrate economic impact.

Spending on materials generates indirect tangible benefits

Exhibit A-21

Expenditure by Location	Total Materials Expenditure	% Share*	Multiplier: 1.4	Multiplier: 2.0
All Locations	\$17,915,812		\$25,082,137	\$35,831,624
Toronto/GTA	\$12,369,544	69.0%	\$17,317,362	\$24,739,088
Canada	\$2,764,379	15.4%	\$3,870,131	\$5,528,758
USA	\$2,479,711	13.8%	\$3,471,595	\$4,959,422
International	\$302,178	1.7%	\$423,049	\$604,356

* Due to rounding % Share does not equal 100%

Return on Investment

Return on Investment (ROI) was calculated by taking the total economic benefit – the sum of tangible benefits and indirect benefits – to the city of Toronto, and dividing it by the cost to run the service, which is the 2012 total direct spending for Toronto Public Library.

To calculate indirect benefit using the multiplier effect, MPI applied a range of 1.4 to 2.0 to the direct expenditures, which is consistent with recent economic impact studies evaluating comparable services, and is consistent with national and provincial multipliers used by Statistics Canada.

TPL generates a Return on Investment of 244% to 681%

Exhibit A-22

	Value to Resident (Low)	Midpoint	Value to Resident (High)
Direct Tangible Benefit	\$352,477,047	\$680,804,866	\$1,009,132,685
Indirect Tangible Benefit	\$81,731,759	\$141,914,469	\$202,097,180
Total	\$434,208,806	\$822,719,335	\$1,211,229,865
TPL 2012 Total Direct Spending		\$177,878,200	
ROI (Low)		244%	
Midpoint		463%	
ROI (High)		681%	

Economic Multipliers – References

Throughout this study, multipliers were used to calculate the indirect effects of Toronto Public Library expenditures, such as salaries, library materials, operating expenses, capital expenses, and renovation spending, on the City of Toronto economy. To determine an appropriate multiplier to use for this study, MPI reviewed the following studies and articles:

Multipliers for indirect tangible benefits

Exhibit A-23

Source Title	Multiplier Used
Growing Room: St. Louis Public Library's Grand Central Renovation	1.7257
Worth their Weight: An Assessment of the Evolving Field of Library Valuation	2.065
Free Library of Philadelphia: An Economic Impact and Activity Analysis of the Central Branch Expansion and Renovation	1.4925
National Statistical and Values Profile of Canadian Libraries: Report to CLA Executive Council	1.40–1.42
Placing an Economic Value on the Services of Public Libraries in Suffolk County, New York	1.9598
National and Provincial Multipliers from Statistics Canada	Construction: 2.24 Non-Profit Inst: 2.15 Arts, Ent & Rec: 2.23 Edu Services: 1.85

APPENDIX B: COMPARATIVE STUDIES

The following studies were examined and evaluated to help the project team understand work done to date, and the methodologies used. These studies help to inform the approach to this study in terms of methodology and organization.

Americans for the Arts. (2012). *Arts & Economic Prosperity IV: Economic Impact of the Nonprofit Arts & Culture Industry*. Retrieved from http://americansforthearts.org/information_services/research/services/economic_impact/default.asp.

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APPENDIX C: LITERATURE REVIEW

Urban policy makers are increasingly interested in quantifying the economic and social benefits of key public elements of the built environment. This paradigm shift aims to move discussions about public goods, such as libraries, beyond the traditionally “soft” benefits associated with quality-of-life variables to “hard” quantifiable variables, such as property values, public health costs, social equity, and literacy and crime rates. Such studies of the economic and social impact of libraries are of increasing importance both for urbanites living in municipalities keen on balancing their budgets by cutting services seen as “unnecessary” and for provincial and federal governments keen on developing highly educated, happy, and productive citizens to compete in the global marketplace.

Only very recently has the direct and indirect economic impact of public libraries received much attention in both popular and academic media. This may largely be in part because people see libraries as essential parts of society and so they of course should receive public funding. Studies investigating the quantitative economic impact of libraries have recently grown in the public sphere because of increased scrutiny of municipal budgets. However, during economic downturns, it has been shown that public libraries take on an increased importance for city residents. This is because libraries “facilitate workforce development by providing access to computers and the Internet, and offer technology training that helps local residents learn new skills, apply for jobs, start and grow business” (Newman, 2012). Therefore, an investigation into the economic impact of libraries has the potential to have widespread policy implications and positive effects on the lives of present and future library users.

In 2007, the Urban Libraries Council released the “Making Cities Stronger: Public Library Contributions to Local Economic Development” report. The report outlines four key economic benefits directly related to the presence of public libraries. First, early literacy services are contributing to long-term economic success. Second, library employment and career resources are preparing workers with new technologies. Third, small business resources and programs are lowering barriers to market entry. Finally, public library buildings are catalysts for physical development (Manjarrez, Cigna, & Bajaj, 2007). Similarly, studies in Norway (Aabø, 2005), Korea (Ko, 2012), Australia (State Library of Victoria, 2011), Florida (McClure, Fraser, Nelson, & Robbins, 2001), South Carolina (Barron, 2005), New York City (Newman, 2012), and Seattle (Berk and Associates, 2005) have all shown that the benefits of libraries to society, both quantitative and qualitative, far outweigh the costs.

In Canada, there have been few recent studies on the economic impact of public libraries. In 1996, an article by Rod Sawyer (Sawyer, 1996) documented extensive anecdotal evidence of how public libraries in Ontario provide economic benefits. A report provided by the Book and Periodical Council (Warner & Fitch, 1997) discusses the positive impact of public libraries on local economies, pointing to anecdotal information from libraries around the world. A recent report by the Canadian Centre for Policy Alternatives (Rao, 2012) provides a history of funding for the Toronto Public Library and uses metrics to demonstrate the library system’s value to Torontonians in terms of entertainment, skills development, social inclusion, economic support, and health, at a high level. Rao’s report opens the door for a more detailed study of how public libraries impact their local economies.

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APPENDIX D: GLOSSARY OF TERMS

Tangible Benefits are those benefits that can be assigned a specific value. The value may be derived in a variety of different ways and a range of values may be possible.

Direct Tangible Benefits are those benefits that accrue directly to an individual or organization; these benefits have an identifiable *beneficiary*.

Indirect Tangible Benefits, also known as the multiplier effect, is the benefit created by the re-spending of dollars within the local economy generated by the direct spending.

Direct Spending includes items such as institutional spending and wages, which have a direct impact on the local economy.

Total Economic Impact is the total of direct tangible benefits, indirect tangible benefits, and direct spending; this is the combined impact across the entire economy.

Return on Investment (ROI) is calculated by taking the total economic benefits – the sum of direct tangible benefits and indirect tangible benefits – and dividing that sum by the cost to run the service (direct spending).

Intangible Benefits are those benefits that cannot be assigned a specific value.

Benefits to City of Toronto is used to express the aggregation of direct benefits that may be accruing to only select individuals within the city. While most of the tangible benefits are effectively only available to people who avail themselves of the library's services and offerings, indirect and intangible benefits accrue more widely. Additionally, "spillover" effects result in indirect benefits for other city residents as those directly benefiting gain skills, knowledge, human capital, or employment.

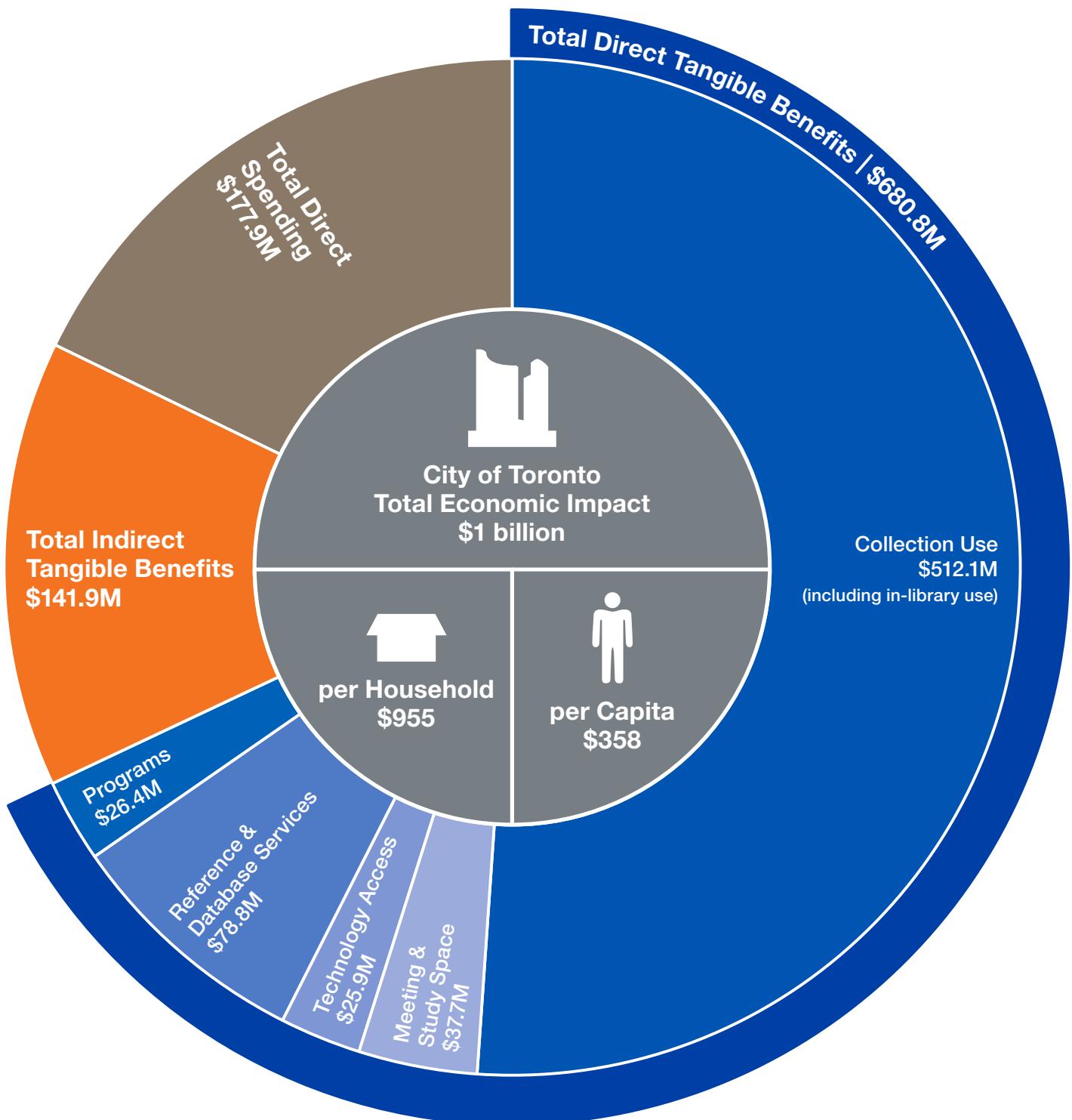
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APPENDIX F: FULL SIZE INFOGRAPHICS

Toronto Public Library creates over \$1 billion in total economic impact	53
Total direct benefit of nearly \$500 per member	54
Total quantifiable benefits delivered significant value to Toronto, 2012	55
The average open hour at a branch generates \$2,515 in direct benefits	56

Toronto Public Library creates over \$1 billion in total economic impact



\$1 invested = \$5.63 of economic impact

Total direct benefit as much as \$500 per member

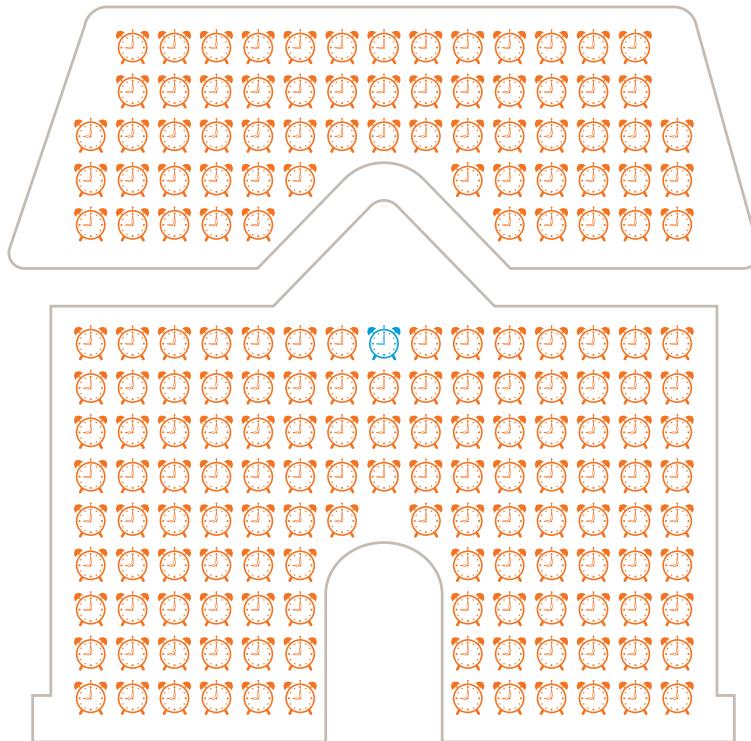
think read listen enjoy
borrow explore watch
experience learn hear
see discuss contemplate

\$502 value of a library
membership.



Based on up to **\$1 billion** in total direct benefits and
use of the library by **72%** of Torontonians.

The average open hour at a branch generates \$2,515 in direct benefits



⌚ **\$627 million**

total value of all library hours
in 2012.

⌚ **\$2,515**

average value of one open hour.

\$653

average cost of one open hour.

Total quantifiable benefits delivered significant value to Toronto, 2012

		Low* (\$)	Estimate* (\$)	High* (\$)
Direct Tangible Benefits	Collection Use	183.7	512.1	840.4
	Programs		26.4	
	Reference & Database Services		78.8	
	Technology Access		25.9	
	Meeting & Study Space		37.7	
	Total Direct Tangible Benefits	352.5	680.8	1,009.1
Direct Spending	Operations		25.3	
	Capital (annual average)		20.7	
	Employment		135.2	
	Materials		17.9	
	Total Gross Spending		199.1	
	Revenue Offsets to Costs		21.2	
	Total Direct Spending		177.9	
Indirect Tangible Benefits	Operations	10.1	17.7	25.3
	Capital (annual average)	8.3	14.5	20.7
	Employment	54.1	94.6	135.2
	Materials	7.2	12.5	17.9
	Pages Employment Experience Benefits	2.1	2.5	3.0
	Total Indirect Tangible Benefits	81.7	141.9	202.1
Total Economic Impact		612.1	1,000.6	1,389.1
Impact per Dollar Spent		3.44	5.63	7.81
Impact per Toronto Resident		219.30	358.49	497.68
Impact per Toronto Household		584.12	954.88	1,325.64
Total Benefits		434.2	822.7	1,211.2
Return on Investment		244%	463%	681%
Average Value of One Open Hour at a Branch			2,515	

*Millions of dollars

Direct Tangible Benefits – directly measurable

Direct Spending – budgeted investment

Indirect Tangible Benefits – multiplier benefits from direct spending

Total Economic Impact – all tangible benefits and direct spending

Total Benefits – sum of tangible benefits

Return on Investment – benefits divided by total direct spending

Average Value of One Open Hour – only includes benefits that require an open library

Assumes 2,791,140 Toronto residents and 1,047,880 households.

Results do not include intangible benefits.

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