The Economic and Socio-cultural Impact of the Edmonton Public Library

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Executive Summary

Total Economic Impact and ROI

The total economic impact of the Edmonton Public Library (EPL) is estimated at just over **\$187 million**. As a result, EPL generates **\$3.11** in economic value for each dollar invested in the library's operations and the equivalent of just under **\$213** of value for each Edmonton resident.

Use Value

EPL's programs, services, materials and collections generate a total of just over **\$131.5 million** in value for Edmonton residents, which is equivalent to:

- \$149 per capita;
- \$556 per active library membership; and
- **\$2,488** per open hour

The Use Value of EPL's operations includes:

- \$107.2 million generated annually from the use of EPL's physical and digital collections and materials
- \$6.4 million generated annually from participation in EPL outreach and in-library programs
- \$400,000 generated annually by the use of EPL's reference services
- \$8.6 million generated annually from library users accessing technology equipment and services at EPL
- **\$8.8 million** generated annually from library users accessing EPL's special event and meeting spaces and using the library's public spaces for work or study.

Operations Impact

On an annualized basis EPL's operations contribute **719 full-time equivalents (FTEs)** of employment and almost **\$56 million in GDP** to the Edmonton Economy, including **509 FTEs** employed directly within EPL and **\$31.5 million** in GDP generated as a result of the library's direct spending related to its activities.

Socio-Cultural Impacts

EPL also has a significant socio-cultural impact on the Edmonton community beyond the economic impact the library generates.

Educational impact

EPL offers a range of programs and services that have important educational impacts that contribute to the development of Edmonton's Human Capital. For example, literacy-focused programs have benefitted thousands of Edmonton residents helping develop early literacy skills that help improve academic performance and the chances of high school completion. EPL also offers more specific



homework support, research instruction, and library orientation programs that directly support and impact the academic performance of high school students.

In addition, EPL's technology access services (e.g. workstations and other devices available for use in library branches and access to free Wi-Fi on personal devices at all library branches) and digital literacy programs help Edmonton residents develop digital skills across a variety of technologies, in relation to a diverse range of activities and at different levels of proficiency. Digital literacy and technology skills are essential to everything from school-readiness and job-readiness, to identity development and community engagement and EPL's offerings in this area contribute to developing a healthy and vibrant labour force.

Social Impact

Many of EPL's most innovative, community-oriented programs and services have important social impacts in the community. For example, EPL offers many services aimed at supporting and aiding Edmonton residents facing social difficulties. For example, drop-in and other community outreach services often serve as a point of access to other social services available through the City, as well as contributing to an increased sense of engagement among at-risk populations. EPL also offers programs that focus on providing guidance and skills-building in job searching, developing resumes, cover letters and interview skills and techniques. Many of these programs are specifically aimed at addressing unemployment and are aimed at target segments of the population, such as teens, seniors, and 'at-risk' individuals.

The library also provides critical support for new Canadians as they settle and integrate into their new lives. The library is a central place where new Canadians can access information, support services and programs such as specialized workshops on immigration law or English as a Second Language. The library also plays a role as an important gathering place where new Canadians can come together for community and cultural sharing.

Community Impact

One of EPL's most central impacts is the role the library plays in community building and strengthening community identity. On the one hand, EPL's physical branches serve as important gathering places for the community and contribute to the development of community bonding and a sense of belonging. EPL branches also provide spaces for other organizations in the community to deliver programs and events. EPL also plays an important role in providing a truly open and welcoming public space for all residents and visitors in the city. As true public spaces, libraries become public gathering places where connections are made and citizens can access information and resources or entertainment for free.

On the other hand, EPL hosts a number of recreational, special interest and community programs that bring Edmonton residents together for shared experiences.

EPL also serves as an outlet for civic engagement, through volunteerism and private philanthropy, which contributes to strengthening a sense of belonging and creating community bonds.

Cultural Impact

EPL plays a role in the promotion and development of local and regional arts and culture. Programs such as the Writer in Residence Program, Illustrator visits and the Reader's Choice Awards promote



local literature and support local authors. EPL also offers programs that encourage the creation of literature, both through writing workshops and self-publishing training sessions using the Espresso Book Machine in the EPL Makerspace

EPL also plays a role in promoting local artistic production in other disciplines, such as the visual arts and music. Programs related to the arts include artist visits to the Gallery at Milner, arts camps and workshops, and Music Maker Mondays with iHuman. Edmonton-based artists also have access to free exhibition space to display their works though a juried application process. And the EPL Makerspace plays an important role in helping local artists and creators (both professional and amateur) access equipment to explore new techniques, promote their work and produce products at a low cost.



1. Introduction

In the wake of celebrating its centennial year in 2013, removing the library card fee, and being awarded Library of the Year in 2014, the time is ripe for EPL to evaluate the economic and sociocultural value it generates for the city of Edmonton and its residents.

EPL's innovative community-led approach means that their programs and services are developed not only with the community and its evolving needs in mind, but in close collaboration and consultation with community groups and Edmonton residents. As a result, EPL has developed a number of innovative programs, several of which include partnerships with other core community organizations in Edmonton.

In addition, the 2014-2018 business plan set a new direction; one that focuses on a small set of core strategic goals (i.e., Transform communities; Evolve the digital environment; Act as a catalyst for learning, discovery and creating; and Transition the way they do business), aimed at strengthening the impact that EPL has in the community and widening its reach to all Edmontonians.

The present Economic and Socio-Cultural impact study—taken within the context of EPL's transformation into a more community-led and community service-focused organization, is an important way to demonstrate the real value and impact of the services EPL makes available to all Edmonton residents.

The following sub-section provided additional details about the study's purpose and objectives.

1.1 Study Mandate and Objectives

The purpose of the present study is to assess EPL's economic and socio-cultural impact and identify the economic return that investment into EPL's operations generates. Much of the economic impact can be measured in monetary terms. Even when market transactions do not take place, reasonable proxies can be used to determine an economic value for the services provided by EPL. However, the socio-cultural impact is assessed in non-monetary terms – largely through an analysis of the reach that EPL programs and services have in the community and through case studies and secondary research that help illustrate the outcomes and impacts of those services.

The measurement of the impact that EPL has on the Edmonton economy and community is part of an effort to understand how EPL contributes to the city's liveability and competitiveness. The core objectives of the study are to:

- Determine the economic value of EPL materials, programs, services and facilities;
- Determine the return on investment (ROI) generated by the investment in library operations, including: library materials, programs, services and facilities;
- Identify the socio-cultural impacts that EPL programs and services are having in the community; and
- Determine how EPL's offerings contribute to Edmonton's competitiveness, liveability, economic development and prosperity.

By conducting a study of its impact on the Edmonton economy and community, EPL is seeking to build on the work undertaken by public libraries in other jurisdictions. In recent years there has been



a push for libraries in Canada to explore and demonstrate both the economic and socio-cultural impacts that they are having in the community. Indeed, the Canadian Library Association in its 2012 report, *National Statistical and Values Profile of Canadian Libraries*, for Canadian libraries to "initiate comprehensive studies of economic benefits and impact" and research the "qualitative meanings of libraries as reading, learning, and democratic institutions that support and enhance the public sphere."

EPL is well known as an industry leader and innovator among Canadian (and international) libraries, as evidenced by their recent successful bid for the Library of the Year Award for 2014 – the only Canadian library to ever receive that prestigious title. The present study is another opportunity for EPL to take leadership and demonstrate innovation in the area of impact measurement for public libraries, both in Canada and internationally.

The report below first explores the Economic Impacts of EPL, including:

- The Use Value (the value generated for Edmonton residents as a result of their access to EPL materials, programs and services);
- The Operations Impact (the economic contribution that EPL's operations make to the local Edmonton economy); and
- The ROI (the economic return generated for every dollar invested in EPL's operations)

The report then goes on to describe the socio-cultural impacts that the library generates in the community, including:

- The Educational Impact (how EPL's programs and services contribute to the development of Edmonton's human capital, a key economic driver);
- The Social Impact (how EPL's contributes to solving and alleviating key social issues in the city through its program and service offerings and contributes to improving the lives of Edmontonians);
- The Community Impact (EPL's role as a community hub, a public gathering space for the community to come together and be engaged in shared experiences and community building); and
- The Cultural Impact (EPL's role in supporting and promoting local arts and cultural production and history).

2. Economic Impacts

The following section provides a description of the economic impacts of the Edmonton Public Library. The Economic Impact includes the three following components:

- **The Use Value** calculation provides an estimate of the value that EPL users extract from accessing the library's collections, material, spaces, programs and services.
- **The Operations Impact** estimates the contribution that EPL's operations make to the Edmonton Capital Region through the employment the library generates for local residents



and the supplies and services it purchases from local businesses for both its operating and capital expenditures.

• **The ROI** calculation uses the total economic impact generated by EPL—including both the Use Value and the Operations Impact—in order to determine the return of economic activity generated for each dollar invested in EPL's operations.

Each of these Economic Impact components is described in more detail in the sections below.

2.1 Use Value

The primary economic impact of the Edmonton Public Library stems from the value that users extract through accessing and using the library system's wide variety of materials, collections, programs and services. Edmonton residents have access to space for work/study as well as private, corporate or community gatherings at EPL's 19 branches. They enjoy access to facilities and amenities including Wi-Fi and specialized equipment through the Makerspace. Edmontonians also have an opportunity to access a wide variety of book, newspaper, magazine, music and video content through EPL's physical and digital collections. And EPL's wide variety of programs—both in-house and outreach— and for all ages offer opportunities for recreation and entertainment, lifelong learning, and skill-building in a range of areas including literacy, career assistance, general life skills and digital literacy.

In most cases, Edmonton residents can take advantage of what EPL has to offer for free.¹ Without access to the Library they would need to access similar services and materials from alternative sources in the city.² As such, EPL and the materials, collections, programs and services it offers provide real value to Edmonton residents.

In order to arrive at the Use Value for EPL's various offerings, research was conducted to determine the average value of the closest equivalent or similar market alternative (the "replacement value"); this replacement value was then multiplied by the total usage of each material, program or service at EPL to arrive at an estimate of the Use Value. In some cases, a discount was applied to the replacement value in order to account for differences in the market value for limited use (i.e., borrowing) of a particular material versus unlimited use (i.e., ownership) of that same material. Given that library users do not have ownership or unlimited access to the materials, using a discounted replacement value provided a more accurate (and conservative) estimate of the value Edmonton residents extract from the use of EPL's materials, programs and services. The methodology used to calculate each component of EPL's Use Value is described in more detail in the sections below.

 $^{^{\}rm 1}$ A small number of EPL's services have a cost-recovery fee associated with them.

² It is true that without access to the library, many residents would not necessarily replace those services and materials with alternatives available commercially, and those who would seek similar services elsewhere might not access them to the same extent as they do services at EPL. However, a number of barriers might be responsible for this discrepancy. That being said, public libraries offer a public good, and encourage citizens to participate to a greater extent on a free or low cost basis. As such, they contribute to building a more literate, engaged and skilled community that has implications for quality of life and the health and vitality of the community and local economy. It follows that a careful examination of the economic value generated by EPL remains a legitimate line of enquiry.



Together EPL's programs, services, materials and collections generate a total of just over **\$131.5 million** in value for Edmonton residents. That is equivalent to the following:

- \$149 of value generated per capita, based on the latest estimate of Edmonton's population at 880,000;
- \$556 of value generated for each library membership, based on EPL's average annual total active membership of 237,000; and
- \$2,488 of value generated for one open hour at EPL, based on 52,841 total open hours across all EPL branches

The following table summarizes the total Use Value in each of five broad service categories that comprise EPL's offerings:

- Collections and Materials Use
- Program Participation
- Reference Services
- Technology Access
- Use of Space

Table 1 - Summary of Use Value, by service category (Total Average Annual Value)

Category	Total Average Annual Use Value
Collections and Materials Use	\$107,202,052
Program Participation	\$6,437,483
Reference Services	\$401,225
Technology Access	\$8,610,614
Use of Space	\$8,801,447
TOTAL USE VALUE	\$131,452,821

The following sections further examine the Use Value of EPL's offerings across these five broad service categories.

2.1.1 Collections and Materials Use

The Edmonton Public Library has a vast collection of books, periodicals, video, and music materials, both in physical and digital formats. EPL's collections and materials are core assets for the community and bring a total Use Value of \$107,202,052 to city residents annually. This section explains the research and calculations used to determine the Use Value of each main category of EPL's physical and digital collections and materials.

Physical Materials

EPL's physical materials include books, periodicals (e.g., magazines, newspapers), audiobooks, and DVDs and CDs, which Edmontonians can borrow from the library for free with a library card.



In order to determine the Use Value associated with the use of EPL's physical collections and materials, Nordicity researched pricing practices in the marketplace in order to determine an average replacement values for each type of material. In order to arrive at the average replacement value, we identified market prices for a random selection of 25 titles from among the top 500 most-circulated titles in EPL's collections for three age categories: Adult, Young Adult and Juvenile.³ We then calculated an average market replacement value for titles in each age. In addition, a discount was applied to account for the difference in value between owning and borrowing an item, since access to library materials is limited through loans or in-library use. The discounted replacement value was then applied to the total circulation (i.e., the number of times users borrowed or used the item) for each collection in the respective years under review. In other words, the estimated total Use Value generated by the circulation and in-library use of EPL's physical collections was calculated by multiplying the per-unit adjusted replacement value by the number of times it was circulated to library users.

As referred to above, a discount was applied to account for the fact that the items are borrowed, not owned. In order to determine the discounted Use Value, a "limited use" approach was taken. The consumer marketplace is rife with examples of products for which there exist two markets: One for the unlimited use of a product (generally the purchase of a new product) and one for the limited use of the same product. A common example of a limited use market for a product that also has an unlimited use market is the rental of video content on physical DVDs, which has now been more commonly replaced with the rental (or temporary/limited-time download) of digital copies of video content. There typically exists a significant consumer pricing differential between the limited use (rental) and the unlimited use (ownership) of the same product.

Similarly, there are many consumer products for which there exists a primary market for new products and a secondary market for used, "after-market" products. One of the most commonly known examples of this phenomenon is the re-sale of used CDs, DVDs and physical video game discs that represented a significant consumer market for these products through the 1990s and 2000s. Physical books have also traditionally experienced successful after-market consumption. Used books stores have been around for decades (even centuries) and now used books are available for sale on platforms such as Amazon.ca. In these examples, the purchase of a new product assumes unlimited use of that product. A limited-use value can be extrapolated based on the assumption that the period of use between the original purchase and the re-sale of a product represents a period of limited-use for that product's initial user. As such, the limited-use value of the product becomes the differential between the original purchase price and the subsequent re-sale price.

Based on the assumption that borrowing EPL materials constitutes a limited-use of a given product, a limited-use ratio was applied to the retail market replacement value in order to account for the differential in value between limited and unlimited use. More detail on the methodology Nordicity used to calculate the limited-use ratio is provided in Appendix A.

The Use Values for EPL's physical collections are summarized below.

³ A random sample of the most circulated titles in 2014 was selected for the research, though the market prices applied to those titles are for 2015.



Books and comics

EPL circulated just over 5 million books in 2014 and library visitors accessed roughly 16,400 books inhouse during their visits. In addition, EPL users borrowed or used just over 100,000 comics. The following tables summarize the Use Value attributable to the circulation and in-library use of books and comics in EPL's collection over a three-year period from 2012 to 2014. In total, the use of physical books and comics in EPL's collection has generated a value of over under **\$68.6 million** on average annually between 2012 and 2014 for Edmontonians.

Table 2 - Use Value of physical books (Hard Cover), annually (circulation)

	2012	2013	2014	3-year Average
Adult	\$42,861,573	\$42,248,850	\$42,978,425	\$42,696,283
Juvenile	\$13,989,061	\$14,621,832	\$16,490,126	\$15,033,673
Young Adult	\$3,320,486	\$3,436,217	\$3,341,110	\$3,365,938
Undefined	\$276,606	\$292,608	\$380,252	\$316,489
TOTAL	\$60,171,120	\$60,306,899	\$62,809,662	\$61,095,894

Source: Nordicity estimates based on data from EPL, Indigo.ca and Amazon.ca

Table 3 - Use Value of physical books (Paperback), annually (circulation)

	2012	2013	2014	3-year Average
Adult	\$2,778,051	\$2,295,343	\$1,886,761	\$2,320,052
Juvenile	\$3,832,029	\$3,977,040	\$3,947,423	\$3,918,831
Young Adult	\$344,801	\$338,139	\$311,924	\$331,621
Undefined	\$7,184	\$5,596	\$4,447	\$5,742
TOTAL	\$6,954,881	\$6,610,523	\$6,146,108	\$6,570,504

Source: Nordicity estimates based on data from EPL, Indigo.ca and Amazon.ca

Table 4 - Use Value of physical books (Hard Cover), annually (in-library use)

	2012	2014	2-year Average
Adult	\$161,495	\$129,196	\$145,346
Juvenile	\$46,123	\$50,601	\$48,362
Young Adult	\$12,900	\$10,937	\$11,918
TOTAL	\$220,519	\$190,733	\$205,626

Source: Nordicity estimates based on data from EPL, Indigo.ca and Amazon.ca

⁴ EPL did not collect in-library use data in 2013; therefore, data from 2012 and 2014 only was used to calculate the Use Value of in-library use for physical books.



Table 5 - Use Value of physical books (Paperback), annually (in-library use)

	2012	2014	2-year Average
Adult	\$2,936	\$2,930	\$2,933
Juvenile	\$10,614	\$11,111	\$10,863
Young Adult	\$711	\$825	\$768
TOTAL	\$14,261	\$14,867	\$14,564

Source: Nordicity estimates based on data from EPL, Indigo.ca and Amazon.ca

Table 6 - Use Value for comics, annually (circulation)

	2012	2013	2014	3-year Average
Juvenile	\$372,829	\$405,990	\$400,597	\$393,139
Young Adult	\$354,270	\$412,109	\$347,077	\$371,152
TOTAL	\$727,099	\$818,100	\$747,674	\$764,291

Source: Nordicity estimates based on data from EPL and Indigo.ca

Table 7 - Use Value for Comics, annually (in-library use)

	2012	2014	2-year Average
Juvenile	\$1,032	\$1,166	\$1,099
Young Adult	\$354,270	\$5,953	\$180,112
TOTAL	\$355,303	\$7,119	\$181,211

Source: Nordicity estimates based on data from EPL and Indigo.ca

In order to determine the Use Value for books and comics, research was conducted to determine the average retail price for a book or comic on Indigo.ca (the "replacement value"). We used a random sample of 25 titles from the top 500 most-circulated titles for each age category in EPL's collection – in hard cover and paperback format, respectively, for books – to determine the average replacement value for one unit in each of those collections. The market prices were sourced from Indigo.ca. As described above, the retail market replacement value was then discounted to account for the limited-use value differential of borrowing versus owning a book, using a limited-use ratio.

The limited-use ratio applied to the replacement value of physical books and comics was estimated by calculating the average price differential between the purchase of a new and used copy of a book on Amazon.ca. The estimating process was as follows:

 A random sample of 75 titles (25 from each age category) was selected from EPL's top 500 most circulated book titles in 2014.

⁵ The available sample of most-circulated titles for young adult comics was limited and therefore the average replacement value is only based on a sample of 10 titles (not 25 as with other collections).



- The price differentials between the new and used price for those 75 titles were averaged in order to arrive at an estimate of the average limited-use price differential ratio for physical books.
- The resulting limited-use ratio of 57% was then applied to the total replacement value.
- That value was multiplied by the total circulation in each age group to arrive at an estimate of the Use Value for the circulation of physical books and comics at EPL.

CDs, DVDs, Video Games and Audiobooks

In 2014 EPL circulated almost 3 million CDs and DVDs and Blu-ray discs, and just over 244,000 video games. Library users also accessed a total of 2,455 CDs, DVDs and Blu-ray discs and 163 video games in-house during library visits in the same year. The following tables summarize the Use Value generated for the use of EPL's CD, DVD, Blu-ray and video game collections respectively, which amounts to a total of just under **\$26 million** on average annually between 2012 and 2014.⁶

Table 8 - Use Value of Physical CDs DVDs & Blu-rays, annually (circulation)

	2012	2013	2014	3-year Average
Adult	\$16,551,181	\$15,810,497	\$13,597,205	\$15,319,628
Juvenile	\$6,116,846	\$5,643,830	\$4,079,665	\$5,280,114
Young Adult	\$1,417,102	\$1,295,848	\$1,124,480	\$1,279,143
Undefined	\$37,908	\$31,678	\$25,474	\$31,687
TOTAL	\$24,123,037	\$22,781,854	\$18,826,824	\$21,910,572

Source: Nordicity estimates based on data from EPL and Indigo.ca

Table 9 - Use Value of Physical CDs DVDs & Blu-rays, annually (in-library use)

	2012	2014	2-year Average
Adult	\$8,199	\$7,398	\$7,799
Juvenile	\$7,504	\$7,204	\$7,354
Young Adult	\$931	\$775	\$853
TOTAL	\$16,635	\$15,377	\$16,006

Source: Nordicity estimates based on data from EPL and Indigo.ca

⁶ EPL did not collect in-library use data in 2013, therefore data from 2012 and 2014 only was used to calculate the Use Value of in-library use for CDs, DVDs and Blu-ray discs.



Table 10 - Use Value of Video Games, annually (circulation)

	2012	2013	2014	3-year Average
Adult	\$81,302	\$576,995	\$736,213	\$464,837
Juvenile	\$469,054	\$532,338	\$375,929	\$459,107
Young Adult	\$1,098,969	\$1,093,693	\$981,109	\$1,057,923
TOTAL	\$1,649,325	\$2,203,026	\$2,093,251	\$1,981,867

Source: Nordicity estimates based on data from EPL and EB Games

Table 11 - Use Value of Video Games, annually (in-library use)⁷

	2012	2014	2-year Average
Adult	\$120	\$608	\$364
Juvenile	\$188	\$343	\$266
Young Adult	\$368	\$437	\$403
TOTAL	\$676	\$1,387	\$1,032

Source: Nordicity estimates based on data from EPL and EB Games

As with physical books, the Use Value was calculated by applying a discounted replacement value to the total circulation of physical CDs, DVDs, Blu-ray discs and video games. The discounted replacement value was estimated using the following process:

- Research was conducted to determine the average retail price (i.e., the replacement value) for a random sample of 75 titles (25 for each age category) from the top 500 most circulated CD DVD/Blue-ray and video game titles at EPL. Market prices were sourced from Indigo.ca for CDs and DVDs and from EB Games for video games.
- A limited-use ratio of 33% was then applied to the total replacement value to arrive at a discounted replacement value that accounts for the limited use of borrowing items from the library or using them in-house.
- The limited-use ratio was calculated by conducting research to determine the average price differential ratio between purchasing (unlimited use) and renting (limited-use) a sample of film titles on iTunes. A random sample of 75 titles (25 from each age group) was selected from EPL's top 500 most circulated movie titles in 2014 to estimate the average price differential ratio between purchasing and renting film titles.
- The resulting discounted replacement value (the replacement value after the limited-use ratio was applied) was then multiplied by the total circulation of CD, DVD and video game titles in each age category to arrive at an estimate of the Use Value generated by the use of those materials at EPL.

⁷ EPL did not collect in-library usage data for its collections in 2013.



Audiobooks

In 2014 EPL circulated over 200,000 audiobooks. The Use Value generated for the use of EPL's physical audiobooks amounts to an average of just under **\$2 million** annually. The following table summarizes the use value generated by EPL's Audiobook collection between 2012 and 2014.

Table 12 - Use Value of Physical Audiobooks, annually (circulation only)

	2012	2013	2014	3-year Average
Adult	\$1,486,243	\$1,402,132	\$1,331,191	\$1,406,522
Juvenile	\$463,566	\$387,063	\$379,947	\$410,192
Young Adult	\$74,123	\$52,615	\$65,968	\$64,235
Undefined	\$828	\$1,023	\$1,640	\$1,164
TOTAL	\$2,024,761	\$1,842,833	\$1,778,746	\$1,882,113

Source: Nordicity estimates based on data from EPL and Indigo.ca

The Use Value for audiobooks was calculated by applying a discounted replacement value to the total circulation of audiobooks. The discounted replacement value was estimated using the following process:

- Research was conducted to determine the average retail price (i.e., the replacement value) for a random sample of 75 titles (25 for each age category) from the top 500 most circulated CD DVD/Blue-ray and video game titles at EPL. Market prices were sourced from Indigo.ca for CDs and DVDs and from EB Games for video games.
- The same limited-use ratio of 33% used for CDs, DVDs, and video games was applied to the average replacement value identified for audiobooks. The resulting figure is the adjusted or discounted replacement value that accounts for the limited use of borrowing items from the library.
- The discounted replacement value (the replacement value after the limited-use ratio was applied) was then multiplied by the total circulation of audiobooks at EPL in each age category to arrive at an estimate of the Use Value generated by the use of those materials.

Periodicals

In 2014 library user borrowed just over 200,000 magazines and read roughly 3,451 magazines and newspapers while visiting the library. The following tables summarize the Use Value of EPL's physical periodicals over the three-year period under examination. The total Use Value for EPL's periodicals amounts to an average of just over **\$1 million** annually between 2012 and 2014.8 That being said, while physical periodicals still represent a significant resource and value for EPL customers, the use of physical periodicals is decreasing significantly every year, likely because of a shift toward use of digital periodical materials, and this downward trend is likely to continue. Moreover, EPL has been reducing

⁸ EPL did not collect in-library use data in 2013, therefore data from 2012 and 2014 only was used to calculate the Use Value of in-library use for the physical periodical collections.



the number of titles and copies it holds in physical periodicals (primarily in response to decreasing demand).⁹

Table 13 - Use Value of Physical Periodicals, annually (circulation; magazines only)

	2012	2013	2014	3-year Average
Adult	\$1,077,602	\$921,359	\$799,739	\$932,900
Juvenile	\$84,806	\$68,268	\$55,311	\$69,462
Young Adult	\$36,702	\$28,357	\$19,781	\$28,280
Undefined	\$21,134	\$2,948	\$458	\$8,180
TOTAL	\$1,220,244	\$1,020,933	\$875,288	\$1,038,822

Source: Nordicity estimates based on data from EPL and Nordicity market research (more detailed sources are provided in Appendix B)

Table 14 - Use Value of Physical Periodicals, annually (in-library use; magazines and newspapers)

	2012	2014	2-year Average
Newspapers	\$257	\$3,458	\$1,857
Total Magazines Only	\$20,740	\$14,664	\$17,702
Adult	\$19,801	\$13,740	\$16,771
Juvenile	\$592	\$553	\$572
Young Adult	\$346	\$372	\$359
TOTAL all Periodicals	20,996	18,122	19,559

Source: Nordicity estimates based on data from EPL and Nordicity market research (more detailed sources are provided in Appendix B)

No limited-use ratio was applied to the replacement value for periodicals based on the assumption that the use of periodicals is intrinsically "limited". For example, most periodicals become out of date as soon as the next issue is released. In addition, usage patterns are typically such that individuals consume an issue once and discard it when they are finished, rarely keeping old issues and referring back to them. As such, this study assumes that individuals accessing issues of various periodical publications from EPL were receiving the same value as they would for an issue of the same publication if they had purchased it. Based on this assumption, it is unnecessary to further discount the replacement value for physical periodicals. The Use Value for periodicals was calculated using the following steps:

⁹ It should be noted that use of physical periodicals is decreasing rapidly, as evidenced by the decreasing use value between 2012 and 2014. As such, the 3-year average may slightly over-state the Use Value generated by EPL's periodicals because the significantly higher use of physical periodicals prior to 2014 is driving the 3-year average up. In addition, it is important to remember that the value generated by these collections is likely to decrease with time.



- Research was conducted in order to estimate the average replacement value for one issue of a periodical publication in each age category. For magazines, the average replacement value is based on a random sample of 75 titles (25 from each age category) was selected from the top 500 most circulated titles in EPL's collections. For newspapers, a random sample of 25 titles was selected from among the roughly 47 titles held by EPL branches across the city.¹⁰
- In order to arrive at an estimate of the per-issue replacement value, we estimated the market prices for one issue of the titles in the sample by dividing the annual subscription fee by the total number of issues included in an annual subscription.¹¹
- The average per-issue replacement value was then applied to the total circulation for periodicals at EPL in order to arrive at the Use Value estimate for magazines and newspapers.

Music Scores

EPL also lends music scores. In 2014, library users borrowed or used just over 12,500 music scores. The average Use Value generated by EPL's collection of music scores between 2012-2014 was just under **\$140,000**. The following tables summarize the Use Value generated by EPL's music score collection.

Table 15 - Use Value of Music Scores, annually (circulation)

	2012	2013	2014	3-year Average
Adult	\$132,007	\$157,293	\$133,211	\$140,837
Juvenile	\$7,104	\$8,352	\$5,458	\$6,972
TOTAL	\$139,111	\$165,645	\$138,669	\$147,808

Source: Nordicity estimates based on data from EPL and Long & McQuade

Table 16 - Use Value of Music Scores, annually (in-library use)¹²

	2012	2014	2-year Average
Adult	\$580	\$491	\$535
Juvenile	\$35	\$52	\$43
TOTAL	\$614	\$543	\$578

Source: Nordicity estimates based on data from EPL and Long & McQuade

¹⁰A random sample was used for newspapers with the exception of five titles, which we selected as part of the sample based on their high local relevance for Edmonton residents.

¹¹ Nordicity used a per-issue market price based on annual subscriptions rather than the newsstand market price for an individual issue in keeping with our general approach to select the least expensive equivalent or similar service

¹²EPL did not collect in-library usage data for its collections in 2013 therefore a two-year average was used to calculate the average Use Value for the period under examination.



In order to calculate the Use Value, Nordicity researched market prices for the purchase of music scores from Long & McQuade's online store using a random sample of 50 titles (25 from each age category) from among EPL's top most circulated music score titles.¹³ The limited-use ratio used for books and comics (57%) was then applied in order to determine the adjusted replacement value that accounts for the value differential between borrowing and owning an item. Finally, the adjusted replacement value was multiplied by the total circulation of music scores in order to arrive at the Use Value.

E-Collections

In an increasingly digital age, EPL's electronic collections are playing an ever greater role in the library system's offering to its users and represent a significant part of the value that the library brings to Edmontonians. City residents have access to a wide variety of digital content, from e-books to digital periodical publications to music and video content.

As with the physical collections the Use Value was calculated by determining an average replacement value for the closest equivalent or similar alternative product and a limited-use ratio was applied to the average replacement value to account for the difference that exists between the unlimited use (ownership) and limited use of digital content (borrowing or streaming). The adjusted replacement value was then applied to the total usage of EPL's e-collections in order to calculate the Use Value associated with the use of the library's digital collections and materials.

The Use Values for EPL's digital collections are summarized below.

E-books and digital Audiobooks

In 2014 total circulation was just under 635,000 for e-books and just under 123,000 for e-audiobooks at EPL. The following tables summarize the Use Value of EPL's e-books and e-audiobooks between 2012 and 2014. The total Use Value for EPL's e-books and e-audiobooks amounts to an average of over **\$2.4 million** annually. As consumer trends continue to become more and more digitally-focused, the use of e-books and e-audiobooks will continue to increase significantly and the Use Value of EPL's digital collections will increase accordingly.

¹³ EPL only tracks Music Score titles in two age categories: Adult and Juvenile.

¹⁴ In some cases the private market alternative was also based on a limited-use pricing model (e.g., streaming video) and therefore no limited-use ratio was applied to the replacement value.

¹⁵The use of e-audiobooks is trending upwards sharply, as evidenced by the drastic increases year-over-year of the Use Value for e-books and e-audiobooks between 2012 and 2014. As a result, the use value of e-books and e-audiobooks is likely slightly under-stated. The 3-year average is driven down because of the significantly lower circulation in 2012 and 2013.



Table 17 - Use Value for e-books and e-audiobooks, annually

	2012	2013	2014	3-year Average
e-books	\$936,042.61	\$1,446,227	\$1,984,054	\$1,715,140
e-audiobooks	\$318,095	\$540,785	\$762,551	\$651,668
TOTAL	\$1,254,137.44	\$1,987,013	\$2,746,604	\$2,366,809

Source: Nordicity estimates based on data from EPL, Indigo.ca and iTunes

The replacement value for e-books was estimated using the following steps:

- Research was conducted in order to estimate the average retail price for a random sample of 75 titles from the 500 most circulated e-book and e-audiobook titles available through services offered by EPL. The market pricing data for e-books was sourced from Indigo.ca and from iTunes for e-audiobooks.
- The limited-use ratio of 33% that we used for Physical CDs, DVDs and Audiobooks was then applied to the replacement value to estimate the discounted replacement value. The 33% limited-use ratio was used in this case based on the assumption that a check-out of an e-book or e-audiobook is akin to a rental (or temporary download) for video content. The value differential for the user between a permanent download (ownership) and a temporary download (borrowing) of an e-audiobook or e-book is similar to the value differential that exists between a permanent download (ownership) and a temporary download (rental) of a digital movie.
- The discounted replacement value was then applied to the total circulation figure for EPL's ebooks and e-audiobooks in order to arrive at an estimate of the Use Value generated by those collections.

Digital periodicals

EPL customers accessed just under 161,000 e- magazines and just shy of 245,000 e-newspapers in 2014. Access to e-periodicals through services offered by EPL generated a total of just over **\$950,000 annually** on average between 2012 and 2014 for Edmonton residents. Circulation for e-periodicals increased exponentially after 2012. ¹⁶ Indeed, in response to higher demand, EPL added three new services to its catalogue between 2012 and 2014. ¹⁷ This trend is likely to continue and therefore the Use Value of EPL's e-periodical services is likely to continue to increase significantly. The increase in e-periodical use, and the Use Value it generates, likely creates a counter balance for the decrease observed with physical periodicals, a trend that will probably continue.

¹⁶The use of e-periodicals is growing rapidly, as evidenced by the drastic increases year-over-year of the Use Value for e-books and e-audiobooks between 2012 and 2014, particularly between 2012 and 2013. As a result, the Use Value for e-periodicals is likely slightly under-stated because the significantly lower circulation in 2012 (and less so in 2013) drives down the 3-year average.

¹⁷EPL added the following new e-periodical services to its catalogue: National Geogrpahic in June 2012, Zinio in February 2013, and Flipster in July 2014.



The table below summarizes the Use Value generated by EPL's digital periodicals during the period under examination.

Table 18 – Use Value for e-magazines and e-newspapers, annually 18

	2012	2013	2014	3-year Average
e-magazines	\$80,607.54	\$932,993.49	\$1,065,023.31	\$692,875
e-newspapers	\$225,923.04	\$246,761.24	\$302,793.12	\$258,492
TOTAL	\$306,530.58	\$1,179,754.73	\$1,367,816.43	\$951,367

Source: Nordicity estimates based on data from EPL and Nordicity market research (more detailed sources are provided in Appendix B)

The Use Value for digital periodicals was calculated based on data regarding the number of issues or "documents" accessed on each periodical service by EPL users. We then conducted research on market pricing to determine the average per-issue replacement value for e-newspapers and e-magazines respectively. The respective replacement values were calculated in the following way:

- A random sample of 75 publications was selected from the top 500 most circulated newspaper and magazine titles, respectively.¹⁹
- The average per-issue market price was identified by dividing the annual subscription fee for each e-magazine and e-newspaper title in the sample by the number of issues included in a subscription.²⁰

As with physical periodicals, no limited-use ratio was applied to the replacement value because the nature of periodical use is intrinsically "limited" due to the fact that most users only read the content once and in many cases the content is no longer current once the next issue is published. As a result, our approach is based on the assumption that there is no material difference in the value between subscribing to a digital periodical publication and accessing that same publication through services offered by EPL.

¹⁸ Because of the nature of the e-periodical services, there could be a mix of newspaper and magazine publications among the items accessed, although they are either primarily magazine or press display services. The document access data from the various services was treated as either e-newspaper or e-magazine usage depending on the primary purpose of the service as either a periodical or press display service. This approach is based on the assumption that the vast majority of documents accessed on each service would either be newspapers or magazines, respectively, because usage would map to the titles available on each service. However, there may be some intersection between the two types of periodicals. That being said, this does not result in any double-counting as they remain unique document accesses. Rather, a small number e-magazine accesses may be counted as e-newspapers and vice versa.

¹⁹ In the case of newspapers, a random sample was used with the exception of five titles, which we selected as part of the sample based on their high local relevance for Edmonton residents.

²⁰ In the case of e-magazines, Nordicity used a per-issue market price based on annual subscription fees rather than the per-issue price equivalent to the "newsstand" price for physical periodicals. This approach is in keeping with that used throughout the report; wherever possible the least expensive equivalent or similar service was selected for the replacement value estimates.



Licensed Web Databases

EPL provides library users with access to a host of licensed web databases. In 2014, library users accessed over 130,000 documents using those services. Access to licensed web databases through EPL generates on average just under **\$8 million** in value for city residents.

Table 19 - Use Value for Licensed Web Databases, annually

	2012	2013	2014	3-year Average
Document downloads	\$6,784,341	\$9,972,268	\$7,070,513	\$7,942,374

The Use Value estimate for licensed web databases was calculated using the following approach:

- Research was conducted to arrive at an average per-document replacement value for documents accessed through private document delivery services.²¹
- The replacement value was then multiplied by the total number of documents downloaded by EPL users.

Digital Music and Video

In total, Edmontonians downloaded or streamed just under 323,000 songs and 25,000 full albums in 2014 through services offered by EPL. In addition, users downloaded or streamed a total of just under 37,000 videos. Access to digital music, movie, TV and video content generated a total value of just under **\$200,000** for EPL users annually on average between 2013 and 2014. The following table summarizes the Use Value generated by EPL's digital music and video content offerings during the period under examination.

Table 20 – Use Value for digital music and video, annually

	2012	2013	2014	3-year Average
Music	\$105,635.30	\$114,188	\$158,278	\$126,034
Movies, TV & Video	\$8,314.92	\$41,664	\$169,518	\$73,166
TOTAL	\$113,950.22	\$155,852	\$327,796	\$199,199

Source: Nordicity estimates based on data from EPL and data from iTunes, Netflix and Spotify

EPL users can access digital music and video content in two ways: i) they can stream content through services such as Indieflix or Freegal, and ii) they can download a digital copy, typically for a limited time²² via services such as Overdrive or Hoopla, much the same way as e-books are checked-out as time-limited temporary downloads on similar services (e.g., Overdrive).

²¹ Document delivery service fees typically include a combination of a base document purchase fee and a copyright fee.

²²Music and video file downloads are treated as check-outs (i.e. temporary, time-limited downloads) in all cases but one. Song files downloaded from the Freegal service are permanent and indefinite.



In congruence with these two means of accessing digital music and video content at EPL, the Use Value calculation used the following two-pronged approach:

- For downloaded files, the market prices for a random sample of 75 music and video files (selected from a list of the top 500 most accessed music and video titles by EPL users) was researched. In the case of TV and Movie titles the rental price from iTunes was used. For music files, the per-song or per-album purchase price was researched on iTunes.²³
 - A limited-use ratio of 33% was applied to the purchase price for music files in order to account for the difference in value between owning and renting (borrowing) a digital music file.²⁴ The limited-use ration is the same one that was used for CDs, DVDs & Blu-ray discs.
- The resulting replacement, or adjusted replacement values were then applied to the total number of music and video files accessed or downloaded by EPL users, respectively.
- For streaming services, the average per-song or per-video replacement value was estimated based on estimates of the average total number of monthly streams-per-user divided by the monthly subscription fee for Spotify and Netflix respectively.²⁵
- The per-item replacement value was then multiplied by the total number of music and video files streamed by EPL users on the relevant services.²⁶

As with e-book and e-audiobooks, no limited-use ratio was applied to the replacement values for digital music and video content. The sources for the replacement values offered services that were the same or similar to the ones offered by EPL and therefore the value for EPL users would be the same whether they used the service offered by EPL or accessed the market alternative(s). In addition,

²³ Some of the digital music services offered by EPL provide downloads of full albums, whereas other services only offer individual song downloads. For albums, the average market price for a full album was used to determine the replacement value and multiplied by the total number of albums accessed by EPL users through the relevant services. In the case of single songs, the average market price per-song was used to determine the replacement value and multiplied by the total number of songs accessed by EPL users on those services.

²⁴No limited-use ratio was applied when calculating the Use Value for files downloaded through Freegal, given that files downloaded through that service are permanent and indefinite. No limited-use ratio was applied to video downloads because the market prices used for the replacement values were for video rentals, which has an equivalent value for the user as borrowing and is a direct equivalent replacement for borrowing digital videos through services offered by EPL. Therefore, no limited-use ratio is necessary.

²⁵ For more detail on how the per-song price was estimated, see Appendix A.

²⁶ Some of the music streaming services offered by EPL provide full-album streaming and the usage data is based on the total number of albums accessed. In order to calculate the use value for those items, a per-album replacement value was used instead. The per-album replacement value for streaming was calculated by estimating the average number of songs on an album based on research conducted on a random sample of albums from EPL's 500 most accessed titles. The per-song market price estimate was then multiplied by the average number of songs in order to arrive at an estimate of the average per-album streaming replacement value.



the pricing for the alternative services are based on a limited-use model and therefore do not require any additional adjustments.

2.1.2 Program Participation

The wide variety of programs on offer at EPL represent another significant aspect of the library's value for its users and all Edmonton residents. EPL offers a range of in-house, outreach and online elearning programs geared towards residents of all ages that address a breadth of needs and interests. EPL's program offerings range from recreational or special interest activities to career assistance, literacy development and digital skills building. Many are designed to support and give access to information for specific communities, such as: at-risk youth, the homeless, or new Canadians. Others provide a place for members of the community to come together for discussion, learning, entertainment and shared experiences (e.g., book clubs and special gaming nights) and much more. This section summarizes the Use Value generate by EPL's program and e-learning offerings.

Library Programs

In 2014, Edmonton residents participated in roughly 7,478 hours of outreach and in-library programming offered by the Edmonton Public Library and its partners. EPL's programs had a total attendance of over 210,500.²⁷ The following table summarizes the Use Value that was derived from Edmontonians' participation in those programs, which amounts to roughly **\$2,6 million** on average annually between 2012 and 2014.

Table 21 - Use Value for EPL programs

Program Category	2012	2013	2014	3-year
				Average
Children's	\$130,889	\$119,292	\$149,795	\$133,325
Early Literacy	\$1,395,063	\$1,613,009	\$1,722,959	\$1,577,010
Family Day	\$9,455	\$9,786	\$9,750	\$9,663
Spring Break	\$15,145	\$17,039	\$16,556	\$16,246
Digital Skills Building	\$32,205	\$39,019	\$63,909	\$45,045
Tech one-on-one	\$31,886	\$62,832	\$60,973	\$51,897
Children's - Digital skills building	\$17,975	\$31,339	\$122,373	\$57,229
Recreation/Special Interest	\$405,971	\$515,955	\$534,452	\$485,459
Career Assistance	\$31,227	\$21,115	\$22,553	\$24,965
Education and Training	\$98,583	\$157,922	\$239,371	\$165,292
TOTAL	\$2,168,399	\$2,587,309	\$2,942,690	\$2,566,133

Source: Nordicity estimates based on data from EPL and Nordicity market research (more detailed sources are provided in Appendix B)

²⁷ Note that the attendance figure may count the same individual multiple times if that person participated in more than one program. This figure does not represent total unique program participants, rather the total attendance at programs.



The Use Value calculation for programs used the following process:

- Research was conducted to estimate the average replacement value for one hour of similar programming offered by other organizations in Edmonton in each program category (e.g., career assistance, early literacy, etc.).
- That per-hour replacement value was then multiplied by an estimate of the average program length for programs in each program category, which provided an estimate of the average replacement value for attendance at an individual program in each category.
- The average "per attendance" replacement value was then applied to the total program attendance in order to arrive at an estimate of the Use Value generate by each program category.²⁸

E-learning

EPL also offers users access to a number of online courses geared toward literacy, tutoring and English as a Second Language and other learning opportunities. The Use Value generated by EPL's elearning offerings is estimated at just under **\$3.9 million**.²⁹

In order to determine the Use Value of EPL's e-learning programs, research was conducted in order to identify the consumer market rates for registration to the same e-learning service or a similar alternative in order to estimate the average replacement value for registration to an e-learning service

The average annual subscription rate (replacement value) for the same or similar e-learning service was then multiplied by the total number of users registered³⁰ for e-learning services through EPL in order to arrive at the Use Value.³¹ A list of sources for e-learning service market pricing is provided in Appendix B.

will extract value from each service for which he or she is registered.

²⁸ It should be noted that some of EPL's programs do not have any equivalents outside of the library system. In addition, some programs have equivalents offered by other non-profit or government organizations for which there is no fee and therefore there is no replacement value associated with accessing that program at EPL specifically. For these reasons, some of EPL's program offerings may not be included in the Use Value calculation. ²⁹ Unique user data was difficult to obtain from EPL's e-learning service providers and as such this estimate is based on current registration data for those services (except in one case where 2014 data was provided). ³⁰ While some EPL customers may be registered for more than one e-learning service through EPL, we still consider each individual registration to be unique and do not consider this as double-counting given that a user

³¹A number of e-learning services could not provide the necessary data to EPL for the Use Value calculation and were not included in the estimate. As such, the Use Value for e-learning services may be slightly under-estimated. In addition, at least one e-learning service changed the service agreement commencing July 1st 2015, so that a limit of three courses was imposed on registered users accessing the service through EPL. The new usage limitations will likely have a slight impact on the Use Value generated by e-learning services at EPL in the future.



2.1.3 Reference Services

EPL's librarians and expert staff are available to library users for consultation and research help. Users can access these services for support in finding and using reliable information from the library's collections and other credible sources. Library members, city residents and visitors can access reference services via email, phone or in-person at EPL branches.

In 2014, EPL responded to an average of approximately 1,400 reference questions per week which amounted to roughly 71,000 questions for the entire year. The following table summarizes the Use Value generated by EPL's reference services between 2013 and 2014.

	2013	2014	2-year Average
Reference services	\$376,000	\$426,450	\$401,225
Source: Nordicity estimat	es based on data from	EPL and Nordicity market rese	earch (more detailed sources are
provided in Appendix B)			

The following steps were used in order to estimate the Use Value of EPL's reference service:

- Data on similar fee-based reference services was collected and an average per-question replacement rate was calculated. For consistency across the different sources an average question length of 15 minutes was assumed and taken as the closest similar service available outside of EPL.
- EPL collects reference service data over a one-week period three times annually, which provided a basis to estimate the weekly average number of reference service transactions.
- That figure was then used to estimate the annual number of reference transactions, based on an assumption of 50 weeks of available service.³²
- The replacement rate was then applied to an estimate of the total number of reference questions addressed by EPL staff annually to arrive at an estimate of the Use Value of reference services.

2.1.4 Technology Access

In today's information age, technology and the internet in particular are critical access points for knowledge, information and resources for daily life. Not to mention how much of a role technology and the internet play in communication and community building.

Technological and digital skills and literacy are also critical for success in today's labour market.

As part of EPL's offerings, Edmonton residents can access workstations at library locations, which are equipped with an internet connection and email and word processing software. EPL also lends out

³²Only reference transactions that were 5 minutes or longer were counted toward the weekly average number of transactions.



laptops (Chromebooks) and e-readers for in-library use.³³ Library visitors can also connect to the free public Wi-Fi at all EPL locations using their own devices.

These services are an important part of EPL's offerings as they provide access to computers and Wi-Fi for many Edmonton residents who would not otherwise have access to it, and at no cost. Indeed, EPL recently participated in the Impact Survey, which found that roughly 6% of workstation users at EPL do not have access to a computer or alternative device at home.³⁴ As a result, there are important implications for access to information and social considerations such as unemployment, some of which are discussed in section 3 below. For many other Edmontonians, EPL simply offers a free alternative place to access a computer and/or an internet connection outside of home, office or school.

In addition to providing access to basic technological amenities, EPL's Makerspace provides Edmontonians with access to specialized technology, software and equipment which can be used to complete personal, school or business projects and provides a place for experimentation and skills building with specific technologies and equipment.

The following section examines the Use Value generated by Edmontonians' access to workstations, free public Wi-Fi and technology and equipment offered in the Makerspace.

Workstations

In 2014, EPL customers accessed over 800,000 hours of time at workstation across library locations. The Use Value generated by workstation usage amounted to a total of just over **\$7.2 million** for 2014.

In order to determine the Use Value of workstation usage at EPL, a per-hour replacement value was assigned based on the per-hour rate for use of a workstation at a local internet cafe in Edmonton.³⁵ The replacement value was then applied to the total number of workstation hours logged by EPL users in 2014.

³³ Reasonable alternatives could not be found to determine the replacement value for access to laptops and e-readers in-library. As such, these items were not included in the Use Value calculation, resulting in a very slight under-estimation of the Use Value generated by EPL's technology access services.

³⁴ Results from the Impact Survey provided by EPL.

³⁵ Although most Edmonton residents would not be likely to go to an internet café if they did not have access to the workstations at EPL, the internet café service is the closest similar alternative that provided the source for a dollar value estimate of the value that users extract from access to EPL workstations.



Wi-Fi

Roughly 1,500 users access the public Wi-Fi on their devices at EPL locations daily.³⁶ The Use Value generated by access to EPL's free public Wi-Fi network is approximately **\$907,847** annually.³⁷ Use Value for public Wi-Fi at EPL was determined in the following way:

- Research was conducted in order to determine the average replacement value for the closest similar alternative service outside of the home or office. In this case, coffee shops were deemed to be the closest similar alternative to the library for connecting to a Wi-Fi network outside of the home or office. This decision was based on the assumption that the most likely alternative that users would turn to if they didn't have access to the library would be a coffee shop. It is also the alternative that most closely resembles the circumstances of accessing Wi-Fi at the library with a user-owned device.
- Since the expectation is that customers accessing free Wi-Fi at a coffee shop will purchase something in exchange for that access, research was conducted to estimate the average cost of the least expensive drink on the menu at three major coffee shop retailers.
- The resulting average replacement value was then applied to the total number of annual Wi-Fi clients in order to estimate the annual Use Value of EPL's free public Wi-Fi.

The EPL Makerspace

The Makerspace at the Stanley A. Milner Library has equipment such as 3D Printers, the Espresso Book Machine, PC and Mac creative workstations, digital conversion hardware, gaming consoles, a green screen, and 2 sound booths, along with a host of other creative technology and equipment. In addition to having access to specialized workshops and programming related to the Makerspace equipment, Edmonton residents can access the equipment any time during the Library's operating hours to experiment and create.³⁸

³⁶ Data from EPL on access to public Wi-Fi counts individual devices as separate clients or users. As such, if one EPL visitor connects to the Wi-Fi network on more than one device they may be counted as more than one client. This phenomenon could result in an inflated estimate of the total number of daily Wi-Fi clients. That being said, this report makes the assumption that the number of users actually connecting to the Wi-Fi network on multiple devices at the same time during the same visit is likely negligible and would not have any notable impact on the results of the total Use Value calculation.

³⁷ Data supplied by EPL on Wi-Fi usage was only available for the last 60 days from the time when it was extracted (June 2015). The data was then extrapolated to estimate average annual usage (for 2015). The Wi-Fi Use Value estimate is the only component that is based on 2015 usage data.

³⁸ Several other satellite mini-Makerspaces are being launched at select EPL location across the city in 2015, which will only increase the Use Value generated by this important resources. In addition, the EPL's literacy vans are equipped with Makerspace kits, which also extends the Use Value of the Makerspace offering. However, data regarding usage of the Makerspace kits in the literacy vans was not available and therefore was not captured in the Use Value calculation.



The following table summarizes the Use Value generated by some of the key components of the Makerspace in 2014, which amounted to just under \$500,000.³⁹

Table 22 - Use Value for core Makerspace Equipment, 2014

Malana Factoria	He A Melion
Makerspace Equipment	Use Value
Espresso Book Machine	\$92,640
3D printers	\$97,958
Sound booths	\$300,000
TOTAL	\$490,598

Source: Nordicity estimates based on data from EPL and Nordicity market research (more detailed sources are provided in Appendix B)

In order to estimate the Use Value for the equipment available in the Makerspace at Stanley A. Milner Library, pricing research was conducted to determine the replacement value for the use of that same equipment from vendors in Edmonton. The replacement value was then applied to the number of items printed on the Espresso Book Machine and 3D printers respectively and the number of hours booked at the sound booths.

In the case of the Book Machine and the 3D printers, EPL charges a small cost-recovery fee for projects printed on those machines. As such, the Use Value for those components reflects the differential between the total replacement value attributed to the use of the same or similar equipment from a local vendor and the total fees collected by EPL for the use of the library's equipment.

2.1.5 Use of Space

EPL's branches provide an important public space that Edmontonians can use as a community gathering place, a safe quiet place for work or study or a space to host private, corporate or community meetings and events. The following section will examine the Use Value that is generated by Edmontonians' free access to EPL's spaces for work/study and to venues and spaces for a wide variety of functions for a nominal cost-recovery fee.

Work/Study

Recent research undertaken by EPL indicates that roughly one third of EPL customers use the library as a space for work/study. The Use Value generated by the use of the library's spaces for work/study in 2014 amounts to approximately **\$8 million**. The following table summarizes the Use Value of EPL's spaces for work/study.

³⁹ Usage data for much of the equipment available for use in the Makerspace was either unavailable or not detailed enough to be able to complete a reliable estimate of the Use Value associated with access to that equipment in the Makerspace.



Table 23 - Use Value for work/study, 2014

Total # of visitors to EPL (2014)	# of visitors using EPL for work/study (2014)	Use Value		
5,332,634	1,759,769	\$8,065,609		
Source: Nordicity estimates based on data from EDL and Nordicity market research (more detailed sources are				

Source: Nordicity estimates based on data from EPL and Nordicity market research (more detailed sources are provided in Appendix B)

The Use Value for work/study is based on an average replacement value for reasonable alternatives for work/study. In this case, the replacement value is estimated as the average between the price for the least expensive drink at a coffee shop and the fee for 2 hours at a hot desk or co-working facility in the city.⁴⁰ These two ends of the spectrum were both deemed to be the most reasonable alternatives to a space for work/study outside of the home or office. The estimated replacement value was then applied to the total estimate of the number of visitors in 2014 who used EPL as a space for work/study.

Meeting rooms and event spaces

EPL has a range of spaces available across its branches that Edmontonians can access to host meetings and functions for a small cost-recovery fee. The spaces on offer range from small meeting rooms for 8 people to larger classroom spaces for 20-70 people to theatre-style venues such as the exceptional Library Theatre at the Stanley A. Milner location, which has a capacity of over 240. In total, there were just shy of 3,000 space bookings across the library's branches in 2014. The total Use Value generated by those space rentals amounted to just under \$736,000.

The following table summarizes the Use Value generated in 2014 by meeting room and event space rentals at each of the EPL branches that have spaces available for rent.

⁴⁰ Market prices for a hot desk service in Edmonton were based on a half-day service. The average cost per hour was calculated in order to arrive at a replacement value for 2 hours at a hot desk, which is a reasonable assumption of the average length of a work/study visit to the library.

⁴¹ In addition to the paid room and space rentals, EPL's branches offer a number of smaller meeting spaces that members and residents can access and use for free. However, reliable booking data related to the use of those spaces was unavailable. As such, the replacement value for meeting rooms and events spaces is likely slightly under-estimated as it would not include the value generated by the use of those free spaces.



Table 24 - Use Value for meeting rooms and event spaces, 2014⁴²

EPL Branch	Use Value for space rental
Abbotsfield	\$7,421
Calder	\$12,769
Capilano	\$4,972
Castledowns	\$22,555
Highlands	\$3,552
ldylwylde	\$41,203
Jasper Place	\$22,378
Lois Hole	\$55,029
Londonderry	\$6,554
Millwoods	\$22,161
Riverbend	\$24,331
Sprucewood	\$6,335
Stanley A Milner - Centenial Room & Room #7	\$37,350
Stanley A Milner - Edmonton Room	\$68,243
Stanley A Milner - Library Theatre	\$273,000
Strathcona - (both rooms)	\$46,467
Whitemud	\$50,083
Woodcroft	\$31,435
TOTAL	\$735,838

Source: Nordicity estimates based on data from EPL and data from City of Edmonton Arenas and the Radisson Conference Centres

In order to determine the Use Value for meeting and event spaces at EPL, market prices were researched to determine estimates for the average replacement value to rent similar spaces at other facilities in Edmonton. An average per-hour replacement value was used.

Given that EPL charges a cost-recovery fee for its space rentals, an adjusted replacement value was estimated by calculating the differential between the per-hour replacement value to rent similar spaces elsewhere and the per-hour fee to rent the spaces at EPL. The adjusted replacement values were then applied to the total number of rental hours for EPL spaces with similar capacity and function to determine the Use Value of EPL's meeting rooms and event spaces.

⁴²EPL charges slightly different fees for for-profit and not-for-profit groups for the use of their spaces and facilities. The vast majority of room bookings in 2014 are coded as not-for-profit. As such, the total fees from room bookings was calculated using the not-for-profit rate and may be slightly understated, resulting in a slight overstatement of the differential, and thus of the total Use Value. That being said, the number of for-profit bookings was so small that the difference would be negligible when calculating the total values.



Operations Impact

Although most of the economic impact generated by EPL is derived from its Use Value as estimated above, it does also make a contribution to the Edmonton Capital Region's (ECR's) economy through its library operations. In particular, EPL generates employment for ECR residents, and purchases supplies and services from local businesses for both its operating and capital expenditures.

In order to calculate the Operations Impact, Nordicity employed its proprietary *MyEIA* Model. This model provides estimates of the impact that an organization or program has on a provincial and regional economy in terms of employment, labour income, gross domestic product (GDP) and tax revenue. In this case, the economic impact modelling was based on data for EPL's operating and capital expenditures, and included estimates of the direct, indirect and induced economic impacts (see Appendix A for definitions and description of methodology).

EPL's operating and capital expenditures are \$60.2 million on an annualized basis. Of this total, wages and salaries (i.e., labour income) paid to employees and contract workers amounted to \$31.5 million, or approximately 52%. Other large expenditure categories included collections (\$9.6 million), construction (\$8.1 million) and office equipment (\$3.8 million).

On an annualized basis EPL's Operations generated the following:

- 719 full-time equivalents (FTEs) of employment, including 509 FTEs directly within EPL and 117 FTEs at supplier businesses in Edmonton (i.e., indirect impact); the induced impact generated an additional 94 FTEs within the Edmonton regional economy.
- The employment generated by EPL's Operations translated into \$42.9 million in labour income.
- EPL's Operations also generated \$55.9 million in GDP for the Edmonton economy, including \$31.5 million in direct GDP, \$12.4 million in indirect GDP and \$11.9 million in induced impact GDP.
- The total economic activity generated by EPL's operations impact also yielded an estimated \$1.5 million in local taxes and \$4.9 million in provincial taxes (see Appendix A for detailed fiscal impact results).

Table 25 – EPL operations impact (annualized)

	Direct impact	Indirect impact	Induced impact	Total impact
Employment (FTEs)	509	117	94	719
Labour income (\$)	31,546,253	6,329,139	5,057,242	42,932,633
Gross domestic product (\$)	31,546,253	12,401,328	11,943,288	55,890,868

Source: Nordicity estimates based on data from EPL, Statistics Canada and Alberta Treasury Board and Finance.



2.2 Return on Investment

This section presents the ROI of the Edmonton Public Library. The ROI was calculated by dividing the total economic impact of EPL – the sum of the Use Value and Operations impacts – by the total cost to run the library system – determined by the total direct spending by the system in a given year (i.e. the total capital and operating expenditures).

The total economic impact of EPL is estimated at just over \$187 million, including both the Operations Impact and Use Value. That figure translates to \$3.11 in economic value generated for each dollar invested in library operations (based on a total annualized investment of roughly \$60,000,000 in operating and capital expenditures) and just under \$213 of value generated for each Edmonton resident (based on the most recent estimate of Edmonton's population at 880,000).

3. Socio-cultural Impacts

The following section presents the socio-cultural impacts of EPL's programs and services on library users, specifically, and the city of Edmonton more broadly. The socio-cultural impacts assessed include:

- **Educational impacts**, which reflect the role of EPL as a learning environment and its programs as opportunities to build fundamental skills.
- Social impacts, which benefit Edmonton residents by addressing challenges such as unemployment and homelessness, and supporting the integration of newcomers into Canadian society.
- Community impacts, which arise from EPL's promotion and facilitation of community engagement and its role in fostering a sense of belonging among Edmonton residents.
- **Cultural impacts**, which contribute to growth, development and appreciation of Edmonton's rich cultural offerings.

Each of these impacts are discussed in more detail in the sections below.

3.1 Educational Impact

The educational impacts of EPL are inherently linked to the growth of Edmonton's human capital – the cornerstone of any thriving economy. An appropriately skilled workforce and one that has the fundamental skills required to seize opportunities in a rapidly changing environment can be an unparalleled competitive advantage for a city and an important factor for economic development. In examining EPL's contribution to human capital development, this report considers three key areas:

- Literacy (both general literacy and early literacy);
- Digital literacy and technology skill-building; and
- High School Completion.

EPL's educational programming, its role in the development of these fundamental skills and the resulting impacts are discussed further in the following sections.

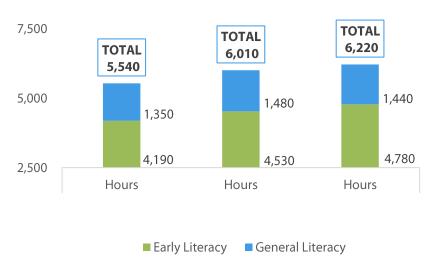


3.1.1 Literacy

As a foundational element of learning at all stages of life, literacy enables the development of skills and knowledge required to build an economy's human capital. The ability to effectively interpret and apply information is essential to fostering and advancing a workforce that is both productive and innovative, and indeed one that represents a strong competitive advantage and potential for economic growth.

Many of EPL's programs contribute to the advancement of literacy – that is, the development of advanced reading, writing and communication skills – in Edmonton, with a focus on the early stages of development. Figure 1 presents the total hours of literacy-focused programming offered by EPL from 2012 to 2014, which shows that a majority (roughly 75%) of these programs concentrate on early literacy.

Figure 1: Hours of EPL Literacy programming, 2012 to 2014



Source: Nordicity estimates based on data from EPL

EPL's literacy programs have benefitted thousands of Edmonton residents. In fact, from 2012 to 2014, attendance at literacy programs across the EPL locations totaled nearly 700,000. Figure 2, below, presents the yearly attendance figures, along with the proportion of total literacy program participation accounted for by early literacy programs.



TOTAL TOTAL 244,800 **TOTAL** 236,700 250,000 209,100 73,300 75,400 70,100 150,000 161,300 171,500 139,000 50,000 Attendance Attendance Attendance 2012 2013 2014 ■ Early Literacy ■ General Literacy

Figure 2: Attendance at EPL Literacy programs, 2012 to 2014

Source: Nordicity estimates based on data from EPL

EPL offers early literacy programs for children of all ages, including infants. For example, the *Sing, Sign, Laugh and Learn* program provides an opportunity for parents and caregivers to learn strategies to engage their infants and toddlers up to age three, including those with developmental challenges, to enhance their communication and development through repetition, visuals and movement. The program is offered in collaboration with Alberta Health Services and the Edmonton Early Intervention Program and had a total attendance of nearly 180,000 from 2012 to 2014. *Welcome Baby*, an early literacy outreach program offered by EPL in collaboration with Alberta Health Services, is described in the box below.



Welcome Baby!

The Welcome Baby Program has become one of EPL's marquee early-literacy programs. Developed in partnership with Alberta Health Services, the program was designed to give all children born in Edmonton (and their parents) equal access to early literacy resources, including those available at EPL. The program was designed both to introduce families with new babies to EPL in the hopes of developing a lasting relationship and to provide all parents and babies with basic early literacy resources for use at home. The Welcome Baby Program is centred on the distribution of Early Literacy Kits to parents of new babies in Edmonton. The packages include a book, a CD, Recommended-Reading Guide Booklet with 100 recommended reads for parents and babies and an invitation to register the child for a free library card. Parents who subsequently register their children for a library card before they turn 24 months also receive additional Welcome Baby materials, including an illustrated song and rhyme booklet.

The program distributes the Early Literacy Kits to parents with new babies when they visit one of the city's Public Health Centres for their child's 2-month immunization. Roughly 92% of all babies born in Edmonton are reached through these immunizations at the city's Public Health Centres.

Initially piloted in 2013 at three Edmonton Public Health Centres, the program has met with great success. **Over 1700 Welcome Baby Packages were distributed to families with new babies during the 2013-2014 pilot program**. As a result, the program was rolled out to all nine of the City's Public Health Centres beginning in April 2014. As of April 2015, 10,340 kits had been distributed.

Feedback received from 60 Welcome Baby! Package recipients showed that 82% of parents had read the book included in the kit to their child. In addition, 35% of parents who sent in feedback indicated that they had signed their child up for a library card and 27% had participated in a program at a local library with their baby.

The Welcome Baby Program is well on its way to achieving its vision of putting early literacy resources in the hands of the families of all new babies born in Edmonton, leading to equal access to critical early exposure to literacy-related activities and resources for all babies in the City.

Sources: *Just Getting Started! Edmonton Public Library 2014 Library of the Year Application*, EPL, 2014; *Welcome Baby Program Testimonials*, EPL website, accessed June 2015.

EPL early literacy programs are, in some cases, delivered through innovative digital platforms that simultaneously contribute to the development of early digital literacy (see Section 3.1.2 for a discussion of EPL's digital literacy programs). For example, Early Literacy Stations (ELS) allow touchscreen access to approximately 70 educational games designed for children (1 to 5 years old).

Research has demonstrated that literacy programs, in particular those offered at an early age, contribute to better academic performance later in life. Some examples include:



- A 2012 study of public library pre-school literacy programs⁴³ found that participation fostered school-readiness among the children (demonstrated through involvement in activities and following instructions), as well as the children's motivation to read (demonstrated through their attending to and asking questions about the books being read). Other developments included an awareness of rhymes and sounds of language, new vocabulary, an understanding of narratives, increased engagement with books, and the development of social skills and independence. There was also a development of the children's ability to focus, listen, follow directions, and display manners, all contributors to a child's school-readiness.
- Similarly, in a 2010 study of the impact of a public library summer reading program⁴⁴ attended by students between the third and fourth grades, teachers, school librarians and public librarians reported perceived improvements among program participants in reading achievement and enjoyment. Furthermore, it was reported that students were school-ready, exhibited increased confidence, exceeded the reading requirements and assigned importance to reading.
- Finally, an examination of children who attended public library summer reading programs demonstrated a higher rate of familiarity with children's literature based on the child's ability to recognize famous authors and titles of books appropriate for their age group. It was determined that even if a child only attends for a short time, those who attend summer library programs read on a higher level than those who do not come at all.⁴⁵

Overall, it is understood that early literacy programs contribute to higher levels of reading performance and interest, as well as have broader impacts on social and learning skills, all of which are fundamental to academic success. Given the high rates of program participation and emphasis on early childhood development, EPL's educational impact is largely attributable to its literacy programs, which contribute to the development of Edmonton's human capital.

⁴³ Shelley Stagg Peterson, Eunice Jang, Carol Jupiter, Maggie Dunlop, "Preschool Early Literacy Programs in Ontario Public Libraries," *Partnership: The Canadian Journal of Library and Information Practice and Research*, Vol. 7.2, available at: https://journal.lib.uoguelph.ca/index.php/perj/article/view/1961#.VVKJ-GYgpl9

⁴⁴ Susan Roman, Deborah T Carran, Carol D. Fiore, *The Dominican Study – Public Library Summer Reading Programs Close the Reading Gap*, Dominican University Graduate School of Library and Information Science, June 2010, p.51, available at: http://gslis.dom.edu/sites/default/files/documents/IMLS_finalReport.pdf
This study focused on 367 students participating in library summer reading programs at 11 schools and public libraries across the U.S. Interviews and surveys were done with 9 school librarians, 51 grade 4 teachers, 110 parents, and 11 public librarians. Students were also encouraged to keep a reading log throughout the summer

45 (Donna Celano, Susan B. Neuman, *The Role of Public Libraries in Children's Literacy Development: An Evaluation Report*, Pennsylvania Department of Education, 2001, available at: http://www.ifpl.org/Junior/studies/Role%20of%20Libraries.pdf



epl2go

epl2go is a new literacy van initiative at EPL that has been rolling through the streets of Edmonton since July 2013, creating pop-up library spaces for learning, discovering and making in communities where access to a traditional library branch is limited. epl2go brings library programs and services directly to residents in underserved communities, aiming to break down barriers to library service for all Edmontonians. By meeting the community where they are, from parks to banks to recreation centres, epl2go provides an opportunity to surprise and delight with a new way to access EPL. epl2go offers a variety of fun and interactive programming including early literacy, discovery, digital literacy and Makerspace programs.

In the far South West of the city, where transportation can be a barrier to library use, families attend a weekly Family Storytime at a residents' association. One parent wrote in a comment: "My 4 year old and 20 month old love coming and mommy loves that she doesn't have to drive too far." Another parent told a staff member that her family didn't go to the library because the nearest branch was too far to travel with young children. The epl2go visit is so close to their house that they now use it as their library branch, coming to storytime but also getting library cards and checking out and returning material there weekly.

Across the city, an EPL customer with limited mobility wrote after she discovered epl2go visited her residence weekly: "I've just moved into my new apartment. I woke the next day to the sound of a "car" door slamming and feeling muscles I didn't know I still had. I pulled up the window blinds, squinted into the glaring sunshine and saw ... a van from the Edmonton Public Library that had "EPL.ca/epl2go" written on it. And since I am under the lifelong opinion that the Library is the BEST invention there is, I now know my glass is definitely not only "half-full", it is MORE than "half full". The EPL keeps getting better because of its commitment to reaching out and the fundamental understanding of what a huge and powerful thing "HOPE" is. I'm looking forward to seeing you again in the future."

A visit at a family centre revealed how deeply barriers can affect library use. A mother of three told the epl2go Community Librarian that she did not feel that she was an effective library role model for her children because she was not a strong reader. As a result, even though she wanted to take her children to programs she was too nervous to attend. Her family frequents the local family centre that epl2go visits, and when she found out the library came directly to the centre, she was excited to have an opportunity to try out the library in a way that felt less intimidating. Now she and her children come to the epl2go visit at the family center weekly, participating in programming, trying out new technology and checking out library material. She said they are even thinking of going to their local branch now that she knows that the library is friendly and will welcome her family.

epl2go will pop up in even more unexpected places in the coming year. With a second van just added to the fleet and a total of four vans planned for the future, EPL will continue to reach Edmontonians in the heart of their communities.

With material provided by EPL staff



3.1.2 Digital literacy and technology skill-building

In a world where technology is advancing at a rapid pace and embedded in all aspects of information sharing, digital literacy is a prerequisite for advancement in sectors across the economy. As such, educational impact and its role in human capital development is inseparable from the skills involved in accessing and understanding, as well as in creating and distributing information using technology.

Digital literacy and technology skills are essential to everything from school-readiness and job-readiness, to identity development and community engagement. EPL's digital literacy programs enable Edmonton residents to develop digital skills across a variety of technologies, in relation to a diverse range of activities and at different levels of proficiency. Digital literacy programs at EPL cover the use of hardware and gadgets (e.g., computers, tablets, e-readers, etc.), programs and tools (e.g., social media platforms, word processors, online search tools, etc.), and activities (e.g., animation, genealogy, 3D-printing, programming, etc.). Some programs are also geared toward target groups, such as beginners, children, seniors, women, language learners, and persons with developmental disabilities, among others. Yearly participation and program volume figures are shown in Figure 3, below.

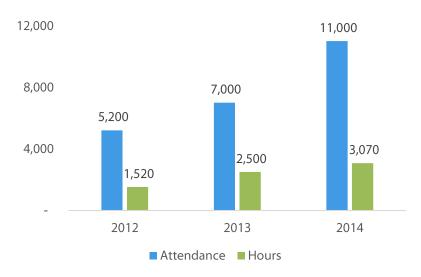


Figure 3: Hours of programming and attendance for EPL digital literacy programs, 2012 to 2014

Source: Nordicity estimates based on data from EPL

EPL's digital literacy programming more than doubled in volume from 2012 to 2014, and attendance grew in line with that increase, reaching 11,000 in 2014.



Digital Literacy at EPL: The Makerspace

The Makerspace opened at the Stanley M. Milner library in the fall of 2013 and features a wide variety of materials and equipment including:

- Two 3D-printers;
- An Espresso Book Machine;
- A green screen;
- Two professional sound-recording and mixing booths;
- Several high-performance computers with design, video, audio and game development software;
- A digital conversion station to convert older media to modern formats; and
- A video gaming area with an XBOX One and PS4 game consoles and PCs.

The space also has Lego Mindstorm kits, Sphero and Dash/Dot Robots, Raspberry Pi kits, Arduino starter kits, Makey Makey kits, and Little Bits kits available for use.

Users can access the equipment anytime during open hours and a host of special programs offer introductory training on how to use them.

In addition to the technology, equipment and software available in the Makerspace, branch staff are trained to be digitally literate in order to provide support to library users. EPL also has a small staff of Digital Literacy librarians who work with staff at branches to help achieve digital literacy objectives. Many branches also have a sandbox of devices that librarians use for staff training and customer demonstration and instruction.

Digital literacy has been a strategic focus for EPL since 2011 when the Digital Literacy Initiatives (DLI) group was established. The DLI team leads strategic decision-making on which new technology and devices the library uses and provides to EPL customers and supports and implements new technology-related programs and service initiatives. EPL further solidified its commitment to contributing to improved digital literacy among Edmonton residents in its latest 5-year business plan where "Evolve our digital environment" was named one of the 4 strategic priorities the organization is going to focus on. EPL is committed to "creat[ing] a digital environment that fuels Edmontonians' experimentation, discovery and wonder."

In 2014, almost 4,300 people attended programs in the Makerspace. Roughly 5,000 creations have been printed on the 3D-printers to date and an average of about 200 books are printed monthly on the Espresso Book Machine. In addition, there are about five sessions a day booked for the sound recording booths and approximately 2,000 sessions were logged on the game consoles and PCs respectively in the gaming area.

Access to this equipment provides Edmonton residents with access to new technologies and a place to learn new digital skills, experiment, and create. With an expansion planned that will see mini-Makerspaces unveiled in 5 more EPL locations, the impact of EPL's digital literacy initiatives is only bound to grow.

Sources: *EPL's Makerspace*, Urban Libraries Council, accessed June 2015; *EPL Makerspace*, EPL website, accessed June 2014; EPL usage estimates.



In addition to providing training on how to use technology, EPL serves as a point of access to digital resources. The library's role as access point is most notably demonstrated by two factors:

- Its provision of access to computers: over one million Internet station slots were booked in 2014 and more than 800,000 hours were spent by users at these stations; and,
- Its provision of internet connectivity: Recent data⁴⁶ shows that on average, usage activity on EPL's public data exceeds 1,500 clients, 4,400 sessions and 185,000 megabytes per day

Online resources available through EPL cover a range of topics, from curriculum-based subjects to creative skills and software development. For example, the Gale Courses program allows library members can take up to three six-week instructor-led online courses on a range of topics from business courses to parenting to creative writing.

Research conducted in 2010 on public libraries in the US has highlighted computer and internet access as one of the most important services offered by public libraries, and one that is linked to all the other types of impact (i.e., program areas and target segments of the population) discussed in this section. Highlights from that research include:

- Use of in-library computers for electronic library resources was more frequent among lower income patrons (everyday use of electronic resources was reported by 21% of individuals from households with incomes below the poverty line, compared to 6% of those in the highest income category);
- Internet access through an in-library computer or wireless connection was highest among low income individuals, youth between 14-18 years of age and non-English speakers.

Internet connections, according to this study, were most common for social connections (60%), education (42%) employment (40%) and health (37%). However, it should be noted that in most of these areas, the usage rates were far higher among users who solely relied on the public library for internet access.⁴⁷

The centrality of digital literacy to human capital and economic development in today's knowledge-based, technology-driven world is reflected in its classification as an "essential skill" by Employment and Social Development Canada. That is, digital technology skills, including the use of computers, applications, and other software and hardware is recognized as a skill that is "needed for work, learning and life, and allow[s] people to grow with their jobs and adapt to changes in the workplace."⁴⁸

⁴⁶ Based on Wi-Fi usage data from April 24 to June 23, 2015.

⁴⁷ Samantha Becker et al., *Opportunity for All: How the American Public Benefits from Internet Access at U.S. Libraries*, March 2010, available at: http://www.imls.gov/assets/1/assetmanager/opportunityforall.pdf

⁴⁸ Government of Canada, Employment and Social Development Canada, "Guide to Essential Skills Profiles," 2014, available at: http://www.esdc.gc.ca/eng/jobs/les/profiles/guide.shtml



3.1.3 High school completion

As mentioned above, participation in early literacy programs is a significant contributor to future academic success, and consequently, high school completion. At the same time, many EPL programs that fall under the other categories discussed in this report, including those with social, community and cultural impacts, are youth-oriented and geared toward high school students. As such, it is assumed that these programs also impact the rate of high school completion among students.

Improvement of high school completion rates in Edmonton may be only indirectly an outcome of many EPL programs. However, there are also more specific homework support, research instruction, and library orientation programs that directly support and impact the academic performance of high school students.

From 2012 to 2014, EPL offered over 40 hours of programming related to high school completion, with approximately 900 participants. Most of these programs were delivered in partnership with Edmonton high schools (including alternative schools). Participation in other youth-oriented programs related more directly to social, community and cultural impacts are included in those sections of the report.

3.2 Social Impact

The social impact of EPL revolves around programs that reflect its engagement with broader social issues. Some of these programs target specific segments of the populations that face unique challenges. Others are general support programs that aim to equip Edmonton residents with the tools required to maximize their quality of life and social, physical and mental well-being.

This section examines the social impact of EPL's programs and services in the following areas:

- Vulnerable community members;
- Unemployment;
- Support for new Canadians; and
- General life skills (including health and wellness).

EPL's impacts in each of these areas are described in further detail below.

3.2.1 Vulnerable community members and Unemployment

EPL offers many services aimed at supporting and aiding Edmonton residents facing social difficulties. On-site and outreach programs for 'at-risk' and vulnerable individuals, particularly youth, are offered in partnership with several organizations, including (among others):

- Armoury Youth Centre
- Old Strathcona Youth Society
- Edmonton Young Offender Centre
- CASA

- Jellinek Society
- John Howard Society
- Our House Addiction Recovery Centre
- Boyle Street Community Services



Building a Safer Community through Inclusive Learning

Building a Safer Community through Inclusive Learning ("the library outreach project") is a program developed by EPL in collaboration with Boyle Street Community Services (BSCS). The program was funded by the Alberta Safe Communities Innovation Fund (SCIF) during its pilot phase from August 2001 to March 2014. The initial program ran out of the Stanley A. Milner Library in downtown Edmonton but has been extended to five other EPL branches.

In response to a marked increase in the number of vulnerable individuals turning to Stanley A. Milner Library in downtown Edmonton for refuge, EPL set out to identify how they could better serve and address the needs of those individuals. EPL recognized that many of the individuals that ended up at the library were frequently there because they had nowhere else to turn. The library, as a true public space, offered a safe, welcoming place for these individuals to spend their days and temporarily escape some of the stress associated with living in unstable conditions. In many cases the individuals coming to the library are there because they fell through the cracks of the system and are not able to access existing social services – whether because of restrictions associated with intake processes and program parameters or personal reluctance to engage in the formal processes associated with those programs.

The program was initially conceived to target young adults who are at-risk for victimization, isolation and criminal or disruptive behavior in an attempt to connect them with programs and services both within and outside of the library. The objectives were primarily centered on crime and substance abuse prevention. However, by the end of the project period the target client group was extended to all vulnerable individuals, regardless of age. The programs largest client group, more than half of its clients, are men aged 36-55 years most of whom have struggled with chronic poverty, mental health issues and addiction for several years.

The program has allowed social workers to develop lasting relationships with clients in an informal way, unbound by the restrictions associated with more formal social service programs that have specific intake parameters and processes. Instead, clients can engage with the social workers at the library to the extent that they want and in the way that they want. As a result, social workers have been able to develop richer, longer-lasting relationships with clients, which allows them to tackle specific issues incrementally and at the client's own pace; making it a less intimidating and overwhelming experience. (Continued on next page)



Building a Safer Community through Inclusive Learning (continued)

A recent summative evaluation of the program in 2015 demonstrates how successful it has been so-far. For example, during the initial program period outreach workers made:

- 14,319 contacts among the target client population, which is equal to an average of over 100 contacts per week.
- 3,575 referrals for services and supports on behalf of program clients, most of which
 were for housing, identification recovery and income support services. They also
 commonly made referrals for other services such as health care services, employment,
 addictions services, mental health services and legal support.
- One referral for every two encounters by the end of the initial program period, which was an improvement on the average of one referral for every 10 encounters in the first year of the program.

In addition, qualitative evidence collected from both clients and social workers indicates that several clients have been able to make positive changes in their lives, such as securing and maintaining housing, and finding work and securing income.

One of the main success stories of the program and one of its primary advocates is Colin Mulholland, who was homeless, struggled with alcohol addiction and had lost hope. After spending his nights at a local homeless shelter, Colin would head to the downtown library during the day where he would mostly try to get some rest. Over several months, Jared Tkachuk, one of the library's social workers, slowly began to build a relationship with Mulholland. At first, the social worker was simply a sympathetic ear, someone for Mulholland to connect with on a regular basis. But eventually the relationship allowed Tkachuk to guide Mulholland in a more positive direction, building from a solid foundation of trust and empathy.

Eventually, with Tkachuk's support Mulholland was able to address his alcohol addiction, get housing and went on to pursue post-secondary education, earning a diploma in social work. Mulholland is currently pursuing a bachelor of arts program at the University of Alberta, something he never imagined was an option for him.

Sources: Building a Safer Community Through Inclusive Learning: Outcome & Summative Evaluation, Edmonton Public Library, EPL, 2015; Homeless find hope, refuge and community at public libraries, CBC news, Nov 20, 2014; Outreach Services, EPL website, accessed June 2015; Building a Safer Community Through Inclusive Learning: Outcome & Summative Evaluation, Edmonton Public Library Board & Boyle Street Community Services, 2015.



In addition to affiliation with partner organizations addressing similar social challenges, EPL's focus on vulnerable community members, including those experiencing or at risk of experiencing homelessness, aligns with broader municipal directions such as *A Place to Call Home: Edmonton's 10 Year Plan to End Homelessness* (2009). Drop-in and other community outreach services often serve as a point of access to other social services available through the City, as well as contributing to an increased sense of engagement among at-risk populations.

EPL also offers programs aimed at supporting career planning and job searching for Edmonton residents, often in partnership with other organizations such as Alberta Works and BGS Enterprises. These programs focus on providing guidance and skill-building in developing resumes, cover letters and interview skills and techniques. Many of these programs are specifically aimed at addressing unemployment and are aimed at target segments of the population, such as teens, seniors, and 'atrisk' individuals.

From 2012 to 2014, a total of over 1,060 hours of programming aimed at vulnerable communities were delivered to roughly 14,700 participants. In addition, around 250 hours of unemployment support programs were offered, which attracted approximately 600 participants.

While most public support programs for homeless and 'at-risk' individuals centre on housing, there is evidence that outreach programs focused on education and community engagement have the potential to increase participants' ability to manage difficult life situations. For example, an evaluation of Reconnect, an Australian service for homeless or at-risk youth, offering educational, recreational and cultural identity programs as well as other support and therapy services, found that:

- Temporary living situations among participants fell from 16.5% to 5%;
- More participants were living with their parents, indicative of more stable relationships;
- There were reported improvements in family conflict resolution and general conflict management among participants;
- Employment (full or part time) of participants increased from 2% at the start of support to 5% at completion; and
- The proportion of participants who were not in education, training or employment dropped from 15% at program entry to 11% at exit.⁴⁹

The program also had positive self-reported impacts on participants, including feeling better about themselves, not getting as angry as they used to, being better able to control their anger, being able to deal with problems better, and feeling more positive about the future.

Similarly, outreach programs, educational offerings and encouragement of participation in EPL recreational and community engagement activities are likely to increase stability among Edmonton's most vulnerable citizens.

⁴⁹ Australian Government, Department of Family and Community Services, *I'm Looking at the future': Evaluation Report of Reconnect*, 2003, available at:

 $https://www.dss.gov.au/sites/default/files/documents/05_2012/imlookingtothefuture_finalreport_30oct2003_0.\\pdf$



Friends at Milner

The "Friends at Milner" program was created in 2010 as part of a partnership between Marian Enow (Community Librarian) and Colin Inglis (Downtown Street Outreach) in an attempt to foster a sense of community amongst EPL's vulnerable and marginalized patrons. The program consisted of library tours, short film presentations and other activities.

With the launch of EPL's Building Safer Communities through Inclusive Learning outreach program in the summer of 2011, "Friends at Milner" became a complimentary program facilitated by the Outreach Workers. The program now acts as more of a conversational group, a source of community support, where participants are encouraged to speak about "the good, the bad, and the ugly" in their own lives, issues they feel passionately about, and/or things that have recently caught their attention.

Under its new guise, the group has become a place where people feel comfortable speaking their minds without fear of judgment or censure. Mutual respect has been the only real rule of the group. New participants often ask "what's this group about?" or "what's the topic of discussion?" and the answer is always the same: "whatever you want it to be." The facilitator's task is not to control participants, but to accept their worldview and to encourage them to speak freely, even if their words are tangential or challenging.

The hallmark of the group has always been its acceptance of people and its willingness to listen and be patient. This means that the most marginalized people in the library, and probably the city itself – those with very complex needs who often face extreme stigmatization – will regularly join the table and contribute. The topics of discussion are often as diverse as the members themselves: people will typically relay their experiences of being homeless and on the margins, but there is also always laughter and the swapping of good stories.

The sense of community experienced by the participants is reflected in the group's steady attendance, the general willingness to contribute, the interaction between people (who often didn't know each other beforehand) and the formation of a "core group" who have adopted more of a leadership role.

One mental health worker from Alberta Health Services, who helped facilitate the group on several occasions, once said: "I can't tell you how many times we tried to do this very thing at the hospital and no one ever came, and here it is happening at the library."

With material provided by Jared Tkachuk, Outreach Worker at Stanley A. Milner Library



Research has also demonstrated a link between job search programs and increased rates of transition to employment for unemployed people, including in the following cases:

- In a study conducted in Austria, participants in a six-week job search program one that provided training on writing application letters, building interview skills, and other job seeking skills had a 15% higher probability of finding a job within four months and an increase in the 'job hazard' rate (possibility of getting a job) by 67%. The findings of this study indicated that the earlier the individual starts the program in their unemployment, the higher the rate of becoming employed.⁵⁰
- Another study⁵¹ examined the impact of various types of unemployment programs and found that whether there was a focus on group activities and support of self-directed job search, or whether the program was delivered in a classroom setting, participants' earning increased in the three years following the program.
- An assessment⁵² of an experimental unemployment program that involved five sessions over a one-week period focused on learning job-search skills and inoculation against setbacks found that participants were more likely to be employed, were working more hours per week and earning a higher income per month than those in a control group that was only provided job search informational material (i.e., booklet). Furthermore, those in the experimental group had lower levels of depressive symptoms and a higher level of emotional functioning.

Job search programs are effective in assisting unemployed individuals regain employment more quickly than other programs, and typically help them retain employment over time. They are the preferred method of employment assistance in many areas, as they have more immediate results than long-term training and education-based programs, and are generally as effective in the reemployment process. Individuals who regain employment using a job search program also tend to exhibit increased self-esteem.

3.2.2 Support for new Canadians

More than a quarter of the population of the City of Edmonton were born outside of Canada, and 22% of Edmonton's immigrant population (in 2011) are recent immigrants (arrived between 2006 and 2011).⁵³ New Canadians make up a significant portion of the City's population and EPL's targeted programs and services aim to help them in their transition as they settle into their new community.

EPL provides critical support for new Canadians in a variety of ways. The library is a central place where new Canadians can access information and support services, both when they arrive to help

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⁵⁰ Andrea Weber and Helmut Hofer, *Are Job Search Programs A Promising Tool? A Microeconometric Evaluation for Austria*, Institute for the Study of Labor, 2004, available at: http://ftp.iza.org/dp1075.pdf

⁵¹Dan Bloom and Charles Michalopoulos, *How Welfare and Work Policies Affect Employment and Income: A Synthesis of Research*, 2001, available at: http://www.mdrc.org/sites/default/files/full_393.pdf

⁵² AD Vinokur et al., "Two years after a job loss: long-term impact of the JOBS program on reemployment and mental health," *Journal of Occupational Health Psychology*, Vol. 5.1, 2001, available at: http://www.isr.umich.edu/src/seh/mprc/PDFs/vin_johp2000.pdf

⁵³ Statistics Canada, *National Household Survey 2011*.



with settlement and on an ongoing basis through various programs. EPL's programs aimed at supporting new Canadians range from specialized workshops on immigration law to English as a Second Language Programs and materials (e.g., the English Conversation Circles and the English Language Learner's Book Club, Family Language Kits, and e-learning programs for ESL instruction). They also include several programs geared toward children, youth, women and families for community and cultural sharing.

In 2014, EPL hosted nearly 2,000 hours of programming targeted at New Canadians which were accessed by roughly 15,000 new Edmonton residents. Figure 4, below, presents the hours of programming targeting new Canadians specifically, and participation rates in those programs.

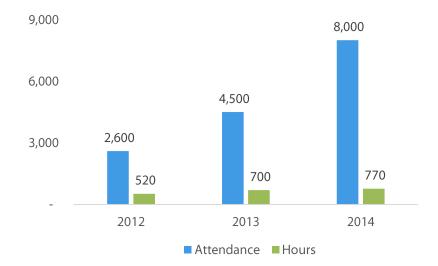


Figure 4: Hours of programming and attendance for EPL programs for new Canadians, 2012 to 2014

Source: Nordicity estimates based on data from EPL

Looking at the programming and attendance over the three years, there is substantial growth in participation in programs for new Canadians – over 70% increase from 2012 to 2013, and more than triple the attendance numbers from 2012 to 2014.

In addition, the Settlement Services program offers new Canadians access to settlement practitioners at six EPL locations who provide advice, support and referral services to clients on a variety of topics such as housing, health services, transportation, education and social assistance. From 2012/13 to 2014/15, EPL settlement workers worked with 878 individuals. The Settlement Services program is delivered in partnership with the Edmonton Immigrant Services Association (EISA) and financially supported by Citizenship and Immigration Canada.

Research on immigration support and language instruction programs in Canada (i.e., those provided by Citizenship and Immigration Canada) suggests significant impacts on the comfort and ease of integration after arriving in Canada.



In particular, it was found that the Immigration and Adaptation Program:

- Helped new Canadians in their search for employment, with 62% responding that the program had a major impact and 43% reporting that they found employment after using the services;
- A majority of new Canadians who used the services (and responded to the survey) reported a
 positive impact on understanding settlement needs, meeting basic daily needs, learning
 about services available in the community, setting goals and dealing with the stress
 associated with settlement; and
- Increased their confidence and community engagement.⁵⁴

Similarly, the Language Instruction for Newcomers to Canada (LINC) Program was found to have improved language abilities of students in the areas of reading and writing, and eventually listening and speaking (beyond what they would have gained from simply living in Canada).⁵⁵

An evaluation of the Settlement and Education Partnership in Toronto (SEPT) also revealed high levels of satisfaction among surveyed participants. Newcomers found that the SEPT program allowed them to gain a better understanding of resources available in the community, and more confidently navigate the school system, particularly due to the presence of settlement workers⁵⁶

Generally, programs aimed at helping new Canadians through language education and social support are effective in providing participants with greater knowledge of the language, access to information and assistance in searching for employment, and stability and support when navigating certain institutions, including education and healthcare organizations. These programs also contribute to strengthened community relationships.

3.2.3 General life skills building (including health and wellness)

EPL's social impacts also include programs aimed at improving the overall quality of life of Edmonton residents, through the provision of general skills development and health and wellness programs. Annual programming and attendance numbers for these types of programs are presented in Figure 5, below.

⁵⁴ Citizenship and Immigration Canada, Evaluation of the Immigrant Settlement and Adaptation Program (ISAP), 2011, available at: http://www.cic.gc.ca/english/resources/evaluation/isap/2011/section4.asp

⁵⁵ Citizenship and Immigration Canada, Evaluation of the Language Instruction for Newcomers to Canada (LINC) Program, 2010, available at: http://www.cic.gc.ca/english/resources/evaluation/linc/2010/linc-eval.pdf
⁵⁶ Usha George and Wes Shera, Settlement and Education Partnership in Toronto (SEPT) Evaluation Report, Faculty of Social Work University of Toronto, 2000, available at:

http://www.ceris.metropolis.net/Virtual%20Library/education/usha_wes/evaluation%20report.html#_Toc50144 6082)



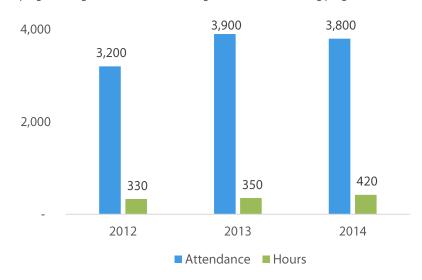


Figure 5: Hours of programming and attendance for EPL general life skills building programs, 2012 to 2014

Source: Nordicity estimates based on data from EPL

As shown above, approximately 1,100 hours of EPL general life skills building programs were delivered by EPL between 2012 and 2014, serving around 10,900 participants. These programs provide participants with the opportunity to learn new skills and support measures that will benefit them in various areas. For example, legal workshops familiarize participants with the judicial system, financial literacy and retirement planning sessions prepare participants for effective management of their finances, and bereavement support programs help those who are grieving the loss of loved ones. Programs are also offered for seniors, including the Healthy Aging series that includes sessions on boosting memory, making healthy choices and travelling.

According to a study conducted by the UK Arts Council, regular users of library services were more likely to report that they are in good health. This correlation was most markedly observed in older library users (aged 60 and above).⁵⁷

3.3 Community Impact

EPL's commitment to the communities it serves is centred on its Community-Led Service Philosophy, which adopts a participative approach to designing and delivering programs and services. From the first Community Development Librarian Intern hired in 2008, EPL has prioritized understanding, engaging with, and serving the needs of all community members and ensuring accessibility and relevance of library services.

⁵⁷Daniel Fujiwara, Ricky Lawton and Susana Mourato, The Health and Wellbeing Benefits of Public Libraries, Arts Council England, March 2015, available at:

 $http://www.artscouncil.org.uk/media/uploads/Health_and_wellbeing_benefits_of_public_libraries_full_report.pdf$



In line with this commitment, and in addition to the other impacts described in other sections of this report, EPL as an institution and as a collection of physical spaces primarily impacts the community in the following areas:

- Role as a community hub and gathering place; and,
- Contribution to civic engagement.

These impacts are further explored in the following section.

3.3.1 A community hub and gathering place

EPL's physical branches serve as important gathering places for the community and contribute to the development of community bonding and sense of belonging. EPL hosts a number of recreational, special interest and community programs that bring Edmonton residents together for shared experiences. These offerings contribute to a stronger sense of community among residents.

Programs in this area range from book clubs and film screenings to having a presence at local farmers' markets. These programs target a variety of groups, including kids (e.g., Story Time, March Break programming, etc.), youth (e.g., Tween Lounge, youth nights, etc.), adults and seniors.



EPL Makerspace: A place for shared experiences

EPL offers a number of opportunities for community member of all ages to gather and share experiences. In particular, the Makerspace at Stanley A. Milner hosts a number of fun and interesting programs that contribute to the library's role as community hub.

One of the Makerspace's most popular programs is the Saturday afternoon Lego Robotics Club for ages 8-12. In 2014, approximately 1153 participants attended – that's an average of 23 potential roboticists each week! This free program, developed by Makerspace staff member Connie Yuen, introduces kids to the basics of building, motion, sensing, and programmatic logic! Laughter, discovery, and problem solving converge as participants try out different projects and challenges.

Another popular program offered through the Makerspace are the Friday night Game Nights. In January 2013, Makerspace assistant Ben Ehlers began hosting and facilitating Friday night programs focused on multiplayer gaming. From League of Legends to Minecraft to retro gaming and beyond, this program draws in people who regularly use the makerspace, but also attracts new library visitors and families. A community has grown and blossomed where players share smiles and strategies, as illustrated by the following testimonials:

"I like the interactions, learning from the other players, you make new friends!" - Jason

"The games are lot of fun. You started me out with FEZ, and I tried that, but I thought what a lame game. But then one Friday I saw the room filled with 30 people all playing the same game, and I thought, 'I want to come to one of those events and see what happens'." - Ron

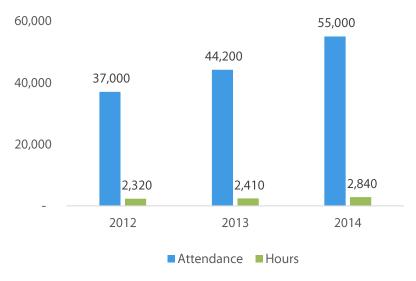
"At one of the events a couple weeks ago, I had one of the best games ever. It's a close community, just having fun... You don't see the players as a skill level, you see the people as people. That's what gaming communities should be about. Helping each other out, having a blast." - John

With material provided by EPL staff



At the same time, the library branches are important information, service and entertainment access points for the community, helping to make EPL a true *community hub.*⁵⁸ Programs related to EPL's role as a community hub attracted the second highest number of participants between 2012 and 2014 (over 136,000 – second only to literacy programs). The annual programming and attendance figures are shown in Figure 6, below.

Figure 6: Hours of programming and attendance for EPL programs related to its role as a community hub and gathering place, 2012 to 2014



Source: Nordicity estimates based on data from EPL

In addition to community-focused programming, EPL branches provide space for other organizations in the community to deliver programs and events. In 2013 and 2014, nearly 3,000 room bookings were made at EPL locations, with the overwhelming majority (96%) made by non-profit organizations.

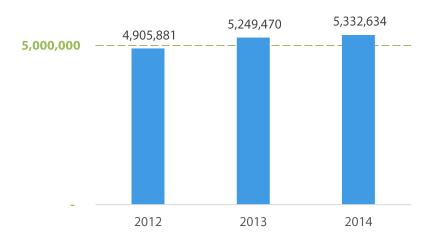
EPL also plays an important role in providing a truly open and welcoming public space for all residents and visitors in the city. As true public spaces, libraries become public gathering places where connections are made and citizens can access information and resources or entertainment for free.

From 2012 to 2014, overall visits to EPL branches increased by nearly 9%, surpassing the five million visitor mark in December, 2013. The annual visitor numbers are shown in Figure 7, below.

⁵⁸ According to the International Making Cities Livable Council, a "community hub" is a central community gathering place that brings diverse people and agendas together and where multiple functions and services overlap in one space. http://www.livablecities.org/blog/community-hubs, accessed March 2015.



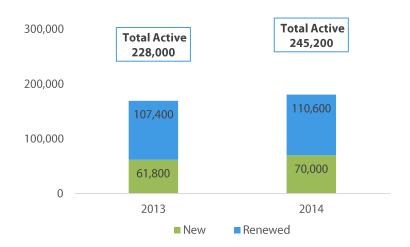
Figure 7: Total EPL visits 2012 to 2014



Source: Nordicity estimates based on data from EPL

EPL memberships allow visitors to access a variety of programs and services, including the physical and digital collections and computer services. The library also offers open Wi-Fi, which is accessible to anyone from the public at all EPL locations. In 2014, there were roughly 245,200 total active memberships at EPL and about 180,000 memberships were either opened or renewed that same year.

Figure 8: EPL memberships, new and renewed, 2013 to 2014



Source: Nordicity estimates based on data from EPL

The library as a multi-service community hub is an important aspect of its impact, as it underlines the evolving role of the public library system and the far-reaching impacts that it has on the community.



3.3.2 Civic engagement

In part due to the impacts discussed in this report, the community is not only engaged but highly invested in EPL. As such, EPL also serves as an outlet for civic engagement, through volunteerism and private philanthropy. Average and total contributions from private donors from 2012 to 2014 are depicted in Figure 9. These donations are used to fund library programs, special projects and initiatives or grow the library's collections.

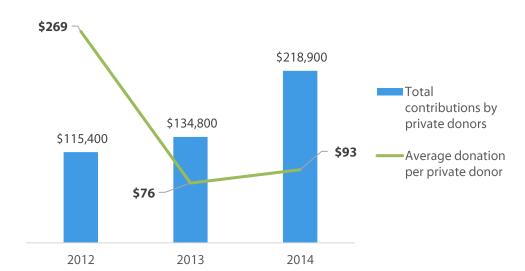


Figure 9: Contributions from private donors, average donation and total funds raised, 2012 to 2014

Source: Nordicity estimates based on data from EPL

As these figures demonstrate, while the total annual funds raised from private philanthropy grew by nearly 90% from 2012 to 2014, the average donation experienced a substantial decline. ⁵⁹ In effect, it appears that many more Edmonton residents are supporting EPL, albeit through smaller donations. These figures illustrate that Edmontonians are becoming increasingly engaged in the library and value its role in the community.

As mentioned above, volunteerism is another indicator of EPL's impact on civic engagement. Figure 10 shows the number of volunteers and total hours donated by volunteers from 2012 to 2014.

⁵⁹ It should be noted that EPL received a number of very large individual donations in 2012, which would have driven up the average donation size in that year. As a result, the sharp decline between 2012 and 2013 may be an anomaly and not necessarily indicative of a downward trend.



373
328
4,505

5,169

Total number of volunteers

Total volunteer hours

Figure 10: EPL volunteerism, total number of volunteers and total hours, 2012 to 2014

Source: Nordicity estimates based on data from EPL

In 2014, average weekly hours for EPL volunteers was 20, up 43% from 2012 and 2013. Volunteers contribute to EPL in a variety of ways, including as reading buddies, through home service delivery, assisting in book sales and events, and even as mascots.

3.4 Cultural Impact

EPL also plays a role in the promotion and development of Edmonton's arts and culture. This section will examine the cultural impact that EPL has on the community in terms of furthering local artistic production and appreciation. In particular, the following areas of impact are explored:

- Supporting the literary arts; and,
- Promoting and support of local artists.

Each of these areas of impact is further explored in the following section.

3.4.1 Supporting the literary arts

Beyond providing access to an expansive collection of literary works, EPL plays a role in supporting and celebrating local and Canadian authors and the creation of literary works with a regional flavour. EPL's programs, such as the Writer in Residence Program, Illustrator visits and the Reader's Choice Awards promote local literature. At the same time, EPL offers programs that encourage the creation of literature, both through writing workshops and self-publishing training sessions using the Espresso Book Machine.

From 2012 to 2014, EPL offered nearly 700 hours of programming related to the literary arts, with total program participation reaching 67,800.



Among all the categories of programs and services discussed in Section 3, literary arts programs have the highest attendance intensity – that is, the average number of participants per hour of programming – likely due to the popularity of the Young Reader's Choice Awards among Edmonton children and youth.

3.4.2 Promoting and supporting local artists

EPL also plays a role in promoting local artistic production in other disciplines, such as the visual arts and music. Programs related to the arts include artist visits to the Gallery at Milner, arts camps and workshops, and Music Maker Mondays with iHuman.

Capital City Records: The Edmonton Local Music Project

In 2013 the seed was planted for a vision of a new digital public space at EPL that is focused on showcasing, sharing and archiving music by local Edmonton artists. Part of the vision for the project includes the creation of a digital archive that will provide a record of the history of local music in Edmonton, including digitized concert posters and other memorabilia.

The project will accept 100 albums a year that will be added to a curated collection. EPL will put out a general call for submissions four times per year and will accept 25 albums per submission period to be added to the archive. The selection process will be juried by members of the local music community, making it a community-led initiative. Users will be able to download, stream, create playlists and share the music in the collection for free.

Local artists can also submit their works to be included in a non-curated local music archive that will also be hosted on the site and available to users.

The initiative was developed in an effort to support and promote local Edmonton artists. In addition to providing local artists with a community-led space where they can share their work with audiences, EPL has also committed to providing an honorarium to the artists whose projects have been selected for inclusion in the curated collection.

The new digital public space for local Edmonton music is scheduled to launch in 2015, making the first 50 albums in the collection available to Edmonton residents for listening and sharing.

Sources: <u>Digital Public Spaces Trend-spotting Report: Detailed Trends</u>, EPL, 2013; Capital City Records: Edmonton Local Music website, http://www.capitalcityrecords.ca/about, accessed June 2015.

In addition to programs focused on supporting artistic development, EPL provides free exhibition space for artists based in Edmonton or the local area to display their works though a juried application process. Exhibitions are typically on display for a month at a time, and the Library supports their promotion through its websites, announcements and postings. From 2012 to 2014, Gallery at Milner hosted 50 shows, including solo and group exhibitions of works by local artists, students and craft makers.

The EPL Makerspace also plays an important role in helping local artists and creators (both professional and amateur) access equipment to explore new techniques, promote their work and produce products at a low cost.



Makerspace: A place for creating and experimenting

The EPL Makerspace provides a unique environment that allows local artists and creators (or aspiring creators) to learn, experiment with new equipment and techniques and most importantly to create!

Edmontonians have printed a diverse range of self-published, creative work on the Espresso Book Machine, including: verse novels, class poetry books, graphic novels, fiction, instructional books, spiritual reflections, technical documentation, family history, and memoirs. For example, an Edmonton family brought in two imaginative stories (Fairies around the World and The Secret Lives of Aliens), both written and illustrated by their daughter and son respectively and Makerspace staff helped turn their creativity into two wonderful softcover books! In addition, two University of Alberta students fell in love with the Espresso Book Machine at first sight and wrote, designed, and produced a beautiful verse novel, Newly Opened Restaurant, in a single day. When EPL customer Nick Wanchuk completed his memoirs, family members worked together to collaboratively self-publish his work. Makerspace staff members assisted them with the layout of his manuscript and book cover design – as well as printing the final product. The family even held a book-signing! One of the family members said of the project: "We are so grateful to have this service in Edmonton. It made it possible for a 93-year-old man to see his memoirs published. The EPL staff were amazing and very helpful. It is very exciting for us to make this professional book. Thank-you."

Since discovering EPL's 3D printers, Edmontonians of all ages have used the service to try out ideas, make parts for electronics projects or small household repairs, and to surprise and delight friends and family with creative, personalized objects. EPL customer Eleanor Runnalls used created a ghost from the online game Destiny as a gift for a friend. She explains: "Here is a photo of me with my finished and painted Destiny Ghost (file by user RotoScan as posted on Thingiverse.com), but I don't get to keep it - it's a gift for a member of my Destiny clan.:) Maybe I'll have to come back and print one for me!" Another EPL customer, Matt Nikolaychuk, used EPL's 3D printers for a creative fan costume project inspired by the game series Fallout – his very own wearable computer inspired by the PipBoy 3000. And high school chemistry teacher Michael Ng recently ordered a prosthetic hand 3D print – which was printed in beautiful ruby red on the EPL Makerspace's 3D printers. This is the first prosthetic project Edmonton Public Library has printed. The hand will be part of a volunteer project for the school's science 3D club in the fall. The design was created by e-Nable, which is an open source community specializing in creating free 3D printed non-medical devices for low-cost production to provide basic functional grasping motion for adults and children.

Edmontonians – be they photographers, costume makers, filmmakers, or friends and individuals just having some fun – have embraced the photography area of the Makerspace for a range of different projects and purposes; from cosplay to weddings, book illustrations to school projects, and even scanning 3D selfies. When the green wall, chroma flooring, and lighting equipment are in use, the Makerspace quickly draws a crowd of interested onlookers. The space has had wedding parties taking themed portraits, photographers experimenting with shutter speeds and lighting, and even a local costume designer taking cosplay photos in a recent creation inspired by the game Portal.

Edmontonians are eager to experiment, explore, create and play and the Makerspace provides them with a place to do that.

With material from EPL staff



4. Conclusion

EPL, like all public libraries, is a public good that provides a host of resources and services to members of the Edmonton community, typically at no cost.

These resources and services create an economic contribution to the community through the value they provide to users. In the absence of the library, Edmontonians would have to access similar resources elsewhere, generally in the private market, which would come at a significant cost. Not to mention that for a variety of reasons many community members would not be able to access the same resources or services (or at least not to the same degree) if they could not access them through EPL due to a number of barriers.

But more than providing an economic benefit simply through the monetary value of the services and materials it provides to Edmonton residents, EPL creates value and impact for residents in a variety of ways that cannot necessarily be quantified in monetary terms. The library provides underserved or vulnerable communities with access to important resources and services that help improve their quality of life. Moreover, EPL acts as an anchor for community building through the provision of public spaces and programs that bring the community together both physically and through shared experiences.

While they may not be economic benefits per se, these other impacts have important implications for economic development, contributing to key liveability indicators that drive economic growth and prosperity. For example, EPL arguably contributes to building Edmonton's Human Capital--an important economic driver--and access to education—an important liveability indicator. EPL's early literacy, homework help and other programs aimed at youth contribute to improving the academic performance and high school completion rates among participants, helping to build Edmonton's Human Capital from the ground up. In addition, programs and services offered by EPL related to improving digital literacy and lifelong learning (e.g. E-learning programs, book clubs, etc.) contribute to skills building and help build higher-quality talent among Edmonton's labour force. EPL's resources and programs also provide access to knowledge and skills-building opportunities, contributing to access to education for Edmonton residents.

Infrastructure, or specifically digital infrastructure in this case (i.e. access to the internet), is also an important liveability indicator for cities and has ramifications for economic development. A connected and digitally literate population is a more informed and more productive population. EPL not only provides access to digital infrastructure by offering free public wi-fi and access to technology and equipment, but its programs and services aimed at improving digital literacy also provide the skills necessary to leverage that infrastructure.

Finally, the library contributes to an improved quality of life for Edmonton residents. Quality of Life is a key liveability indicator and economic driver and includes a number of elements. Cultural availability is part of Quality of Life and EPL contributes to that both through its programs that support cultural production by local artists and creators and also by providing residents with access to books, music, movies and other cultural products in its collections and through programs such as film screenings and art exhibitions at local branches.

Another element of the Quality of Life indicator is access to public space and the quality of the urban environment. EPL's branches (especially given the recent and ongoing building projects that include



new branches and revitalizations for existing branches) contribute significantly to the urban landscape in Edmonton. They provide both architectural interest in the city landscape and offer a truly public space for Edmontonians to use for recreation, work/study or as a gathering place.

EPL also contributes to community building in Edmonton, another key element of the Quality of Life indicator. It provides a place where citizens can become engaged with their city and their communities through volunteer opportunities or by participating in special interest programs with other like-minded community members. The library also helps welcome citizens into the community be it New Canadians or members of vulnerable communities looking for a welcoming place and a community to participate in.

The Edmonton Public Library's impact is wide ranging creating economic value to the City directly through its service offerings and indirectly by contributing to the quality of life and education of Edmonton residents.



A Appendix A: Notes on Methodology

This appendix provides some additional notes and explanations regarding the methodology employed to estimate and demonstrate EPL's economic and socio-cultural impacts.

A.1 Key Terms

Use Value: The estimated value generated (for EPL users) by the use of EPL services and materials.

Operations Impact: The total contribution EPL's operations to Edmonton's GDP. It includes the direct, indirect and induced impacts.

Direct Impact: The direct impact is the impact generated in the economy as a result of the library's direct spending related to its activities.

Indirect Impact: The indirect impact is the impact generated in the economy as a result of the increase in economic activity that occurs at businesses that supply goods and services to EPL.

Induced Impact: The induced impact represents the impact generated as a result of the re-spending of labour income earned by Edmonton households from both direct-impact employment at the library and the indirect-impact employment generated in supplier industries in the city.

Replacement Value: The replacement value represents the dollar value least expensive, closest similar alternative service or material outside of the library. It is typically measured on a per-unit basis.

Limited-use ratio: The limited use ratio is a ratio that is applied to the replacement value in order to discount that value to account for the difference in value between owning a material and borrowing (or using) it for a limited time. In most cases the limited-use ratio represents the ratio of the differential between the cost of ownership and the cost of limited use for a material.

ROI: The ROI (or Return on Investment) is the dollar value returned to Edmonton residents

A.2 Measuring Economic Impacts

This section will feature an overview of the methodologies used in the estimates of the Use Value, ROI and the Operations impact of the Edmonton Public Library.

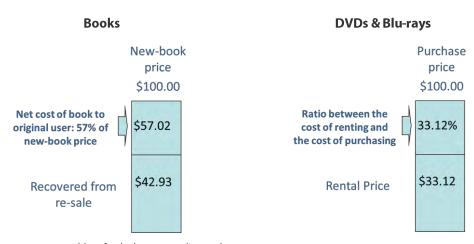
Use Value

In order to calculate the Use Value generate by EPL's various offerings for library users and the general population in Edmonton, Nordicity employed a "replacement value" methodology. The estimation of the Use Value includes the following basic steps:

- 1. An average replacement value was estimated for each type of material, program or service offered by EPL by conducting research into the average market price for a reasonable equivalent or similar service outside of the library.
 - a. In the case of most of the materials and collections, the replacement value was discounted to account for the difference between the value (for the user) of owning a product (which implies unlimited use) and borrowing a product (which implies limited use). We employed a limited-use approach. A limited-use ratio was applied to the retail price for new materials in order to calculate a discounted replacement



value for limited access to certain materials (versus unlimited access through ownership). Two sets of limited-use ratios were calculated: i) for physical books (57%), ii) for DVDs and Blu-rays (based on digital video rentals), which was applied to CDs, DVDs, Blu-rays and audiobooks (33%). The limited-use ratio for DVDs was also applied to e-audiobook and e-music temporary download borrowing. The following figures illustrate the process for estimating both limited-use ratios for physical books and CDs, DVDs, Blu-rays and audiobooks, respectively.



^{*}percentages may not add perfectly due to rounding and the use of averages.

The limited-use ratio for books was calculated using the differential between the retail price of a new book and the re-sale price for a used book. The differential represents both the retained cost and retained value of the material for the *original* owner.

The second limited-use ratio (for DVDs/Blu-rays) was calculated using the differential between the purchase and rental price of a movie or TV show on iTunes. In this case the price of the rental is the example of the limited use. However, since there were a number of materials with no rental market from which a direct replacement value could be researched, a ratio extracted from the closest example (i.e. video rental on iTunes) had to be used instead. The differential ratio between a video purchase and a video rental was applied to the retail price of those materials to arrive at an adjusted (discounted) replacement value that better represents the limited-use value.

b. For digital movies and TV, the replacement value was calculated simply by determining the average digital rental (temporary download) price based on research



- c. For single-song music streaming Nordicity determined the average cost per-song for commercial music streaming services in order to identify the replacement value. Using data regarding Spotify's usership, Nordicity was able to estimate the average number of songs streamed annually by Spotify users. Then Nordicity estimated the average persong (or per-stream) cost by dividing the cost of one year's worth of monthly subscriptions to the service by the average total annual number of streams per-user.
- d. The replacement value for movie and TV title streaming was calculated using a similar approach to the one used for single-song streaming. Using data regarding Netflix usership, Nordicity estimated how many hours of content the average Netflix subscriber watched per month. Then, assuming that user viewing habits were evenly split between television and movie content, Nordicity estimated the average number of movies and TV episodes that are streamed per month per user (based on an average movie length of 90 minutes and an average television episode length of 30 minutes). Using the monthly subscription fee, Nordicity was then able to estimate the average cost per file streamed.
- 2. The respective estimated (adjusted) replacement values were multiplied by the total usage of each material, program or service at EPL to arrive at an estimate of the Use Value.
 - a. In some cases where EPL charges a small cost-recovery fee for certain services, the Use Value was determined by calculating the differential between the total value paid by EPL users for access to those services and the total replacement value for an alternative service in Edmonton. The differential value represents the true Use Value that EPL users extracted for access to those services at the library.

Use Value: Assumptions and data limitations

- The Use Value calculation represents the value of programs, services, equipment, amenities and materials to the extent that usage and circulation data was available. However, data for some materials, programs and services was either unavailable or incomplete. As a result there may be some EPL offerings that are not captured in the Use Value calculation, which may cause the Use Value to be under-stated.
- The Use Value calculation was based on annualized data from 2012, 2013 and 2014. However, in some cases data was unavailable for certain years due to changes in EPL's reporting and data collection practices or because a particular program or service did not exist in previous years. In addition, some of EPL's services are hosted with external partners (e.g. programs) or come from external service providers (e.g. electronic collections) which limited what usage data was available. Where data for all three years was not available, 2-year or single year data was used and taken as the annualized data for those programs and services.
- Wherever possible the market price for the closest reasonable alternative to EPL's materials, programs and services was used to estimate the replacement values for EPL's offerings. Where the closest alternative did not have a reliable market price that could be applied to estimate replacement value, the closest alternative with a reliable market price was used. In addition, every effort was made to select the least expensive alternative to EPL services to ensure conservative estimates of the replacement value.



- Some of EPL's programs and services do not have any equivalent or similar alternative outside of the library. And in a few rare cases the alternatives are also accessible for free. As such, no replacement value estimate was possible for those offerings. Although they do generate value for users, there was no reliable way of quantifying that value in monetary terms and so they were not included in the Use Value calculation. As a result, the Use Value may be slightly under-estimated.
- The Use Value estimate is based on a straight replacement value estimate that assumes that all users would access alternative services elsewhere if they didn't have access to the library. In reality it is unrealistic to assume that the same usage rates would apply outside the library. If the library didn't exist many users would simply forego some of the materials, programs and services they access at EPL. However, the Use Value is meant to reflect the true value that users actually extract from using EPL's services at the rates they use them. The market prices are merely used to estimate what that real value is in monetary terms. Therefore, Nordicity is confident that the straight replacement value is a reliable and reasonable approach to calculating Use Value.

Operations Impact

In order to calculate the Operations Impact, Nordicity employed its proprietary MyEIA Model. The MyEIA Model provides estimates of the impact that an organization or program has on a provincial and regional economy in terms of employment, labour income, GDP and tax revenue. In this case, the impact modelling was based on data for EPL's operating and capital expenditures, and included estimates of the following three key components of standard economic impact analysis:

- Direct impact. The direct impact represents the impact generated by EPL directly within the libraries and archives industry (North American Industry Classification System [NAICS] 5191) and is largely comprised of the wages and salaries paid to EPL employees and any operating surplus generated by library operations.
- Indirect impact. The indirect impact represents the increase in output, employment, labour income and GDP that occurs at businesses that supply goods and services to EPL. Nordicity used its MyEIA model which is based on a regionally customized version of Statistics Canada's provincial input-output tables in order to estimate the impact that EPL's purchases of goods and services had within the Edmonton Capital Region's (ECR's) economy.
- Induced impact. The induced impact represents the increase in output, employment, labour income and GDP experienced by businesses across the ECR economy as a result of the respending of labour income earned by ECR households from both the direct-impact and indirect-impact employment. Nordicity also used its MyEIA model to estimate the induced economic activity generated in the ECR economy as a result of EPL's operations.

The estimation of the Operations Impact included the following steps:



- 1. Nordicity obtained EPL's detailed operating expenditures for 2012-2014, and detailed capital expenditures data for 2009-2014.⁶⁰
- 2. Both data sets were converted to real 2014 dollars using Statistics Canada's all items consumer price index (CPI). Both data sets were also annualized. EPL's detailed operating and capital expenditures were assigned to the expenditure categories in the data-input template in the MyEIA Model (see Table 26 below).
- 3. For the direct impact modelling, Nordicity assumed that 100% of wages and salaries were paid to ECR residents.
- 4. Nordicity obtained Alberta supply ratios from Alberta Economic Multipliers 2010⁶¹ and used these supply ratios to isolate the portion of EPL expenditures in each category which could be attributed to purchases from Alberta-based suppliers.
- 5. Nordicity obtained data from EPL indicating that the average full-time salary of EPL employees was \$62,030 in 2014. This figure was used to calculate the number of direct-impact FTEs generated by EPL Operations by dividing the annualized amount of wages and salaries paid to employees and freelance contractors by the average full-time salary.
- 6. On the basis of the combined annualized expenditures, the MyEIA Model was used to estimate the indirect and induced impacts in terms of employment, labour income and GDP.
- 7. The MyEIA Model was also used to estimate the local, provincial and federal tax revenues yielded by the economic activity generated by EPL's Operations Impact (Table 27).

⁶⁰ Since capital expenditures may experience wider year-to-year variability than operating expenditures, a larger sample of annual observations (i.e. six years) was used to derive annualized amounts.

⁶¹ Alberta Treasury Board and Finance (2014), *Alberta Economic Multipliers 2010*, accessed at http://www.finance.alberta.ca/aboutalberta/economic-multipliers/2010/Alberta-Economic-Multipliers-2010.pdf on June 23, 2015.



Table 26 - Annualized operating and capital expenditures for EPL (real \$ 2014)

MyEIA Model input expenditure category	Operating expenditures	Capital expenditures	Combined annualized expenditures
Employee wages	31,294,123		31,294,123
Freelance	252,130		252,130
Computer services	89,933		89,933
Construction	1,667	8,133,571	8,135,238
Education and training	36,858		36,858
Equipment rentals	51,951		51,951
Financial services and bank charges	38,479		38,479
Insurance	104,981		104,981
Legal and accounting	11,059		11,059
Office equipment	1,229,040	2,527,543	3,756,583
Office supplies and services	466,838		466,838
Other expenses	2,532,153		2,532,153
Other professional services	295,440		295,440
Printing and publishing (library collections)	1,751,660	7,882,424	9,634,084
Real estate services	707,125		707,125
Rent	1,709,113		1,709,113
Telecommunications services	180,445		180,445
Travel	143,530		143,530
Utilities	779,716		779,716
Total	41,676,240	18,543,539	60,219,778

Source: Nordicity tabulations based on data from EPL.

Table 27 - Fiscal impact of EPL operations, annualized, (real \$ 2014)

	Federal	Provincial	Total
Personal income taxes	6,024,376	3,012,170	9,036,546
Corporation income taxes	1,217,079	907,321	2,124,400
Consumption taxes	1,655,372	967,905	2,623,277
Local property taxes and other fees	0	1,479,986	1,479,986
Total	8,896,828	6,367,382	15,264,209

Source: Nordicity estimates based on data from EPL, Statistics Canada and Alberta Treasury Board and Finance.

Operations Impact: Assumptions and data limitations

The Operations Impact is arguably not a true incremental or "value add" impact given that funds invested in EPL would likely be re-directed to other City of Edmonton programs, services and departments should the library not exist. However, it is still an economic impact generated by EPL and its operations, justifying its inclusion in the Total Economic Impact and ROI estimates.



Return on Investment (ROI)

In order to calculate the ROI, first the total Economic Impact of EPL was calculated by summing the total Use Value and Operations impacts. The ROI was then calculated in two ways:

- 1. The total economic impact was divided by EPL's total capital and operating expenditures in order to arrive at the total ROI for every dollar invested in EPL's operations.
- 2. The total economic impact was divided by the most recent estimate of Edmonton's population in order to arrive at the total per-capita ROI of the Edmonton Public Library.

A.3 Measuring Socio-cultural Impacts

The Socio-Economic Impacts are estimated and presented in both quantitative (non-monetary) and qualitative terms, using two main impact indicators:

- 1. **Reach** is demonstrated by the number of programs and services or hours of service available for access by Edmontonians and the usage or participation rates for those same services.
- 2. Outcomes are demonstrated primarily through the use of secondary research to the extent that it was available regarding similar programs or services offered by other organizations in Canada and internationally that have conducted longitudinal impact measurement studies. The secondary research is used to provide supporting evidence of real outcomes and impacts associated with the types of programs and services offered by EPL. Outcomes are also illustrated through the use of Vignettes highlighting success stories from among EPL's programs and users.

Socio-Cultural Impacts: Assumptions and data limitations

- Data regarding programming hours and program participation can sometimes be inconsistent or incomplete from branch to branch, therefore attendance and participation figures for EPL programs may be slightly under-stated in some cases.
- Data related to reach for some of EPL's programs and services was either unavailable or limited and therefore those specific programs and services could not be included in the impact estimate. As a result, the reach of some of EPL's service areas may be understated.



B Appendix B: Use Value Data Sources

The following table presents the sources consulted to identify the market prices for the closest equivalent or similar alternative to EPL materials, programs and services.

Use Value Component		Market Price Data Source	
Jse	Books & Comics	Indigo.ca	
Physical Collections Use	Periodicals (per-issue)	Data sourced directly from the publications using a random sample of 75 magazine titles (25 for each age category) and 25 newspaper titles.	
	Audiobooks	Indigo.ca	
	Music Scores	Long & McQuade (long-mcquade.com)	
	CDs/DVDs/Video Games	Indigo.ca; EBGames.ca	
	eBooks	Indigo.ca	
e-Collections Use	e-Periodicals – Newspapers (perissue)	PressReader.com	
	e-Periodicals – Magazines (per- issue)	Zinio	
ctio	eAudiobooks	iTunes	
Collec	eMovies (Streaming) (per-stream estimate)	Netflix	
ģ	eMovies (Downloads)	iTunes	
	eMusic (Streaming) (per-stream estimate)	Spotify	
	eMusic (Downloads)	iTunes	
	Career Assistance	Compass Counselling	
	Children's	YMCA Children's Programs	
	Children's - Digital skills building	Sylvan Learning Kids Coding	
	Digital Skills Building	University of Alberta Continuting Education	
	Early Literacy	Mommy Connections Mom & Baby Class	
e G	Education and Training	University of Alberta Continuting Education	
Usaç	Family Day	Family Day at the Edmonton Valley Zoo	
E C	Recreation/Special Interest	Royal Alberta Museum	
Program Usage	Spring Break	Telus World of Science Day Camp	
r.q	Tech one-on-one	Apple Genius Bar	
	E-learning	Eduboard Sylvan Learning (Online service) MyTutor.ca Ed2Go.com via McEwan University Mango Solaro.ca Treehouse (consumer)	



Use V	alue Component Market Price Data Source		
Referenc e Services	Reference Services	Brainmass.com Belleville (ON) Public Library fee-based reference service	
	Work Study	Geeks on Whyte Internet Café	
Technology Access	Wifi	Starbucks, Tim Horton's, Second Cup; Boingo, XXX	
	3D Printer	Yakimoski 3D Printing	
	Recording Studios	Turnkey Studios	
	Espresso Book Machine	College Copy Shop	
Use of Space	Room Bookings	City of Edmonton Arenas; Radisson Conference Centres	
	Work Stations	Homestead Coworking Space	