Economic and Community Impact of the Somerset County Library



Executive Summary

The Somerset County Library provides significant economic and community benefits for the county. In FY17, Somerset County Library provided \$3.7 million in benefits while requiring an investment of approximately \$827,000, a return on investment of 349%. This means that for every dollar invested in operating the library systems the county realizes a value of \$4.49.

A two-pronged approached was utilized to estimate the total impact of the library system. First, a traditional economic impact assessment was conducted for the operations of the library. Second, a market valuation was used to estimate the value of the various materials and services the library provides to patrons.

The economic impact assessment was conducted using IMPLAN and examined the economic activity generated by the library purely as a business and organizational entity. The total operating budget was approximately \$827,000 and 15.3 FTE employees in FY17. The economic activity generated by the spending of the library was nearly \$893,000 with a total of 18 jobs supported in the local economy. In addition to the annual impact of the library operations, there is also an impact from the capital expenditures that occur on an irregular basis. Given the sporadic nature of the capital spending, an average over the past seven years was examined rather than a snapshot of spending from a single year. The annual average capital expenditures of \$926,681 over the past seven years has led to nearly \$1.1 million in economic activity and supported 9 jobs in the county each year, on average. In total, the estimated annual impact of operating the Somerset County Library is \$2.0 million and supports approximately 27 jobs in the local economy.

The second component of the analysis included estimating the market value of the core goods and services provided by the library to patrons. If the library ceased to exist individuals would have to obtain the materials and services elsewhere in the marketplace, which would cost money. The fact that the library provides these materials and services for free to patrons means that the money is now available to be spent elsewhere or saved. The total estimated market value of the collection materials and services of the library is over \$1.7 million. It is important to note that this is a conservative estimate both due to the valuation methods utilized and due to the fact that this does not represent a comprehensive assessment of all materials and services, but rather core materials and services. This conservative approach provides greater certainty that the estimated value is at least as reported although, it may actually be significantly higher.

There is a multitude of other benefits provided by the library that are difficult, if not impossible, to quantify. However, these benefits are equally important to consider in assessing the overall value of the public library systems. The community impacts of public libraries can be grouped into four main categories: workforce development, business development, literacy, and community culture. Many of the workforce and business development benefits associated with the library are difficult to track as individuals and businesses use the knowledge and skills gained from the library to continue to grow their careers and business success in future years. Literacy and cultural benefits of the library manifest themselves in a number of areas including the quality of life of the impacted citizens and local community health.

Introduction

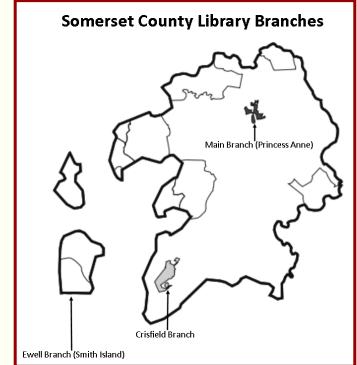
Public libraries are not simply local facilities through which residents, regardless of socio-economic and educational background, can access a multitude of books, periodicals, multi-media materials and digital information. They are also important contributors to the economic, workforce, and social well-being of their respective communities. Public libraries serve as a community meeting space, contribute to child and adult literacy, provide lifelong learning opportunities, and equip business and individuals with services and information necessary for workforce development and economic stability and growth. The benefits provided by the libraries expand beyond the direct services of the library to include far reaching societal and economic benefits that permeate the entire community.

This study examines the economic and community benefits of the Somerset County Library on the county. The analysis is broken into three components. The first is a traditional economic impact assessment of the operation of the library. The second is a market valuation approach that places an economic value on the services and materials provided by the library. Taken together, the findings from both components are used to estimate the return on investment in the region. Lastly, a qualitative discussion is included regarding some of the additional benefits of the library that are difficult to quantify.

The Somerset County Library is a community library that serves the residents of Somerset County, MD. The Library system has a total of three branches in Crisfield, Ewell, and Princess Anne. The Library offers resources for local employment, continuing education, small businesses, and resume/interview assistance. Additionally there are a variety of programs that promote cultural appreciation, reading readiness, and education.

The Somerset County Library includes 3 public branches that serve a total population of nearly 26,000 citizens in approximately 8,000 households. Just under 40% of the population, approximately 10,000 individuals, are cardholders of the library. In FY17, there were nearly 109,000 visits to the libraries.

Approximately 25.1% (4,826) of Somerset County's residents live in poverty. Of the nearly 4,200 children



under the age of 18 in the county, 39.1% (1,629) live below the poverty line while 10.7% (396) of the approximately 3,700 residents aged 65 and older live in poverty.¹

Data

Detailed collections, budget, and employment data was collected from each library system for FY17. Additional data was gathered from various public sources as noted throughout the report.

¹ U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

I. Economic Impact of Library Operations

The first component in measuring the economic value of the library is an economic impact assessment of the operation of the library. This assessment examines the impact of the money spent within the county as a result of the operations of the library. The impact of the library's direct spending to vendors and employees (in the form of salaries) "trickles down" through the local economy and generates indirect and induced impacts. The indirect impacts include the increased spending by library vendors as a result of the transactions from the library. The induced impacts include the spending of library and vendor employees' salaries. A portion of these transactions will leak outside of the county when vendors are located in other geographies or employees live outside the county. The results of the analysis reported here include an estimate of only the impact that remains within the county.

IMPLAN was the software modeling program utilized for the economic impact portion of this study. IMPLAN multipliers, social accounting matrices, and trade flows used in this study related to public libraries and are unique to Somerset County. The expenditure and personnel data from FY17, provided by each of the library systems in the study area, served as the inputs to IMPLAN. All results are reported in 2018 dollars unless otherwise noted.

Operating Expenditures

The direct operational spending of the library totaled over \$827,000 with a total of 15.3 FTE employed by the library in FY17. The portion of the direct spending that remains in the county (does not leak outside the area) multiplies through many other industries. The library expenditures in FY17 led to approximately \$893,000 in total economic activity in the county and 18 jobs supported in the local economy. The economic impact from operations is an annual impact to the region.

Table 1. Economic Impact from Operations						
Impact Type	Employment	Labor Income	Value Added	Output		
Direct Impact	16	\$669,030	\$747,351	\$680,814		
Indirect Impact	0	\$587	\$1,110	\$2,170		
Induced Impact	2	\$48,232	\$115,758	\$209,833		
Total Impact	18	\$717,848	\$864,219	\$892,816		

Capital Expenditures

Given the sporadic nature of capital expenditures, a seven year annual average of capital expenditures was utilized rather than a single year of expenditures. The economic impact of capital expenditures occurs during the time period of the capital project rather than throughout the year. On average, over the past seven years the library spent slightly less than \$1 million per year on capital projects. These outlays may include new buildings, additions, renovations, or the acquisition of furniture, equipment, vehicles or the like. The annual average of total economic activity generated in the county from the capital expenditures is \$1.1 million. This spending also supports an additional 9 jobs in the local economy.

Table 2. Economic Impact from Capital Expenditures						
Impact Type	Employment	Labor Income	Value Added	Output		
Direct Impact	7	\$150,442	\$205,538	\$914,719		
Indirect Impact	1	\$48,829	\$88,759	\$157,496		
Induced Impact	0	\$15,198	\$36,618	\$66,329		
Total Impact	9²	\$214,469	\$330,915	\$1,138,544		

II. Market Value of Core Library Materials and Services

The economic impact estimated in the preceding section does not account for the value of the materials accessed and services provided by the library to its patrons and the community. This section of the report estimates the value of the various materials and services provided by the library. If the library ceased to exist individuals would have to obtain the materials and services elsewhere in the marketplace, which would cost money. The fact that the library provides these materials and services for free to patrons means that the money is now available to be spent elsewhere or saved. The total estimated market value of the collection materials and services of the library is approximately \$1.7 million. It is important to note that this is a conservative estimate and is

not a comprehensive valuation of all of the materials and services of the library. The sum of the estimated market value of the materials and services outlined below is a significant but not complete estimate of the market value of all that the library provides to their patrons, rather it represents the value of the core offerings of the library.

Total Estimated Value of Library Materials and Services

\$1.7 Million

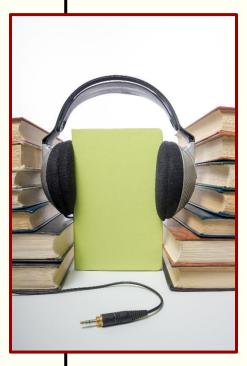
² May not sum due to rounding.

Collection Materials

To estimate the value of circulation materials provided by the library, several categories of materials are considered separately then aggregated. Circulation materials are divided into books, video and audio items, Ebooks and downloadable books, and periodicals.

Printed Books

Patrons of the Somerset County Library checked out nearly 127,000 books in FY17. It is assumed that if the libraries did not exist, patrons would purchase these books from other sources. Some patrons would likely purchase new books while others would purchase used books at a discounted price. To remain conservative in estimating the value of the books checked out by patrons, it is assumed that they would most likely purchase used books rather than new without the presence of the library. The value assigned to used books is \$7.50, which reflects an average sales price of \$15.00 for a new paperback book (notably less expensive than the average hardcover book) less a 50% discount, which reflects the approximate resale value of the used book. Using this valuation method, the value of the books being checked out by library patrons in the last year totals just over \$950,000.



Audiobooks

In FY17, library patrons checked out approximately 2,300 books on CD and downloaded nearly audiobook files 7,400 times. If library patrons had to rely on other sources to obtain audiobooks, they have several options: purchasing books on tape or CD, purchasing the audio file for download, or purchasing a subscription to an audiobook service. Based on current data, audiobooks range in price from less than \$10 to more than \$40 with the average appearing to be around \$30 (whether in physical form or downloadable file format). An audiobook subscription service is generally priced at \$15 per month. In estimating the value of the audiobook circulation, the price of \$15 per book is used. This value reflects the retail price of the average audiobook discounted by 50%, assuming the book has a resale value, and taking into consideration the ability to buy used rather than new books, or the corresponding monthly cost of the subscription service. The discounted cost is multiplied by the number of downloads and check outs to estimate the total market value of the audiobook use at the library which totaled over \$167,700 in FY17.

EBooks and Downloadable Books

EBooks and downloadable books are purchased for immediate transfer from the vendor to the purchaser's computer or reading device. In FY17 the library had a total of approximately 72,000 Ebooks in circulation,³ which were downloaded a total of over 14,600 times. EBook files are restricted in such a way to prevent reselling of the material. Therefore, the full purchase price is used in estimating the value of the EBook circulation. The average purchase price of the types of Ebooks

³ Including eAudiobooks

held in circulation at the library is estimated to be \$12.50. The estimated value that library patrons receive from the Ebooks provided by the library was over \$182,600 in FY17.

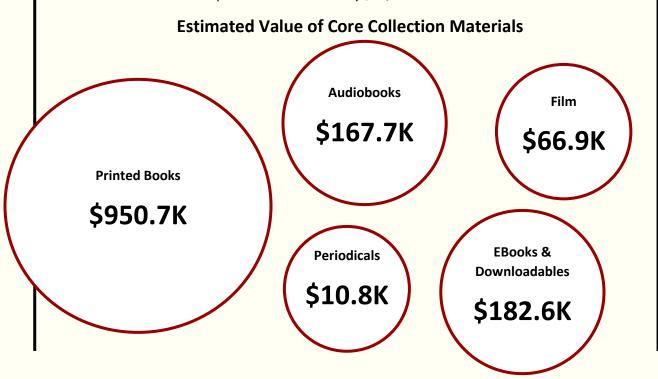
Film Circulation

A well-established market exists for the rental of film including the rental of DVDs and the streaming of electronic content. Two of the most popular DVD rentals services include Redbox and Netflix. Prices vary among DVD rental services with Redbox charging \$1.86 (including sales tax) for most DVDs. Redbox rentals take place at kiosks located at many community drug stores, gas stations, and similar locations. Netflix charges a monthly rate based on the number of discs received per month and delivers discs via mail. For standard DVDs, prices start at \$4.99 per month for up to two discs per month and go up to \$11.99 per month for unlimited disc rentals, with up to 2 discs checked out at a time.

Streaming services, such as Amazon, Netflix, and Google Play, can lower the per unit price of film rentals (with monthly subscriptions starting around \$7.99), but it can often be difficult to stream content in more rural areas due to a lack of reliable, high quality, constant internet connection. Therefore, physical disc rentals are assumed to be the viable alternative in the study area and the conservative per unit rental price of \$1.86 is utilized. Library patrons checked out DVDs nearly 34,900 times and downloaded another 1,107 movies in FY17 with a total value of over \$66,900.

Periodicals

In total, the library has over 1,600 periodicals in circulation. Library staff estimates approximately 2,154 in-house uses of these periodical materials throughout the year. The value of periodicals ranges significantly. For purposes of this study, a conservative estimate of \$5.00 per use, the estimate value a patron would be willing to pay to access the individual issue of interest, places the total estimated value of the periodicals use at nearly \$10,800.



Services

In addition to the physical materials the library also offers a wide variety of services that provide economic value to patrons. These services include reference questions answered by professional librarians, access to a wide variety of programing that ranges from children's story time to outreach programs supporting job seekers, access to computer terminals and the internet, and space to conduct meetings. The following provides an estimate of the value of the services that are quantifiable.

Reference Services

The value of reference services is estimated using the average hourly wage of librarians multiplied by the estimated length of time spent per transaction services. The average hourly wage was calculated using wage and personnel data provided by the library. A conservative estimate of 6 minutes per reference question was assumed. In the county, over 13,700 reference questions were handled by librarians in FY17 with an estimated value of nearly \$39,700.

Programs

The library hosts a wide variety of programs throughout the year. In FY17, a total of over 500 programs were offered. These included programs that encourage and assist reading, programs that promote child reading development skills, programs for non-native English speaking patrons, programs that support businesses and job seekers, and programs to encourage cultural diversity among many others. To estimate the total value of the programs a nominal fee of \$5 per child attendee and \$7 per teen or adult attendee was multiplied by the total attendance. A total of 282 children's programs, 94 young adult programs, and 120 adult programs were attended by over 7,100



children, approximately 165 young adults, and over 1,300 adults. The total estimated value of these programs is estimated to be approximately \$46,400.

Computer Terminals and Internet Access

The Somerset County Library has a total of 26 computer terminals available for public access. In addition to using library computers to access the electronic resources discussed above, patrons also use the computers to access the internet and for other common functions such as word processing. A total of approximately 17,600 computer hours were logged by library patrons in FY17. If library patrons did not have free access to computers through the library, it is reasonable to assume that they would have to pay as a computer use for the portion of their computer time that is deemed a necessary or important function such as resume preparation, bill payment, etc. Given the difficulty of estimating the portion of computer hours that patrons would be willing to pay elsewhere for these functions, an estimate of 50% of total computer hours is utilized based on the limited availability of



internet access elsewhere in the county. Hourly rates for computer use at local retail locations (such as Staples and FedEx Kinko's) ranges from \$18.00 to \$24.00. Using the lower rate of \$18.00 and the portion of computer use that patrons may be willing to pay for if the library did not have free computer access, the total estimated value of the computer access is over \$158,300.⁴

Patrons may also choose to utilize the library's free access to wireless internet whether on a personal computer or mobile device. In the last year, approximately 33,700 wi-fi sessions were registered on the library's network. To estimate the value of wireless internet usage, it is assumed that an average session lasts approximately .5 hours and a value of \$0.25 per half hour is utilized. This individual session value represents the pro-rated cost of wireless internet access from major providers in the area if patrons had to purchase wireless internet themselves for at-home use (it assumes a monthly cost of \$50 and approximately 100 hours of use during the month or 3 hours per day). The total value of wireless internet access is valued at over \$8,400. Taken together, the total estimated value of computer and internet access at the library is \$166,700.

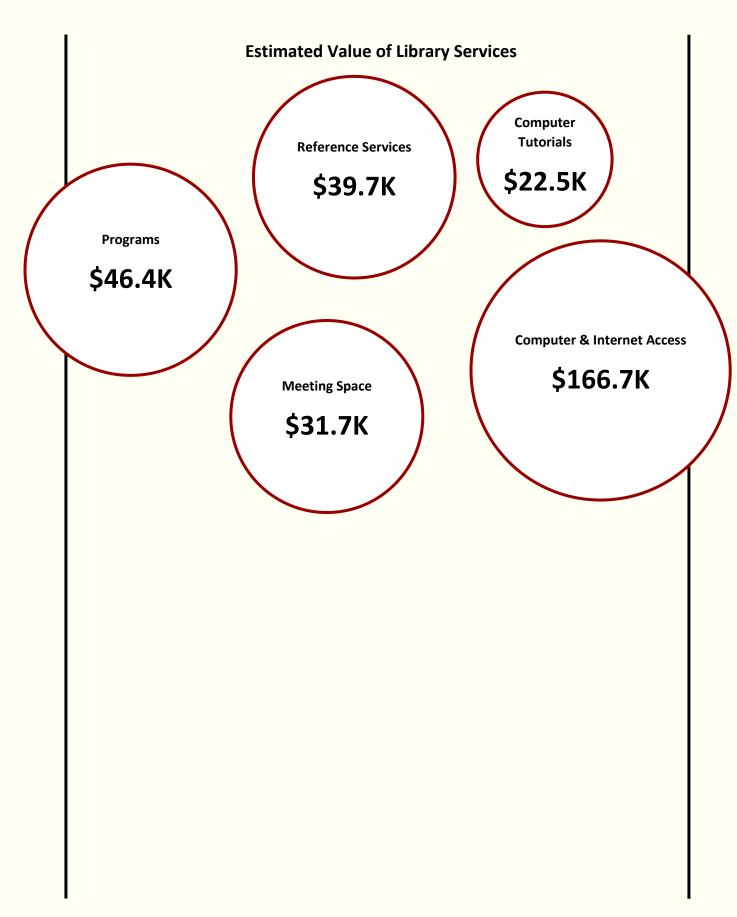
Computer Tutorials

The library offers a variety of computer tutorials. Services could range from help with a personal device, assistance filling out online applications, and tutorials on basic computers skills or computer software. While the length of each session varies an average length of 45 minutes was estimated based on staff experiences with such services. Prices for similar services in the private sector range anywhere from \$20 to \$200 or more and can be obtained from free-lance professionals or established technology stores. The average price in the region is approximately \$75 per hour which equates to a value of \$56.25 for a 45 minutes session at the library. With 400 tutorials provided by staff in FY17, the total value of this service is \$22,500.

Use of Meeting Space

The library makes meeting space available for free to use by community organizations and businesses. In FY17, 317 meetings occurred within the library's 2 public meeting rooms. A national study of meeting room and shared office spaces (CloudVO, 2015) examined hourly costs of meeting space based on size. Prices ranged from \$43 for small meeting rooms that accommodate less than 5 people spaces, up to \$90 for large meeting spaces that accommodate over 20 people. Based on this study, an hourly rate of \$50 was assigned as a conservative estimate of the value of the use of the library meeting space. Assuming an average meeting time of 2 hours, the use of the libraries' meeting space is valued at nearly \$31,700.

⁴ Assumes a computer session equals one hour.



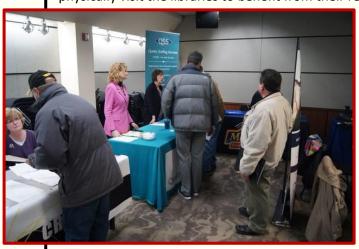
III. Community Impact of Public Libraries

Libraries offer many benefits to the local community that are easily quantifiable through data and statistics. There are many other benefits of public libraries that are difficult to quantify but still add significant value to the community. These benefits are equally important to consider in assessing the overall value of the public library system. The community impacts of public libraries are categorized below in the following four sections: workforce development, business development, literacy, and community culture.

Workforce Development

Public libraries provide a wide variety of workforce development assistance. There are a number of government sponsored agencies strictly devoted to workforce and employment assistance, but the number of public libraries outnumbers these entities making a public library an alternative resource to access. Government agencies may not be conveniently located and receiving job assistance can be intimidating, which may deter citizens from taking the step to utilize the resources provided. A local library offers a comfortable resource to help individuals find employment opportunities. In addition, a local librarian will have a deep understanding of the surrounding community and be able to provide specialized assistance to those in need, which makes a public library a valuable resource for workforce development (Gutsche, 2011). In FY17, Somerset County libraries offered a handful of outreach programs in support of business and job seekers.

In addition, libraries offer opportunities for remote access, which allows for those who cannot physically visit the libraries to benefit from their resources. Librarians understand the need for



innovation and modern communication within the library system and its external users. In order for them to execute this communication, public libraries connect with their users via internet services, e-mail references, digital services, and online libraries. These mediums allow library users to benefit through accessibility to online resources (Mon, 2007). In FY17, Somerset County libraries had almost 30,000 virtual visits which includes web sessions, app sessions and catalog sessions.

Business Development

Libraries can inspire innovation for entrepreneurs and serve as an incubator for ideas as they provide a space for social innovation which includes ideas for new products, services and models. They provide the community stakeholders with the opportunity and resources to come together and address the needs of the community by jointly working together to find economically and socially relevant solutions. These community built relationships and collaborations can bloom into entrepreneurial projects in the community which have both economic and employment impacts (De Moor, 2013).

In addition, libraries can also provide additional resources for people to start and/or grow their businesses. Libraries have access to statistical data, records, software, programs and other resources that an individual would have limited access to otherwise. It also provides the help of the librarians who can assist in utilizing the information efficiently. Business owners can use libraries and their resources for countless opportunities including, but not limited to, networking, marketing, increasing financial literacy, and learning about the local demographics for finding



a proper target market (Gutsche, 2011). In FY17, Somerset County libraries had over 1,600 reference books in circulation for career development, financial management and health and wellness.

Literacy

Another intangible benefit of a public library system is the increase in literacy for all patrons. The library promotes a peaceful and comfortable space where anyone can come to improve their literacy skills without restriction or overbearing circumstances. Librarians play a significant role in the process of improving community health and literacy of its visitors, but they often times go undervalued or unnoticed. Many librarians make this possible through research that is aimed to improve library service, better customer service, and greater literacy. Regarding librarian research, Farmer stated "The research process also constitutes authentic professional development as the librarian research self-identifies reading and literacy issues, and searches for best practice and underlying concepts and theories to ground understanding and appropriate action" (Farmer, 2017). In FY17, Somerset County libraries offered around 40 programs that encouraged and assisted reading and over 50 programs that were directed towards promoting child reading development skills.

Due to continuous immigration waves and demographic changes, public libraries have adapted by offering services and programs to English Language Learners (ELLs) and students in English as a Second Language (ESL). Most libraries believe "libraries should reflect the diversity of community demographic ethnic groups" by offering access to educational materials (ie: books, computers, and exam preparation), classes for ELLs to learn English, cultural and recreational presentations



demonstrated by bilingual staff, and a space for speakers of a common language to learn and communicate together (Stephens, p.43, 2007). In order for them to provide such classes, public libraries must have the physical capacity (ie: classrooms and study rooms) to seat these linguistic minorities. Improved literacy is strongly tied to an individual's quality of life and employment and financial success. In FY17, Somerset County libraries offered at least 10 programs for non-native English speaking patrons.

Community Culture

One of the intangible benefits of libraries is that they offer a place to preserve the history of the local community by archiving artifacts and monographs as well as recording oral histories. Keeping record of the community's heritage connects society to our legacies that make us who we are culturally, educationally, and economically. Learning from our past allows us to have a closer sense of belonging within the community while also providing a better ideas of how to approach upcoming challenges. Past failures and successes can act as a guide to influence decisions of present and future community members and impact the accomplishments of the public (Berry, 2012).

Libraries serve as a center for the arts by providing access to nonmainstream points of view and increasing community awareness for local artists. Many authors and artists target public libraries as a place to promote any new works they have made available, which include, but not limited to, concerts, book signing, and gallery displays. Libraries not only promote art awareness, but they encourage participation in art programs and activities. The library allows access to the arts that is free and open to the public. With the increasingly high cost of universities and private institutions, libraries act as a secondary education institute to explore art opportunities regardless of economic status



(Edwards, 2013). In FY17, Somerset County libraries offered 60 recreational programs that supported the arts.

Libraries can also act as the catalyst for which local social problems can be addressed. Librarians have the unique opportunity of interacting with the community daily and can observe trends and problems within the area. If an issue arises they can bring it to the attention of local officials while also being a resource to the rest of the community, thus serving as the communicator between the local government and its citizens (Edwards, 2013).

Furthermore, libraries can teach teens important life skills and provide a safe and educational environment where they can thrive academically. A library offers a public space for teens to improve their confidence in reading, writing, and research skills as well as their digital and traditional literacy. It also provides a physical space where teens can safely meet and converse about common interests. According to the Young Adult Library Services Association, over 14 million middle school and high school kids are on their own after school, thus the public libraries provide a safe environment for these students to go and interact with their peers. In FY17, Somerset County libraries had roughly 16,000 children's books in circulation and offered almost 300 programs specifically geared towards children. In addition, they offered almost 100 programs for teens and had a number of public access computers dedicated to both children and teens.

Public libraries are a hub for the community, and they are often viewed as mainstays in the neighborhood. They provide an informal meeting place that promotes furthering education, relationship building, and a friendly environment. Many libraries provide and support programs that focus on a variety of populations with specific needs, such as senior citizens, veterans, and immigrants. Libraries also act as an advocate for community awareness about the impact of

homelessness. Often times, assisting them with job applications and resumes, food and housing referrals, legal aid, and entertainment programs. They also use partnerships with other institutions to connect patrons in need with the services and help they need (Cabello, 2017). In Fy17, Somerset County libraries offered over 500 programs in total, including events specifically for senior citizens, events promoting lifelong learning and personal growth and events encouraging cultural diversity.

Conclusion

The non-quantifiable effects of public libraries in a community are impressive because they not only help the local economy by assisting the workforce and local businesses, but they also help to better the public by assisting in increasing literacy rates and preserving the local history. The indirect impacts of the local support, collaboration, and resources on the overall well-being of individuals lead to additional downstream employment and economic impacts that, although difficult to track, are notable in considering the impact of public library systems within their communities.

