



Vision: The Knowledge Exchange

Carroll County Public Library 2030



“Libraries are not the consequence
of progress and prosperity, they are
the cause of progress and prosperity”

Andrew Carnegie, 1889

Executive Summary

Background

In the age of technology, it is very difficult to predict what life will look like in 18 years. In 1994, PCs and laptops were not ubiquitous. Most people did not have access to the internet, or to a graphic user interface. We did not have smart phones. In 1996, Bill Gates, who had been a page in his school library, envisioned libraries as the place where people could learn to use computers and access the web. He began a pilot program in 9 libraries which proved to be a great success. In subsequent years, the Gates Foundation has given millions in grants to fund hardware, software and network infrastructure for libraries. Since 1996, the use of computers and access to the Internet in libraries has skyrocketed. Today, the library is playing a public utility role for millions of people who don't have computers, software, or broadband access at home. In addition, millions with handheld devices come to the libraries to access Wi-Fi.

In 1947, Bell Laboratories invented the transistor and won a Nobel Prize. Since then Bell Labs has received 30,000 patents. Last year alone, they received 2,600 patents, the equivalent of seven per day. Over the next 18 years, rapid developments in technology will continue, putting more emphasis on the need for constant learning. People are increasingly coming into the library asking for information about and guidance on how to use new technology. In the past year, seeing the interest in e-readers, CCPL put tech bars in all branches and customers flocked in to learn how to use the new devices and compare features. Libraries play an important role in providing space for people to learn about new technology, but effectiveness requires that we constantly update hardware, software and infrastructure and staff training to keep pace with invention.

Carroll County population grew 10.8% over the past decade. Assuming that same rate of growth over the next two decades, population will increase 21.6%, from 167,134 to 205,235. However, Carroll's proximity to national cyber security centers, including Ft. Meade, TSA, and NSA, could result in a much higher population increase. Population projections show that growth will be spread throughout Carroll County.

Assumptions

In 1965, 10% of Americans had a college education. Today 25% have college degrees. In Carroll County, 35% of residents have a bachelor's degree or higher (including 14% with post graduate degrees). Workforce demands over the next 18 years will require that many more people have advanced training in science, technology, engineering and math. At the same time, online educational opportunities such as those offered by the Khan Academy, <http://www.khanacademy.org> will revolutionize the way we teach and learn. There is a growing need for educational space beyond that offered by formal K-12 and post secondary institutions. CCPL meeting rooms are regularly booked by tutors and homeschool groups. We need to provide more space for individual and group learning, and to improve the technology in these spaces, so that individuals and study groups can participate in high quality online educational opportunities outside the classroom.

Executive Summary

Another important role CCPL is playing now and will continue to play in the future, is preparing children, ages birth to five, to succeed in school. CCPL's partnership with Carroll County Public Schools and the Local Management Board is making great strides in preparing children and helping parents and caregivers to prepare children for school. In fact, Carroll County is leading the State in kindergarten readiness. Carroll County's Early Learning Initiative is a model for the nation in helping children succeed in school.

Throughout the coming decades, we anticipate that the library's role as community and technology commons will increase. The library is an important community place for exhibits and associated learning activities. Currently CCPL staff provide more than 6,600 learning activities per year that 126,000 people attend. The demand for library meeting room space continues to increase. In FY11, library meeting rooms were used 6,764 times, an 18% increase over FY09. Individuals come to the library to learn how to use computers and software. Last year branch staff gave 18,363 one-on-one computer instruction sessions. Libraries are providing workforce support, small business support, printing, copying, and faxing service.

CCPL actively engages in community partnerships. We are part of the important continuum of education within the community and have created effective partnerships with day care providers, Carroll County Public Schools, Carroll Community College and McDaniel College to provide educational resources and activities that engage students in learning beyond the classroom. We have a strong partnership with the Carroll County Arts Council and the Maryland Humanities Council. Together we are offering learning opportunities that enhance the fabric of our community. For many years, CCPL has maintained the Community Information Database, providing information on more than 1,295 agencies and promoting community activities and events on our community web page.

Libraries are important community centers during and after emergencies. For example, following Hurricane Irene, when many homes were without power, the library became a center not only for accessing the internet, but also a place to plug in and power up cell phones and laptops. In recognition of the role libraries have played in disaster relief statewide and nationally, the library has been formally recognized by FEMA, and recently both the Maryland House and Senate passed bills designating Maryland public libraries as essential services in times of emergencies.

In the following pages, we have identified specific activities and costs associated with those activities that would allow us to continue to play a vital role in meeting the educational needs and aspirations of Carroll County residents.



Overview of Services

The Knowledge Exchange

Carroll County Public Library is the community's Knowledge Exchange.

To further develop in this role, CCPL is focusing its work in three key areas:

- **Education and Lifelong Learning**
- **Knowledge Broker**
- **Community and Technology Commons**

Education & Lifelong Learning

- Create young readers and promote early literacy. Young children (age five and under) will continue to have programs and services designed to ensure that they will enter school ready to read, write, listen and learn.
- Increase awareness of and provide timely access to the resources and opportunities that children need to become effective learners.



- Satisfy curiosity by ensuring that Carroll County residents have the resources they need, in the formats they desire, to explore topics of personal interest and continue to learn throughout their lives.
- Share library resources and services with independent learners of all ages that connect them to ideas and learning communities and provide opportunities to develop skills for personal and professional growth.
- Foster lifelong learning, thereby supporting an informed electorate, the basis of a healthy democracy.

Knowledge Broker

- Stimulate imagination and ensure that customers of all ages have access to materials and programs that stimulate their imaginations.
- Provide pleasurable reading, viewing and listening experiences, offer materials advisory recommendations and coordinate discussion groups to facilitate dialogue and build community.
- Help navigate the vast quantities of information, now available in a multitude of formats, by guiding Carroll residents to the information that is most meaningful to their individual needs.
- Foster an environment where community ideas are nurtured and allowed to incubate.

Community & Technology Commons

- Provide Carroll County residents with robust, high-speed access to the ever-growing resources and services available through the Internet.
- Make residents aware of the availability of and access to current and emerging technologies and to the assistance they need to use them effectively and confidently in their daily lives.
- Maintain an engaging and interactive online presence where Carroll County residents will have access to timely and relevant information about CCPL's collections and services.
- Provide easy access to information about the programs, services and activities provided by community agencies and organizations.
- Serve as the community connector helping Carroll residents more easily connect to their county government and its vast array of services.
- Become the civic commons where Carroll residents can engage in civilized discourse in a politically neutral space.
- Offer a greater opportunity to learn about the community and make community connections through library resources and events.



Information Technology

Current State of Information Technology at CCPL

To provide an idea of what CCPL's Information Technology may look like in 2030, we need to understand where we are now and how we got here.

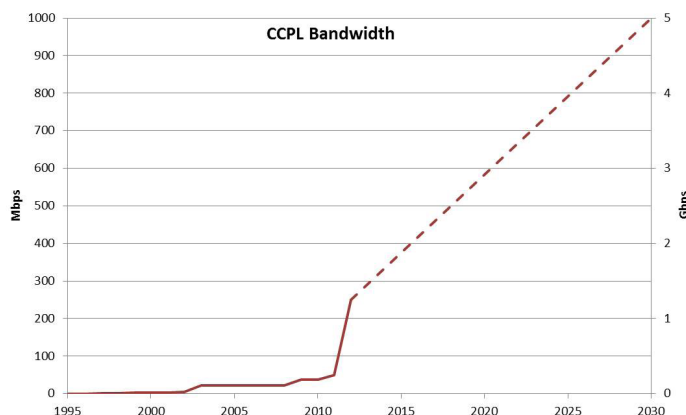
CCPL continues to be at the forefront of technology as it relates to libraries and the citizens it serves. Through the capital funds we have received from the county, we have provided our customers with up-to-date computer equipment and access to the Internet at speeds never thought of when we first started offering this service in 1995.

Computer usage in CCPL branches has climbed dramatically since we began offering Internet access. Our branch PCs serve over 240,000 people per year. We also provide Wi-Fi service that allows our customers to bring in their own laptop, tablet or smartphone and connect to the Internet. We currently serve more than 1,000 Wi-Fi customers per week at our six locations. These numbers indicate that for many of Carroll County's citizens the library is the only place to receive free high-speed internet access. The library is also the only place where customers can receive free one-on-one technology training on the use of these services with the latest equipment and software.

CCPL continues to make a substantial investment in information technology resources. This investment includes annual recurring expenses such as data connections, phone lines, and maintenance of the circulation and catalog system. CCPL continues to refresh its computer equipment on a four-year cycle due to heavy customer and staff use. Desktop computers, laptops, servers, network switches, printers, copiers, and all peripherals such as printers and scanners are included in the replacement cycle.

The fastest growing area of our information technology budget is software. As we continue to rely more on software and virtual services, the cost to maintain adequate licenses and support is growing. We currently spend \$196,404 per year on software and maintenance, and expect this to trend higher as we rely more heavily on software to support library functions and meet the needs of our customers.

To adequately handle all of the Internet traffic generated by our customers and our staff who are answering questions, circulating items, and providing computer training, our Internet bandwidth requirements have sharply increased over the past few years. As seen in the graph below, our Internet bandwidth requirements have increased by a staggering 99,900% since we began offering Internet service in 1995. This is an incredible growth rate and is due to the interactive nature of the Internet. For instance, we all know that YouTube is a major source of online entertainment. However, a recent study at Penn State University has shown that teens now use YouTube as an information resource more than any other single web site. YouTube University has played a major role in this increase by providing access to educational videos for young children, PhD candidates, and lifelong learners in all educational disciplines.



The State of Information Technology at CCPL in 2030

To meet the future trends of the other areas discussed in this document, the funding necessary to meet the information technology needs of these services will increase, but not at the pace of the past 15 years.

While it is difficult to know what the Internet will look like in 2030, we can confidently state that its use will continue to grow and we will need to continually increase our bandwidth to keep pace with this growth. We expect to use considerably more bandwidth in 2030 than we do presently as indicated in the graph. 5Gbps (gigabit per second) is a huge amount of data, but as more and more of our everyday activities (learning, entertainment, and communication) move to the Internet in formats that are interactive and transmitted in high-definition formats, this may still not be enough. At 5Gbps you could transfer an entire CD worth of data (625MB) in one second.

CCPL is forecasting that we will be adding three “micro-branches” and utilizing the space in the Westminster basement by 2030. This will increase our Internet bandwidth requirements and the need for more technology. The new locations (Silver Run, New Windsor and Union Bridge) will cost approximately \$100,000 each to provide adequate computer, phone, and meeting room equipment. Technology for the Westminster “Creative Commons” will cost approximately \$100,000 to outfit with the equipment and services necessary to provide the citizens of Carroll County with a state-of-the-art open area to meet, learn, experiment, and be entertained. We are already seeing a shift in library spaces toward more open and free-flowing spaces that provide customers with informal meeting areas. The technology installed at these locations must be flexible enough to facilitate free and easy access to the Internet, online collaborative and productivity software, and entertainment providers from anywhere in the library’s public space.

Based on current trends, we expect very moderate increases in the funding necessary to support our technology needs and do not predict that costs will rise as much as they have between 1995 and 2012. We expect that communication costs will modestly increase based on the expanded need of Internet bandwidth. The four-year replacement cycle will still be necessary to maintain adequate hardware for customer and staff use, but we do not foresee costs increasing by any significant amount. The need for new software will outpace our need for more hardware in the future as more customers bring in their own equipment and use online software and services that the library provides for their use while on our network. This will move toward more online software and services will result in a modest cost increase.

The Numbers	2012	2030 (in today's dollars)
Annual Recurring Charges	\$101,364	\$135,884
Capital Replacement	\$312,000	\$312,000
Computer/Software Maintenance	\$196,404	\$235,685
Total	\$609,768	\$683,569



Capital Plan

Background

During the past 20 years, space allocations in libraries have changed to reflect changing services. In 1980, the Westminster Branch opened with 90" shelving, required to hold a large collection of multiple volume reference books. The branch had a large reference desk built to accommodate numerous open volumes of text. There were no computers in libraries at that time. In 2009 the branch was renovated and the layout was changed. Shelving was reduced to 60". Significant space was allocated for public computers. Service desk space was reduced, and more space was allocated to children's services. The need to renovate and reallocate space in libraries will continue over the next 18 years.

Also, anticipated growth in population, coupled with the expanding role of the library as a community commons and technology center, will drive the need to add micro-library facilities in communities that do not have a library branch now. Based on these assumptions, following are the capital projects we envision over the next decade to meet 2030 goals.

In 2008, the State instituted a Library Capital Projects program that requires a 50% local match. CCPL has applied for and received capital funds during all five years of the program. This funding together with the local match has resulted in \$2.4 in improvements to library buildings. With the County's willingness, we will continue to apply for Library Capital Grants to support the following projects.

Proposed Timeline

FY13 Westminster Parking Lot Improvements –\$47,000 in Library Capital Grant funding has been approved by the Division of Library Development and Services/MSDE. The Department of Legislative Services has recommended full funding for the Capital Grants to Libraries program. If approved by the General Assembly, funds will be available on July 1, 2012. The required match is in the County CIP recommendation. The City of Westminster has agreed to fund a portion of the match to cover improvements to the Diffendahl Lot, the upper parking lot owned by the City. Anticipated Cost \$95,000.

FY14 Mount Airy Improvements, Phase II - We received \$233,000 from the State in FY 12 to replace the roof, change sidewalk grade, overlay the parking lot and make interior improvements. Due to significantly higher than anticipated roof replacement costs, the funds earmarked for interior improvements had to be used to cover roofing cost. Therefore, we will apply for an additional grant for interior work. Plans include construction of a classroom style computer room for training and group study, consolidation of service desks, additional self-check stations, painting and some furniture replacement. Anticipated Cost: \$257,469.



Eldersburg Redesign Study – The Eldersburg Branch is a very busy place. We plan to request design funds to create a redesign of space to accommodate more study rooms, group learning and tech lab activity. Anticipated cost for plan \$40,000.

FY15 Westminster Branch Basement Improvements - The Westminster Branch basement offers 13,000 ft² of unfinished space that could be renovated into important flexible service space to meet four needs:

- 1) Large meeting room space – No space in CCPL can seat more than 50 people; this space would allow for larger group programs.
- 2) Small group study space – currently Westminster has only one small meeting room which is in constant demand by tutors and others needing conference room space. The new large meeting room would offer the flexibility to be divided into smaller spaces.
- 3) Technology workshop open to the public where entrepreneurs, product developers, inventors, and business people can get help making prototypes of their inventions. Educators and students will find working in the FAB Lab helpful as they complete technology and science projects. Lectures and resources at the lab educate users about industrial design, manufacturing, marketing, intellectual property protection, licensing, and other product development steps. The lab could include technologies such as ShopBot router, a CNC milling machine, a UPrint 3-D printer, Roland Vinyl cutter, Epilog laser cutter, and a variety of design software.
- 4) Espresso Book Machine which offers the opportunity to print books in a matter of minutes. This is a great vehicle for self-publishing.

Total Anticipated Cost for Renovation: \$5 million. (Project would require additional operating funds.)

FY16 Silver Run/ Union Mills Area Micro-Library Facility - Design work and exploration in preparation for construction of 5,000 ft² library/technology lab/community commons space. Anticipated timeline to construction is five years. Anticipated cost to build: \$4 million. (Project would require additional operating funds.) The project would be designed in order to be replicated in other communities, as need is determined.

Eldersburg Interior Renovation – Based on FY14 design results, renovation would begin at Eldersburg. Anticipated Cost \$2 million (which includes HVAC upgrade).

New Windsor Classroom Conversion to Community Technology Center – Two classrooms at the Old New Windsor School (1959 wing) would be operated as a community technology center. Anticipated Cost: \$100,000. (Project will require some operating funds.)

FY18 Union Bridge Area Micro-Library Facility – Design work and exploration in preparation for construction of a 5,000 ft² library/technology center. (Currently, we have a partnership with the Bridges afterschool program in the Union Bridge Community Hall, where we installed and maintain a Wi-Fi hotspot and maintain laptop computers. The bookmobile also provides service to the program.) Anticipated timeline to construction is five years. Anticipated Cost to Build: \$4 million. (Project would require additional operating funds.)

FY20 Finksburg Library Addition and Solar Panel Project – The Finksburg Branch was built to accommodate expansion. Funds would be requested to build a 5,000 ft² expansion for additional study and meeting room space, and expanded children's area for birth to 5 learning. Funds would also cover the creation of a learning garden, in partnership with the Friends of the Library, Master Gardeners and the Carroll County Farm Bureau. Total Cost: \$2.7 million. Cost includes \$500,000 for solar panel installation that will produce \$1,000 of electricity per month.

FY22 North Carroll Redesign Study – Funds would be requested to create a plan to redesign space to accommodate more study rooms, group learning and tech lab activity. Anticipated Cost: \$40,000.

FY24 Redesign Study for Remaining Branches

*Enclosed is a copy of CCPL's FY 2010-2014 Capital Plan.

Budget/Staffing

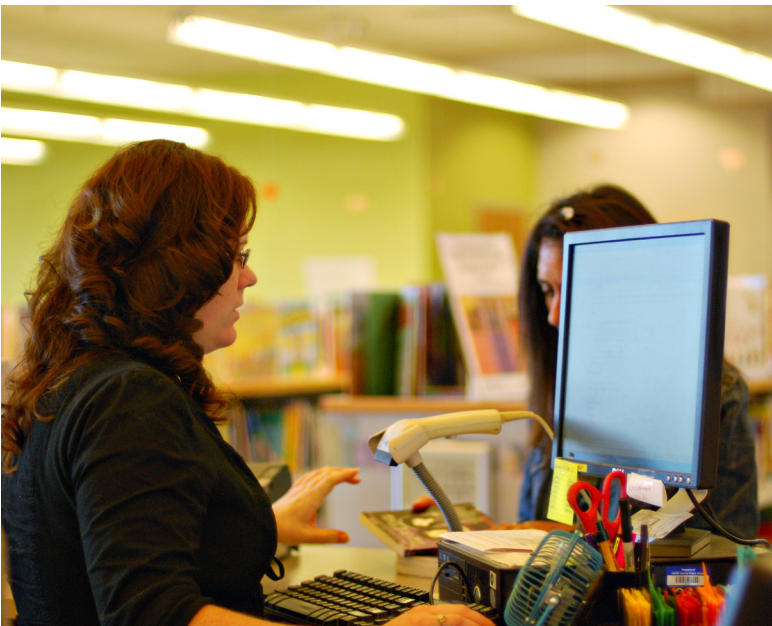
Purpose: To continue to provide and support Carroll County's high quality education infrastructure.

CCPL's budget will increase slightly to meet the customer service needs of a highly-educated population anticipated in 2030.

Cost for CCPL Vision 2030 compares the Library's current operating budget for FY12 with a projected budget for FY30 in real dollars using FY12 as a base.

Costs are assumed to remain relatively unchanged except for the following operating impacts:

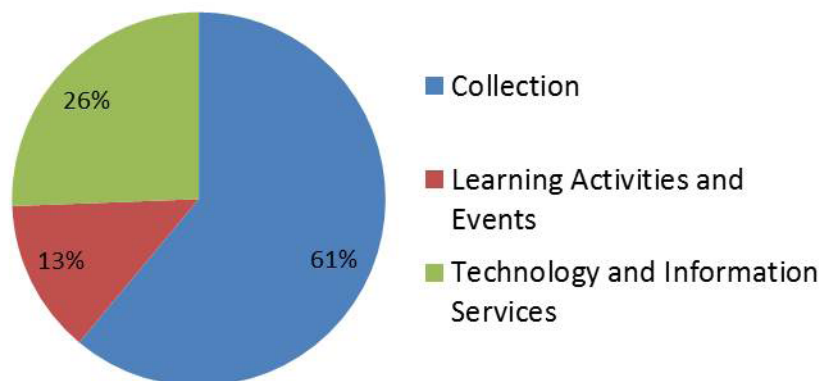
- Staff required to serve customers at new facilities, Micro Libraries - 3 Locations: \$470,000
- Staff repurposing: reflects a shift to higher skill sets to meet the technology intensive information needs of 2030 customers \$240,000
- Staff: Sunday Hours provided at all CCPL locations (30 weeks/year) \$360,000
- Staff: Expanded hours of operation (19 hours per week at 9 locations) to fill the role as a community commons \$398,000
- Staff: Required for Westminster Branch Tech Lab \$61,000
- Data Connections, Phone Lines, and Computer and Software Maintenance \$74,000
- Technology Replacement reinstated into the CIP annually to serve the technology needs of the community \$312,000



CCPL FY12 9,054,808
CCPL FY30 10,700,000 in FY12 Dollars

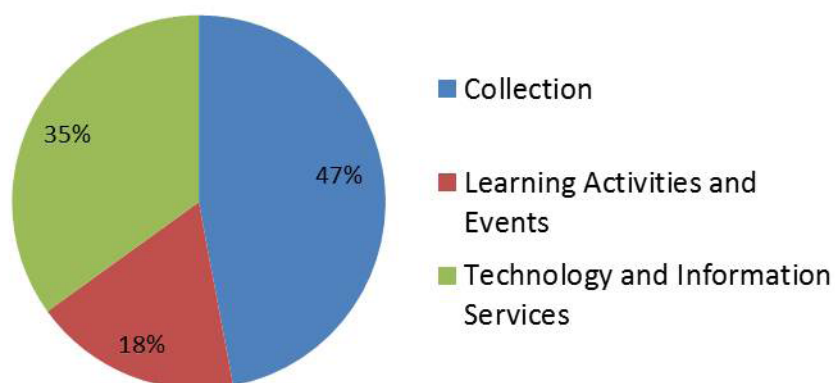
CCPL Vision 2030 Resource Allocation

FY 2012



CCPL Approved Budget \$9,054,808

FY 2030 ¹



CCPL Estimated Budget \$10,700,000

¹ FY30 shown cost in FY12 Dollars