



**HOWARD COUNTY
LIBRARY SYSTEM**
Public Education for All

Howard County Library System Master Plan Update

REPORT | 10 October 2019





G R O U P 4

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All photos in this report are courtesy of HCLS unless otherwise noted.



EXECUTIVE SUMMARY

In order to prepare for the future and continue delivering high-quality public education for all, Howard County Library System (HCLS) is proactive about planning – including for its facilities. For the last 15 years, HCLS’ decision-making about facilities has been guided by a Facilities Assessment and Master Plan first published in 2004. The 2004 Master Plan established a clear vision and framework for the system’s facilities in Howard County through 2030, and recommended a series of capital projects to build capacity to ensure adequate service to the growing community.

Since 2004, the library system has implemented many of the recommendations of the 2004 Master Plan. Renovations, expansions, and newly constructed facilities have significantly increased HCLS’ programming capacity, allowing the libraries to better serve the diverse interests of the growing community. Over that time, some of the assumptions behind the recommendations have evolved, and new circumstances and opportunities have arisen that were not predicted in the 2004 Master Plan. Significant changes include:

- Howard County has grown faster than was anticipated in 2004; by 2018, the population had already exceeded the previous projection for 2030. It has been the fastest growing county in Maryland over the past eight years, according to the Baltimore Sun (*Nocera, 2019*). Recent projections predict that Howard County could grow by as much as 16 percent over the next decade. This will place additional requirements on HCLS facilities and increase demand for service.
- Current development plans and construction will create an even bigger and more diverse population center in downtown Columbia than was forecast in 2004. Along with millions of square feet of retail, commercial, and hospitality space, a new mix of market-rate and affordable housing is anticipated to create a vibrant new metropolitan area in the heart of Howard County.
- Due to the downtown Columbia revitalization and redevelopment project, HCLS’ second-largest facility – the Central Branch – is slated for demolition within the next five years. This was not anticipated in the 2004 Master Plan.

In 2019, HCLS initiated a process to revisit and adjust the Master Plan recommendations. Group 4 Architecture, Research + Planning, Inc. was commissioned to facilitate the process, which included interviews and discussion with HCLS leadership and staff as well as input from the HCLS Board and the community.



Needs Assessment Update

As in 2004, Howard County continues to be a community of choice that attracts and retains residents with its convenient location, top-rated education system, strong business community, and high quality of life. HCLS is integral to the educational attractiveness of the county. The Library is a provider of self-directed, instructional, and enlightening experiences that are available to all citizens regardless of their socioeconomic status or other factors. Additionally, HCLS has strong partnerships with the school system, community college, local and state government, and other organizations essential to the county's success.

Community survey respondents confirmed that HCLS' services and resources are highly valued and responsive to community needs. Hundreds of survey respondents took the time to leave positive comments expressing their love for the library system and its commitment to education. However, survey respondents also noted that libraries in Howard County do not fully meet their expectations for services and can often feel crowded. Indeed, HCLS' facilities appear to be operating at full capacity in terms of their collections, shelving, meeting spaces, classrooms, and study spaces, as well as staff and storage spaces.

HCLS has not yet achieved the space planning target established in the 2004 Master Plan, which recommended providing 1 square foot of library space for every Howard County resident. It also has not yet realized the 2004 Master Plan's recommended vision for the Central Branch as a countywide destination with unique, high-impact services and spaces. These deficits affect HCLS' ability to provide service today, both locally and systemwide – and these effects will increase and intensify as the population grows over the next decade.

2019 Recommendations

Based on state standards, development projections and construction underway, transportation forecasts, community members' input, and the fate of the existing Central Branch building, the updated Master Plan recommendations for HCLS' capital projects are as follows:

- **New Downtown Columbia Branch.** An opportunity has emerged for HCLS to develop approximately 100,000 square feet of new space less than one mile from the current Central Branch, in the proposed Merriweather District of the downtown Columbia development. HCLS should take advantage of this opportunity. This will enable HCLS not only to maintain high-quality services, but also to expand its curriculum to meet current needs and emerging trends related to education, business, culture, and the arts. Given the imminent demolition date, the Central Branch project should be a high priority for HCLS, the county, and citizens.
- **New Branch.** To achieve the state requirement of 1 SF/capita target, HCLS needs to add another full-service branch of approximately 30,000-50,000 square feet, depending on 2030 population size (projections vary). While slated for the southwestern area of the county, the location for this new branch may be determined based on community growth and development.

Together, these two projects could expand HCLS' facility capacity by more than 40 percent.



INTRODUCTION

HOWARD COUNTY LIBRARY MASTER PLAN 2004

Howard County Library System is proactive about planning for the future, which has enabled it to provide the community with high-quality service as well as to seize opportunities for enriching educational experiences. HCLS' current facilities master plan was developed by Providence Associates through a process that included extensive staff, stakeholder, and community engagement.

Key findings included:

- Howard County demographics match the profile of communities with high library usage, including education level, household income, home ownership, and households with children under 18.
- Howard County residents do in fact use HCLS branches frequently, with high rates of visits, circulation, and active library cards per capita.
- HCLS is essential to the quality of life in Howard County. Participants in the 2004 master planning process expressed deep appreciation and support for all that the library system helps them achieve.
- Public library use correlates strongly with the amount of library space available, both in individual facilities and in the system overall (relative to population size).

The 2004 Master Plan recommended a series of facility improvements to better serve the community and build future capacity. To date – just over halfway through the planning timeframe – HCLS has implemented many of these recommendations, including:

- A new, larger Miller Branch was constructed in Ellicott City in 2011;
- The Savage Branch was expanded in 2014;
- HCLS administration and operations were moved out of the Central and East Columbia branches and into the former Miller Branch in 2015;
- The Central Branch was renovated in 2016, allocating an additional 7,000 square feet to space for public service;
- A new, larger Elkridge Branch opened in 2018, adding 12,000 square feet; and



- The East Columbia Branch was renovated in 2018, adding 9,000 square feet.

Most HCLS facilities are new or have been significantly updated recently. HCLS is proactive about maintenance, and keeps its facilities fresh and functioning well.

The 2004 Master Plan also recommended adding another branch to the southwest of either Ellicott City or Columbia, depending on community development. HCLS has not yet implemented this recommendation.

MASTER PLAN UPDATE METHODOLOGY

When HCLS decided to revisit and update the 2004 Master Plan, the purpose was not to wholly revise the basic planning principles and framework, but to update key information and inputs – such as demographics and growth projections – and adjust the recommendations based on circumstances and new opportunities that have emerged since 2004.

HCLS engaged Group 4 Architecture, Research + Planning, Inc. to facilitate the master plan update. The update process included:

- **Independent research and analysis.** Group 4 reviewed documents such as county- and council-approved legislation, market performance and prospects, annual reports, as well as planning and strategic documents published by Howard County Government, the downtown site developer (Howard Hughes Corporation), and consultants. This enabled Group 4 to determine the impact of the revitalization project on the existing HCLS Central Branch and anticipated demographic changes.
- **Community survey.** A community survey was published in both electronic and hard copy versions beginning on April 11, 2019. HCLS promoted the survey widely, including in an email blast to all HCLS customers as well as by posting links on HCLS' website and social media channels. Feedback regarding HCLS facilities and services was widely solicited. The survey prompted an incredibly enthusiastic response from the community, exceeding the consultant's expectations and experience. By the end of April, more than 4,000 responses had been collected.
- **Board survey.** In a separate survey, trustees were invited to share additional perspectives and insights about HCLS' future challenges and opportunities.
- **HCLS Leadership Team workshop.** Group 4 facilitated a workshop with representatives of key HCLS public service, branch management, operations, and administrative departments. The agenda included review of community profile and anticipated development; core and emerging library services; and facility needs and vision. The workshop also explored possibilities and opportunities for an expanded Central Branch in downtown Columbia to serve both local branch and countywide service needs.



Image courtesy J. Castner

3. NEEDS ASSESSMENT UPDATE

COMMUNITY AND MARKET PROFILE

Conveniently located between the Baltimore and Washington D.C. metropolitan areas, Howard County is a community of choice for commuters working in diverse public and private sector industries. According to the Maryland Department of Commerce, almost 60 percent of Howard County residents commute beyond the county borders for work (*Brief Economic Facts*, 2019).¹

Howard County has an abundance of employment opportunities of its own as well. The Maryland Department of Commerce estimates that Howard County generates \$21.9 billion in economic output through its private sector, which includes healthcare organizations, biotech companies, information technology and telecom companies, wholesale distributors, additive manufacturers, and many other industries. Research institutions such as the John Hopkins Applied Physics Lab are major employers in Howard County, as is the cybersecurity industry, fueled by proximity to Fort George Meade (*Brief Economic Facts*, 2019).

*“We love the HoCo Library!
It’s a major perk of living in
Howard County.”
— 2019 community survey
respondent*

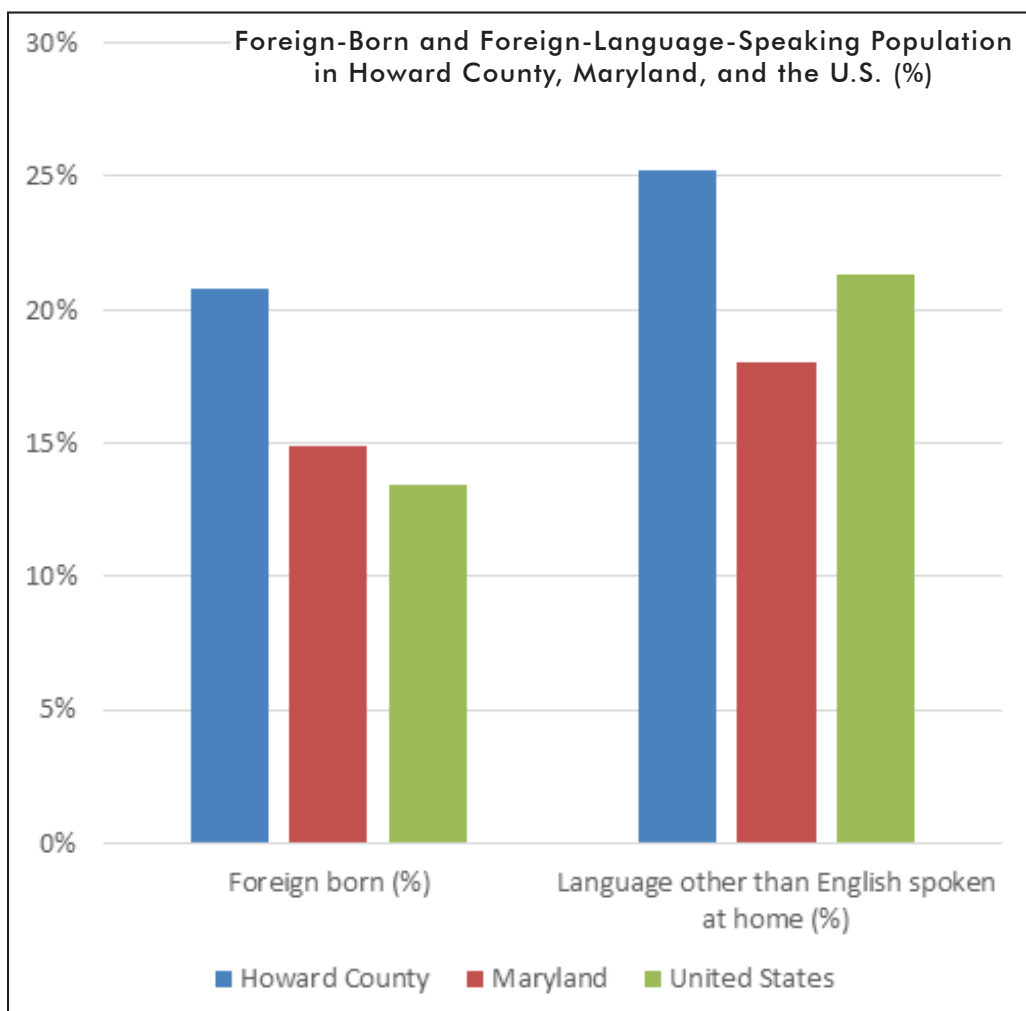
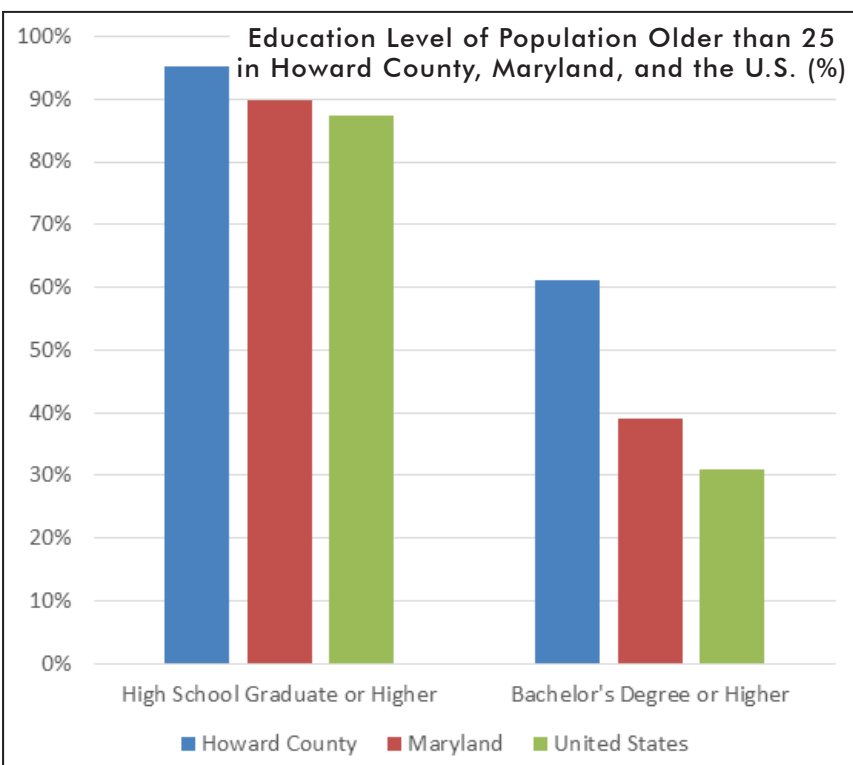
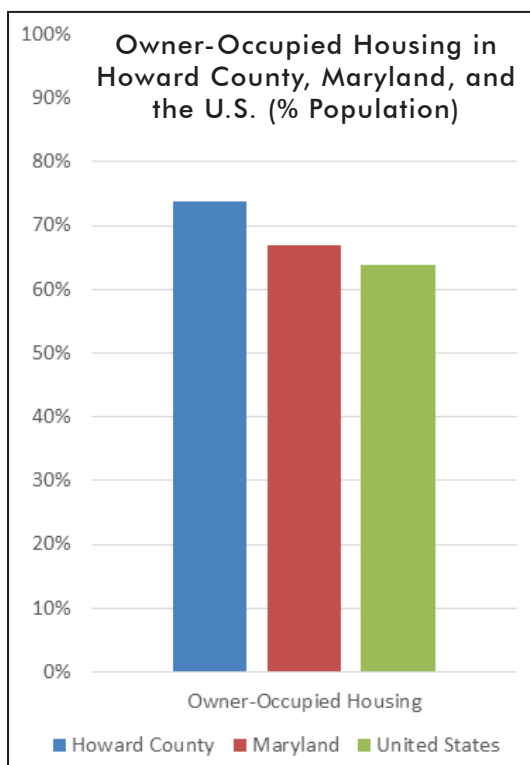
¹ See the Bibliography for a list of the references used in this section.

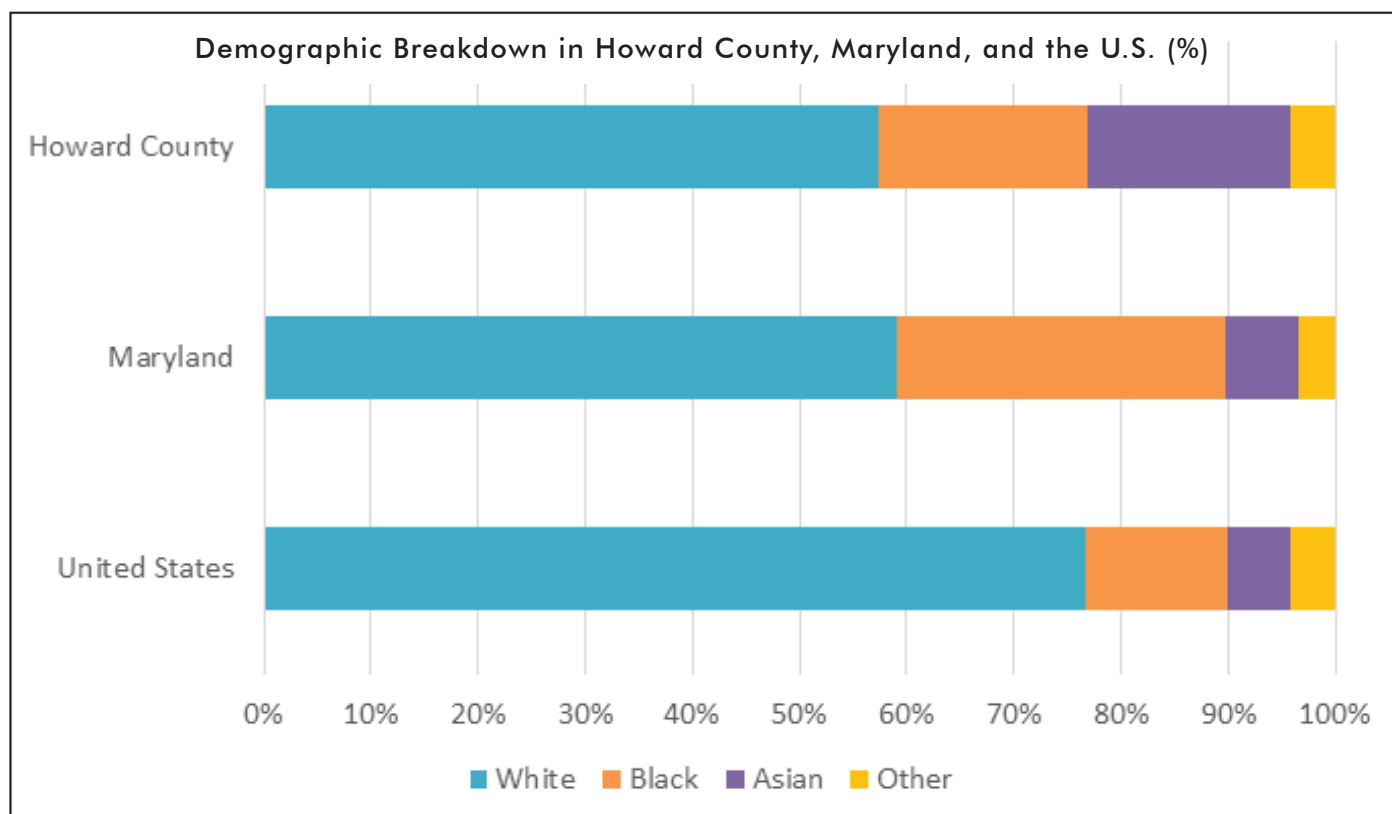


As the Maryland Department of Commerce proudly proclaims, “[Howard County] is nationally recognized as one of the best places to live, work and raise a family.”

- *Money Magazine* regularly rates Howard County communities among the top places to live in the United States, most recently in 2018 (*2018 Best Places to Live*).
- *Niche* puts the Howard County Public School System at the top of its ranking of Maryland school districts (*2019 Best School Districts in Maryland*), and *U.S. News & World Report* ranked five of Howard County’s 12 high schools among the best in the U.S. in 2018 (*Howard County Public School Districts, 2018*).
- Howard County is the second healthiest county in Maryland according to the County Health Rankings & Roadmaps program, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute (*Maryland, 2019*).

The prior Master Plan noted that Howard County was considerably above the U.S. average on key demographic indicators that tend to correlate with high rates of library use, including education level, income, home ownership, and households with children. Fifteen years later, this continues to be the case, with Howard County still ranking above average on each of these demographic measures. The following charts display data published by the United States Census Bureau, comparing Howard County with the state of Maryland and the United States as a whole.





Howard County is also a diverse community. Approximately one in five residents is foreign-born, and a quarter of the population speaks a language other than English at home.

Since 1987, HCLS' Project Literacy initiative, located at the Central Branch, has taught basic math, reading, and writing skills to 8,400 adults through free, one-on-one tutoring and class sessions. Howard County Library System is the only library in the state of Maryland to receive money from the Maryland State Department of Labor, Licensing and Regulation to support an adult literacy initiative, Project Literacy. Last year, 435 HCLS Project Literacy students attended more than 7,000 hours of classes and one-on-one tutoring sessions conducted by Howard County Library System volunteers and instructors. It is through Project Literacy that students are able to earn a high school diploma, receive instruction, and earn their U.S. citizenship. Ninety percent of Project Literacy students are foreign-born, coming from 45 different countries and speaking 30 languages.

Howard County has a strong and diverse community. The Library is a destination for customers all along the economic continuum. HCLS has long-standing partnerships, curriculum, and materials for students from the autistic community, special needs groups, and 50+ centers.



With over three million annual visits – the highest per capita in the state – and classes consistently waitlisted, HCLS is the place to be. While Howard County is an economically and socially diverse community, many children, youth, and families are struggling and do not have access to basic resources such as affordable housing, public transportation, technology, and extra-curricular educational activities — limiting their potential for success.

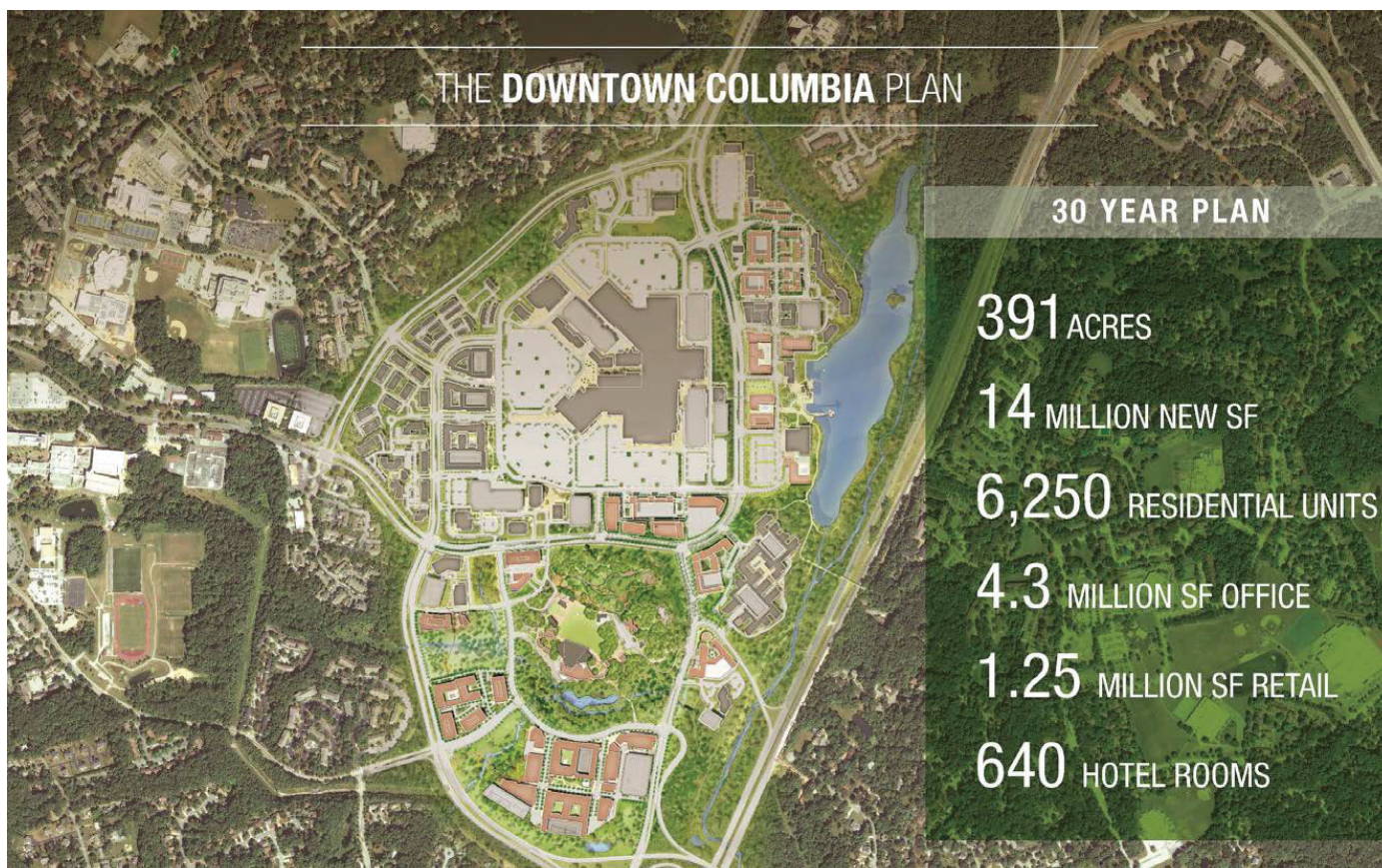
Many residents have difficulty making ends meet (*Schachtel & Spruill, 2011*). The income of ALICE (Asset Limited, Income Constrained, Employed) individuals and families in Howard County is higher than the Federal Poverty Level but lower than the self-sufficiency level (*Hoopes, 2018; Salganik & Martin, 2018*). Financially insecure households exist in all age groups, races, and ethnicities, in single- and two-parent families, and with and without children (*Howard County Local Children's Board, 2019*). One in four households in Howard County do not earn enough to satisfy basic needs — housing, childcare, healthcare and food (*Nocera, 2018*). In the 2018-2019 school year, 23 percent of Howard County Public School System students are receiving free and reduced meals (*Nocera, 2018*).



*"HCLS is one of the reasons we
chose to live in Howard County."
— 2019 community survey
respondent*

Through its classes, events, educational resources, and partnerships, Howard County Library System provides opportunities for all community members to realize their full potential. Below are several examples of HCLS' most impactful educational initiatives for children, youth, and adults:

- HCLS partners with Head Start to teach classes in social foundations, language, literacy, and mathematics. Parent Cafes (workshops held at HCLS branches) teach parents and caregivers storytelling and book sharing techniques to facilitate their children's learning at home. In addition, HCLS provides the four Head Start Centers with rotating collections of books and educational toys, known as Satellite Collections, to promote literacy by stimulating children's imagination, encouraging their curiosity, and inspiring their creativity.
- HCLS contributes to the academic success of students, kindergarten through college, with Homework Centers at all branches that provide space (including study rooms), computers, high speed Internet access, school supplies, and assistance from instructors and research specialists to study and complete their homework.
- Teen Time allows students to unwind from school and talk about their day, complete homework with assistance from HCLS instructors, and participate in enrichment activities. While centering on academic enrichment, Teen Time focuses on a variety of additional components, which involves guest speakers, art contests, and poetry slams.
- HCLS is making an impact towards alleviating food insecurity in the county through its partnership with Howard County Public School System (HCPSS) and KidzTable, which provides free summer meals and after school snacks to youth 18 years old and younger.



FUTURE COMMUNITY GROWTH AND DEVELOPMENT

(Source: Howard Hughes presentation)

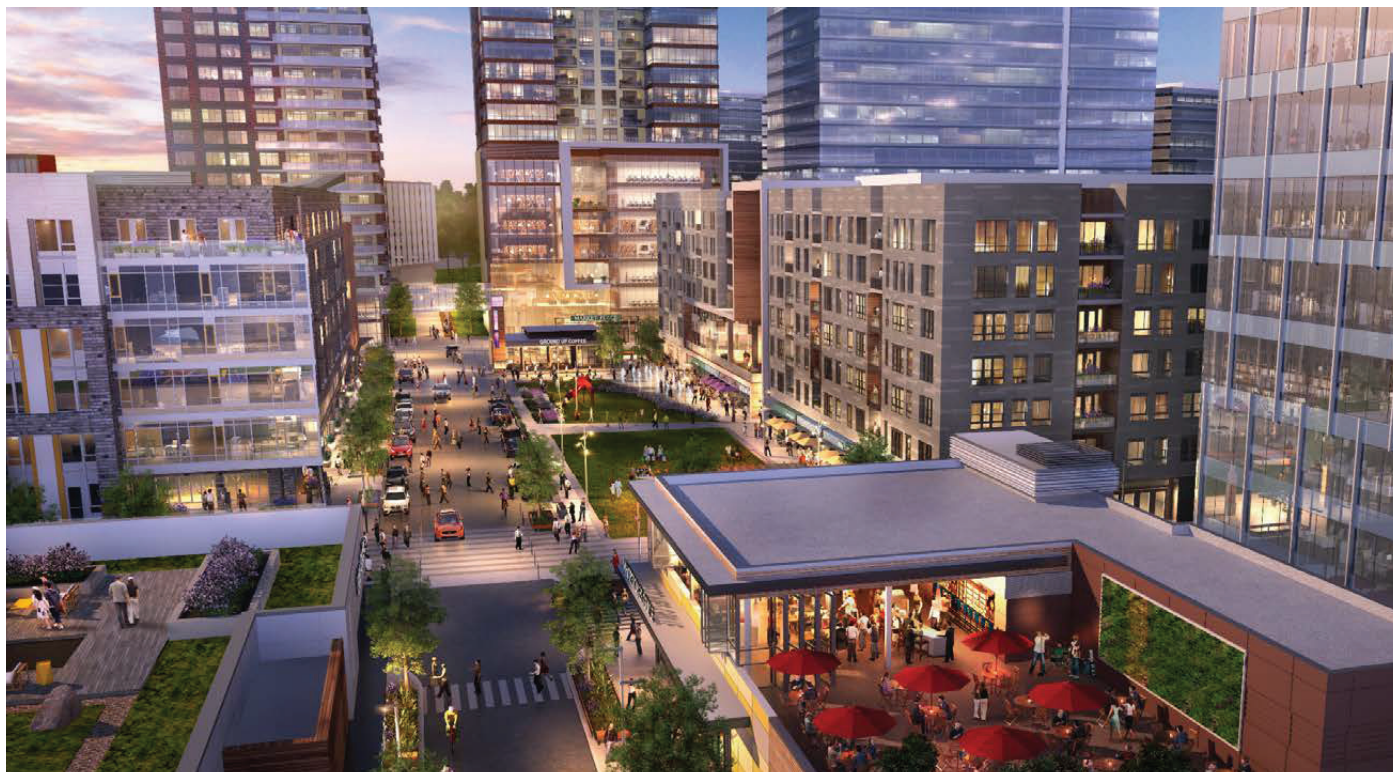
The 2004 Master Plan projected that Howard County's population would reach approximately 320,000 by 2030; in fact, the population has already surpassed that number and continues to grow. Updated projections predict as much as 16 percent additional growth over the next decade. The Maryland Department of Planning projects a population of nearly 370,000 by 2030 (*Historical and Projected Total Population for Maryland's Jurisdictions, 2017*).

The Howard County Economic Opportunity and Prosperity Task Force identified key areas of importance for maintaining livable, equitable, and sustainable communities as the population grows. A few of those are:

- Education;
- Business workforce development;
- Needs of the immigrant community; and
- Arts and culture.

HCLS is an integral partner in education in the community with an important role to play in the other areas of focus.

Much of the projected growth is anticipated to occur in downtown Columbia. Extensive development plans – not anticipated in the 2004 Master Plan – are underway that are expected to change both the size and demographic profile of Columbia's population.



Merriweather District conceptual rendering (source: Howard Hughes)



(Source: J. Castner)

In particular, more than 6,200 new residential units are planned as part of the initial downtown redevelopment and expansion plan, which will expand Columbia's population by 15 percent or more. The mix of housing will attract young professionals, but also offer long-time Howard County residents an opportunity to downsize within their community. Nearly 15 percent of the new residential units are proposed as affordable housing, which will more than double the supply of affordable housing in Howard County, according to the Baltimore Sun (Magill, 2018).

The vision for Columbia is of a walkable community where people can live, work, learn, and play (Downtown Columbia Redevelopment Monitoring Report, 2018).

The plan for downtown Columbia includes a new connector road directly through the current site of HCLS' Central Branch, which will be demolished once the new branch is constructed.

HIGH-PERFORMANCE LIBRARY SYSTEM

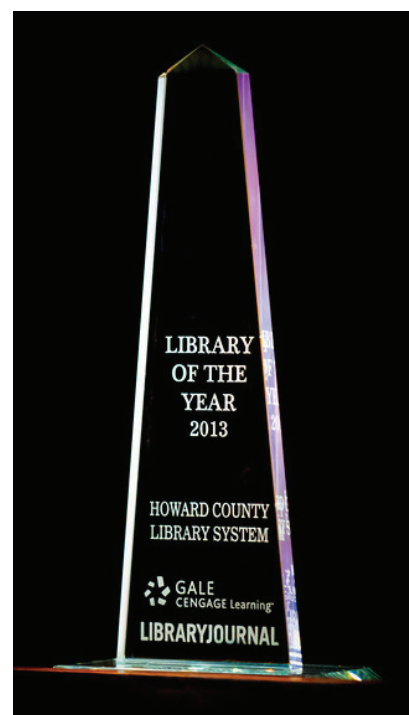
HCLS' results-based community educational model and high-quality services have led to dozens of honors and awards. In 2013, HCLS was named Library of the Year by the Library Journal out of more than 21,000 public and academic library systems in North America. HCLS has won numerous awards, including innovation awards from the Urban Libraries Council (Urban Libraries Council, n.d.). For six years, Library Journal has bestowed a five-star rating on HCLS (*Lance, 2018*).

But perhaps the best indicator of HCLS' value, quality, and responsiveness is the community's enthusiastic use and support. Maryland State Library statistics illustrate this clearly (*Maryland Library Statistics, Fiscal Year 2016*):

- **Visits** – Howard County's library branches attract more visitors than any other library system in Maryland. The average Howard County resident visits an HCLS branch more than seven times per year. In the community survey conducted for this master plan update, 75 percent of respondents identified themselves as regular or even "frequent" library users; more than half reported that they visit an HCLS branch at least twice per month.
- **Cardholders** – More than 95 percent of Howard County residents have HCLS library cards – the highest proportion of any library in Maryland, according to the state library.
- **Borrowing per capita** – HCLS boasts the highest borrowing rate in the state; in 2016, on average every Howard County resident borrowed nearly 26 items.
- **Collection turnover** – HCLS also has one of the highest collection turnover rates in the state, demonstrating the skill of HCLS' collection development team in selecting materials that meet the community's needs as well the high level of demand in Howard County for a quality collection.
- **Classes** – HCLS classes are well attended with waiting lists for Project Literacy and full registration within 24 hours for HiTech STEM classes.
- **Signature Events** – Popular events include Battle of the Books which attracts one third of all the County's fifth graders, the Spelling Bee, the Summer Reading Program with more than 5,000 attendees, and more.



"You have the best libraries of all counties I have been in! Bravo!"
— 2019 community survey respondent





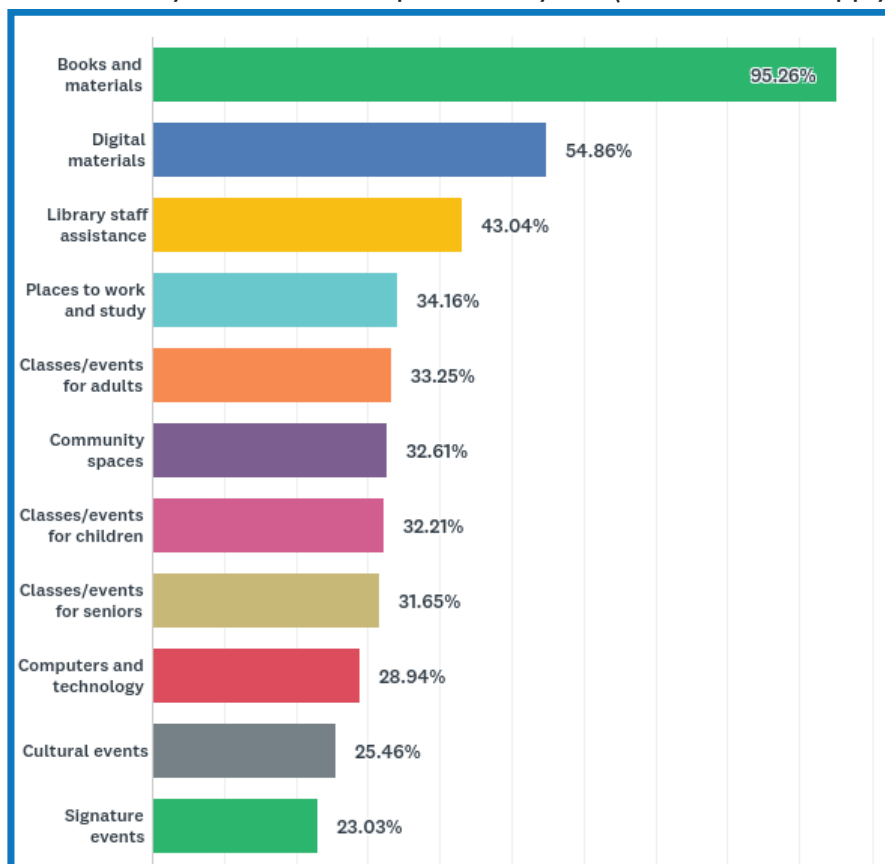
- **Partnerships** – HCLS has partnerships across all sectors to better serve the community. For example, HCLS partners with HCPSS to deliver its A+ Partners in Education curriculum, and with HCPSS and the Howard County Department of Community Resources and Services to provide free lunches for children during school breaks.
- **Meeting Room Utilization** – There is a growing demand for library meeting rooms; in fact, HCLS reports an increase of 300 percent. In 2018 alone, almost 100,000 community members used meeting rooms. Consequently, there is often a long waitlist for meeting rooms.

One of the biggest areas of deficit at the time of the 2004 Master Plan was space for programming. The expansion of library facilities in Howard County over the past 15 years has significantly increased HCLS' programming capacity and enhanced the diversity of its curriculum. Given the high level of community use of library facilities coupled with demand for additional classes and space for meetings and events, HCLS would be well served to continue to include adequate, flexible space for such uses in future facility designs.

COMMUNITY NEEDS AND PRIORITIES

The Howard County community is eager to share its ideas and perspectives about its libraries. Nearly 4,000 people responded to the community survey within the first two weeks after it was published. Multiple respondents declared HCLS to be one of the best parts of living in Howard County. Hundreds of positive comments expressed respondents' appreciation of HCLS' services and positive community impacts.

2019 Community Survey:
"Which library services are important to you? (Check all that apply)"



"The summer reading program (especially the prizes) is motivating for my kids. I would love to see more single day classes for middle schoolers."
 — 2019 community survey respondent



"I believe the library needs to evolve to be a place for knowledge and skills of all types, but especially digital media... It's important that this be both free and very high quality as that would drive development of the community."

— 2019 community survey respondent

The responses also reflected a number of common needs and desires. Survey results confirmed that community members deeply value the variety of services and classes that HCLS provides, and would like to see additional expansion and enhancement as well.

- The collection was a high priority, with 95 percent of survey participants identifying books and materials as an important aspect of library services. Respondents strongly support expanded access to collections, including digital and downloadable materials.
- Classes and events for children, adults, and seniors were all strong priorities. Respondents also requested more multi-generational programming.
- Respondents also value branches as a place for people – including places for the community to gather and connect as well as for work and study. In particular, many respondents asked for more quiet spaces to work alone as well as more spaces for group collaboration.



While HCLS leadership echoed many of the community’s priorities for core library curriculum and spaces – such as more HiTech (STEM-based) classrooms and expanded space for children – they also identified emerging and anticipated community needs that HCLS could play a role in meeting. These include:

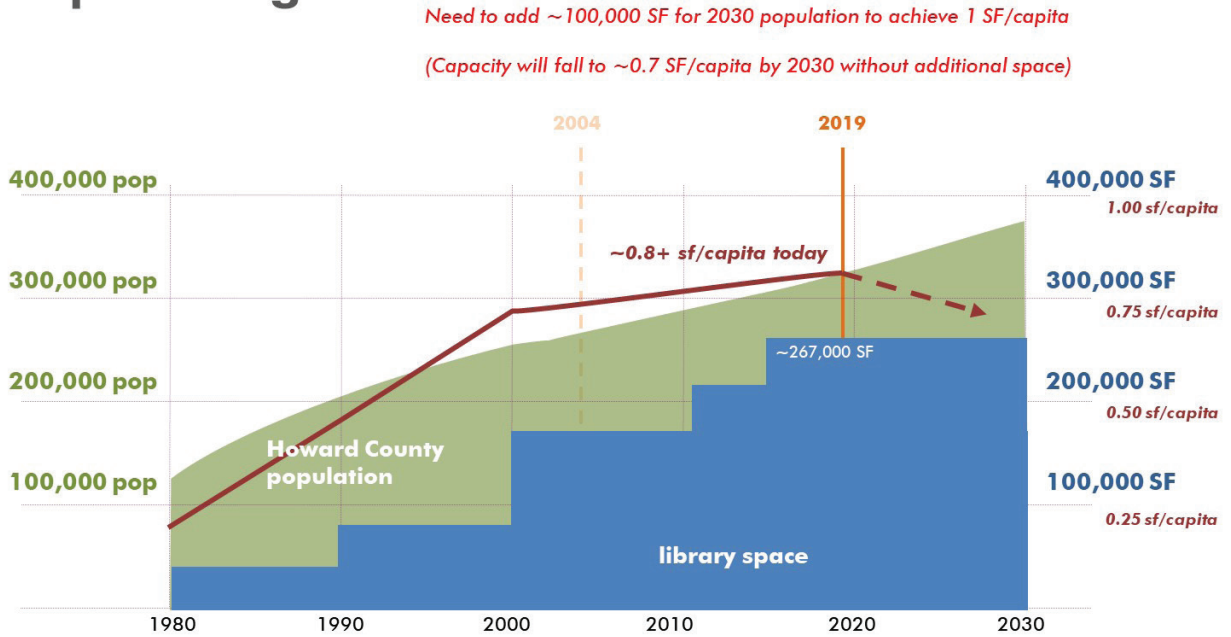
- Hands-on and virtual learning environments in which young people learn trades and job skills.
- Spaces for high-interest, high-impact educational classes and community events.
- Expanded curriculum around food and nutrition, including more hands-on gardening programs, classes in culinary skills, and more.
- Expanded cultural education and competency curriculum.

HCLS leadership highlighted equity of access as a priority for current and future facilities with a focus on customers with mobility, vision, hearing, and other challenges.

“The individual studying room gets pretty crowded in the afternoons.”
 — 2019 community survey respondent

HCLS 2030

Space planning

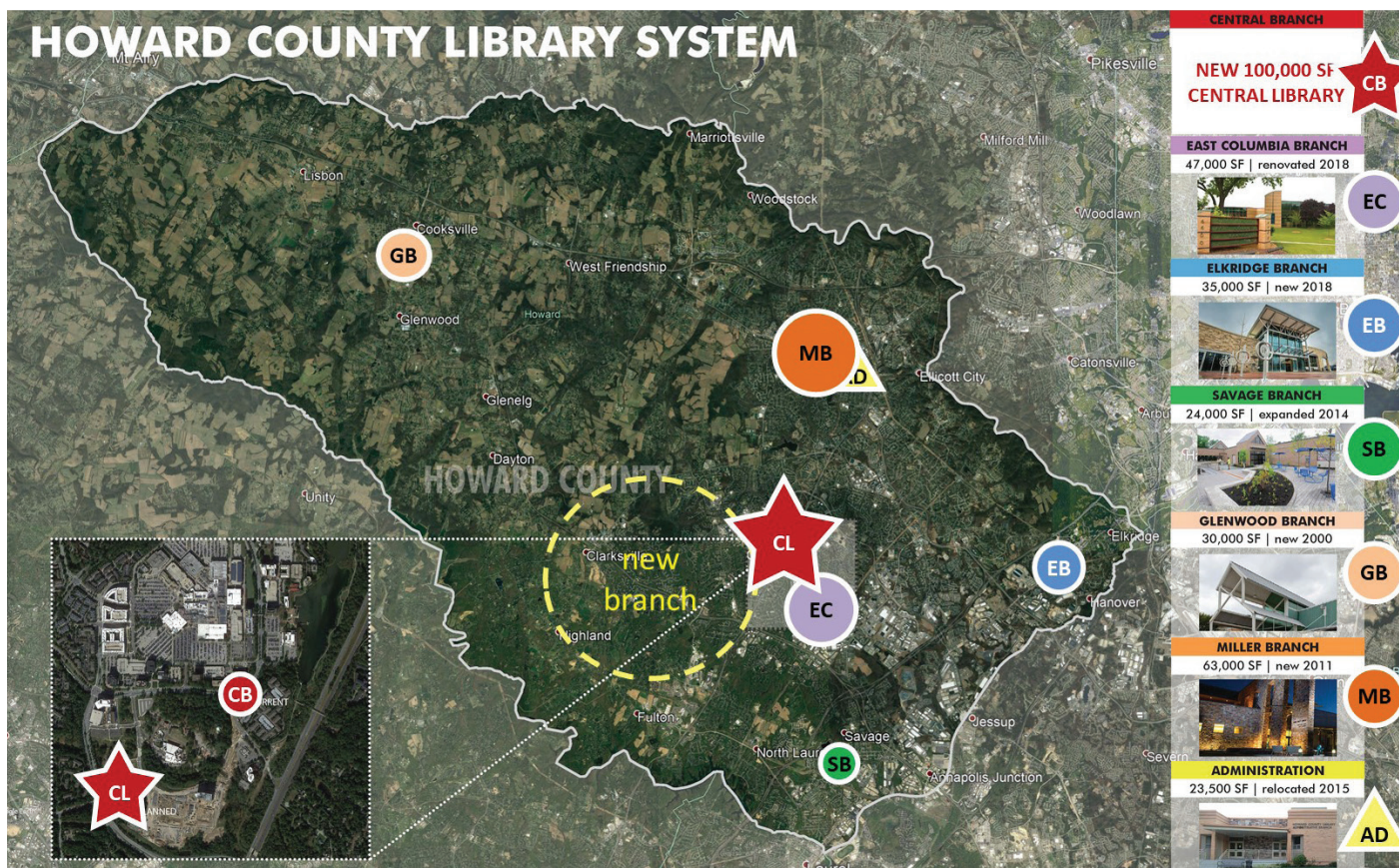


LIBRARY SYSTEM NEEDS

Maryland state guidelines have established a facility planning target ratio of 1 square foot of library space per county resident (SF/capita). The 2004 Master Plan calculated the HCLS need using this target ratio together with the projected 2030 population, and the recommended capital projects were designed to help HCLS meet that need by 2030.

However, because the population has grown faster than was projected in 2004, HCLS is facing a larger space deficit than it expected at this stage of plan implementation. Today HCLS provides only 80 percent of the library space recommended for the current population; without further expansion of library space, this ratio could drop to 70 percent by 2030.

"The Central Branch feels a little cramped, and there's... not enough tables for seating."
— 2019 community survey respondent



4. RECOMMENDATIONS UPDATE

While some of the 2004 Master Plan recommendations are still relevant, accelerated population growth and the planned demolition of the current Central Branch as part of the downtown Columbia redevelopment mean that some Library recommendations need to be updated. The following section outlines the short-term and long-term recommendations for HCLS.

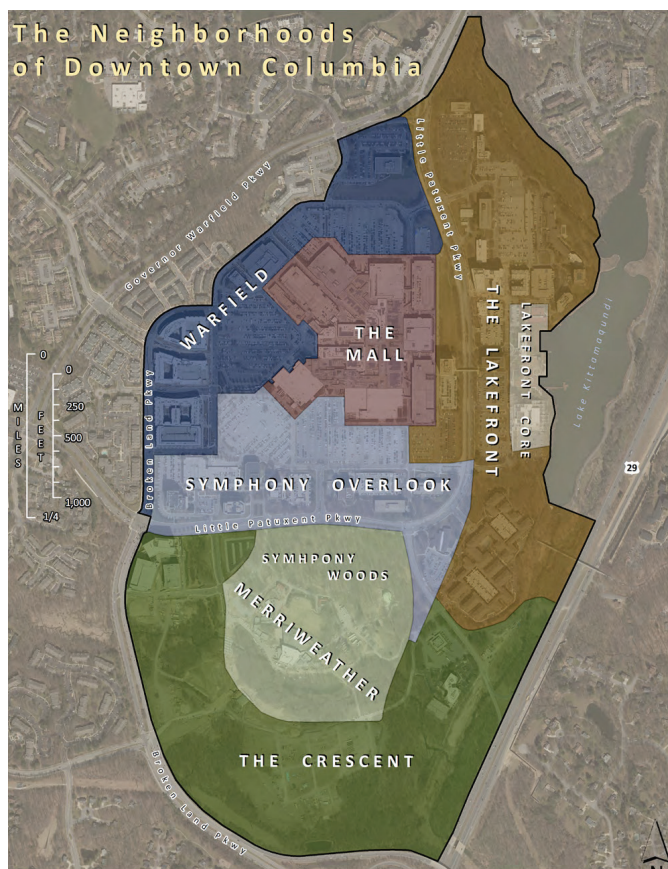
EXPAND LIBRARY SPACE

With a 1 SF/capita planning target, HCLS will need to add approximately 80,000-100,000 SF of additional library space by 2030 to meet the service demands of the growing Howard County population. The 2004 Master Plan recommended that HCLS build capacity primarily through a network of large, full-service, and well-located destination libraries (rather than by adding smaller neighborhood-scale facilities). This strategy is still the best way for HCLS to build capacity for service within available operating funds.

Two major capital projects are recommended by this Master Plan Update: build a larger downtown Columbia branch to replace the soon-to-be-demolished Central Branch and an additional new branch.



"Keep adding new features.... We love the DIY center at ElkrIDGE and borrow art work at Central."
— 2019 community survey respondent



*Downtown Columbia development vision
(source: Downtown Columbia
Redevelopment Monitoring Report)*

Build a New Downtown Columbia Branch

A new central branch located in the Merriweather District in downtown Columbia is envisioned as a regional destination for culture and commerce as well as a vital and vibrant residential community anchor in its own right. The library would be situated at one end of a new pedestrian promenade and connect to an existing trailhead, bridging the natural landscape and new cultural center of Howard County.

Branch services (e.g., classrooms, meeting space, collection, technology) and staff support spaces would bring together inspiration, learning, performance, and meeting space for experience, discovery, connection, participation, and creation:

- **Children's discovery and education.** Central Branch is currently the top branch for children's classes; however, staff and customers report that the children's space is undersized relative to use and the high demand for pre-literacy interactive and discovery space, classes, technology, and resources for children. A dedicated Learning and Discovery Educational Center would meet this need while promoting early learning and improving student outcomes. Central Branch also is home to the KidzTable program, which provides summer meals and snacks daily to dozens of children after school.
- **Workforce development.** A career portal complete with skill-building classes, resources, and technology to support employment search and application would assist customers in moving from job search to career. A wide range of entrepreneur- and small business-related resources is needed.
- **Language and literacy education.** Central Branch is a hub for literacy and ESL classes, especially for Howard County's large immigrant population. HCLS leadership note that participants in these programs often bring their children to the library, contributing to the high demand for diverse children's services.



Demand for adult instruction in this area also continues to rise as evidenced by long waitlists for Project Literacy and similar classes. The new branch will need to offer increased, and more flexible space to keep pace.

- **Arts education.** HCLS' art education collection would relocate from the Central Branch to the new downtown branch. As demand continues to increase, the new facility will need to accommodate display, storage, and performing arts spaces for customers of all ages. To further support the artistic educational enrichment of the community, the downtown branch is slated for an auditorium or multiple auditoriums that use audio/visual technology to support performances, akin to public libraries in New York, Chicago, and Jacksonville.

The new downtown Columbia branch is a high priority for implementation. HCLS will have the opportunity to refine the specific program for the proposed new downtown branch through the design process.

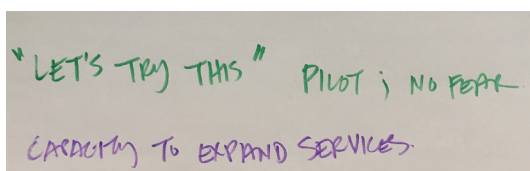
Build a New Branch

Given the updated population projections and the planned size of the new downtown branch, it is anticipated that HCLS may need to add another 30,000 to 50,000 square feet to achieve its 1 SF/capita target. The 2004 Master Plan recommended building another full-service branch, and this still appears to be the most viable and sustainable strategy for building this additional capacity. HCLS anticipates that this branch could be located somewhere west/south of Columbia to support current and future growth in that area. It should continue to monitor community development and access to library services as it evaluates potential locations for the new branch.



"The children and teen classes are fabulous! I like the variety and it gets my children excited about going to the library, attending a class and then getting good reading materials."

— 2019 community survey respondent



INCREASED OPERATING CAPACITY

HCLS' current branch service model is an effective interactive model that delivers educational materials, services, and classes for customers of all ages and local organizations, in a manner that meets the community's needs. The operational outlook for HCLS is similar to metropolitan library systems across the country that require facilities equipped to meet the growing needs of the communities they serve. Specifically, Howard County is credited as:

- one of the wealthiest counties in America;
- a leader in diversity, inclusion, and equity;
- a major cyber hub among large government contractors; and
- located between two prominent metropolitan areas.

Given the profile of Howard County and trends in library systems nationwide, HCLS engages the community through its collection (print and eResource), as well as immersive educational experiences that educate, inform, and foster the community. Envisioned experiences, to teach and showcase information learned, include maker spaces, interactive early learning spaces, large-capacity event space, and culinary education and teaching kitchens. These enhancements add tremendous value to the community in terms of workforce development, microbusiness support, and education.

Facilities to accommodate these forward-thinking experiences will need to be scoped and targeted as appropriate space becomes available within the county. These enhanced, immersive spaces are not typical library spaces and will fall outside the per capita guidelines of the state.

HCLS will leverage emerging technologies and our facilities to connect people more closely to art education, technology, business, and other topics found in a library.

Additionally, national trends have demonstrated a demand for maker spaces and Citizen Labs to enable community interaction, support microbusinesses, and assign a place for collaborative creativity. HCLS will provide citizens of Howard County countless benefits by identifying a maker/citizen space to service the community and stay ahead of national trends.

HCLS' maker space is slated to include workshop space, computer science, robotics, CISCO engineering, Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI). Additionally, this space will incorporate a community teaching and education kitchen that enables the library to teach classes



and also service the community. The maker space follows the Citizen Lab model where HCLS' current curriculum is offered in space designated for the sharing of community knowledge, plus transforming education through project-based experiences and industry knowledge. It has been a proven model to ensure self-directed learning.

Specifically, HCLS will leverage emerging technologies to expand their curriculum in Computer Science, Cybersecurity, and CISCO certification, as well as launch the 2021 curriculum and accessibility model for customers seeking Artificial Intelligence (AI), Data Analytics, and Algorithms' components. Additionally, HCLS will continue to grow its existing educational curriculum based on Artificial Reality (AR) and Virtual Reality (VR).

It will be important to design the new branch to support a service model that ensures efficient and effective operations. HCLS is encouraged to consider:

- Locating holds on the public floor and providing express checkout stations, which can save time for both customers and staff.
- Intuitive navigation and wayfinding through building design and effective signage.
- More flexible, movable, and retail-style shelving, including face-out displays to help customers navigate the collection, reducing the need for staff assistance in finding materials, providing more opportunities for staff curation around issues of community interest, and promoting serendipitous discovery of materials by customers.
- Multiple smaller-scale staff points throughout the branch to better serve customers where they are.





IMPLEMENTATION CONSIDERATIONS

This Facilities Master Plan Update will guide the development of new and improved library branches in Howard County over the next decade. It will also provide the basis for confirming funding strategies, identifying potential new sites, and strengthening partnerships. It was beyond the scope of this Master Plan update process to develop specific implementation strategies, capital budgets, or phasing for the recommended projects. This section outlines the next steps for HCLS as it works towards implementation of plan-recommended projects.

Capital Budgeting

As projects are defined and potential timelines are established, it is recommended that HCLS develop capital project budgets with all anticipated costs, including soft costs, contingencies, and escalation, as well as costs for site and building construction, furniture and shelving, etc. Other applicable project costs may include costs for land acquisition, moving, temporary library facilities, public art, collection development, enterprise technology, staff management, and other costs associated with building and operating new and improved library branches.

As construction markets vary widely throughout the nation, HCLS is strongly encouraged to work with a cost consultant who has demonstrated experience and success in budgeting for capital projects in the Baltimore metro area. It is also recommended that HCLS revisit and update its capital project budgets at least annually in order to stay abreast of construction market conditions, which have been volatile in recent years.



Project Sequencing and Timeline

HCLS will determine the sequence and timing of each project based on needs and opportunities of each facility and community. For example, the Downtown Columbia Branch project will likely be a high priority for implementation within the next few years to replace the current Central Branch.

Acquiring appropriate sites can be one of the most challenging steps in developing new libraries. In addition to the Downtown Columbia Branch, HCLS will need to find a site for the other proposed new branch. Commercial, retail, and residential development is projected to continue in Howard County in the coming years, which will almost certainly affect the availability and affordability of sites.

HCLS should begin its search for an appropriate site for the new branch as soon as possible — even if it does not plan to build immediately. Considerations and evaluation criteria for potential new sites include:

- A prominent, well-located, accessible, and highly visible site that is served by transit and major transportation routes (current or planned).
- A site that is large enough and well-proportioned for development of a modern library with associated parking and landscaping. Generally speaking, libraries smaller than about 40,000 square feet should be single story, if possible, given site development opportunities and constraints. Multi-story libraries should strive for as few floors as possible.
- Site zoning, adjacent uses, and community development plans are compatible and complementary with development of a library.
- Any unusual or special measures that would be required for development of the site as a library can be accommodated in the capital project budget (e.g., hazmat or poor soil remediation; bringing new utilities to an undeveloped site; significant regrading needs).

It should be noted that sites for new libraries do not necessarily need to be undeveloped. There are many examples of communities that have acquired existing facilities for successful conversion into modern, high-performance libraries. HCLS may wish to consider opportunities for creative transformation of an existing facility as well.

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APPENDIX A: MASTER PLAN UPDATE PROJECT PARTICIPATION

This project was made possible in part by the Maryland State Library and the Institute of Museum and Library Services. Grant Number: 519231.

HOWARD COUNTY LIBRARY SYSTEM

Board of Trustees

- Anne R. Markus, Chair
- Robert Mentz, Vice Chair
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- Phillip Dodge
- Thomas K. Munns
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- Antonia B. Watts

Library Leadership Team

- Tonya Aikens, President and CEO
- Angela Brade, Chief Operating Officer – Support Services
- Lewis Belfont, Chief Operating Officer – Public Services
- Dorna Anderson, Accounting Manager
- Katie DiSalvo-Thronson, Community Education and Engagement Manager
- Stacey Fields, Director of Human Resources
- Cari Gast, Head of Children's and Teen Curriculum
- Alli Jessing, Events and Seminars Manager
- Christie Lassen, Director of Communications and Partnerships
- Brooke McCauley, Customer Experience Manager
- Emma Ostendorp, Adult Basic Education Manager
- Ben Sfanos, Director of IT

HCLS Branch Management

- Nina Krzysko, Central Branch Manager
- Suki Lee, East Columbia Branch Manager
- Lauren McCloskey, Elkridge Branch Manager
- Mary Brosenne, Glenwood Branch Manager
- Susan Stonesifer, Miller Branch Manager
- Diane Li, Savage Branch Manager

Additional HCLS staff members who assisted with the technology visioning process:

- Herbert Kule-Thomas, System Support Administrator
- Peter Hyun, Web Developer
- Ruth Vargas, Software Systems Manager

HOWARD COUNTY COMMUNITY MEMBERS

We are grateful for the enthusiastic participation of the thousands of community members who responded to the community survey published for this process.



MASTER PLAN CONSULTANT TEAM

Group 4 Architecture, Research + Planning, Inc., is a full-service planning and architecture firm dedicated to creating vibrant public places that cultivate dynamic communities. Since our incorporation in 1976, our inspired and talented staff has provided quality services to public clients and the cities, counties, and districts they serve. Our distinctly inclusive design process engages diverse public, staff, and stakeholder groups in shaping the future of their communities.

Our South San Francisco-based, 25-person staff includes planners, architects, interior designers, and technical and construction support specialists. We are active in professional organizations such as PLA, ULC, the American Institute of Architects, and the Environmental Design Research Association. Most of our professional staff are LEED accredited.

Group 4 is a leader in the planning and design of public libraries and library systems, with more than three decades of experience on hundreds of library projects nationwide. Consultants join our team as needed to deliver products finely tuned to the singular profile, needs, and vision of each library client. The result has been many functional, achievable plans and award-winning libraries crafted to serve their communities well into the future.

Group 4 has unparalleled experience with facilities master plans for libraries and library systems throughout the United States, including urban and rural, municipal and multi-jurisdictional libraries of all sizes. We work with library clients to develop solutions addressing expansive and varied geographies, diverse and migrating populations, economic and budgetary restrictions, and service shifts and expansion.

We have included a partial list of our public library clients.



Main Library, Dayton OH
Group 4 with LWC

Master Plan Clients (Selection)

- Columbus Metropolitan Library (OH)
- Houston Public Library (TX)
- Pierce County Library System (WA)
- Public Library of Cincinnati and Hamilton County (OH)
- Sacramento Public Library (CA)
- Jefferson County Public Library (CO)
- Johnson County Library (KS)
- Multnomah County Library (OR)
- Alameda County Library (CA)
- San José Public Library (CA)
- Oakland Public Library (CA)
- Marin County Free Library (CA)
- Santa Cruz Public Libraries (CA)
- Pikes Peak Library District (CO)
- Spokane Public Library (WA)
- Lexington Public Library (KY)
- Palo Alto City Library (CA)
- Chula Vista Public Library (CA)
- Deschutes Public Library (OR)
- Poudre River Public Library District (CO)
- Olathe Public Library (KS)

Design Clients (Selection)

- Dayton Metro Library (OH)
- San Francisco Public Library (CA)
- City of Palo Alto (CA)
- Spokane Public Library (WA)
- Santa Cruz Public Libraries (CA)
- Contra Costa County Library (CA)
- City of Carlsbad (CA)
- Oakland Public Library (CA)
- Alameda County Library (CA)
- Yorba Linda Public Library (CA)
- Milpitas Public Library (CA)
- Santa Clara City Library (CA)
- Burlingame Public Library (CA)

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- David Schnee AIA LEED — Principal-in-Charge
- Jill Eyres LEED — Senior Associate; Senior Planner
- Daniel LaRossa LEED — Associate
- Anna Hollingsworth — Assistant Planner



*Downtown Library, Spokane WA
Group 4 with Integrus*



Interior Court : Workspace Layout

*Indian Creek Library, Olathe KS
Group 4 with Gould Evans*



*Walnut Creek Library, Walnut Creek CA
Group 4*



*ACL San Lorenzo Library, San Lorenzo CA
Group 4*

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APPENDIX B: COMMUNITY OUTREACH SESSIONS

NEW SOUTHWEST BRANCH DREAM SESSIONS

HCLS conducted two community outreach events in Maple Lawn and River Hill on June 10 and 19, 2019, to solicit input about a potential future southwest library. Community members discussed and strongly reaffirmed the need and enthusiasm for a new, local library branch. What kinds of spaces and services should a new southwest branch provide? Participants had lots of ideas.

To address the diverse needs of the population, participants noted that it would be crucial to create a variety of spaces for all ages. In particular, there was a deep interest in multigenerational learning spaces. Lots of people wanted study rooms and co-working spaces. For school-aged customers, a homework-help and tutoring space was proposed. The kids' area would ideally have a toddler play area, a storytime area, and space for other kids' programs like educational after-school activities. Baltimore County Public Library's Storyville was seen as an inspirational model by many community members.

To accommodate some of the myriad classes requested by the community, a new southwest library branch would also need classroom space. Community participants asked for a wide variety of classes, including HiTech and other STEM classes, in addition to classes about music, art, finance, college prep, writing, foreign languages, CPR, and cooking. Some of these classes would benefit from specialized spaces like music practice rooms, an art studio and gallery space, or a commercial teaching kitchen. A maker space or DIY space could offer 3D printing, woodworking, ceramics, or other hands-on learning activities. Computer classes for all ages, from kids to seniors, and long-distance learning could be hosted in a computer lab equipped with the latest technologies. Community members were interested in a range of high-tech resources, from video-editing to AI technologies. The desired programs could be supported by partnerships with local organizations.



Community outreach participants also wanted space for a varied collection alongside quiet reading areas. They envisioned an array of comfortable seating choices and reading nooks. Beyond traditional items and research resources, participants requested diverse additions to the collection such as a tool library, musical instruments, bikes, games, and more.

Social gathering spaces were prioritized by community members too. There was high demand for meeting rooms and a flexible event space that could be used for community group activities, performances, cultural events, lectures, author events, town halls, etc. Many wanted to see a dedicated area for teens to hang out, study, play video games, and do other activities. A café was also suggested. Additionally, lots of community members expressed interest in an outdoor space that could have a garden, a farmers' market, or a playground.

Participants also shared their design preferences for a new library facility. Multiple people were enthusiastic about building a sustainable, energy-efficient or even net-zero facility and introducing electric vehicle charging. Some community members were excited about lights for wayfinding and murals.



To ensure that the new library branch serves everybody in the community, participants observed that the branch should offer special programming for disabled community members and be ADA-accessible. Furthermore, in discussions about potential sites, community members emphasized the importance of the site being pedestrian-friendly, and ideally, within walking distance of some of the local schools or the new senior center in Fulton. Others hoped for bike and bus access. Ample parking would also be necessary. A drive-thru book return, remote book drops, and self-check options could further increase library access and improve customer experience.

During both community outreach events, participants were asked to select their preferred potential location for the new southwest library branch. The map on the following page shows the results of community feedback. In the interim, before a new library branch is built, community members suggested introducing a bookmobile or a pop-up library to temporarily serve the southwestern population of Howard County.



Site Suggestions

- 1
- 2-4
- 5+
- 10+

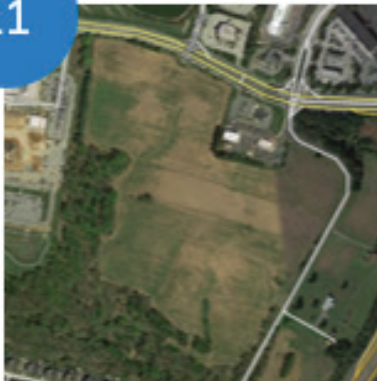
TOP SITES FOR A NEW BRANCH

34



Downtown Clarksville

11



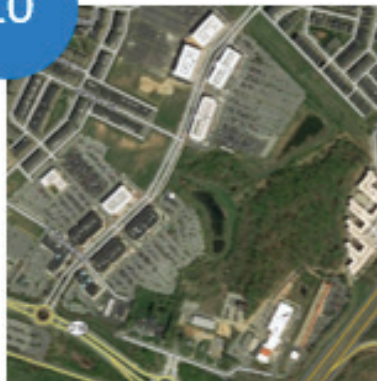
Undeveloped area in Maple Lawn

17



Near Reservoir High School, Fulton Elementary School & Grace Church

10



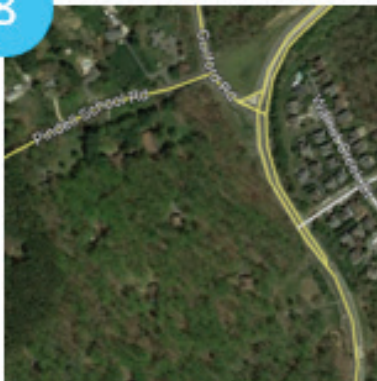
Commercial area in Maple Lawn

12



Near Maple Lawn Farms, Lime Kiln Middle School & Cedar Lane School

8



Undeveloped area north of Fulton

GLENWOOD LIBRARY DREAM SESSIONS

HCLS hosted two community dream sessions on August 12, 2019, at its Glenwood Branch. One session was from 1-3 pm, and the other was from 5-7 pm. In total there were approximately 20 people who gave feedback to the staff either during that day, or during the week in conversations with Glenwood Branch staff.

One key area that customers provided feedback on was on ways the Library could provide tech support to customers. Some of the examples include setting up cell phone, computer, Kindle, and car charging stations and options. Additionally, renting Kindles and offering Blue rays were mentioned.

Customer service conveniences were also suggested. These included opening earlier in the day (8 am), offering a check out in the children's section, a refresh for the café that includes new items as well as a drive-through. This would help make the branch a designated spot for more than just books.

Participants had ideas about reimagining the space as well to make it more conducive to specific needs and less interruptive for guests who are concentrating and need quiet space. For example, the quiet space could have a fireplace as the center focal point indoors. Having quiet reading spaces or a reading-only room with "comfortable" furnishings, and designated areas for work or group projects and tutoring would be ideal. Teens and tweens need their own space, so that they are not sharing space with those trying to concentrate on tutoring lessons or projects. Kids too needed space for them to just "be kids". People are respectful, it was emphasized, but space is at a premium.

For the outside of the facility, customers suggested using more of the grounds. Ideas included a playground and covered outdoor reading area (for rainy days) with space for parents to convene while their children are in classes or on the playground. One customer even suggested a pool!

The Library could become even more community focused in its offerings of activities and opportunities to collaborate and coalesce. More social spaces for displays art displays including kids' art displays and games, movie nights, concerts, diverse cultural holidays, and adult games. Field trips for varying age groups (including seniors), family book clubs, community art projects and spaces, business referral center, and an animal adoption space such as the DEAR program could be offered. There could also be spaces for seniors to come and enjoy the library post classes that are held, whether the class was in the community center or library.

We also found that community members had concerns and interests about the environment and would like to see the branch incorporate more into its layout and offerings. These ideas ranged from having a stream on the property and weed support, along with rain barrels that did not pollute the soil or water, and butterfly and food gardens. Additionally, customers wanted to invite groups such as the Master Gardeners and Watershed Stewards to help residents and the library with classes and maintaining the property. Classes around wells and septic instruction were suggested, and for the public health environment, offering more hand sanitizing stations was mentioned.

Classes is another area that garnered interest. Customers wanted to see more classes about STEAM , history, math (Khan Academy was specifically mentioned), cooking, and social and career development. Finally, residents wanted to see more classes available later in the evenings and on Saturday afternoons.

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APPENDIX C: STATE OF TECHNOLOGY ASSESSMENT

SUMMARY

As part of its Master Plan update, Howard County Library System (HCLS) completed a technology survey to assess HCLS' support and public services as they relate to technology, e-offerings, and curriculum that require technology and rely on HCLS' facilities.

The following is an assessment of HCLS' technology, industry and IT trends impacting libraries, as well as, facilities-based IT recommendations for HCLS based on the staff survey, HCLS' technology reports, certifications, systemwide metrics, and industry trends.

HCLS TECHNOLOGY SNAPSHOT

Over the last 10 years, HCLS has strategically implemented technology solutions that improved access and increased lending of materials, plus addressed the system's educational mission while simultaneously redesigning facilities to accommodate technological specifications and industry trends that deliver greater service to the community. Key drivers for HCLS' approach are customer behaviors and national library trends that demonstrate an increase in the demand for technology with no decrease in the borrowing of physical materials, increased use of electronic resources, and flexible space(s) with state-of-the-art technological provisions.

As a multi-branch system, HCLS embraces the concept of technology equity in its branches, offering a consistent approach to services alongside facility-based specializations. This approach increases utilization and addresses specific community needs in the areas closest to that need. HCLS' facilities and technology footprint includes:

- State-of-the-art library management software (Polaris).
- Fully integrated Radio Frequency Identification (RFID) system inclusive of multiple material check outs, self-checkout machines at all branches, strategically placed automated materials return and sorting systems, and real-time materials' availability monitoring.
- Increased Public Access Computing (PAC) machines and seating to address growing customer demand for on-site access to educational, work, business, and other resources.
- Improved and standardized meeting rooms with state-of-the-art integrated audio-visual equipment to ensure rooms enable emerging capabilities (i.e. teleconferencing). HCLS plans to have a hearing loop (assistive listening system for those using hearing aids) available in public meeting rooms.

Operationally, HCLS has:

- Improved IT facilities, capacity-based computing, and its server room to enable the IT Department to appropriately address and manage staff demands.
- Implemented a variety of operating systems to meet internal and external technical requirements enhancing operational efficiency.
- Completed core data infrastructure equipment improvements along with Linux-integrated systems to enable Single Sign On and simultaneous systemwide upgrades to staff computers.

Strategically, HCLS has:

- Planned and implemented flexible facilities design to ensure that technology-based curriculum is delivered with state-of-the-art technology connections scalable to various class sizes. Highly demanded STEM classes are made possible by existing facilities, which include two science labs to implement a full science curriculum, one virtual reality cave, one professional-level sound recording booth, and specialized training rooms.

LIBRARY TRENDS DIRECTLY IMPACTING FACILITIES AND OPERATIONS

The following trends are guiding technological transformation for many U.S. libraries:

Static to Active

Libraries were once thought of as quiet places of study with wall to wall books. Today, libraries still require quiet spaces, with a variety of materials; however, libraries have evolved into highly interactive spaces, and must be able to adapt their physical layouts (facilities) to meet the changing needs of customers. This translates to flexible facilities with spaces that are comparable to retail or education.

Transactional to Transformational

Historically, libraries have tended to measure their value in a “transactional” framework, by tracking the number of customer visits, circulation of the items in the collection, website visits, and ILS searches. Over the past several decades, libraries have become educational and transformative centers that provide facilities that meet the community’s requirements for transformative education. Notable trends in library service include commercial kitchens (to help address food deserts, among other things), spaces for workforce development (including computer labs and curriculum designed to help workers re-tool for modern skills), and robust Internet connectivity (to ensure all community members have access).

Consumption to Creation

In the past, the library was a place of knowledge – a storehouse of community information where people physically came to consume information contained in books. Since the late 1990s, interactive and project-based learning models have gone beyond traditional classrooms at schools to all educational venues where customers are learning.

Formal Education to Self-Directed Education

As education and the quest for knowledge continue to be critical drivers for communities across the U.S. and as technological advances enable greater accessibility to education for all, there has been consistent growth in the acceptance of online educational opportunities from trade schools, colleges, and universities. The increased registration of this “self-directed” educational model has changed the learning landscape.

Public libraries are perfectly positioned to connect learners to education opportunities through digital access, services (including exam proctoring), and technology-enhanced shared learning spaces. For example, HCLS is a perfect example of how to serve the education continuum in Howard County through its significant efforts in working with local schools to support K-12 educational objectives for students.

Toward Digital Inclusion

With the proliferation of mobile devices and Internet access, those who already have computers, Wi-Fi and Internet connectivity may not realize that many in communities across the U.S. – especially in rural areas – have limited or no access to computers and the Internet. Increasingly, common needs such as applying for a job, participating in government, and awareness of current events require computer and Internet access as well as the skills and knowledge to use digital tools and connectivity.

KEY TECHNOLOGY TRENDS IMPACTING LIBRARIES

While there are numerous technology trends that will impact the economy, society, and communities around the world, there are five technology-based trends that will impact libraries and their facilities. According to the Urban Libraries Council, many of these trends will require public libraries to assume a leadership role in the future.

Emerging technologies will impact the educational resources available to communities as they pertain to access, circulation, and accommodations. Public libraries are poised to respond through technically-equipped facilities and highly skilled on-site staff. Specific trends libraries will need to be ready for include the following technologies:

- Artificial Intelligence (AI) and Machine Learning;
- Virtualization of Content;
- Robotics;
- Library Labs; and
- Gamification Centers.

HCLS TECHNOLOGY AND FACILITY RECOMMENDATIONS

The long view for HCLS' technology should be to continue the implementation of a prudent IT strategy while leveraging emerging technology opportunities and seeking trendsetting opportunities, where possible. Specifically, the recommended technology and facility framework for HCLS includes:

A. Implementing technology that leads to operational and integrated service enhancements such as:

- Improved e-commerce functionality;
- HCLS mobile app;
- State-of-the-art space reservation and events system;
- Communication software for engaging customers and boosting library use;
- Self-service holds – creating spaces in new and existing branches to allow customers to pick up their own holds;
- Increased e-resources, *where necessary*; and
- Increased digital lending of mobile devices including laptops, tablets, hotspots, or Collection Hubs.

B. Acquiring and designing facilities and spaces that are *technologically rich and enable transformative educational experiences that allow HCLS to:*

- Create multiple environments/spaces for simultaneous design thinking and project-based learning for various technology-related classes.
- Design and build facilities with integrated technologies for community maker spaces and Citizen Labs to provide customers with technical assistance and spaces designed to foster job skills and community entrepreneurship, including prototyping at the library.
- Design and build facilities to accommodate workforce development and small community business innovation, including space suited to support small group meetings and focused training opportunities for local workforce development, along with the development of new skills and elimination of skills gaps.
- Design and build for flexible space and more educational classrooms that meet the demand for large capacity and unique STEM curriculum delivery.
- Build technologically flexible Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) environments that are vital to HCLS' role as an educator in the community.
- Ensure the technological footprint is in place to support current and future HCLS art education initiatives, including immersive and accessible technology, broadcast technology, and audio/visual technologies for instruction and performances.

IMPLEMENTATION CONSIDERATIONS

In implementing technology, the Library should consider the following implementation strategies and techniques:

- ***The Library has the opportunity to build upon its current project management competencies.*** HCLS has demonstrated considerable success in technology project management. Recognition and ongoing support of this successful culture is a core competency to maintain as the Library forges into the future.
- ***Consider sequencing and load balancing when undertaking projects.*** Success comes from considering dependencies and the order of multiple projects that lead to the most successful outcomes.
- ***When applicable, use Design Thinking and Pilot approaches when exploring new technology projects.*** The process of small-scale pilots, “failing fast”, learning from the experience and ultimately providing a successful, widespread implementation of technology is the modern path to technological success.
- ***Consider budgeting for “innovation opportunities.”*** With the rapid pace of technological change, things that were previously impossible – and/or prohibitively expensive – can suddenly become a feasible option. By earmarking some funding between budget cycles, the Library has the opportunity to pounce on emerging opportunities in a just-in-time manner.
- ***Criteria-based approaches help create a shared understanding of technology initiatives.*** Not everyone in an organization always has a clear understanding of the “why” behind different technology approaches. Defining the purpose of the technology solution and criteria for program success helps create clear understanding.
- ***Ultimately, technology in libraries is about serving people.*** All technology in the Library should be oriented around and clearly aligned with the Library’s strategic initiatives.

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ABOUT TECHNOLOGY CONSULTANT

Carson Block Consulting Inc. provides technology consulting services designed to bring technology vision and technology power to your library, including technology assessments and planning, recruitment, library master planning and construction, inspirational speaking, and teaching.

Facilities Master Planning

- Cincinnati Public Library
- Johnson County Libraries
- Anchorage Public Library
- New Braunfels Public Library
- Round Rock Public Library
- Seguin Public Library
- Lyons Public Library
- Poudre River Public Lib District

Cincinnati, OH
Johnson County, KS
Anchorage, AK
New Braunfels, TX
Round Rock, TX
Seguin, TX
Lyons, CO
Ft. Collins, CO

Facilities Design - Technology

- Bellevue Public Library
- New Braunfels Public Library
- Poudre River Public Library District
- Olathe Public Library
- Rt. 9 Library
- Dayton Metro Libraries
- Highland Public Library
- Logan Public Library
- Moffat Library of Washingtonville
- Kinderhook Memorial Library
- Seguin Public Library
- Gloversville Public Library
- Hewitt Public Library

Bellevue, NE
New Braunfels, TX
Fort Collins, CO
Olathe, KS
Wilmington, DE
Dayton OH
Highland, NY
Logan, UT
Washingtonville, NY
Kinderhook, NY
Seguin, TX
Gloversville, NY
Hewitt, TX

Technology Planning

- Sonoma County Libraries
- Miami-Dade Public Library System
- Flower Mound Public Library
- Lexington Public Library
- Teton County Libraries
- Flower Mound Public Library
- Central Arkansas Library System
- Tacoma Public Library
- Anchorage Public Library
- Pierce County Libraries
- Santa Cruz Public Library
- Delaware Department of Libraries
- Poudre River Public Lib District

Sonoma County, CA
Miami, FL
Flower Mound, TX
Lexington, KY
Jackson, WY
Flower Mound, TX
Little Rock, AR
Tacoma, WA
Anchorage, AK
Tacoma, WA
Santa Cruz, CA
Dover, DE
Ft. Collins, CO

Strategic Planning

- Sonoma County Libraries
- Poudre River Public Library District
- Miami-Dade Public Library System
- New Jersey State Library
- Georgia PINES Network
- eiNetwork
- Johnson County Libraries
- Los Angeles Public Library
- Muskingum County Libraries
- Iowa City Public Library
- Provo City Library (for Google Fiber)
- Vigo County Libraries

Sonoma County, CA
Fort Collins, CO
Miami-Dade County, FL
Trenton, NJ
Atlanta, GA
Pittsburgh, PA
Johnson County, KS
Los Angeles, CA
Zanesville, OH
Iowa City, IA
Provo, UT
Terra Haute, IN

New Public Service Model Design

- Oakland Public Library
- Flathead County Libraries (workshop)

Oakland, CA
Kalispell, MT

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