



URBAN
LIBRARIES
COUNCIL

SEPTEMBER 2026

FUTURE SCENARIOS: LIBRARY SPACE & DESIGN

*Strategic policy positioning
for library leaders*

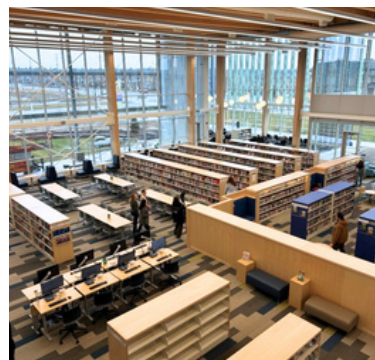


Photo Credit Cleveland Public Library, Oakville Public Library, Toronto Public Library.

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TABLE OF CONTENTS

3	EXECUTIVE SUMMARY
4	I. INTRODUCTION
5	II. THE LIBRARY OF TODAY
7	• The Library User of Today
10	• General Trends Shaping Library Use
15	III. LIBRARIES OF THE FUTURE
18	• Space and Design:
18	◦ Physical and Digital Expressions in Design
20	◦ General Built Environment Design Guidelines
24	◦ General Built Environment Design Themes
27	◦ General Digital Design Guidelines
31	IV. FUTURE SCENARIOS
31	• Four Futures Matrix
32	• 2029 By the Numbers
33	• Scenarios and Associated Policy Implementation Direction
37	V. CONCLUSION
38	ACKNOWLEDGEMENTS
39	BIBLIOGRAPHY



The Urban Libraries Council is an innovation and action tank of North America's leading public library systems. ULC drives cutting-edge research and strategic partnerships to elevate the power of libraries as essential, transformative institutions. Across the U.S. and Canada, nearly 200 member libraries rely on ULC to identify significant challenges facing today's communities and develop new tools and techniques to help libraries achieve stronger outcomes in education, workforce and economic development, and equity.

Library photos/images in this report were submitted by respondents to ULC's 2026 New Construction Survey.

Some data visualizations and charts were analyzed and developed by running datasets through OpenAI's Codex V24.04 and are labeled as such. All AI-assisted outputs, including code, calculations, and text, have been thoroughly reviewed, verified, and edited by the authors.

EXECUTIVE SUMMARY

The world we live in is being shaped by various agents of rapid change. This includes digitization, social fragmentation, and economic uncertainty. These changes all bring with them new pressures on the foundations of our social infrastructure, testing whether the promise of shared public life, opportunity, and belonging can still hold.

Public libraries have always been a living expression of their communities, reflecting local needs, history and aspirations, pressures, and possibilities. As our communities evolve ever more rapidly, avenues to make sense of and participate in the molding of future change become even more important.

Libraries are one of the few civic institutions that present the stability needed to help people navigate change together. The mission of the public library is therefore becoming more important, not less. This work presents a body of policy recommendations for ensuring that public libraries continue to serve their communities by meeting them at the highest point of need.

In this regard, this work focuses on the physical library space and its design as one of the most important elements for ensuring that libraries further establish themselves, moving from nice-to-have amenities to essential civic infrastructure. **This report begins by:**

- **Examining how patrons use library spaces, programs, and services today, alongside broader community trends shaping public life.**
- **It then uses those patterns to imagine what future patrons may need and expect from their public libraries.**
- **Finally, the report translates these insights into future library scenarios shaped by changes in patron behavior, physical space design, and digital infrastructure.**

KEY TAKEAWAYS

- Libraries remain trusted public institutions, but the public story must catch up to the full range of roles they now play.
- As third places become scarcer, libraries are becoming essential infrastructure for public life. To maximize potential, future library design should balance digital access with high-quality physical experiences in real life.
- Libraries can become agents for reducing social disconnection by creating places where people know how to participate, belong, and find their way. The future library should help people make sense of change, not simply keep pace with it.
- Technology should augment the library's human purpose, not replace it. The most successful libraries in the future will be both digitally advanced and unmistakably human.

I. INTRODUCTION

Libraries do more than connect people to information, libraries connect people to people through information.

The future-ready library must do three things at once: preserve its core commitments to equitable knowledge discovery, access and literacy; modernize service delivery through new advanced technologies and digital operations; and function as social infrastructure that strengthens community connections and reduces the feeling of social disconnection and disorientation. In this model, the library does not compete by controlling information; it leads by ensuring communities can access advanced tools and knowledge in a trusted, place-based public setting grounded in the history and context of the community (effectively moderating digital engagement and physical connection).

The “Future Scenarios: Library Space & Design” resource is designed as a policy roadmap to ensure public libraries remain essential social infrastructure in their service communities—both today and tomorrow. Drawing from observations of evolving general community trends (including socioeconomic and technological) and shifts in library usage, this resource presents recommended policy actions aimed at positioning public libraries to effectively navigate a changing world, be resilient and adaptive, and build public spaces that are responsive to the needs of tomorrow's patron.

As public libraries work towards future positioning, one major strategic challenge is evolution without mission drift.

In other words, how can future libraries expand from information provision to navigation, participation, and resilience while protecting the core identity and uniqueness of the library—making clear how libraries differ from civic centers and other public spaces and third spaces? In response to this classic challenge, this resource emphasizes the need for libraries to meet the emerging demand for digital technologies and flexible spaces, while actively representing the physical elements that reinforce the traditional promise of the library as places of knowledge, discovery, and literacy—blending digital and physical spaces through a “phygital” (physical AND digital) design approach.

This resource explores emerging patterns as they relate to public libraries, anticipates expected community needs, proposes governance strategies, space, and location design interventions, and explores future scenarios to help public libraries meet evolving demand and maintain community value and resiliency into the future.

“

“If the shelves are quiet and the rooms are full, the building is telling us what to do next.”

*Patrick Losinski, Senior Advisor Library Services, Gresham Smith
Library Director (Retired), Columbus Metropolitan Library*

II. THE LIBRARY OF TODAY

Libraries remain trusted civic institutions, but now operate at the intersection of rapid technological change, social fragmentation, and political pressure.

The value of the library is overwhelmingly accepted, and its versatile nature is visible in its ability to effectively modulate function to match the unique needs of the community.¹ The modern public library is to the community what many households build for themselves: a home bookshelf that reflects identity and memory, a study room for learning, an office for economic mobility, and a living room for connection and belonging. In that sense, libraries hold a community's past, support its present needs, and help prototype its future. They are open to all, representative of all, and uniquely positioned to translate change into shared opportunity.



Cincinnati & Hamilton County Public Library (USA), Downtown Main Library

Universal Perceptions of the Library

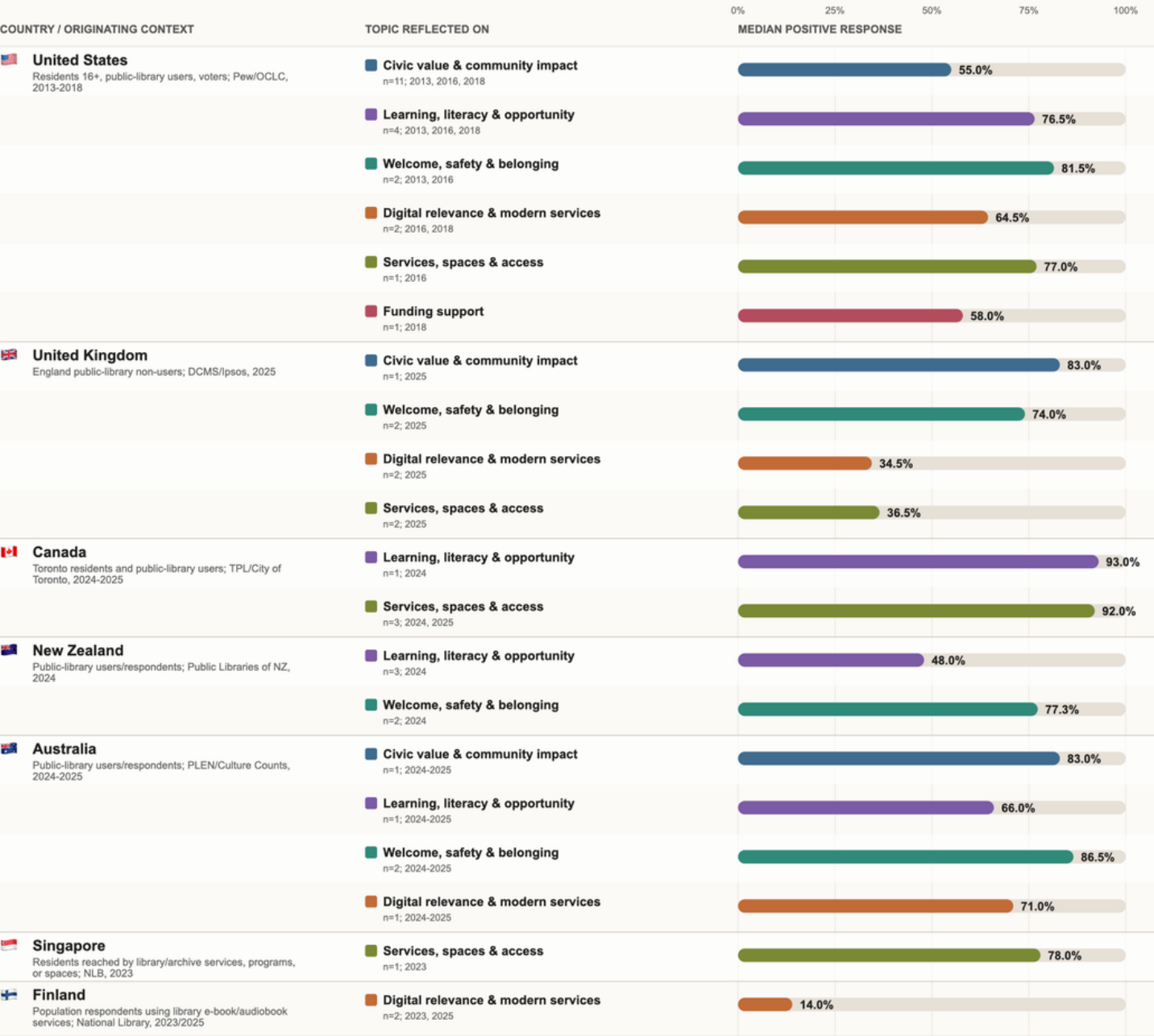
Across countries, perception data continues to show strong public trust; the larger risk is not relevance, but uneven awareness of how much today's libraries do in their communities. A review of public library perception data across the United States, Canada, the United Kingdom, Australia, New Zealand, Singapore, and Finland shows a consistently strong public mandate for libraries as essential social infrastructure: **in multiple contexts, large majorities associate libraries with literacy, community wellbeing, safety, opportunity, and local identity, while even non-users generally affirm their value.** The clearest emerging risk is not declining relevance, but uneven awareness of the full range of modern services libraries now provide—libraries have evolved, but the public perception has not caught up with these innovations and advancements.

¹ Based on community needs and demand, the Orange County Library System is adding two new branches planned around flexible, affordable, and community-specific service: media labs, study spaces, and dedicated rooms for nursing mothers and patrons. Similarly the DCPL recently renovated its Southeast Library in Washington DC with attributes informed by functional community driven design: a vibrant children's environment, skylights, careful noise gradients, flexible furniture etc.

Figure 1.

International Library Perception: What Respondents Were Reacting To

Topic/context map of curated survey statements. Use as directional evidence, not as a country ranking.



Notes: Survey questions, years, and populations differ by country; percentages are not directly harmonized. Bars show median positive response within each country-topic grouping. Flags are used as quick visual anchors; country/context text is included for accessibility and precision. Full statement-level detail is in the companion CSV.

Visual created using OpenAI's Codex.

THE LIBRARY USER OF TODAY

The typical library, at its core, embodies the public space ethos—a space capable of serving everyone in a community and effectively managing sometimes conflicting needs.² This versatility makes library offerings valuable to different groups in different ways, as each group or individual is largely able to customize their experience by taking advantage of the flexibility built into the library’s physical space, as well as all library program offerings—from parents utilizing the library for early childhood events, to teens and young adults utilizing media rooms and multimedia services, and young professionals reserving rooms for video conferencing meetings. We have also seen library use evolve over the years, modulated by community and patron demand, technological advancements, and changes in formats of information sharing and transfer.

Today, public library usage is evolving even more rapidly. Library users are engaging with library programs and services differently from how they did before. But libraries are not unique in this experience. Over the past few years, the way people move through the built environment has undergone and is undergoing immense rearrangement. Examples include **stagnation in office space usage** (Figure 2) across most major U.S. metropolitan areas, as well as **increased demand for flexible spaces** (Figure 3) across the U.S. and Canada—leading to a situation where supply cannot keep up with demand. The pandemic-induced rapid digitization of processes and interactions has compressed behavioral and organizational change that should normally take years into a shorter adoption period, leading to nuanced realities and outcomes.³



Cleveland Public Library (USA) - West Park

² William H. Whyte's *The Social Life of Small Urban Spaces* provides the underlying public-space logic: successful places work because they layer multiple generators of use, including sittable space, food, street visibility, pedestrian flow, and “triangulation,” where an external stimulus creates social interaction among strangers. Whyte’s framework supports the need to design public spaces for multiple uses and users at once, rather than treating them as single-purpose environments. *The Social Life of Small Urban Spaces* (New York: Project for Public Spaces, 1980), 8, 24, 50, 54, and 94.

³ Neubaum et al. find that COVID-era digital skill gains were uneven by age, gender, and education, reinforcing second-level digital divides. See German Neubaum et al., “A Pandemic for the Good of Digital Literacy?,” *arXiv*, 2025, <https://arxiv.org/abs/2504.13852>.

Figure 2.

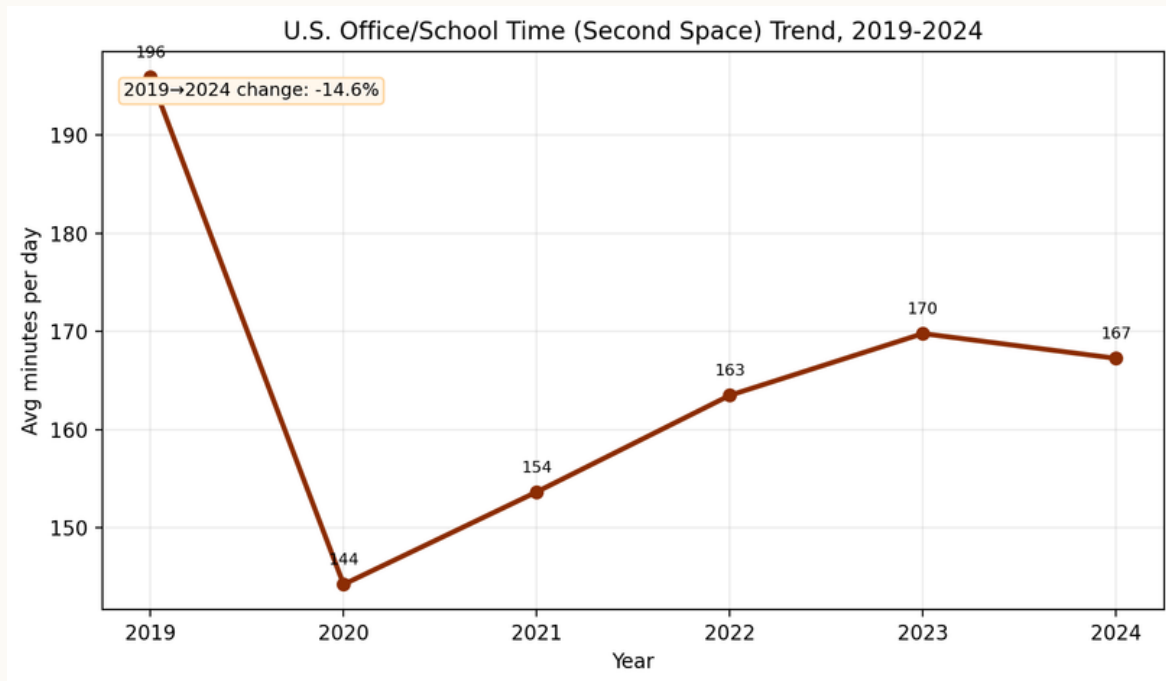


Figure 3.

Flexible Space Demand Is Outpacing Supply

U.S. and Canada flexible-workspace signals support demand for adaptable, bookable, high-convenience third spaces.

■ Demand growth ■ Supply growth

1. North America overall: demand growth exceeds supply growth

Demand vs. pre-pandemic



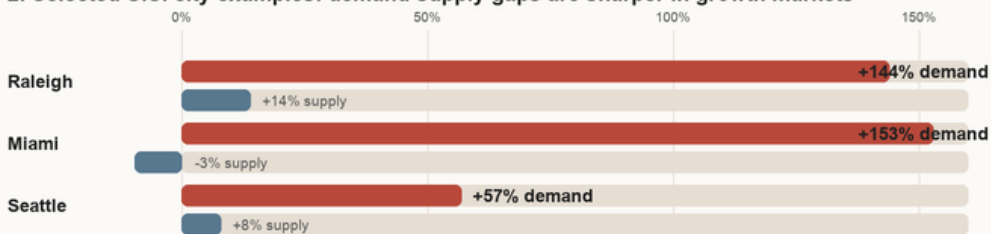
Supply vs. pre-pandemic



Demand is growing more than twice as fast as supply.

This gap suggests scarcity for flexible, reservable, technology-enabled space, especially outside traditional office cores.

2. Selected U.S. city examples: demand-supply gaps are sharper in growth markets



3. Demand is also shifting toward suburban and bookable-use formats

Fairfield County, CT

+38% demand, 2019-2024

Morris County, NJ

+33% demand, 2019-2024

Meeting-room searches

+79% in the past year

Report use: These indicators do not measure library demand directly; they show a broader user preference for flexible, nearby, reservable spaces that libraries can respond to through adaptable rooms, meeting spaces, and technology-supported booking.

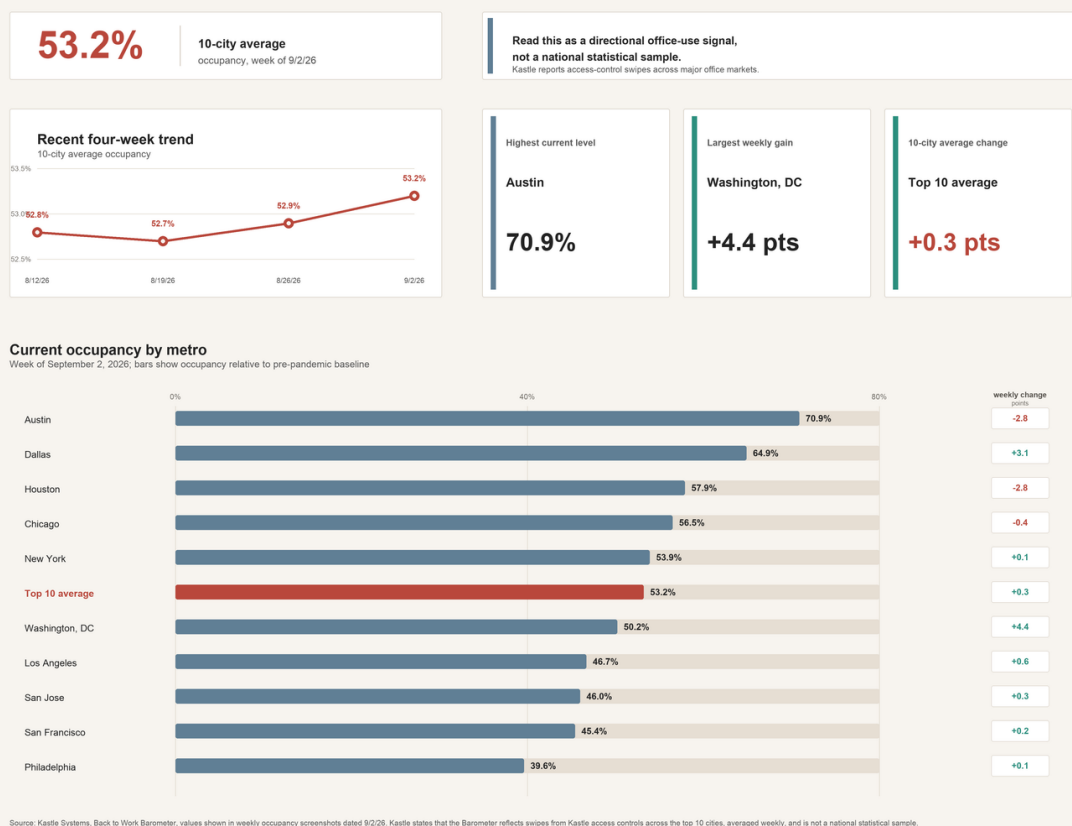
Source: The Instant Group, "Flexible Workspace Enters a New Era: What's Driving Demand in the U.S. and Canada?" June 3, 2025.

Visual created using OpenAI's Codex.

Figure 4.

Office Occupancy Is Holding Near Half of Pre-Pandemic Levels

Kastle Back to Work Barometer, week of September 2, 2026



For libraries, this has led to an acceleration of previously observed trends related to patron engagement with library programs and services, and changes in the nature of patron discovery. In today's library, more patrons are seeking personalized digital experiences and access to advanced tools, valuing shared physical space supported by flexible design that enhances group and human interaction, but also provides options for privacy.⁴

“

“Defined spaces matter: lactation rooms, innovation rooms, veteran services, teen spaces. These are not extras; they are how libraries meet real life.”

Roosevelt Weeks, Library Director, Fort Bend County Libraries

⁴ Ben Hillier argues that how people use space is a reflection of larger associated societal realities; he states “Culturally and socially, space is never simply the inert background of our material existence. It is a key aspect of how societies and cultures are constituted in the real world, and, through this constitution, structured for us as ‘objective’ realities”. “Encountering, congregating, avoiding, interacting, dwelling, teaching, eating, conferring are not just activities that happen in space. In themselves they constitute spatial patterns”. Bill Hillier, *Space Is the Machine: A Configurational Theory of Architecture* (Cambridge: Cambridge University Press, 1996).

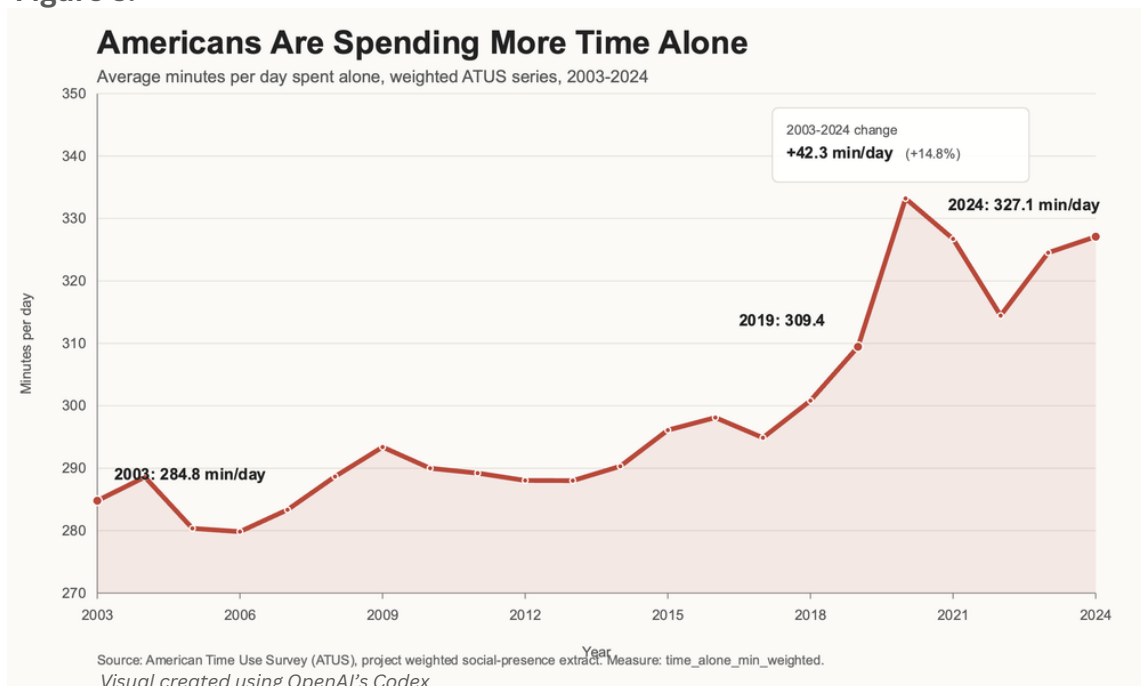
GENERAL TRENDS SHAPING LIBRARY USE

The in-depth understanding of these interrelated realities is important in itemizing new and evolving community needs and the role public spaces like the library play in responding to these new community demands. General trends show that:

1

In the United States, there has been a gradual decline in social connectedness for decades. Time spent alone by Americans increased significantly from 2003 to 2020, while time spent on in-person social engagements decreased. However, after a brief decline, this trend has begun to accelerate over the last few years as remote work and digital business processes and digital social interactions take center stage—contributing to what the former U.S Surgeon General describes as an epidemic of loneliness.

Figure 5.



A further byproduct of spending less time together is that social connection becomes less practiced: people may have fewer opportunities to belong, but also the competencies and habits required to participate in belonging.⁵

⁵ Kelly-Ann Allen's work on belonging frames belonging as something supported by both conditions and capabilities; libraries provide both by offering repeated, low-barrier opportunities for shared activity.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC8095671/>

DC Public Library’s 2026 strategic plan, IRL (In Real Life), offers a timely example of a major urban library system responding directly to digital saturation and social isolation by centering meaningful in-person experiences, belonging, joy, and resilience as core library outcomes.⁶

②

At the same time, widening economic uncertainty is increasing demand for free, trusted public infrastructure: United For ALICE (Asset Limited, Income Constrained, Employed) estimates that 41% of U.S. households were below the ALICE Threshold in 2024, while Federal Reserve data show that more than one-third of adults could not cover a \$400 emergency expense with cash or its equivalent.⁷ In this context, libraries play an increasingly important economic mobility role by providing no-cost access to technology, workforce support, small-business resources, benefits navigation, and spaces for learning without the cost barriers attached to many other civic or commercial environments.

③

The most recent ULC Library Insight Survey (LIS) shows significant changes in media used by library patrons to access information. For example, in 2019, average usage of e-resources was 47% of 2025 levels. LA County Library e-resource usage increased 95% from 2019 to 2025. At the same time, reservable room usage has become increasingly popular—up by 57% in 2025 compared to 2019 levels. Indications show that these trends are likely to continue well into the future. In addition, the demand for a variety of digital information sources including AI platforms continues to rise, as well as the preference for flexible, reconfigurable, shared, and personal spaces.⁸

⁶ District of Columbia Public Library, *IRL (In Real Life): Strategic Plan* (Washington, DC: DC Public Library, 2026), 2, 4, 10, 14. The plan emphasizes meaningful in-person experiences, physical and social infrastructure, digital wellness, and the idea that “The Space is the Service.”

⁷ The ALICE Threshold is derived from a Household Survival Budget covering essentials such as housing, child care, food, transportation, health care, technology, and taxes. United For ALICE, “Methodology,” United Way of Northern New Jersey, accessed July 9, 2026, <https://www.unitedforalice.org/methodology>.

⁸ The [Frisco Public Library case study](#) by CTG UAlbany shows this demand in practice: FPL was selected as a case because it offers extensive AI education, including hands-on workshops using tools such as ChatGPT and Canva, AI pop-ups, AI Maker Kits, and classes on topics ranging from prompt writing to online safety and career planning with AI. The case also shows that this demand is operational, not abstract: FPL reported strong attendance, averaging about 20 participants per class, and staff described plans to expand AI programming into existing classes, coding, data science, teacher workshops, and more advanced generative-AI applications.

In response, libraries are working to meet this soaring demand, but challenges related to limited budgets and resources are ever present. This has led to challenges in expanding digital offerings to effectively meet demand: most major library systems are recording increased wait times for e-books and audiobooks—a combination of patron usage and unsustainable pricing models from publishers.⁹

In addition, libraries have to contend with the rising demand for flexible spaces and reservable rooms amidst aging infrastructure and increasing construction costs—[Government Accountability Office \(GAO\)](#) data shows a structural capital squeeze in the United States: over 7 in 10 libraries report construction costs and funding as major barriers, while 92% needed repairs in the last five years.¹⁰ At the same time, LIS data shows that average construction costs went up from an estimated \$695 per square foot in 2023, to an estimated \$808 in 2024 (a 16.3% increase in just over a year).

4

A new generation of library users is emerging with unique needs. An [ALA report](#) published in 2023 shows that out of the Millennial and Gen Z respondents surveyed, 53% visited the library in the last 12 months, while 52% reported borrowing a book from the library’s digital collection—encouraging insights suggesting that younger populations still actively engage with the library.¹¹ 23% have visited the library in the last 12 months but do not identify as readers. Lastly, 75% of the survey respondents (Gen Z and Millennials) believe that a wait time of one week for digital resources is too long of a wait. Considering that this population group currently represents 43% of the U.S. population, libraries seeking to define future success and relevance should consider designing future operations to intentionally engage this and other groups, while addressing current demand gaps.

5

Researchers are warning that the U.S. is experiencing a “reading recession” as children continue to lose ground in reading skills and math.¹² Results from the most recent nations report card exam shows further declines in reading and math scores from pandemic levels (with the exception of 4th grade math).

⁹ In 2023, the libraries surveyed in the LIS (n=91) had an average wait time of over a month for e-books and audiobooks

¹⁰ U.S. Government Accountability Office, GAO-26-107262, public-library building conditions survey data, survey items Q14 and Q24. Q24 reports the share of libraries needing maintenance/repairs in the last five years. Q14 reports challenges to addressing maintenance/repair needs; figures cited combine “Moderate” and “Major” response categories.

¹¹ Gen Z and Millennials How They Use Public Libraries and Identify Through Media Use: <https://www.ala.org/sites/default/files/advocacy/content/tools/Gen-Z-and-Millennials-Report%20%281%29.pdf>

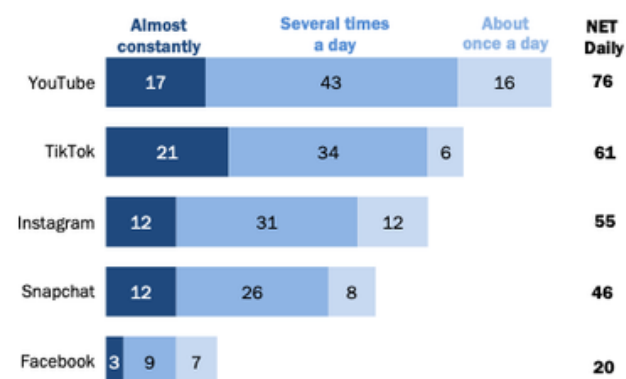
¹² Kids are in a ‘reading recession,’ as test scores continue to decline: <https://apnews.com/article/reading-math-test-scores-education-scorecard-7fa4111ad0de934f664ebb984e830d13>

One explanation is the decline in the number of young students who read for enjoyment as shown [by a 2022 survey](#), as well as the rise in hours spent by teens on digital devices. PEW [reports](#) that nearly one in five teens are on YouTube or TikTok almost constantly.¹³

Figure 6.

Most teens visit YouTube and TikTok daily, including about 1 in 5 who say they do almost constantly

% of U.S. teens ages 13 to 17 who say they visit or use the following apps or sites ...



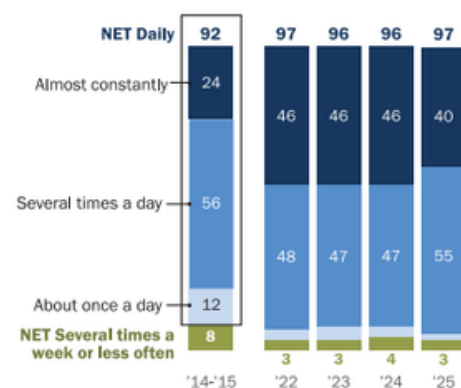
Note: Figures may not add up to NET values due to rounding. Those who did not give an answer or gave other responses are not shown.
Source: Survey of U.S. teens conducted Sept. 25-Oct. 9, 2025.
"Teens, Social Media and AI Chatbots 2025"

PEW RESEARCH CENTER

Figure 7.

4 in 10 teens say they're online 'almost constantly,' up from 24% a decade ago

% of U.S. teens ages 13 to 17 who say they use the internet ...



Note: Figures may not add up to NET values due to rounding. Those who did not give an answer are not shown.
Source: Survey of U.S. teens conducted Sept. 25-Oct. 9, 2025.
"Teens, Social Media and AI Chatbots"

PEW RESEARCH CENTER

At the same time, there is growing consensus that children's access to digital devices should be delayed until they reach a certain level of maturity. New laws that govern children's access to mobile devices and social media platforms are being explored in the U.S., Canada, UK, and Australia, among other countries.¹⁴ Given the library's design as a safe space for all, there is an opportunity to position libraries as the healthy alternative for introducing youth to the digital world in a moderated, safe place-based setting that also provides experiences that foster reading for enjoyment.

¹³ Michelle Faverio and Olivia Sidoti, "Teens, Social Media and AI Chatbots 2025," Pew Research Center, December 9, 2025, <https://www.pewresearch.org/internet/2025/12/09/teens-social-media-and-ai-chatbots-2025/>.

¹⁴ Across the United States, Canada, UK, and Australia, policymakers are increasingly restricting student access to personal digital devices during the school day. The trend is strongest for mobile phones and smart devices, not school-issued learning technology. Australia has implemented restrictions across all public schools; England is putting mobile-phone guidance on a statutory footing in 2026; and the U.S. and Canada are moving through state/provincial laws, directives, and district-level policy. These policies generally do not ban all technology in schools. They mostly target personal phones, smartwatches, social media access, and non-instructional device use, while preserving exceptions for learning, disability accommodations, health/medical needs, and emergencies.

In response to these challenges, today's library must prepare for tomorrow's patron by exploring new and innovative approaches in meeting evolving community demand, while strengthening social infrastructure in local communities. Using space and function, libraries are uniquely positioned to help facilitate social contact that significantly enhances the development of tangible connections, while reducing the likelihood of social isolation. Libraries are also positioned to provide patrons of all ages an experiential discovery process that aligns with the current digital preference of information access (in terms of format, speed, and interactivity), as well as access to advanced digital tools and technologies.

“

“Future-ready libraries have to be designed from the patron experience outward: flexible enough to change, accessible enough to welcome everyone, and open enough to keep serving the community as needs evolve.”

Hannah Terrell, Director of Libraries, Austin Public Library



Austin Public Library (USA), Central Library

III. LIBRARIES OF THE FUTURE

The future-ready library must do three things at once: preserve its core commitments to equitable information access and literacy, modernize delivery through advanced technologies, AI, and digital operations, and function as social infrastructure that strengthens community connection and reduces social disconnection and disorientation.

How can libraries remain responsive and adaptive while building public spaces that are ready for the world ahead? This section explores developing policy guidance for the library of the future in response to the evidence compiled about today's library user. Its purpose is to clearly outline practical policy pathways for library leaders as patron behavior, information access, technology, work patterns, and community needs continue to evolve.

To better ground the recommended policy pathways, we focus primarily on the physical and digital space needs of libraries (phygital needs) and their design. This focus is intentional since it is inside the library buildings where many of the pressures observed in the earlier sections converge. Demand for reservable rooms, flexible work and study areas, youth and family spaces, digital navigation support, creation and media spaces, quiet retreat, and community convening all place new expectations on the built environment. Future-ready libraries therefore need physical spaces that can flex across uses, support different levels of social interaction and privacy, and make the discovery of information feel legible, welcoming, and participatory.



Cleveland Public Library (USA) - Martin L King, Jr. Campus

While technology has improved information flow by enabling digital access through the internet, information access through the library has always been firmly rooted in its added value—**the discovery journey and the experience of navigating various sources of information, in a defined physical space, through various media, alongside other community members.** Given the high information exposure levels of today's world, there is an opportunity for the library of the future to be positioned as a moderator of the ever-growing information stream. At the same time, as libraries provide the physical space for this moderation, they should provide seamless access to information through a user-defined, customized information discovery journey.

We have identified three areas for libraries to explore:



Ensure that patrons of different ages and backgrounds are able to access all forms of information in a safe setting, using the most advanced technologies and tools, enhanced and supported by the flexible design of library spaces, and augmented by library services, programs, and resources that ensure information standards and quality. This includes high-demand consumer-facing resources such as e-books, e-audiobooks, and digital magazines; more specialized access to journals, research databases, and trusted reference materials; and AI tools and technologies.

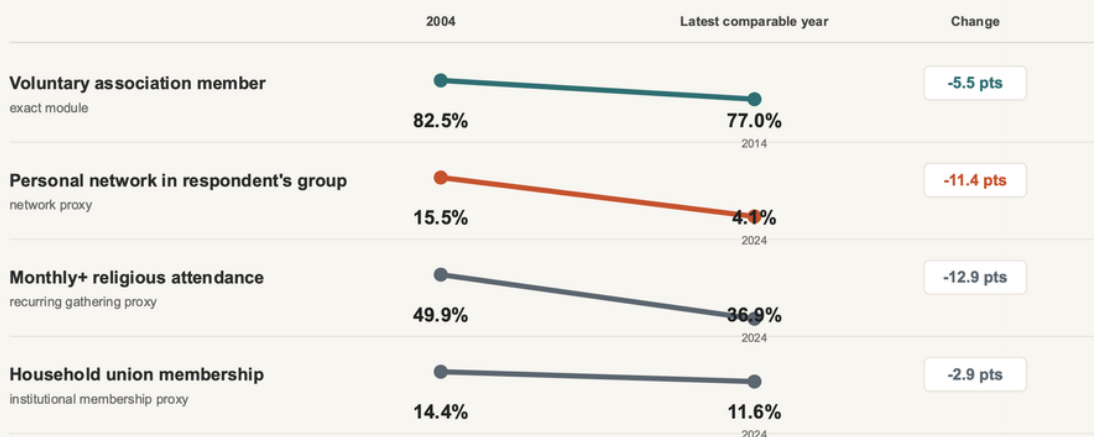


Provide avenues for user-defined, customizable experience of discovery encouraged by intentional, flexible design, immersive technologies, and interactive community designs that encourage social mixing and group interactions. This requires reconfigurable rooms, visible service points, strong acoustical design, technology-enabled meeting spaces, and layouts that allow the building to change throughout the day, week, and year without requiring major renovation. This effectively improves the quality of the information discovery process, while building social capital through encouraging social mixing and social interaction. This also positions the library as a facilitator for the development of social capital and shared group identities that carry on beyond the walls of the library and into the community, positioning the library's public space as a place that builds community and effectively tackles social isolation and loneliness.

Figure 8.

GSS Indicators Point to Weaker Formal Group Affiliation

Exact voluntary-association data are comparable through 2014; broader affiliation proxies extend to 2024.



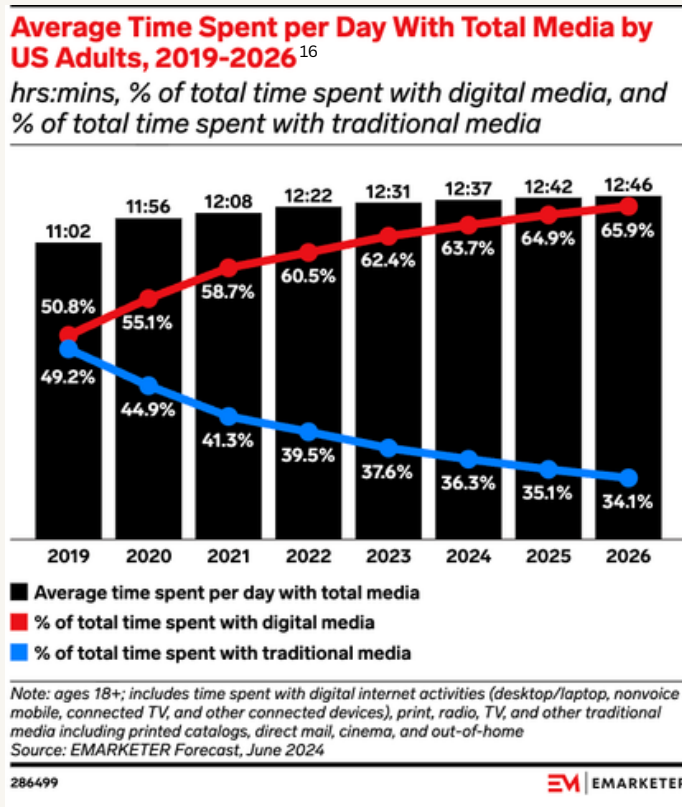
Source: General Social Survey 1972-2024 Release 3. Weighted shares among valid responses; post-2021 weights use WTSSNRPS where WTSSALL is unavailable.
Visual created using OpenAI's Codex.



Provide library users with the tools needed to moderate the waves of information exposure and social interaction—ensuring people feel like they are active participants in curating and customizing their experience. This is achieved by giving the user high autonomy, making them feel seen and recognized, and having their voices heard; effectively achieving privacy without anonymity.

The library of the future should aim to reduce disorientation by helping patrons locate themselves in both physical and digital life: clear wayfinding, visible service points, understandable program pathways, trusted staff guidance, privacy-respecting digital tools, and spaces that let people choose between retreat, learning, work, and social participation. In this sense, legibility is not only a design principle, it is a belonging strategy. A library that helps people understand where they are, what is available, how to participate, and how their own identity is reflected in the space reduces disorientation and strengthens the feeling that the community is readable, navigable, and shared.¹⁵

Figure 9.



¹⁵ Kevin Lynch argued that people form emotional connection to places when those places can be read, navigated, and mentally mapped; when environments are illegible, people experience disorientation, anxiety, cognitive overload, loss of control, and detachment. Kevin Lynch, *The Image of the City* (Cambridge, MA: MIT Press, 1960).

¹⁶ eMarketer. "Average Time Spent per Day With Total Media by US Adults, 2019-2026." EMARKETER Forecast, June 2024. <https://www.emarketer.com>.

LIBRARY OF THE FUTURE: SPACE AND DESIGN

Like most public spaces, a major defining attribute of the public library is its location and physical presence. The façade signals a unique use compared to neighboring buildings (historic or modern) and makes a noticeable presence in bulk and mass—making mischaracterization highly unlikely.

Libraries are also usually [strategically located](#) to prioritize and maximize access. This specific design attribute is carried through into the indoor library space itself—welcoming spaces that invite the user or patrons to engage in an experiential journey of information discovery, large windows and viewpoints that connect the activities on the streetscape or open space to that in the library, creating a continuous experiencing of public space or what Jane Jacobs refers to as “eyes on the street.”¹⁷

Phygital Expressions in Design

Going by today’s user demand and the rapid evolution of technology, tomorrow’s library should seek to design, provide, and maintain spaces that enable seamless technological integration and upgrades, at the same time grounding users in the uniqueness of the library’s physical element—effectively balancing digital access with physical connections in real life.

A few examples of how libraries are currently merging physical and digital offerings and elements include:



Emerging libraries are blending smart digital infrastructure with flexible, human-centered spaces, allowing patrons to register for programs, reserve rooms and equipment, access Library of Things collections, and move between online and in-person services more easily.

Orange County Library System linked branch expansion with media labs, study rooms, and inclusive support spaces (including sensory/nursing accommodations), while maintaining human service pathways for users who prefer non-digital interaction. Howard County Library System offers another useful example, with online room reservations across branches and catalog-based access to nontraditional resources such as DIY learning materials.¹⁸

¹⁷ Jane Jacobs argues that safe, lively streets depend on “eyes upon the street,” meaning the informal public oversight created by residents, shopkeepers, pedestrians, and everyday sidewalk activity. See Jane Jacobs, *The Death and Life of Great American Cities* (New York: Random House, 1961), 35.

¹⁸ Howard County Library System [catalog example](#) for DIY Education Center / Library of Things-style resources

- ➔ DC Public Library’s 2026 strategic plan reinforces this direction by **treating the library’s physical campus as social infrastructure**: modernized neighborhood libraries, welcoming community spaces, digital wellness programs, and wellness-oriented design are presented as tools for helping residents reconnect, navigate technology, and build real-world belonging.
- ➔ Toronto Public Library’s capital planning approach ties **service-delivery models to spatial programming**, including virtual interview-room concepts and integrated community service functions.
- ➔ Yale Library’s Digital Humanities Laboratory integrates a **place-based research environment with advanced digital technologies** (consulting, text/data methods, machine-learning applications), supported by staff expertise and material objects, balancing the digital and the analog.
- ➔ Design practitioners also generally reinforce the same principle: the need to prioritize adaptable room ecosystems, interactive programming, and branch-specific customization over fixed or generalized designs.¹⁹

“

“The future branch has to be a media lab, a study room, a community room, and a human service point all at once.”

Steve Powell, Director & CEO, Orange County Library System



Cambridge Public Library (CAN) - Southeast Galt Recreation Complex & Library

¹⁹ HCL Facility Master Plan; <https://g4arch.net/portfolio/hennepin-county-library/>

General Built Environment Design Guidelines

Based on current and future user demand, there are important features to consider when reconfiguring existing or designing new libraries for future library users. The following technical guidance translates current demand signals into professional design priorities.

1. **Library as anchor tenant in mixed-use developments:** treat libraries as civic anchors capable of restoring everyday foot traffic and public purpose to malls, big-box sites, and mixed-use retail districts where traditional anchors have weakened.^{20 21}
 - a. Co-location with community centers and civic services: where libraries are included in civic redevelopment, community-center, recreation, health, workforce, or public-service projects, they should be planned as the legible public front door of the development rather than a secondary tenant.²² Design criteria should preserve visible ground-floor access, an independent library identity, shared but governable meeting and event rooms, and clear circulation between library, community-center, residential, and service components.
 - b. Affordable-housing and mixed-use integration: when libraries are embedded in affordable-housing or neighborhood-redevelopment projects, they should function as shared social infrastructure for both residents and the surrounding community. The design should address separate security and after-hours access, acoustic separation, durable public entries, youth and family learning adjacencies, digital navigation and workforce-support spaces, and governance agreements that protect the library's open-to-all mission while leveraging the development's resident base.^{23 24}

20 Anne Arundel County Public Library's Discovery Branch is a mall-based library that expanded from an initial storefront/pilot into a larger branch and event-space model, becoming one of the system's strongest programming locations. A similar example is Milwaukee's new Capitol Library branch in a former Walmart at Midtown Center, alongside broader redevelopment activity and nearby affordable housing.

21 ULC research shows that central libraries are helping restore vitality to downtowns where office attendance and traditional foot traffic have weakened, noting that flagship libraries collectively represent more than 215 million square feet of free indoor public space, serve nearly one-third of the U.S. population, and generate spillover visits to nearby cafés, restaurants, stores, cultural venues, and other neighborhood attractions before and after library visits. The analysis also cites Washington, DC's Martin Luther King Jr. Memorial Library as attracting more than 650,000 downtown visits in 2023, with one event drawing 6,500 people.

22 The Executive Office of the Mayor of Washington D.C. [announced plans](#) for a New Community Center, Library, and Housing at Chevy Chase Civic Site in Ward 3. The release describes a public-land redevelopment combining a modern library, community center, public space, and mixed-income housing.

23 Elected officials are increasingly seeing the value libraries play to redevelopment and revitalization. In his speech at the opening of the new Johnston Square branch of the Enoch Pratt Free Library, [Baltimore Mayor Brandon Scott said](#): "When we talk about Baltimore's Renaissance, projects like this one are exactly what we're talking about: 100 affordable homes and the first new branch of the Enoch Pratt Free Library in 15 years. This building will be an incredible resource for all of East Baltimore...With the support of so many of our partners, we are delivering on a future for our city that benefits all of our residents, especially those that have faced intentional disinvestment for generations."

2. **Flexibility and adaptability:** creating a space that encourages shared usage, community ownership, but at the same time presents an opportunity for a retreat to privacy.
- a. Prioritize flexible space where necessary, emphasize sustainable design practices across all design elements.
 - b. Accessible flexibility: treat accessibility as a core condition of adaptable library design, not a separate compliance layer. Flexible rooms, clear circulation, natural light, varied seating, private and semi-private spaces, assistive technology, and easy access to digital tools should allow patrons with disabilities to fully participate in quiet study, collaboration, programming, digital access, and community life.
 - c. Reconfigurable room ecosystems: treat reservable rooms as core infrastructure, with movable furniture, flexible power/data, and rapid conversion across tutoring, telework, telehealth, creation, and convening uses.
 - d. Acoustic gradients: replace one-size-fits-all silence models with intentional noise transitions across floors and zones, enabling both social activity and focused study within the same branch.



Anne Arundel County Public Library (USA), Discoveries: The Library at the Mall

24 As another example, the City of Milwaukee is moving forward to replace the Capitol Library branch, planning to open the new branch in a retail complex space formerly occupied by a Walmart, with the spokesperson for Mayor Cavalier Johnson stating that this move “will be a valuable addition to the Midtown neighborhood.”

- e. Human-scale legibility and invitation: design entries, thresholds, and interior circulation to be immediately understandable, with active edges that encourage optional participation and longer dwell time.
- f. Inclusive and sensory-aware design: provide visible accessibility, sensory-sensitive areas, family support rooms, and varied seating typologies that preserve dignity, choice, and comfort for different users.
- g. Climate and lifecycle performance: embed low-carbon materials, resilient systems, and maintainable assemblies that reduce long-term operating strain under budget constraints.
- h. Climate action and resilience: treat climate readiness as a core dimension of adaptable library design, pairing low-carbon materials and energy-use reduction with extreme-weather readiness, building-level resilience, simple tracking of emissions, energy use, and costs.^{25 26}
- i. Operational realism: ensure design choices reflect staffing models, maintenance capacity, and phased modernization needs, so built solutions remain sustainable after opening.
- j. Community-specific emphasis: position branch layouts and program mix to highlight local demographics, mobility patterns, and neighborhood identity rather than applying a single standardized template.
- k. Civic identity through place: use architecture, materials, physical collections, and interpretive elements to express local history and reinforce the library as shared public memory and future civic platform.²⁷

“

“Adaptive reuse is not just about filling space; it is about meeting families, teens, and adults in their daily lives.”

*Skip Auld, Chief Executive Officer,
Anne Arundel County Public Library*

²⁵ King County Library System, “Climate Action Plan,” adopted January 2025, accessed July 28, 2026, <https://kcls.org/climate-action-plan/>. KCLS describes its plan as a framework for reducing emissions, tracking greenhouse-gas and energy-use benchmarks, preparing for extreme weather, strengthening library buildings, and using a dashboard to evaluate energy, emissions, and cost reductions over time.

²⁶ Broward County’s 2025 Resilience Plan reinforces the need for libraries to be designed as climate-ready civic infrastructure, with stormwater, heat, flood, and continuity-of-service resilience built into future facilities. <https://www.resilientbroward.com/>

²⁷ Vitruvius ties architecture to locality: buildings should use locally available materials and take their form from regional site and climate (Vitruvius, *De Architectura* II.1, VI.1).

3. **Phygital integration:** digital discovery, AI assistance, and online service channels should be spatially supported by coaching points, reservable rooms, and collaborative zones.

- a. Consider layered service zones: placing high-assistance functions (digital navigation, AI support, workforce services) along primary paths, while locating deeper quiet zones for concentration and low-interruption use.
- b. Human fallback by design: preserve walk-up, face-to-face support for high-friction tasks (forms, verification, benefits navigation, AI interpretation and general technology assistance), especially for older adults and digitally hesitant patrons. Maintain visible staff stewardship, staff presence, and approachable support points in high-use zones to improve trust, safety, and service conversion.
- c. Digital-physical continuity: in-branch wayfinding, booking, and discovery should mirror online user journeys so patrons can move seamlessly between remote and in-person use modes.
- d. Design ready for technological evolution in digital devices for space management, future computing, WAPs, advanced LANs, immersive technologies, cloud computing, centralized computing, virtual desktop infrastructure/machines, cloud-based workspaces, etc.
- h. Infrastructure readiness for technology evolution: design baseline capacity for periodic upgrades in connectivity, AV, computer, and device ecosystems without disruptive full-scale retrofits.



Cleveland Public Library (USA), Rockport Branch

General Built Environment Design Themes

The guidelines below translate the concepts above into deployable active library space planning design interventions.

Guideline	Why It Matters	Design Interventions	Precedent Projects
Design for networked civic nodes, not standalone building sections	Libraries perform best when spaces are physically linked to one another, including complementary uses such as parks, schools, transit, and neighborhood retail activity.	Prioritize sites with pedestrian catchments and layered adjacency; design entrances to face active public routes.	<u>The Indian Creek Library</u> (Olathe Public Library*) connects to a citywide trail network, as well as a multi-generational public park and playground.
Program for multigenerational simultaneous use	Resilience grows when children, teens, workers, and elders can all find relevant uses in the same facility.	Use parallel activity bands: early-learning, teen media/creation, workforce rooms, and social seating zones.	<u>The Dayton Main Library</u> * incorporates a wide range of performance and gathering spaces, from a 300 seat amphitheater, to an "out of the box" white box theater, to multiple recording and creation spaces.
Treat flexible rooms as core infrastructure	Demand data shows reservable rooms are now foundational service channels, not supplemental amenities.	Increase room count/variety, simplify booking, and support rapid conversion between meeting, study, and coaching formats, group/individual use	<u>Spokane Public Library's* the Hive Branch</u> includes multiple gathering and studio spaces reservable by the public on an hourly, monthly, or seasonal basis.
Build a visible stewardship layer in public-facing space	Belonging and safety are social outcomes produced by people, not only by architecture.	Embed ambassador/greeter/help roles and partnerships with trusted local organizations in high-use zones.	<u>The Dayton Main Library</u> * includes dynamic opportunity spaces on each corner of the block-long library, creating a dynamic, rotating, and flexible public-facing partnerships, which have included arts residencies, summer camps, and performances.

(Continued on next page.)

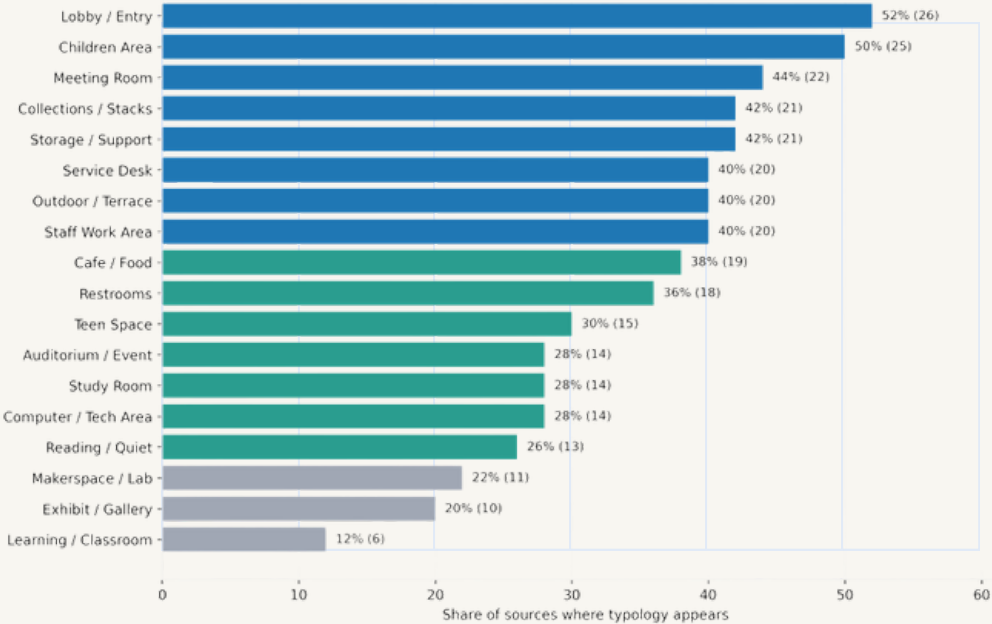
* Denotes ULC Member Library

(Continued)

Guideline	Why It Matters	Design Interventions	Precedent Projects
Design active edges and dwell spaces along circulation paths	Comfortable, observable edges convert pass-through movement into social contact and repeat visitation.	Add shaded seating, micro-plazas, transparent facades, and threshold zones at entries and sidewalk edges.	<u>The Yorba Linda Library and Cultural Arts Center</u> unites multiple civic functions into a shared campus which includes a unifying paseo with smaller outdoor "rooms," as well as a community amphitheater activated through multiple indoor-outdoor connections.
Use inclusive, trauma-aware public-space detailing	A space can be open yet still exclusionary if comfort, dignity, and choice are poorly supported.	Provide varied seating types, sensory-sensitive zones, stroller/wheelchair-friendly routes, and accessible rest points.	<u>The Storybook Play Spaces</u> at Santa Clara County Library District's* branches support a wide range of activity within children's spaces for both kids and caregivers alike. Varied seating, activities, and spaces are animated by shared themes of discovery and enchantment.
Integrate indoor and outdoor program loops	Community life is not confined to either interior rooms or exterior open space; value comes from movement between both.	Pair interior rooms with adjacent outdoor program zones for reading, youth activities, performances, and informal learning.	<u>The Marksbury Family Branch</u> of the Lexington Public Library* integrates an indoor and outdoor paseo which creates flexible, dynamic spaces for community gathering and celebration through both programming and a community arts gallery.
Design for participation, not just occupancy	Social infrastructure works when people do things together, not simply when they are co-located.	Allocate staff and calendar capacity for recurring participatory programs, co-design sessions, and place-based partnerships.	<u>The Cincinnati & Hamilton County Public Library's* Downtown Main Library</u> , renovated in 2024, integrates a new outdoor public square with a reinvented five-story atrium. A generous social staircase connects all public floors of the building while creating a community square for informal daily use, monthly concerts, and city-wide gatherings including author events.

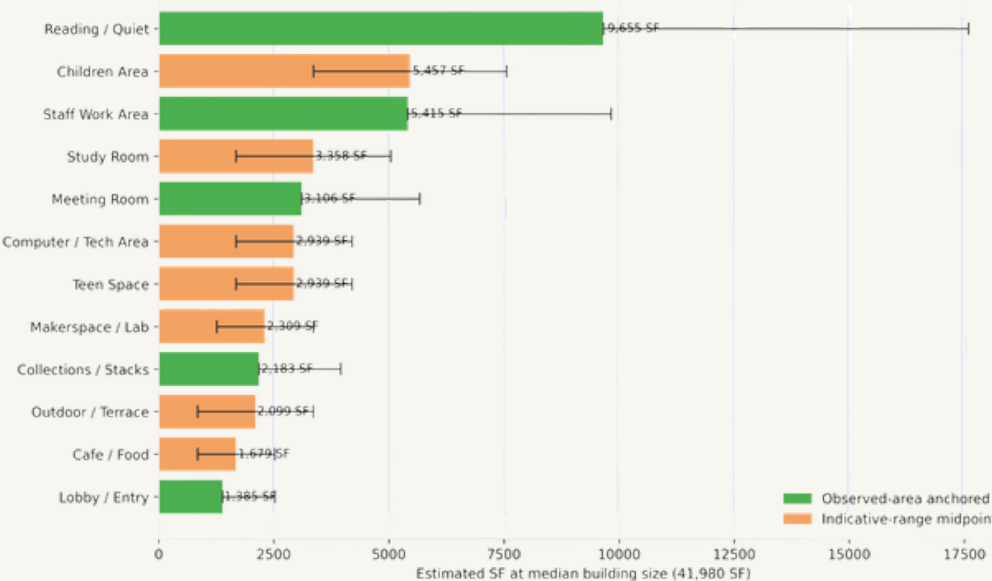
* Denotes ULC Member Library

Figure 10. Typology Frequency Across Sample (n=50 sources)



This chart shows how often each space type appears across a sample of branch construction floor plans for 50 library planning and design sources in U.S. and Canada. Lobby/entry (52%), children’s areas (50%), meeting rooms (44%), and collections/stacks (42%) are the most frequent, highlighting a consistent design pattern that blends core library functions with community-focused, flexible use spaces.

Figure 11. Average Square-Footage by Typology (Observed + Indicative Estimates)



This chart estimates the typical square-footage allocation of recurring library space typologies using a median building-size anchor of 41,980 SF. The analysis shows that reading/quiet areas, children’s areas, staff work areas, study rooms, and meeting rooms represent some of the most space-intensive typologies in contemporary branch planning. The findings reinforce the need for libraries of the future to balance traditional library functions with flexible, reservable, technology-enabled, and community-oriented spaces.²⁸

²⁸ Square-footage values are directional estimates normalized to a median library building size of 41,980 SF. Green bars are anchored to observed area-share data from source plans or area tables. Orange bars are indicative midpoint estimates based on low-to-high planning ranges assigned from recurring typology evidence. Whiskers show the low and high ends of each typology’s estimated range when mapped to the same median building-size anchor.

General Digital Environment Design Guidelines

Current data from the U.S. and Canada show that some households and families still lack access to a computer and the internet. As the economic, digital, and social worlds move away from simple access to devices and connection to participation in open information access and sharing, libraries should position themselves as access points to these advanced technologies, leveraging custom solutions to meet unique demand in some cases.

The library of the future should be infrastructurally positioned to support enterprise-scale technology upgrades that seamlessly accommodate tomorrow's technology as well as the evolution of AI deployment and use. This digital infrastructure should support the curation of a safe space that embodies the core ethos of public space (both digital and physical), while placing the users in firm control of the levers of privacy or interaction—a space where interaction is encouraged, but privacy is an active and prioritized option as well.

“

“Libraries can learn from retail without becoming retail: clearer communication, better experience, and spaces that invite people in.”

Peter Coyl, Library Director & CEO, Sacramento Public Library

Key considerations for libraries to prioritize include:

①

Cybersecurity infrastructure: over the past few years, there has been an uptick in the number of cyberattacks on libraries as well as other institutions, organizations, and businesses. A 2025 Verizon data breach investigation report shows that there was a 37% increase in ransomware compared to 2024.²⁹ Additionally, the FBI's annual internet crime report shows that the reported amount lost to ransomware in 2025 was an estimated \$32 million (up from \$12.4million in 2024).³⁰

As libraries modernize and provide patrons with more digital tools and environments, matching investments are needed to secure the library's cyberspace. Additionally, the phygital design approach recommended will involve patrons needing to share more data to support a truly curated, customized, and immersive experience. This also means that libraries will need to continue to make provisions to protect and secure patron data generated in this process.

²⁹ 2025 Data Breach Investigations Report: https://www.verizon.com/business/resources/infographics/2025-dbir-smb-snapshot.pdf?utm_source=chatgpt.com

³⁰ FBI Internet Crime Report: https://www.ic3.gov/AnnualReport/Reports/2025_IC3Report.pdf

2

As technology advances and the speed of information processing increases, the volume of data being created, stored, and transferred also increases. Cloud computing, cloud gaming, multimedia remote collaboration projects, and more all require massive bandwidth supported by high upload and download speeds capable of serving multiple users all at once. As digital technologies and AI use continue to advance, so will the need for updated devices, and more importantly, high-speed internet infrastructure. Future libraries have the opportunity to ensure they are able to provide patrons with high-speed internet connected to fiber broadband infrastructure (or similar).

In the U.S., 4.5% of households (about 6 million households) had no internet access at all in 2024, while 6.8% (8.9 million households) had no access to broadband internet connection, while in Canada an estimated 3.6% of households (about 600k households) had no such access. A sizable percentage of the population relies on the library for internet connection either because they have no access or slow access/connection. This means that more people will need better connection if they are to access the benefits of current and future technological advancements.

Figure 12. Underserved Households with a Local Library But No Fiber-Optics Connection

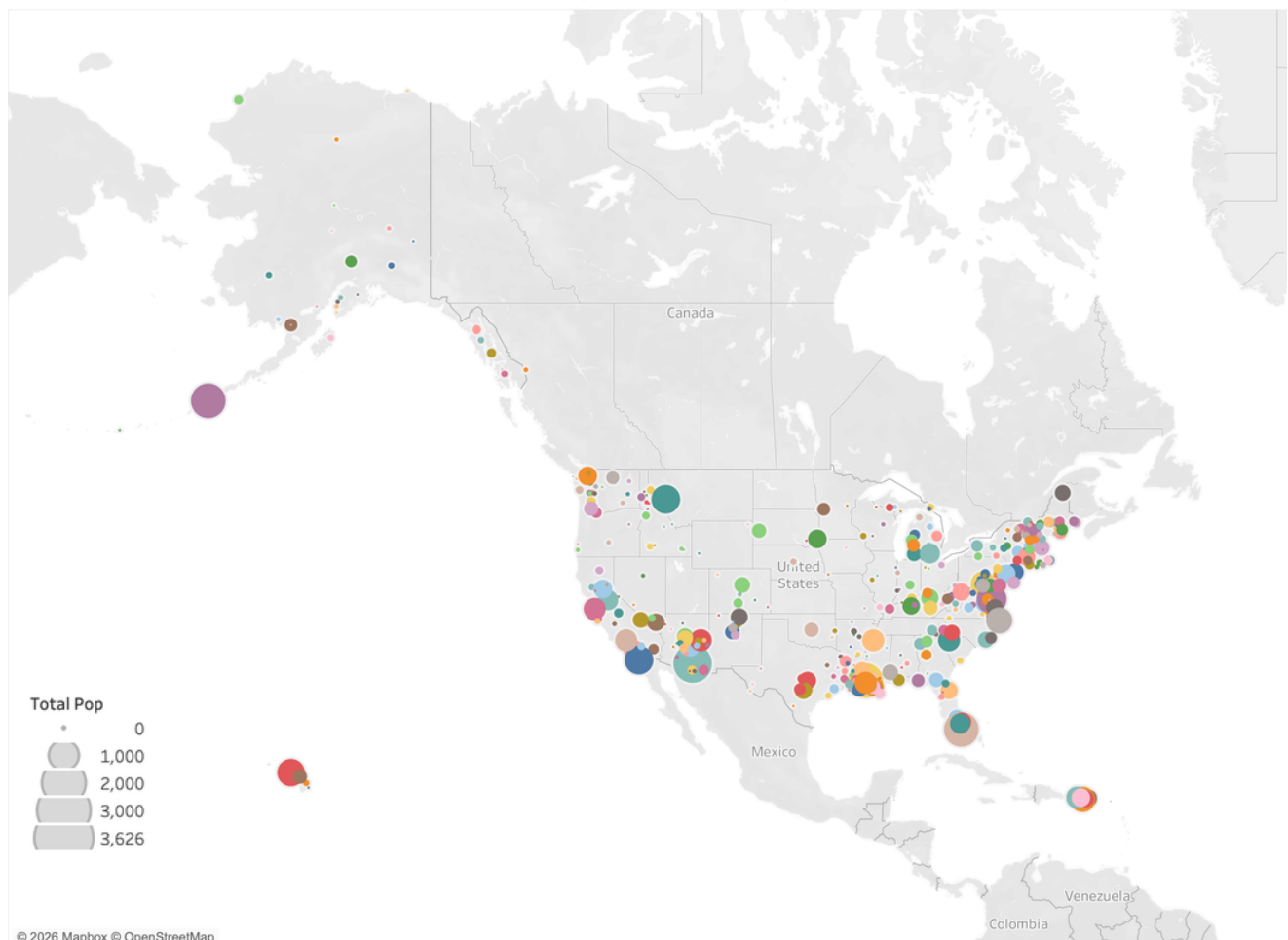


Figure 13. Underserved Households with a Local Library But No Fiber-Optics Connection

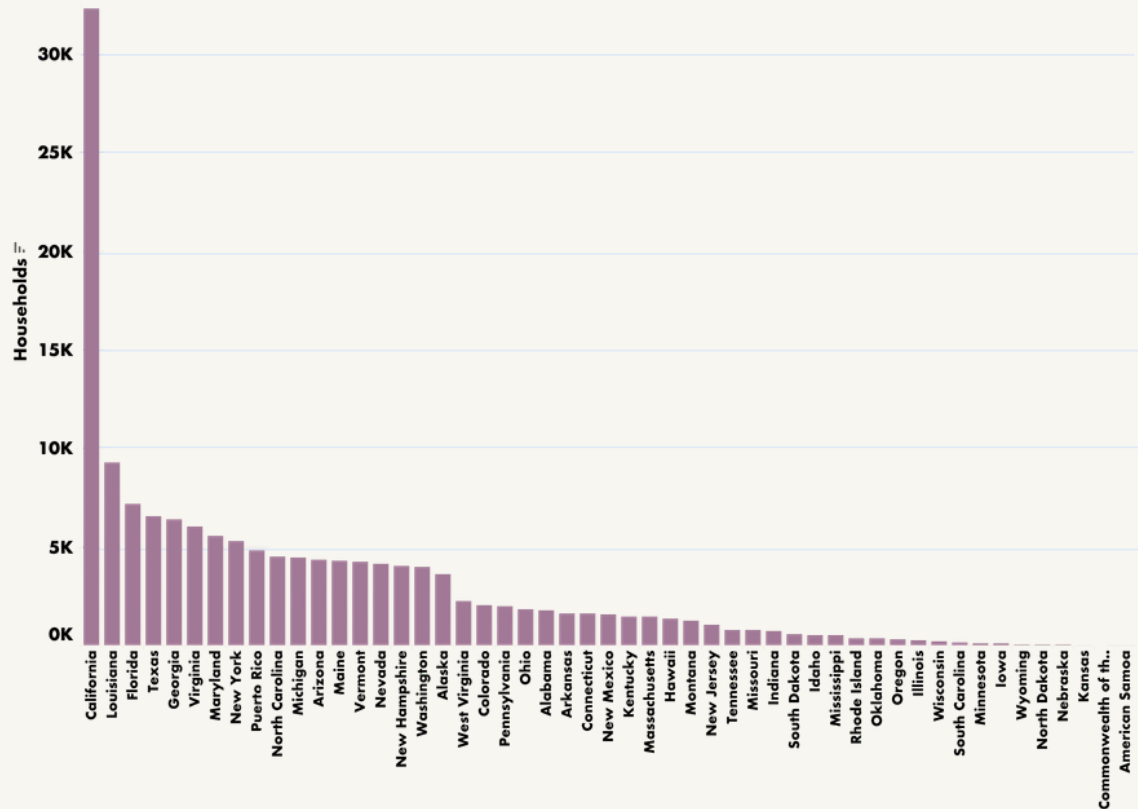
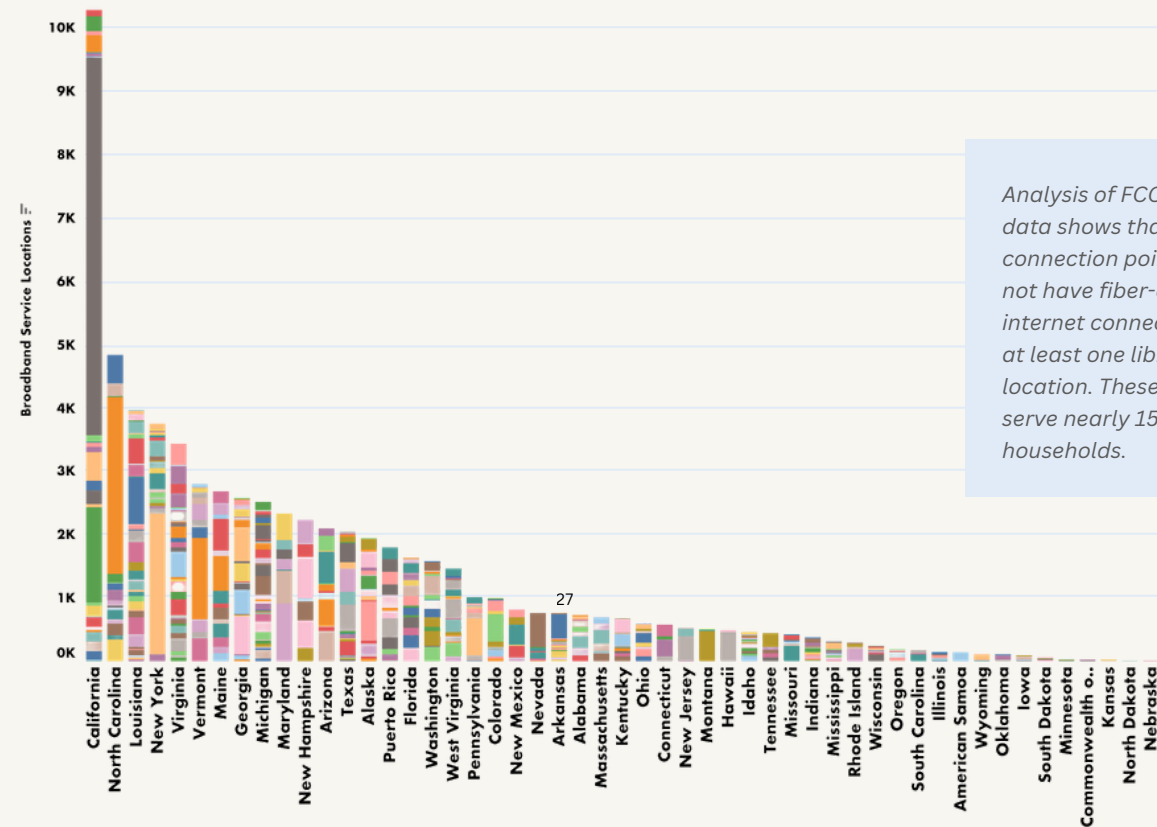


Figure 14. Total Broadband Service Locations (BSL) with a Local Library and No Fiber-Optics Connection (by State/County)



Analysis of FCC connection data shows that over 694 connection points that do not have fiber-optics internet connections have at least one library branch location. These locations serve nearly 150k households.

- ③ Prioritize research and development of AI tools for improved service delivery: Meeting future demand will need customized solutions and the ability of teams to constantly innovate, design, and deploy service-specific solutions.³¹

Libraries should create a culture where workshops with updates on AI and emerging technologies are the norm, while developing the capacity to design and deploy customized AI tools for service-specific solutions, strengthen ILS interoperability, and build stronger consortium partnerships between public and research libraries.^{32 33}

“

“The future belongs to libraries who are flexible enough to keep up with the ever-evolving use and demand of the library patron.”

*Paula Brehm-Heeger, Eva Jane Romaine Coombe Library
Director, Cincinnati & Hamilton County Public Library*



Cleveland Public Library (USA) - Brooklyn Campus

³¹ Harvard University Library has an internal mini-grant/innovation-fund program to support staff-led R&D of internal tools (for example, multilingual service assistants, discovery and recommendation tools, workflow automation, program-demand forecasting, and staff copilots for reference and outreach planning).

³² Libraries at MIT invests in creating a culture of shared understanding of AI technologies through ongoing workshops on AI and emerging technologies while providing staff with an AI 101 training course.

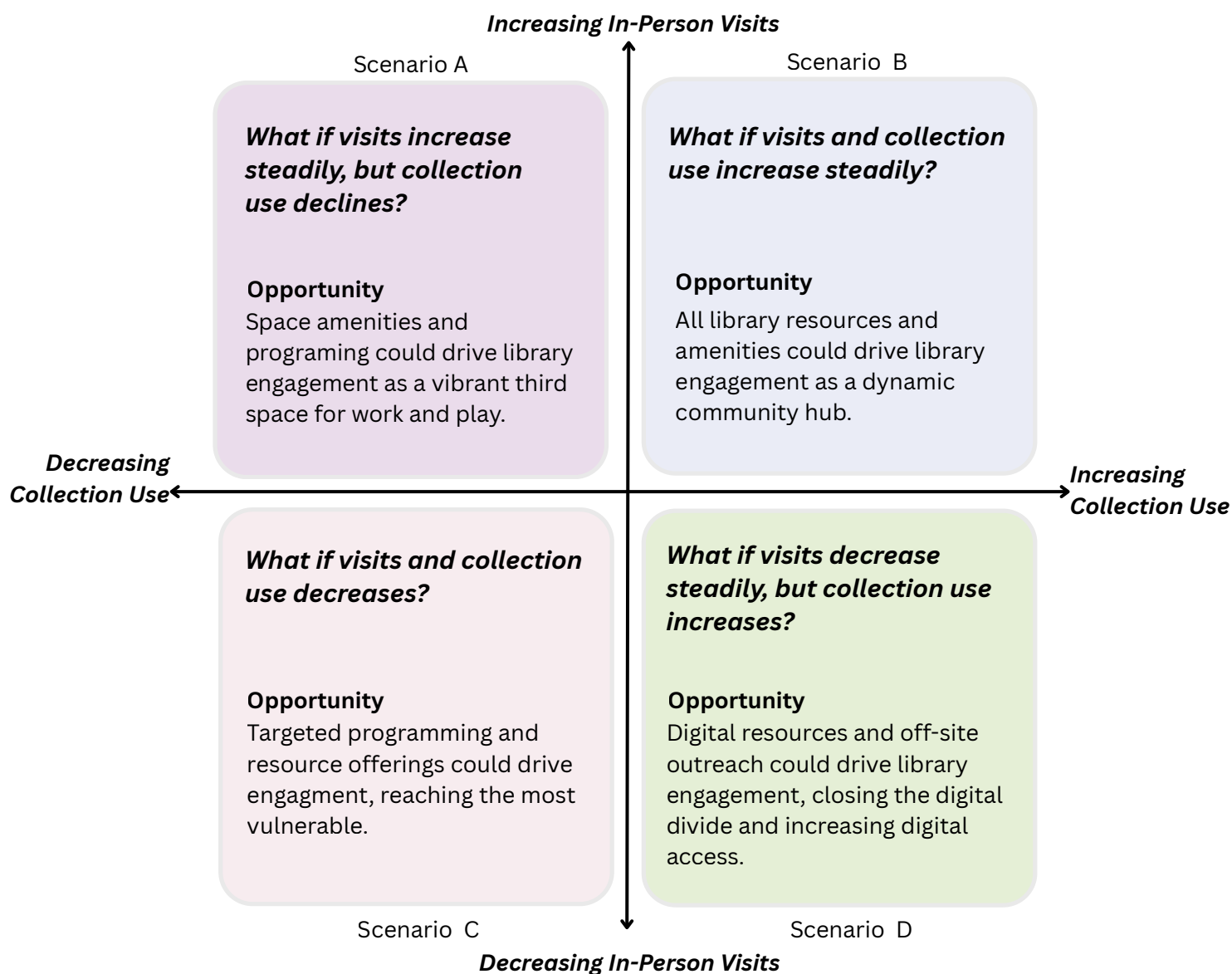
³³ San José's Dr. Martin Luther King, Jr. Library shows how stronger public-research library partnerships can expand access to shared civic and academic knowledge infrastructure. Through a joint City of San José-San José State University model, residents, students, faculty, and researchers can access public and academic collections, research databases, special collections, digital humanities resources, and collaborative spaces. <https://www.sjlibrary.org/about-king-library>

IV. FUTURE SCENARIOS

FOUR FUTURES MATRIX

A “Four Futures” matrix, also called a scenario matrix, is an exploratory practice that examines potential future scenarios based on the extent to which libraries implement the policies suggested in earlier sections. Framed as “what if” statements, these scenarios examine a few of a multitude of potential future scenarios for North American libraries. The matrix has been set up with in-person visits on one axis and, on the other axis, collection use (comparable to interaction with the in-library digital environment), explored here as physical circulation and e-resources accessed.

Figure 15. Four Futures Matrix: Visits and Collection Use



2029 BY THE NUMBERS

These four scenarios were used to explore user demand with a constant 1%, 5%, or 10% year-over-year growth rate. These constant changes are sometimes lower and sometimes higher than the changes observed in the LIS from 2023 to 2024, which have also been included for context.³⁴

Table 1: How could per person visits and collection use rate increase or decrease by 2029?

per Person	% Change '24	'24 Average	+/-	1%	5%	10%
Visits	+7.6%	3.45		3.62	4.40	5.55
				3.28	2.67	2.04
Physical Circulation	-0.28%	6.25		6.57	7.98	10.08
				5.95	4.84	3.40
e-resources Accessed	+8.7%	4.29		4.51	5.48	6.91
				4.08	3.32	2.53

- **Scenario A:** What if visits increase steadily, but collection use declines?
- **Scenario B:** What if visits and collection use increase steadily?
- **Scenario C:** What if visits and collection use decrease?
- **Scenario D:** What if visits decrease steadily, but total collection use increases?

³⁴ The “average” ULC Library has a 2024 library service area population of 752,000. This population is estimated to increase at a compound growth rate of 0.55 to 757,000 by 2029. If Scenario B occurred at a 5% increase year over year, this library would see a 28% change. A change resulting in an additional 736,400 visitors, 925,000 e-resources accessed and 1.35 million physical items circulated.

Scenario A:

What if visits increase steadily, but collection use declines?

If visits increase, but collection use declines, then **Scenario A patrons engage with the library as a community space first**. Space amenities, like room reservations and wireless sessions as well as in-branch programming attendance could all grow, or drive, increased visits.

Table 2: How could space amenities and program attendance change?

per Person	% Change '24	'24 Average	+/-	1%	5%	10%
Program Attendance	+ 4.3%	0.28	+	0.29	0.36	0.45
Room Reservations	+ 20.5%	0.041	+	0.043	0.053	0.066
Wireless Sessions	+0.95%	2.51	+	2.63	3.20	4.04

Associated Policy Implementation Direction

Libraries renovate branches, add flexible spaces, improve children's and teen areas, and create stronger civic interiors, but underinvest in cybersecurity, interoperability, network capacity, staff AI literacy, and shared digital governance. The result is a better in-person experience that is not matched by a strong digital service backbone.

3-Year Outlook	Renovated spaces generate public enthusiasm and higher in-person use, but digital quality varies by branch and staff capacity.
5-Year Outlook	Technology-enabled programs remain uneven, with promising local experiments that do not scale systemwide.
10-Year Outlook	Facilities remain active and loved, but long-term competitiveness weakens as residents increasingly expect seamless physical-digital service integration from trusted institutions.

Scenario B:

What if visits and collection use increase steadily?

If both visits and circulation increase steadily, then we could anticipate growth across all areas of library amenities and services. In Scenario B, the library functions as a thriving community and information hub. Scenario B libraries, with all service areas growing in use, may have especially increased strain on staffing and budget demands. Staffing and budgets would need to grow to meet the increased user demand. In Scenario B, the strain would be even greater if staffing and budgets declined.

Table 3: How could staffing and budget change?

per Person	% Change '24	'24 Average	+/-	1%	5%	10%
Staff	-6.2%	19.3	+	20.2	24.6	31.0
			-	18.3	14.9	11.4
Total Budget	+10%	\$78	+	\$82	\$99	\$125
			-	\$74	\$60	\$46

**Budget numbers are calculated per capita.*

Associated Policy Implementation Direction

Libraries fully implement the report's guidance as one coordinated operating model. Branches are redesigned around flexible, reservable, technology-enabled space; enterprise digital infrastructure is upgraded; cybersecurity and privacy-by-design standards are treated as core civic infrastructure; and recurring AI working groups plus internal R&D mini-grants help staff test, govern, and scale new tools. The library becomes both a trusted public room and a trusted digital layer for learning, work, culture, and civic participation.

3-Year Outlook	Early pilots become repeatable models, with stronger room-utilization data, clearer service standards, and better coordination between IT, public service, facilities, and programming teams.
5-Year Outlook	High-demand spaces, digital services, and AI-supported workflows reinforce each other, producing faster service delivery and more equitable access across branches.
10-Year Outlook	libraries function as essential phygital civic infrastructure, with measurable gains in digital inclusion, community learning, workforce support, and social connection.

Scenario C:

What if visits and collection use decrease?

If both visits and circulation decrease, the community members continuing to engage with library services may be either those most enthusiastic about the library or those with the greatest need for library offerings. Here, Scenario C libraries could see increases in computer usage, and there could also be increased demand for community services from the most vulnerable.

Table 4:

per Person	% Change '24	'24 Average	+/-	1%	5%	10%
Computer Usage	+64.5%	0.66	+	0.69	0.85	1.07

Associated Policy Implementation Direction

Fiscal stress, fragmented governance, procurement limits, staffing shortages, and risk aversion delay both spatial and digital modernization. Libraries continue to provide valued services, but the operating model remains reactive: aging infrastructure, uneven digital access, limited AI governance, and underpowered physical spaces make it harder to meet new patron expectations.

3-Year Outlook	Service patches continue, but systemwide learning is limited, and staff burden grows.
5-Year Outlook	Digital inequities widen, cybersecurity exposure rises, and high-demand spaces become more constrained.
10-Year Outlook	Libraries retain symbolic importance but lose practical relevance in areas where they should be strongest: trusted information navigation, workforce support, youth learning, social connection, and equitable access to emerging technologies.

Scenario D:

What if visits decrease steadily, but total collection use increases?

If visits decline, but total circulation increases, e-resource access could drive circulation engagement.

Scenario D libraries become digital first libraries, offering many services virtually. Off-site programming could also become a cornerstone of engagement, meeting community members outside of library branches. In branch offerings, room reservations and wireless sessions could all decline.

Table 5: What could a decline in space amenities look like?

per Person	% Change '24	'24 Average	+/-	1%	5%	10%
Full-Time Equivalent Staff	+ 4.3%	0.28		0.26	0.21	0.16
Room Reservations	+ 20.5%	0.041		0.039	0.032	0.024
Wireless Sessions	+0.95%	2.51		2.39	1.94	1.48

Associated Policy Implementation Direction

Libraries move quickly on digital services, AI experimentation, online programming, and patron-facing platforms, but capital investment and building adaptation lag behind. This produces visible innovation, but the physical branch network cannot fully absorb demand for collaboration rooms, hybrid learning, creation spaces, quiet work, and technology-supported programs.

3-Year Outlook	Virtual access improves, and staff productivity rises in selected workflows, but pressure grows around meeting rooms, power/data infrastructure, and inconsistent branch capacity.
5-Year Outlook	The gap between digital ambition and physical constraints becomes a service-equity problem, especially in neighborhoods where residents rely on branches for devices, broadband, study space, and staff assistance.
10-Year Outlook	Libraries remain digitally relevant, but the full phygital promise is capped because the physical platform is not modernized enough to carry the new service model.

V. CONCLUSION

The future of libraries is a story of reinvention: a public institution adapting its spaces, services, technologies, and partnerships to meet a world in which people need both stronger digital access and more meaningful places to gather. Across the data in this report, the signal is clear: residents are using libraries as platforms for work, learning, creativity, connection, trusted information, and civic life. The library of the future should be designed to make that role more visible, more flexible, and more powerful.

Tomorrow's library will be a place where the physical and digital reinforce one another. It will include flexible rooms that can support tutoring in the morning, workforce training in the afternoon, community meetings in the evening, and hybrid participation throughout the day. It will offer quiet study, active collaboration, maker and media tools, immersive and AI-enabled learning supports, multilingual access points, and staff expertise that help residents navigate information systems that are becoming more complex. It will also remain unmistakably local: rooted in neighborhood identity, designed for welcome and belonging, and legible enough that people can quickly understand where they are, what is available to them, and how they can participate.

This is what makes the public library distinct from other third places. It is not only a comfortable place to spend time; it is a civic infrastructure for opportunity. As demand rises for e-resources, reservable rooms, digital tools, social connection, and trusted guidance, libraries can become the community's most accessible bridge between technological change and everyday life. The strongest future libraries will be those that pair excellent buildings with excellent digital environments, strong staff capacity, clear governance, and partnerships that extend the library's reach into housing, schools, workforce systems, health, culture, and local economic life.

Realizing this future will also require libraries to think differently about the operating models that support new kinds of space and service. Flexible rooms, event-capable spaces, cafe partnerships, and other shared-use models may create opportunities for earned revenue or deeper partnerships, though these strategies should be treated as mission-aligned supplements rather than substitutes for stable public funding. Just as importantly, the future library will depend on staff who are not only skilled in traditional library services, but also curious, adaptive, and fluent in broader trends shaping technology, learning, civic life, design, and community well-being.

The next chapter for libraries should therefore be ambitious. If communities invest in flexible, welcoming, technology-rich, and deeply human library spaces, libraries will not simply keep pace with change; they will help people make sense of it. They will be places where residents can learn new tools, find one another, build confidence, access opportunity, and feel that public life still has a home. The library of the future is not a smaller version of the library of the past. It is a more connected, more adaptive, and more essential civic commons for the world ahead.

ACKNOWLEDGEMENTS

The Future Scenarios: Library Space & Design report was shaped by real experiences and practical expertise of library directors, senior administrators, planners, designers, technologists, and academic-library leaders who helped translate broad social and technological change into the day-to-day realities of library buildings, services, staff, and users. Their input made the report more than a forecasting exercise; it grounded the work in construction projects, capital planning decisions, digital transformation, public-space design, and evolving community need.

We are especially grateful to ULC member libraries and partner institutions that shared interview time, construction examples, capital-project data, strategic-plan material, and case studies. The report also draws on public datasets and national research on library use, facility conditions, time use, social connection, digital access, and public-space design.

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