Public Libraries in Massachusetts

AN EVOLVING ECOSYSTEM



SASAKI

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17 Findings



Libraries are central to every community.

They are places where children go to learn about their world, where youth and adults go to read, study, and spend time, and where communities come together. Increasingly, libraries are taking on new roles in their communities and adapting to changes from myriad forces, including demographic changes, economic shifts, and the rise of the internet. This study explores both existing and potential models for public libraries in Massachusetts.



The Massachusetts Board of Library Commissioners (Mary Ann Cluggish, Chair / James Lonergan, *Director*) commissioned Sasaki, an interdisciplinary design firm based in Watertown, MA, to conduct this study to explore the current state and future potential of public libraries throughout Massachusetts. This report was produced by the MBLC's *Library* Building Specialists, Lauren Stara and Rosemary Waltos, and Sasaki's Lan Ying Ip, Principal Architect and Brad Barnett, Planner. Additional support came from Sasaki's Corinne Jachelski, Space and Data Analyst and Aliza Leventhal, *Corporate Librarian*/ Archivist.

This report, completed in Spring 2018, is based on 2016 data provided by the MBLC's Annual Report Information Survey (ARIS) and two surveys written and administered by Sasaki during the summer and early autumn of 2017.

To ask questions or share comments about this report, please contact the MBLC via email: ecosystem@mblc. state.ma.us, or visit www.mblc.state. ma.us/ecosytem

Public Libraries of Massachusetts



How are Massachusetts' public libraries organized today?



the patron experience.

About the Networks

Massachusetts works to ensure equal access to public libraries and library services for everyone in the state. Networks form the foundation of this commitment, providing the mechanism for reciprocity between libraries and broad availability of both physical and electronic services. Within this statewide approach, each network has its own unique character, composition, and service offerings. Of the 9 networks, 8 have public library members. In addition to the networks, MassCat supports small and unique libraries that are not part of another network.



	FULL NAME				
NETWORK		NUMBER OF REPORTED LIBRARIES	TOTAL NUMBER OF LOCATIONS	POPULATION	
CLAMS	CAPE LIBRARIES AUTOMATED MATERIALS SHARING	34	37	231,152	ຕິຕິ
C/W MARS	CENTRAL/WESTERN MASSACHUSETTS AUTOMATED RESOURCE SHARING	141	167	1,728,967	ĥĥĥĥĥĥĥĥĥĥĥĥĥĥĥĥ
MBLN	METRO BOSTON LIBRARY NETWORK	3	27	744,145	ຕໍ່ດໍດີດໍດີດໍດີ
MINUTEMAN (MLN)	MINUTEMAN LIBRARY NETWORK	37	55	1,123,548	ຕໍ່ຕໍ່ດີດໍ່ດີດໍ່ດີດໍ່ດີດໍ່ດີດໍ່ດີດໍ່ດີ
MVLC	MERRIMACK VALLEY LIBRARY CONSORTIUM	36	39	804,818	ŶŶŶŶŶŶŶ
NOBLE	NORTH OF BOSTON LIBRARY EXCHANGE	17	22	544,225	ĥôôô
OCLN	OLD COLONY LIBRARY NETWORK	26	35	714,161	ĥĥĥĥĥ
SAILS	SAILS	38	47	773,379	ŶŶŶŶŶŶ

Due to the significant difference in size and data available for MassCat and MBLN in comparison with the other networks listed above, MassCat and MBLN were excluded from the findings of this report.

About this Study

The role of public libraries is evolving.

Many public libraries in Massachusetts are looking for innovative ways to ensure they remain essential to their community, providing a place where residents and visitors of all ages explore, learn, and gather. This study was designed to understand how libraries are used today, and to identify opportunities for public libraries to more effectively provide services, work collaboratively, and evolve to meet emerging needs.

This study consists of three main elements:

- 1. Survey responses from patrons and library staff
- 2. Data on library facilities, services, and operations
- 3. Analysis of contextual data about the environmental conditions of individual libraries

The findings from these three sources led to both system-wide as well as network-specific recommendations for how to optimize resources and operations to meet the needs of communities today and into the future.







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Survey Methodology

Two surveys were conducted in 2017 to examine patron uses and expectations of public library services and spaces throughout the state.

The first survey was focused on soliciting insights from patrons; the second engaged library staff in contextualizing the patron experience and needs as expressed in the first survey. These surveys asked a series of similar questions to compare patron responses to staff perceptions of patron needs.

FRAMEWORK

The framework of the surveys was designed to uncover how patrons currently engage with public libraries and services and their future expectations and desires for public libraries. The patron survey was geared toward identifying spatial patterns of library use. Surveys were developed with the expertise of Sasaki's Librarian/ Archivist in collaboration with MBLC.

PLATFORMS

The statewide surveys were deployed via an online platform, as well as several in-person events facilitated by MBLC. Individual libraries were encouraged to post the online survey link to their websites. Additionally, print copies of the survey were distributed at many library locations. Surveys were available in English, Spanish, and Chinese.



LIBRARY STAFF COMPLETED THE SURVEY

RESPONSE

More than 7,800 patrons from across the state completed the survey. Nearly 700 library staff from across the state and representing various levels of leadership within their libraries, completed the survey.

ANALYSIS

Responses were analyzed by Network and age group of patrons to look for similarities or variances. The data sets were mapped where applicable to reveal spatial patterns. Generally, the data was analyzed in terms of top responses by either raw count or percentage. By reshaping the data, interesting conclusions arose that were not explicitly sought, such as the top libraries patrons indicated going to in order to take advantage of specific aspects of library spaces and services. In addition to the quantitative data, which could be analyzed through charts and percentages, many questions allowed for additional comments, providing a rich amount of qualitative data.

Methodology Strategy

One key task for this study was to understand how libraries compare to each other, both in services offered and communities served.

To better understand the strengths and challenges of libraries, each library was examined across three categories: community data, library data, and borrowing patterns.

COMMUNITY DATA

Community data includes information about the communities libraries serve. Examples include demographics such as average age and income levels or physical characteristics such as number of people within close proximity of a library.

LIBRARY DATA

Datasets such as fiscal year 2016 Annual Report Information Survey (ARIS) provide detailed information about libraries themselves, such as circulating collection, programs and services, and staffing.

BORROWING DATA

There are two primary datasets about patron borrowing. The first looks at Inter Library Loans (ILL), and the second involves Direct Circulation from non-resident borrowers (i.e., "over the desk" checkouts). In both cases, the data is available at the library level, not the patron level.

COMMUNITY DATA

- Population Distribution (2012-2016 ACS 5-year sample)
- Age (2012-2016 ACS 5-year sample)
- Race & Ethnicity (2012-2016 ACS 5-year sample)
- Income
 (2012-2016 ACS 5-year sample)
- Massachusetts Municipal Growth Projections (UMASS Donahue Institute 2035 Projections)

LIBRARY DATA

- Gross Square Footage
- Library Location
- Parking
- Staff Size
- Hours of Operation
- Visitors

BORROWING DATA

- Direct Circulation
- $\gamma = 1LL$
- Non-Resident Circulation

(All data taken from 2016 ARIS Datasheet)

- Access to Transit Stops (General Transit Feed Specification)
- Road Connectivity (OpenStreetMap/US TIGER Census)

- Programs
 - Seating Capacity
 - Holdings
- Year Last Renovation

(All data taken from 2016 ARIS Datasheet) To understand the distribution and differences across the state, libraries were ranked by quartile (lowest 25%, lower 25%, upper 25%, top 25%) for each factor. For instance, libraries were sorted by parking spaces provided, and then assigned a quartile score of 1 (lowest) to 4 (highest) based on which quartile they fit into. Once this was completed for all factors, the scores for each library were averaged to create an overall average 1-4 score for the library. This overall score also considered a weighting criteria developed by MBLC staff and best practices.



3. PARKING



5. NON-RESIDENT CIRCULATION





9. TOTAL PROGRAM



12. NUMBER OF BUS STOPS WITHIN A ¼ MILE OF THE LIBRARY

Visit www.mblc.state.ma.gov/ecosystem to explore the full results.

ANDOVER BILLERICA CHELMSFORD METHUEN BURLINGTON HAVERHILL LOWELL NORTH ANDOVER TEWKSBURY LAWRENCE NEWBURYPORT WILMINGTON DRACUT WESTFORD GROTON HAMILTON MIDDLETON LITTLETON IPSWICH NORTH READING TOPSFIELD AMESBURY CARLISTE GEORGETOWN ROWLEY TYNGSBOROUGH MERRIMAC NEWBURY ROCKPORT BOXFORD WEST NEWBURY MANCHESTER SALISBURY GROVELAND DUNSTABLE

Top 25% Upper 25% Lower 25% Lowest 25%

THE TOP 13 TYPES OF DATA FROM ARIS AND **CONTEXTUAL DATA WERE:**

Data sources: ARIS, Census, GIS, Transportation























11. SEATING CAPACITY MAIN

LIBRARY

ATTENDANCE

10. VISITORS



13. PROXIMITY TO OTHER LIBRARIES



ESSEX



Variation in Network Usage

There are many factors that determine the success of a public library within the community.

Local factors like financial support as well as individual collections and services are important drivers of public library performance. Additionally, there are many players involved in supporting the services provided by public libraries across the state; of those, the data collected in this study revealed that networks are a critical factor, and became the focus of this study's findings. Across Massachusetts, there is significant diversity in the level of support and performance of libraries within a given network. As the Commonwealth looks to the future, closing the gap in service quality among networks will be an important task.



OVERALL NETWORK PERFORMANCE

MINUTEMAN (MLN) 3.39 NORTH OF BOSTON LIBRARY EXCHANGE (NOBLE) 3.06 MERRIMACK VALLEY LIBRARY CONSORTIUM (MVLC) 2.94 OLD COLONY LIBRARY NETWORK (OCLN) 2.92 CAPE LIBRARIES AUTOMATED MATERIALS SHARING (CLAMS) 2.72 METRO BOSTON LIBRARY NETWORK (MBLN) 2.66 SAILS 2.55 CENTRAL/WESTERN MASSACHUSETTS AUTOMATED RESOURCE SHARING (C/W MARS) 2.18 MASSCAT/NO NETWORK 1.14

NETWORK PERFORMANCE (ABOVE)

Each library was assessed based on the criteria outlined in the methodology section of this report and rated 1 (lowest) to 4 (highest). Taking the average of these library scores shows the significant differences between networks like Minuteman and C/W MARS.

NETWORK SHARING (LEFT)

This chart demonstrates the highest volume of inter-network loans occurring throughout the state. The Minuteman and C/W MARS networks, respectively, are the largest lenders and recipients of Inter-Library Loan (ILL) materials in the state; however, unlike CLAMS which is the recipient of ILL materials from every network in the state as well as out-of-state libraries, the Minuteman and C/W MARS receive most of their ILL materials from within their own network. These sharing patterns demonstrate the strengths and challenges of these three networks, and weighed into the findings of this report. Between these three networks, all with very different geographic and population factors, almost 6 million items were shared throughout the state in 2016.



BOOKS CHECKED OUT FROM THE BOSTON PUBLIC LIBRARY BY VISITORS.

The MBLN system, which includes Boston, is unique due to the incredibly high volume of service and density of library branches within the network's relatively small footprint.



Network **Types**

Based on these differences among networks, strategies for the future must be nuanced and resist a one size fits all approach. This study found that library networks can be characterized by three distinct typologies: Resource, Peerto-Peer, and Seasonal systems. Each of these typologies shows specific characteristics in borrowing patterns, library characteristics, and community characteristics.

For each typology, this study identifies the main characteristics that define it as well as the library networks that match this profile. Each typology is also given a set of key recommendations and strategies for optimizing how individual libraries work together within that type of network.





Resource

Bringing together larger Magnet libraries and smaller Core locations.

- · C/W MARS
- MVLC
- Mass Cat/No Network
- · SAILS



Peer-to-Peer

Networks of similarly performing libraries in Metro Boston.

· OCLN

- Minuteman
- NOBLE

- · MBLN



Seasonal

Balancing fluctuating demand for services over the year.

· CLAMS

FINDINGS

Resource Network

This type of network is made up of larger regional-serving "Magnet" libraries and smaller local-serving "Core" libraries in the same general geographic area. The relationship of the Magnet library to the local Core library is symbiotic, engrained over time through usage by the network's patrons.

Magnet libraries tend to be located in centralized, more populated cities and towns. These libraries often play an important role in the lives of residents of other towns who supplement local Core library offerings with the more robust services, programs, and collections these regional-serving libraries offer. However, these Magnet libraries can often be several miles away for patrons. This reinforces the importance of smaller, local Core libraries that are often closer to patrons and can provide more frequently needed services like tailored collections, local programming, and broadband services. Together, these two types of libraries reinforce each other's strengths, creating a complementary continuity of service. Lines represent non-resident direct circulation in which a patron checked out an item in person from a library other than their home library.

Visit www.mblc.state.ma.gov/ ecosystem to explore the full results.

Resource Network Recommendations

To leverage the advantages of each library type, the member libraries of a Resource Network should focus investments in services, collections, and operations towards their relevant library profile (Resource-serving or Local-serving).

1. Define the library types.

Identify which libraries are best characterized as Magnet libraries and Core libraries. Where there are geographic gaps in Magnet library coverage, identify existing Core libraries which can be transitioned over time into Magnet locations.

2. Tailor Investments to Magnet and local Core libraries.

Magnet libraries should focus their investment on collection development, technological resources, and offering a variety of programs that will support the local-serving Core libraries in addition to their own residents. Local Core libraries should provide services targeted to the specific needs of their immediate communities, such as expanded hours of operation, children's services, or senior services. Local Core libraries should also promote the extensive resources of their Magnet library counterparts.

3. Treating the entire network as a single entity.

Resource Networks function best when member libraries, both Magnet and Core libraries, serve as complementary library types that strategically support each other. Member libraries should look for creative ways to leverage each other's strengths through active cross-listing of events, streamlined ILL, and potentially joint programs and services.

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Peer-to-Peer Network

Lines represent non-resident direct circulation in which a patron checked out an item in person from a library other than their home library.

Visit www.mblc.state.ma.gov/ ecosystem to explore the full results.

Peer-to-Peer Networks feature libraries with similar levels of service, typically situated in more urban environments with denser concentrations of people, jobs, and amenities.

The most striking feature of these networks is the high rate of borrowing among libraries, in part due to the close proximity of these libraries to each other. As the chart to the right depicts, Peer-to-Peer type networks provide a similar range of services and programs, and are almost equally sharing their collections between their libraries.

Peer-to-Peer Network Recommendations

The strength of Peer-to-Peer libraries is their distributed model of service. Because of this, Peer-to-Peer libraries should focus on providing similar levels of service across their network, recognizing that patrons use these libraries interchangeably.

1. Establish network-wide goals for levels of service.

Conduct a network-wide analysis of the existing resources, programming, and services to inform decision-making about future investments.

2. Invest strategically to balance service levels across the network.

Identify libraries in need of investments to match the level of service across the network as a whole, and focus investments on initiatives to improve those libraries. This can include both new specialty hardware and equipment, as well as special programming spaces to ensure parity of experience for all members of the network.



FINDINGS

Seasonal Network

Lines represent non-resident direct circulation in which a patron checked out an item in person from a library other than their home library.

Visit www.mblc.state.ma.gov/ ecosystem to explore the full results.

Seasonal Networks are places where tourism or other factors create strong seasonal variation in service needs.

The primary example of this is CLAMS, located on Cape Cod. During the summer, Cape Cod's population more than doubles, from roughly 200,000 people to over 500,000. This swell in population, driven by tourism and seasonal work, translates to significantly greater usage of libraries within the CLAMS Network. Individual libraries elsewhere in the state, such as the Berkshires, also exhibit seasonal dynamics and may benefit from the recommendations for this network type. The primary task for these types of libraries is to balance the needs of seasonal users with the essential needs of year-round residents.

Seasonal Network Recommendations

The range of services varies widely between libraries within a Seasonal Network; and is impacted by the significant shift in service population throughout the year. Developing the appropriate collection size and physical space for communities that vary seasonally in service demand will require creative, innovative strategies.

1. Optimize hours of operation for seasonal demand.

Libraries within a Seasonal Network should balance expanded hours in the summer with sufficient hours of operation for year-round residents.

2. Strengthen cross-Network resource sharing.

As noted on page 19, CLAMS is the top receiver from several other networks of cross-network interlibrary loan borrowing. Seasonal Networks will be able to improve their service levels by strengthening relationships with other networks or specific libraries with larger collections to support peak season borrowing needs.

3. Creative uses for flexible spaces.

One of the main challenges for Seasonal Network libraries is the different space needs during different periods of the year. Seasonal Network libraries should look for opportunities to meet these varying space requirements through flexible spaces that can support community uses during the winter months. During the busier summer months, these spaces can accommodate additional collections and programs. By engaging the year round community, individual libraries can ensure they remain active throughout the year. Similarly, Seasonal Networks should work with MBLC to factor these seasonal dynamics into programming and planning decisions. FINDINGS

Statewide Recommendations

Many of the recommendations in this report are targeted to specific types of networks. These recommendations will create stronger public libraries and more seamless patron experiences. There are also a number of opportunities for the MBLC to strengthen its role in supporting libraries.



Match funding streams to network types for programs, services and construction.

This study's findings show there is a wide spectrum of needs and library sizes, all of which require equal access to funding for facility improvements, as well as for innovative programs and services.

Investments will increasingly need to consider not only individual library needs, but the needs and performance of the networks as a whole. The MBLC should consider funding criteria and guidelines to reflect a proposed investment's contribution to network-level performance.

Similarly, there is an opportunity to more intentionally provide resources for smaller libraries. Providing tiered levels of funding based on the library size or service population could make more of the local Core libraries eligible for state-funded projects, including construction.



Pursue strategic partnerships.

Public libraries exist as part of a civic context, and that context can be a significant contributor to the success of a library. The MBLC and libraries themselves should look for civic partnerships that amplify the level of service of the library while accomplishing other goals. Particularly where public funds are involved, municipal and statewide agencies have a shared interest in identifying projects or initiatives that would benefit from integrated services—potential partners include the departments of transportation, parks and recreation, and education; or integrating playgrounds, gardens, or other community open space into libraries. These civic partnerships reinforce the central role public libraries play within the community. Opportunities for targeted, clearly defined commercial partnerships such as with cafés or other retail, may also be considered.



Invest in resource sharing and training for libraries.

The MBLC should offer training and establish resources for public library employees to raise awareness of the opportunities for complementary services among libraries. Improving understanding of how each library fits into its own network and the state's broader library ecosystem will create better patron experiences and stronger library networks overall.

What's Next?

The purpose of this study was to understand how public libraries are used today, and identify opportunities for the future of libraries in Massachusetts. The findings and recommendations of this report will be utilized to help prioritize investments, guide agency-level activities, and support broader discussion about how to optimize library services going forward.



Get Involved!

Continued dialogue and input from local libraries, the MBLC, and other stakeholders will be a critical next step in this process. To that end, we invite you to participate in the following ways:

- The MBLC will be conducting community outreach meetings to solicit feedback from library staff and patrons about this report's findings and recommendations. https://mblc.state.ma.us/ecosystem
- Readers are encouraged to explore the data used in creating this report via https://mblc.state.ma.us/ ecosystem and to share their feedback about this report and the data used to the MBLC on the site or via email at ecosystem@mblc.state. ma.us.

Feedback from this process as well as the findings of this report will guide development and implementation of the MBLC Strategic Plan.

