

Access to Public Library Services and Materials During the First Nine Months of the COVID-19 Pandemic

MAY 2023

Highlights

- While library buildings were closed to the public, 62 percent of libraries intentionally provided Wi-Fi internet access to users outside the buildings.
- The percentage of libraries that allowed patrons to register for library cards online without needing to be physically present more than doubled—to 64 percent—during the pandemic.
- Usage of electronic materials increased 25 percent from FY 2019 to FY 2020, according to median electronic circulation per person in library service areas.

Introduction

In early 2020, as Novel Coronavirus 2019 (COVID-19) infections spread and the World Health Organization declared a global pandemic, it became clear that how people received public services would need to change, including how they accessed public library resources.

In late March 2020, the Public Library Association conducted a survey, and of the 2,500 libraries that responded, 76 percent indicated that they were expanding their online checkout services, 63 percent were expanding virtual programs, and 42 percent were expanding virtual reference service, all because their physical locations were closed to the public (Goek, 2021).

To better understand these dynamics across the entire universe of libraries, the Institute of Museum and Library Services (IMLS), with representatives from several state library administrative agencies, developed a special section of 15 survey questions for the fiscal year (FY) 2020 Public Libraries Survey (PLS) to obtain a comprehensive picture of how libraries responded to COVID-19.

The purpose of this research brief is to share findings from those questions to illustrate how libraries adapted to COVID-19 to meet the needs of their communities. During the first nine months of the pandemic, almost all libraries closed their buildings to visitors,

for anywhere from a few weeks to a few months. However, they also transformed many of their services to function virtually by enabling online registration for access to electronic resources, expanding availability of electronic materials, boosting Wi-Fi signals and duration, allowing for distribution of physical materials outside of the building, and offering virtual library programs.

An IMLS research brief released in 2021 used FY 2014 and FY 2018 PLS data to establish pre-pandemic trends in circulation of physical and electronic library materials (IMLS, 2021). This brief continues that prior analysis using electronic circulation¹ data from FYs 2018, 2019, and 2020 to further explore changes to patron usage of library resources in the wake of COVID-19.

This research brief contains two main sections that address how libraries adapted service models during the first nine months of the pandemic (up to December 2020): (1) providing hybrid access to services, and (2) continuing to provide access to materials.

Data & Methodology

The PLS is a collaboration between IMLS and the state library administrative agencies of the 50 states, the District of Columbia, and five outlying territories. Due to differences in how and when states collect each cycle's data

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¹Electronic materials include e-books and downloadable electronic video and audio files, and circulation is limited to items that require a user authentication and have a limited period of use.

from public libraries, some of the library records in the FY 2020 PLS data reflect reporting periods that ended before COVID-19 started. The analysis in this brief includes 8,426 public libraries in the 50 states and the District of Columbia that met the Federal State Cooperative System (FSCS) definition of a public library,² and had 12-month reporting periods that ended between May 2020 and December 2020.³ Records with missing responses to the COVID-19 questions are included in the analysis, so the denominators for all exhibits are the totals shown in **Table 1**.

The analysis of electronic circulation focuses on the median per capita value using the population of the legal service area for each library system. To ensure comparability, trend analyses of FY 2018 and FY 2019 data are limited to the 8,426 library records in the FY 2020 analysis set, excluding any that did not meet the FSCS definition in each year.

This brief presents findings overall and by locale. The urban-centric locale code system, developed by the U.S. Department of Education's National Center for Education Statistics (NCES), classifies geographic areas into four major locales based on U.S. Census Bureau definitions:⁴

- **City:** territory inside an urban area with a population of 50,000 or more and inside a principal city
- **Suburb:** territory inside an urban area with a population of 50,000

- **or more and outside a principal city**
- **Town:** territory inside an urban area with a population of 2,500 or more but less than 50,000
- **Rural:** territory that does not lie within urbanized areas or urban clusters

Table 1 shows the distribution of libraries included in this analysis by locale. The appendix includes detailed tables of the results presented in this brief.

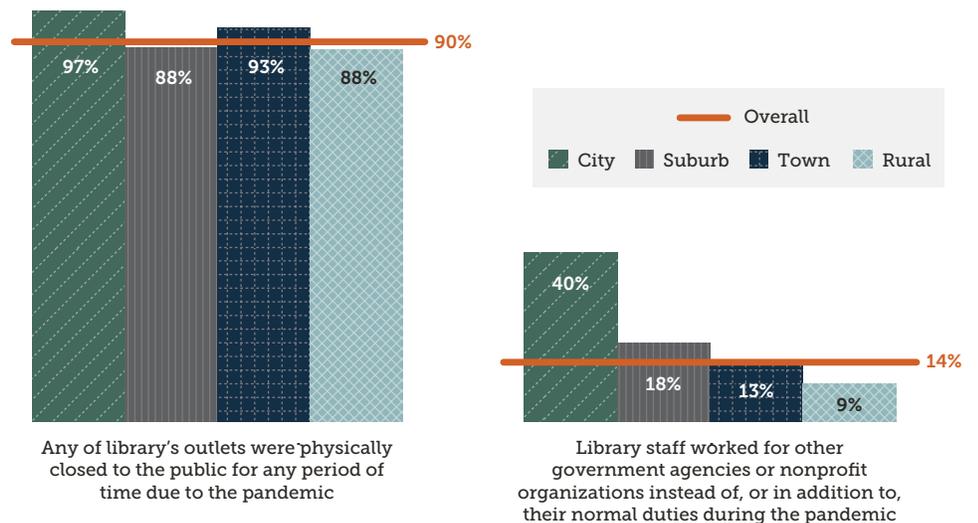
Table 1. Distribution of public libraries included in FY 2020 analysis by locale

Category	Overall	Locale			
		City	Suburb	Town	Rural
Percent	100.0	5.6	25.9	24.5	44.0
Total	8,426	475	2,179	2,064	3,708
Approximate Service Area Population (in millions)	310 M	109 M	129 M	43 M	29 M

Access to Library Services

In general, libraries reacted similarly in their responses to COVID-19. As **Figure 1** illustrates, very few libraries remained open, regardless of locale, and very few libraries reassigned staff to other agencies or organizations. Libraries located in cities were the exception, with 40 percent reporting that they reassigned staff. (See **Table A1** in the appendix for proportions of libraries that reassigned staff by legal basis.)

Figure 1. Percentages of libraries that closed outlets and reassigned staff to other agencies, by locale



² See the [FY 2020 PLS Data File Documentation](#) for more information about the FSCS definition.

³ Libraries with fiscal years ending before May 2020 are clustered in a few states, and COVID-19 overlapped with less than 20 percent of their reporting periods. A total of 599 libraries were excluded from the analysis.

⁴ Locale codes were assigned to each library system using two methods: (1) the geographic location of the library system's physical address and (2) the modal locale code among central and branch libraries of that library system (i.e., excluding bookmobile and books-by-mail-only outlets). This brief uses the locale code assigned based on the second method: the modal locale code of the library system's associated stationary outlets.

Even though most libraries were physically closed, many strived to maintain patron access to their services (see **Figure 2**). They continued to provide reference services and library card registration, as well as expanded Wi-Fi access and offered virtual programs. On average, 82 percent of libraries continued to provide reference services online or over the phone.

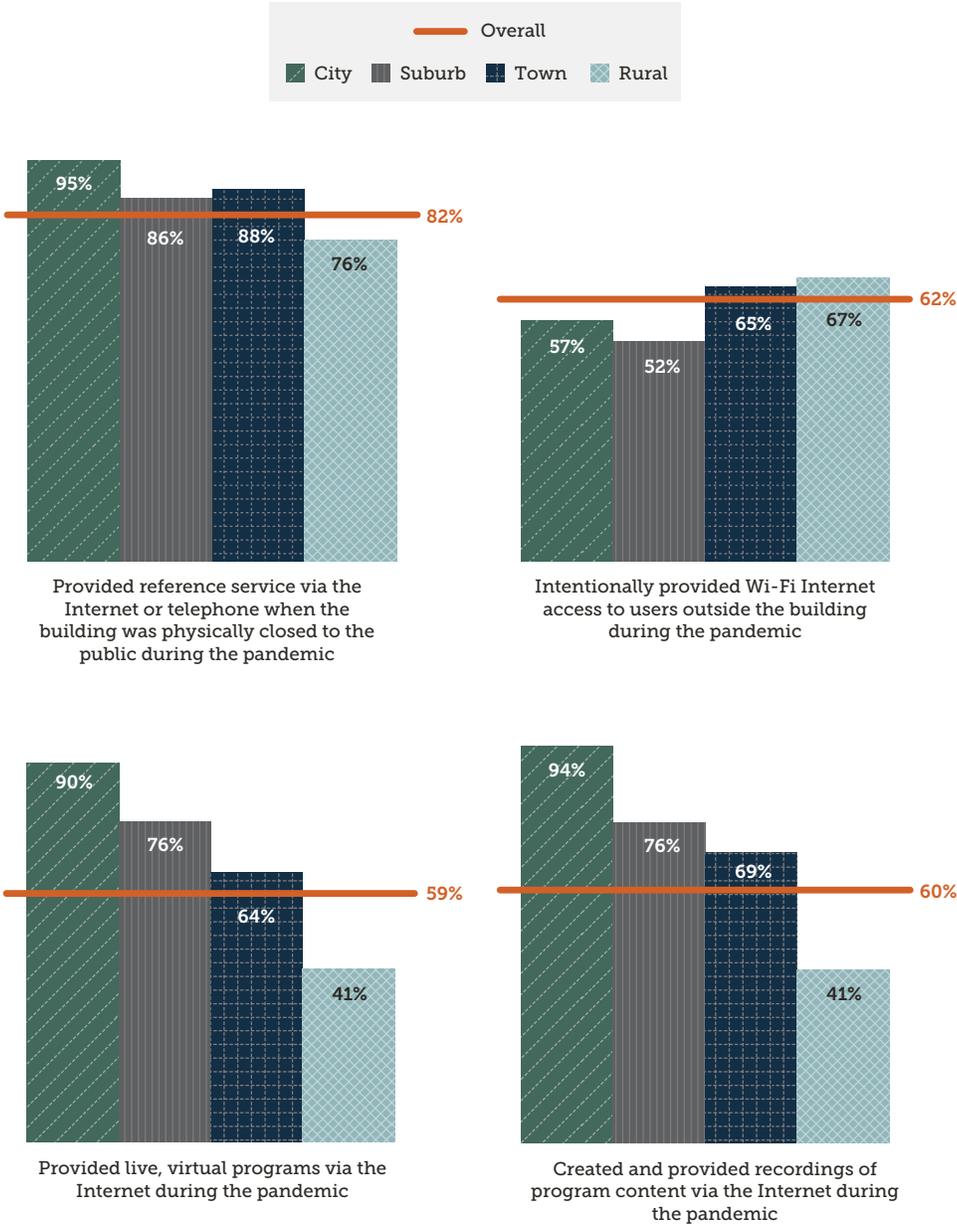
Many people also rely on libraries for free internet access. Libraries recognized the need to maintain

this essential service even when buildings were closed to the public due to local regulations or had limited occupancy rules in place. Most libraries (62 percent) reported that they intentionally provided Wi-Fi services outside their physical buildings during COVID-19, with relatively more libraries in towns (65 percent) and rural areas (67 percent) indicating that they provided this access for their communities.

The differences between libraries in cities and those in other locales

are apparent again in the large number that were able to shift how they provide programs: 90 percent of libraries in cities provided live, virtual programs and 94 percent provided recordings of program content. While relatively fewer rural libraries were able to pivot to these new formats, 41 percent of rural libraries indicated they offered live virtual programs and recordings of programs—a greater number of libraries in absolute terms than the city libraries.

Figure 2. Percentages of libraries that offered virtual reference service, outside Wi-Fi access, live-virtual programs, and recordings of program content, by locale



Access to Library Materials

Not only did they adapt the ways they offered essential information services, public libraries also shifted how they provided access to materials they are traditionally known for, like books and e-books. As **Figure 3** shows, the percentage of libraries that allowed patrons to register for library cards online without needing to be physically present more than doubled during the pandemic, from 29 to 64 percent. This change is evident across all locales, with the relative increase of libraries making the switch higher in towns and rural areas than those in cities and suburbs.

Public libraries also ensured their patrons could access physical and electronic holdings despite the pandemic (see **Figure 4**). Increased access to electronic collection materials included raising the concurrent or monthly borrowing limits for electronic materials; adding to their electronic holdings; or otherwise augmenting the public's ability to use electronic materials. While libraries in cities more commonly reported taking any of these actions (95 percent), more than half (52 percent) of rural libraries also increased access to their electronic collections. Overall, two-thirds of libraries added or increased access to electronic materials in response to the pandemic.⁵

Libraries became especially creative with the ways that they provided access to physical materials with minimal contact, including delivery and curbside, vestibule, porch, or drive-thru pickups. The PLS defined all these as "outside" service. **Figure 4** shows that, overall and across locale groups, between 80 and 90 percent of libraries employed these methods.

Figure 3. Percentages of libraries that allowed online registration for library cards before and during pandemic, by locale

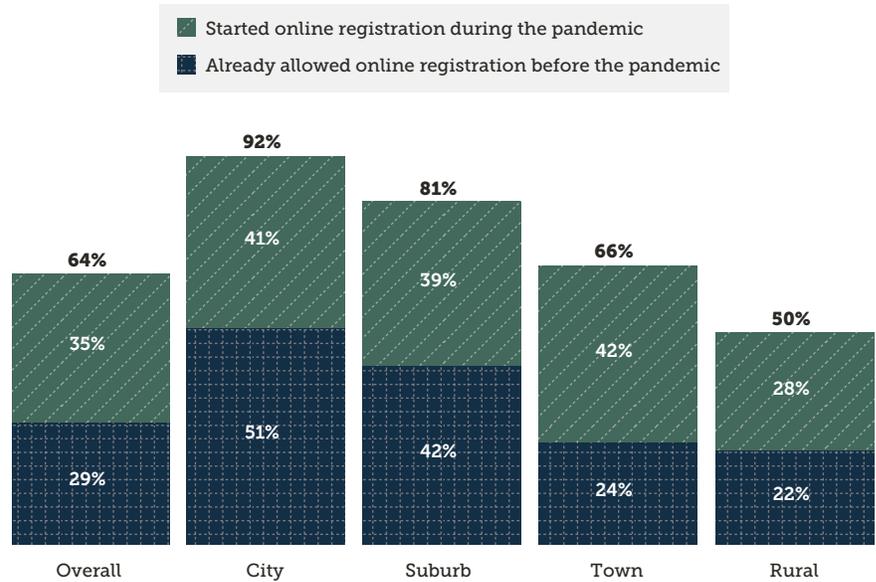
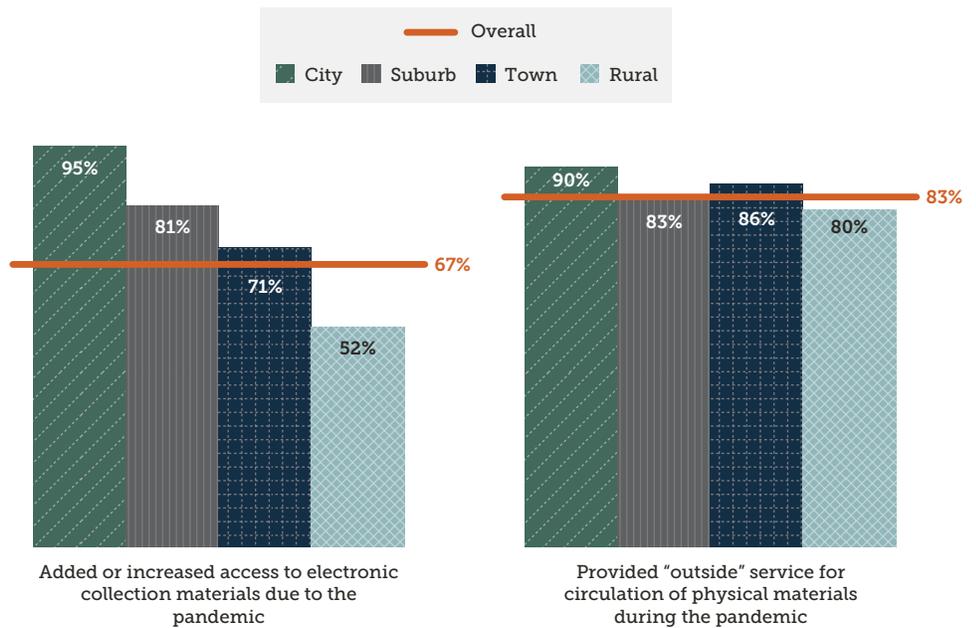


Figure 4. Percentages of libraries that added or increased access to electronic materials and distributed physical materials outside the building, by locale



⁵Analyses of the counts of electronic material holdings are problematic because group purchasing arrangements for these materials are very common, which complicate any statements about availability of materials to patrons of any individual library.

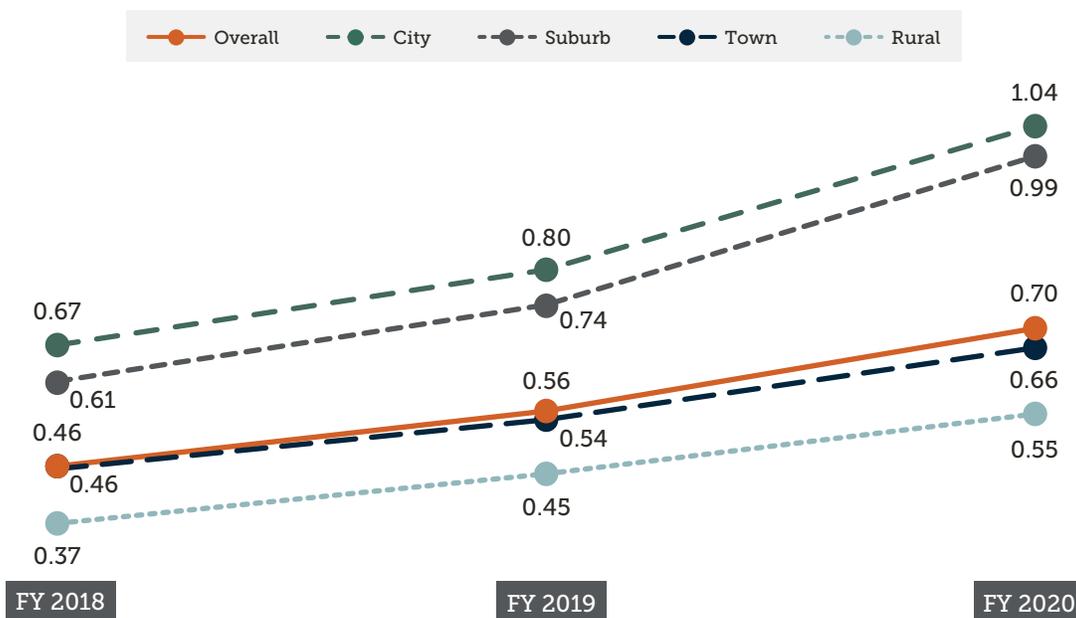
Patrons took advantage of these expanded offerings from libraries. Median electronic circulation per person reached the highest levels ever in FY 2020, at 0.7 overall and about one electronic item checked out per person for libraries in cities and suburbs (see **Figure 5**).

This metric increased from FY 2018 to FY 2020 for libraries in all locale groups. The largest relative change was the 63 percent increase in electronic circulation for libraries serving suburbs. The

FY 2018 PLS research brief (IMLS, 2021) established that across the five-year period from FY 2014 to FY 2018 median electronic circulation per person increased almost 150 percent. That is, the average annual increase in median electronic circulation per person from FY 2014 to FY 2018 was 26 percent. Then from FY 2018 to FY 2019, this metric increased by only 20 percent, but increased by 25 percent from FY 2019 to FY 2020 (see **Figure 5** and **Table A2** in appendix).

The rate of change between fiscal years increased in all locale groups except rural areas. From FY 2019 to FY 2020, libraries in cities and suburbs experienced 31 percent and 34 percent increases, respectively, in the median electronic circulation per person, whereas the increases from FY 2018 to FY 2019 were 19 and 22 percent, respectively (see **Figure 5** and **Table A2** in appendix).

Figure 5. Median electronic circulation per person FY 2018–2020, by locale



Summary & Future Research

Public libraries in the United States responded to COVID-19 by adapting their services to meet the needs of their communities. Most often, this adaptation took the shape of accelerating the digital transformation that was already underway before the pandemic. For example, before the pandemic, 29 percent of libraries offered patrons a way to register to access library materials without the need to visit a library facility in person; by the end of FY 2020, another 35 percent of libraries had adopted the practice.

Many of these COVID-19-specific questions remained on the PLS for FY 2021, and analysis of the next cycle’s data can include the entire survey universe of more than 9,000 public libraries. The questions on the horizon are whether electronic circulation will continue to increase beyond the historic level seen in FY 2020, and to what extent other library metrics will revert to pre-pandemic levels in FY 2021 and beyond.

References

- Goek, S. (2021). “Public Libraries Respond to COVID-19.” *Public Libraries* (Jan/Feb): 21–32. Retrieved from <https://www.ala.org/pla/issues/covid-19/dataviz>.
- Institute of Museum and Library Services. (2021). *The Use and Cost of Public Library Materials: Trends Before the COVID-19 Pandemic*. Washington, DC. Retrieved from https://www.ims.gov/sites/default/files/2021-02/pls_fy18_research_brief.pdf.

Appendix

Table A1. Percentage of libraries that reassigned staff due to the pandemic, by legal basis, FY 2020

Category	Total N	Percentage that Reassigned Staff
Overall	8,426	14.1
City-County	94	22.2
City-Municipal	4,386	15.6
County	884	25.5
Library District	1,246	5.3
Multi-jurisdictional	288	11.2
Tribal government	47	10.2
Non-profit	1,231	8.0
Other	78	17.7
School district	172	27.3

SOURCE: Institute of Museum and Library Services, Public Libraries Survey, FY 2020.

Table A2. Median electronic circulation per person and year-to-year percentage change, by locale, FY 2018–2020

Category	Median Electronic Circulation per Person			Percent Change in Median Electronic Circulation per Person		
	FY 2018	FY 2019	FY 2020	FY 2018 to FY 2019	FY 2019 to FY 2020	FY 2018 to FY 2020
Overall	0.46	0.56	0.70	20.4	25.4	50.9
Locale						
City	0.67	0.80	1.04	19.2	30.7	55.8
Suburb	0.61	0.74	0.99	21.5	34.4	63.3
Town	0.46	0.54	0.66	18.4	22.6	45.1
Rural	0.37	0.45	0.55	23.2	22.7	51.2

NOTE: Calculations are based on unrounded estimates; therefore, reported totals may differ because of rounding. Per person estimates use the population of the LSA.
SOURCE: Institute of Museum and Library Services, Public Libraries Survey, FYs 2018–2020.

About the Institute of Museum and Library Services

The Institute of Museum and Library Services (IMLS) is the primary source of federal support for the nation’s libraries and museums. We advance, support, and empower America’s museums, libraries, and related organizations through grant-making, research, and policy development. Our vision is a nation in which museums and libraries work together to transform the lives of individuals and communities.

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