

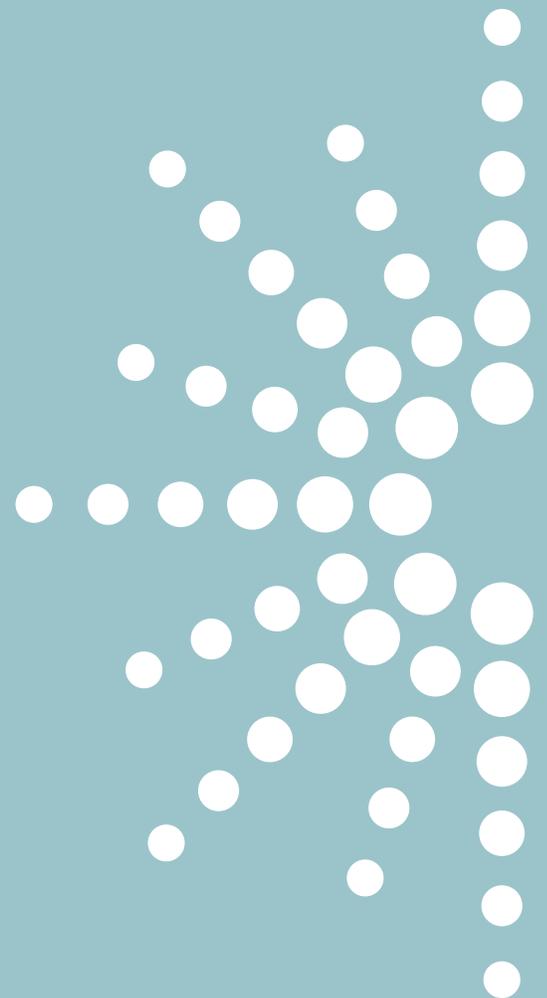


# Public Libraries in the United States

FISCAL YEAR 2017

VOLUME II

October 2020





## Institute of Museum and Library Services

Crosby Kemper III  
Director

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. To learn more, visit [www.ims.gov](http://www.ims.gov) and follow us on [Facebook](#) and [Twitter](#).

As part of its mission, IMLS conducts policy research, analysis, and data collection to extend and improve the nation's museum, library, and information services. IMLS research activities are conducted in ongoing collaboration with state library administrative agencies; national, state, and regional library and museum organizations; and other relevant agencies and organizations. IMLS research initiatives are designed to identify trends and provide valuable, reliable and consistent data concerning the status of library and museum services, as well as report timely, useful, and high-quality data to Congress, the states, other policymakers, practitioners, data users, and the general public.

---

### Contact Information

#### Institute of Museum and Library Services

955 L'Enfant Plaza North, SW, Suite 4000  
Washington, DC 20024-2135  
202-653-IMLS (4657)  
[www.ims.gov](http://www.ims.gov)

This publication is available online: [www.ims.gov/research-evaluation](http://www.ims.gov/research-evaluation).  
IMLS will provide an audio recording of this publication upon request.  
For questions or comments, contact [research@ims.gov](mailto:research@ims.gov).

**October 2020**

---

### Suggested Citation

The Institute of Museum and Library Services. (2020). *Public Libraries in the United States: Fiscal year 2017, Volume II*. Washington, DC: The Institute.

Unless specifically noted, all information contained herein is in the public domain and may be used and reprinted without special permission. Citation of this source is required.

---

### Cover Photos

Left: As one of the largest providers of free internet in the county, San Mateo County Libraries offer over 500 public computers and provide thousands with wireless access every day. (Photo courtesy of San Mateo County Library)

Middle: Kids use their imagination and creativity to build structures with colorful magnetic shapes at Willowbrook Library's grand opening in July 2018. The library's MākMō maker mobiles are stocked with STEAM-based learning technology—including Magna-Tiles—that they bring when they visit an @LACountyLibrary location or a community event outside library walls, helping youth get hands-on experiences with technology that might otherwise be unavailable. (Photo courtesy of Los Angeles County Library)

Right: As a key component to revitalization efforts in the Route 9 Corridor, bound by the Delaware River and interstate highways, the Route 9 Library and Innovation Center in its first few years of operation has found success bringing a mix of programs and services to local residents. (Photo courtesy of New Castle County—Route 9 Library and Innovation Center)

# Contents



## Public Libraries in the United States Survey, Fiscal Year 2017: Volume II

List of Tables.....	iv
List of Figures .....	v
A Message from the Director.....	vi
Executive Summary .....	vii
Introduction.....	1
Methodology .....	2
Analysis.....	2
<b>PART ONE: Public Library Financial Health .....</b>	<b>4</b>
Overview .....	5
Indicator 1. Total Operating Revenue per Person	
Indicator 2. Total Operating Expenditures per Person	
<b>PART TWO: Public Library Resources, Services, and Usage.....</b>	<b>9</b>
Overview .....	10
Section One: Collections and Circulation .....	10
Indicator 3. Collection Materials per Person	
Indicator 4. Circulation per Person	
Section Two: Library Visits and Reference Transactions.....	13
Indicator 5. Library Visits per Person	
Indicator 6. Reference Transactions per Person	
Section Three: Program Offerings and Attendance .....	15
Indicator 7. Programs per 1,000 People	
Indicator 8. Program Attendance per 1,000 People	
Section Four: Internet Access.....	19
Indicator 9. Public-Access Internet Computers per 5,000 People	
Indicator 10. Public-Access Internet Computer User Sessions per Person	
<b>PART THREE: Public Library Staffing .....</b>	<b>23</b>
Overview .....	24
Indicator 11. Staffing (FTEs) per 25,000 People	
<b>APPENDICES.....</b>	<b>26</b>
Appendix A. Key Library Terminology .....	27
Appendix B. Trends by Locale and Population Size Served, FY 2008–2017 .....	29
Acknowledgments.....	35



# List of Tables

Table ES-1. Public Libraries by Locale and Population Size Served, FY 2017 .....	viii
Table N-1. Distribution of Libraries by Locale and Population Size Served, FY 2008 and FY 2017 .....	3
Table 1-1. Operating Revenue and Percent of Operating Revenue per Person by Source of Revenue, Locale, and Population Size Served, FY 2017.....	6
Table 1-2a. Operating Expenditures per Person by Source of Revenue, Locale, and Population Size Served, FY 2017 .....	7
Table 1-2b. Collections Expenditures per Person by Type of Material, Locale, and Population Size Served, FY 2017 .....	8
Table 2-1. Collection Materials and Circulation per Person by Type, Locale, and Population Size Served, FY 2017 .....	12
Table 2-2. Library Visits and Reference Transactions per Person by Locale and Population Size Served, FY 2017 .....	15
Table 2-3. Total Programs Offered and Total Program Attendance per 1,000 People by Program Type, Locale, and Population Size Served, FY 2017.....	18
Table 2-4. Public-Access Internet Computers per 5,000 People and User Sessions per Person by Locale and Population Size Served, FY 2017 .....	22
Table 3-1. Staffing (FTEs) per 25,000 People by Staffing Type, Locale, and Population Size Served, FY 2017 .....	25
Table A-1. Urban-Centric Locale Categories .....	28
Table B-1. Operating Revenue per Person, by Local and Population Size Served, Fiscal Years 2008–2017 (in constant 2017 dollars) .....	29
Table B-2. Operating Expenditure per Person by Locale and Population Size Served, Fiscal Years 2008–2017 (in constant 2017 dollars).....	29
Table B-3. Total Collection Materials per Person by Locale and Population Size Served, Fiscal Years 2008–2017.....	30
Table B-4. Total Circulation per Person by Locale and Population Size Served, Fiscal Years 2008–2017.....	30
Table B-5. Library Visits per Person by Locale and Population Size Served, Fiscal Years 2008–2017.....	31
Table B-6. Reference Transactions per Person by Locale and Population Size Served, Fiscal Years 2008–2017.....	31
Table B-7. Total Programs Offered per 1,000 People by Locale and Population Size Served, Fiscal Years 2008–2017 .....	32
Table B-8. Total Program Attendance per 1,000 People by Locale and Population Size Served, Fiscal Years 2008–2017 .....	32
Table B-9. Number of Public-Access Internet Computers per 5,000 People by Locale and Population Size Served, Fiscal Years 2008–2017.....	33
Table B-10. Number of Public-Access Internet Computers per Stationary Outlet by Locale and Population Size Served, Fiscal Years 2008–2017.....	33
Table B-11. Public-Access Internet Computer User Sessions per Person by Locale and Population Size Served, Fiscal Years 2008–2017.....	34
Table B-12. Librarians per 25,000 People by Locale and Population Size Served, Fiscal Years 2008–2017 ...	34



# List of Figures

Figure 1-1. Revenue per Person by Population Size Served, FY 2008–2017 .....	5
Figure 2-1. Total Collection Materials per Person by Locale, FY 2008–2017 .....	11
Figure 2-2. Library Visits per Person by Population Size Served, FY 2008–2017 .....	13
Figure 2-3. Reference Transactions per Person by Locale, FY 2008–2017 .....	14
Figure 2-4. Total Programs Offered per 1,000 People by Population Size Served, FY 2008–2017 .....	16
Figure 2-5. Total Program Attendance per 1,000 People by Population Size Served, FY 2008–2017 .....	17
Figure 2-6. Number of Public-Access Internet Computers per 5,000 People by Locale, FY 2008–2017 .....	20
Figure 2-7. Public-Access Internet Computers per Stationary Outlet by Locale, FY 2008–2017 .....	20
Figure 2-8. Public-Access Internet Computer User Sessions per Person by Locale, FY 2008–2017 .....	21
Figure 3-1. Librarians per 25,000 People by Population Size Served, FY 2008–2017 .....	24

# A Message from the Director



The Institute of Museum and Library Services (IMLS) is pleased to present the *Fiscal Year (FY) 2017 Public Libraries Survey (PLS) Report, Volume II*. This report discusses the results of our annual survey of public libraries in 50 states, the District of Columbia, and outlying territories and shows changes in how public libraries have served the community across 10 years.

We release this report at a time of economic uncertainty and anxiety about the nation's health in the global coronavirus (COVID-19) pandemic. With this in mind, the statistical information in our report on library finances, services, usage, and staffing has become even more important.

The 1.3 billion visits to public libraries and the 2.2 billion items checked out (circulation) represent a significant part of the nation's cultural, intellectual, and educational life. The over 300,000 public computers and 258 million sessions on those computers reflect how public libraries continue to serve as a community lifeline to jobs, health care information, community activities, and the development of 21st century skills. The growth public libraries have seen in online activity, as well as e-books and electronic information use, represents more than an ongoing technological trend—it represents how public libraries play a central role in an educational ecosystem that will only grow as we learn from the current crisis.

Our goal is to make the report responsive to your needs and interests as practitioners, policymakers, and community members. We will be mindful of representing the large and powerful impact of the current public health pandemic on community engagement and community life as it relates to public libraries as we continue to collect and report this critical information over the next few years.

Sincerely,  
**Crosby Kemper III**  
Director, IMLS

# Executive Summary



In the United States, public libraries serve their communities by providing free educational resources and meeting spaces, a variety of physical and digital materials, equipment, Internet access, and access to information professionals who provide programs (such as children's reading programs) and answer questions for their patrons. This is the second of two volumes reporting results from the Fiscal Year (FY) 2017 Public Libraries Survey (PLS), along with trends using data collected annually since FY 2008 on how public libraries served their patrons.

The FY 2017 PLS annual census collected data from 98 percent of the public libraries<sup>1</sup> in all 50 states, the District of Columbia, and the outlying territories. The analyses in this report include the 9,045 libraries in the 50 states and the District of Columbia that were open in FY 2017 and met the Federal-State Cooperative System (FSCS) public library definition.<sup>2</sup> Eleven main public library indicators provide a snapshot of the status of public libraries in terms of (1) financial health, (2) resources, services, and usage, and (3) staffing (measured as full-time equivalents, or FTEs).

Indicators are calculated as per-person estimates,<sup>3</sup> adjusted for population so they provide a way to compare and contrast libraries across different contexts. In the first volume, libraries were compared across state and national contexts. In this second volume, libraries are compared across contexts defined by the population size served by libraries and locale types, which categorize the areas in which libraries are located (e.g., town or city).

Key findings shown in Volume I<sup>4</sup> are as follows:

- Expenditures and revenue<sup>5</sup> per person decreased by 4.4 percent or more since FY 2008. Similarly, the number of FTE staff per 25,000 people in the service area declined by 7.9 percent per person since 2008;
- While the number of physical visits per person declined from 5.1 in FY 2008 to 4.2 in FY 2017, 118.4 million Americans attended a library program in FY 2017, a 44.0 percent increase over the same period;
- Since FY 2008, the expansion of digital resources and continued acquisition of physical resources have resulted in a 59.1 percent per person increase in collection materials available to the public; and
- Libraries made more than 300,000 Internet access computers available to the public in FY 2017, an increase of 37.2 percent from FY 2008.

Volume II presents 10-year trends in library indicators on two demographic characteristics: locale and population size served. 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 categories: city, suburb, town, and rural.<sup>6</sup> Population size served is separated into four categories: small (fewer than 2,500 people), medium (2,500–9,999 people), large (10,000–25,000 people), and very large (more than 25,000 people). While these two demographic

<sup>1</sup> Any reference to a public library in this report refers to the administrative entity, which may be a single-outlet library or a multiple-branch library system. An outlet is a public library, such as a central library, branch library, or bookmobile that is attached to an administrative entity.

<sup>2</sup> Overall, 200 libraries were excluded from the analyses, consistent with PLS reporting practices. Of these, 168 libraries did not meet the FSCS public library definition, 29 libraries were reported as permanently or temporarily closed in FY 2017, and three libraries were located in the outlying territories of American Samoa, Guam, and Northern Marianas. The report contains no library data from outlying territories.

<sup>3</sup> For scaling purposes, some indicators are computed as per 1,000 people (e.g., Indicators 7 and 8, programs offered and program attendance), per 5,000 people (e.g., Indicator 9, public access Internet computers), or per 25,000 people (Indicator 11, staff FTE).

<sup>4</sup> <https://www.ims.gov/sites/default/files/publications/documents/publiclibrariesintheunitedstatesurveyfiscalyear2017volume1.pdf>

<sup>5</sup> Revenue refers to "Total Operating Revenue" and expenditures to "Total Operating Expenditures."

<sup>6</sup> 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 report uses the locale code assigned based on the second method, the modal locale code of the library system's associated stationary outlets. Approximately 81 percent of libraries are single-outlet administrative units for which the locale based on methods 1 and 2 is identical.



characteristics are related, **Table ES-1** shows that there are differences between a library's locale and the size of the population it serves. For example, while just over two-thirds of the libraries that serve very large populations (more than 25,000 people) are in cities or suburbs, 11.2 percent are in rural

areas. Similarly, not all rural libraries serve small populations: of the 4,013 rural libraries, 12.6 percent provide services to 10,000 people or more. For additional details about locale definitions, see Appendix A.

**Table ES-1. Public Libraries by Locale and Population Size Served, FY 2017**

Population Size Served	Locale				Total
	City	Suburb	Town	Rural	
Very large (>25,000)	459	991	446	239	2,135
Large (10,000–25,000)	23	779	688	267	1,757
Medium (2,500–9,999)	7	514	963	1,273	2,757
Small (<2,500)	2	63	97	2,234	2,396
Total	491	2,347	2,194	4,013	9,045

NOTE: Locale could not be assigned for six library systems due to placement of outlet(s) outside of locale boundaries.

SOURCE: IMLS, Public Libraries Survey, FY 2017.

## Key Findings in Volume II

### Financial Health of Public Libraries (Indicators 1 and 2)

- FY 2017 per person (pp) revenue and expenditures were larger for libraries in cities (revenue \$45.52 pp, expenditures \$43.09 pp) and suburbs (revenue \$45.21 pp, expenditures \$42.04 pp) than in towns (revenue \$31.65 pp, expenditures \$29.33 pp) and rural areas (revenue \$32.79 pp, expenditures \$30.17 pp).
- Suburban libraries had the largest per person declines in revenue (10.5 percent) and expenditures (10.9 percent), with negligible declines for libraries in towns and rural areas. Libraries in cities saw a negligible decline in revenue (2.7 percent pp) but a larger decline in expenditures (3.9 percent pp).
- Contrary to the overall national trend since FY 2008, libraries serving small communities (those with fewer than 2,500 people) saw increases in revenue (14.8 percent pp) and expenditures (12.9 percent pp). Libraries that serve very large populations (i.e., more than 25,000 people) reported the smallest per person revenue and expenditures and saw the largest per person decreases since FY 2008, with revenue declining 5.7 percent and expenditures declining 6.3 percent.

### Public Library Services, Resources, and Usage (Indicators 3–10)

- The number of collections material per person (Indicator 3) and number of public-use Internet computers per 5,000 people (Indicator 9) increased at libraries in all types of communities (characterized by locale or population size served) since FY 2008.
- The largest increases in these resources were at libraries in towns and rural areas and at libraries that serve populations with fewer than 25,000 people, where collections material per person more than doubled since FY 2008.
- Traditional indicators of the use of library services—circulation (Indicator 4), library visits (Indicator 5), reference transactions<sup>7</sup> (Indicator 6), and use of public-access Internet computers (Indicator 10)—showed continued declines compared to FY 2008:<sup>8</sup>
  - The largest declines were reported by libraries in suburbs and cities.
  - Contrary to the downward trends:
    - Libraries in rural areas and towns saw increased circulation per person (23.2 percent and 6.9 percent, respectively) since FY 2008; and

<sup>7</sup>Reference transactions are substantive questions that members of the public pose to library professionals.

<sup>8</sup>All of these indicators increased between FY 2008 and FY 2010 and after that time started the decline referenced here. For more details, please see Appendix B and Swan, D. W., Grimes, J., Owens, T., Miller, K., Arroyo, J., Craig, T., Dorinski, S., Freeman, M., Isaac, N., O'Shea, P., Padgett, R., Schilling, P. & Scotto, J. (2014). *Public Libraries in the United States Survey: Fiscal Year 2011* (IMLS-2014-PLS-01). Institute of Museum and Library Services. Washington, DC. Online at: <https://www.imls.gov/sites/default/files/legacy/assets/1/AssetManager/PLS2011.pdf>



- Libraries that served small communities (fewer than 2,500 people) saw a 6.0 percent increase in reference transactions.
- Despite the decline in visits, public library staff offered an increasing number of programs (Indicator 7) attended by increasing numbers of patrons (Indicator 8) at libraries serving varied population sizes and in various locales.
  - The largest increase in the number of programs per 1,000 people was by libraries in rural areas (60.5 percent), while the smallest increase was for those in suburbs (41.9 percent); and
  - Increases in attendance were most pronounced for libraries in areas serving medium-sized populations (2,500-9,999 people) (42.1 percent) and small populations (fewer than 2,500 people) (41.5 percent).

## **Public Library Staffing (full-time equivalent, or FTE, per 25,000 people) (Indicator 11)**

- Since FY 2008, the number of FTE staff at public libraries declined by a negligible 2.5 percent. There were 4.0 staff FTE per 25,000 people at public libraries in FY 2017.
- While suburban and city libraries saw declines in library staff FTE (3.9 percent and 5.2 percent, respectively), those in rural areas and towns saw increases (6.0 percent and 4.9 percent, respectively).
- Staff FTE decline was associated with libraries serving very large populations (4.2 percent). Libraries serving populations of 25,000 or fewer people saw increases in staff FTE per 25,000 people between 3.3 percent and 7.9 percent.

In summary, the analyses reported in both Volumes I and II document the varied ways in which trends in libraries are similar and different across states, location types, and the size of the population they serve. America's communities have different information needs and, as these needs have changed over the past decade, public libraries responded to these changes by providing valuable resources and services to their communities.



# Introduction

Public libraries across the United States offer services and resources to help meet the information, learning, and literacy needs of their communities. These needs vary between cities, suburbs, towns, and rural areas, as well as by the population size of the community; nevertheless, libraries in all settings are cornerstones of their local communities. The Public Libraries Survey (PLS) serves as a tool that helps measure when, where, and how public library services are changing, especially in relation to the demographic characteristics of urbanicity and population size. These data, supplied annually by more than 98 percent of public libraries across the country, provide long-term trend information that researchers, policymakers, and practitioners can use to make strategic, data-based decisions about the support and management of public libraries.

In FY 2017, there were 9,045 active public libraries in the United States that met the definition of a public library developed by the Federal and State Cooperative System (FSCS).<sup>1</sup> Approximately 312 million people lived within a public library legal service area (LSA)—approximately 96 percent of the total U.S. population.<sup>2</sup> The number of public libraries varied by locale and population. In FY 2017, rural areas (4,013) had more public libraries than cities (491), suburbs (2,347), and towns (2,194). Furthermore, most public libraries (76.4 percent) served a population area of fewer than 25,000 people. These public libraries provided access to information and services through 16,735 central and branch libraries and 619 bookmobiles, which translates to 5.3 outlets<sup>3</sup> for every 100,000 people.

## Public Library Indicators

### Organization of the Report

This is the second of two volumes that report metrics for public libraries in three key areas: (1) financial health: (2) resources, services, and

usage, and (3) staffing. [Volume I](#) focused on trends at the national and state levels, and [Volume II](#) focuses on trends and describes differences across library subgroups based on locale and population size served.

The 11 main indicators listed below provide an overall picture of the stability and utility of public libraries when examined together. In most cases, the indicators are calculated as per person (often denoted as pp), but in some cases, they are scaled to per 1,000 people, per 5,000 people, or per 25,000 people. These scaled indicators provide a way to compare performance across libraries in different contexts and across time.<sup>4</sup>

Each of the three main sections—associated with each of the three indicator areas—starts with a trend graph for the period FY 2008–FY 2017. This graph shows either the trend among the four locale groups or among the four population-size-served groups, benchmarked to the national level (which is shown as an orange solid line). Appendix B contains data for all 11 indicators at the national level along with the two demographic characteristics of locale type and population size served. The text highlights key findings from the graph as well as Appendix B for each set of indicators.

Next, focusing on FY 2017, libraries are compared and contrasted by locale and the population of the library service area (LSA), as the indicators are examined in greater detail. The 11 primary indicators associated with each metric and the available sub-indicators are used to show a finer level of detail about how libraries meet the needs of their communities.

### Public Library Financial Health

- Indicator 1. Total Operating Revenue per Person
- Indicator 2. Total Operating Expenditures per Person

<sup>1</sup>Analyses in this report exclude 200 libraries: 168 libraries that did not meet the FSCS public library definition, 29 libraries that were reported as permanently or temporarily closed in FY 2017, and three libraries in the outlying territories of American Samoa, Guam, and Northern Marianas. The report contains no library data from outlying territories.

<sup>2</sup>In 2017, the U.S. population was 325,719,178. For more information, see <http://www.census.gov/popest/>.

<sup>3</sup>An outlet is a public library attached to an administrative entity, which is either a branch, central library, or bookmobile.

<sup>4</sup>Per person indicators are calculated using state-reported population data.



## Public Library Resources, Services, and Usage

- Indicator 3. Collection Materials per Person
- Indicator 4. Circulation per Person
- Indicator 5. Library Visits per Person
- Indicator 6. Reference Transactions per Person
- Indicator 7. Programs per 1,000 People
- Indicator 8. Program Attendance per 1,000 People
- Indicator 9. Public-Access Internet Computers per 5,000 People
- Indicator 10. Public-Access Internet Computer User Sessions per Person

## Public Library Staffing

- Indicator 11. Staffing (FTEs) per 25,000 People

## Methodology

The PLS is a universe survey, which means that information is solicited from all public libraries in the United States. The PLS questionnaire was designed collaboratively by IMLS, the State Data Coordinators (SDCs), and the Library Statistics Working Group (LSWG). In FY 2017, there were 9,216 public libraries—9,213 public libraries in the 50 states and the District of Columbia and three public libraries in the outlying territories,<sup>5</sup> as identified by state library agencies. Data were collected using the PLS Web Portal, an online data collection tool developed by the American Institutes for Research. After the data were collected, they were reviewed and imputed. Historically, PLS response rates have been high. Since FY 2010, unit response to the PLS has been over 97 percent. In FY 2017, the unit response rate was 98.1 percent, and most item-level response rates were above 95.0 percent.<sup>6</sup>

## Analysis

Consistent with past practice, analyses are reported for the 9,045 public libraries in the 50 states and the District of Columbia that met the Federal-State Cooperative System (FSCS) definition of a library and were not closed or temporarily closed in

FY 2017.<sup>7</sup> A public library is established under state or territory authority laws or regulations to serve a community, district, or region.

Under the FSCS definition, a public library must, at a minimum, meet the following criteria:

- Contain an organized collection of printed or other library materials, or a combination thereof;
- Employ paid staff;
- Maintain an established schedule in which the services of the staff are available to the public;
- Have the facilities necessary to support such a collection, staff, and schedule; and
- Receive support in whole or in part from public funds.

Any reference to a public library in this report refers to the administrative entity, which may be a single-outlet library or a multiple-branch library system. References to outlets refer to central libraries, branch libraries, and bookmobiles. Most administrative entities (80 percent in FY 2017) were single-outlet libraries.

While [Volume I](#) presented findings at the national and state levels, Volume II presents 10-year trends in library indicators by two demographic characteristics: locale and population size served. 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:<sup>8</sup>

- **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; and
- **Rural:** territory that does not lie within urbanized areas or urban clusters.

<sup>5</sup> Analyses in this report exclude three libraries in the outlying territories of American Samoa, Guam, and Northern Marianas. The report contains no library data from outlying territories.

<sup>6</sup> For more details about the PLS methodology, see the Data File Documentation: Public Libraries in the United States Fiscal Year 2017, available at [https://www.ims.gov/sites/default/files/fy2017\\_pls\\_data\\_file\\_documentation.pdf](https://www.ims.gov/sites/default/files/fy2017_pls_data_file_documentation.pdf)

<sup>7</sup> In FY 2017, 168 libraries did not meet the FSCS public library definition, 29 libraries were reported as permanently or temporarily closed, and three libraries were in the outlying territories of American Samoa, Guam, and the Northern Mariana Islands. The report contains no library data from outlying territories.

<sup>8</sup> 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 report uses the locale code assigned based on the second method: the modal locale code of the library system's associated stationary outlets.



As shown in **Table N-1**, more than two in five libraries are located in rural areas (44.4 percent) followed by nearly equal amounts in towns and suburbs (24.3 and 25.9 percent respectively).

Population size served is separated into four categories based on the state-reported library service area population:

- **Small:** fewer than 2,500 people,
- **Medium:** 2,500–9,999 people,
- **Large:** 10,000–25,000 people, and
- **Very large:** more than 25,000 people.

In contrast to the concentration of libraries in one of the four locale categories, as shown in **Table N-1**, libraries categorized by the population size of the communities they serve are more evenly distributed across the categories. Libraries serving medium-sized communities (2,500–9,999 people) accounted for 30.5 percent of the nation’s libraries in FY 2017, while those serving large populations (10,000–25,000 people) accounted for just under one in five libraries.

In this report, national per person indicators are aggregate totals based on summing data across all public libraries to the national level and dividing

by the unduplicated population.<sup>9</sup> For scaling purposes, some indicators are then multiplied by 1,000 (e.g., Indicators 7 and 8, programs and program attendance), by 5,000 (e.g., Indicator 9, public-access Internet computers), or by 25,000 (e.g., Indicator 11, staff FTE). Following the same computational methods, indicators computed for the four locales and four population-size-served groups are summed for each group and divided by the unduplicated population to determine per person indicators, with similar adjustments for scale as noted for the national-level indicators. All financial data presented in this report are in constant FY 2017 dollars.

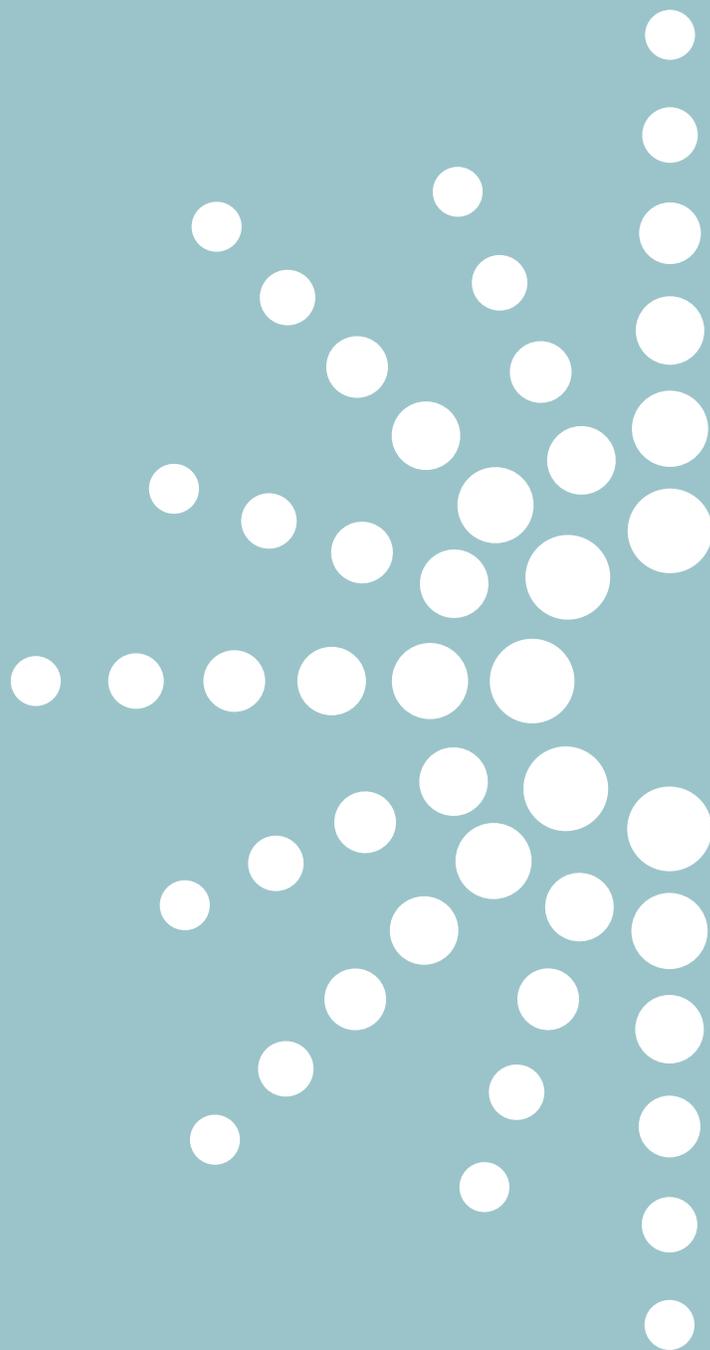
Because the PLS is a universe collection, this report does not use statistical tests to measure the statistical significance of differences over time or between locales and population-size-served groups. Such techniques are necessary when only a sample of subpopulation is used. However, in general, this report examines trends between FY 2008 and FY 2017 and interprets changes between -3 percent and +3 percent as “negligible.” This same guideline (a 3 percent difference) is used when making comparisons across locale or population-size-served groups.

**Table N-1.** Distribution of Libraries by Locale and Population Size Served, FY 2008 and FY 2017

Category	FY 2017		FY 2008	
	Number	Percent	Number	Percent
Overall	9,045	100.0%	8,925	100.0%
<b>Locale</b>				
City	491	5.4%	487	5.5%
Suburb	2,347	25.9%	2,059	23.1%
Town	2,194	24.3%	2,224	24.9%
Rural	4,013	44.4%	4,155	46.6%
<b>Population Size Served</b>				
Very large (>25,000)	2,135	23.6%	2,045	22.9%
Large (10,000–25,000)	1,757	19.4%	1,753	19.6%
Medium (2,500–9,999)	2,757	30.5%	2,799	31.4%
Small (<2,500)	2,396	26.5%	2,328	26.1%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

<sup>9</sup>For details about the unduplicated population, see the *Data File Documentation: Public Libraries in the United States: Fiscal Year 2017*, available at [https://www.ims.gov/sites/default/files/fy2017\\_pls\\_data\\_file\\_documentation.pdf](https://www.ims.gov/sites/default/files/fy2017_pls_data_file_documentation.pdf). Nearly 50 percent (49.7 percent) of libraries’ unduplicated population is the same as the LSA population.



## **PART ONE:**

# Public Library Financial Health



### Overview

This section contains metrics for understanding public libraries' financial health. Total operating revenue and total operating expenditures provide insights about investments in public libraries and library operations. Public libraries receive revenue from federal, state, local, and other sources, including grants and donations, while libraries make expenditures to pay for operating expenses, staffing, and collection materials. When computed at the per person level, both revenue (Indicator 1) and expenditures (Indicator 2) measure investments in public libraries and public library resources.

### National-Level Benchmarks

**Indicator 1. Total Operating Revenue per Person: \$42.34 (\$13.24 Billion Total)**

**Indicator 2. Total Operating Expenditures per Person: \$39.59 (\$12.38 Billion Total)**

#### Trends Since FY 2008

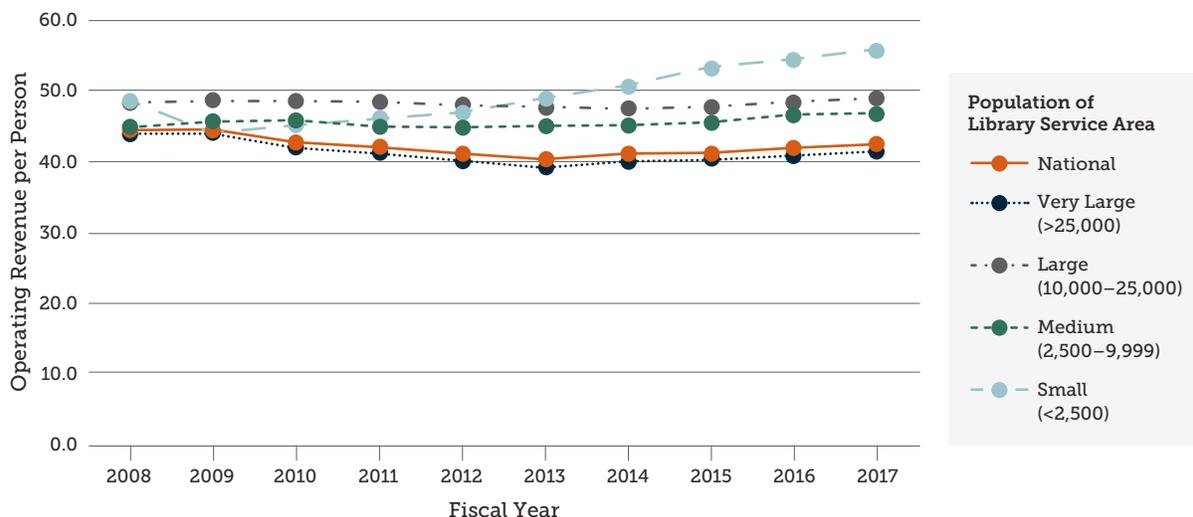
Volume I showed that per person revenue and expenditures both decreased over the 10-year period from FY 2008 to FY 2017 (4.4 percent and 5.0 percent, respectively). During this same time period, revenue received from local sources remained higher than revenue derived from state and federal sources.

**Figure 1-1** shows trends in total operating revenues for all libraries from FY 2008 to FY 2017 at the national level as well as revenues disaggregated by population-size-served groups. Revenue per person decreased during this period for libraries serving very large populations (more

than 25,000 people) but increased for those serving small and medium-sized communities. Revenue remained about the same over the period for those serving large communities. The largest per person change over the period was the 14.8 percent increase in per capita revenue for libraries serving small communities (fewer than 2,500 people).

The revenue trend lines for libraries serving the other three population-size-served groups roughly parallel the national trend line, with libraries serving very large communities below and libraries serving large and medium-sized

**Figure 1-1. Revenue per Person by Population Size Served, FY 2008–2017**



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

# PART ONE:

## Public Library Financial Health



communities above the national trend line. These results suggest that the overall national decline is likely due to the 5.7 percent reduction in revenue per capita for the 23.6 percent of libraries serving very large populations.

Appendix Tables B-1 and B-2 provide additional trend details regarding per person revenue and expenditures for libraries in different locales and with respect to each of the population-size-served categories. Some highlights of these analyses are as follows:

- FY 2017 revenue and expenditures were larger for libraries in cities and suburbs than in towns and rural areas.
- Suburban libraries had the largest declines in revenue (10.5 percent) and expenditures (11.0 percent) from FY 2008 to FY 2017, with negligible declines in both revenue and expenditures for libraries in rural areas. Libraries in cities also saw a negligible (2.7 percent) decline in revenue but a more significant decline in expenditures (3.9 percent).
- Libraries serving small populations (fewer than 2,500 people) had higher per person revenue (\$55.72) and expenditures (\$51.00) than those serving areas with larger populations.

### Focus on FY 2017

**Table 1-1** shows the total operating revenue per person and the percentage of operating revenue per person by source of revenue for each locale and population size served. State and local funds were libraries' two largest sources of revenue, with local sources contributing 85.9 percent and state sources contributing 6.7 percent of revenue per person at the national level. However, the relative contribution of these sources of revenue differed based on both the library's locale and the population size of the community it served. Libraries in towns received a greater share of revenue from state sources (12.2 percent) compared to local, federal, and other sources, than libraries in other locales. At the other end of the spectrum, libraries in suburbs saw the largest percentage of revenue from local sources (88.4 percent).

Libraries that served small communities (less than 2,500 people) had the lowest share of funds from local sources (77.6 percent), while those that served large or very large communities both reported just over 86 percent of revenue from local sources. Across all four population-size-served categories, the relative percentage of per person revenue from state sources varied less than across the locale categories, ranging from 5.7 percent for libraries serving small communities to 6.8 percent for those serving very large ones.

**Table 1-1. Operating Revenue and Percent of Operating Revenue per Person by Source of Revenue, Locale, and Population Size Served, FY 2017**

Category	Total	Local	Percent	State	Percent	Federal	Percent	Other	Percent
Overall	\$42.34	\$36.37	85.9%	\$2.82	6.7%	\$0.15	0.4%	\$2.99	7.1%
Locale									
City	\$45.52	\$39.23	86.2%	\$2.42	5.3%	\$0.21	0.5%	\$3.65	8.0%
Suburb	\$45.21	\$39.96	88.4%	\$2.75	6.1%	\$0.07	0.2%	\$2.43	5.4%
Town	\$31.65	\$24.66	77.9%	\$3.85	12.2%	\$0.16	0.5%	\$2.98	9.4%
Rural	\$32.79	\$26.28	80.1%	\$3.20	9.8%	\$0.23	0.7%	\$3.07	9.4%
Population Size Served									
Very large (>25,000)	\$41.28	\$35.58	86.2%	\$2.81	6.8%	\$0.15	0.4%	\$2.74	6.6%
Large (10,000–25,000)	\$48.78	\$42.25	86.6%	\$2.88	5.9%	\$0.09	0.2%	\$3.56	7.3%
Medium (2,500–9,999)	\$46.70	\$38.36	82.1%	\$2.89	6.2%	\$0.22	0.5%	\$5.24	11.2%
Small (<2,500)	\$55.72	\$43.25	77.6%	\$3.15	5.7%	\$0.31	0.6%	\$9.01	16.2%

NOTE: Calculations are based on unrounded estimates; therefore, reported totals may differ due to rounding. Per person estimates in the table use the unduplicated population." to the table per the source documentation.

SOURCE: IMLS, Public Libraries Survey, FY 2017.

# PART ONE:

## Public Library Financial Health



Focusing next on library expenditures, **Table 1-2a** reports findings for expenditures in three categories (staff, collection materials, and other) by locale and size of population served. The patterns noted earlier with respect to per person revenue are similar to those for per person expenditures, since revenue and expenditures tend to align. At the national level, two-thirds of expenditures were on staff, with 11.1 percent on collections. There was negligible variation in the relative percentage of expenditures on collections across libraries in different locales and for those serving communities of different sizes. However, the overall mix of expenditures for libraries serving small communities stands out as different from those of libraries in the other population-size-served categories, with 61.2 percent (the lowest percentage among all categories) of expenditures on staffing, but 12.5 percent on collections and

26.4 percent on other expenses (the highest percentage among all categories).

**Table 1-2b** shows collections expenditures per person and the percentage of spending on electronic collections by locale and population size served. Relative spending on electronic materials varied by locale and service population size groups. Libraries in towns and rural areas spent less than 18 percent of their collections expenditures on electronic materials, while those in cities spent more than 31 percent on this material format. Likewise, for libraries in small communities, 9.1 percent of collections expenditures were for electronic items, while libraries in very large communities spent more than three times this level (29.2 percent) on electronic items.

**Table 1-2a. Operating Expenditures per Person by Source of Revenue, Locale, and Population Size Served, FY 2017**

Category	Expenditure Type						
	Total	Staff		Collections <sup>1</sup>		Other <sup>2</sup>	
		Per person	Percent of total	Per person	Percent of total	Per person	Percent of total
Overall	\$39.59	\$26.41	66.7%	\$4.39	11.1%	\$8.78	22.2%
Locale							
City	\$43.09	\$29.08	67.5%	\$4.55	10.6%	\$9.46	22.0%
Suburb	\$42.04	\$28.01	66.6%	\$4.86	11.6%	\$9.16	21.8%
Town	\$29.33	\$19.27	65.7%	\$3.16	10.8%	\$6.90	23.5%
Rural	\$30.17	\$19.49	64.6%	\$3.47	11.5%	\$7.21	23.9%
Population Size Served							
Very large (>25,000)	\$38.72	\$25.82	66.7%	\$4.31	11.1%	\$8.58	22.2%
Large (10,000–25,000)	\$44.88	\$30.59	68.2%	\$4.72	10.5%	\$9.57	21.3%
Medium (2,500–9,999)	\$43.14	\$28.32	65.6%	\$4.83	11.2%	\$9.99	23.2%
Small (<2,500)	\$51.00	\$31.20	61.2%	\$6.36	12.5%	\$13.45	26.4%

<sup>1</sup> Includes operating expenditures for other materials not reported separately in this table (e.g., microform, physical audio, physical video, DVD, and new formats).

<sup>2</sup> Other operating expenditures not included in staff or collections. This includes expenses such as binding, supplies, repair or replacement of existing furnishings and equipment, and costs of computer hardware and software used to support library operations or to link to external networks, including the Internet. Report contracts for services, such as costs of operating and maintaining physical facilities, and fees paid to a consultant, auditor, architect, attorney, etc.

NOTE: Calculations are based on unrounded estimates; therefore, reported totals may differ due to rounding. Per person estimates in the table use the unduplicated population.

SOURCE: IMLS, Public Libraries Survey, FY 2017.

# PART ONE:

## Public Library Financial Health



**Table 1-2b.** Collections Expenditures per Person by Type of Material, Locale, and Population Size Served, FY 2017

Category	Collections			Percent Electronic
	Total Collections <sup>1</sup>	Print Materials	Electronic Materials	
Overall	\$4.39	\$2.41	\$1.19	27.2%
<b>Locale</b>				
City	\$4.55	\$2.37	\$1.42	31.2%
Suburb	\$4.86	\$2.59	\$1.35	27.8%
Town	\$3.16	\$2.01	\$0.56	17.9%
Rural	\$3.47	\$2.25	\$0.57	16.3%
<b>Population Size Served</b>				
Very large (>25,000)	\$4.31	\$2.28	\$1.26	29.2%
Large (10,000–25,000)	\$4.72	\$2.89	\$0.95	20.1%
Medium (2,500–9,999)	\$4.83	\$3.29	\$0.61	12.7%
Small (<2,500)	\$6.36	\$4.64	\$0.58	9.1%

<sup>1</sup> Includes operating expenditures for other materials not reported separately in this table (e.g., microform, physical audio, physical video, DVD, and new formats).

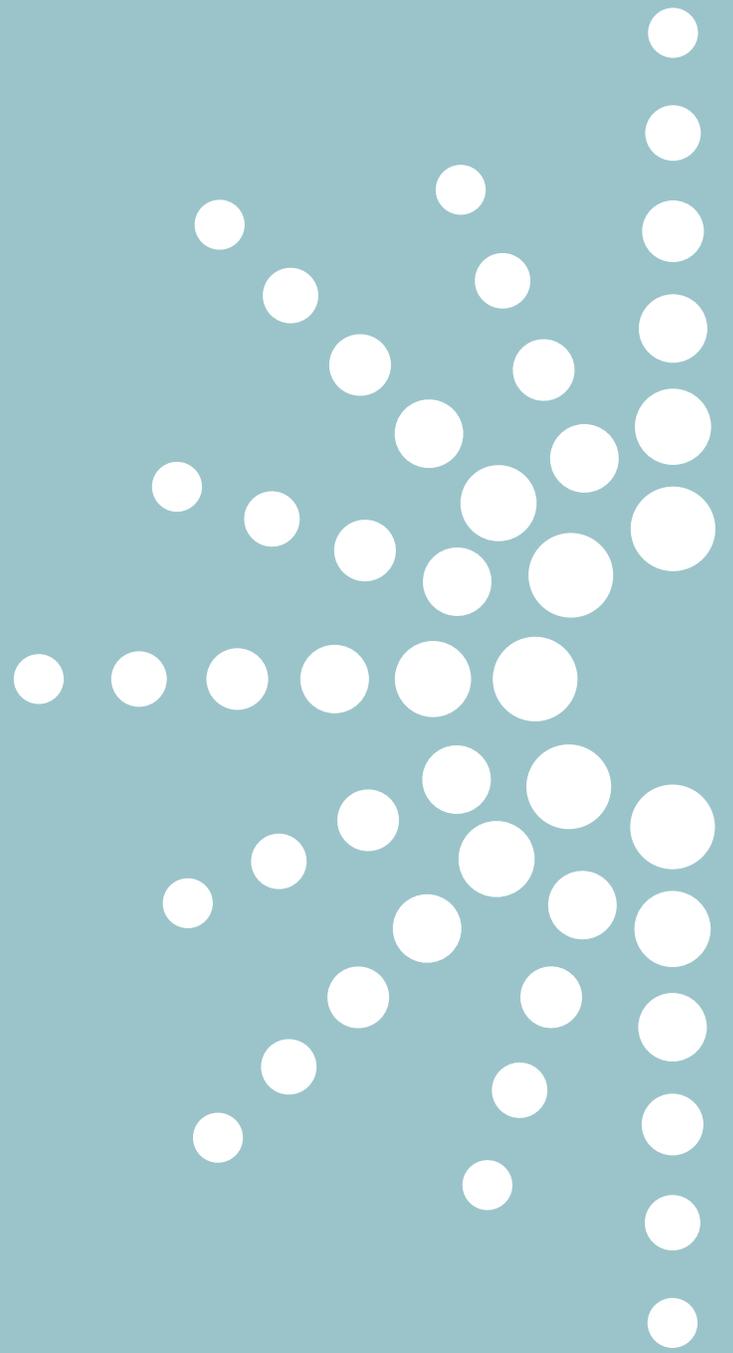
NOTE: Calculations are based on unrounded estimates; therefore, reported totals may differ due to rounding. Per person estimates in the table use the unduplicated population.

SOURCE: IMLS, Public Libraries Survey, FY 2017.

### Summary

At the national level, there was a 4.4 percent decline in per person revenue and a 5.0 percent decline in per person expenditures at public libraries from FY 2008 to FY 2017; however, the analyses in this section demonstrate the importance of looking more closely at the trends in financial health indicators for libraries in different types of communities. The trends in these indicators for suburban libraries and

those that serve very large populations (over 25,000 people) aligned with the national trends, with decreases in both per person revenue and expenditures from FY 2008 to FY 2017. However, other types of libraries deviated from the national trends, with libraries in both small and medium-sized communities seeing increases in per capita revenue and expenditures over the same period.



## **PART TWO:**

# Public Library Resources, Services, and Usage



## Overview

Part Two of this report contains metrics for understanding public library resources, services, and usage. It describes public library collections (e.g., books, e-books, audio materials, video materials, and electronic materials) and circulation, visits and reference transactions, program offerings and attendance, and public-access Internet computer availability and usage.

There are four sections in Part Two. Section One focuses on the 1.6 billion collection materials that public libraries make available to patrons and the 2.2 billion items that patrons checked out (circulation)—the traditional metrics of public libraries. Next, Section Two examines public library services, represented by the 1.3 billion physical library visits and 240 million reference transactions. Section Three examines the 5.4 million programs attended by 118.4 million people. Finally, Section Four explores the 300,199 public-access Internet computers, which offer patrons the means to participate in web-based services and activities at no charge.

## Section One: Collections and Circulation

Library collections<sup>10</sup> include materials in many formats: physical books, e-books, audio materials, and video materials. Libraries make the materials in their collections available for circulation to the public. Circulation is an important measure of library utilization, specifically the use of the collection materials.<sup>11</sup>

### National-Level Benchmarks

**Indicator 3. Collection Materials per Person: 5.0 (1.6 Billion Materials Total)**

**Indicator 4. Circulation per Person: 6.9 (2.2 Billion Circulations Total)**

### Trends Since FY 2008

[Volume I](#) reported that per person collection materials increased over the 10-year period from FY 2008 to FY 2017 (59.1 percent), while per person circulation declined (10.3 percent).

**Figure 2-1** shows trends in collection materials for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by locale. Collection materials per person during this period increased for libraries in all the locale groups. The largest per

person change was the 187.6 percent increase in collection materials for libraries serving rural areas.

The trend lines for libraries in the other three locales roughly parallel the national trend line, with suburban and city libraries below the national trend line (with a negligible deviation of less than 3 percent over the period) and libraries in towns above it. These results suggest the national increase is likely due to the increase across locales.

<sup>10</sup> For the purposes of this report, total collections are the sum of books, e-books, physical and downloadable audio materials, and physical and downloadable video materials. For more details, refer to the [Data File Documentation: Public Libraries in the United States Fiscal Year 2017](#).

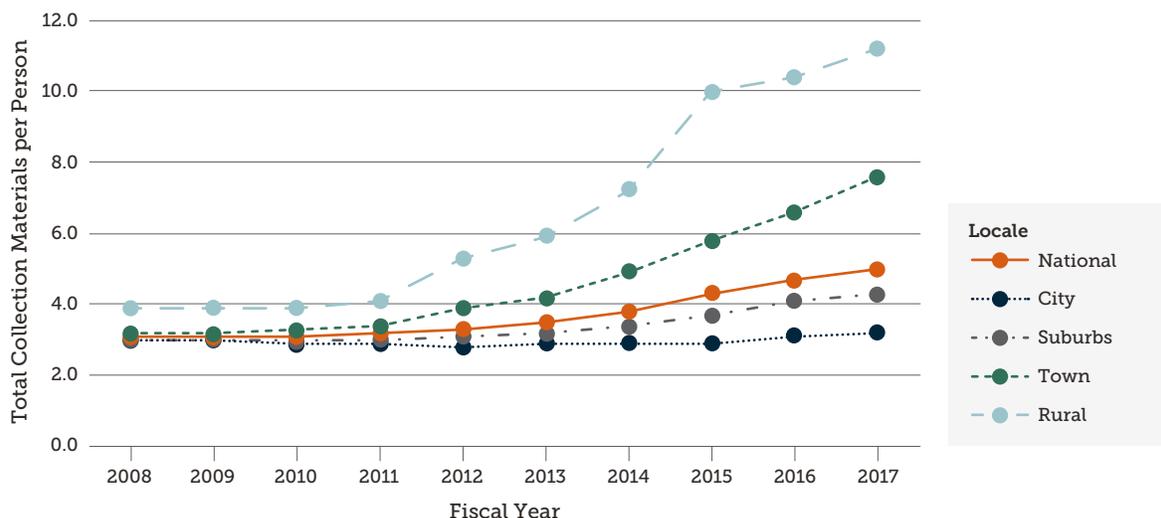
<sup>11</sup> Total circulation is the total annual circulation of all types of library materials, including renewals. Because the PLS data element measuring total circulation underwent a methodological modification in FY 2016, missing data in FY 2017 were not imputed and remained missing, according to PLS data processing practices (see [Data File Documentation: Public Libraries in the United States Fiscal Year 2017](#)). Libraries with missing data are excluded from per person estimates.

## PART TWO:

### Public Library Resources, Services, and Usage



**Figure 2-1. Total Collection Materials per Person by Locale, FY 2008–2017**



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

Appendix Tables B-3 and B-4 provide additional trend details per person for collection materials and circulation for libraries in different locales and in each of the four population-size-served groups. Some highlights of these analyses are as follows:

- FY 2017 collections and circulation per person were largest for libraries serving small communities (less than 2,500 people).
- Libraries serving small communities had the largest growth in collection materials from FY 2008 to FY 2017 (303.4 percent), followed by libraries serving medium-sized communities (175.2 percent).
- Libraries serving very large populations (over 25,000 people) had the least decline in circulation (9.8 percent).

#### Focus on FY 2017

**Table 2-1** shows collection materials and circulation per person by type, locale, and population size served. Total collection materials per person were substantially lower in cities (3.2) than in rural areas (11.2). Also, the more rural the locale, the greater the number of each type of material per person in the library’s collection—

that is, books, e-books, audio materials, and video materials. The relative number of collection materials differed by locale. Collection materials in libraries in rural areas had a greater proportion of e-books (46.1 percent) than libraries in other locales. Suburban libraries had the highest total circulation per person (7.8) as well as children’s materials circulation per person (2.9).

Collection materials per person also varied by population size groups in FY 2017. Overall, the smaller the community served, the greater the library’s total collections per person with respect to each type of collections material: books, e-books, audio materials, and video materials. The relative number of collection materials differed by population size groups, with libraries serving small communities hosting a greater proportion of e-books (56.4 percent) than libraries in other locales. Also, the smaller the community served, the greater the total circulation per person. Although libraries across population size groups did not differentiate greatly, the highest children’s materials circulation occurred in libraries serving large communities (10,000–25,000 people) (2.7).

## PART TWO:

### Public Library Resources, Services, and Usage



Table 2-1. Collection Materials and Circulation per Person by Type, Locale, and Population Size Served, FY 2017

Category	Collection Materials per Person									
	Total Collection Materials <sup>1</sup>	Books <sup>2</sup>	Percent of Total	E-books	Percent of Total	Audio Materials <sup>3</sup>	Percent of Total	Video Materials <sup>3</sup>	Percent of Total	
Overall	5.0	2.3	45.8%	1.5	29.7%	1.0	19.3%	0.3	5.2%	
Locale										
City	3.2	2.1	66.9%	0.4	11.4%	0.5	15.6%	0.2	6.2%	
Suburb	4.3	2.1	48.4%	1.2	27.8%	0.7	17.3%	0.3	6.6%	
Town	7.6	2.7	35.0%	2.7	35.4%	1.9	25.6%	0.3	3.8%	
Rural	11.2	3.4	30.0%	5.1	46.1%	2.3	20.7%	0.4	3.3%	
Population Size Served										
Very large (>25,000)	3.4	2.0	56.8%	0.6	18.2%	0.6	18.7%	0.2	6.3%	
Large (10,000–25,000)	9.9	3.4	34.3%	3.8	38.1%	2.3	23.0%	0.4	4.4%	
Medium (2,500–9,999)	16.0	4.8	30.0%	7.7	48.1%	2.8	17.5%	0.6	3.8%	
Small (<2,500)	47.0	10.3	21.9%	26.5	56.4%	8.8	18.7%	1.0	2.1%	
Category	Circulation per Person									
	Total Circulation <sup>2</sup>			Children's Materials Circulation				Percent of Total		
Overall	6.9			2.5				35.3%		
Locale										
City	6.9			2.3				33.5%		
Suburb	7.8			2.9				37.7%		
Town	5.4			1.8				32.9%		
Rural	5.6			1.8				32.5%		
Population Size Served										
Very large (>25,000)	6.9			2.4				35.4%		
Large (10,000–25,000)	7.4			2.7				35.9%		
Medium (2,500–9,999)	7.3			2.5				33.7%		
Small (<2,500)	8.1			2.6				32.1%		

<sup>1</sup> Total excludes libraries missing data for books. Collection material types exclude libraries missing data for the respective material type only. As a result, material types will not sum to the total given the different denominators.

<sup>2</sup> Missing data were not imputed due to data element definition change in FY 2016. Libraries with missing data are excluded from this estimate.

<sup>3</sup> Includes physical and downloadable materials.

NOTE: Calculations are based on unrounded estimates; therefore, reported totals may differ due to rounding. Per person estimates in the table use the unduplicated population and exclude libraries with missing data.

SOURCE: IMLS, Public Libraries Survey, FY 2017.



**Section Two: Library Visits and Reference Transactions**

Patron visits are meaningful markers of physical library usage when examined in conjunction with reference transactions (in which library staff members use information sources to provide knowledge, recommendations, interpretation, or instruction on the use of information sources to public library patrons). Information sources can range from printed materials and catalogs to electronic databases and library computers.

**National-Level Benchmarks**

**Indicator 5. Library Visits per Person: 4.2 (1.3 Billion Total)**

**Indicator 6. Reference Transactions per Person: 0.8 (240.0 Million Total)**

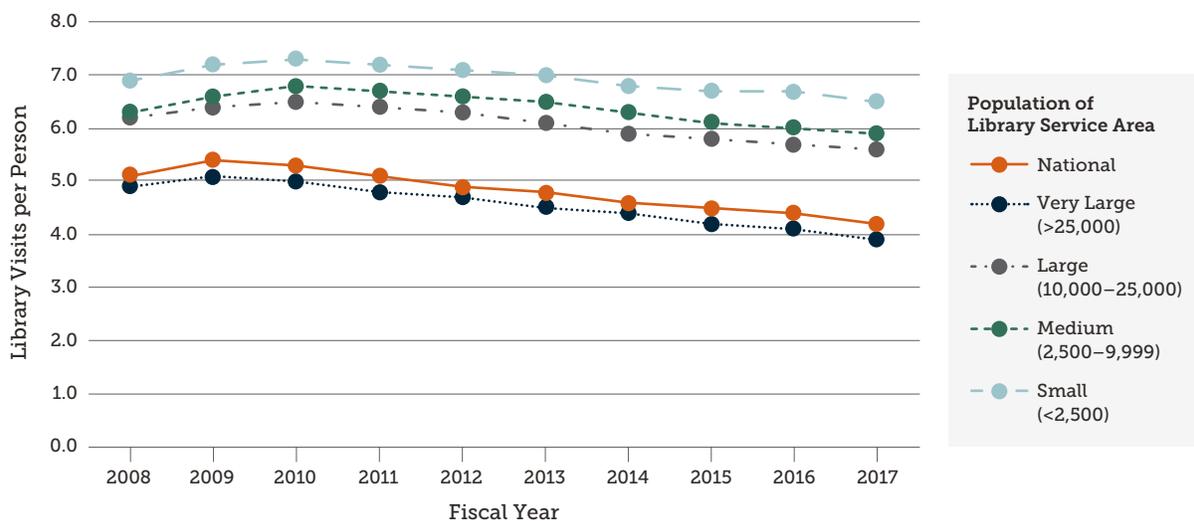
**Trends since FY 2008**

Volume I examined how per person library visits and reference transactions declined over the 10-year period from FY 2008 to FY 2017 (by 17.5 percent and 24.9 percent, respectively).

**Figure 2-2** shows per person library visit trends for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by population size groups. Library visits per person decreased during this period for libraries in all four population size groups. The largest per person change over the

period was the 19.4 percent decline in library visits for libraries serving very large communities (with populations greater than 25,000). The trend lines for libraries serving the other three population size groups are above the national trend line, with smaller decreases from FY 2008 to FY 2017 ranging from 5.0 to 8.4 percent. These results suggest that the overall national decline is likely due to the declines across population sizes served.

**Figure 2-2. Library Visits per Person by Population Size Served, FY 2008–2017**



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

## PART TWO:

### Public Library Resources, Services, and Usage

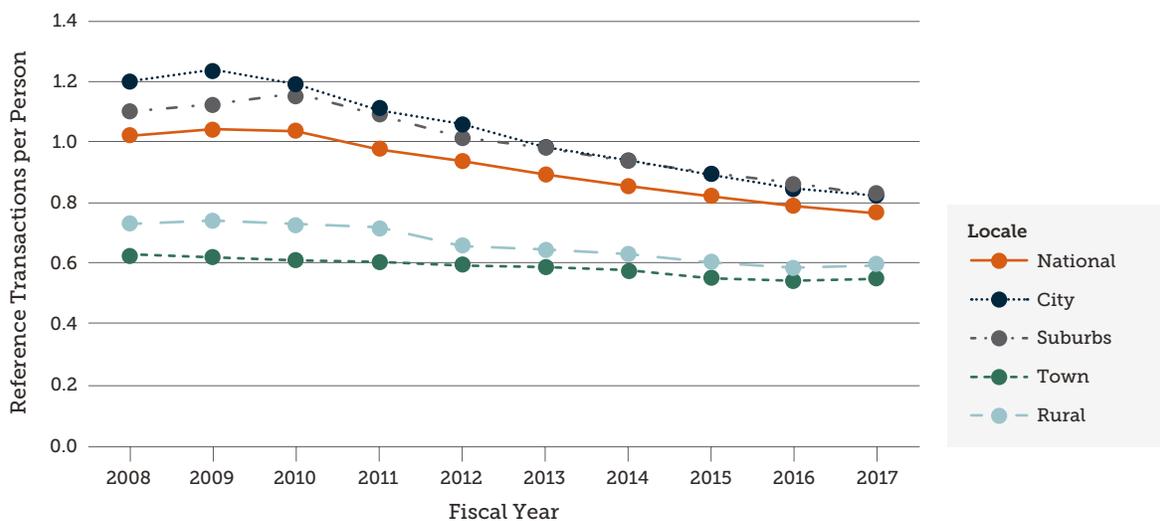


**Figure 2-3** shows trends in reference transactions for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by locale. Reference transactions per person remained about the same over the period, with slight declines across locale types. The change was lowest among libraries in towns, where it decreased by 12.8 percent. The trend lines for libraries in suburbs and cities roughly parallel the national trend line, with libraries in both locale types above the national trend. Libraries in these two types of locales had the greatest declines in reference transactions per person (25.0 percent and 31.3 percent, respectively). These results suggest that the overall national decline is due to the decrease in reference transactions per person for the 31.4 percent of libraries in suburbs and cities.

Appendix Tables B-5 and B-6 provide additional trend details for per person library visits and reference transactions for libraries in different locales and in each of the four population-size-served categories. Some highlights of these analyses are as follows:

- For 2017, per person library visits were highest for libraries in suburbs, followed by those in cities and towns.
- Libraries in suburbs had the largest decline in per person library visits from FY 2008 to FY 2017 (20.3 percent).
- For 2017, per person library reference transactions did not vary substantially across population size groups.
- Libraries serving very large communities (populations over 25,000) had the largest decline in reference transactions (27.6 percent).

**Figure 2-3. Reference Transactions per Person by Locale, FY 2008–2017**



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

## PART TWO:

# Public Library Resources, Services, and Usage



### Focus on 2017

**Table 2-2** shows library visits and reference transactions per person by locale and population size served. Patrons visited suburban libraries on average 4.4 times during FY 2017, higher than in any other type of locale. Library visits varied only slightly across population size groups, with libraries serving small communities (fewer

than 2,500 people) having the most visits per person (6.5).

Reference transactions did not vary substantially across locales, ranging from 0.6 to 0.8 per person, and were relatively consistent across population size groups, ranging from 0.8 to 0.9 per person.

**Table 2-2. Library Visits and Reference Transactions per Person by Locale and Population Size Served, FY 2017**

Category	Library Visits per Person	Reference Transactions per Person
Overall	4.2	0.8
Locale		
City	4.1	0.8
Suburb	4.4	0.8
Town	4.1	0.6
Rural	3.9	0.6
Population Size Served		
Very large (>25,000)	3.9	0.8
Large (10,000–25,000)	5.6	0.8
Medium (2,500–9,999)	5.9	0.8
Small (<2,500)	6.5	0.9

NOTE: Per person estimates in the table use the unduplicated population. Calculations are based on unrounded estimates; therefore, reported totals may differ due to rounding.

SOURCE: IMLS, Public Libraries Survey, FY 2017.

## Section Three: Program Offerings and Attendance

Public libraries offer a variety of programs to address the needs of their community such as programs designed to offer health-centered activities or to build digital literacy skills. The PLS captures information on the total number of programs offered, as well as the number of programs offered to two target populations: children (age 11 and under) and young adults (ages 12–18).<sup>12</sup> In addition, the PLS captures attendance information for total programs offered, children’s programs, and young adults’ programs.<sup>13</sup> The number of programs offered indicates how the library responds to needs in its community. Attendance metrics reflect the public response to library offerings, with higher rates signaling greater public interest.

### National-Level Benchmarks

**Indicator 7. Programs per 1,000 People: 17.3 (5.4 Million Total)**

**Indicator 8. Program Attendance per 1,000 People: 378.7 (118.4 Million Total)**

<sup>12</sup> Data on program offerings for adults are included in total program offerings rather than collected separately.

<sup>13</sup> The number of attendees is not an accounting of individual people; it may include multiple instances of the same person if that person participated in more than one program.

# PART TWO:

## Public Library Resources, Services, and Usage



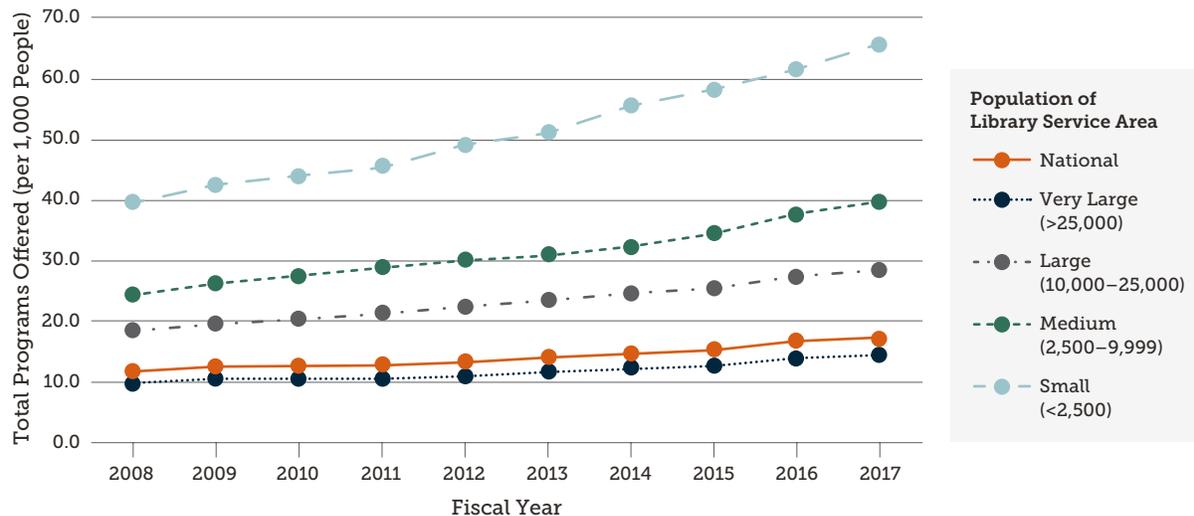
### Trends Since FY 2008

Volume I showed that programs offered and program attendance per 1,000 people increased substantially over the 10-year period from FY 2008 to FY 2017 (48.2 percent and 35.5 percent, respectively).

**Figure 2-4** shows trends in library programming for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by population size groups. Library programming per 1,000 people increased substantially during this period for libraries across population size groups. The largest change over the period was the 66.1 percent increase in programming per 1,000 people for

libraries serving small communities (fewer than 2,500 people). The trend lines for libraries serving the other three population size groups roughly parallel the national trend, with that of libraries serving very large communities below the national trend line (with a negligible deviation of less than 3 percent over the period) and those of libraries serving medium-sized and large communities above it. These results suggest that substantial increases across population size groups were less pronounced in the national trend line during this time period due to the 23.6 percent of libraries serving very large communities.

**Figure 2-4. Total Programs Offered per 1,000 People by Population Size Served, FY 2008–2017**



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

## PART TWO:

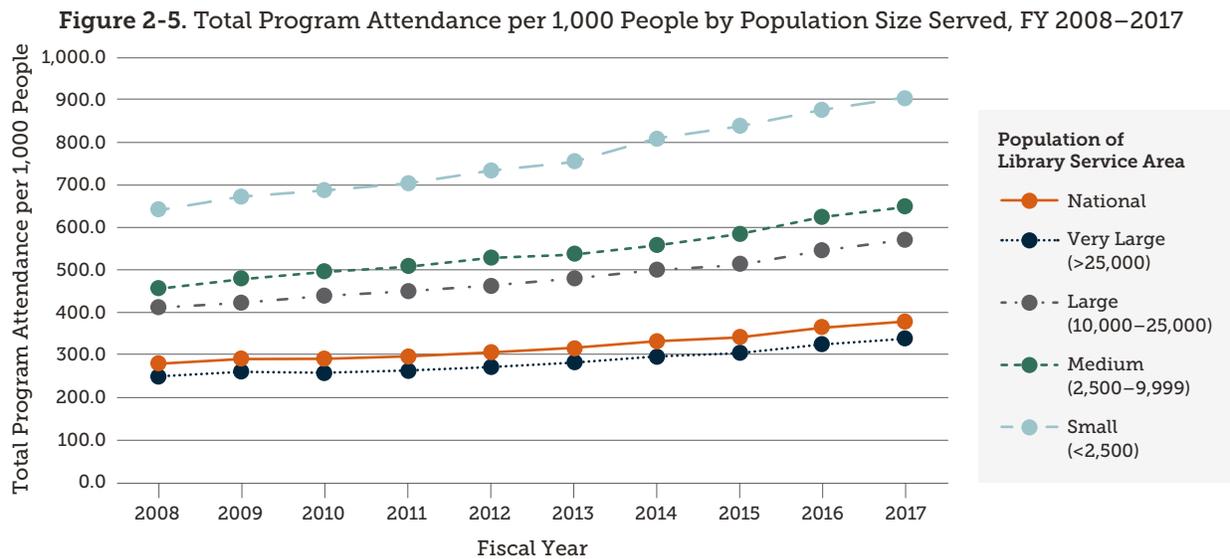
### Public Library Resources, Services, and Usage



**Figure 2-5** shows trends in program attendance for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by population size groups. Program attendance per 1,000 people increased during this period for libraries serving all population size groups. The largest change over the period was the increase in program attendance per 1,000 people for libraries serving small (fewer than 2,500 people) and medium-sized (2,500–9,999 people) communities, which increased 41.5 percent and 42.1 percent, respectively. The trend lines for the other two population groups roughly parallel the national trend line, with libraries serving very large populations below and libraries serving large communities above the line. These results suggest that the overall national increase was less pronounced during this time period due to the 23.6 percent of libraries serving very large populations (more than 25,000 people).

Appendix Tables B-7 and B-8 provide additional trend details for programs offered and program attendance per 1,000 people for libraries in different locales and in each of the four population-size-served categories. Some highlights of these analyses are as follows:

- For 2017, programs offered per 1,000 people were highest for libraries in rural areas, followed by those in towns, suburbs, and then cities.
- Libraries in rural areas had the largest increase in programs offered per 1,000 people from FY 2008 to FY 2017 (60.5 percent).
- For 2017, program attendance per 1,000 people was highest for libraries in rural areas, followed by suburbs, towns, and then cities.
- City libraries had the largest increase in program attendance per 1,000 people (36.9 percent), followed closely by libraries in towns (36.0 percent).



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

## PART TWO:

# Public Library Resources, Services, and Usage



### Focus on 2017

**Table 2-3** shows programs offered and program attendance per 1,000 people for total programs, children's programs, and young adult programs by locale and population size served. Libraries in rural areas had nearly two-thirds more programming and over 20 percent more attendance per 1,000 people than city libraries. The relative amount of children's programming differed by locale, although negligibly, with libraries in towns having a greater proportion of children's programming (59.1 percent) than libraries in other

locales. City libraries offered fewer young adults' program per 1,000 people (1.6) than libraries in rural areas (2.0).

Libraries serving small communities had significantly more programs and higher program attendance per 1,000 people than libraries serving other population size groups. This pattern was consistent for children's programs and young adults' programs as well.

**Table 2-3.** Total Programs Offered and Total Program Attendance per 1,000 People by Program Type, Locale, and Population Size Served, FY 2017

Category	Programs Offered per 1,000 People				
	Total Programs	Children's Programs	Percent	Young Adults' Programs	Percent
Overall	17.3	9.5	54.9%	1.7	9.8%
Locale					
City	14.9	7.9	53.4%	1.6	10.6%
Suburb	17.1	9.2	53.8%	1.7	9.7%
Town	18.8	11.1	59.1%	1.9	9.9%
Rural	24.7	14.1	56.9%	2.0	8.2%
Population Size Served					
Very large (>25,000)	14.4	7.8	54.5%	1.4	10.0%
Large (10,000–25,000)	28.4	15.8	55.7%	2.8	9.9%
Medium (2,500–9,999)	39.7	22.2	55.8%	3.4	8.6%
Small (<2,500)	65.7	37.2	56.7%	5.3	8.0%
Category	Programs Attendance per 1,000 People				
	Total Programs	Children's Programs	Percent	Young Adults' Programs	Percent
Overall	378.7	253.0	66.8%	26.1	6.9%
Locale					
City	339.5	223.5	65.8%	25.0	7.4%
Suburb	398.8	266.5	66.8%	27.8	7.0%
Town	389.7	268.0	68.8%	25.8	6.6%
Rural	416.7	279.2	67.0%	23.0	5.5%
Population Size Served					
Very large (>25,000)	338.1	226.4	67.0%	24.1	7.1%
Large (10,000–25,000)	570.9	384.2	67.3%	37.8	6.6%
Medium (2,500–9,999)	647.7	425.9	65.8%	35.7	5.5%
Small (<2,500)	905.6	564.0	62.3%	48.7	5.4%

NOTE: Per 1,000 people estimates in the table use the unduplicated population. Calculations are based on unrounded estimates; therefore, reported totals may differ due to rounding.

SOURCE: IMLS, Public Libraries Survey, FY 2017.



### Section Four: Internet Access

A core function of public libraries is to facilitate open access to resources. Public libraries accomplish this by providing open access to computers and the Internet, serving as technology access points for communities. Section four contains the final two indicators of public library services, resources, and usage. These indicators analyze the number of public-access Internet computers per 5,000 people and the number of public-access Internet computer user sessions per person. Public-access computer usage does not include patrons using Wi-Fi.<sup>14</sup> These metrics describe public-access Internet computer availability in U.S. public libraries and help libraries and states determine the need for computers located in public libraries.

---

### National-Level Benchmarks

**Indicator 9. Public-Access Internet Computers per 5,000 People: 4.8 (300,199 Total)**

**Indicator 10. Public-Access Internet Computer User Sessions per Person: 0.8 (258.0 Million Total)**

---

### Trends Since FY 2008

*Volume I* showed that public-access Internet computers per 5,000 people increased (29.1 percent) over the 10-year period from FY 2008 to FY 2017, while user sessions decreased (31.6 percent). During this time, there was a 36.6 percent increase in public-access Internet computers per stationary outlet.

**Figure 2-6** shows trends in public-access Internet computers for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by locale. Public-access Internet computers per 5,000 people increased during this period for libraries across all locale groups. The largest change over the period

was the 37.1 percent increase in public-access Internet computers per 5,000 people for libraries in towns, followed closely by the 36.9 percent increase for libraries in cities. The trend lines for suburban and city libraries roughly parallel the national trend line, with both below the national trend line (deviating by no more than 3 percent over the period) and libraries in towns above the national trend. The trend line for libraries in rural areas is substantially higher than the national trend line and other locales. These results suggest the national increase is likely due to the increase across locales.

---

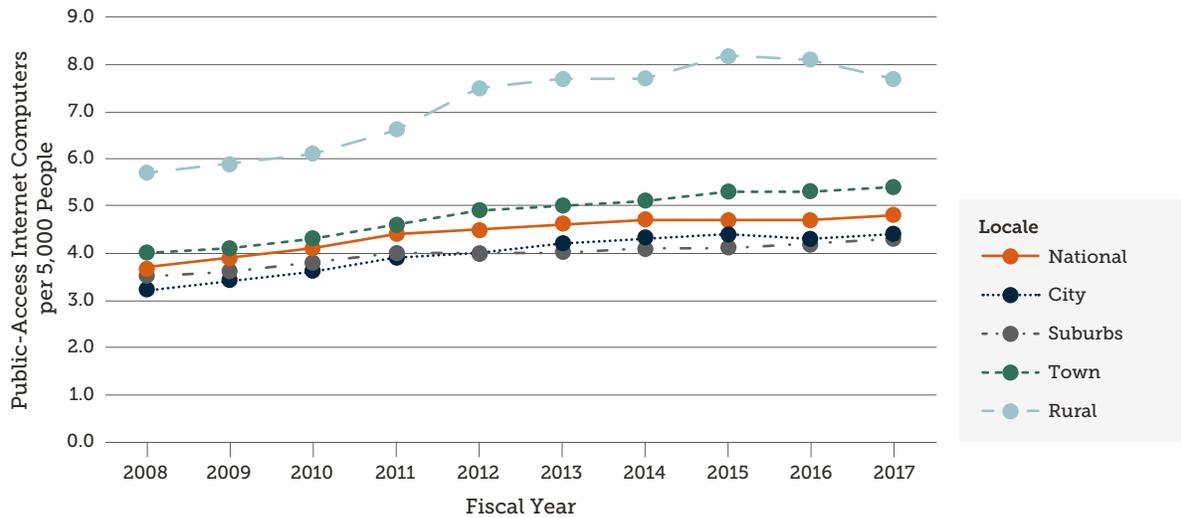
<sup>14</sup>This does not include wireless Internet sessions. The item that captures wireless Internet sessions has been collected since FY 2014 but contains a large proportion of missing data. Therefore, this item is not included in analyses for this report.

# PART TWO:

## Public Library Resources, Services, and Usage



**Figure 2-6.** Number of Public-Access Internet Computers per 5,000 People by Locale, FY 2008–2017

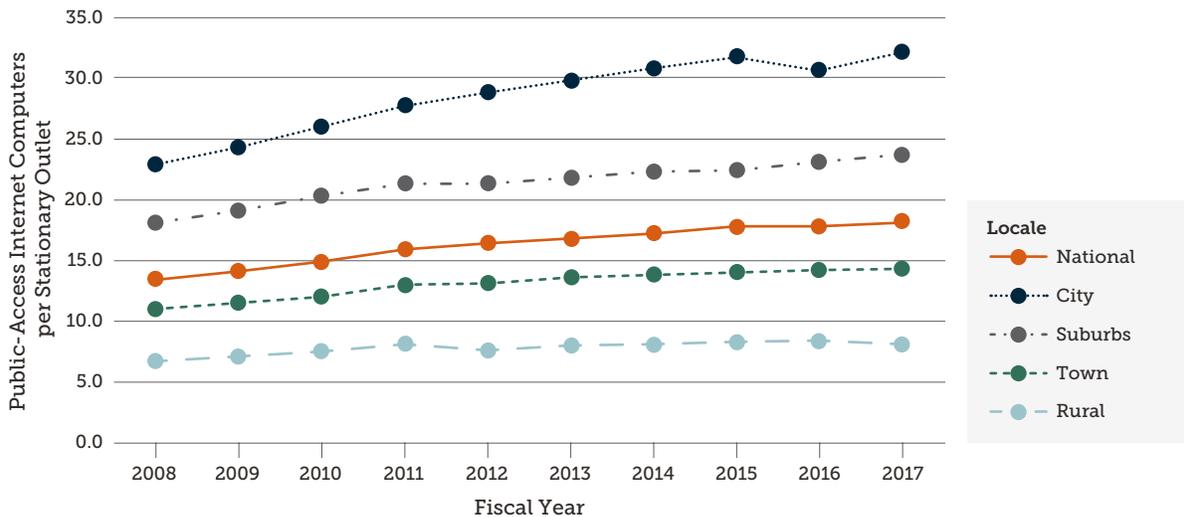


SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

**Figure 2-7** shows trends in public-access Internet computers per stationary outlet for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by locale. Public-access Internet computers per stationary outlet increased during this period for libraries across locales. The largest change over the period was the 40.2 percent

increase in public-access Internet computers for libraries in cities. The trend lines for libraries in the other three locales roughly parallel the national trend line, with libraries in towns and rural areas below and suburban libraries above the national trend line. These results suggest the national increase is likely due to the increase across locales.

**Figure 2-7.** Public-Access Internet Computers per Stationary Outlet by Locale, FY 2008–2017



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

## PART TWO:

# Public Library Resources, Services, and Usage

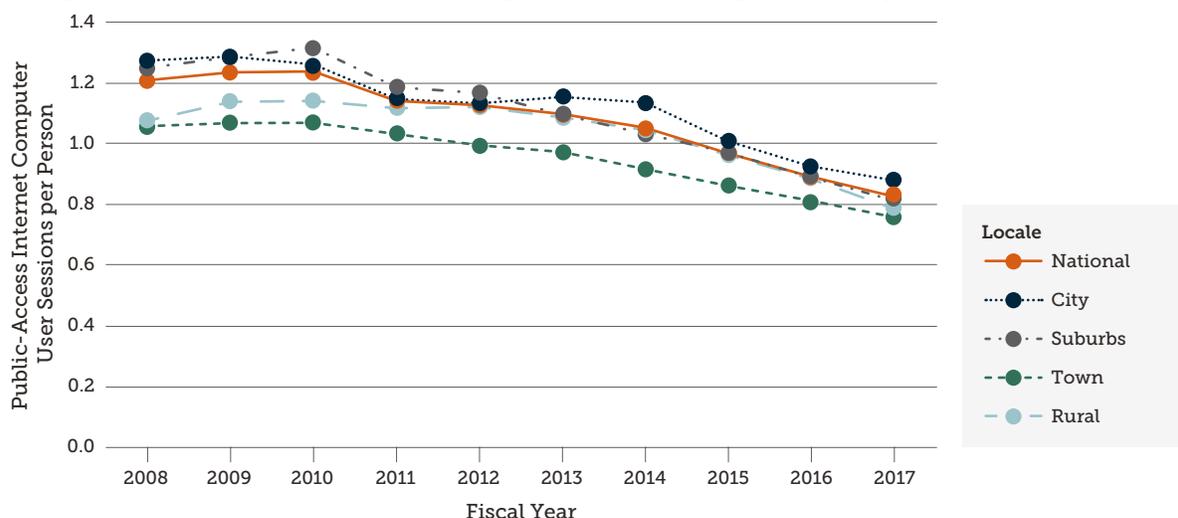


Volume I showed that public-access Internet computer user sessions per person decreased from FY 2008 to FY 2017.

Figure 2-8 shows trends in public-access Internet computer user sessions for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by locale. Per person public-access Internet computer user sessions decreased during

this period for libraries across all locale types; however, the absolute change across locale types was less than 0.5 user sessions. The largest change over the period was the decrease in per person user sessions for libraries in suburbs, which decreased 35.0 percent. The trend lines for libraries across locales aligned with the national trend, with decreases from FY 2008 to FY 2017.

Figure 2-8. Public-Access Internet Computer User Sessions per Person by Locale, FY 2008–2017



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

### Focus on 2017

Table 2-4 shows Internet access-related indicators per 5,000 people, per stationary outlet, and per person by locale and population size served. In FY 2017, the availability of computers in public libraries per 5,000 people was higher in rural areas (7.7) than in the other three locales. The number of public-access Internet computers per stationary outlet (i.e., central and branch libraries) varied by locale, with city libraries having more computers per stationary outlet (32.1) than libraries in all other locales and the national average. During FY 2017, public-access Internet computer user sessions per person showed little variation across locales.

Libraries serving small communities (fewer than 2,500 people) had the greatest number of public-access Internet computers per 5,000 people (23.5) and the greatest number of public-access Internet computer user sessions per person (1.4). However, libraries serving very large communities had significantly more public-access Internet computers per stationary outlet (24.6) than libraries serving the other population size groups.

Appendix Tables B-9, B-10, and B-11 provide additional details on trends in Internet access for

libraries in different locales and each population size group. Some of the highlights are as follows:

- Libraries serving medium-sized communities had the greatest change from FY 2008 to FY 2017 in the number of public-access Internet computers per 5,000 people, with an increase of 38.8 percent, and in the number of public-access Internet computers per stationary outlet, with an increase of 39.1 percent.
- Libraries serving very large communities had the greatest change in the number of public-access Internet computer user sessions per person, with a decrease of 32.5 percent.
- In FY 2017, libraries serving small communities offered more public-access Internet computers per 5,000 people and user sessions per person than libraries serving larger population sizes.
- In FY 2017, libraries serving very large communities had more public-access Internet computers per stationary outlet than libraries that serve smaller population sizes.

## PART TWO:

### Public Library Resources, Services, and Usage



**Table 2-4. Public-Access Internet Computers per 5,000 People and User Sessions per Person by Locale and Population Size Served, FY 2017**

Category	Public-Access Internet Computers per 5,000 People	Public-Access Internet Computers per Stationary Outlet <sup>1</sup>	Public-Access Internet Computer User Sessions per Person
Overall	4.8	18.1	0.8
Locale			
City	4.4	32.1	0.9
Suburb	4.3	23.7	0.8
Town	5.4	14.3	0.8
Rural	7.7	8.1	0.8
Population Size Served			
Very large (>25,000)	4.1	24.6	0.8
Large (10,000–25,000)	6.4	15.8	0.9
Medium (2,500–9,999)	10.2	10.5	1.1
Small (<2,500)	23.5	5.7	1.4

<sup>1</sup> Per stationary outlet was calculated by dividing the total number of public-access Internet computers in central and branch outlets by the total number of such outlets.

NOTE: Per 5,000 people and per person estimates in the table use the unduplicated population. Calculations are based on unrounded estimates; therefore, reported totals may differ due to rounding.

SOURCE: IMLS, Public Libraries Survey, FY 2017.

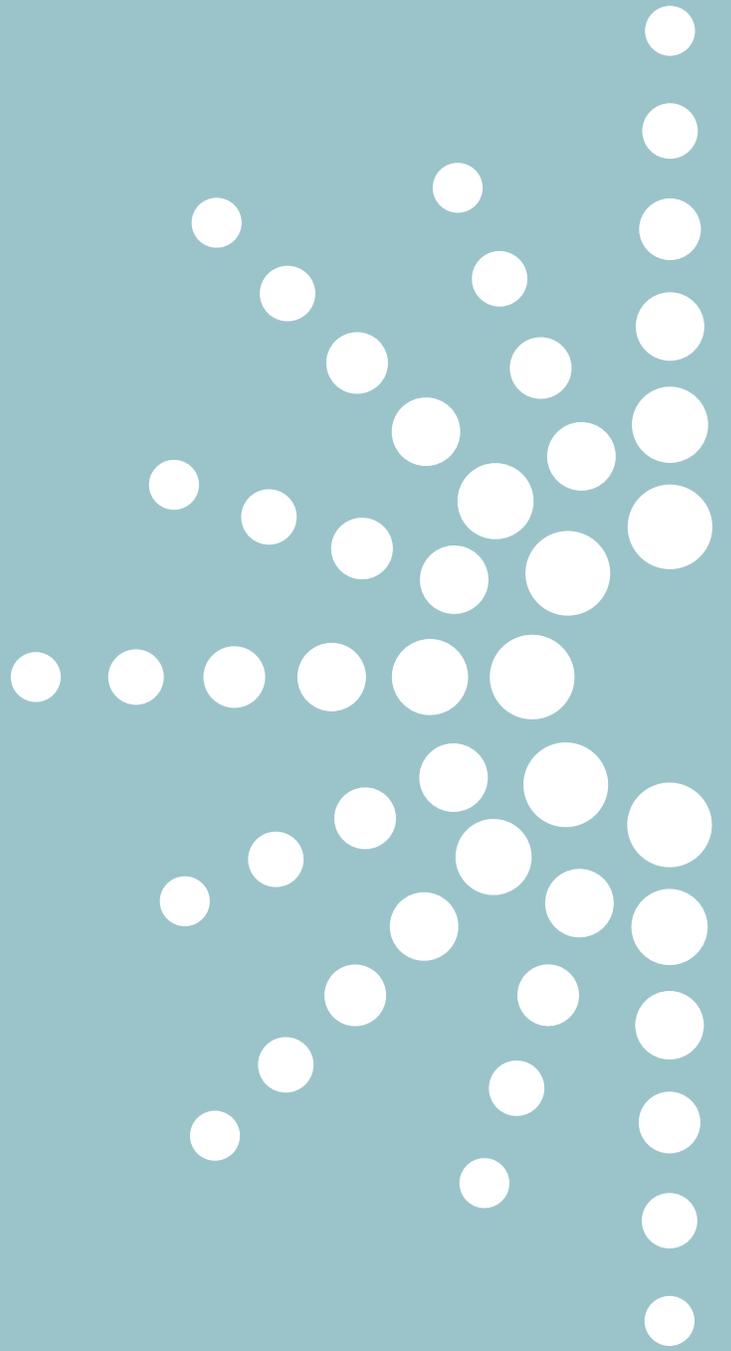
#### Summary

At the national level, there was a 59.1 percent increase in per person collection materials and a 10.3 percent decline in per person circulation from FY 2008 to FY 2017. Trends in per person collections across different types of communities show that trends by community type are aligned with national trends, with libraries experiencing growth in collections in FY 2017 compared to FY 2008; however, trends in per person circulation for libraries in rural areas and towns deviated from the national trends. While other libraries saw decreases from FY 2008 to FY 2017, these libraries saw increases in circulation per person.

There was also a 17.5 percent decline in per person library visits and a 24.9 percent decline in per person reference transactions but a 48.2 percent increase in programs per 1,000 people and a

35.5 percent increase in program attendance. Except for reference transactions, trends in these usage indicators across different types of communities align with national trends. Trends in reference transactions per person for libraries that serve small communities deviated from the national trends, with increases from FY 2008 to FY 2017.

Finally, there were increases in the number of public-access Internet computers per 5,000 people and per stationary outlet (29.1 percent and 35.6 percent, respectively), but a 31.6 percent decline in public-access Internet computer user sessions per person. Trends in these resource and usage indicators across different types of communities aligned with the national trends.



## **PART THREE:**

# Public Library Staffing



### Overview

This section contains metrics for understanding the extent to which the public has access to professionals in library and information sciences to address its information needs. Knowledgeable library staff are important public library assets. They help to ensure that the facilities, resources, and services are accessible, available, and well managed. Moreover, beyond collection development and resource management, library staff help to address information needs by providing programs, answering reference questions, and supporting research. Librarians with an American Library Association-accredited master's degree in library or information sciences (ALA-MLS) have specialized expertise and skills that position them for complex library responsibilities beyond those of other librarians. In the PLS, public library staff is measured in full-time equivalents (FTEs) and consists of three categories: librarians, ALA-MLS librarians, and other paid staff.

### National-Level Benchmark

#### Indicator 11. Staffing (FTEs) per 25,000 People: 11.4 (142,131 FTE Total)

#### Trends Since 2008

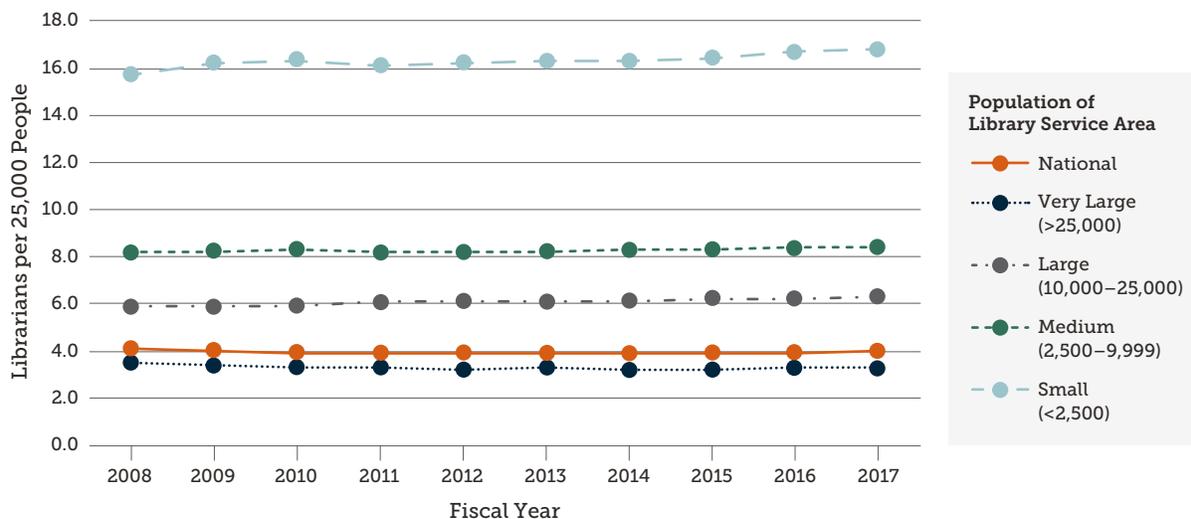
Volume I showed that library staffing per 25,000 people declined by 7.8 percent over the 10 years from FY 2008 to FY 2017 but that the percentage of librarians with ALA-MLS credentials stayed nearly the same (68.0 percent in FY 2008 and 67.8 percent in FY 2017).

Figure 3-1 shows library staffing for all libraries from FY 2008 to FY 2017 at the national level and disaggregated by population size groups. Library staffing per 25,000 people decreased during this period for libraries serving very large communities (more than 25,000 people) but increased for those serving the other three population size groups.

The largest change over the period was the 7.9 percent increase in library staffing for large communities of 10,000–25,000 people.

The trend lines for libraries serving the other three population size groups roughly parallel the national trend line, with libraries serving small and medium-sized communities above the line and libraries serving very large communities below it. These results suggest that the overall national decline is likely due to the decrease in library staffing for the 23.6 percent of libraries serving very large populations.

Figure 3-1. Librarians per 25,000 People by Population Size Served, FY 2008–2017



SOURCE: IMLS, Public Libraries Survey, FY 2008–17.

# PART THREE:

## Public Library Staffing



Appendix Table B-12 provides additional trend details for librarians per 25,000 people for libraries in different locales and each of the four population-size-served categories. Some highlights of these analyses are as follows:

- FY 2017 library staffing was proportionately largest for libraries in rural areas, followed by towns, suburbs, and cities.
- City libraries had the largest decline in library staff from FY 2008 to FY 2017 (5.2 percent), and rural libraries had the largest growth (6.0 percent).
- Libraries serving large communities (10,000–25,000 people) had more growth in library staffing (7.9 percent) than did those serving other population-size-served groups.

### Focus on FY 2017

Table 3-1 shows library staffing per 25,000 people and the percentage of library staff by type by locale and population size served. The total number of library staff per 25,000 people varied slightly by locale, with libraries in rural areas having more staff than libraries in other locales. The percentage of librarians with ALA-MLS credentials varied significantly across locales, with the highest percentage in city libraries (83.8 percent).

Staffing levels varied by population size served. Libraries that serve small populations had more than twice as many total staff per 25,000 people as libraries that serve very large populations and about five times the number of librarians. Libraries that serve very large communities had a substantially higher percentage of ALA-MLS librarians (78.1 percent) than libraries that serve other population-size-served groups.

**Table 3-1. Staffing (FTEs) per 25,000 People by Staffing Type, Locale, and Population Size Served, FY 2017**

Category	Full-Time Equivalent per 25,000 People					Percentage of Librarians with ALA-MLS
	Total Staff	Librarians	Percent	Other Paid Staff	Percent	
Overall	11.4	4.0	34.9%	7.4	65.1%	67.8
Locale						
City	11.0	3.3	30.3%	7.7	69.7%	83.8
Suburb	11.7	4.0	34.2%	7.7	65.8%	78.2
Town	10.8	4.3	40.0%	6.5	60.0%	41.6
Rural	11.8	5.6	46.9%	6.3	53.1%	28.1
Population Size Served						
Very large (>25,000)	10.6	3.3	31.5%	7.2	68.5%	78.1
Large (10,000–25,000)	14.9	6.3	42.5%	8.6	57.5%	56.9
Medium (2,500–9,999)	16.7	8.4	50.5%	8.3	49.5%	32.8
Small (<2,500)	24.0	16.8	70.2%	7.2	29.8%	10.0

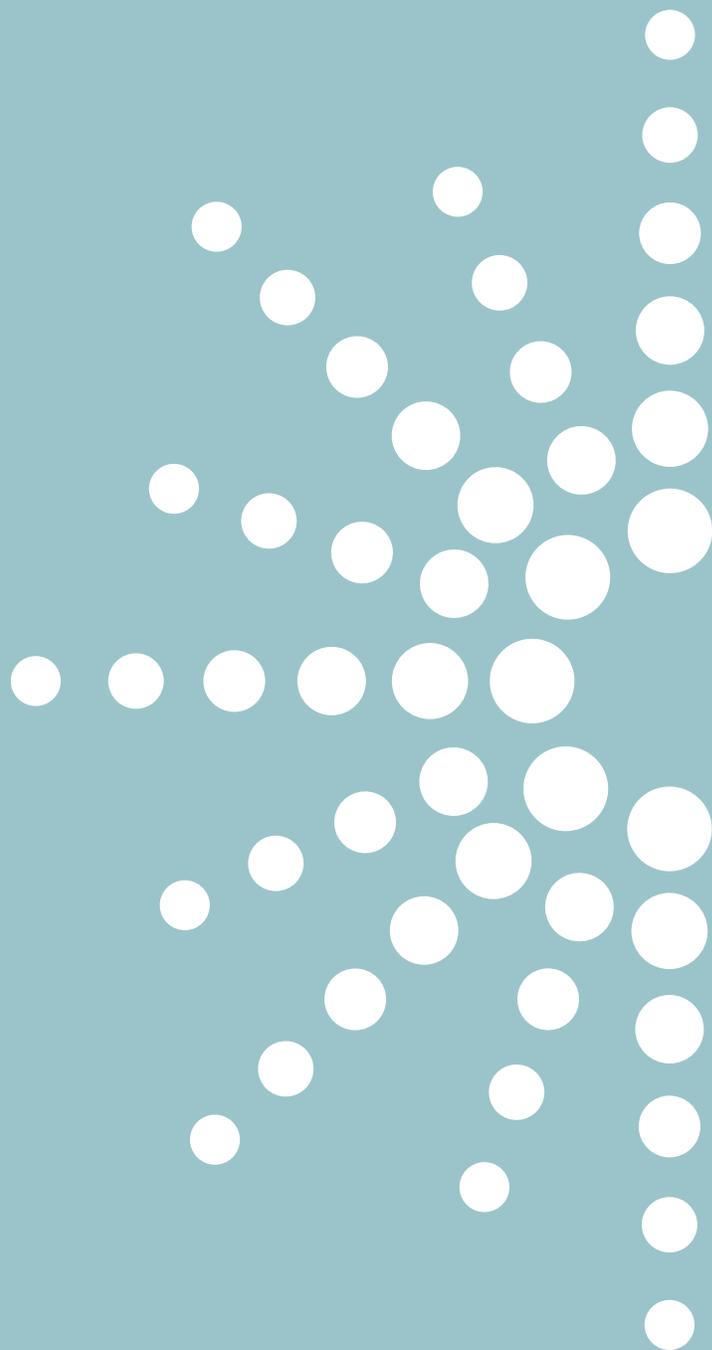
NOTE: Per 25,000 people estimates in the table use the unduplicated population. Calculations are based on unrounded estimates; therefore, reported totals may differ due to rounding.

SOURCE: IMLS, Public Libraries Survey, FY 2017.

### Summary

At the national level, there was a 2.5 percent decline in library staffing per 25,000 people from FY 2008 to FY 2017; however, the analyses in this section demonstrate the importance of looking more closely at trends in public library staffing for libraries in different types of communities. Trends in these indicators for suburban and city libraries and those that serve very large populations (over

25,000 people) aligned with the national trends, with these libraries experiencing decreases in library staff in FY 2017 compared to FY 2008. However, other types of libraries deviated from the national trends. Libraries in rural areas and towns, as well as in small, medium-sized, and large communities, saw increases in library staffing per 25,000 people over the same period.



# APPENDICES

Appendix A: Key Library Terminology

Appendix B: Trends by Locale and Population Size  
Served, FY 2008–2017



### Appendix A. Key Library Terminology

**Public library.** A public library is an entity that is established under state-enabling laws or regulations to serve a community, district, or region and that provides at least the following: (1) an organized collection of printed or other library materials, or a combination thereof; (2) paid staff; (3) an established schedule in which the services of the staff are available to the public; (4) the facilities necessary to support such a collection, staff, and schedule; and (5) support in whole or in part with public funds.

**Administrative entity.** An administrative entity is the agency that is legally established under local or state law to provide public library service to the population of a local jurisdiction. The administrative entity may have a single public library service outlet, or it may have more than one public library service outlet. (Note: In this report, the term public library means an administrative entity.)

**Public library service outlet.** Public libraries may have one or more outlets that provide direct services to the public. This report includes information on three types of public library service outlets: central library outlets, branch library outlets, and bookmobile outlets. Information on a fourth type of outlet, books-by-mail-only outlets, was collected but omitted from this report because these outlets are not open to the public.

**Library visits and reference transactions.** Public libraries reported annual library visits and annual reference transactions based on actual counts, if available. Otherwise, annual estimates were provided based on library visits and reference transaction activity during a typical week in October, multiplied by 52.

**Per person.** Many items presented in this report are measured per person. Per person is the measure of an item divided by the unduplicated population of the legal service area.<sup>1</sup> Per person metrics control for population changes over time and allow for standardized comparison of metrics. In some cases, items are measured per 1,000, 5,000, and 25,000 people for illustration purposes. As with per person metrics, these measures help standardize comparisons over time.

**Paid, Full-Time-Equivalent Staff.** In analyses of the workforce, information on employment is classified according to FTE status. FTE is a unit that measures the workload of an employed person. It is used to aid in comparisons of workload across contexts. An FTE of 1.0 indicates that the person is the equivalent of a full-time worker, who usually works 40 hours per week. An FTE of 0.5 indicates a person who works half time. If a library reports that it has 2.0 FTEs, it may be referring to two full-time employees or four part-time employees (each of whom works approximately 20 hours per week).

#### Locale

Federal agencies use a variety of ways to classify community types. In this report, libraries are classified using a system of locale codes developed by NCES. Working with the U.S. Census Bureau, NCES revised these codes by using improved geocoding technology and the 2010 Office of Management and Budget's definitions of metropolitan statistical areas.<sup>2</sup> Thus, locale codes rely on proximity to an urbanized area, rather than population size and county boundaries.

Beginning with the FY 2008 data file, locale codes were added to the PLS outlet and administrative entity datasets. Locale codes identify general characteristics about where a public library is situated. The codes allow users to quickly identify which library outlets and administrative entities are in cities, suburbs, towns, or rural areas. For FY 2017, locale codes were assigned to public library systems using two methodologies. The first methodology assigned locale code based on the geocoded latitude and longitude values of the administrative entity's street address. The second methodology assigned locale code based on the modal locale code among central and branch libraries of that library system (excluding bookmobile and books-by-mail-only outlets); this is the locale code used in the report.

The NCES locale coding system classifies areas into four major categories: city, suburban, town, and rural (**Table A-1**). Each category has three subcategories. For urban and suburban areas, gradations are based on population size: large, midsize, or small. Towns and rural areas are subcategorized based on their distance from an urbanized area: fringe, distant, or remote.

<sup>1</sup>Details about the unduplicated population can be found in the *Data File Documentation: Public Libraries in the United States: Fiscal year 2017*, available at [https://www.imls.gov/sites/default/files/fy2017\\_pls\\_data\\_file\\_documentation.pdf](https://www.imls.gov/sites/default/files/fy2017_pls_data_file_documentation.pdf).

<sup>2</sup>The Office of Management and Budget delineates geographic entities for metropolitan and metropolitan statistical areas for use by federal agencies in collecting, tabulating, and publishing federal statistics. To learn about the designation, see the notice in the *Federal Register*, Vol. 75, No. 123, pp. 37246–39052, published June 28, 2010.

# APPENDIX A:

## Key Library Terminology



Table A-1. Urban-Centric Locale Categories

City
<b>Large:</b> Territory inside an urbanized area and inside a principal city with population of 250,000 or more
<b>Midsized:</b> Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000
<b>Small:</b> Territory inside an urbanized area and inside a principal city with population less than 100,000
Suburb
<b>Large:</b> Territory outside a principal city and inside an urbanized area with population of 250,000 or more
<b>Midsized:</b> Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000
<b>Small:</b> Territory outside a principal city and inside an urbanized area with population less than 100,000
Town
<b>Fringe:</b> Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area
<b>Distant:</b> Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area
<b>Remote:</b> Territory inside an urban cluster that is more than 35 miles from an urbanized area
Rural
<b>Fringe:</b> Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster
<b>Distant:</b> Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster
<b>Remote:</b> Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster

SOURCE: U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data, Identification of Locale Codes, from [https://nces.ed.gov/programs/edge/docs/NCES\\_LOCALE\\_USERSMANUAL\\_2016012.pdf](https://nces.ed.gov/programs/edge/docs/NCES_LOCALE_USERSMANUAL_2016012.pdf).

These objective measures of rurality and urbanicity permit benchmarking of library services by basing comparisons on community attributes as well as the attributes of the libraries themselves. In other words, library services in rural, remote areas can be compared to library services in other rural, remote areas within the same state or across the country by using a standardized rurality/urbanicity metric that is applied consistently to each library in the country. Once communities of interest have been selected, comparisons can be made to any data that are available in the PLS, whether they are related to aspects of finance, operations, or service.

Since FY 2008, each library outlet and administrative entity and outlet in the PLS has been assigned a locale code. Starting with the FY 2009 survey data files, bookmobiles and books-by-mail-only outlets were assigned locale codes. For the FY 2017 data file, all records were coded for geography. Administrative entities were assigned locale codes based on the modal locale codes among central and branch libraries of that library system (excluding bookmobile and books-by-mail-only outlets).



**Appendix B. Trends by Locale and Population Size Served, FY 2008–2017**

**Table B-1. Operating Revenue per Person, by Local and Population Size Served, Fiscal Years 2008–2017**  
(in constant 2017 dollars)

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	\$44.27	\$44.38	\$42.64	\$41.90	\$41.00	\$40.20	\$40.96	\$41.14	\$41.82	\$42.34	-\$1.93	-4.4%
<b>Locale</b>												
City	\$46.79	\$46.97	\$43.90	\$44.08	\$43.22	\$42.26	\$43.97	\$43.33	\$44.33	\$45.52	-\$1.27	-2.7%
Suburb	\$50.54	\$50.60	\$49.02	\$47.32	\$45.06	\$43.92	\$44.33	\$44.64	\$45.04	\$45.21	-\$5.33	-10.5%
Town	\$31.63	\$31.49	\$31.60	\$31.07	\$29.33	\$29.42	\$29.62	\$30.36	\$31.02	\$31.65	\$0.02	0.1%
Rural	\$33.41	\$33.92	\$33.36	\$32.39	\$32.25	\$32.72	\$32.92	\$32.98	\$33.52	\$32.79	-\$0.62	-1.9%
<b>Population Size Served</b>												
Very large (>25,000)	\$43.76	\$43.81	\$41.75	\$40.95	\$39.95	\$39.02	\$39.93	\$40.08	\$40.74	\$41.28	-\$2.48	-5.7%
Large (10,000-25,000)	\$48.22	\$48.35	\$48.41	\$48.31	\$47.83	\$47.64	\$47.34	\$47.58	\$48.29	\$48.78	\$0.56	1.2%
Medium (2,500-9,999)	\$44.71	\$45.52	\$45.66	\$44.80	\$44.72	\$44.89	\$45.01	\$45.36	\$46.48	\$46.70	\$2.00	4.5%
Small (<2,500)	\$48.52	\$43.94	\$45.00	\$45.88	\$46.82	\$48.76	\$50.58	\$53.17	\$54.31	\$55.72	\$7.20	14.8%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

**Table B-2. Operating Expenditure per Person by Locale and Population Size Served, Fiscal Years 2008–2017**  
(in constant 2017 dollars)

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	\$41.69	\$41.90	\$40.64	\$39.42	\$38.29	\$38.15	\$38.48	\$38.50	\$39.65	\$39.59	-\$2.10	-5.0%
<b>Locale</b>												
City	\$44.85	\$44.68	\$42.91	\$41.85	\$39.98	\$40.70	\$41.54	\$40.90	\$43.11	\$43.09	-\$1.76	-3.9%
Suburb	\$47.21	\$47.86	\$46.47	\$44.55	\$42.53	\$41.50	\$41.60	\$41.61	\$42.23	\$42.04	-\$5.17	-11.0%
Town	\$29.29	\$29.24	\$29.01	\$28.82	\$27.34	\$27.55	\$27.83	\$28.33	\$28.77	\$29.33	\$0.03	0.1%
Rural	\$30.92	\$31.40	\$30.83	\$29.84	\$29.64	\$30.16	\$30.44	\$30.38	\$30.98	\$30.17	-\$0.74	-2.4%
<b>Population Size Served</b>												
Very large (>25,000)	\$41.34	\$41.53	\$40.00	\$38.58	\$37.32	\$37.12	\$37.53	\$37.55	\$38.78	\$38.72	-\$2.62	-6.3%
Large (10,000-25,000)	\$44.66	\$44.68	\$44.83	\$45.02	\$44.53	\$44.63	\$44.22	\$44.22	\$44.91	\$44.88	\$0.22	0.5%
Medium (2,500-9,999)	\$41.40	\$42.07	\$42.51	\$42.09	\$41.71	\$41.97	\$42.37	\$42.40	\$43.14	\$43.14	\$1.75	4.2%
Small (<2,500)	\$45.16	\$46.69	\$47.41	\$47.35	\$47.67	\$48.73	\$49.60	\$50.71	\$51.43	\$51.00	\$5.84	12.9%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

# APPENDIX B:

## Trends by Locale and Population Size Served, FY 2008–2017



**Table B-3. Total Collection Materials per Person by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	3.1	3.1	3.1	3.2	3.3	3.5	3.8	4.3	4.7	5.0	1.9	59.1%
<b>Locale</b>												
City	3.0	3.0	2.9	2.9	2.8	2.9	2.9	2.9	3.1	3.2	0.2	5.0%
Suburb	3.0	3.0	3.0	3.0	3.1	3.2	3.4	3.7	4.1	4.3	1.3	43.3%
Town	3.2	3.2	3.3	3.4	3.9	4.2	4.9	5.8	6.6	7.6	4.4	137.9%
Rural	3.9	3.9	3.9	4.1	5.3	5.9	7.2	10.0	10.4	11.2	7.3	187.6%
<b>Population Size Served</b>												
Very large (>25,000)	2.8	2.8	2.7	2.7	2.7	2.7	2.8	3.0	3.2	3.4	0.7	24.6%
Large (10,000-25,000)	4.2	4.2	4.3	4.6	5.0	5.6	6.4	7.7	9.2	9.9	5.7	135.1%
Medium (2,500-9,999)	5.8	5.9	6.1	6.6	7.8	9.1	11.2	13.8	15.8	16.0	10.2	175.2%
Small (<2,500)	11.7	12.2	12.4	13.4	16.5	19.6	24.9	41.5	43.0	47.0	35.4	303.4%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

**Table B-4. Total Circulation per Person by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	7.7	8.1	8.3	8.1	8.0	7.8	7.5	7.3	7.2	6.9	-0.8	-10.3%
<b>Locale</b>												
City	7.5	7.8	7.9	6.5	6.3	6.2	6.0	5.8	7.1	5.5	-2.0	-26.2%
Suburb	8.9	9.6	9.8	6.4	6.0	5.9	5.8	5.5	8.1	5.4	-3.6	-40.0%
Town	6.3	6.4	6.5	9.6	9.3	8.9	8.6	8.3	5.4	7.8	1.5	23.2%
Rural	6.4	6.9	6.9	7.9	7.8	7.6	7.4	7.2	5.9	6.9	0.4	6.9%
<b>Population Size Served</b>												
Very large (>25,000)	7.6	8.0	8.2	8.0	7.9	7.7	7.4	7.2	7.1	6.8	-0.7	-9.8%
Large (10,000-25,000)	8.5	8.7	8.9	8.8	8.6	8.5	8.1	7.8	7.7	7.4	-1.1	-12.9%
Medium (2,500-9,999)	8.5	8.8	8.9	8.7	8.6	8.3	8.0	7.7	7.6	7.2	-1.2	-14.7%
Small (<2,500)	9.4	9.7	9.7	9.4	9.3	9.1	8.7	8.4	8.3	7.9	-1.5	-15.9%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

# APPENDIX B:

## Trends by Locale and Population Size Served, FY 2008–2017



**Table B-5. Library Visits per Person by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	5.1	5.4	5.3	5.1	4.9	4.8	4.6	4.5	4.4	4.2	-0.9	-17.5%
<b>Locale</b>												
City	5.1	5.3	5.2	5.0	4.8	4.7	4.5	4.3	4.2	4.1	-1.0	-19.5%
Suburb	5.6	5.9	5.8	5.6	5.3	5.1	5.0	4.8	4.6	4.4	-1.1	-20.3%
Town	4.6	4.7	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.1	-0.5	-10.9%
Rural	4.5	4.8	4.7	4.5	4.5	4.4	4.2	4.1	4.0	3.9	-0.6	-12.4%
<b>Population Size Served</b>												
Very large (>25,000)	4.9	5.1	5.0	4.8	4.7	4.5	4.4	4.2	4.1	3.9	-0.9	-19.4%
Large (10,000–25,000)	6.2	6.4	6.5	6.4	6.3	6.1	5.9	5.8	5.7	5.6	-0.5	-8.4%
Medium (2,500–9,999)	6.3	6.6	6.8	6.7	6.6	6.5	6.3	6.1	6.0	5.9	-0.4	-6.4%
Small (<2,500)	6.9	7.2	7.3	7.2	7.1	7.0	6.8	6.7	6.7	6.5	-0.3	-5.0%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

**Table B-6. Reference Transactions per Person by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8	-0.3	-24.9%
<b>Locale</b>												
City	1.2	1.2	1.2	1.1	1.1	1.0	0.9	0.9	0.8	0.8	-0.4	-31.3%
Suburb	1.1	1.1	1.2	1.1	1.0	1.0	0.9	0.9	0.9	0.8	-0.3	-25.0%
Town	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	-0.1	-12.8%
Rural	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	-0.1	-18.8%
<b>Population Size Served</b>												
Very large (>25,000)	1.1	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.8	-0.3	-27.6%
Large (10,000–25,000)	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	-5.1%
Medium (2,500–9,999)	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	-0.1	-8.5%
Small (<2,500)	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.1	6.0%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

# APPENDIX B:

## Trends by Locale and Population Size Served, FY 2008–2017



**Table B-7. Total Programs Offered per 1,000 People by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	11.7	12.5	12.6	12.7	13.2	14.0	14.6	15.2	16.7	17.3	5.6	48.2%
<b>Locale</b>												
City	9.7	10.2	10.5	10.3	10.8	12.0	12.2	12.8	14.4	14.9	5.1	52.8%
Suburb	12.1	13.1	12.9	13.2	13.7	14.1	15.1	15.5	16.6	17.1	5.1	41.9%
Town	12.2	13.0	13.3	13.6	14.1	14.5	15.1	15.9	17.4	18.8	6.6	54.3%
Rural	15.4	16.4	16.8	17.0	19.2	19.9	21.0	22.4	23.9	24.7	9.3	60.5%
<b>Population Size Served</b>												
Very large (>25,000)	9.8	10.5	10.5	10.5	10.9	11.6	12.1	12.6	13.9	14.4	4.5	46.2%
Large (10,000–25,000)	18.4	19.5	20.3	21.2	22.4	23.4	24.6	25.4	27.4	28.4	10.0	54.6%
Medium (2,500–9,999)	24.3	26.2	27.5	28.8	30.0	30.8	32.3	34.4	37.7	39.7	15.4	63.3%
Small (<2,500)	39.5	42.5	44.0	45.3	49.1	51.0	55.5	58.2	61.5	65.7	26.1	66.1%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

**Table B-8. Total Program Attendance per 1,000 People by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	279.4	290.6	291.1	296.8	306.0	316.8	332.4	341.3	364.0	378.7	99.3	35.5%
<b>Locale</b>												
City	247.9	255.2	255.2	263.7	269.2	282.7	297.0	304.0	325.5	339.5	91.6	36.9%
Suburb	295.6	311.0	306.4	313.4	326.1	334.7	356.4	364.4	385.2	398.8	103.2	34.9%
Town	286.5	297.7	307.1	308.2	312.0	319.1	328.9	338.2	364.1	389.7	103.2	36.0%
Rural	311.9	323.8	328.4	325.6	346.2	356.3	370.4	388.4	406.7	416.7	104.8	33.6%
<b>Population Size Served</b>												
Very large (>25,000)	249.8	260.5	258.4	263.6	271.6	282.0	296.6	304.3	324.8	338.1	88.3	35.3%
Large (10,000–25,000)	411.4	422.6	439.0	450.0	463.3	479.8	499.9	511.4	545.5	570.9	159.4	38.8%
Medium (2,500–9,999)	455.7	478.1	495.3	507.4	528.3	536.0	557.5	584.2	624.3	647.7	192.0	42.1%
Small (<2,500)	640.2	672.5	687.0	703.3	733.4	753.7	809.2	837.5	876.4	905.6	265.4	41.5%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

# APPENDIX B:

## Trends by Locale and Population Size Served, FY 2008–2017



**Table B-9. Number of Public-Access Internet Computers per 5,000 People by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	3.7	3.9	4.1	4.4	4.5	4.6	4.7	4.7	4.7	4.8	1.1	29.1%
Locale												
City	3.2	3.4	3.6	3.9	4.0	4.2	4.3	4.4	4.3	4.4	1.2	36.9%
Suburb	3.5	3.6	3.8	4.0	4.0	4.0	4.1	4.1	4.2	4.3	0.8	23.6%
Town	4.0	4.1	4.3	4.6	4.9	5.0	5.1	5.3	5.3	5.4	1.5	37.1%
Rural	5.7	5.9	6.1	6.6	7.5	7.7	7.7	8.2	8.1	7.7	2.0	35.9%
Population Size Served												
Very large (>25,000)	3.2	3.4	3.5	3.7	3.8	3.9	4.0	4.0	4.0	4.1	0.9	28.9%
Large (10,000-25,000)	5.0	5.1	5.4	5.8	6.0	6.2	6.3	6.3	6.4	6.4	1.5	29.4%
Medium (2,500-9,999)	7.4	7.9	8.3	8.9	9.2	9.3	9.4	10.2	10.3	10.2	2.9	38.8%
Small (<2,500)	17.2	18.5	19.6	21.4	22.8	23.6	23.7	23.6	23.7	23.5	6.3	36.9%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

**Table B-10. Number of Public-Access Internet Computers per Stationary Outlet by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	13.4	14.1	14.9	15.9	16.4	16.8	17.2	17.8	17.8	18.1	4.8	35.6%
Locale												
City	22.9	24.3	26.0	27.7	28.8	29.8	30.8	31.7	30.6	32.1	9.2	40.2%
Suburb	18.1	19.1	20.3	21.3	21.3	21.8	22.3	22.4	23.1	23.7	5.6	30.7%
Town	11.0	11.5	12.0	13.0	13.1	13.6	13.8	14.0	14.2	14.3	3.4	30.9%
Rural	6.7	7.1	7.5	8.1	7.6	8.0	8.1	8.3	8.4	8.1	1.4	20.9%
Population Size Served												
Very large (>25,000)	18.1	19.1	20.3	21.5	22.2	22.9	23.4	24.0	23.9	24.6	6.4	35.6%
Large (10,000-25,000)	12.1	12.5	13.1	14.3	14.7	15.1	15.3	15.6	15.6	15.8	3.7	30.8%
Medium (2,500-9,999)	7.5	8.0	8.4	8.9	9.4	9.5	9.6	10.5	10.5	10.5	2.9	39.1%
Small (<2,500)	4.3	4.5	4.8	5.2	5.4	5.6	5.7	5.7	5.7	5.7	1.4	32.5%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

# APPENDIX B:

## Trends by Locale and Population Size Served, FY 2008–2017



**Table B-11. Public-Access Internet Computer User Sessions per Person by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	0.9	0.8	-0.4	-31.6%
<b>Locale</b>												
City	1.3	1.3	1.3	1.1	1.1	1.2	1.1	1.0	0.9	0.9	-0.4	-30.9%
Suburb	1.2	1.3	1.3	1.2	1.2	1.1	1.0	1.0	0.9	0.8	-0.4	-35.0%
Town	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.8	0.8	-0.3	-28.4%
Rural	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	0.9	0.8	-0.3	-27.0%
<b>Population Size Served</b>												
Very large (>25,000)	1.2	1.2	1.2	1.1	1.1	1.1	1.0	0.9	0.9	0.8	-0.4	-32.5%
Large (10,000-25,000)	1.3	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.0	0.9	-0.4	-28.2%
Medium (2,500-9,999)	1.4	1.5	1.5	1.5	1.4	1.3	1.2	1.2	1.1	1.1	-0.3	-24.5%
Small (<2,500)	1.9	2.0	2.0	2.0	1.9	1.9	1.8	1.7	1.6	1.4	-0.5	-23.9%

SOURCE: IMLS, Public Libraries Survey, FY 2017.

**Table B-12. Librarians per 25,000 People by Locale and Population Size Served, Fiscal Years 2008–2017**

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change: 2008–2017	
											Delta	% (over 2008)
Overall	4.1	4.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.0	-0.1	-2.5%
<b>Locale</b>												
City	3.5	3.4	3.3	3.2	3.2	3.3	3.2	3.2	3.3	3.3	-0.2	-5.2%
Suburb	4.2	4.3	4.1	4.0	4.0	4.0	4.1	4.0	4.0	4.0	-0.2	-3.9%
Town	4.1	4.0	4.1	4.1	4.0	4.1	3.9	4.1	4.2	4.3	0.2	4.9%
Rural	5.2	5.2	5.1	5.0	5.6	5.5	5.5	5.6	5.7	5.6	0.3	6.0%
<b>Population Size Served</b>												
Very large (>25,000)	3.5	3.4	3.3	3.3	3.2	3.3	3.2	3.2	3.3	3.3	-0.1	-4.2%
Large (10,000-25,000)	5.9	5.9	5.9	6.1	6.1	6.1	6.1	6.2	6.2	6.3	0.5	7.9%
Medium (2,500-9,999)	8.2	8.2	8.3	8.2	8.2	8.2	8.3	8.3	8.4	8.4	0.3	3.3%
Small (<2,500)	15.7	16.2	16.3	16.1	16.2	16.3	16.3	16.4	16.7	16.8	1.1	7.0%

SOURCE: IMLS, Public Libraries Survey, FY 2017.



## Acknowledgments

Many individuals made important contributions to this report. The Institute of Museum and Library Services is grateful to the many staff members who contributed to this report as well as the team from the American Institutes for Research.

### IMLS

Marisa Pelczar  
Lisa M. Frehil  
Matthew Birnbaum

### AIR

Evan Nielsen  
Jennifer Hudson  
Yuting Li

IMLS extends sincere gratitude to the Chief Officers, State Data Coordinators, other State Library Administrative Agency staff, librarians, and public library directors and other staff who provided data for this report. Their diligent efforts result in a national data resource with an exceptionally high response rate, year after year.

IMLS would also like to extend a special thank you to members of the survey advisory group for their help in managing the survey process. The Library Statistics Working Group (LSWG) is a vital part of the survey team. Their time and effort have helped make this report a more valuable resource to the library community and the public.

### Library Statistics Working Group Members

Stacey Aldrich, State Librarian, Hawaii State Public Library System  
Jay Bank, State Data Coordinator, Kentucky Department for Libraries and Archives  
Liz Babbitt, State Data Coordinator, Massachusetts Board of Library Commissioners  
Joseph Hamlin, State Data Coordinator, Library of Michigan  
Linda Hofschire, Director of Library Research Service, Colorado State Library  
Amanda Johnson, State Data Coordinator, State Library of North Carolina  
Martha Kyrillidou, Principal, QualityMetrics LLC; Research Associate, iSchool, University of Illinois  
Jennifer Nelson, State Librarian/Director of State Library Services, Minnesota Department of Education  
Annie Norman, State Librarian and Director, Delaware Division of Libraries  
Whitney Payne, State Data Coordinator, State Library of Georgia  
Emily Plagman, Project Manager, Public Library Association  
Eric Norris, State Librarian, Kansas State Library  
Mark Smith, Director and Librarian, Texas State Library and Archives Commission