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Foreword

(This foreword is not part of the American National Standard for Information Services and Use: Metrics & statistics for libraries and information Providers – Data Dictionary, ANSI/NISO Z39.7-2004 and is intended for information only.)

This standard was first published in 1968 as ANSI Z39.7-1968, reaffirmed in 1974, and revised in 1983 (ANSI Z39.7-1983), and in 1995 (ANSI/NISO Z39.7-1995). This is the third revision of Z39.7.

This revision takes the path of developing an interactive web-based utility for identifying standard definitions, methods and practices relevant to library statistics activities in the United States (US). Like the previous editions of Z39.7 the aim of the standard remains: to assist librarians and researchers [now defined as the information community] by indicating and defining useful quantifiable information to measure the resources and performance of libraries and to provide a body of valid and comparable data on American libraries.

This revision differs significantly from its predecessors in its approach. The charge to Standards Committee AY charge to revise the standard closely matched recommendations from the NISO Forum on Performance Measures and Statistics for Libraries, held February 15-16, 2001 in Washington, D.C. At this Forum, current standards and best practices for library statistics and performance measures were discussed and identified as critical to the next edition of Z39.7. This revision absorbs the de facto definitions established through the national program for collecting data about libraries (i.e., the National Center for Education Statistics (NCES) survey program), and absorbs relevant US association definitions, methods and practices of data collection. The value of this approach is that it recognizes the guidelines and best practices in the area of library statistics across the community, not only at the national survey level. As in the 1995 edition, most of the data elements included here appeared on one or more of the national and association surveys. In addition, relevant definitions from the international standard ISO 2789 developed by the International Organization for Standardization have been incorporated. Many other valuable resources were taken into account in the course of this revision. The appendices to this standard list the publications and projects considered. The work of Standards Committee AY is documented at http://www.niso.org/committees/ay/

Suggestions for improving this standard are welcome. They should be sent to the National Information Standards Organization, 4733 Bethesda Avenue, Suite 300, Bethesda, MD 20814 USA, telephone (301) 654-2512.
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Introduction

1.1 Scope

This standard identifies categories for basic library statistical data reported at the national level, and provides associated definitions of terms. In doing so it deals with the following areas: reporting unit and target population, human resources, collection resources, infrastructure, finances, and services. In addition, the standard identifies new measures associated with networked services, databases, and performance. These measures are reported at a variety of levels, and at the time of this writing were slowly being incorporated into national library statistical data reports.

The standard is not intended to be comprehensive in scope. Instead, it presents a framework for comparable library data by describing common elements pertaining to libraries of various types in the US. It does not address detailed statistics for specific areas where it seems more appropriate for experts in those areas to make recommendations (e.g., music, government documents and maps).

1.2 Purpose

The purpose of this standard is to assist the information community in the identification, definition, collection, and interpretation of statistical data used to describe the current status and condition of libraries in the US. In addition, it assists that community in collecting the data necessary to support research and analysis directed toward improving the performance of libraries and enhancing library effectiveness.

1.3 Application

This standard is primarily for library managers and those who collect data from libraries. For library managers, the standard indicates categories for measurement of library resources, services and activities, staffing, and infrastructure. For data collectors, the standard indicates categories for consideration in constructing data collection instruments. The standard also provides guidance to others interested in information about statistical measures related to library services. Applicability of this standard may be at the local, state, national or international levels.

1.4 Format

The format of this standard is by section, category, and then by subcategory. Sections are broad in scope, categories provide more precise divisions within a section, and subcategories provide the most specific division within a section. The categories and subcategories are organized alphabetically, to the extent possible. E-metrics are arranged as categories or within subcategories as appropriate. The six sections, including brief descriptions, are:
• **Reporting Units** – Describes types of libraries, the entity that has administrative or budgetary control, and the populations served by each. Staffing is described under section “Human Resources.”

• **Human Resources** – Describes all levels of staffing associated with each library type.

• **Collections** – Describes broad collection categories in all formats.

• **Infrastructure** – Describes facilities, including capacity and technology.

• **Finances** – Describes broad categories of revenue (e.g., income) and expenditure by type and source.

• **Services** – Describes broad categories of services provided by libraries including hours of operation, as well as other metrics associated with understanding library use both tangible and virtual.

In addition to formal sections, there are five appendices:

• **Appendix A: Methods of Measurement**

• **Appendix B: Measuring the Use of Electronic Library Services**

• **Appendix C: Measuring Public Library Networked Services: Preparing Your Library to Collect Network Statistics**

• **Appendix D: References in Developing the Z39.7-2002 Revision**

• **Appendix E: National and International Efforts Regarding Electronic Metrics**

### 1.5 General Principles

The following general principles are the basis of this standard:

1.5.1 Data categories are mutually exclusive as far as possible.

1.5.2 Collection resource categories are based on the following sources: Anglo-American Cataloguing Rules, second edition, revised; and MARC21 Format for Bibliographic Data Including Guidelines for Content Designation.

1.5.3 Data categories are constructed to provide annual figures as far as possible.

1.5.4 The standard suggests that data be collected so that expenditures can be reported both for all serials and for individual formats because serial publications in all formats are an increasingly important factor in library budgets. See Section 6 Finances.

1.5.5 Most data categories in the standard are common to current instruments used to collect data from academic, public, and school libraries by the federal government and other national agencies and associations. Beyond this common level, the standard identifies other data categories currently collected from one or more types of libraries but not from all. Those categories are identified in the database through metatags. The library types include: public, state, academic, school, special, network & cooperative.

1.5.6 Categories of data may be provided by a source other than the library. Therefore, a source notation is made in each Section category. The sources are: library, vendor.
1.5.7 The 2002 revision of this standard acknowledges national survey instruments as well as guidelines and "best practices." Therefore, the applicability of the definition, method, and measurement require delineation. The applicability metatags are: local, state, national, and international.

1.5.8 A metatag has been included to advise the user whether the data category represents a total that can be aggregated. The aggregate metatags are: yes, no.

1.5.9 The e-metrics appear at the end of each category within each section. As with all other categories, the e-metrics include a definition, method for collecting, and measurement recommendation.

1.6 Using the Library Statistics Data Dictionary (LSDD)

[Note: This clause refers to the online Data Dictionary and not specifically to this PDF version of the standard.]

There are a variety of navigation options within the LSDD, including:

- **Keyword** searching within the full data dictionary
- Linking to specific categories, sections and subsections within the full data dictionary via the *Table of Contents*
- Browsing alphabetically in the *Index to the Current Document*

2 Reporting Unit and Primary Target Population

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, cooperative, network, public, school, special, state  
**Aggregate:** yes

2.1 Reporting Unit

The reporting unit varies by type of library but is generally the entity that has administrative and budgetary control.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, cooperative, network, public, school, special, state  
**Aggregate:** no

2.1.1 Academic Library

A library forming an integral part of a college, university, or other academic institution for postsecondary education, organized and administered to meet the needs of students, faculty, and affiliated staff of the institution. Note: An academic library's population may include undergraduate and graduate students as well as faculty. The central library facility normally reports for branch and independent libraries (e.g. law or medical libraries) of a particular institution or campus.
2.1.2 Administrative Unit

Any independent library, or a group of libraries, under a single director or a single administration.

- Note 1: The term "independent" does not imply legal or financial independence but only that the library is a recognizably separate unit, typically within a larger organization.
- Note 2: Typically the administrative unit is an organization containing a central/main library, branch libraries and administrative functions.

2.1.3 Bookmobile

A bookmobile is a traveling branch library. It consists of at least all of the following:

1. A truck or van that carries an organized collection of library materials.
2. Paid staff.
3. Regularly scheduled hours (bookmobile stops) for being open to the public.

2.1.4 Branch Library

A branch library is an auxiliary unit of an administrative entity which has at least all of the following:

1. Separate quarters.
3. Paid staff.
4. Regularly scheduled hours for being open to the public.
2.1.5 Government Library

A library maintained to serve any government service, department or agency, or parliament, including international, national and local (regional) government organizations.

Source: library
Applicability: international, local, national, state
Library Type: special, state
Aggregate: yes

2.1.6 Health Services/Medical Library

A library which serves health service professionals in hospitals or elsewhere, whether in the private or public sector. Note: Pharmaceutical company libraries should be included under Industrial/Commercial Library.

Source: library
Applicability: international, local, national, state
Library Type: special
Aggregate: yes

2.1.7 Industrial/Commercial Library

A library in any industrial enterprise or business firm, maintained by the parent organization to serve the information needs of its staff. Note: Includes libraries maintained by information and management consultants, manufacturing and service industries and libraries of commercial legal practices.

Source: library
Applicability: international, local, national, state
Library Type: special
Aggregate: yes

2.1.8 Library Cooperative

A Library Cooperative (network, system, and consortium) is an organization that has a formal arrangement whereby library and information services are supported for the mutual benefit of participating libraries. It must meet all of the following criteria:

1. Participants/members are primarily libraries.
2. The organization is a U.S. not-for-profit entity which has its own budget and its own paid staff.
3. The organization serves multiple institutions (e.g., libraries, school districts) that are not under the organization's administrative control.
4. The scope of the organization's activities includes support of library and information services by performing such functions as resource sharing, training, planning, and
advocacy.

Source: library
Applicability: international, national, state
Library Type: cooperative, network
Aggregate: yes

2.1.9 Main Library
A main or central library is a single outlet library or the library which is the operational center of a multiple-outlet library. Usually all processing is centralized here and the principal collections are housed here.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

Public Libraries Survey
Public Library Data Service Questionnaire

2.1.10 National Library
A library that is responsible for acquiring and conserving copies of all relevant documents to the country in which the library is located; it may function as a legal deposit library. Note 1: It will also normally perform some or all of the following functions: produce the national bibliography, hold and keep up to date a large and representative collection of foreign literature including documents about the country; act as a national bibliographic information center; compile union catalogues; supervise the administration of other libraries and/or promote collaboration; coordinate a research and development service, etc. Note 2: The definition of ‘national library’ allows for more than one in a country.

Source: library
Applicability: international, national, state
Library Type: special
Aggregate: yes

2.1.11 Public Library
A library that serves all residents of a given community, district, or region, and (typically) receives its financial support, in whole or part, from public funds. Public libraries make their basic collections and services available to the population of their legal service area without charges to individual users. Products and services beyond the library’s basic services may or may not be provided to the public, with or without individual charges. Individual charges may be assessed to library users outside the legal service area of the library. In addition to including the tax-supported municipal, county, and regional public libraries, this definition includes privately-and federally-controlled libraries governed by single board of trustees or other authority, and administered by a single director. Examples of public libraries include:

- A city library with its branches.
- A county, multicounty, or regional library with outlets functioning as branches.

Source: library
Applicability: international, local, national, state
Library Type: public
Aggregate: yes
2.1.12 School Library Media Center

A library that is an integral part of the educational program of an elementary or secondary school providing materials and services that meet the curricular, information, and recreational needs of students, teachers, and administrators. This entity may be called a library, media center, resource center, information center, instructional materials center, learning resource center, or some other name.

Source: library
Applicability: international, local, national, state
Library Type: school
Aggregate: yes

2.1.13 Special Library

A special library is a library within a business firm, professional association, government agency, hospital, research institution or other organized group; a library maintained by a parent organization to support a specialized clientele; or an independent library that may provide materials or services or both to the public, or to other libraries. Scope of collections and services are limited to the subject interests of the host or parent organization and usually have depth within those subject areas.

Source: library
Applicability: international, local, national, state
Library Type: special
Aggregate: yes

2.1.14 State Library Agency

A State Library Agency is the official agency of a State charged by the law of that State with the extension and development of public library services throughout the State, and has adequate authority under the law of the State to administer State plans in accordance with the provisions of the Library Services and Technology Act (LSTA).

Source: library
Applicability: international, national, state
Library Type: state
Aggregate: yes

2.2 Primary Target Population

The primary target population varies by type of library. It is the group of persons for which the library (reporting unit) has been established to offer services and from which it derives its identity. The primary target populations are noted in each subcategory. Secondary populations served are not included. It is recommended that library service mission, policies, and/or guidelines be consulted to understand the target populations for any given library or information organization.
2.2.1 Academic Library Target Population
An academic library's target population may include undergraduates and graduate students as well as faculty.

- 2.2.1.1 Undergraduate Students: Full time.
- 2.2.1.2 Undergraduate Students: Part time.
- 2.2.1.3 Graduate and First Professional Students: Full Time.
- 2.2.1.4 Graduate and First Professional Students: Part Time.
- 2.2.1.5 Faculty: Full Time.
- 2.2.1.6 Faculty: Part Time.

2.2.2 Network and Cooperative Target Population
The target population for a library network or cooperative is the participating libraries.

- 2.2.6.1 Academic Libraries.
- 2.2.6.2 Public Libraries.
- 2.2.6.3 School Library Media Centers.
- 2.2.6.4 Special Libraries.

2.2.3 Public Library Target Population
The target population of a public library is the population of the legal service area.

Population of the Legal Service Area
The total unduplicated population of those areas in a state that receive library services. The population of unserved areas is not included in this figure.

- Note 1: For states that have no overlapping jurisdictions, this number will be identical to the state's total population of legal service areas.
- Note 2: The state's most recent official state population figures for jurisdictions in the state are used as the basis for calculating the total unduplicated population of legal service areas.

Please refer to Appendix A for Methods of Measurement.
2.2.4 School Library Media Center Target Population
The target population of a school library media center are both the students and faculty.

2.2.5 Special Library Target Population
The target population of a special library is the group of persons that the special library is intended to serve, generally the staff of the parent organization.

2.2.6 State Library Agency Target Population
The target population of a state library agency may include blind and physically handicapped individuals, residents of State correctional institutions, residents of other State institutions, State government employees and the general public. Note: State library agencies may include archives. The governance structure of archives is outside the scope of this data dictionary. Please refer to Appendix A for Methods of Measurement.

- **2.2.6.1 Blind and Physically Handicapped Individuals.**
  Outlets serving this user group may contain talking books on discs and tapes and books in Braille made available from the National Library Service for the Blind and Physically Handicapped, a division of the Library of Congress. In addition, these outlets may contain large print books for the visually handicapped and captioned films for the deaf. These outlets provide library materials and library services to blind or physically handicapped residents who have been certified by competent authority as unable to read or to use conventional printed materials as a result of physical limitations.

- **2.2.6.2 Residents of State Correctional Institutions.**
  Outlets serving this user group provide books, other library materials, access to other information resources and other library services to residents of prisons, reformatories, and other correctional institutions operated or substantially supported by the State.

- **2.2.6.3 Residents of Other State Institutions.**
  Outlets serving this user group provide books, other library materials, access to other information resources and other library services to patients or residents of residential training schools, hospitals, nursing homes, and other general or special institutions operated or substantially supported by the State.
• **2.2.6.4 State Government Employees, (executive, legislative, or judicial).**
  Outlets serving this user group provide books, other library materials, access to other
  information resources and other library services to employees of all branches of
  State government.

• **2.2.6.5 General Public.**
  Outlets serving this user group function as the State-level equivalent of a local public
  library, providing books, other library materials, and electronic access to locally
  mounted and remote information resources for all State residents. These outlets
  serve the general public, regardless of whether they are open on a walk-in or referral
  basis.

**Source:** library
**Applicability:** international, national, state
**Library Type:** state
**Aggregate:** yes

## 3 Human Resources

Please refer to [Appendix A](#) for Methods of Measurement.

**Source:** library
**Applicability:** international, local, national, state
**Library Type:** academic, cooperative, network, public, school, special, state
**Aggregate:** yes

  - [ARL Statistics Questionnaire](#)
  - [Academic Library Survey](#)
  - [Public Libraries Survey](#)
  - [Public Library Data Service Questionnaire](#)
  - [School Library Media Center Survey](#)
  - [State Library Agency Survey](#)

### 3.1 Certified Library Media Specialist

Library staff member who has met the state’s regular or standard certification requirements
in the library media specialty area. Note: Includes those who have completed all necessary
course work and are eligible for full certification upon completion of a probationary period.

**Source:** library
**Applicability:** local, national, state
**Library Type:** school, special
**Aggregate:** yes

  - [School Library Media Center Survey](#)

### 3.2 Contributed Services Staff

Library staff, such as members of religious orders, whose services are valued by
bookkeeping entries rather than by full cash transactions. Note: Does not include volunteers.
3.3 Other Staff

Library employees without formal qualification in librarianship/information science or other relevant specialization, not included elsewhere.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Academic Library Survey
Public Libraries Survey
Public Library Data Service Questionnaire
School Library Media Center Survey
State Library Agency Survey

3.4 Professional Staff

Staff members doing work that requires professional education (the master's degree or its equivalent) in the theoretical and scientific aspects of librarianship; also, in some libraries, staff performing professional level tasks who, though not librarians, have equivalent education and training in related fields (e.g., archives, preservation or conservation, computer sciences, business administration, education).

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Academic Library Survey
Public Libraries Survey
Public Library Data Service Questionnaire
School Library Media Center Survey
State Library Agency Survey
3.5 Qualified Specialist Staff

Library employees who have received training in a specialist discipline other than librarianship and/or information science. Note: The training may be by formal education or by means of an external period of work of a professional nature under supervision in a specialization such as accountancy, computing, staff management, bookbinding.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Academic Library Survey
Public Libraries Survey
Public Library Data Service Questionnaire
School Library Media Center Survey
State Library Agency Survey

3.6 Staff Training

Formal staff training received inside or outside of the library.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

3.6.1 Staff Hours of Training

Hours of formal training received by staff during the reporting period.

Source: library
Applicability: local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

3.6.2 Number of Staff Trained

Number of staff who have received formal training during the reporting period.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

3.7 Student Assistants

Student assistants, employed on an hourly basis whose wages are paid from funds under library control or from a budget other than the library budget, including College Work Study Program. Note: Does not include maintenance and custodial staff.
3.8 Volunteers

Persons working on library tasks without payment. Note: Volunteers may receive token reimbursements or expense allowances.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special
Aggregate: yes

4 Collections

Documents held locally and remote resources for which permanent or temporary access rights have been acquired.

The library collection consists of all documents provided by a library for its users. Collections comprise documents held locally and remote resources for which permanent or temporary access rights have been acquired. Notes: Access rights may be acquired by the library itself, by a consortium and/or through external funding. Acquisition is to be understood as deliberately selecting a document, securing access rights and including it in the OPAC or other databases of the library. Interlibrary lending and document delivery are excluded. Does not include links to Internet resources for which the library has not secured access rights by legal agreements (e.g. legal deposit right), license or other contractual and/or co-operative agreement. Free Internet resources that have been catalogued by the library in its OPAC or a database should be counted separately (see ISO 2789 6.2.14).

The following terms apply to all categories within Collections and, to reduce duplication of term identification within categories and subcategories, precede specific categories of collections.

Access Rights
Rights for reaching or using the library collection. For the electronic collection, this implies that the library has secured permanent or temporary access for its users by law, license or other contractual and/or co-operative agreement.

Addition (Acquisitions)
Document or item added to a collection during the reporting period. Additions may be obtained, for example, by purchase, licensing, legal deposit, donation, or exchange. Added physical units or added titles are units or titles that have been cataloged according to Anglo-American Cataloguing Rules or for which other inventory records have been made available to users (e.g., minimal or provisional catalog records, accession records, or records in a database file).
Document
Recorded information or material object which can be treated as a unit in a documentation process [ISO/FDIS 5127]. Documents may differ in their physical form and characteristics.

Holdings
Number of documents of a certain type (e.g. books and serials, microforms, electronic serials) held locally or in remote resources for which access rights have been acquired, at least for a certain period of time. To be measured at the end of the reporting period. Note: Referred to as "stock" in ISO 2798.

Physical Unit
An individual item of library materials. A physically coherent document unit, inclusive of any protective devices, freely movable against other document units. Note 1: Coherence may be achieved, for example, by binding or encasement. Note 2: For printed documents, the term "volume" is used for the physical unit (see also volume). Examples of physical units are: a volume (books or serials); a linear foot (manuscripts and archives); a reel, sheet, or card (microforms); a sheet or bound atlas (cartographic materials); a film, slide, photograph, or picture (graphic materials); a disk, cassette, cartridge, or reel (sound recordings, motion pictures, and video recordings); and disks, tapes, or cartridges (computer files).

Title
The designation of a separate bibliographic whole, whether issued in one or several volumes, reels, discs, slides, or other parts. Titles are defined according to the Anglo-American Cataloging Rules. A book or serial title may be distinguished from other such titles by its unique International Standard Book Number (ISBN) or International Standard Serial Number (ISSN). This definition applies equally to print, audiovisual, and other library materials. For unpublished works, the term is used to designate a manuscript collection or an archival record series. Two subscriptions to Science magazine, for example, are counted as one title. When vertical file materials are counted, a file folder is considered a title.

Volume
A single physical unit of any printed, typewritten, handwritten, mimeographed, or processed work, distinguished from other units by a separate binding, encasement, portfolio, or other clear distinction, which has been cataloged, classified, and made ready for use, and which is typically the unit used to charge circulation transactions. Either a serial volume is bound, or it comprises the serial issues that would be bound together if the library bound all serials.

Withdrawal
Document or item withdrawn from a collection during the reporting period. Withdrawals may be effected, for example, by discarding, transferring, or in the case of electronic resources by deletion from files or canceling licenses.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Academic Library Survey
Public Libraries Survey
State Library Agency Survey
School Library Media Center Survey
Public Library Data Service Questionnaire

4.1 Archives and Manuscripts

Archives
The non-current records of an organization or institution preserved because of their continuing value.

Manuscripts
Works written by hand or typed, including books, dissertations, letters, speeches, music, legal papers, and printed forms completed by hand.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire

4.1.1 Linear Feet Added

See www.itsmarc.com/crs/grph0200.htm for definition of linear feet.

See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire

4.1.2 Linear Feet Held

See www.itsmarc.com/crs/grph0200.htm for definition of linear feet.

See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire

4.1.3 Cubic Feet

A unit of measure for library buildings.

See www.itsmarc.com/crs/grph0200.htm for definition of cubic feet.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: no
4.2 Audio-Visual Materials

Materials that are displayed by visual projection or magnification, or through sound reproduction, or both, including sound recordings, motion pictures and video recordings, and graphic materials. Also included in this category are special visual materials such as three-dimensional artifacts and realia, and web-based audio-visual resources. Document in which sound and/or pictures are prominent, and which requires the use of special equipment to be seen and/or heard [ISO 5127-11]. Note 1: This includes audio documents such as records, tapes, cassettes, audio compact discs, files of digital audio recordings; visual documents such as slides, transparencies, and combined audio-visual documents such as motion pictures, video recordings, etc. Microforms are excluded.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Public Libraries Survey
Academic Library Survey
State Library Agency Survey
School Library Media Center Survey

4.2.1 Audio-Visual Materials Additions--Physical Units
See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.2.2 Audio-Visual Materials Additions--Titles
See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.2.3 Audio-Visual Materials Holdings – Physical Units
See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.2.4 Audio-Visual Materials Holdings – Titles
See Section 4.

Source: library
Applicability: international, local, national, state
4.3 Books and Serials (print materials)

Book
A non-serial printed publication of any length bound in hard or soft covers or in loose-leaf format. Also called monograph. Includes sheet music and Braille.

Print Materials
Materials consisting primarily of words and usually produced by making an impression with ink on paper. Included in this definition are materials that do not require magnification (books, journals, pamphlets, and printed sheets including music and two-dimensional cartographic materials), as well as printed materials that require magnification (microforms). This also includes Braille materials.

Serial
A publication in any medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely. This definition includes periodicals, newspapers, and annuals (reports, yearbooks, etc.); the journals, memoirs, proceedings, transactions, etc. of societies; and numbered monographic series.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

Public Libraries Survey
Academic Library Survey
ARL Statistics Questionnaire
School Library Media Center Survey
State Library Agency Survey

4.3.1 Books and Serials Additions – Physical Units
See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.3.2 Books and Serials Additions – Titles
See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.3.3 Books and Serials Holdings – Titles
See Section 4.
4.3.4 Books and Serials Holdings--Volumes

See Section 4.

4.3.5 Newspapers

Serials which contain news on current events of special or general interest, the individual parts of which are listed chronologically or numerically and appear usually at least once a week.

4.4 Cartographic Materials

Materials representing in whole or in part the earth or any celestial body at any scale (e.g., maps and charts).

4.4.1 Cartographic Materials Additions--Physical Units

See Section 4.

4.4.2 Cartographic Materials Holdings--Physical Units

See Section 4.
4.5 Current Serials Received

Documents in print or in non-print form, issued in successive parts, usually having numerical or chronological designations, and intended to be continued indefinitely, whatever its periodicity.

- Note 1: Serials published in electronic form only or in both electronic and other format.
- Note 2: Comprises serials held locally and remote resources for which access rights have been acquired, at least for a certain period of time.
- Note 3: Include duplicate subscriptions.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

Public Libraries Survey
ARL Statistics Questionnaire
State Library Agency Survey
School Library Media Center Survey
Academic Library Survey

4.5.1 Current Subscriptions

Subscriptions refer to the arrangements by which, in return for a sum paid in advance, periodicals, newspapers, or other serials are provided for a specified number of issues. These include print/microfilm subscriptions, and electronic/digital subscriptions. Note: Include duplicate subscriptions.

- 4.5.1.1 Print/Microfilm Subscriptions
- 4.5.1.2 Electronic/Digital Subscriptions

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Public Libraries Survey
Academic Library Survey
School Library Media Center Survey
State Library Agency Survey

4.5.2 Current Serial Titles

See Section 4.

Serial title refers to the bibliographic entity represented regardless of the number of subscriptions to that entity in a given format.
4.5.2.1 Print/Microform Serial Titles
4.5.2.1 Electronic/Digital Serial Titles

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.6 Government Documents

Publications in book, serial, or other form of library material that are published by a government agency, e.g., the publications of federal, state, local, and foreign governments and of intergovernmental organizations to which governments belong and appoint representatives, such as the United Nations, Organization of American States, and the Erie Basin Commission graphic materials.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
State Library Agency Survey

4.6.1 Government Documents Additions--Physical Units

See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.6.2 Government Documents Holdings--Titles

See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.7 Graphic Materials

Opaque (e.g., two-dimensional) art originals and reproductions, charts, photographs or materials intended to be projected or viewed without sound, e.g., filmstrips, transparencies, photographs, posters, pictures, radiographs, slides, and collections of such materials.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
4.7.1 Graphic Materials Additions--Physical Units
See Section 4.

Source: library  
Applicability: international, local, national, state  
Library Type: academic, public, school, special, state  
Aggregate: yes

4.7.2 Graphic Materials Holdings--Physical Units
See Section 4.

Source: library  
Applicability: international, local, national, state  
Library Type: academic, public, school, special, state  
Aggregate: yes

4.8 Microforms

Photographic reproductions of textual, tabular, or graphic material reduced in size so that they can be used only with magnification. The two main types of microforms are micro reproductions on transparent material, including roll microfilm, aperture cards, microfiche, and ultrrafiche, and reproductions on opaque material.

Source: library  
Applicability: international, local, national, state  
Library Type: academic, public, school, special, state  
Aggregate: yes

Academic Library Survey

4.8.1 Microforms Additions – Physical Units
See Section 4.

Source: library  
Applicability: international, local, national, state  
Library Type: academic, public, school, special, state  
Aggregate: yes

4.8.2 Microforms Holdings – Physical Units
See Section 4.

Source: library  
Applicability: international, local, national, state  
Library Type: academic, cooperative, network, public, school, special, state  
Aggregate: yes

4.9 Other Materials

Non-electronic documents or items other than books; serials; manuscripts; printed music documents; microforms; cartographic, audio-visual or graphic documents; artifacts or patents separately specified in this standard.

- Note 1: This includes items such as dioramas and other three-dimensional documents, games, toys, etc. Documents in Braille are counted as print documents.
• Note 2: Multimedia documents. Documents combining different information media (text, graphics, photos, video, audio) in digital format. Multimedia documents are counted according to their main feature or purpose (e.g., as database, electronic serial or digital document).

• Note 3: Other Library Documents. Non-electronic documents or items other than books, serials, manuscripts, printed music documents, microforms, cartographic materials, audio-visual materials, or graphic documents, separately specified in this standard. This includes items such as dioramas and other three-dimensional documents, games, toys, etc. Documents in Braille are counted as print documents.

• Note 4: Patents. Government documents granting an inventor the sole right to use or license an invention together with associated documentation.

• Note 5: Printed Music Documents. Documents, the essential content of which is a representation of music, normally by means of notes. May be in sheet or codex form.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire

4.9.1 Other Materials Additions – Physical Units
See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.9.2 Other Materials Holdings – Physical Units
See Section 4.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

4.10 Other Materials – Electronic Emetrics

An electronic document or item. Includes eBooks, databases, Internet resources and other digital documents.

Electronic Collection
All resources in electronic form in the library collection. Note: The electronic collection includes databases, electronic serials, and digital documents. Free Internet resources which have been catalogued by the library in its OPAC or a database should be counted separately.

Access Rights
Rights for reaching or using the library collection. For the electronic collection, this implies that the library has secured permanent or temporary access for its users by law, license or other contractual and/or co-operative agreement.
4.10.1 Compact Disc Read-Only Memory (CD-ROM)

Computer based information storage and retrieval medium based on laser technology that contains data in text and/or multimedia formats. CD-ROMs are counted according to its contents as database, digital document, or electronic serial.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: no

4.10.2 Computer Files

The number of pieces of computer-readable disks, tapes, CD-ROMs, and similar machine-readable files comprising data or programs that are locally held as part of the library’s collections available to library clients. Examples are U.S. Census data tapes, sample research software, locally mounted databases, and reference tools on CD-ROM, tape or disk. Note: Does not include bibliographic records used to manage the collection (i.e., the library's own catalog in machine-readable form), library system software, and microcomputer software used only by the library staff.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

4.10.3 Databases

Collection of electronically stored data or unit records (facts, bibliographic data, and texts) with a common user interface and software for the retrieval and manipulation of the data.

- Note 1: The data or records are usually collected with a particular intent and are related to a defined topic.
- Note 2: A database may be issued on CD-ROM, diskette, or other direct access method, or as a computer file accessed via dial-up methods or via the Internet. Note 3: When access to more than one licensed database is effected through the same interface, each database should be counted separately.

4.10.3.1 Abstract and Indexing Databases

Collection of bibliographic references analyzing and presenting on a continuous basis periodical and/or other titles that usually relate to a common discipline or geographic area. This includes electronic reference and indexing tools which, if existed in print form, would be counted as periodicals. The content of abstract and indexing databases consists predominately of bibliographic references without associated full text articles, although both may be represented in the database.
4.10.3.2 Aggregated Full Text Databases
Collection of both bibliographic references and full text articles from periodical and/or other titles presented on a continuous basis that may relate to a common discipline or may provide multi-disciplinary coverage. This includes electronic reference and indexing tools which, if existed in print form, would be counted as periodicals. The content of aggregated full text databases consists predominately of full text articles rather than bibliographic references without associated full text, although both may be represented in the database.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: no

State Library Agency Survey
ARL Statistics Questionnaire

4.10.4 Digital Documents
Information unit with a defined content that has been digitized by the library or acquired in digital form as part of the library collection. This includes eBooks, electronic patents, networked audiovisual documents and other digital documents, e.g. reports, cartographic and music documents, pre-prints etc. Databases and electronic serials are excluded.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

4.10.5 eBooks
Digital documents, licensed or not, where searchable text is prevalent, and which can be seen in analogy to a print book (monograph). The use of eBooks is in many cases dependent on a dedicated device and/or a special reader or viewing software. Note 1: eBooks can be lent to users either on portable devices (eBook readers) or by transmitting the contents to the user's PC for a limited time period. Note 2: Doctoral dissertations in electronic format are included.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

4.10.6 Electronic Serials
Serials published in electronic form only or in both electronic and other format.

- Note 1: Comprises serials held locally and remote resources for which access rights have been acquired, at least for a certain period of time and for which the institution has access rights.
- Note 2: Current Serials Received (4.5) works in conjunction with this definition.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes
4.10.7 Free Internet Resources

The number of links to unique free Internet resources (web sites, digital documents, databases, electronic journals, etc.) which have been catalogued by the library in its OPAC or a database.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, cooperative, network, public, school, special, state  
**Aggregate:** no

4.10.8 Other Digital Documents

Digital documents other than an eBook, networked audio-visual document or electronic patent, e.g. report, pre-print, cartographic or music documents, exhibits, etc., in electronic format.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, cooperative, network, public, school, special, state  
**Aggregate:** no

5 Infrastructure

The library infrastructure pertains to facilities, including capacity and usable space, and technology. Hours open is discussed in Section 7, Services.

Please refer to [Appendix A](#) for Methods of Measurement.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, public, school, special, state  
**Aggregate:** yes

- [ARL Statistics Questionnaire](#)  
- [Academic Library Survey](#)  
- [Public Libraries Survey](#)  
- [Public Library Data Service Questionnaire](#)  
- [School Library Media Center Survey](#)  
- [State Library Agency Survey](#)

5.1 Gross Measured Area

Total space in the library building or buildings. Note: Areas devoted to cafes and staff recreation areas may be reported separately.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, public, school, special, state  
**Aggregate:** yes
5.2 Net Usable Area

Includes space for readers and reading areas, materials shelving and storage areas, space for services to clientele, public service desks, exhibit space, equipment areas aisles, and all other space used for library resources and services. Excludes vestibules, lobbies, traffic areas, janitorial or custodial storage and service areas, rest rooms, staff recreation area, cafes, elevators, stairway space, building corridors, space occupied by heating ventilation and cooling devices.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

5.3 Net Usable Area by Function

The total net usable area may be allocated to the following functions:

1. **User Services**
   Includes space for reading, studying, information delivery. Computer terminals and any other services delivered to users, also open access storage areas as integrated part of user service areas.

2. **Library Operations**
   Includes receipt of materials, bindery, acquisitions, cataloging, computing and management.

3. **Materials Storage**
   Includes all areas devoted principally to storing materials whether open access or closed.

4. **Events**
   Includes seminar and meeting rooms, space for meetings and story telling, and formal exhibition space.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

5.4 Facilities

A physically separate location where library materials and services are provided to the library's clientele. A facility has a staff and a permanent collection of library materials, and is usually, but not necessarily, separate from other facilities. This definition includes stationary facilities (e.g., a central facility, a branch library) and bookmobiles.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Academic Library Survey
5.4.1 Mobile Facilities
A library, usually an outlet of a library, using specially equipped transport and furnished to provide documents and services direct to users as an alternative to access on library premises.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

5.4.2 Physical Facilities
All stationary physical library outlets (central and branch).

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

5.5 Seating Capacity
Seats provided for users for reading or studying whether with or without equipment. Includes seats in carrels, in seminar and study rooms and the audiovisual and children's departments of the library. Includes seats in computer labs only if the labs are managed or operated by the library. Excludes seats in halls, and theaters intended for audiences of special events. Also excludes informal seating such as, floor space on which users may sit.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes
5.6 Workstations

A computer workstation may be stand-alone or networked, or a dumb terminal. Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

5.6.1 Available Workstations

Number of workstations in the library available to users. Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

5.6.2 Available Internet Workstations

Number of workstations in the library available to users and connected to the Internet. Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

6 Finances

Income and expenditures during the reporting period.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

6.1 Capital Expenditures

Funds expended for the acquisition of or additions to fixed assets such as building sites, new buildings and building additions, new equipment (including major computer installations), initial collections, furnishings for new or expanded buildings, and new vehicles. These expenditures exclude replacement and repair of existing furnishings and equipment, regular purchase of library materials, and investments for capital appreciation. (Also referred to as Capital Outlay).

Source: library
Applicability: international, local, national, state
6.2 Operating Expenditures by Type of Expenditure

Current and recurrent costs necessary for the provision of library services, such as personnel, library materials, binding, supplies, repair or replacement of existing furnishings and equipment, and costs incurred in the operation and maintenance of the physical facility. Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

6.2.1 Audiovisual Material Expenditures

Expenditures for materials that are displayed by visual projection or magnification, or through sound reproduction, or both, including sound recordings, motion pictures and video recordings, and graphic materials.

- Note 1: This includes expenditures for special visual materials such as three-dimensional artifacts and realia, documents in which sound and/or pictures are prominent, and which requires the use of special equipment to be seen and/or heard [ISO 5127-11].
- Note 2: This includes expenditures for audio documents such as records, tapes, cassettes, audio compact discs, files of digital audio recordings; visual documents such as slides, transparencies, and combined audio-visual documents such as motion pictures, video recordings, etc.
- Note 3: Microforms are excluded.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes
6.2.2 Bibliographic Utilities, Networks and Consortia Expenditures

Expenditures for services provided by national, regional and local bibliographic utilities, networks and consortia.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

6.2.3 Book and Serial Backfile Expenditures (print materials)

Expenditures for:

1. **Books**
   A non-serial printed publication of any length bound in hard or soft covers or in looseleaf format. Also called monograph. Includes sheet music.

2. **Print Materials**
   Materials consisting primarily of words and usually produced by making an impression with ink on paper. Included in this definition are materials that do not require magnification (books, journals, pamphlets, and printed sheets including music and two-dimensional cartographic materials), as well as printed materials that require magnification (microforms).

3. **Serials**
   A publication in any medium issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely. This definition includes periodicals, newspapers, and annuals (reports, yearbooks, etc.); the journals, memoirs, proceedings, transactions, etc. of societies; and numbered monographic series.
6.2.4 Collection Expenditures
All expenditures for materials purchased or leased for use by the public, such as print materials (including microforms), machine-readable materials, audio-visual materials, etc.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

- Public Libraries Survey
- State Library Agency Survey

6.2.5 Computer Hardware, Software, Supplies and Maintenance Expenditures
Expenditures from the library budget for computer hardware and software used to support library operations, whether purchased or leased, mainframe or microcomputer. Includes expenditures for maintenance and for equipment used to run information service products when that expenditure can be separated from the price of the product.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

- Academic Library Survey

6.2.6 Current Serial Expenditures
Expenditures for print, microfilm and electronic or digital subscriptions.

- 6.2.6.1 Current Serial Expenditures – Paper and Microform.
- 6.2.6.2 Current Serial Expenditures – Electronic

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

- ARL Statistics Questionnaire
- Academic Library Survey
- School Library Media Center Survey

6.2.7 Document Delivery/Interlibrary Loan Expenditures
Expenditures for document delivery and interlibrary loan services. Includes fees paid for photocopies, costs of facsimile transmission, royalties and access fees paid to provide document delivery or interlibrary loan. Includes fees paid to bibliographic utilities if the portion paid for interlibrary loan can be separately counted. Does not include expenditures related to transactions between the main or central library and branches.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

- ARL Statistics Questionnaire
6.2.8 Electronic Access Expenditures

All operating expenditures from the library budget associated with access to electronic materials and services. Include computer hardware and software used to support library operations, whether purchased or leased, mainframe and microcomputer. Includes expenditures for maintenance. Includes expenditures for services provided by national, regional, and local bibliographic utilities, networks, consortia and commercial services. Includes all fees and usage costs associated with such services as OCLC FirstSearch or electronic document delivery. Excludes capital expenditures.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

6.2.9 Electronic Materials Expenditures

Operating expenditures for electronic (digital) materials. Types of electronic materials include eBooks, eSerials (including journals), government documents, databases (including locally mounted, full text or not), electronic files, reference tools, scores, maps, or pictures in electronic or digital format, including materials digitized by the library. Electronic materials can be distributed on magnetic tape, diskettes, computer software, CD-ROM, or other portable digital carrier, and can be accessed via a computer, via access to the Internet, or by using an eBook reader. Include equipment expenditures that are inseparably bundled into the price of the information service product; expenditures for materials held locally and for remote electronic materials for which permanent or temporary access rights have been acquired; and expenditures for database licenses.

- Note: Based on ISO 2789 and FSCS definitions.

Source: library
Applicability: international, local, national
Library Type: academic, public, school, special, state
Aggregate: yes

6.2.10 Employee Benefit Expenditures

Expenditures for the benefits outside of salary and wages paid and accruing to an employee, regardless of whether the benefits or equivalent cash options are available to all employees.

- 6.2.10.1 Direct, Paid Fringe Benefits
  Includes Social Security, retirement, medical insurance, life insurance, guaranteed disability income protection, unemployment compensation, workmen’s compensation, tuition, and housing benefits.
• **6.2.10.2 Indirect, Fringe Benefits**
  Includes time away from work usually allowed with pay, such as vacation, sick, or educational leave, and holidays, but in some instances without pay, such as family leave not considered sick leave.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, public, school, special, state  
**Aggregate:** yes

  - ARL Statistics Questionnaire
  - Public Libraries Survey
  - Academic Library Survey
  - Public Library Data Service Questionnaire
  - State Library Agency Survey

**6.2.11 Furnishing and Equipment Expenditures**
Expenditures for furnishings and equipment. Extraordinary, nonrecurring equipment expenditures are included in Capital Expenditures.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, cooperative, public, school, special, state  
**Aggregate:** yes

  - Academic Library Survey

**6.2.12 Microform Material Expenditures**
Expenditures for microforms. Microforms are photographic reproductions of textual, tabular, or graphic material reduced in size so that they can be used only with magnification. The two main types of microforms are micro reproductions on transparent material, including roll microfilm, aperture cards, microfiche, and ultrafiche, and reproductions on opaque material.

**Source:** library  
**Applicability:** international, local, national  
**Library Type:** academic, public, school, special, state  
**Aggregate:** yes

  - ARL Statistics Questionnaire  
  - Academic Library Survey  
  - School Library Media Center Survey

**6.2.13 Other Operating Expenditures**
Operating expenditures not included in any other subcategory of 6.2, Operating Expenditures by Type of Expenditure. (Also called Miscellaneous Expenditures).

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, public, school, special, state  
**Aggregate:** yes
6.2.14 Preservation Expenditures
Expenditures for specific measures undertaken for the repair, maintenance, restoration, or protection of library materials, including but not limited to binding and rebinding, materials conversion (to microform for example), deacidification, and lamination.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

6.2.15 Professional Staff Salaries and Wages
All monies paid before deductions to all professional staff paid from library's budget (reporting unit's budget) for work performed. This definition excludes employee fringe benefits. Professional staff are staff members doing work that requires professional education (the master's degree or its equivalent) in the theoretical and scientific aspects of librarianship; also, in some libraries, staff performing professional level tasks who, though not librarians, have equivalent education and training in related fields (e.g., archives, computer sciences, business administration, education).

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

6.2.16 Student Assistant Salaries and Wages
All monies paid before deductions to all student assistants paid from library's budget (reporting unit's budget) for work performed. This definition excludes employee fringe benefits.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes
6.2.17 Support Staff Salaries and Wages

All monies paid before deductions to all support staff paid from library's budget (reporting unit's budget) for work performed. This definition excludes employee fringe benefits.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

6.3 Operating Income by Source

Money or money equivalents received in an accounting period and used for salaries and wages, the costs of library materials and services, and other operating expenditures.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

6.3.1 Federal Government Income

All federal government funds distributed to the library for expenditure by the library, including federal money distributed by the State.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

6.3.2 Government Income

Includes all tax and non-tax receipts designated by the community, district, or region and available for expenditure by the library. The value of any contributed or in-kind services or the value of any gifts and donations are excluded.
6.3.3 Other Sources of Income

All income other than that included under local, state and federal. Includes grants from non-profit organizations or corporations, donations from Friends as well as other donations, gifts, interest, fines, and fees. The value of any contributed services or the value of in-kind gifts and donations are excluded.

6.3.4 State Government Income

All funds distributed to the library by State government for expenditure by the library, except for federal money distributed by the State. This includes funds from such sources as penal fines, license fees, and mineral rights.

6.4 Capital Revenue

Revenue that will be used for major capital expenditures. Examples include funds received for a) site acquisition; b) new buildings; c) additions to or renovation of library buildings; d) furnishings, equipment, and initial book stock for new buildings, building additions, or building renovations; e) library automation systems; f) new vehicles; and g) other one-time major projects. Includes: federal, state, local and other revenue to be used for major capital expenditures. Excludes revenue to be used for replacement and repair of existing furnishings and equipment; regular purchase of library materials; investments for capital appreciation; contributions to endowments; income passed through to another agency (e.g., fines); or funds unspent in the previous fiscal year (e.g., carryover).
7 Services

Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Academic Library Survey
Public Libraries Survey
State Library Agency Survey
School Library Media Center Survey
Public Library Data Service Questionnaire

7.1 Gate Count

The total number of persons who physically enter the library. The total number includes persons who visit in groups and persons who visit for library-sponsored programs. A person may be counted more than once. Counting may be done either upon entrance or upon exit.

Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Academic Library Survey
Public Libraries Survey
State Library Agency Survey

7.2 Hours Open

Number of hours when the main services are available to users during a normal week.

Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

Public Libraries Survey
Academic Library Survey
Public Library Data Service Questionnaire
State Library Agency Survey

7.2.1 Hours Open in Main/Central Library
Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes
Public Libraries Survey
Academic Library Survey
State Library Agency Survey

7.2.2 Hours Open in Branch Libraries
Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes
Academic Library Survey
Public Libraries Survey
State Library Agency Survey

7.3 Information Requests

An information contact that involves the knowledge, use, recommendations, interpretation, or instruction in the use of one or more information sources by a member of the library staff. The term includes information and referral service.

Information sources include:

1. Printed and nonprinted materials.
3. The library's own catalogs and other holdings records.
4. Other libraries and institutions through communication or referral.
5. Persons both inside and outside the library.

When a staff member uses information gained from previous use of information sources to answer a question, the request is reported as an information request even if the source is not consulted again. (Also known as Reference Transaction).

- Note: It is essential that libraries do not include directional transactions in the report of reference transactions. A directional transaction is an information contact that does not involve knowledge, use, recommendation, interpretation, or instruction in the use of any information sources other than those that describe the library, such as schedules, floor plans, handbooks, and policy statements. Examples of directional transactions include giving instruction for locating, within the library, staff, library users, or physical features, and giving assistance of a non-bibliographical nature with machines.

Please refer to Appendix A for Methods of Measurement.
7.3.1 Virtual Reference Transactions

Virtual reference transactions conducted via e-mail, website, or other network-based medium designed to support virtual reference. (ARL E-metrics; Bertot, McClure, Ryan). Note: Includes questions either received or responded to.

Please refer to **Appendix A** for Methods of Measurement.

7.4 Library Events/Programs

Events organized by the library. Number of exhibitions and number of events (including virtual events) typically with a literary or cultural intent.

7.4.1 Attendance at Library Events

Total number of attendance at events as to type of events: exhibitions and other events; and as to types of users: children and adults.

7.5 Library User

The library user is an individual accessing library materials and services from a variety of access points. Libraries may classify users in different ways, including but not limited to active borrower, registered library user, or eligible user. To adequately describe library user,
a distinction must be made between the library user status and eligibility to access or borrow from a library collection from inside or outside the physical premises of the library. The method of authenticating the status or eligibility of a library user is the responsibility of the individual library.

Please refer to Appendix A for Methods of Measurement and Appendix B: Measuring the Use of Electronic Library Services.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

Public Library Data Service Questionnaire

7.6 Loans and Document Delivery Emetrics

Direct lending or delivery transaction of an item in non-electronic form (e.g., book), of an electronic document on a physical carrier (e.g., CD-ROM) or other device (e.g., eBook reader), or transmission of an electronic document to one user for a limited time period (e.g., eBook).

- Note 1: Loans include user-initiated renewals as well as registered loans within the library (on-site loans). Renewals should be counted separately.
- Note 2: Loans include copied documents supplied in place of original documents (including FAX) and print-outs of electronic documents made by library staff for the user.
- Note 3: Loans of documents in physical form to distance users are included here.
- Note 4: Mediated electronic transmission of documents is counted as electronic document delivery if their use is permitted for unlimited time. This includes transmissions to members of the population to be served.

Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

ARL Statistics Questionnaire
Academic Library Survey
Public Libraries Survey
Public Library Data Service Questionnaire
School Library Media Center Survey
State Library Agency Survey

7.6.1 Interlibrary Loan

Loan of a document in its physical form or delivery of a document (or part of it) in copied form, from one library to another library not under the same administration. Note: Mediated transmission of documents in electronic form is counted as electronic document delivery.
See Section 7.6.2, Electronic Delivery.

- **7.6.1.1 Materials Provided to Other Libraries**
  These are library materials, or copies of the materials, provided by one library to another upon request. The libraries involved in interlibrary loans are not under the same library administration.

- **7.6.1.2 Materials Obtained from Other Libraries**
  These are library materials, or copies of the materials, received by one library from another library upon request. The libraries involved in interlibrary loans are not under the same library administration.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, cooperative, network, public, school, special, state  
**Aggregate:** yes  

### 7.6.2 Electronic Document Delivery

Electronic transmission of a document or part of a document from the library collection to a user, mediated by library staff, not necessarily via another library.

- Note 1: Electronic transmission of documents to members of the population to be served is included. FAX transmission is excluded.
- Note 2: May be split up as to transmission with or without charge to the user.

Please refer to 7.7.1: Use, Electronic Collections for further information.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, cooperative, network, public, school, special, state  
**Aggregate:** yes  

### 7.6.3 External Document Supply

Document or part of it in print or electronic form delivered from outside the library collection by non-library suppliers (not through interlibrary lending) with the library being involved in the transaction and/or the payment.

- Note 1: It is irrelevant whether a number of individual transactions are paid per view or a certain number of transactions have been prepaid.
- Note 2: Please see 7.7.1: Use, Electronic Collections.

**Source:** vendor  
**Applicability:** international, local, national, state  
**Library Type:** academic, cooperative, network, public, school, special, state  
**Aggregate:** yes  

### 7.7 Use

In order to know how far electronic library services enlarge the range of library services and increase their market penetration, it is important to know the provenance of each use. Three locations should be differentiated:

1. Inside the library.
2. Outside the library, but inside the institution or authority (population to be served).
3. Outside the institution or authority (population to be served).

Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

7.7.1 Electronic Collection

- 7.7.1.1 Units/Records Examined
  Content in the electronic collection that is delivered to a user. The sub-categories that follow provide for a detailed breakdown by type of content delivered (full-content unit, or descriptive record) and system delivering the content (Library Collection, Commercial Service or OPAC). See 7.6: Loans and Document Delivery.
  - 7.7.1.1.1 Library Collection Full-Content Units Examined
    Number of full-content units from library electronic collection examined, downloaded, or otherwise supplied to a user. Exclude OPAC or commercial services (i.e., online databases).
  - 7.7.1.1.2 Commercial Services Full-Content Units Examined
    Number of subscription service full-content units examined, downloaded, or otherwise supplied to user, to the extent that these are recordable and controlled by the server rather than the browser. (ICOLC Guidelines, December 2001). Note 1: Journal articles by journal title with ISSN and title listed. Note 2: eBooks by book title with ISBN and title listed. Note 3: Reference materials by content unit appropriate to the resource (e.g., dictionary definitions, encyclopedia articles, biographies, etc.). Note 4: Non-textual resources by file type as appropriate to resources (e.g., image, audio, video, etc.). (ICOLC Guidelines, December 2001)
  - 7.7.1.1.3 Library Collection Descriptive Records Examined
    Number of descriptive records concerning the library's electronic collection delivered to a user. Determined by the record type appropriate to the resource, e.g., abstract, archive, and index. Exclude OPAC or commercial services (i.e., online databases).
  - 7.7.1.1.4 Commercial Services Descriptive Records Examined
    Number of descriptive records concerning the library's commercial services delivered to a user. Determined by the record type appropriate to the resource, (e.g., abstract, archive, and index). Exclude OPAC or library collection descriptive records (i.e., library website services and collections).
  - 7.7.1.1.5 OPAC Descriptive Records Examined
    Number of descriptive records from the library's online catalog delivered to a user. Exclude commercial services or library collection descriptive records (i.e., library website services and collections).

- 7.7.1.2 Searches/Menu Selections (Queries)
  A search is defined as intending to represent a unique intellectual inquiry whether conducted through a search form submitted to the server or through the use of menu selections (e.g., browsing a list of subjects.)
7.7.1.2.1 Library Collection Searches (Queries)
A search is defined as intending to represent a unique intellectual inquiry. Typically a search is recorded every time a search request is submitted to the server. Limited to library electronic collection services. Include menu selection searches. Exclude spider/crawler searches. Excludes OPAC searches. (ISO 2789, Annex A)

7.7.1.2.2 Commercial Services Searches (Queries)
A search is defined as intending to represent a unique intellectual inquiry. Typically a search is recorded every time a search request is submitted to the server. Limited to commercial services. Mistyped search strings do not represent unique intellectual inquiries. Include menu selection searches. Exclude spider/crawler searches. (ISO 2789, Annex A)

7.7.1.2.3 OPAC Searches (Queries)
A search is defined as intending to represent a unique intellectual inquiry. Typically a search is recorded every time a search request is submitted to the server. Limited to the library online catalog service. Include menu selection searches. Exclude spider/crawler searches. (ISO 2789, Annex A)

7.7.1.3 Sessions
A session is defined as a successful request of an online service or library's online catalog. It is one cycle of user activities that typically starts when a user connects to the service or database and ends by terminating activity that is either explicit (by leaving the service through exit or log-out) or implicit (timeout due to user inactivity).

7.7.1.3.1 OPAC Sessions
A session is defined as a successful request of the library's online catalog. It is one cycle of user activities that typically starts when a user connects to the OPAC and ends by terminating activity in the OPAC that is either explicit (by leaving the database through log-out or exit) or implicit (timeout due to user inactivity). In some cases, such as OPAC use inside the library, several users one after the other might make use of the same workstation, and sessions could not be separated. In most systems, a session is cut off after a specified time of non-use, thus avoiding part of the problem. The average timeout setting would be 30 minutes. If another timeout period is used this should be reported. Browser or proxy caching will be likely to reduce the number of requests registered in logfiles. (ISO 2789, Annex A; modified to exclude commercial services).

7.7.1.3.2 Commercial Services Sessions
A session is defined as a successful request of a commercial service (e.g., online database). It is one cycle of user activities that typically starts when a user connects to a database and ends by terminating activity in the database that is either explicit (by leaving the database through log-out or exit) or implicit (timeout due to user inactivity). (ISO 2789, Annex A, modified to exclude OPAC sessions). Note 1: For multiple databases compiling several individual databases further information should be provided as to the separate databases hosted. Note 2: In some cases, e.g. database use inside the library, several users one after the other might make use of the same workstation, and sessions could not be separated. In most systems, a session is cut off after a specified time of non-use, thus avoiding part of the problem. The average timeout setting would be 30 minutes. If another timeout
period is used this should be reported. Browser or proxy caching will be likely to reduce the number of requests registered in logfiles.

- **7.7.1.4 Rejected Sessions (Turnaways)**
  A rejected session (turnaway) is defined as an unsuccessful log-in to an electronic service by exceeding the simultaneous user limit. (ISO 2789, Annex A) Excludes failure of log-in because of wrong passwords.

- **7.7.1.5 Virtual Visits**
  A user's request of the library web site from outside the library premises regardless of the number of pages or items viewed. (ISO 2789, 3.3.25) Excludes web site visits from within the library. Note: This statistic is the equivalent of a session for a library's website. As such, there is a need to exclude various counts (hits, downloads) by users during any given visit.

Please refer to [Appendix A](#) for Methods of Measurement.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, public, school, special, state  
**Aggregate:** yes

- [Public Library Data Service Questionnaire](#)  
- [State Library Agency Survey](#)  

### 7.7.2 In House Use

Documents taken by a user from open access stock for use on the premises.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:**  
**Aggregate:** yes

- [Public Library Data Service Questionnaire](#)  
- [State Library Agency Survey](#)  

### 7.7.3 Internet Access

Internet access by a user from a workstation provided on the library premises or remotely. Note: This will usually be the period of time between a log-in and an implicit or explicit log-off from a library Internet portal, database or the OPAC.

Please refer to [Appendix A](#) for Methods of Measurement.

**Source:** library  
**Applicability:** international, local, national, state  
**Library Type:** academic, public, school, special, state  
**Aggregate:** yes

- [State Library Agency Survey](#)  
- [Public Libraries Survey](#)  

### 7.7.4 Number of Public Access Workstation Users

Annual count of the number of users of all of the library's graphical public access workstations connected to the Internet computed from a one-week sample. (Branch Level Statistic)
7.8 User Orientation and Training

Hours of user training undertaken by the library, either in orientation of collections, services and facilities or on the use of information sources. Hours of user training on electronic services undertaken by the library. Numbers of hours users have accessed web-based training services offered by the library.

Please refer to Appendix A for Methods of Measurement.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

7.8.1 Attendance at User Training

Number of attendees at user training sessions and number of attendees at user training lessons on electronic services.

Source: library
Applicability: international, local, national, state
Library Type: academic, cooperative, network, public, school, special, state
Aggregate: yes

7.8.2 Formal User Information Technology Training

A count of the number of users instructed and the hours of instruction offered in the use of information technology or resources obtainable using information technology in structured sessions - either delivered in the library using a computer lab or other instructional setting or delivered electronically through online-based instruction. (Bertot, McClure, Davis).

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special
Aggregate: yes

7.8.3 Information Services to Groups

Information contacts planned in advance in which a staff member, or a person invited by a staff member, provides information intended for a number of persons. Information service to groups may be either bibliographic instruction or library use presentations, or it may be cultural, recreational, or educational presentations. Story hours are included. Presentations both on and off the library premises are included as long as the library sponsors them. Meetings sponsored by other groups using library meeting rooms are not included.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

7.8.4 Point-of-Use Information Technology Training

A count of the number of users instructed and the hours of instruction offered in the use of information technology or resources obtainable using information technology in unstructured sessions at the impromptu request of users.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes

7.8.5 User Training

Training programs set up with a specified lesson plan which aims at specific learning outcomes for the use of library services.

- Note 1: User training can be offered as a tour of the library, as library instruction, or as a web-based service for users.
- Note 2: The duration of lessons is irrelevant.

Source: library
Applicability: international, local, national, state
Library Type: academic, public, school, special, state
Aggregate: yes
Emetrics Elements

- **4.5** Current Serials Received
  - **4.5.1** Current Subscriptions
  - **4.5.2** Current Serial Titles
- **4.10** Other Materials--Electronic
  - **4.10.1** Compact Disc Read-Only Memory (CD-ROM)
  - **4.10.2** Computer Files
  - **4.10.3** Databases
  - **4.10.4** Digital Documents
  - **4.10.5** eBooks
  - **4.10.6** Electronic Serials
  - **4.10.7** Free Internet Resources
  - **4.10.8** Other Digital Documents
- **5.6** Workstations
  - **5.6.1** Available Workstations
  - **5.6.2** Available Internet Workstations
- **6.2** Operating Expenditures by Type of Expenditure
  - **6.2.2** Bibliographic Utilities, Networks and Consortia Expenditures
  - **6.2.5** Computer Hardware, Software, Supplies and Maintenance Expenditures
  - **6.2.6** Current Serial Expenditures
  - **6.2.7** Document Delivery/Interlibrary Loan Expenditures
  - **6.2.8** Electronic Access Expenditures
  - **6.2.9** Electronic Materials Expenditures
  - **6.2.11** Furnishing and Equipment Expenditures
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- **7.3** Information Requests
  - **7.3.1** Virtual Reference Transactions
- **7.6** Loans and Document Delivery
  - **7.6.2** Electronic Document Delivery
  - **7.6.3** External Document Supply
- **7.7** Use
  - **7.7.1** Electronic Collection
  - **7.7.3** Internet Access
  - **7.7.4** Number of Public Access Workstation Users
  - **7.8** User Orientation and Training
    - **7.8.1** Attendance at User Training
    - **7.8.2** Formal User Information Technology Training
    - **7.8.4** Point-of-Use Information Technology Training
Appendix A:
Methods of Measurement

Expenditures

Report funds expended by the library in the fiscal year being measured (regardless of when received) from its regular budget and from all other sources (e.g., research grants, special projects, gifts and endowments, and fees for services). If items in this section are not paid from the library budget but can be easily identified in other parts of the institution's budget, report them here. Expenditures should be reported for the 12-month period that corresponds to your library's fiscal year. Fiscal years typically commence between the calendar period June 1 to September 30. All expenditures should be reported in whole dollars in the most appropriate category to provide an unduplicated count of expenditures. DO NOT REPORT ANY EXPENDITURES MORE THAN ONCE.

Gate Count in a Typical Week

Report the number of persons who physically enter library facilities in a typical week. It is understood that a single person may be counted more than once.

Hours Open in a Typical Week

Report an unduplicated count of hours a library facility or facilities are open in a typical week, including the main library and branches, using the following method. If a library is open from 9 a.m. to 5 p.m., Monday through Friday, it should report 40 hours per week. If several of its branches are also open during those hours, the figure remains 40 hours per week. Should Branch A also be open one evening from 7:00 to 9:00, the total hours during which users can find service becomes 42. If Branch B is open the same hours on the same evening, the total remains 42, but if it is open two hours on another evening, or from 5:00 to 7:00 on the evening when Branch A is open later, the total becomes 44 hours during which users can find service. Collect service hours separately from hours a library facility is open.

Infrastructure Measurements

Infrastructure measurements are related to the following categories: 5.1 Gross Measured Area; 5.2 Net Usable Area; 5.3 Net Usable Area by Function; 5.4 Facilities, 5.4.1 Mobile Facilities, 5.4.2 Physical Facilities; 5.5 Seating Capacity; 5.6 Workstations, 5.6.1 Available Workstations, 5.6.2 Available Internet Workstations. Methods of measurement within these categories include square footage, linear feet, cubic feet, and physical item count. The FSCS survey of public library data reports square footage of facilities, and a definition is available from the NCES website (http://nces.ed.gov/surveys/libraries/public.asp). The U. S. National Archives & Records Administration (NARA) and the Society of American Archivists (SAA) provide useful information on these methods. SAA recently updated A Glossary of Archival and Records Terminology, Richard Pearce-Moses (http://www.archivists.org/glossary/GART_2004-06-26.pdf) NARA has developed a Lifecycle Data Requirements Guide for their internal use. To request guidance from NARA on methods of measuring collection size, capacity,
and the like, please submit a question to them through the "Contact NARA" link at (http://www.archives.gov/global_pages/contact_us.html). Additionally, refer to the Glossary for Archivists, Manuscript Curators, and Records Managers, Lewis J. Bellardo and Lynn Carlin. This edition is currently available for purchase from the SAA website at (http://www.archivists.org/catalog/). A revision is underway and will be online and searchable from the SAA website.

Reference Transactions in a Typical Week

Report the total number of reference transactions in a typical week. A reference transaction is an information contact that involves the knowledge, use, commendation, interpretation, or instruction in the use of one or more information sources by a member of the library staff. Information sources include printed and non-printed materials, machine-readable databases (including assistance with computer searching), catalogs and other holdings records, and, through communication or referral, other libraries and institutions, and persons both inside and outside the library. Include information and referral services. If a contact includes both reference and directional services, it should be reported as one reference transaction. When a staff member utilizes information gained from a previous use of information sources to answer a question, report as a reference transaction, even if the source is not consulted again during this transaction. Duration should not be an element in determining whether a transaction is a reference transaction.

Total Annual Number of Database Queries/Searches

Total count of the number of searches conducted in the library's online databases. Subsequent activities by users (e.g., browsing, printing) are not considered part of the search process. Check with your database vendor for these data.

Total Annual Number of Items Examined Using Subscription Services

Count the number of views to each vendor subscription (OCLC, Gale, etc.) to which the library subscribes. A view is defined as the number of full text articles/pages, abstracts, citations, and text only or text/graphics viewed.

Total Circulation

The total annual circulation of all library materials of all types, including renewals. Note: Count all materials in all formats that are charged out for use outside the library. Interlibrary loan transactions included are only items borrowed for users.

Total Full Time Equivalent Employees (FTE)

Report the number of filled or temporarily vacant FTE positions paid from funds under library control during the Fall of the fiscal year being reported. To compute FTE's of part-time employees and student assistants, take the TOTAL number of hours worked per week by part-time employees IN EACH CATEGORY and divide it by the number of hours CONSIDERED BY THE REPORTING LIBRARY TO BE A FULL-TIME WORK WEEK (e.g., 60 hours per week of part-time work divided by 40 hours per full-time week equals 1.50 FTE). Data should be reported to two decimal places.

Total Number of Materials Held at End of Fiscal Year

Report the total number of each category held at end of fiscal year. To get this figure, take the total number held at the end of the previous fiscal year, add the number added during the fiscal year just ended and subtract the number withdrawn during that period.
Total Unduplicated Population of Legal Service Areas

This is the total unduplicated population of those areas in your state that receive library services. The population of un-served areas is not included in this figure. Note: A state's actual total population of legal service areas may be different.

Typical Week

A "typical week" is a time that is neither unusually busy nor unusually slow. Avoid holidays, vacation periods, days when unusual events are taking place in the community or in the library. Choose a week in which the library is open regular hours.

E-metrics

Four core datasets have been identified which should, if possible, be collected for all services—separately for each service as well as summed for all services:

- Number of sessions;
- Number of searches (queries);
- Number of units or descriptive records examined (including downloads); and
- Number of virtual visits.

In addition to these core datasets that provide basic information on the use of electronic services, some additional data have been found relevant and should be collected when possible and appropriate:

- Number of rejected sessions (turnaways);
- Number of menu selections; and
- Number of virtual reference transactions.

All data refer to the use of the library collection, the library's website, the OPAC and Internet access via the library - not to users - accessing documents on the Internet that are publicly available and free via the Internet access in the library.

Figure 1 shows the data on use of the library's electronic services that are considered necessary and useful for collection by libraries.

<table>
<thead>
<tr>
<th></th>
<th>From inside the library</th>
<th>From elsewhere inside the institution</th>
<th>From outside the institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of sessions, OPAC</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Number of sessions, commercial services</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Number of rejected sessions (turnaway)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Number of searches (queries), library collection</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Number of searches (queries), commercial services</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Figure 1: Data to collect for electronic services

### Sessions

A session is defined as a successful request of a database or the OPAC. It is one cycle of user activities that typically starts when a user connects to a database or the OPAC and ends by terminating activity in the database or OPAC that is either explicit (by leaving the database through log-out or exit) or implicit (timeout due to user inactivity) (see ISO 2789, 3.3.21 and Annex A).

Note: For multiple databases compiling several individual databases further information should be provided as to the separate databases hosted.

In some cases (e.g. OPAC use inside the library), several users one after the other might make use of the same workstation, and sessions could not be separated. In most systems, a session is cut off after a specified time of non-use, thus avoiding part of the problem. The average timeout setting would be 30 minutes. If another timeout period is used this should be reported. Browser or proxy cashing will be likely to reduce the number of requests registered in logfiles.

### Rejected Sessions (Turnaways)

A rejected session (turnaway) is defined as an unsuccessful log-in to an electronic service by exceeding the simultaneous user limit (see ISO 2789, 3.3.17 and Annex A). Note: Failure of log-in because of wrong passwords is excluded. The number of sessions exceeding the simultaneous user limit cannot always be differentiated from other rejections (e.g., missing or mistyped passwords).
Document Downloaded

Full text of a document or part of a document in the electronic collection that is delivered to a user. (ISO 2789, 3.3.3)

Documents or Records Viewed

Some electronic services (e.g., OPAC, reference database) do not typically require downloading as simply viewing documents (abstracts, titles) is normally sufficient for users' needs. Viewing documents is defined as having the full text of a digital document or electronic resource downloaded, or any catalogue record or database entry fully displayed during a search. (ISO 2789, Annex A).

Note: Documents viewed and downloading transactions can be compared to the following steps in the traditional use of open access collections: browsing at the shelves and taking documents to a working place or to the issue desk.

Number of Searches (Queries)

A search is defined as intending to represent a unique intellectual inquiry. Typically a search is recorded every time a search request is submitted to the server (see ISO 2789, 3.3.20 and Annex A) [applies to licensed database services]

Note: Mistyped search strings do not represent unique intellectual inquiries. In practice, however, libraries will have difficulties to differentiate these unintended searches from intended, but unsuccessful searches. Also, will need to exclude spider/crawler searches.

Total Annual Virtual Visits to Networked Library Resources

A visit occurs when an external user connects to a networked library resource for any length of time or purpose [regardless of the number of pages or elements viewed]. Examples of a networked library resource include a library OPAC or a library web page. In the case of a user visit to a library web site, a user who looks at 16 pages and 54 graphic images registers one visit on the Web server.)

Number of Menu Selections

Number of user initiated searches through the use of alphabetic and subject menu selections. (ICOLC)

Note: Categorized as appropriate for the vendor systems, if display data can be accomplished by browsing (e.g., the use of menus).

Full-Content Units Examined (licensed resources)

Number of Full-Content Units examined, downloaded, or otherwise supplied to user, to the extent that these are recordable and controlled by the server rather than the browser. (ICOLC Guidelines, December 2001). Note: (1) Journal articles - by journal title with ISSN and title listed; (2) eBooks - by book title with ISBN and title listed; (3) Reference materials - by content unit appropriate to the resource (e.g., dictionary definitions, encyclopedia articles, biographies, etc.); (4) Non-textual resources - by file type as appropriate to resources (e.g., image, audio, video, etc.). (ICOLC Guidelines, December 2001)

Number of Public Access Workstations

Annual count of the total number of library owned public access graphical workstations that connect to the Internet for a dedicated purpose (to access an OPAC or for multiple
purposes. Collect and report this statistic for each participating branch, if applicable. (Branch Level Statistic).

Computers in computer labs used for public instruction if graphical and connected to the Internet should be counted. Public access graphical workstations that connect to the Internet that are used by both staff and the public should be counted if the workstation is used by the public for at least half of the hours during an average week that the library is open to the public. Reference desk computers used by staff to assist the public should not be counted.

**Number of Public Access Workstation Users**

Annual count of the number of users of all of the library’s graphical public access workstations connected to the Internet computed from a one-week sample. (Branch Level Statistic).

Note: Select a one-week period during the test period. One week equals the number of hours the library is open over a consecutive seven-day period. Note: Data may be collected for more than one week and averaged but report this change in procedure when submitting the data to the project web site.

Count each user that uses the graphical public access workstations connected to the Internet, regardless of the amount of time spent on the computer. A user who uses the library’s workstations three times a week would count as three users in the count. Internet use includes all types of usage including WWW, e-mail, telnet, chat, etc. The study team recognizes the potential difficulty of determining whether a user on a multi-purpose (CD-ROM access, word processing, etc.) workstation is using the Internet. Do not include staff use of these workstations.

Obtain a total figure of users for the week (or an average weekly use figure if you counted users over a two-week period) and report that number for each participating branch, if applicable. If you collect the user data over a two-week period, for example during the first week 70 users were counted, 80 users were counted the second week, the average number of users would be 75 (obtained and reported by adding week one’s users to week two's [70 + 80 = 150] and dividing by the number of weeks surveyed [150 / 2 = 75]).

**Virtual Reference Transactions**

Virtual reference transactions conducted via e-mail, website, or other network-based medium designed to support virtual reference. (ARL E-metrics; Bertot, McClure, Ryan). Combined definition to create a new one. Note: Includes questions either received or responded to electronically.

General note from the National Center for Education Statistics regarding E-metrics: Due to significant reporting problems in Fiscal Year 2002, data will not be collected in the FY2003 State Library Agency Survey (StLA), and that these items are currently under review by the StLA Survey Steering Committee.
Appendix B:
Measuring the Use of Electronic Library Services

General

Libraries today provide electronic as well as traditional services. With new forms of information resources developing and new possibilities for document delivery, the use of electronic library services is growing rapidly.

Ways of providing and delivering information have changed fundamentally and will continue to change in years to come. Nevertheless, libraries cannot wait for consolidation of this process, but must try to measure and report their activity in this field. Traditional statistics on collection building and use can only show part of a library's current performance. Therefore, this International Standard contains definitions of statistical measures for electronic as well as for traditional library services.

While most traditional statistics can be produced by the library itself, statistical data for electronic services, especially for their use, must be collected from different sources: vendors and suppliers, computing centers and library consortia will be involved. It is important at this time that libraries reach agreement about the statistical data they need to evaluate their services, and that they negotiate with vendors and suppliers of information resources and suppliers of automated library systems to provide such data.

This Standard sets out to define the:

- Various forms of electronic library services;
- Various forms of electronic information resources; and
- Various forms of use of electronic services.

Definition and collection of data for electronic information resources and electronic document delivery are treated in the main standard, because in this area it seems possible at this time to find definitions that are reliable.

Statistics for the use of electronic services are dealt with in this Annex, because, in this area, for some time statistics might be incomplete and methods of data collection are likely to change quickly because of rapid technological development.

Issues of Measuring the Electronic Collection

In contrast to conventional resources, electronic resources often have no physical form and boundaries, and this will affect the measurement of both collection and use. For example:

- Documents can consist of several files or elements (text, image, multimedia), and be embedded in web frames. Also the same document may look different when viewed through different web browsers. Furthermore the contents of electronic resources (whether individual full texts or those in databases) can undergo changes over time. Uniform Resource Identifiers (URI) are becoming more widespread and support the clear identification of documents.
• Databases can be configured to combine and sort information so that every search command may constitute a new object (document). Active Server Page (ASP) technology, for example, allows the generation of a web page out of a number of database entries upon each request. These cannot be counted as documents prior to their generation, and it is difficult to measure use.

• As abstract and indexing, full text, and other databases begin to merge into complex database products, it becomes increasingly difficult to differentiate between them. Therefore subdivision is only proposed as optional measure in Annex B. In future many differences between electronic serials and full text databases will be likely to diminish as well. A precise count of their number will therefore become difficult.

• Many resources (electronic serials, databases, or digital documents) can be accessed free on the Internet, and libraries may catalogue and index some of these. This is dealt with in the main standard (see ISO 2789, 6.2.14).

Issues of Measuring Use

Communication on the Internet can be described as stateless and transaction-based. Each web server will record some significant parameters of these transactions. Dependent on individual settings, the statistical information will be gathered in one or more "log files." In their standard setting, called Common Log file Format (CLF), seven basic parameters are recorded. Among these are: the requesting IP address (unique Internet Protocol number attached to each Internet computer), authentication information, a time stamp, the transfer success status and the transfer volume. The CLF can be extended by two more parameters (i.e., the referring link and the computer's browser), and operating system. Log files therefore only collect statistical data on transactions between Internet computers; time-based data (e.g., search time, time of document or resource exposure) can only be assessed if web log mining tools are being operated to analyze site or server traffic.

In order not to affect the usability of electronic collections libraries rarely implement personal authentication. Use by members of the population to be served, however, can only be determined if some identification information is being recorded. For the purpose of measurement, a request is therefore regarded as being originated by a member of the population to be served if the IP address belongs to the library or institution/legal service area. The access to paid-for electronic library services (e.g., acquired or licensed databases, serials etc.) is usually authenticated for lists or blocks of IP addresses. It must therefore be presumed that members of the population to be served will have originated all successful requests. Requests of free services (e.g., OPAC and library website), however, are impossible to validate in total. While access from inside the institution (identified by IP addresses) is assumed to originate from members of the population, remote use (e.g., from computers at home) will generally be anonymous. Furthermore, individual IP addresses using the same proxy server will not be recognizable, as only the IP address of the proxy will be recorded in the log file.

At the time of this writing a wide range of software tools are available to extract and analyze descriptive statistical information from log files, and a number of online statistics suppliers offer professional guidance in collecting and presenting log data. It must, however, be recognized that the quality and precision of statistics for web-based electronic collections will vary in a number of areas:

• Many paid for electronic collections must be accessed on remote (supplier) servers. Although an increasing number of suppliers nowadays present use statistics of
electronic resources in accordance with a variety of guidelines (including ICOLC and others), libraries are dependent on suppliers for the completeness and quality of the data made available to them, and results are difficult to compare.

- Most Internet providers use proxy servers, and users can activate local cache files in their browsers to store copies of documents that have previously been accessed. In a proxy server environment repeat requests for a document are supported within caches/proxies instead of through the document server, thereby shortening the time of transmission. As these requests will not reach the document server, no statistical entry will be recorded in the log file, and the number of requests counted will underestimate the amount of real use. Individual browser cache settings can add more complication, however, because some professional web analysis tools (many of them developed to measure web advertising) can induce computers to ignore the stored copy and instead newly request the document.

- Not all requests of a page can be regarded as use: search engines will usually request websites for indexing purposes, and library website administrators will access their pages as most of them are subject to frequent maintenance. The number of requests counted will therefore overestimate the amount of real use. These entries can be removed if the requesting IP address is being recorded in the file. If no automatic filtering is available, the total count must be diminished manually by these page requests.

**Use of Electronic Services**

In the last few years, various libraries and institutions have tested datasets that could be used to assess the amount and the different ways of use of some or all electronic library services. Testing is still in progress and reports show that data derived from vendor systems, automated library systems, or library servers may differ considerably. A few measures have been developed that the participating libraries deem most useful and that may turn out to be reliable when based on the same definitions and the same methods of data collection.
Appendix C:
Measuring Public Library Networked Services:
Preparing Your Library to Collect Network Statistics

E-METRICS: Preparing Your Library to Collect Network Statistics (E-metrics)
by John Carlo Bertot
Available at: http://www.niso.org/dictionary/appendices/appendixc/appendixc.pdf
Appendix D:
References in Developing the Z39.7-2002 Revision

NISO FORUM ON PERFORMANCE MEASURES AND STATISTICS FOR LIBRARIES (http://www.niso.org/news/reports/stats-rpt.html), held February 15-16, 2001 in Washington, D.C. NISO sponsored an invitational meeting to explore directions and possible parameters of the five-year review of Z39.7. In a structured setting the Forum participants interactively examined current standards and best practices for library statistics and performance measures. Forum participants charted approaches to the issues including the data collection categories and performance measures that might be changed, added, or deleted and what organizations should participate on the standards committee tasked to revise and/or expand the NISO standard.
Appendix E:
National and International Efforts
Regarding Electronic Metrics

ICOLC
http://www.library.yale.edu/consortia/2001webstats.htm

FSU
http://www.ii.fsu.edu/emis/

NCES STLA

ARL
http://www.arl.org/stats/newmeas/index.html
http://www.libqual.org/
http://www.arl.org/stats/newmeas/emetrics/index.html

EQUINOX
http://equinox.dcu.ie/reports/pilist.html

CLIR
http://www.clir.org/pubs/reports/reports.html

ISO Information and documentation - International library statistics (ISO 2789)
http://www.iso.ch/iso/en/ISOOnline.frontpage

ISO Information and documentation - Library Performance Indicators (ISO 11620)
http://www.iso.ch/iso/en/ISOOnline.frontpage

COUNTER
http://www.projectCounter.org
Meta site for E-metrics Projects

http://web.syr.edu/~jryan/infopro/stats.html
Appendix F:
Survey Information

Following are the principal national library surveys in the U.S.

**ARL Statistics Questionnaire**
**Date:** Version: Frequency: Annual
**Sponsor:** Association of Research Libraries
**Survey Web Site:** [http://www.arl.org/stats/annualsurveys/arlstats/](http://www.arl.org/stats/annualsurveys/arlstats/)

**Academic Library Survey**
**Date:** Version: Frequency: Biennial
**Sponsor:** National Center for Education Statistics
**Survey Web Site:** [http://nces.ed.gov/surveys/libraries/academic.asp](http://nces.ed.gov/surveys/libraries/academic.asp)

**Public Libraries Survey**
**Date:** Version: Frequency: Annual
**Sponsor:** National Center for Education Statistics/National Commission on Libraries and Information Science
**Survey Web Site:** [http://nces.ed.gov/surveys/libraries/public.asp](http://nces.ed.gov/surveys/libraries/public.asp)

**Public Library Data Service Questionnaire**
**Date:** Version: Frequency: Annual
**Sponsor:** American Library Association/Public Library Association
**Survey Web Site:** [http://www.ala.org/ala/pla/plapubs/pldsstatreport/pldsstatistical.htm](http://www.ala.org/ala/pla/plapubs/pldsstatreport/pldsstatistical.htm)

**School Library Media Center Survey**
**Date:** Version: Frequency: Four-five year cycle
**Sponsor:** National Center for Education Statistics
**Survey Web Site:** [http://nces.ed.gov/surveys/libraries/school.asp](http://nces.ed.gov/surveys/libraries/school.asp)

**State Library Agency Survey**
**Date:** Version: Frequency: Annual
**Sponsor:** Institute of Museum and Library Services
**Survey Web Site:** [http://harvester.census.gov/imls/stlib.asp](http://harvester.census.gov/imls/stlib.asp)
Appendix G:
Emetrics Elements

- 4.5 Current Serials Received
  - 4.5.1 Current Subscriptions
  - 4.5.2 Current Serial Titles
- 4.10 Other Materials – Electronic
  - 4.10.1 Compact Disc Read-Only Memory (CD-ROM)
  - 4.10.2 Computer Files
  - 4.10.3 Databases
  - 4.10.4 Digital Documents
  - 4.10.5 eBooks
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  - 5.6.1 Available Workstations
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  - 6.2.14 Preservation Expenditures
- 7.3 Information Requests
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  - 7.6.2 Electronic Document Delivery
  - 7.6.3 External Document Supply
- 7.7 Use
7.7.1 Electronic Collection
7.7.3 Internet Access
7.7.4 Number of Public Access Workstation Users
7.8 User Orientation and Training
7.8.1 Attendance at User Training
7.8.2 Formal User Information Technology Training
7.8.4 Point-of-Use Information Technology Training
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Application (1.3)
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