

**Data Appendix:**  
**Notes on the U.S. Bureau of Education library surveys and classification of libraries**

Beginning with its monumental report on public libraries of 1876, the U.S. Bureau of Education intermittently issued reports based on large surveys of public and related libraries in the United States. These reports often tabulated the returns of all responding libraries above a certain threshold size (in volumes). We have coded these data from the following survey years: 1875, 1885, 1891, 1896, 1900, 1903, 1908, 1913, 1923, 1929.

The statistics reported in the published tables typically included the name and location of the library, some classification as to type of library, whether services were free or by subscription, and number of volumes in collection; in some years they included financial statistics, year of founding, and/or name of librarian. Unfortunately, reports for different years use different minimum size thresholds for publishing individual library data. The reports for 1875 and 1885 list all libraries with 300 or more volumes; the reports of 1891, 1896, 1900, and 1903 use a threshold of 1,000 volumes; 1923 and 1929 a threshold of 3,000 volumes; and 1908 and 1913 a threshold of 5,000 volumes.

**Consistent classification of libraries across survey years**

The kinds of libraries surveyed, as well as the classification schemes adopted in the survey reports, evolved over time, as indeed the institutional structure of the public library system evolved as well. The earlier surveys tended to list a grab-bag of different kinds of libraries, including what we would now consider public libraries (local libraries owned and operated by public entities for use by the general public), libraries run by local associations or fraternal organizations, academic libraries at schools or colleges, libraries associated with other kinds of institutions, such as hospitals or prisons, and specialist and professional libraries, such as law, medical, or historical libraries.

Our interest is in public libraries as community-based institutions providing access to books and other reading materials that were free and open to the public. Eventually these would largely be truly public institutions, in the sense that they were owned, operated, and financed by local governments. But especially in the early years of public library development, many free community libraries were social libraries run by non-governmental voluntary associations. Thus the diversity of libraries surveyed by the earlier library surveys is reflective of the reality of community library services.

Over time, the surveys focused increasingly on the kinds of local libraries for public use that we think of now as public libraries, usually (but not always) run by local government entities and funded at least in part by tax revenue. For our purposes, we have tried to classify libraries as consistently as possible over time, remaining cognizant of the fact that a truly consistent definition of the public library is probably impossible given the limitations of the surveys and the changing landscape of the library system itself. We base our classification scheme on both the classifications provided by the surveys themselves and an analysis of the library names.

To allow for some flexibility, we have reclassified the libraries as public or not using two alternative schemes, one defining public libraries quite narrowly, the other somewhat more broadly.

For the surveys from 1875 through 1908, our narrower classification defines public libraries as libraries meeting the following criteria:

- The library name does NOT evidently indicate that the library is associated with an organization such as a school, bar association, hospital, church, or the like (e.g., “XX Seminary”, or “YY Botanical Garden Library”).  
AND
- The survey report classifies the library as “public” or “general” (the classifications in the original surveys for public-like libraries at the time) OR the library name indicates that it is a public-type library, such as “Springfield public library,” “Springfield town library,” “Carnegie library,” or the like.

For 1875 to 1908, our broader classification defines public libraries as libraries meeting the following criteria:

- The library name does NOT evidently indicate that the library is associated with an organization such as a school, bar association, hospital, church, or the like.  
AND
- The survey report classifies the library as “public” or “general” (the classifications in the original surveys for public-like libraries at the time) OR the library name indicates that it is a public-type library, such as “Springfield public library,” “Springfield town library,” “Carnegie library,” or the like, OR the survey report classifies the library as a “social library” or a library run by a fraternal organization. Such libraries were often “public-like,” being open to the public for general use.

The surveys from 1913 through 1929 generally adopted a rather different classification scheme, based on the “level of control” of the library (such as town, city, corporation, or county). For these years our narrower classification defines public libraries as libraries meeting the following criteria:

- The library name does NOT evidently indicate that the library is associated with an organization such as a school, bar association, hospital, church, or the like (as above).  
AND
- The level of control of the library is “local government,” OR the level of control is non-governmental and the library name indicates that it is a local public-type library.

For 1913 through 1929, our broader classification defines public libraries as libraries meeting the following criteria:

- The library name does NOT evidently indicate that the library is associated with an organization such as a school, bar association, hospital, church, or the like.  
AND
- The level of control of the library is “local government,” OR the level of control is non-governmental.

For most of our analysis we use the narrower definition of a public library. Details on the coding and data cleaning can be found in the Stata do-files for each year, available upon request.

## **1875 survey**

Source: U.S. Dept. of the Interior, Bureau of Education. 1876. *Public Libraries in the United States of America: Their History, Condition, and Management. Special Report*. Washington: GPO.

Work on this study of libraries was initiated by the Commissioner of Education in 1870. The special report’s introduction motivates the study as follows (p. xi): “It was known that within the last quarter of a century the number of public libraries had greatly multiplied, and that they had assumed a position of commanding importance as an educational force, but there were no data for determining the extent of their influence.” The introduction recounts various previous efforts to gather library statistics, including studies under the auspices of the U.S. Census in 1850, 1860, and 1870, which are claimed to have been

“incomplete and untrustworthy.” This view of the Census library statistics seems to have been shared by the Census Bureau itself; the Superintendent of the 9<sup>th</sup> Census, F.A. Walker, wrote in 1870 census report that “The Statistics of Libraries have never been very creditable to the census of the United States.” (orig. source: U.S. Bur. Of the Census, 1872, A Compendium of the Ninth Census (June 1, 1870). Wash: GPO, p. 505).

The Bureau of Education’s survey of libraries began with a list of every town “the population of which was sufficient to seem to justify the belief that it possessed a public library of some sort” (p. xviii). Letters of inquiry were then sent, generally to the local postmaster, soliciting the names of any public libraries. In larger towns and in cities, the superintendent of public schools was also contacted, and in the larger cities “persons were selected to make special investigations” (xviii). Previous listings of libraries, city directories, gazetteers, offices of institutions societies, clergy, public officials, etc., were also consulted. Direct inquiries were then sent the libraries identified. “This preliminary work involved the writing of some 10,000 letters, to which the responses have generally been most prompt and gratifying” (xix). Statistics of libraries with at least 300 volumes were tabulated in chapter 37 of the special report. Subsequent reports appear to have used similar methods.

The diversity of “public libraries” included in the 1875 report is illustrated by the categories used in the report’s own classification scheme (p. 797):

- Academy and school libraries: includes seminaries, institutions for then higher education of women, business colleges, normal schools, academies, high schools; but not common or district schools (primary) save a few, nor colleges or professional schools
- College
- Society libraries: only includes libraries belonging to students’ societies in colleges
- Law
- Medical
- Theological
- Scientific: schools of science, including colleges of agriculture and mechanic arts, scientific societies
- Historical
- Public: all libraries open to public without charge or for nominal fee only
- Mercantile
- Social: includes athenaeums, young men’s associations and institutes, and subscription libraries generally
- YMCA
- Government
- State and territorial
- Garrison
- Asylum and reformatory: also includes hospitals, workhouses, reform schools, prisons
- Misc.

Our final data set includes 3647 total libraries from the report, of which 382 were classified as public using the narrower definition, and 976 using the wider definition.

### **1885 report**

U.S. Dept. of the Interior, Bureau of Education. 1886. *Report of the Commissioner of Education for the Year 1884-85*. Table XVI, pp. 691-782. Washington: GPO.

The report consists of a table of statistics of libraries with 300 or more volumes, with no accompanying text. It appears that most of the entries are reports for the year 1885, but a few are footnoted as returns for 1884.

Of 5335 total libraries included in our final data set, we classify 1182 as public (narrow) and 1850 as public (wide).

### **1891 report**

Source: U.S. Dept. of the Interior, Bureau of Education. 1893. *Statistics of Public Libraries in the United States and Canada. Bureau Of Education Circular of Information No. 7.* Washington: GPO.

The text of the report accompanying the table of library statistics provides little information about the methodology of the survey, but refers to the previous surveys and implies a similar methodology, starting with the previous survey's list of libraries and using "considerable correspondence" to identify additional libraries. Referring to an earlier report summarizing library statistics for 1886-87, the report for 1891 explains the decision to report only libraries with at least 1000 volumes as follows: "From the uncertainty of the data and the imperfect records given of the very small libraries, it was deemed best to restrict the statistics to collections of books that might be fairly called representative, and as those having less than 1,000 volumes made but a proportionally small percentage of the whole number of books the basis of 1,000 volumes or over was taken" (p. 2).

Of 3809 total libraries included in our final data set, we classify 1047 as public (narrow) and 1340 as public (wide).

### **1895-96 report**

U.S. Dept. of the Interior, Bureau of Education. 1897. *Report of the Commissioner of Education for the Year 1895-96.* Vol. 1. Ch. VIII. "Public, Society, and School Libraries" pp. 339-521. Washington: GPO.

Statistics are again based on a survey (sent April 1, 1896) of libraries. "Efforts were made to secure the names of all the libraries in the United States..." (p. 340). The list of included all libraries that reported to the Bureau in its 1891 survey, as well as "several thousand others" (p. 340). Nearly 10,000 addresses were obtained, from which about 8,000 responses were received. Non-responding libraries were sent second and if necessary third requests. The published report lists details only for the libraries that reported at least 1000 volumes: "It is safe to assume that the list of 4,026 public and school libraries published in this report includes very nearly all the libraries in the United States having 1,000 or more volumes" (p. 340). The report notes that an additional 3,167 libraries reported between 300 and 999 volumes, and "nearly 1000" reported fewer than 300.

Of 4026 total libraries included in our final data set, we classify 1333 as public (narrow) and 1529 as public (wide).

### **1900 report**

U.S. Dept. of the Interior, Bureau of Education. 1901. *Report of the Commissioner of Education for the Year 1899-1900.* Vol. 1. Ch. XVII. "Public, Society, and School Libraries," pp. 923-1165. Washington: GPO.

The text of the reports notes the following: “It is not claimed that none have been omitted, but certainly every reasonable effort was made to obtain a complete list. The Office had a trial list of over 12,000 names of libraries. To many of these libraries a second, third, and fourth request for information was sent, requiring the use of more than 20,000 blank forms.... Some libraries printed in the list for 1896 failed to make any report for 1900. In such cases letters of inquiry were addressed to the postmasters, and wherever the library was found to be still in existence its name was retained in the list and the 1896 statistics repeated.” (p. 925). Unfortunately, the table does not identify the libraries for which 1896 statistics were reported. The report also notes that among its returns were 3878 libraries with 300-999 volumes, and “several thousand” with fewer than 300.

Of 5383 total libraries included in our final data set, we classify 1742 as public (narrow) and 1953 as public (wide).

### **1903 report**

U.S. Dept. of the Interior, Bureau of Education. 1905. *Report of the Commissioner of Education for the Year 1903*. Vol. 1. Ch. XVIII. “Public, Society, and School Libraries,” pp. 759-1017. Washington: GPO.

The text of the reports notes the following: “The Office had a trial list of over 13,000 libraries, and returns were received from about 10,000 of these.... To several thousand libraries it was necessary to send a second request, and more than 1,000 reports were delayed until after the third request for information. Most of the libraries from which no information could be secured are undoubtedly very small. Several hundred important libraries which were reported to this Office in 1900, but not heard from in 1903, are retained in the list for this year” (p. 762). The table identifies libraries for which the 1900 statistics were used, and they appear to number about 10 percent of the total. The subsequent report (1909, p. 6) suggests that the 1903 compilation was rushed by the desire to distribute the latest library information at the St. Louis Exposition, which may have introduced errors in the data: “A large number of librarians failed to respond to the request for statistics, making it necessary in their case to include in the 1903 tabulation the statistics of 1900. This led to many duplications where there had been consolidations or changes of name or location.”

The report notes that among its returns were 2242 libraries with 300-999 volumes. Table 10 in the report summarizes the data for these libraries by state.

Of 6870 total libraries included in our final data set, we classify 2168 as public (narrow) and 2398 as public (wide).

### **1908 report**

U.S. Dept. of the Interior, Bureau of Education. 1909. “Statistics of Public, Society, and School Libraries Having 5,000 Volumes and Over in 1908,” *Bureau of Education Bulletin 1909*, No. 5. Washington: GPO.

The text of the report notes: “It was determined not to include in the list to be published any library from which a report for that year [1908] could not be obtained. There had been such an increase in the number of small libraries that it was deemed inadvisable to publish the names of all libraries having 1,000 volumes and over as in former years, but to limit the list to libraries having 5,000 volumes and over. It is believed that the number of public, society, and school libraries having 1,000 volumes and over is in excess of 8,000” (p. 6).

The report goes on to note that “Every effort was made to secure the names of all the libraries established since 1903 (p. 7).” In May 1908 the schedule was sent to the 15,634 libraries known to the Bureau.

Multiple requests were again sent to non-responding libraries. Completed returns were received from 2298 libraries reporting 5000 volumes or over, 3342 reporting 1000-4999, and about 2700 reporting less than 1000. “It is believed that nearly all the libraries having as many as 5,000 volumes are represented in the list published in this bulletin...” (p. 7). The report does include summary statistics by state for libraries with 1000-4999 volumes. The report also includes a copy of the questionnaire.

Of 2298 total libraries included in our final data set, we classify 1082 as public (narrow) and 1242 as public (wide).

### **1913 report**

U.S. Dept. of the Interior, Bureau of Education. 1915. “Statistics of Public, Society, and School Libraries,” *Bureau of Education Bulletin 1915*, No. 25. Washington: GPO.

The text of the report notes that schedules were sent to each library on a list of “nearly 18,000 public, society, and school libraries” (p. 7). “The returns came in slowly and many of them imperfectly made out. Before the close of 1914 six separate requests for information had been sent to delinquent librarians. The returns which could be tabulated numbered 13,686” (p. 7). As for the 1908 report, data for individual libraries with at least 5,000 volumes are published, along with summary statistics by state for libraries with 1000-4999 volumes. As noted above, beginning with the 1913 report the classification scheme used in the published statistics changed rather dramatically, with libraries now classified by the locus of control (town government, corporation, etc.). The report again includes a copy of the questionnaire.

Of 1845 total libraries included in our final data set, we classify 1172 as public (narrow) and 1390 as public (wide).

### **1923 report**

U.S. Dept. of the Interior, Bureau of Education. 1926. “Statistics of Public, Society, and School Libraries, 1923” *Bureau of Education Bulletin 1926*, No. 9. Washington: GPO.

The text notes that the schedules were sent to an address list of “about 18,000 public, society, and school libraries.” Again, multiple requests were made as needed. A total of 8544 returns were received from libraries with at least 1000 volumes, with 2569 from smaller libraries. The report notes a decrease between the 1913 and 1923 reports in the number of returns from libraries with 1000-4999 volumes. The 1923 reports suggests this may be due to some of the smaller libraries growing beyond the 5000 volume threshold, but also notes: “... a large number of the smaller libraries failed to send in returns for 1923 in time for use, and it was found not practicable to wait longer on these libraries or to make additional efforts to obtain information from them” (p. 1).

The 1923 report changes the volume threshold for inclusion down to 3000, “In order to widen the scope of the present bulletin and to give deserved recognition to the important service rendered by many of the smaller libraries...” (p. 2).

Of 5095 total libraries included in our final data set, we classify 2651 as public (narrow) and 2743 as public (wide).

## 1929 report

U.S. Dept. of the Interior, Office of Education. 1931. Statistics of Public, Society and School Libraries 1929. *Office of Education Bulletin*, 1930, No. 37. Wash: GPO.

The report begins with an overview of the increase in library use between 1923 and 1929 suggested by a comparison with the results from the previous library survey (p. 1). “Radio notwithstanding, the use of libraries increased along with the increase in the number of books. Libraries of 3,000 and more volumes have 6,000,000 more borrowers’ cards in force than in 1923...The number of books issued per capita increased 45 per cent from 1923 to 1929 (from 1.924 to 2.788 books per person in the total population)” (pp. 1-2). However, as noted above, report on the 1923 survey raised questions about the completeness of the responses, especially among smaller libraries.

Results were tabulated for libraries reporting at least 3,000 volumes. The published report for the 1929 survey does not provide information about the survey methods or response rate, but it seems likely that the methodology was similar to previous efforts, with the Office working from an augmented list from the previous survey.

Of 6472 total libraries included in our final data set, we classify 3021 as public (narrow) and 3771 as public (wide).