

ILLINOIS COOPERATIVE COLLECTION
MANAGEMENT PROGRAM

A STATEWIDE COLLECTION MAP

RESULTS FROM THE STATEWIDE ASSESSMENT OF MONOGRAPHS AND ELECTRONIC RESOURCES
IN ILLINOIS

By

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History of the Project

For 20 or more years, the Illinois Cooperative Collection Management Program (ICCMP) has worked to “enrich and strengthen the collective information resources available to the customers of the consortium libraries and to the citizens of the State of Illinois.”¹ In order to strengthen those collective information sources, there must be adequate information about the collections in Illinois academic libraries. The Illinois Citizen’s Agenda states frankly, “Illinois colleges and universities will hold students to even higher expectations for learning and will be accountable for the quality of academic programs and the assessment of learning.”²

Assessment is not new to the ICCMP. Illinois has a heritage of collection sharing, and assessment has been an important tool to accomplish that end. The ICAM (Illinois Collection Assessment Matrix) project was completed 20 years ago and surveyed the collections of the ILSCO consortium. Later in the 1990s, some 27 libraries used the OCLC AMIGOS product to some effect as an assessment tool.

The Statewide Assessment project was begun in 2000 and used an automated assessment tool called ICAS (Interactive Collection Analysis Service). ICAS uses data from either the OCLC records in an individual institution’s online catalog or the OCLC WorldCat database. ICAS provides information and reports at the levels of individual libraries, and different combinations of libraries. Our report analyzed the Illinois collection and individual library collections based on the call number ranges (quite similar to the National Shelflist Count ranges). The analysis was done by division (50 large subject areas such as Language and Literature), by category (500 call number ranges), by age, by subject (5,000 descriptors), and by 32 languages. The counts are done by title, not item, which gives a more accurate picture of the holdings in a library by eliminating multiple copies of a title in an individual library.

Studies were done by age, by uniqueness and by overlap to identify those subjects, which contain a large number of unique items and conversely by the gaps in materials present in the libraries and in the state. The project was funded by the ICCMP and by contributions from participating libraries. The final reports were delivered in the Fall of 2004,

¹ “A Plan for Collaborative Collections among Illinois Libraries,” prepared for the Illinois Libraries Cooperative Collection Management Program with the assistance of George J. Soete.

² State of Illinois Board of Higher Education, “A Citizens’ Agenda for Illinois Higher Education: The Illinois Commitment: Partnerships, Opportunities, and Excellence,” item 5, Executive Summary.

This report is the culmination of that project. It has been prepared by a group of librarians using the data from the report in the hope that it will inform consortial projects, give librarians in the state ideas of how to use the data in their libraries, and give a wide ranging picture of the statewide collection and the regional collection of Illinois. Together it provides a conceptual collection map of the state and should prove useful in many ways.

II. Methodology

The Study counts only monographs (in the MARC record fixed field M). Because many of the libraries in Illinois use the Dewey Decimal System, the study was done by Dewey and Library of Congress call numbers. Libraries which are primarily Dewey were mapped to LC and libraries which are primarily LC were mapped to Dewey. The Dewey study includes all of the libraries in Dewey format, and the LC study includes all of the libraries in LC format. The study is divided into Three Parts:

- ❖ The subject and title count by age. Each library was divided by publication date. Older materials were divided by century; after 1900, materials are counted by decade and after 1980 by year.
 - Divisions are broad and divided generally by two letter call numbers, although some subjects require more than one call number range.
 - Categories are more specific and are call number ranges.
 - Subject levels are even more specific and the call number ranges short.
 - 32 languages were analyzed.

- ❖ Numbers for the total collection. The files were pulled and the study performed in the summer of 2003. For that reason, in the age analysis, the results for the last ten years does not include 2003, as only half of the year is included. Age for the purposes of this study is publication date. There is a category called other in the age analyses. This category is used for titles whose publication date is not included in the OCLC record.

- ❖ In the online study, the designation “All libraries” is a total of all titles in the statewide collection and includes duplicates if the same title is owned by more than one library. In our analysis of the statewide collection, the report writers used the uniqueness study to create a de-duplicated, statewide library in which each title was counted only once. In order to look at percentage of subject areas to the collection, titles without a Dewey Decimal or Library of Congress call number were not included in graphs of those subjects, although they are included in the entire study and in some of the analyses in this report.

- ❖ The Uniqueness study uses the subject and age breakdowns to examine the libraries by the degree of uniqueness. Uniqueness was determined using the OCLC number, since the records came from WorldCat. One library did not use the WorldCat records, and those were matched using title, author, edition, publisher, date, material type, IBSN, and ISSN, if present.

- ❖ The Overlap study shows the flip side of the uniqueness study and examined the libraries by the degree of overlap in the collection in the subject and age breakdowns. The same matching methodology was used.
- ❖ The analysis of electronic resources comes from the IDAL statewide state-supported databases and gives some idea of the coverage and the usage of those databases as an indicator of electronic serial coverage in the state.
- ❖ The figures for region and type of library, because they are not statewide totals, could not be deduplicated, and therefore titles owned by multiple libraries are counted multiple times.

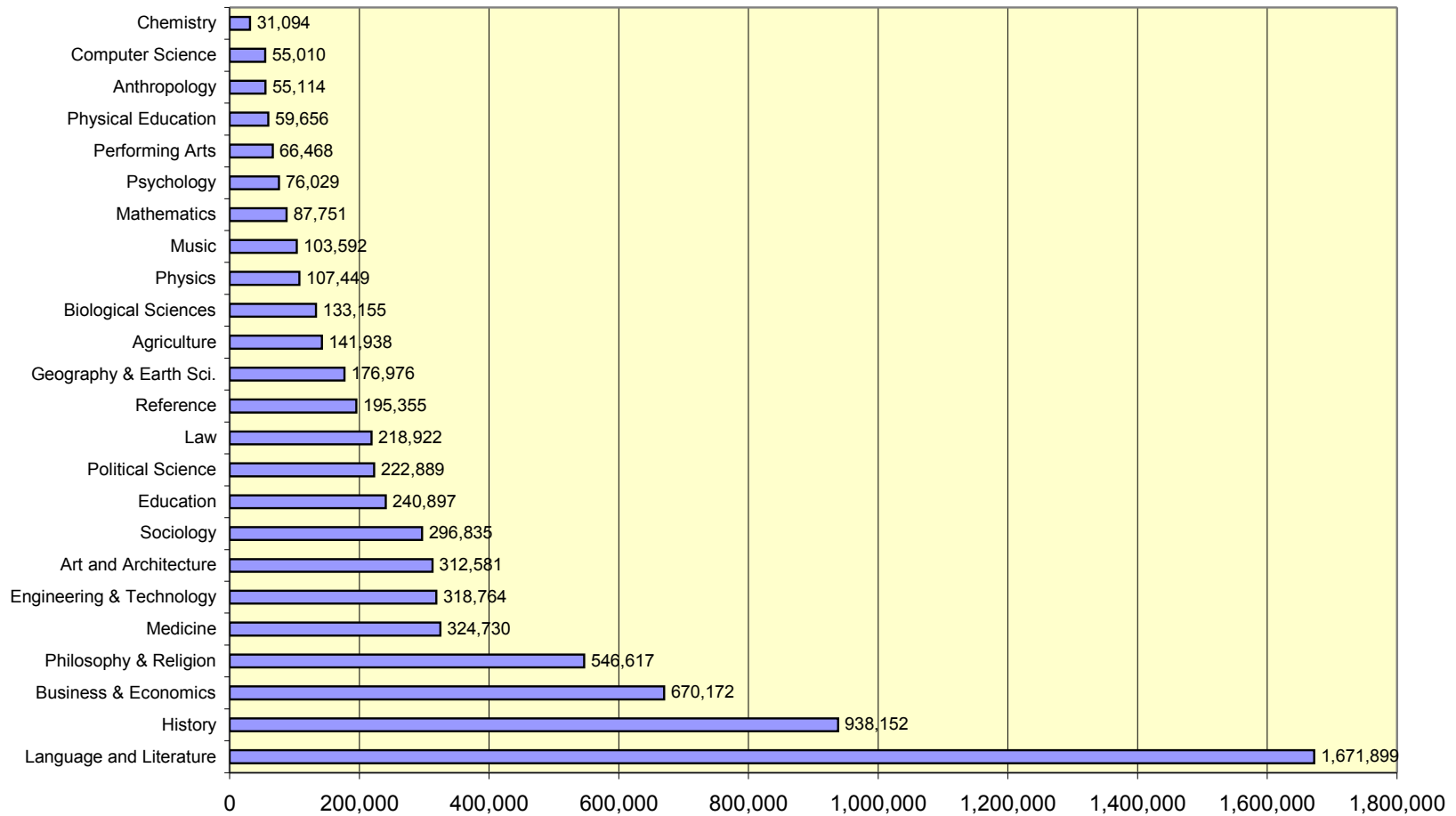
III. General Results

The statewide collection map begins with an overall look at the collection. This view of the Illinois collection sees it as a single, statewide collection, which means that each title in the state is counted only once. An overall look at that collection is presented in the next two pages. Here are some results of that study:

- ❖ It is clear that, for books in Illinois, the traditional humanities – language and literature, history, philosophy and religion – are the largest subject areas. They make up nearly 45% of the collection.
- ❖ Art and architecture, performing arts, and music, humanities subject areas as well, are not quite so large in Illinois. Explanations for the art and architecture monographs might include the expense of books in that area. Music, traditionally dependent on books, shows up low because many of the titles are scores, not cataloged as monographs. The performing arts are relatively new as a separate field.
- ❖ Business and economics are also large, with nearly 10% of the collection. One research library found that the explanation for this large number lay in the fact that HB, economic theory, a heavily monographic field, is included in this division.
- ❖ The subject areas are very healthy, with only the subject areas that are traditionally more dependent on journals than monographs showing lower numbers of books. The smallest subject division statewide still holds over 30,000 titles.
- ❖ Biological science, which is heavily dependent on journals, nevertheless shows up in the middle of the subject areas in size in the statewide collection. One explanation is the botany and ecology books which are included in this section.
- ❖ Physics, thought to be heavily journal dependent, also shows up just below biology, but astronomy and some of the general materials on physics may offer an explanation.

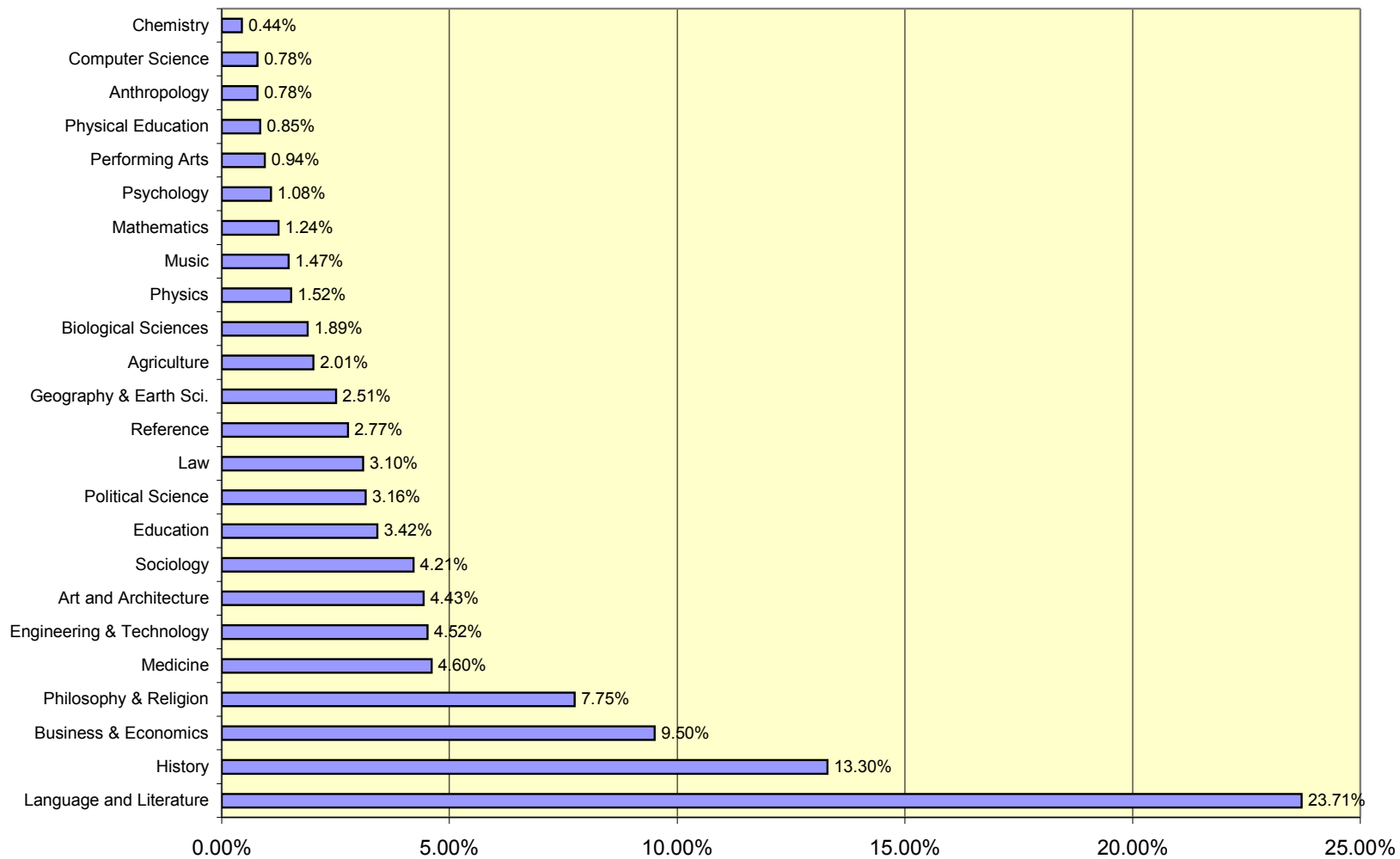
- ❖ The social sciences are also quite healthy, with the traditional social sciences – geography, political science, sociology, education and anthropology – making up a little more than 14% of the statewide collection.

**State of Illinois Collection:
Titles By Division (7,052,045)***



*Does not include items without call number

State of Illinois: Percent of Collection By Division

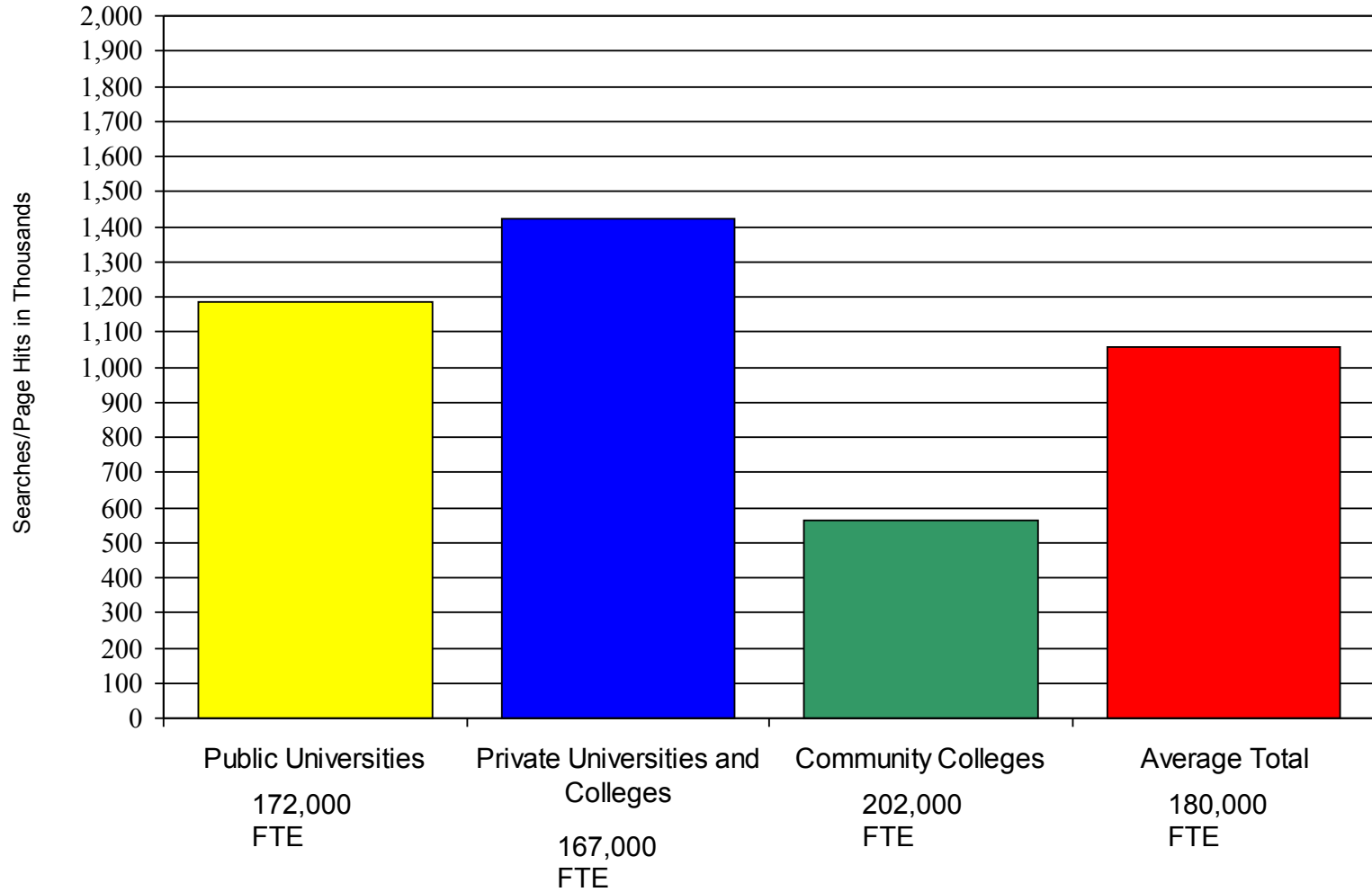


IV. Electronic Usage Data

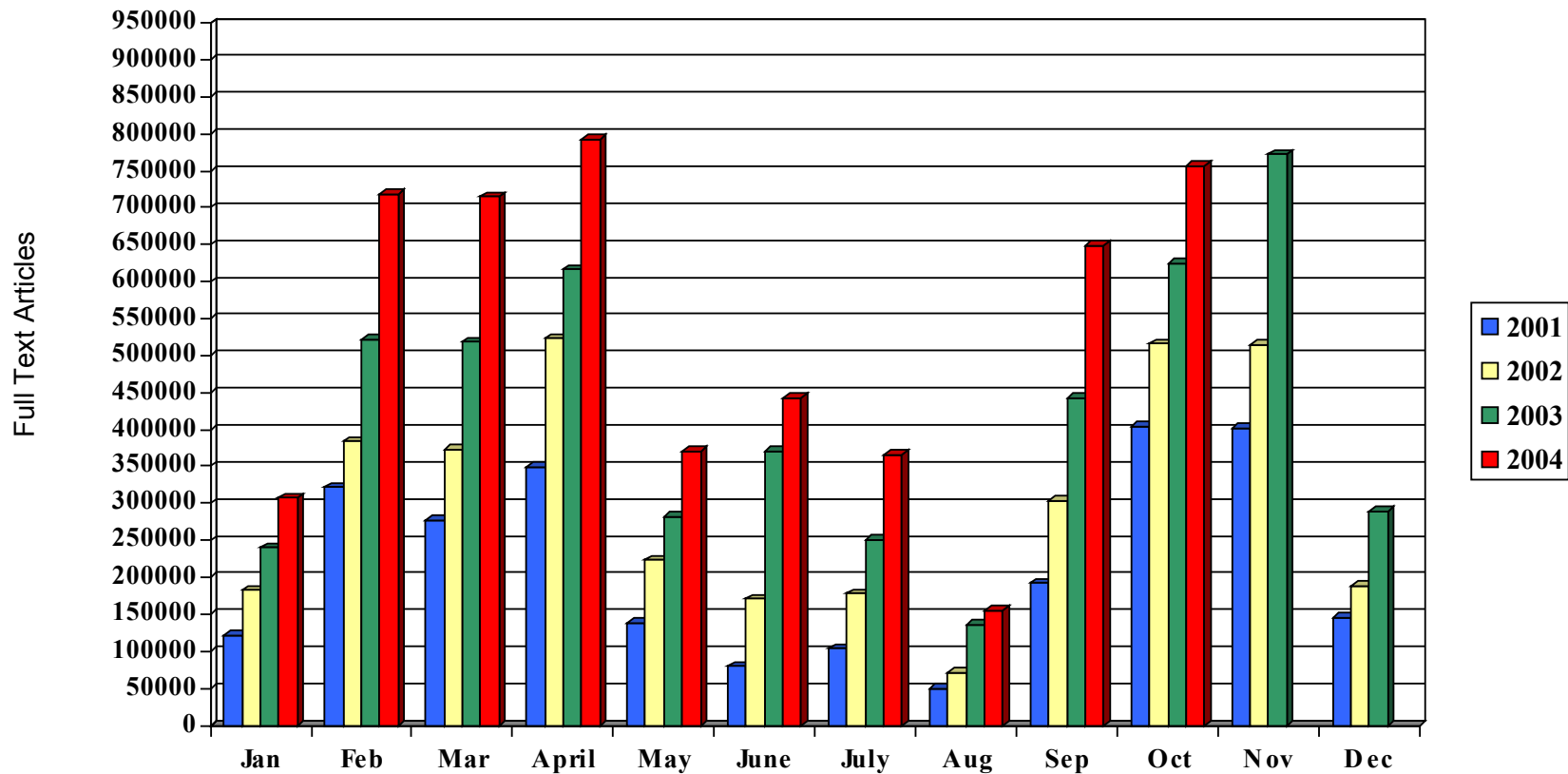
The data for the electronic resources was obtained by taking a large sampling of academic libraries. Because of the infancy of this collection format, studies and statistics are more recent and are not composed of the same historical depth as that of print collections. In addition, the focus of vendors has not been on providing usage statistics in much detail. It is only within the last year or two that we have begun to receive enough data to determine how these resources are being used.

Monthly averages were determined using the categories of Full-Text Articles, Searches/Page Hits, and Retrievals from a select sampling of publishers and vendors. The data used was not necessarily available for all years from all vendors, so in some cases the time period covered may be different. For example, in the chart showing Electronic Journal usage, complete data was not available in 2000. Thus, the time period for the chart is 2001 through 2004. Despite the fact that availability of data for electronic resource usage is in its early stages, it is clear that Illinois' use of electronic resources has grown tremendously in just a few years.

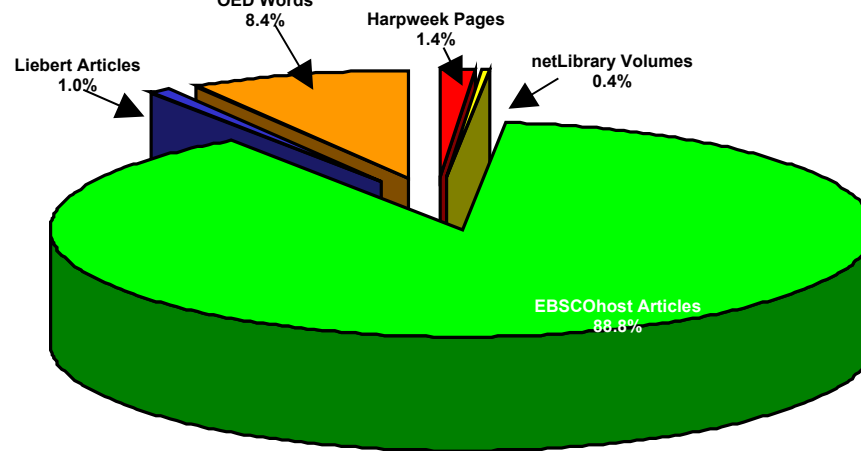
Average Searches/Page Hits per Month 2000-2004



Statewide Electronic Journals Use Full Text Articles Retrieved Multiple Vendors 2001 – 2004



Comparison of Retrievals*
Of Subsidized Electronic Resources
Multiple Vendors – 2000 - 2004



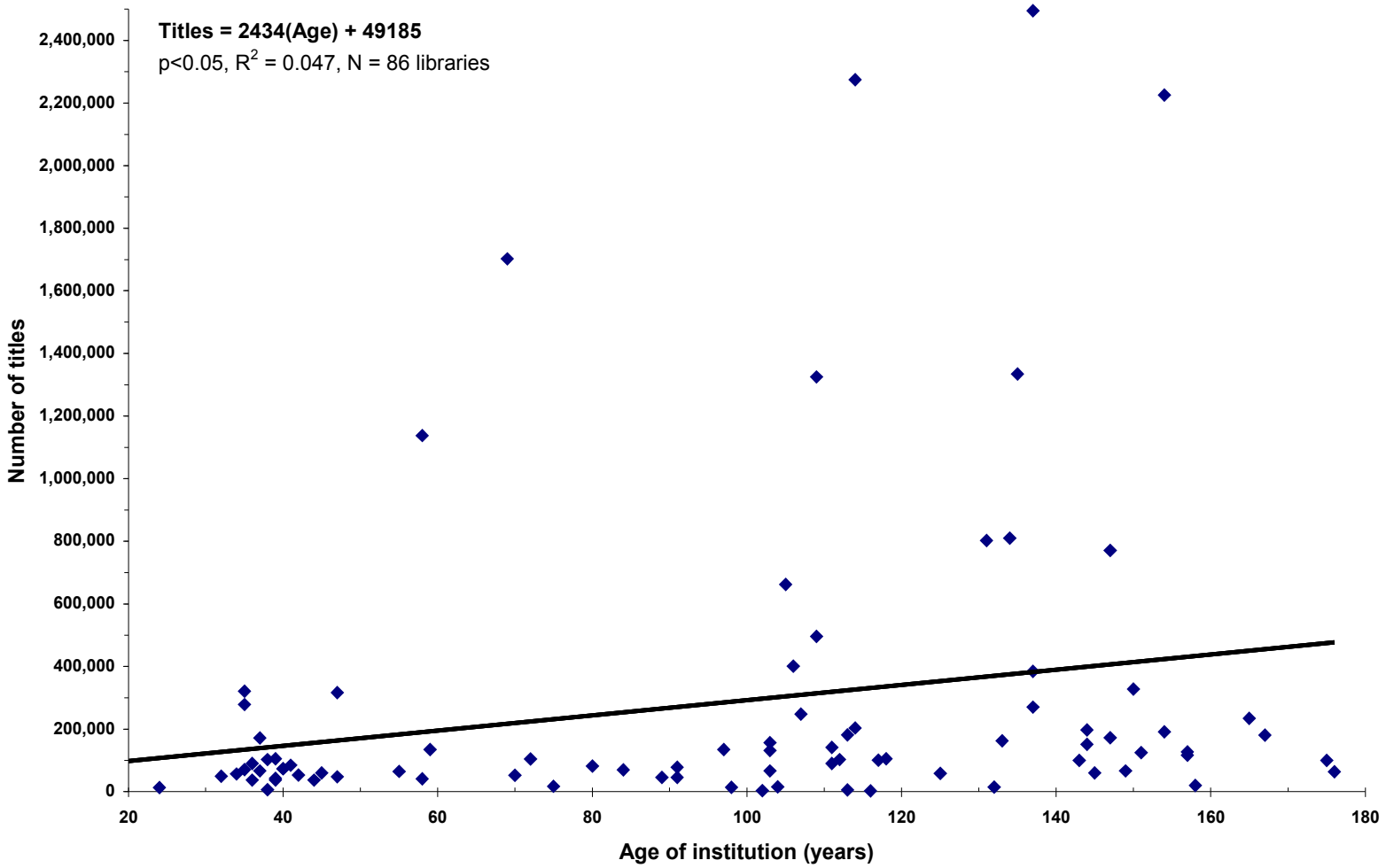
The size of individual library collections correlates with the age of the library, but only weakly so. Libraries between 100-150 years of age appear to be larger, on average, than either newer or older libraries.

The FTE of institutions appears to be correlated with the size of library collections. Higher enrollments are associated with larger collections.

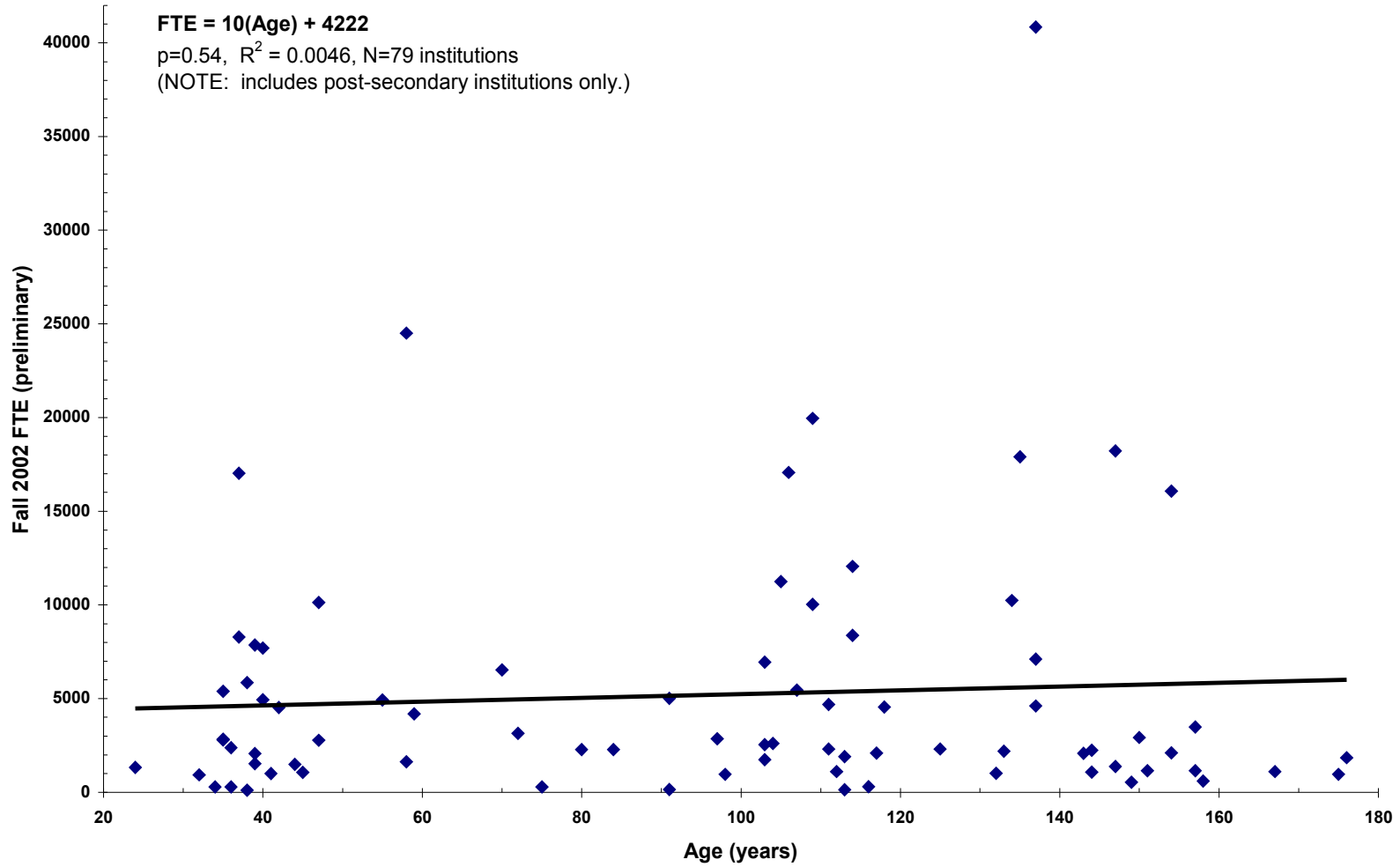
NOTE: FTE data obtained from State of Illinois Board of Higher Education. 2002. Preliminary Fall 2002 Enrollments in Illinois Higher Education. Retrieved from:
<http://www.ibhe.state.il.us/memo/112002FallEnr.pdf> on 10/26/2004.

* The number of times the object (i.e. words, articles, pages, etc.) is downloaded or viewed.

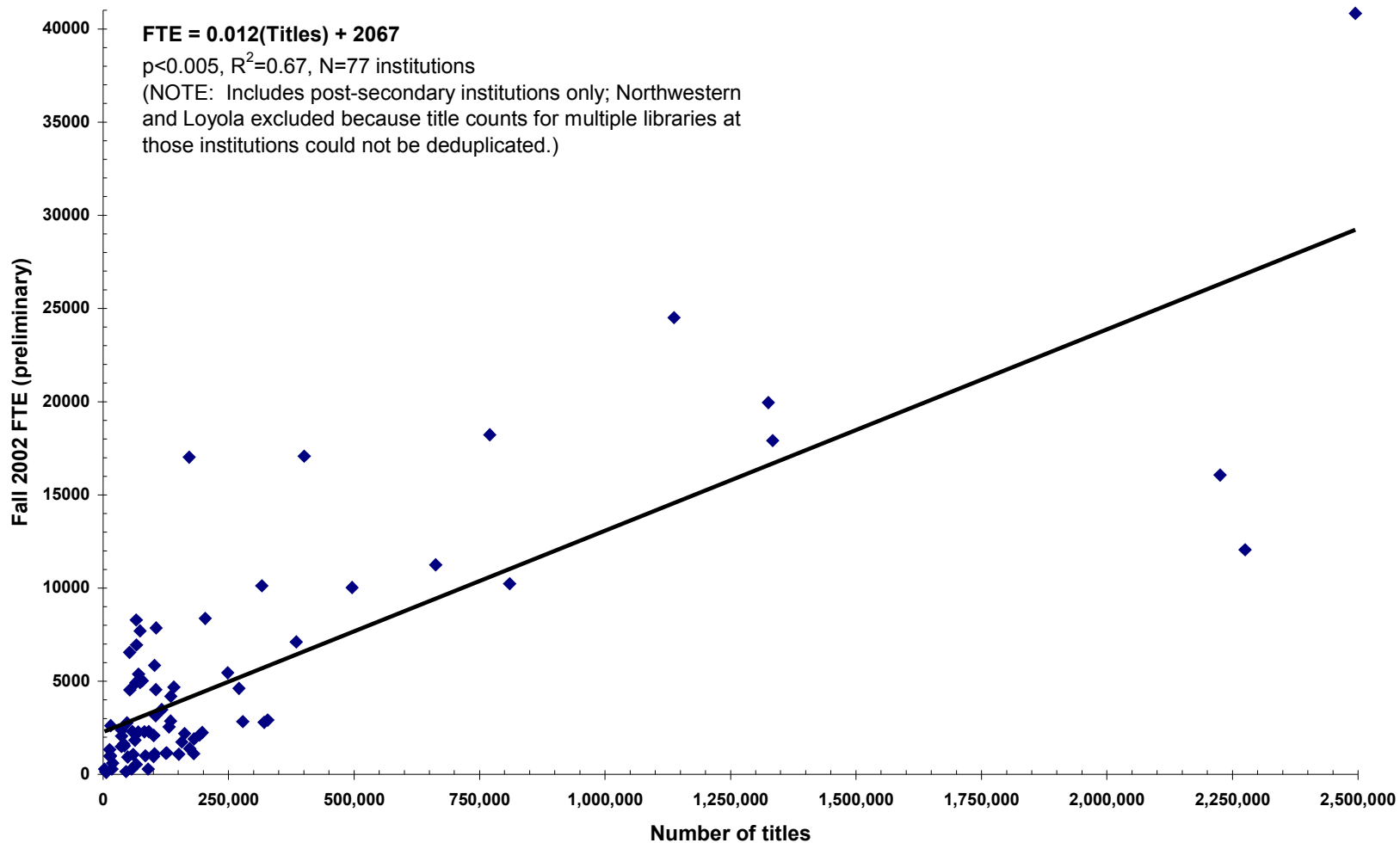
Monographic Title Count of Illinois Collections as a Function of Institution Age



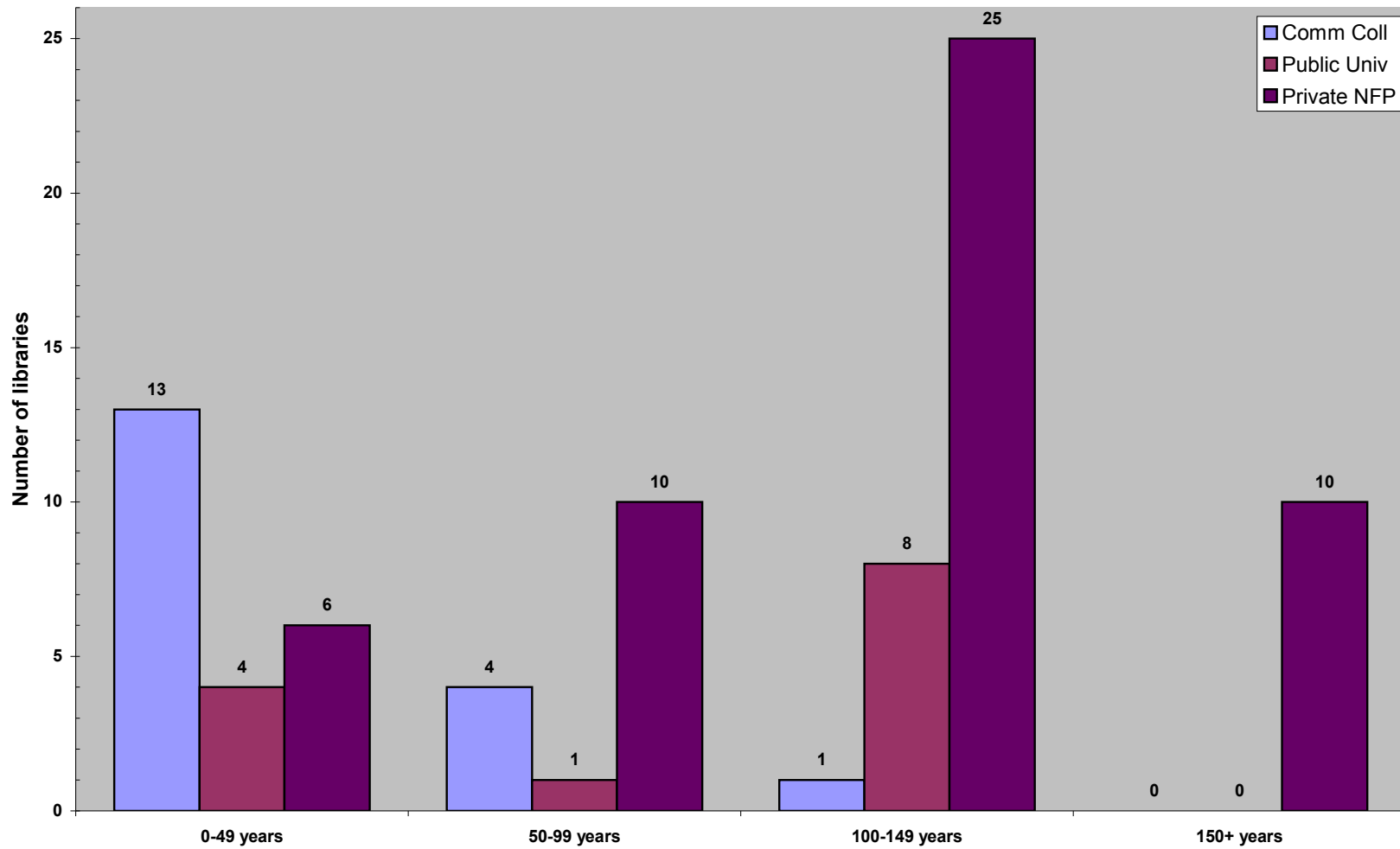
Institutional FTE as a Function of Age of Institution



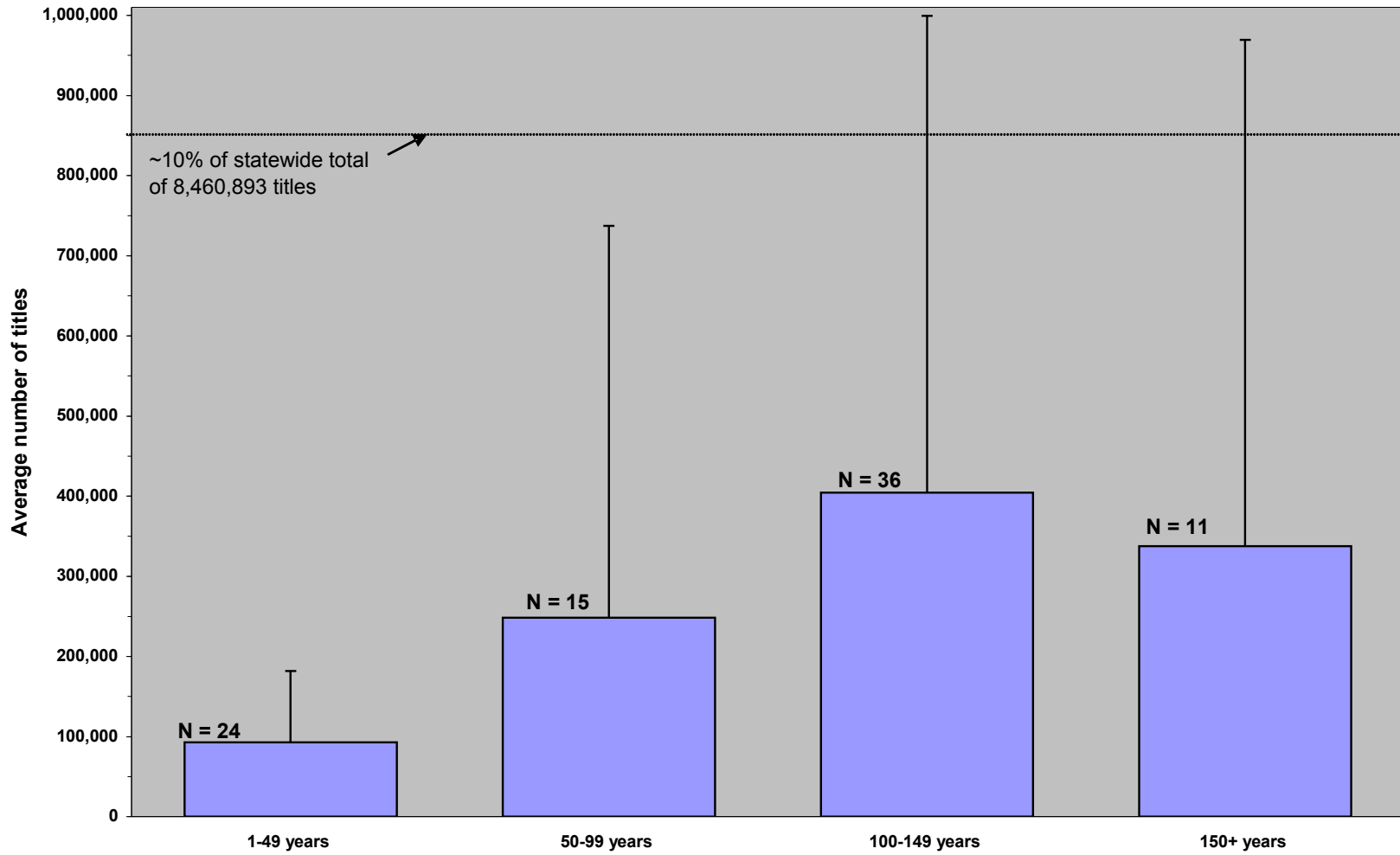
2002 Fall FTE as a Function of Monographic Title Count



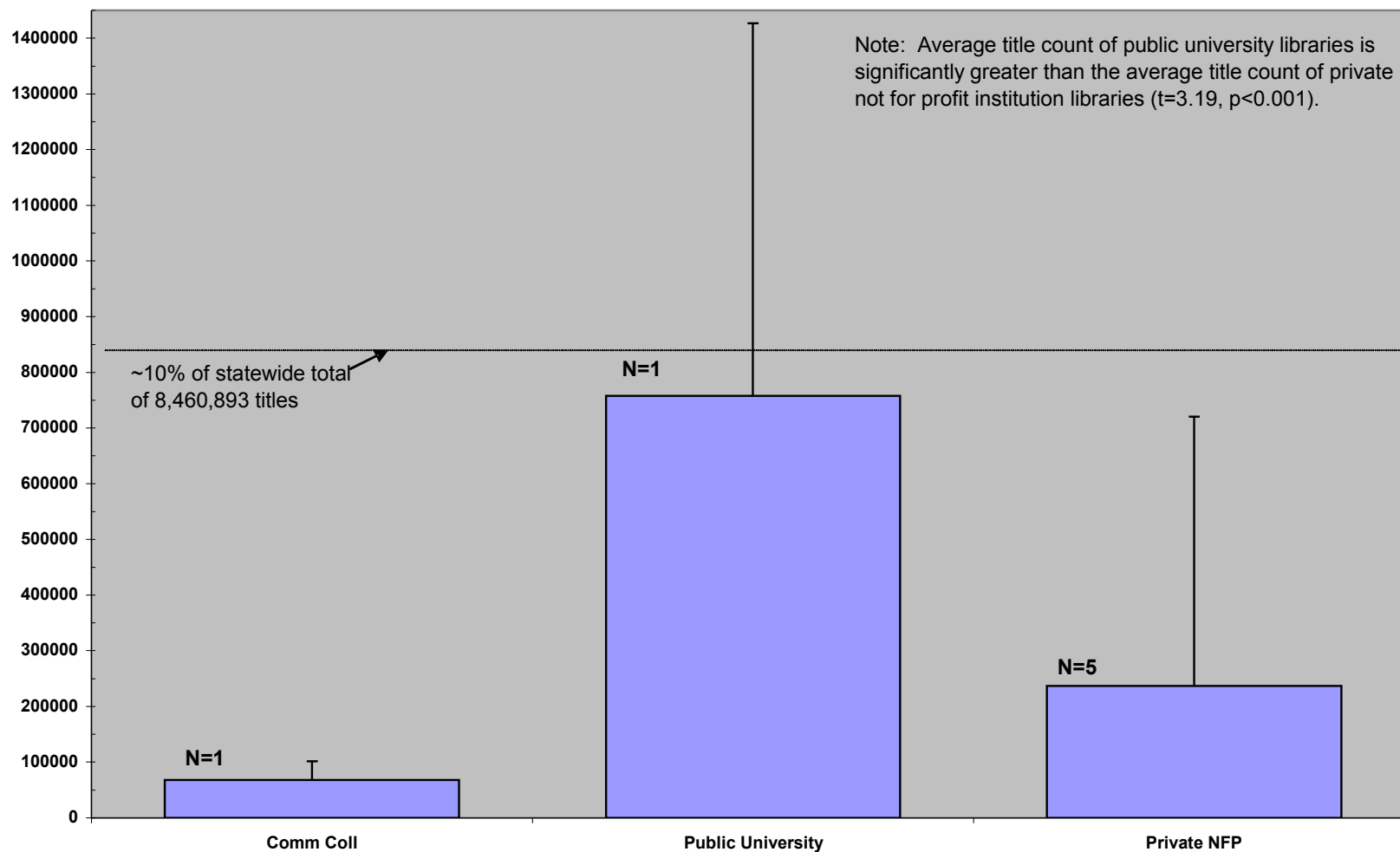
Post-Secondary Institution Libraries by Type and Age Class



Average Title Count (with Standard Deviation) for Libraries in Each Age Class



Average Title Count (with Standard Deviation) by Type of Institution



VI. Date Analysis

Viewed over time, the collection size in any division—as relative to the entire statewide monograph collection and measured by number of titles held—seems to mirror changing collection management policies for the division as well as variations by disciplines within the division. For example, the Humanities show a slight increase in relative collection size overall, while the steady growth and ultimate dominance of Language and Literature monographs reflects both high acquisitions and the importance of historic works in the discipline, which consequently are not weeded from the collection. The Sciences, on the other hand, show a significant decrease in relative collection size, probably due to the value placed on journals for their content currency and to the increasing availability of online literature in the field. Specifically, the dropping ranks of Physical Science and Chemistry probably indicate the rising prominence of the journal literature in those disciplines as well as the likelihood that outdated materials were weeded from many collections. The rising prominence of Computer Science monographs over time reflects the inception and rapid growth of the discipline.

In general, the Social Sciences maintained a stable relative collection size rank over time, but this resulted from a decline in some disciplines and significant growth in others. For example, relative size of monograph collections in Psychology decreased markedly from pre-1800 to 2002, probably due in large part to the growing importance of journal literature in the field. Meanwhile, the relative ranking of Education and Sociology showed a significant upward shift. This trend probably reflects both increased publishing in these fields as well as an increase in interdisciplinary studies and new areas of research (such as Women’s Studies, Special Education, etc.), many of which are classified as part of Education or Sociology.

In the most recent decade examined (1993-2002), monographic acquisitions in the Humanities (687,239 total unique titles) were nearly twice as great as in the Social Sciences (382,842 total unique titles) and nearly three times as great as in the Sciences (255,524 total unique titles). The importance of journal literature in both the Social Sciences and the Sciences may have resulted in decreased monograph acquisitions for two reasons: (a) once again, journals may be preferred over monographs in these fields, and (b) the high cost of journals may have limited funds available for monograph purchases, even if selectors would have liked to acquire them.

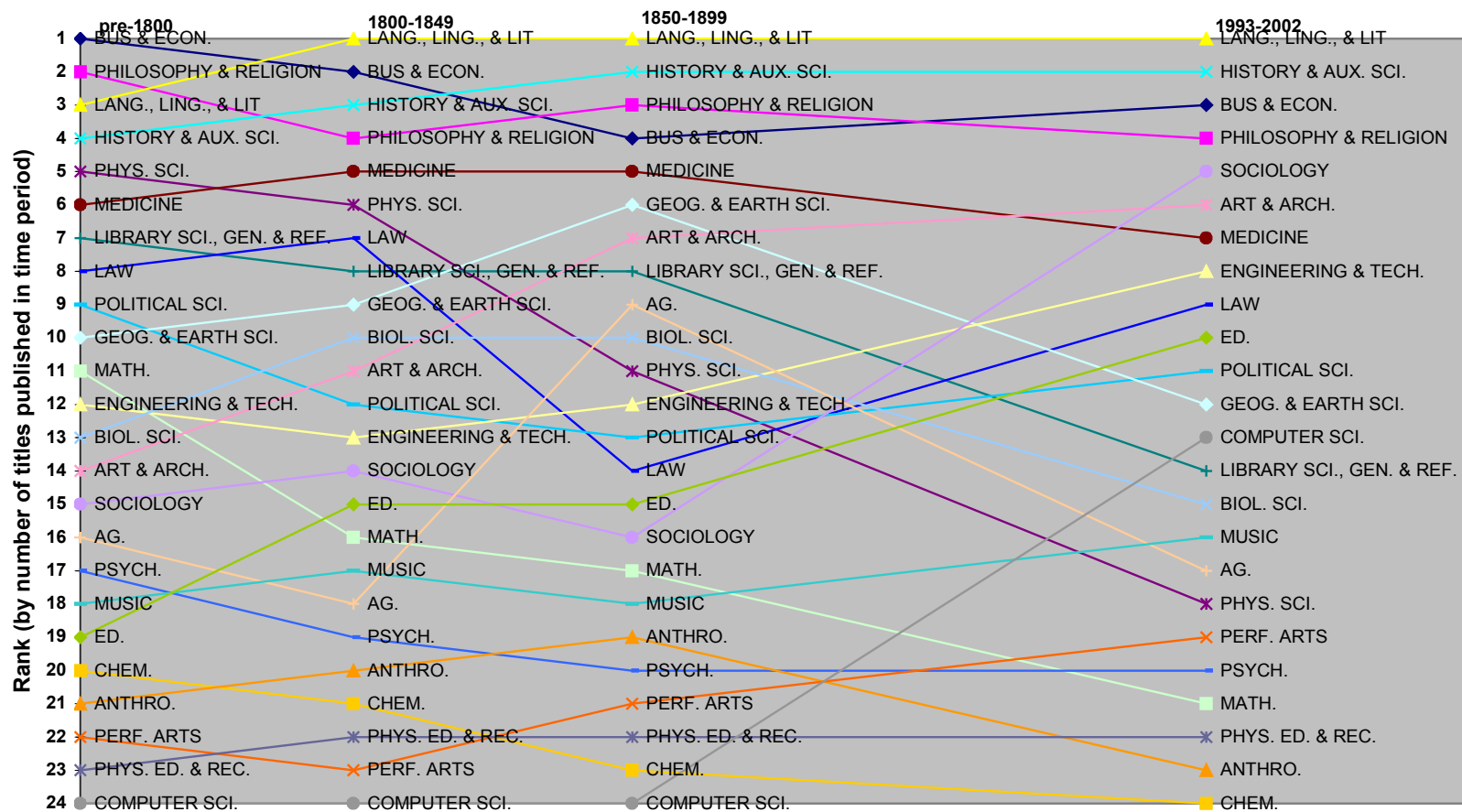
Two disciplines—Geography and Library Science/Generalities/Reference—were designated as “Other” due to their interdisciplinary nature and the inclusion of monographs such as U.S. Geological Survey literature, encyclopedias, reference books, and so forth. In terms

of relative collection size ranking, both areas showed a marked decrease, probably due again to the increased availability of online materials and the value placed upon content currency.

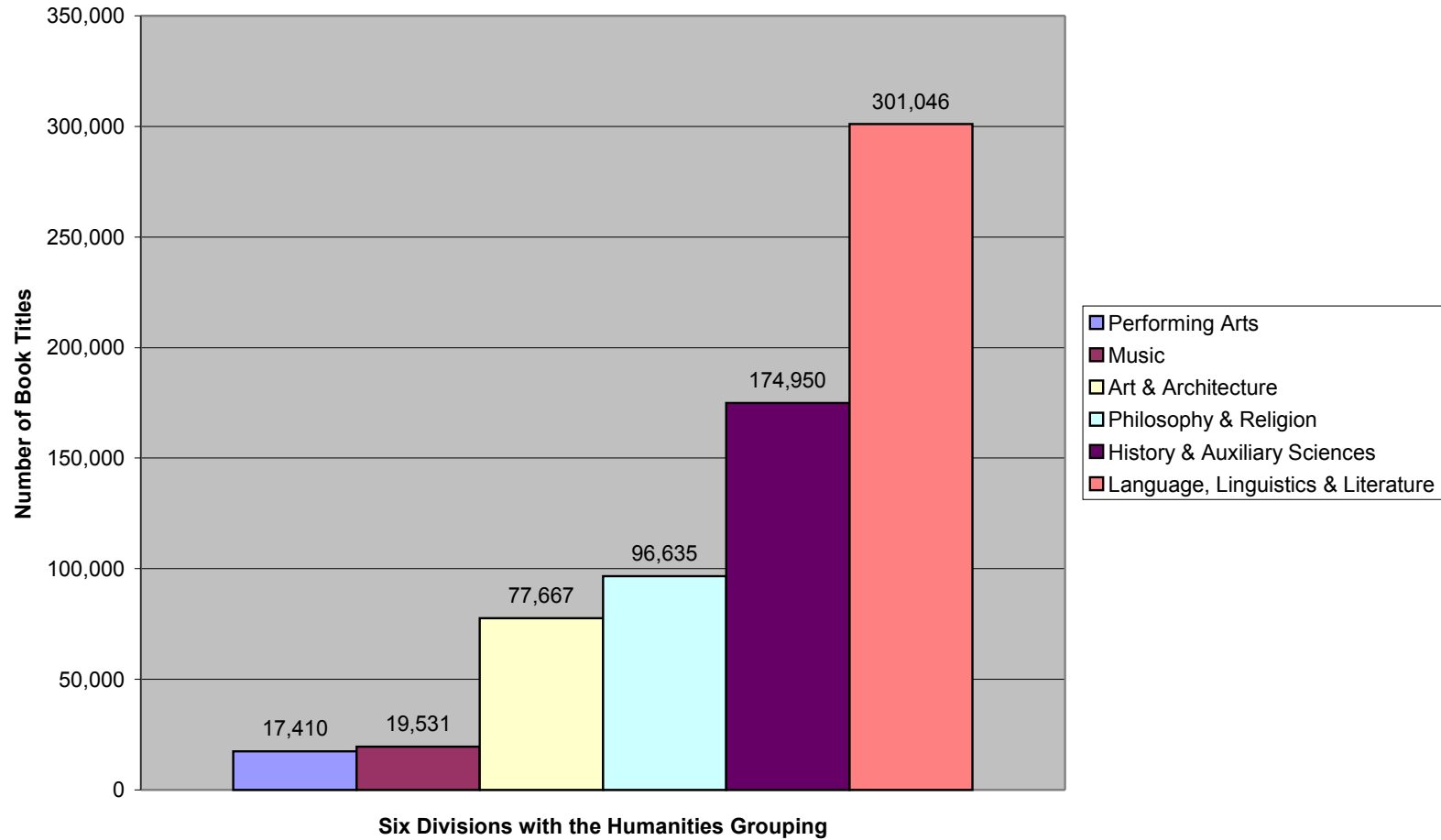
Historical works in Humanities make up a greater percentage of the statewide monograph collection than do historical works in other major subject groups. Historical works in the Sciences make up less than 0.5% of the total statewide monograph collection. The largest collection of historic (pre-1900) monographs is in the Language, Linguistics & Literature division, with History, Business, Philosophy, and Medicine rounding out the top 5 historic monograph collections. The smallest collections of historic monographs (listed in increasing size order) were in Computer Science, Chemistry, Phys Education, Performing Arts, and Anthropology.

Overall, it is clear that the Humanities dominate the monograph collections of Illinois academic libraries. Perhaps the most important reason for its much greater relative collection size is that in many disciplines within the Humanities, the library is the laboratory. Monographs provide both the objects of research and the secondary sources as well.

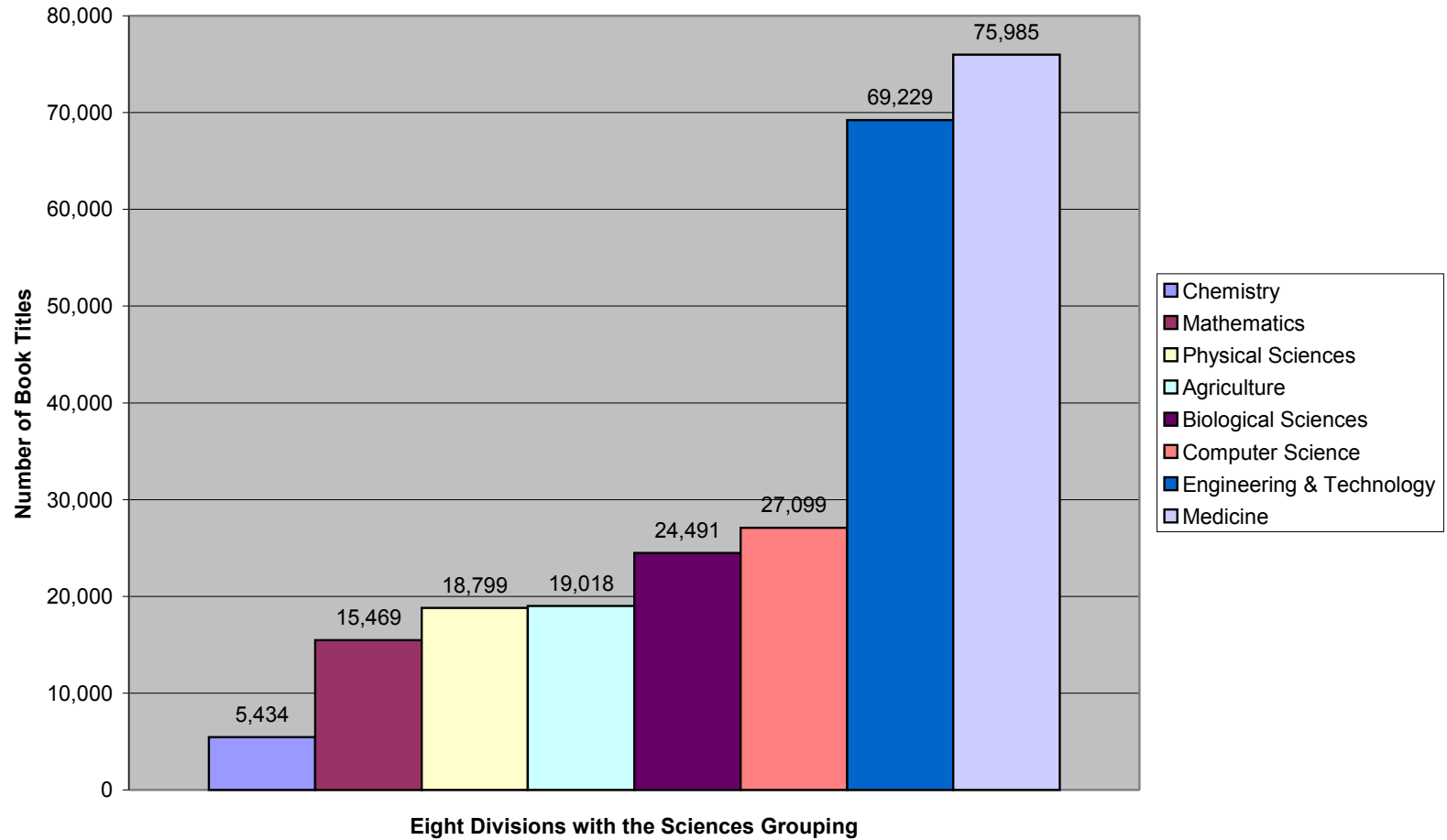
Divisions Ranked by Number of Titles in Statewide Collection for Four Publication Date Categories (1 is largest division, 24 is smallest)



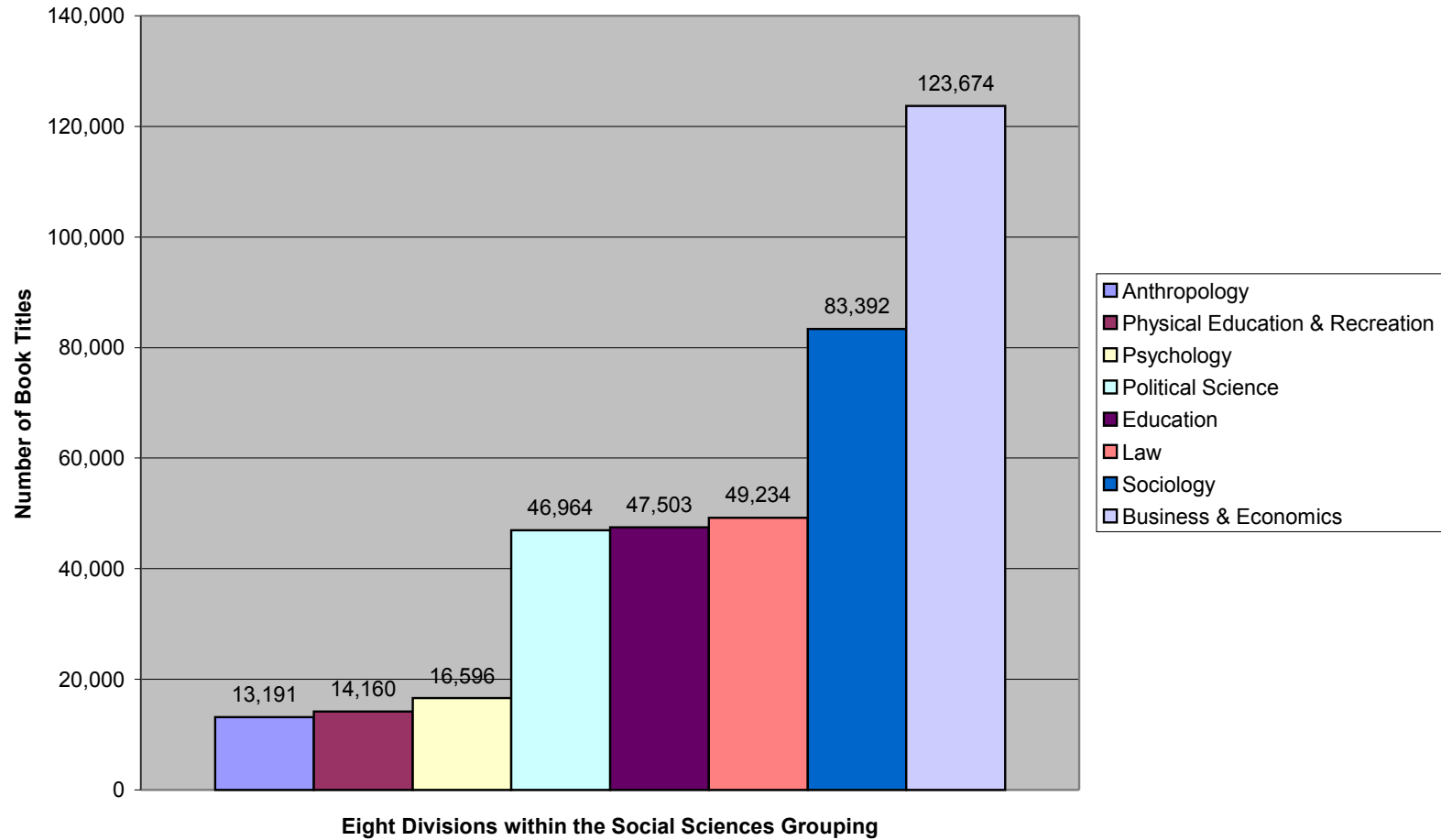
**Statewide Assessment 1993-2002: 687,239 Unique Titles within the Humanities
(Humanities = 49.44% of 1,390,101 Total Unique Titles)**



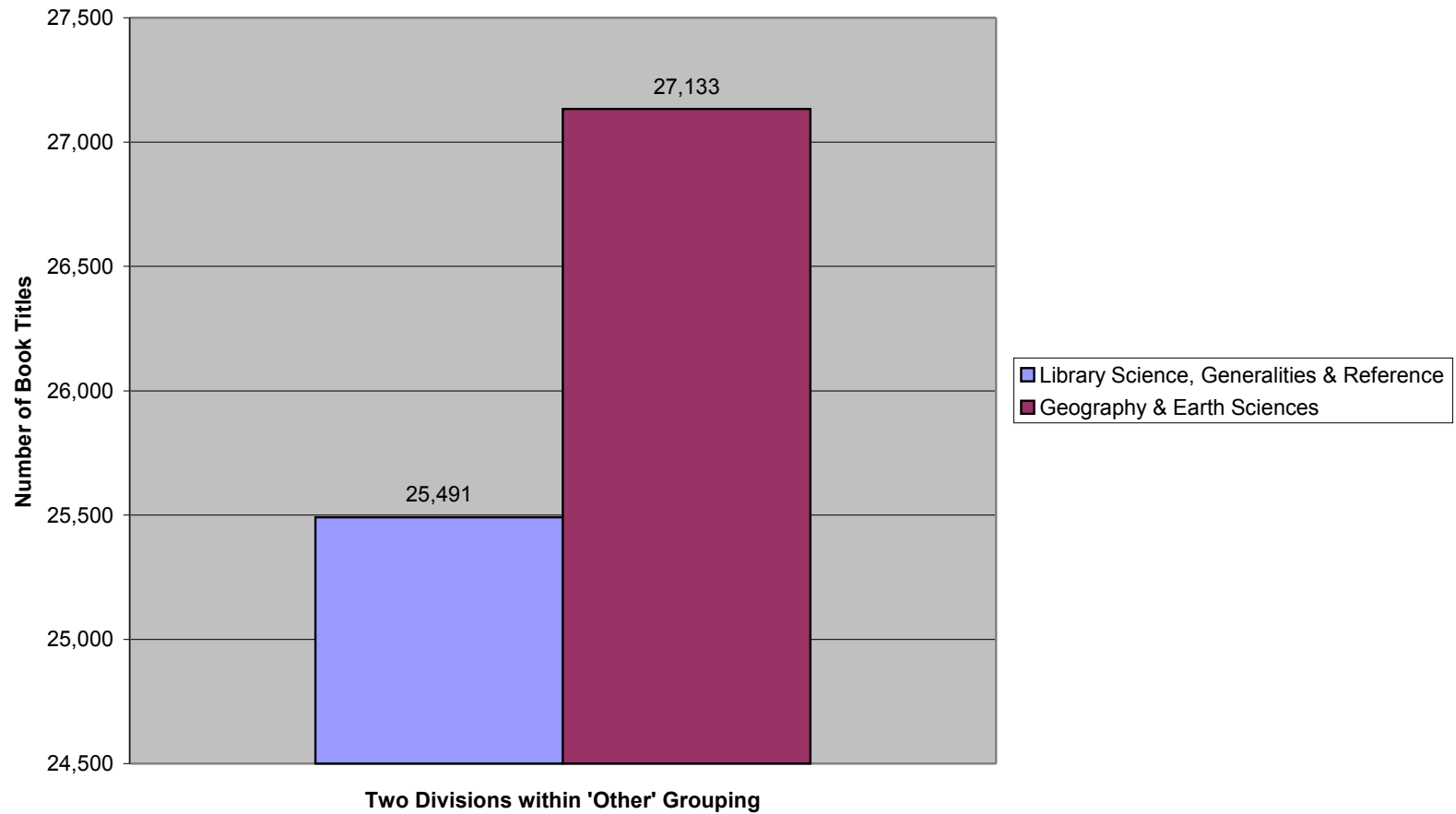
**Statewide Assessment 1993-2002: 255,524 Unique Titles within the Sciences
(Sciences = 18.38% of 1,390,101 Total Unique Titles)**



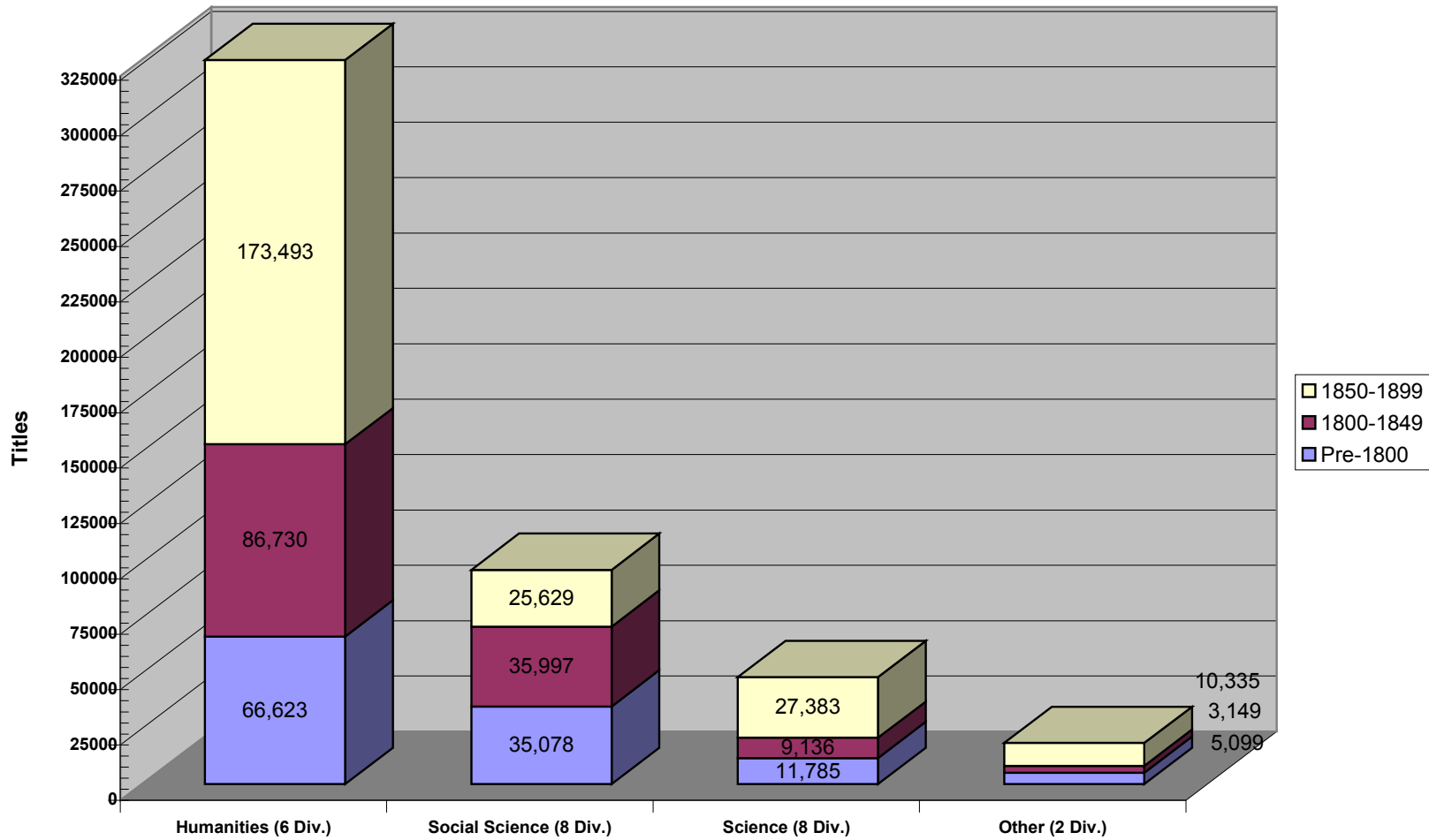
**Statewide Assessment 1993-2002: 394,714 Unique Titles within the Social Sciences
(Social Sciences = 28.39% of 1,390,101 Total Unique Titles)**



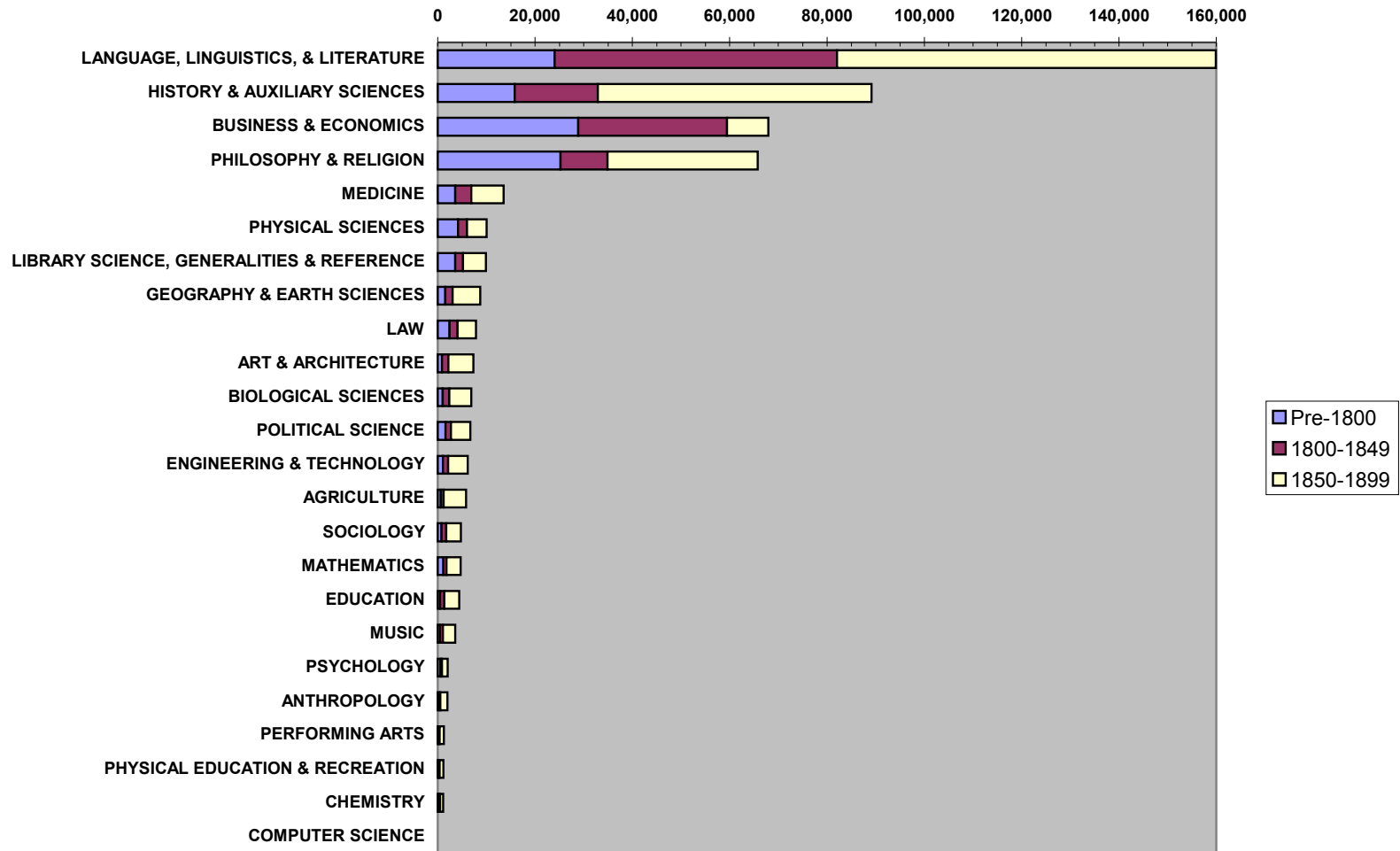
Statewide Assessment 1993-2002: 52,624 Unique Titles within the 'Other' Grouping of Divisions
('Other' Subject Area = 3.79% of 1,390,101 Total Unique Titles)



Titles by Major Subject Area and Date of Publication, pre-1900



Titles by Division and Date of Publication (pre-1900)



VII. Language Analysis

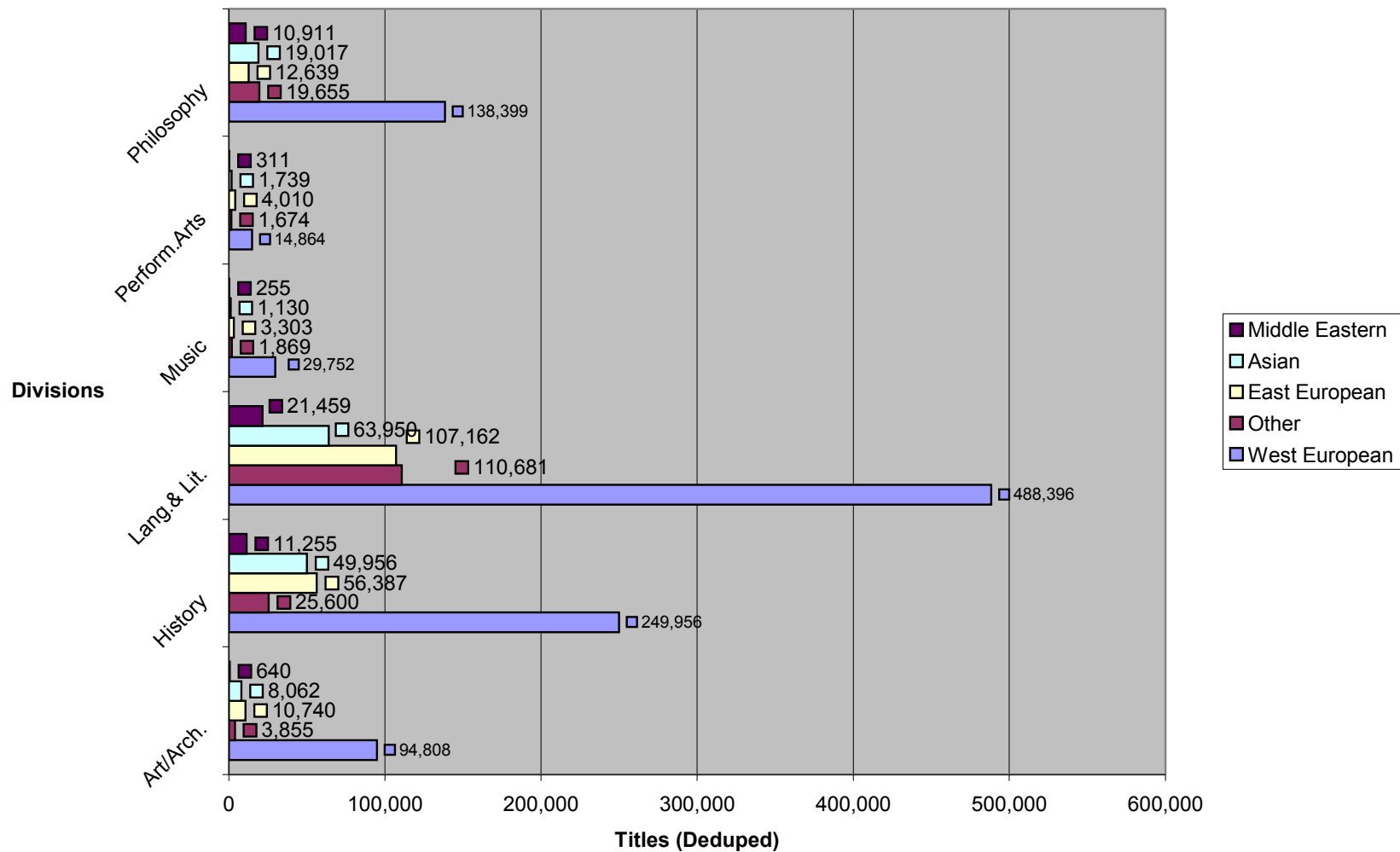
In all subject areas of the statewide collection, German and French are the most frequently represented non-English languages, with Spanish and Russian close behind. Two notable subject areas of strength are History and Business, which both include a particularly large number of monographs in many non-English languages.

Given potential users of specific collections, possible weaknesses include the very few items in Modern Greek in any subject and the very few items in Hindi in science.

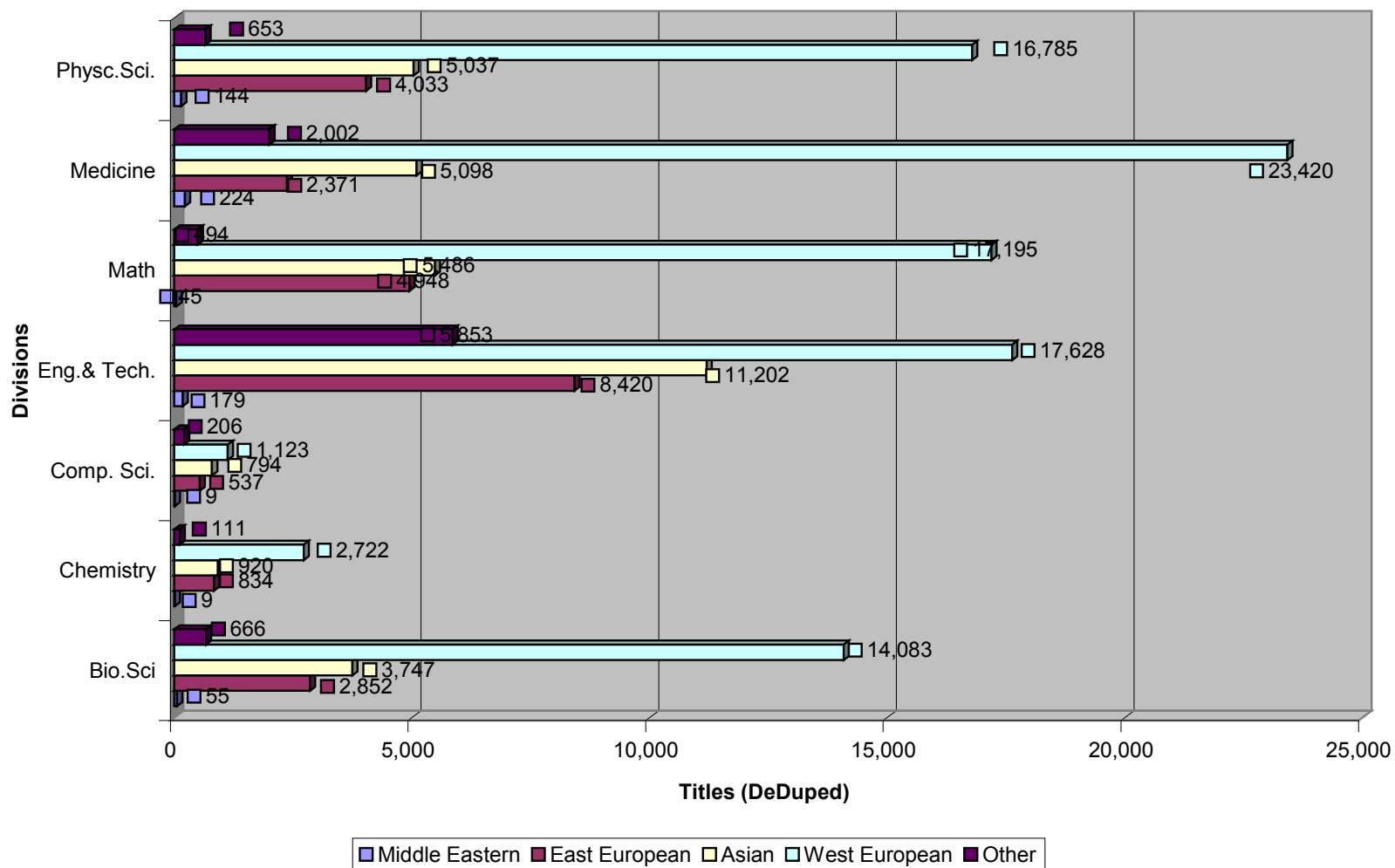
**Languages Other Than English in the State Of Illinois
(32 languages analyzed, Other is all other languages)**

Languages	Titles	Percent of Non-English Collection
German	448,995	19.9%
French	381,637	16.9%
Spanish	354,808	15.8%
Other	215,764	9.6%
Russian	199,335	8.8%
Italian	128,596	5.7%
Chinese	89,627	4.0%
Portuguese	56,449	2.5%
Japanese	43,885	1.9%
Latin	38,315	1.7%
Polish	37,542	1.7%
Arabic	32,935	1.5%
Hindi	26,980	1.2%
Indonesian	24,228	1.1%
Swedish	20,834	0.9%
Ukrainian	17,728	0.8%
Dutch	16,778	0.7%
Czech	14,703	0.7%
Korean	13,816	0.6%
Hungarian	13,494	0.6%
Hebrew	13,413	0.6%
Thai	11,959	0.5%
Danish	8,690	0.4%
Romanian	8,478	0.4%
Norwegian	8,333	0.4%
Bulgarian	7,342	0.3%
Turkish	6,498	0.3%
Persian	6,047	0.3%
Greek, Modern	5,257	0.2%

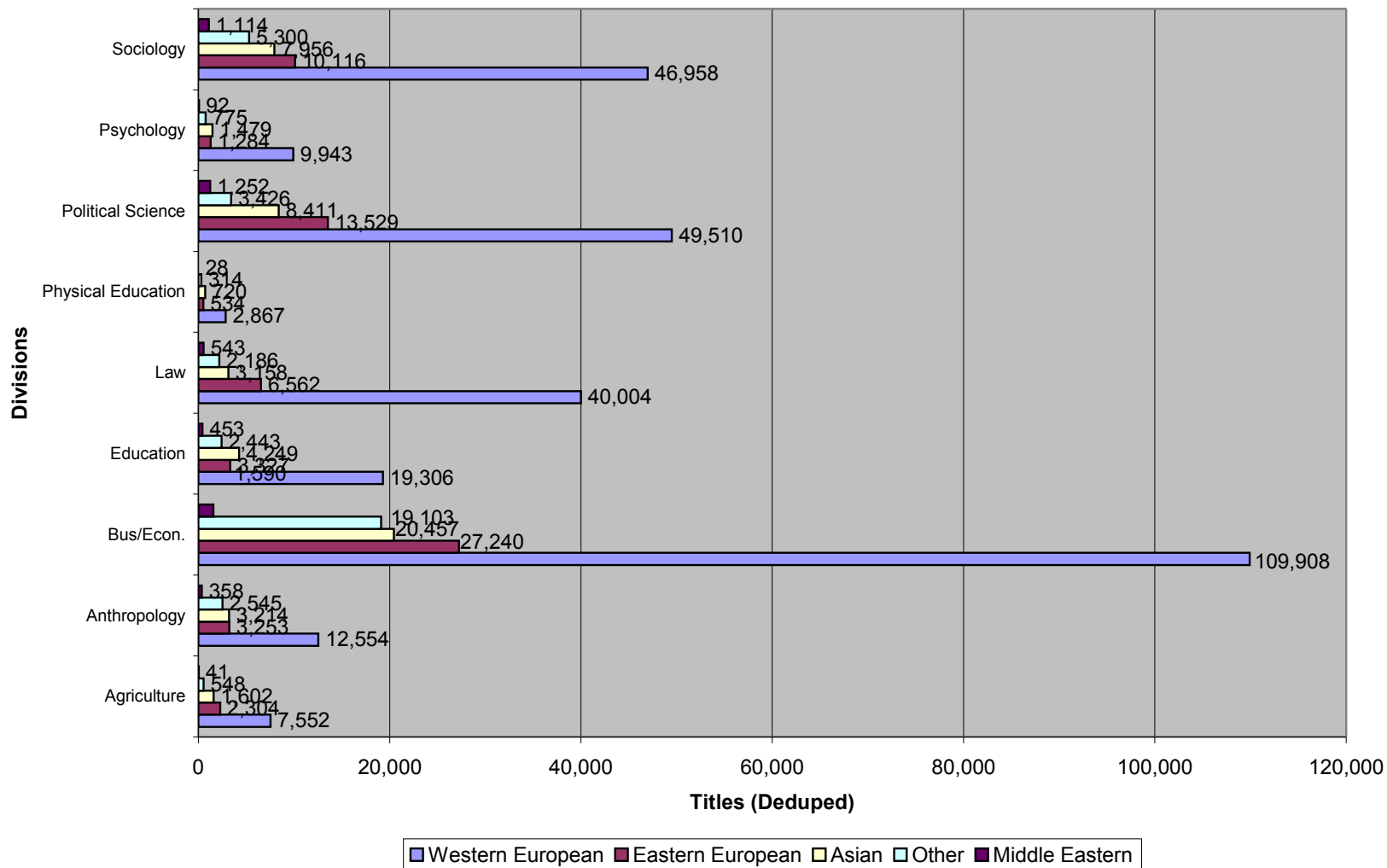
Humanities Titles By Language Family



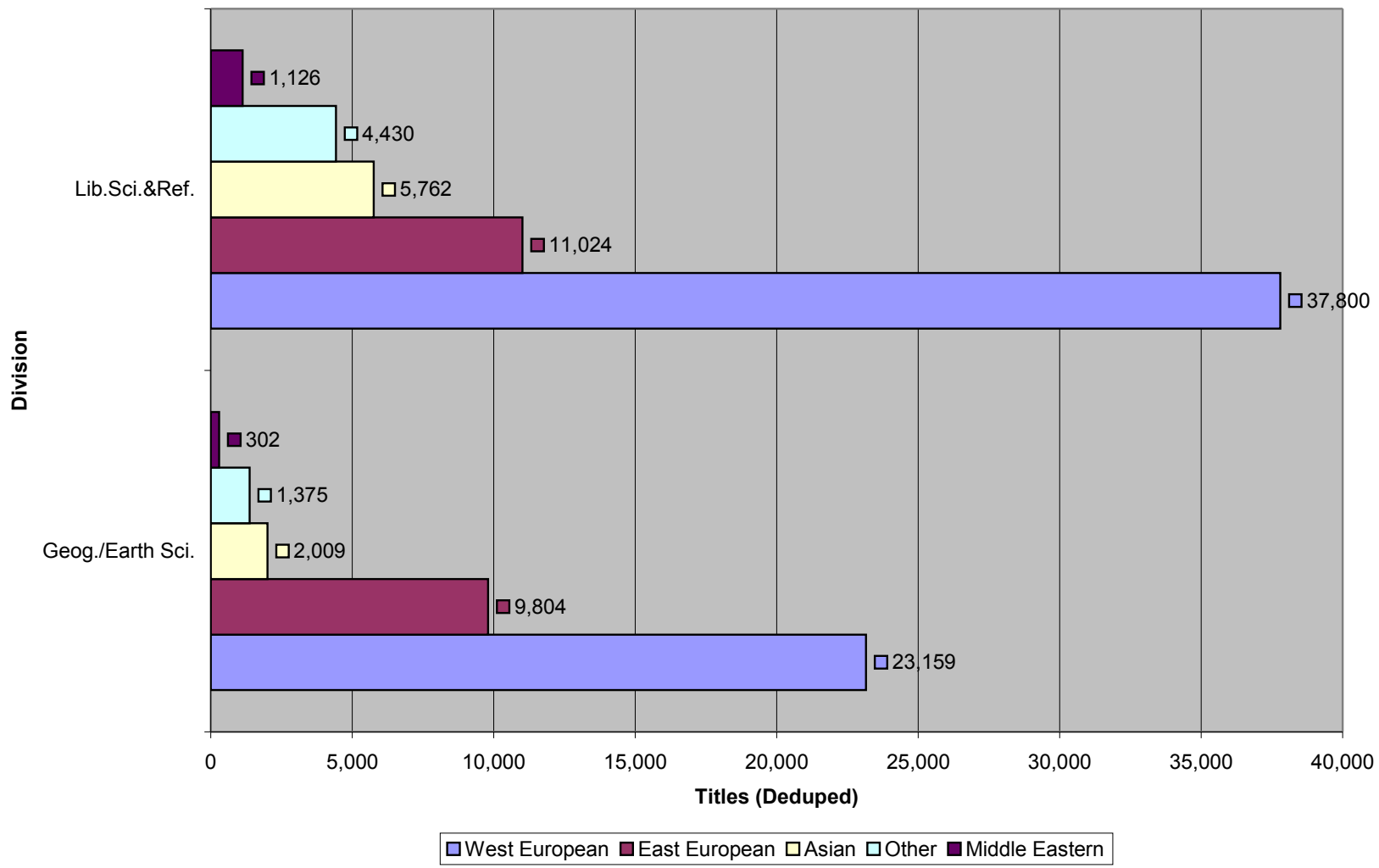
Science Divisions By Language Family



Social Sciences Language by Language Family



Other Divisions By Language Family



VII. Regional Analysis

Several subject concentrations vary somewhat by region, and reasons for these variations may be inferred. For example, collections in the Northeast region are especially strong in philosophy and religion—11.7% of the total holdings—possibly due to the large number of church-related colleges and universities in this area. Conversely, the number of Agriculture books is low in the Northeast—only .6% of the total holdings—presumably because it is an urban rather than rural area. Following this logic, Agriculture holdings rise to 1.4% of the collection in the Southern region and 2.8% of the collection in the Central region. South and Central Illinois are, of course, more rural than the Northeast.

It should be noted that the software used for the study did not allow a regional analysis by unique titles. Therefore, in the regional analysis, a given monograph is counted each time it is part of any library collection in the study.

Percentages and Ranking By Region

Division	Chicago	Northeast	Northwest	Central	South	Chicago	Northeast	Northwest	Central	South
AGRICULTURE	0.6%	0.6%	0.9%	2.8%	1.4%	4	4	3	1	2
ANTHROPOLOGY	0.8%	0.8%	0.8%	0.8%	0.8%	1	1	1	1	1
ART AND ARCHITECTURE	4.8%	4.2%	4.3%	3.7%	4.1%	1	3	2	5	4
BIOLOGICAL SCIENCES	1.9%	2.3%	2.4%	2.6%	2.5%	5	4	3	1	2
BUSINESS AND ECONOMICS	10.0%	7.4%	11.5%	9.8%	9.3%	2	5	1	3	4
CHEMISTRY	0.7%	0.6%	0.6%	0.6%	0.6%	1	2	2	2	2
COMPUTER SCIENCE	0.9%	0.8%	0.9%	0.8%	1.1%	2	3	2	3	1
EDUCATION	3.7%	5.6%	4.7%	3.8%	5.6%	4	1	2	3	1
ENGINEERING	3.0%	2.8%	3.7%	4.3%	4.9%	4	5	3	2	1
GEOGRAPHY	1.7%	1.3%	2.3%	2.7%	2.0%	4	5	2	1	3
HISTORY	13.3%	12.4%	13.0%	12.4%	12.4%	1	3	2	3	3
LANGUAGES AND LITERATURE	21.0%	19.8%	21.1%	19.5%	20.4%	2	4	1	5	3
LAW	3.0%	2.0%	2.8%	4.4%	3.6%	3	5	4	1	2
REFERENCE	2.7%	2.7%	2.7%	2.8%	3.3%	3	3	3	2	1
MATHEMATICS	1.4%	1.3%	1.4%	2.0%	1.7%	3	4	3	1	2
MEDICINE	6.4%	5.7%	4.0%	4.7%	4.7%	1	2	4	3	3
MUSIC	1.5%	1.7%	1.9%	1.6%	1.7%	4	2	1	3	2
PERFORMING ARTS	1.2%	1.2%	1.3%	1.1%	1.4%	3	3	2	4	1
PHILOSOPHY AND RELIGION	8.6%	11.7%	5.3%	4.9%	5.0%	2	1	3	4	5
PHYSICAL EDUCATION	0.4%	1.1%	1.0%	1.0%	1.1%	3	1	2	2	1
PHYSICAL SCIENCES	1.8%	1.6%	1.9%	1.9%	1.8%	2	3	1	1	2
POLITICAL SCIENCE	3.6%	3.3%	4.0%	4.1%	3.7%	4	5	2	1	3
PSYCHOLOGY	1.4%	2.1%	1.6%	1.5%	1.7%	5	1	3	4	2
SOCIOLOGY	5.6%	7.0%	5.9%	6.1%	5.6%	4	1	3	2	4

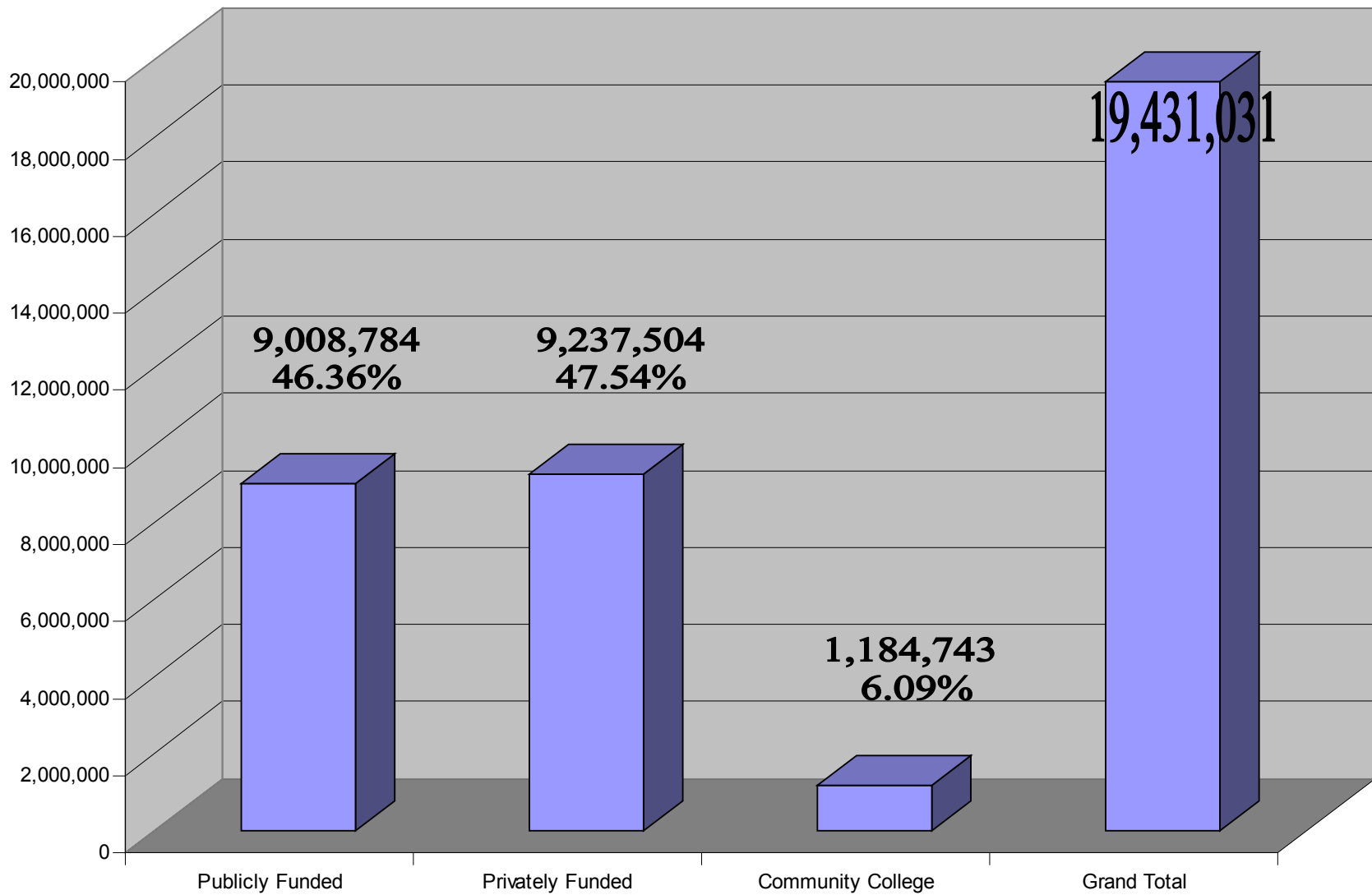
IX. Type of Library Analysis

The analysis by type of library shows the number of monographs held by each type of institution.

Number of institutions in each group is:

Publicly Funded colleges and universities:	16
Privately Funded colleges and universities:	51
Community Colleges:	18
Not included in this analysis:	Chicago Public Library Newberry Library

Again, the software used for the study did not allow an analysis by type of library using unique titles. Therefore, in the type of library analysis, a given monograph is counted each time it is part of any library collection in the study.

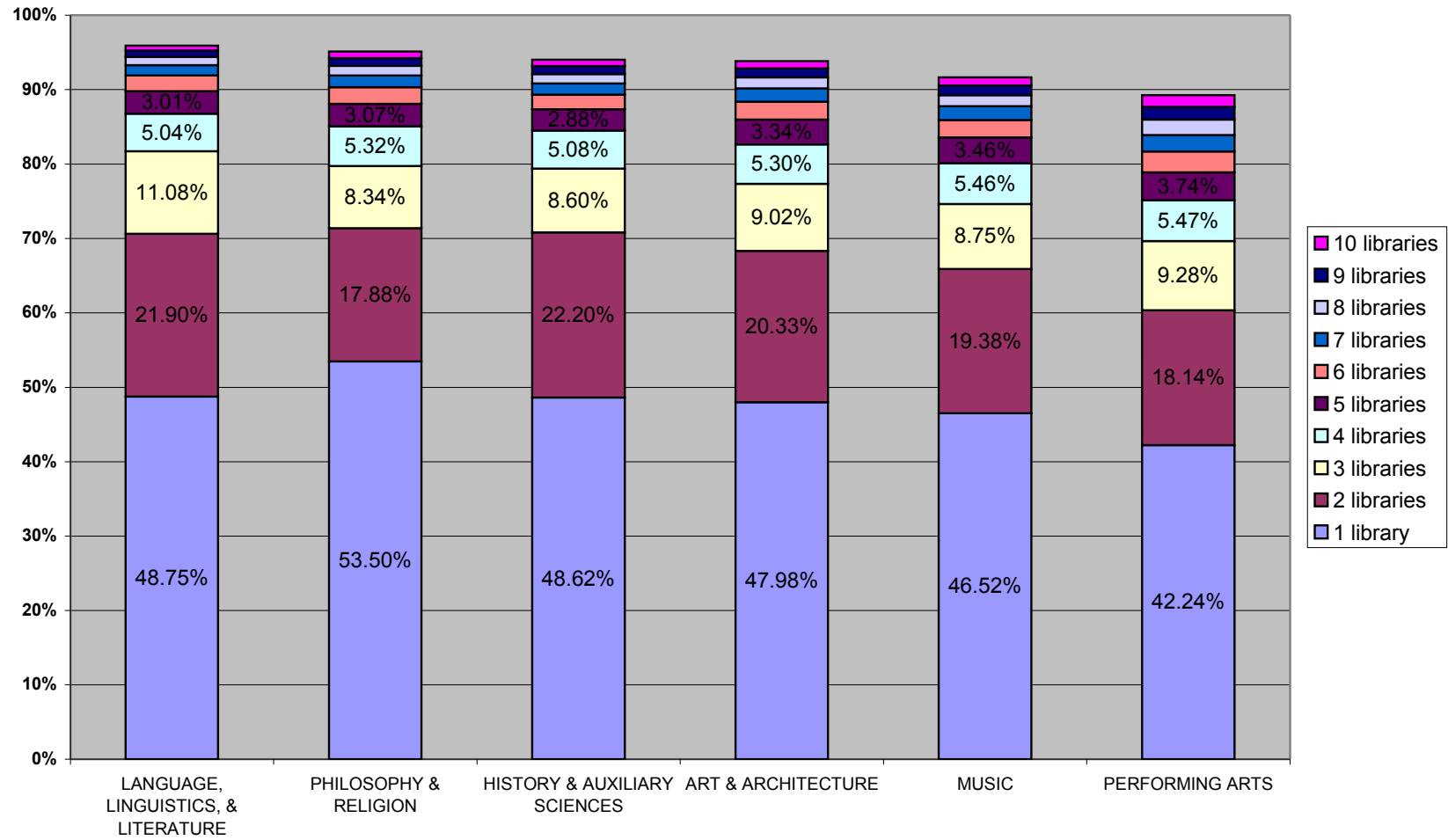


X. Uniqueness Analysis

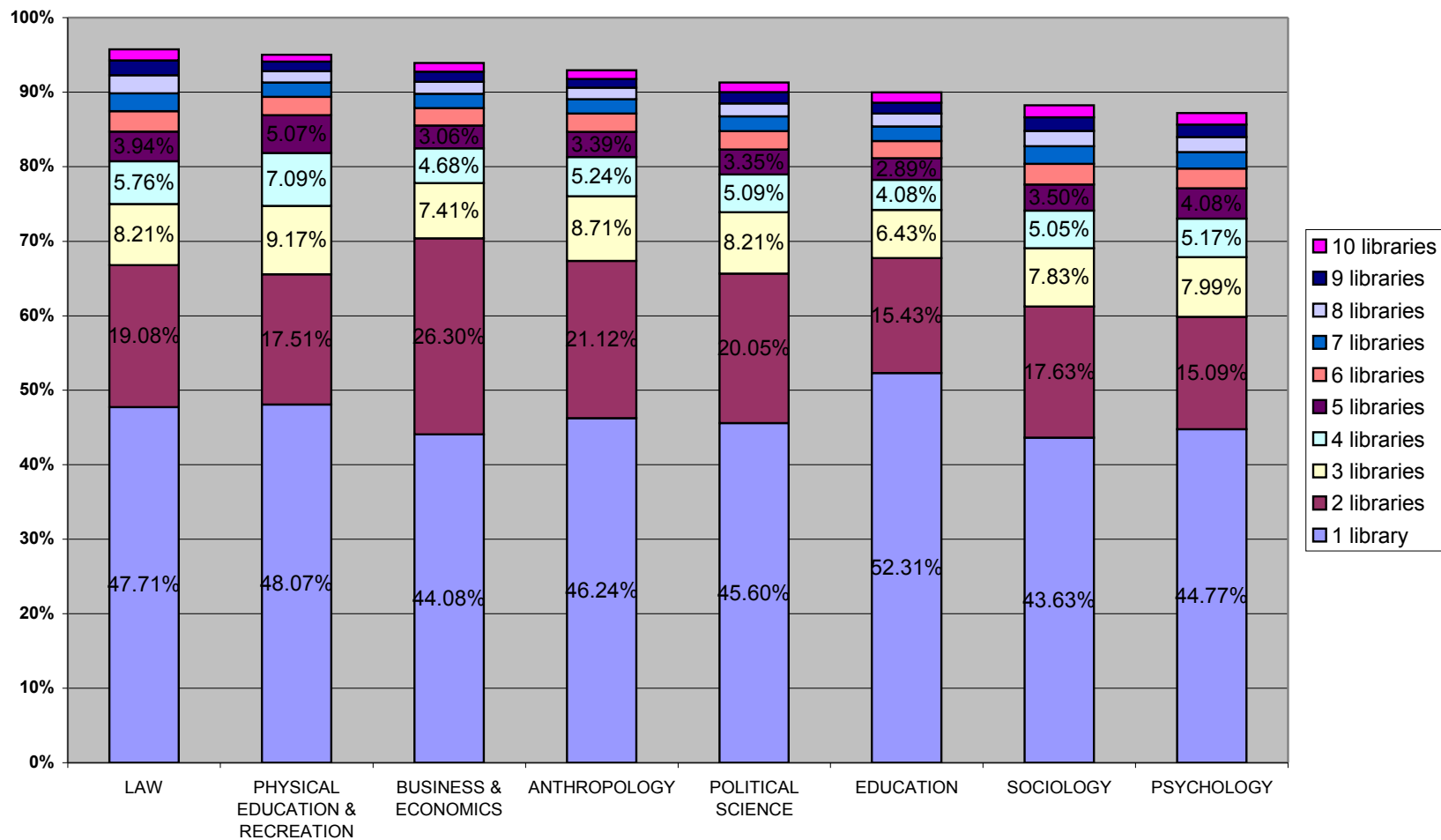
In most disciplines, more than 90% of the monographs in the statewide collection are owned by 10 or fewer libraries. In all but a few disciplines, 40-50% of the statewide collection is owned by only one library! Admittedly, slight variations in cataloging will result in “false uniqueness”—that is, the analysis will designate each of two identical books as unique due to insignificant differences in the records rather than true uniqueness. In addition, multiple editions or printings of a certain book may be designated as unique despite the fact that they are essentially the same book. However, the fact that the percentages of “owned by 10 or fewer” and “owned by one” are extremely high means that even with a generous allowance for shortcomings in the analysis, the concept of the “Vanilla Library” that has caused such great concern over the last few decades is not a reality. All academic libraries do not own essentially the same books—not even close!

The disciplines that show somewhat more duplication of titles across libraries are Education, Psychology, Sociology, Chemistry, and Performing Arts. But even in these cases, the percentage held by 10 or fewer libraries does not fall below 85%.

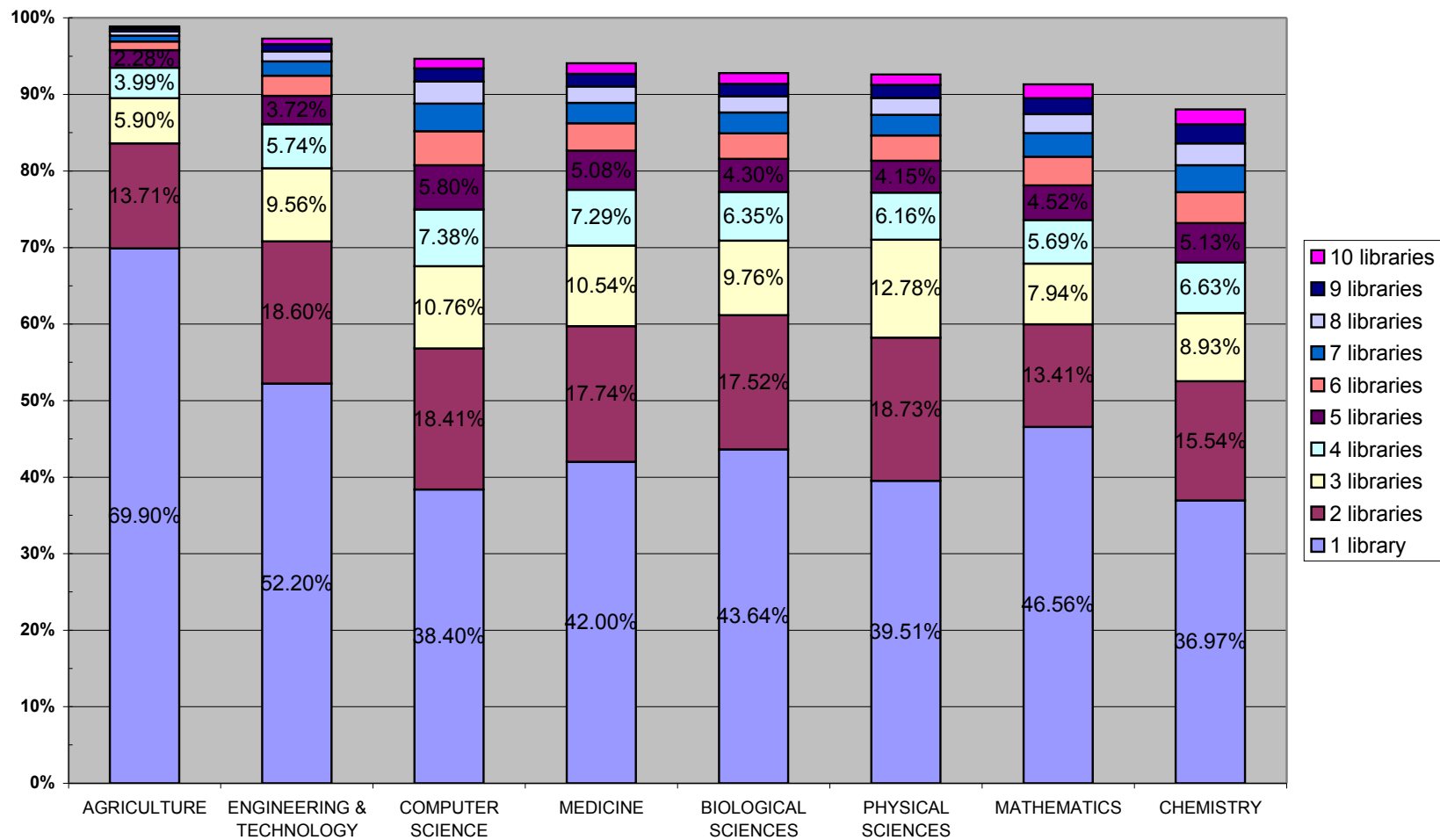
Percent of All Titles in Each Humanities Division Shared by 10 or Fewer Libraries



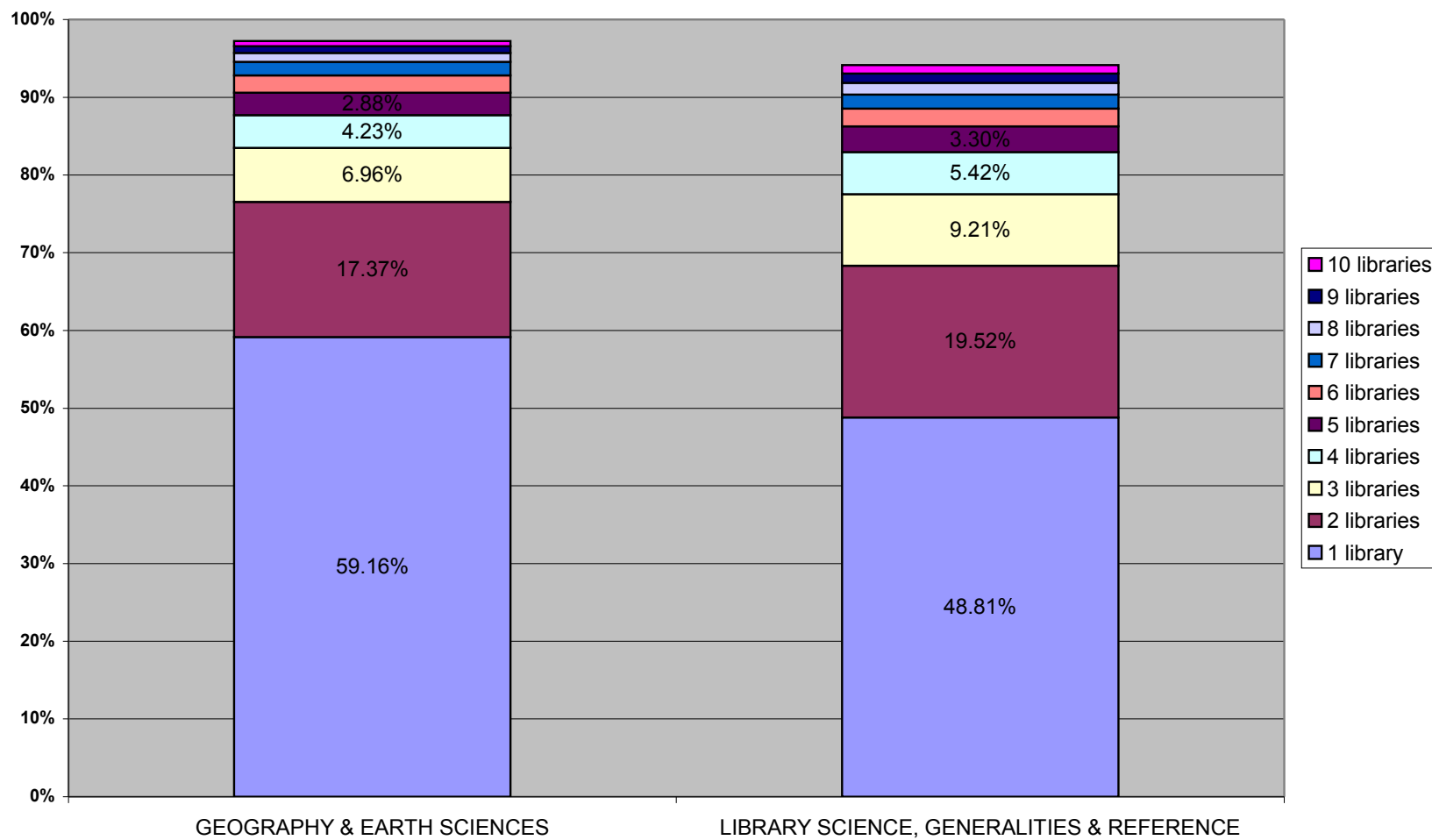
Percent of All Titles in Each Social Science Division Shared by 10 or Fewer Libraries



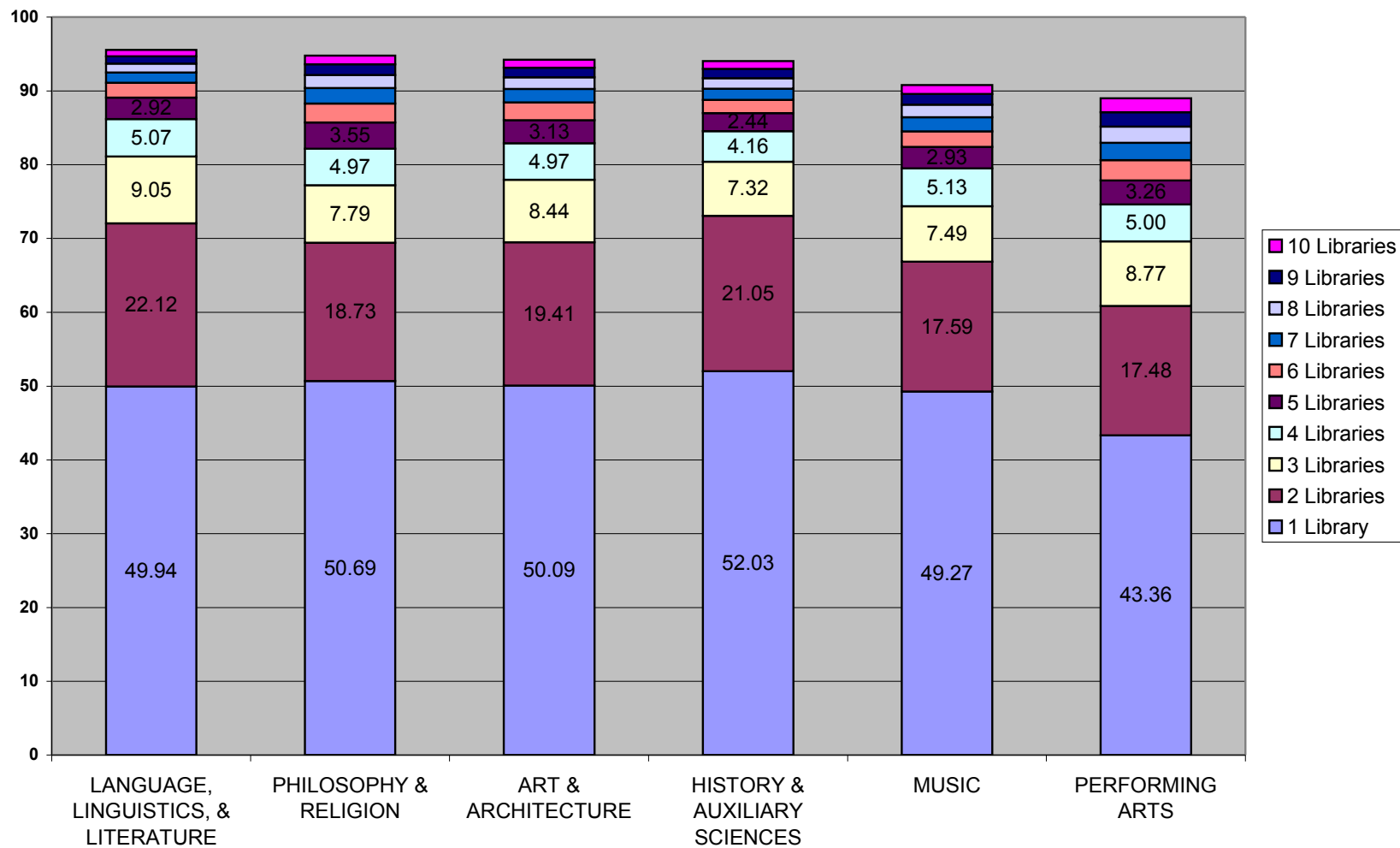
Percent of All Titles in Each Science Division Shared by 10 or Fewer Libraries



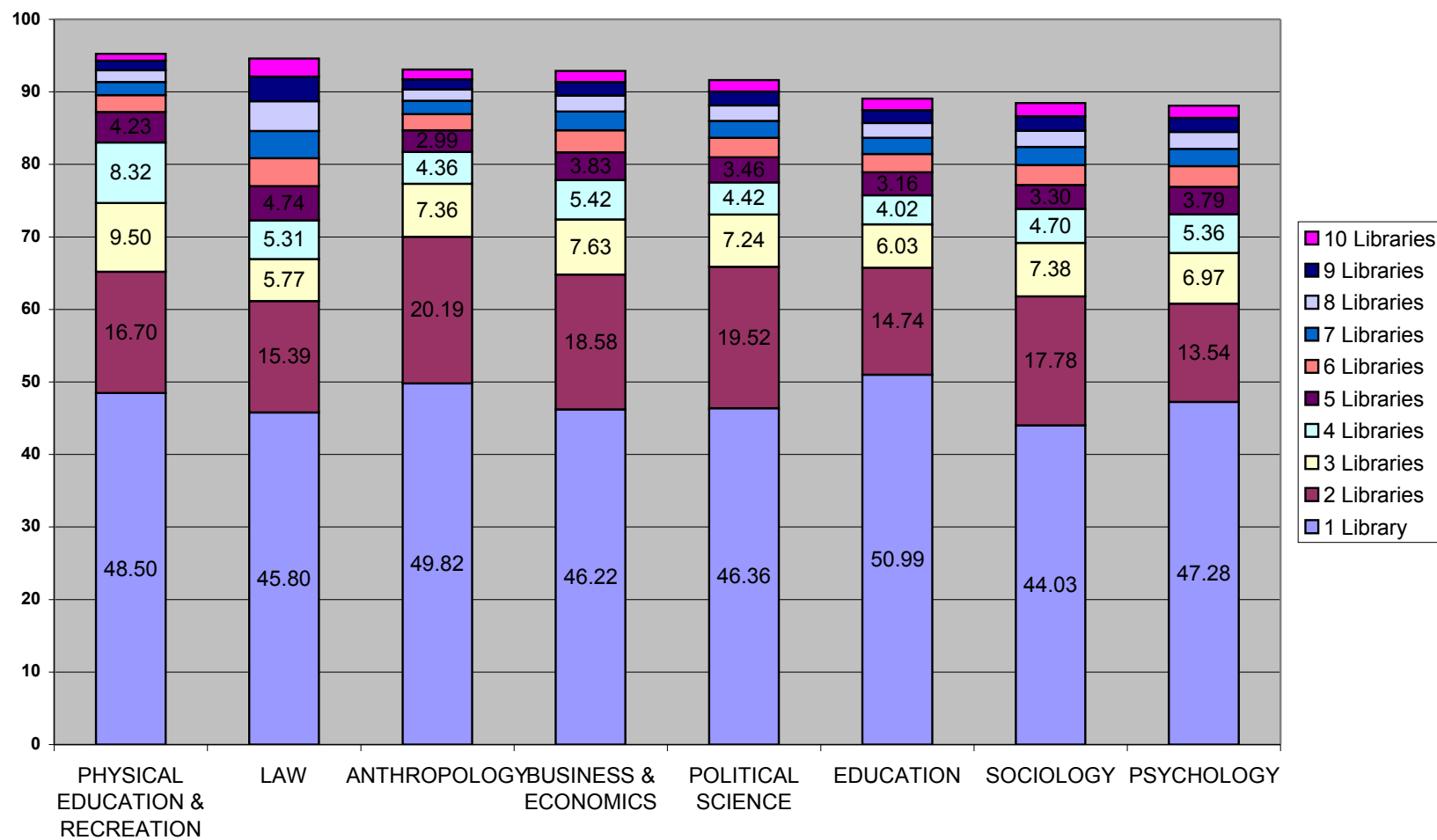
**Percent of All Titles in Each "Other" Division
Shared by 10 or Fewer Libraries**



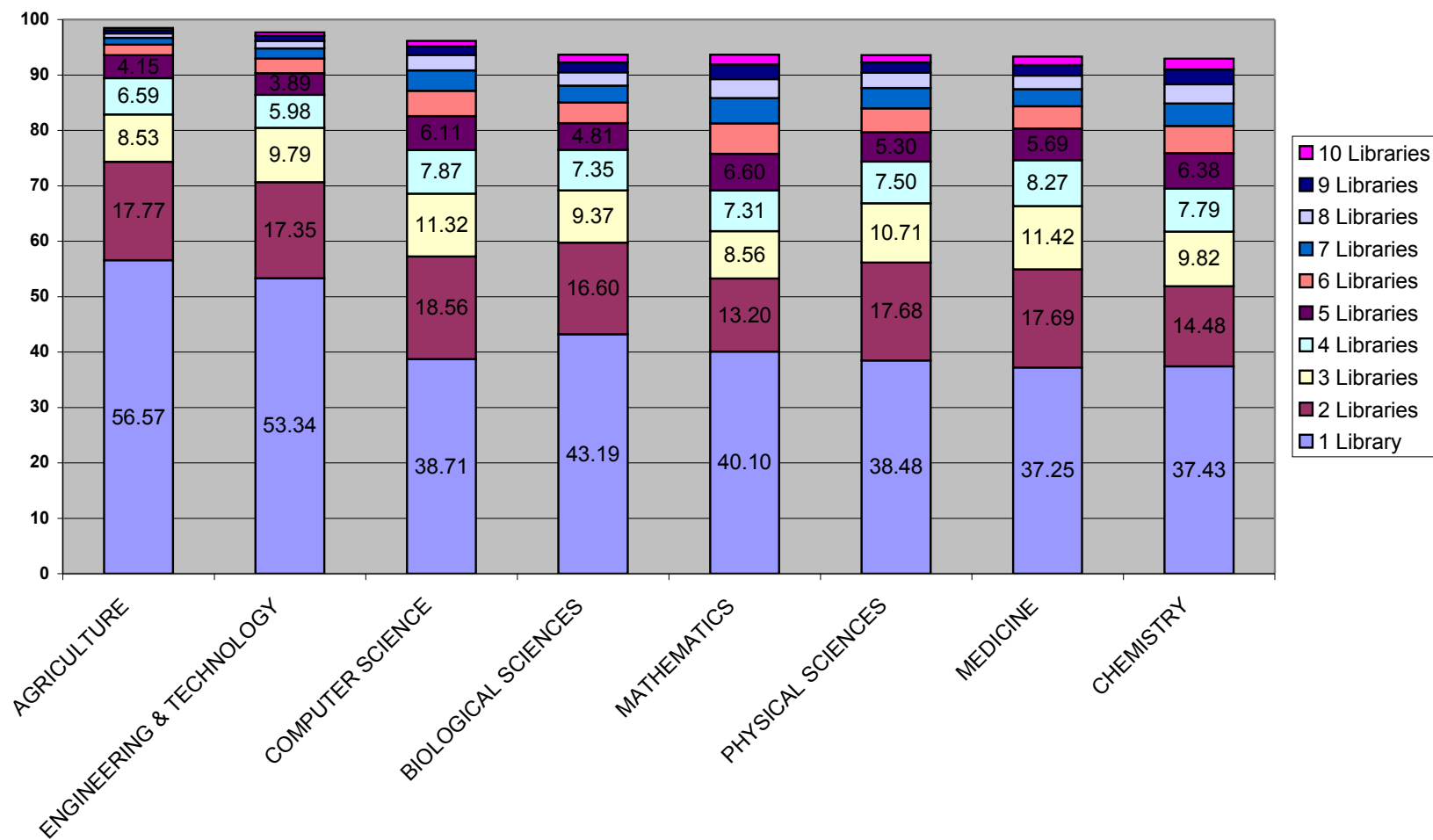
Percent of 1983-2002 Titles in Each Humanities Division Shared by 10 or Fewer Libraries



**Percent of 1983-2002 Titles in Each Social Science Division
Shared by 10 or Fewer Libraries**



**Percent of 1983-2002 Titles in Each Science Division
Shared by 10 or Fewer Libraries**



Percent of 1983-2002 Titles in Each "Other" Division
Shared by 10 or Fewer Libraries

