DOCUMENT RESUME

ED 234 805 IR 050 437

AUTHOR	Wallace, Danny P.
TITLE	Performance Measures in Illinois Special Libraries. Illinois Library Statistical Report No. 8.
INSTITUTION	Illinois State Library, Springfield.
PUB DATE	Jul 83
NOTE	55p.
AVAILABLE FROM	Illinois State Library, Centennial Bldg., Springfield, IL 62756 (free).
PUB TYPE	Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Case Studies; *Data Collection; *Library Administration; Library Services; Library Surveys; Library Technical Processes; Questionnaires; *Recordkeeping; *Special Libraries; *Statistical Data; Tables (Data)
IDENTIFIERS	*Illinois; *Library Statistics; Performance Indicators

ABSTRACT

A survey of 301 Illinois special libraries was conducted in 1982 to determine the number and type of statistics collected by these libraries and the ways in which these data are used. The mean number of statistics collected was reported as 10, including both technical and public service measures. Measures kept regularly by at least 50% of the respondents included items received on interlibrary loan (ILL), periodical titles received, items cataloged, items sent on ILL, items received, items borrowed, items in collection, items ordered, and photocopies received. It was also reported that data collected were used for reports to management, financial and budgetary concerns, user and use analysis, collection analysis and inventory, reports to external agencies, personnel considerations, establishment of goals and objectives, and answering questionnaires. Data cross analyses were conducted by library subject area, the for-profit or not-for-profit status of the library's parent organization, size of primary clientele and library professional staff, and the level of management (middle or upper) to which the librarian reports. This document describes survey methodology and results and presents case studies concerned with the collection and use of statistical data in three special libraries. Appendices provide a sample questionnaire, eight reference tables, and a 16-item bibliography. (ESR)

Illinois Library Statistical Report No. 8

Performance Measures in Illinois Special Libraries

Danny P. Wallace
Library Research Center
Graduate School of Library and Information Science
University of Illinois at Urbana-Champaign

Jim Edgar
Secretary of State
and State Librarian

Illinois State Library
Springfield, Illinois
July, 1983

Funded by a Library Services and
Construction Act Grant

Printed by Authority of the
State of Illinois
March 1983 - 2600 — GA-1571

Previously published numbers in this series:

1. Studies of Illinois Public Libraries Using Data from 1978-79 and 1979-80 (August 1981).

2. 1981 Survey of Illinois Special Libraries (April 1982).

3. Studies of Illinois Public Libraries Using Data from 1980-81 (June 1982).

4. Analysis of Responses to the Public Library Supplemental Annual Report for 1980/81 (July 1982).

5. Results of a Survey of Illinois Academic Libraries Affiliated with ILLINET (August 1982).

6. The 1981 Survey of Illinois Public School Library Media Centers

7. Two Studies of Illinois Public Libraries: An Adult User Survey; and Fines, Fees and Charges Levied.

Acknowledgements

Any report of this nature is necessarily the product of work done by many people. The author wishes to thank Herbert Goldhor, Susan Bonzi, Brad Hess, Carrie Klabunde, Tanya Phillips and the rest of the staff of the Library Research Center for their assistance and advice; Sally Eakin, who helped with the typing of the tables; Judy Genesen and the other members of the advisory committee of the Illinois Chapter of the Special Libraries Association;; and the Illinois special librarians who provided the data which made this report possible.

Contents

1 Introduction

Librarians in various environments have long been interested in the measurement of the services provided by their libraries. Although, as Lancaster has suggested, "the functions of all libraries are essentially the same" (Lancaster, p. 2), it has been commonly assumed that the collection of statistical data is much less prevalent in special libraries and information centers than in libraries of other types. This assumption may be partially a result of a lack of the large scale national or regional reporting of library statistics that has taken place with regard to public, academic and school libraries. Additionally, the great variability in the nature and purpose of special libraries has made it difficult even to identify all the special libraries in existence, much less to obtain uniform data regarding their activities.

Although it may be true that in the past special librarians rarely gathered data concerning their libraries, the increase in the literature dealing with measurement of special library activities would seem to indicate that some change has taken place. Brown has suggested that "traditionally, assumptions about the need for and the value of library services sufficiently justified continued support to libraries," but that "economic realities and the demand for accountability have long since disrupted this sheltered existence" (Brown, p. 475). The fact that in the past few years special libraries have gone out of existence at an increased rate may be further evidence of the need for accountability in special libraries.

Several attempts have been made to delineate the specific purposes of measuring library activities. The Midwest Health Science Library Network, for instance, has provided the following list:

1. To show the administration the use and growth the library has experienced over a period of time.
2. To provide the librarian and library committee with a strong case for necessary funds.
3. To help the librarian evaluate the efficiency of many of the library's services.
4. To provide the . . . administration with a true picture of the services the library offers.
5. To form the basis for a very important part of the library's annual report (Basic Library Management for Health Science Librarians, p. C-6).

Brown has suggested that the use of data can be divided into two fundamental categories: "communications (to relate information to another), and internal management and planning" (Brown, pp. 481-482). Brown has also, however, stated that problems have been caused by the "conflicting purposes, or even lack of purposes" for which statistical data have been gathered, and that these problems have inhibited "rational approaches to data collection" (Brown, p. 477).

One very difficult problem is that of deciding what data are to be collected. The Midwest Health Science Library Network's statement that "ideally, the librarian should consider counting and recording everything that can be counted and recorded" (Basic Library Management for Health Science Librarians, p. C-6) seems excessive. Brown has justifiably concluded that "it is not enough to count resources--to describe the collection resources, for example, only in terms of

dollars and size. It is much more desirable to assess both the quantitative and qualitative aspects of the collection" (Brown, p. 479). To Brown, the most desirable statistic would be one which demonstrates the impact the library has on the organization it serves (Brown, p. 481). It is not clear, however, just how such a statistic can be derived. Given the wide variety of activities and environments which exists among special libraries and information centers, the data which need to be collected, and the ways in which such data should be analyzed, would also be quite diverse.

The 1982 survey of special libraries affiliated with Illinois library systems dealt with performance measures utilized by special libraries and information centers. The survey questionnaire consisted of two major sections. In the first, respondents were asked to identify those statistics they kept and to provide an indication of whether they were kept regularly or only occasionally. The second section asked the respondents to choose three of the statistics they had identified in the first section and to indicate how long each had been kept and the specific uses made of the data collected.

The questionnaire, which had been prepared with the advice of a committee of the Illinois Chapter of the Special Libraries Association, was pretested in four libraries in September of 1981. Some minor alterations were made in order to strengthen weak points identified in the pretest draft, and the final form of the questionnaire was sent to the eighteen Illinois library systems in December of 1981 for distribution to their special library affiliates. A copy of the questionnaire is reproduced as Appendix 1. Questionnaires were

returned by the affiliates to the library systems, which then forwarded them to the Library Research Center of the University of Illinois for analysis. A rather low response rate prompted a decision to send follow-up postcards to those libraries which had responded to the 1981 survey but which had not yet responded to the 1982 survey by June 1982. This postcard also asked respondents specifically to state that they were not interested in participating in the survey if that was the case, and asked for information to identify libraries which no longer existed. Twenty-six libraries declined to participate, and three were identified as no longer being in existence. Additionally, libraries responding for the first time in 1982 were asked to complete the 1981 questionnaire so that certain data from that survey could be incorporated in the analysis of the 1982 responses (Wallace).

A total of 303 responses were received in time to be considered. Of these 303, two were unusable, leaving 301 as the number upon which this report is based. It is interesting to note that 74 of the 301 responses were from libraries not included in the 1981 survey, and that 90 libraries included in the 1981 survey did not provide responses to the 1982 survey.

The 301 forms which were usable were coded and input into a computer file. Data were then analyzed by use of the Statistical Package for the Social Sciences (SPSS). The raw data file will continue to be kept available for further analysis or comparison with later survey results. Special studies based on these data can be requested from the Illinois State Library.

2 Representativeness of the Study Group

Although there is no way of precisely determining the number of special libraries in Illinois, it was possible to identify those special libraries which were affiliate members of the systems as of November 1981. The 301 respondents to the 1982 survey represent 66% of the 454 special libraries known to have been affiliate members at that time (the source for known special library affiliate members is the 1981 ILDS/ILLINET Route Directory). Table 1 gives a system by system listing of these libraries, divided into medical and nonmedical categories, as well as the same data for the libraries included in the present study. It appears from these data that the study group is slightly atypical in that medical libraries are overrepresented and nonmedical libraries are underrepresented. This appears to be especially true for those systems which have a relatively large number of affiliated special libraries. This difference was found to be statistically significant at the .01 level.

Table 2 shows the distribution of special libraries by three geographic regions, again comparing the respondents to this survey with the entries in the ILDS/ILLINET directory. A chi-square test showed no statistical difference between the two groups with regard to geographic distribution.

Two other variables (the number of employees whom the library is primarily intended to serve, and the total full-time-equivalent number of library staff members holding a graduate degree in library and information science) were compared to the same figures for the

respondents to the 1981 survey of special library affiliates. (Respondents to the 1981 survey were more typical of all ILLINET affiliates in terms of the proportion of nonmedical/medical libraries.)

TABLE 1: COMPARISON OF MEDICAL/NONMEDICAL LIBRARIES IN SURVEY GROUP TO KNOWN ILLINET AFFILIATES

System	ILLINET Affiliates November, 1981				1982 Survey Respondents			
	Nonmedical		Medical		Nonmedical		Medical	
	Number/	Percent	Number/	Percent	Number/	Percent	Number/	Percent
Bur Oak	3	(50)	3	(50)	2	(50)	2	(50)
Chicago	161	(83)	33	(17)	78	(77)	24	(24)
Corn Belt	2	(40)	3	(60)	2	(50)	2	(50)
Cumberland Trail	1	(33)	2	(67)	1	(50)	1	(50)
DuPage	12	(57)	9	(43)	10	(56)	8	(44)
Great River	7	(70)	3	(30)	5	(63)	3	(38)
Illinois Valley	8	(50)	8	(50)	4	(33)	8	(67)
Kaskaskia	4	(57)	3	(43)	6	(67)	3	(33)
Lewis & Clark	3	(43)	4	(57)	0	(0)	5	(100)
Lincoln Trail	19	(83)	4	(17)	6	(55)	5	(45)
North Suburban	56	(80)	14	(20)	42	(81)	10	(19)
Northern Illinois	6	(55)	5	(45)	4	(40)	6	(60)
River Bend	4	(40)	6	(60)	3	(50)	3	(50)
Rolling Prairie	13	(68)	6	(32)	12[a]	(60)	8	(40)
Shawnee	1	(50)	1	(50)	1	(50)	1	(50)
Starved Rock	6	(43)	8	(57)	0	(0)	5	(100)
Suburban	17	(50)	17	(50)	13	(45)	16	(55)
Western Illinois	0	(0)	2	(100)	0	(0)	2	(100)
Total	323	(71)	131	(29)	189	(63)	112	(37)
Grand Total	454				301			

TABLE 2: COMPARISON OF GEOGRAPHICAL DISTRIBUTION OF LIBRARIES IN SURVEY GROUP TO KNOWN ILLINET AFFILIATES

Geographic region	ILLINET Affiliates November, 1981 Number/Percent	1982 Survey Respondents Number/Percent
Chicago Area	325 (72)	205 (68)
North & Central Illinois	81 (18)	52 (17)
Southern Illinois	48 (11)	46 (15)
Total	454	301

(Chicago Area includes the Bur Oak, Chicago, DuPage, North Suburban and Suburban library systems; North & Central Illinois includes the Corn Belt, Illinois Valley, Lincoln Trail, Northern Illinois, River Bend, Starved Rock, and Western Illinois library systems; Southern Illinois includes the Cumberland Trail, Great River, Kaskaskia, Lewis and Clark, Rolling Prairie, and Shawnee library systems.)

There was no significant difference between the two survey groups with regard to these two variables. It can be assumed, then, that although the respondents to the 1982 survey may not have been representative with regard to their subject areas, they were representative in other ways. The lack of representativeness with regard to subject area, however, should be considered when evaluating differences among the subject groups throughout this report. Another factor which must be considered is that not all special libraries and information centers in the state are affiliated with ILLINET. No attempt has been made to

determine the number of unaffiliated special libraries, nor to assess those characteristics which distinguish affiliates from nonaffiliates.

3 Number of Statistics Kept

The questionnaire identified explicitly 22 categories of measures and provided space for two additional responses. Respondents were asked to indicate for each measure whether it was kept regularly, kept occasionally, or not kept at all. Regular data collection was defined as keeping data on a continuous basis, and occasional collection was defined as keeping data for one or more sample periods during the preceding year. The frequencies with which each of the 22 explicitly identified measures was kept are given in Table A1 in Appendix 2.

Table A2 lists the forty-two additional measures which were provided in response to survey questions 26 and 27. Twelve of these measures were related to technical services, while twenty-two were public services-related; nine could not be classified as either technical services or public services measures. An arbitrary decision was made to include in further analyses only those additional measures that had been suggested by ten or more respondents; five measures, each of which was public services-related, met this criterion.

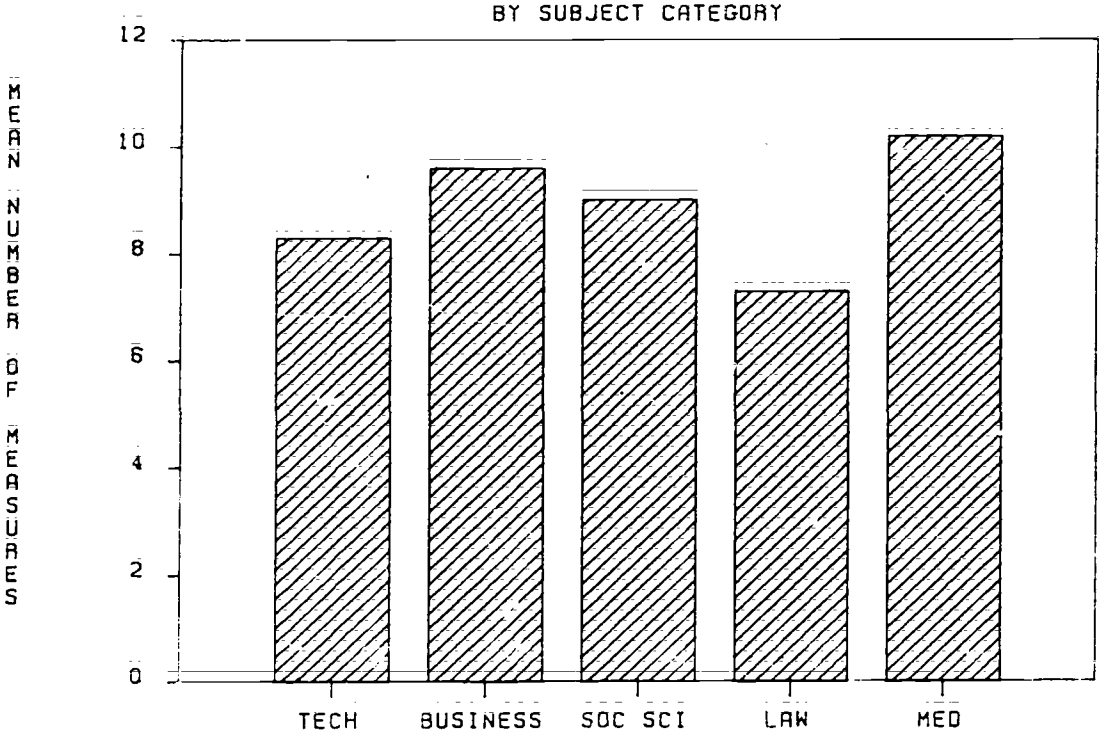
The respondents displayed considerable diversity in terms of the measures actually kept. Very few of the measures listed on the questionnaire were kept by a majority of the respondents, and none of the additional measures provided by the respondents themselves was kept by a majority of respondents. The measure kept regularly by the most

respondents was the number of items received on interlibrary loan, which was kept by 216 (73%) respondents. Table A2 lists those measures that were kept regularly by at least 50% of the respondents. Five of these nine measures are related to technical services, while the remaining four are related to public services.

Data regarding the mean number of measures kept are provided in Table A3. The table shows means for the total number of measures kept regularly; the total number of measures kept occasionally; the number of technical services measures; and the number of measures of public services. The data are cross-analyzed by the for-profit vs. not-for-profit status of the organization served by the library, by the major subject area of the library, by the size of the library's primary clientele, by the number of library employees holding a master's degree in library and information science, and by the position of the head librarian in the organizational structure. The mean number of measures kept regularly is ten, nearly half the number of measures identified on the questionnaire. 14 (5%) of the respondents reported that they kept no measures regularly. As can be seen from the table, libraries in for-profit organizations tended to keep slightly fewer measures than did those in not-for-profit organizations, libraries with smaller primary clienteles kept fewer than did libraries with larger primary clienteles, and nonmedical libraries kept fewer than medical libraries. This last is possibly explained by the role of biomedical consortia in determining what measures are kept by medical libraries; a considerable number of hospital libraries reported that they kept statistics specifically for the purpose of reporting to their area consortium.

The variations among the different subject categories are shown in graphic form in Figure 1. Neither the number of persons with master's degrees in library and information science nor the position of the librarian/information center manager in the organizational structure appears to be related to the mean number of measures kept regularly.

FIG. 1: MEAN NUMBER OF MEASURES REGULARLY KEPT, BY SUBJECT CATEGORY



The mean number of measures kept occasionally is 2.8. 79 respondents (26%) kept no measures on an occasional basis, and only four kept ten or more measures occasionally; no respondent indicated that more than twelve measures were kept on an occasional basis. Libraries in the technology and business subject categories were more likely to keep data occasionally than were libraries in the other three subject categories.

It is questionable whether the number of measures not kept is a meaningful figure, since the list of measures included on the questionnaire was not exhaustive.

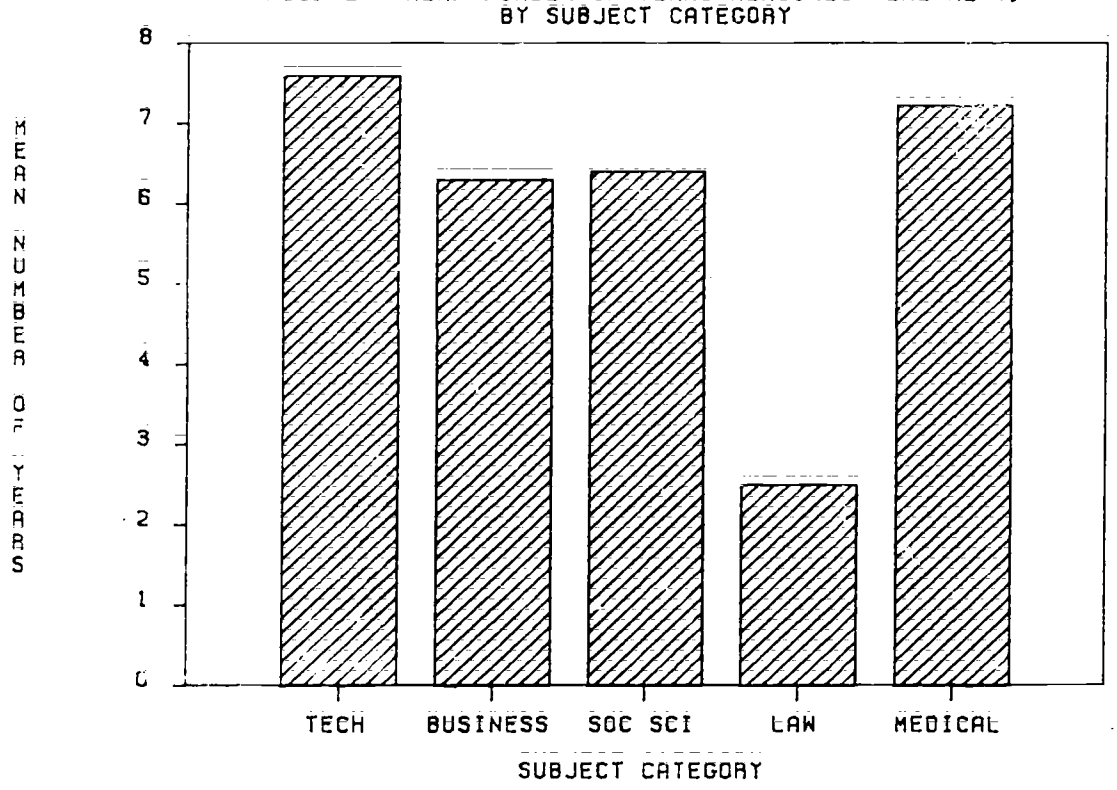
The mean number of regulary kept technical services measures is 3.4, slightly more than half the number of technical services measures listed on the questionnaire. This figure does not include the twelve additional measures identified in response to questions 26 and 27 (see Table A2); none of these additional measures was kept by more than three respondents. Given the very small averages of technical services measures, any conclusions regarding differences among means must be considered tentative. It does appear to be the case, however, that not-for-profit libraries regularly keep more technical services measures than do for-profit libraries, that medical libraries keep more than do nonmedical libraries, and that libraries serving larger primary clienteles keep more than those with smaller primary clienteles. The mean number of technical services measures kept occasionally is only 0.8, and there appears to be no meaningful variation among groups related to this figure.

The mean number of regularly kept public services measures is 6.4, about one third the total number of public services measures listed. This statistic includes the five public services measures which were added in response to questions 26 and 27 by ten or more respondents (see Table A2). More public service measures were kept by not-for-profit libraries than by for-profit libraries, more were kept by medical libraries than by nonmedical libraries, more were kept by libraries with primary clienteles of 250 or more than by those with smaller primary clienteles, more were kept by libraries employing one or more professional staff with a master's degree in library and information science, and slightly more were kept by libraries in which the librarian reported to middle management than by those in which the librarian reported to upper management. The mean number of public services measures kept occasionally is two, and there seem to be no meaningful variations among any of the groups examined.

Respondents were asked to select three of the statistics they reported keeping regularly or occasionally, and to record the dates when the collection of these data was first begun. The mean length of time is 6.7 years. This mean is based on the total number of responses to the request for the dates when measures were first kept; since any respondent could report for up to three statistics, the total number of responses is greater than the number of responding libraries. In 65% of the cases, the measures had been kept for five years or less, and only 15% had been kept for 10 years or longer. This implies that the collection of statistical data in special libraries may be a relatively recent phenomenon. Table A5 provides data on the mean number of years

for which data had been collected. The mean number of years varies from 2.5 for Law libraries to 7.6 for libraries in the Technology subject category. Figure 2 provides a graphic display of the variation in the mean number of years measures had been kept, by subject categoy. The mean for libraries serving not-for-profit organizations is 1.4 years greater than that for those serving for-profit organizations, the mean for libraries serving primary clienteles of 250 or more is 2.1 years greater than that for libraries with smaller primary clienteles, and the mean for libraries whose librarians reported to upper

FIG. 2: MEAN NUMBER OF YEARS MEASURES WERE KEPT, BY SUBJECT CATEGORY



management is 1.2 years greater than for those whose librarians reported to middle management.

It can be seen, then, that libraries attached to for-profit institutions tend to keep fewer kinds of statistics than libraries in not-for-profit institutions, and have kept them for less time. Medical libraries keep substantially more kinds of data than libraries in any of the other subject categories, and have kept them for more years than any other category of library except technology. Larger libraries keep more statistics than do smaller libraries, and have kept them longer. Librarians reporting to upper management keep slightly fewer statistics than do librarians reporting to middle management, but have done so longer. In general, it can be said that in most special libraries in Illinois are in some way involved in the collection of statistical data, but most have not been so engaged for very many years.

4 Uses of Statistics

Part Two of the survey questionnaire asked respondents to indicate, for each of any three data items, the specific uses made of the data collected. A complete list of the uses reported is given in Table A6. Not listed are a number of reported uses which clearly were non-statistical. It was evident from some responses, for instance, that records were kept for the purposes of identifying persons or books, not in order to count them. No attempt has been made to analyze these non-statistical uses. For purposes of analysis, the reported statistical uses have been divided into seven main categories: reports

made to the management of the organizatio ; reports made to some person or agency outside the organization; financial and budgetary concerns; analysis of library use and library users; personnel considerations; collection analysis and inventory; and miscellaneous. Table A7 provides the number of respondents reporting uses in each of these categories, divided according to the five main variables of for-profit vs. not-for-profit status of the organization, major subject area of the library, number of primary employees, number of library staff with a graduate degree in library or information science, and position of the head librarian within the organizational structure. Note that, since each library was asked to provide uses for only three data items, the table does not necessarily provide an accurate portrayal of how all statistical data are used. It is reasonable to assume, however, that the choice of data items was generally based on the librarians' perceptions of importance or representativeness, rather than being a random selection.

The most frequently listed category of use was "Report to Management," with 43% of the libraries reporting use in that category. 41% reported use in the "Financial and Budgetary Concerns" category, 28% in the "User and Use Analysis" category, 22% in the "Collection Analysis and Inventory" category, 16% in the "Report to External Agency" category, and 11% in the "Miscellaneous" category.

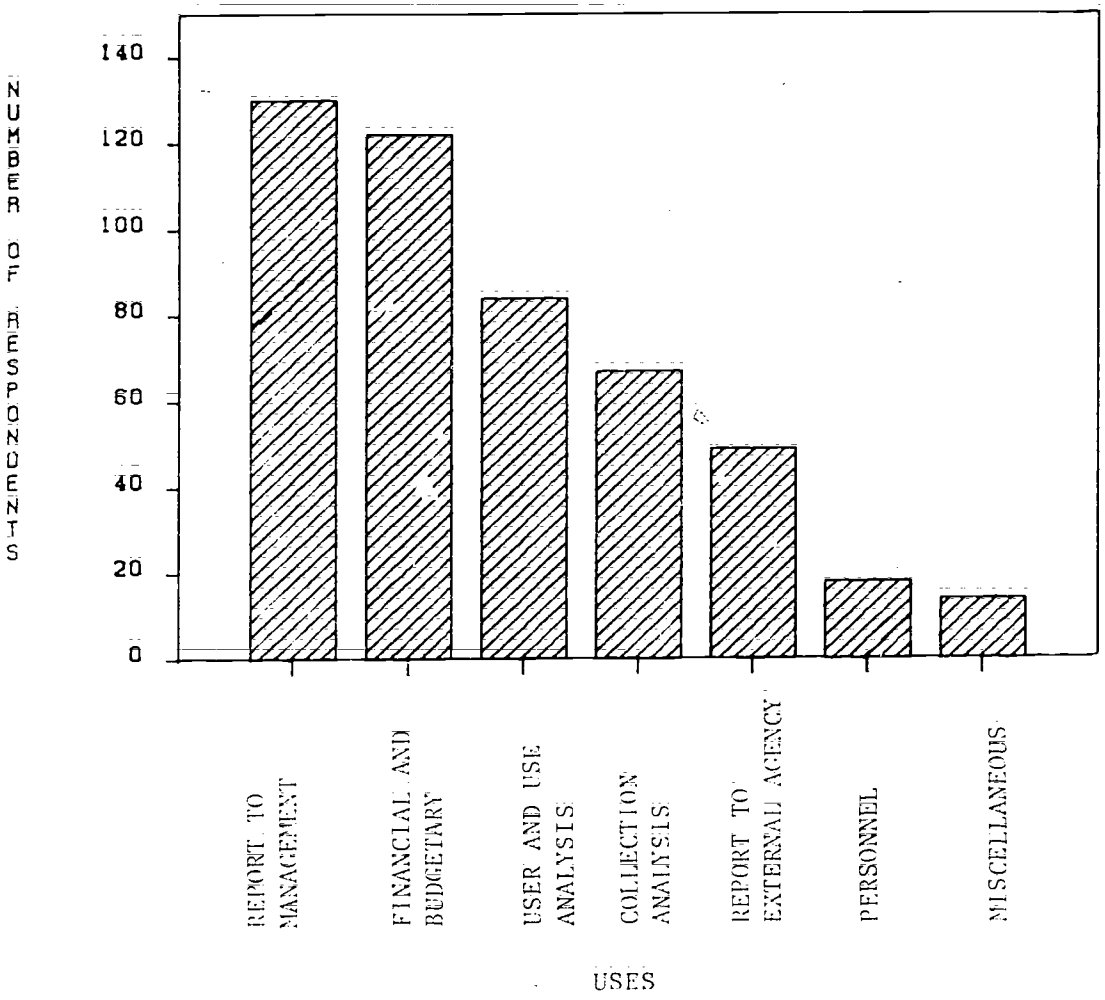
The use categories mo t frequently listed by libraries in for-profit organizations were "Financial and Budgetary Concerns" (47%), "Report to Management" (33%), and "User and Use Analysis" (27%). Those most often listed by libraries serving not-for-profit organizations

were "Report to Management" (48%), "Financial and Budgetary Concerns" (37%), and "User and Use Analysis" (28%). Libraries in for-profit organizations were much more likely to list "Financial and Budgetary Concerns" as a use of data than were libraries in not-for-profit organizations (47% vs. 37%), but much less likely to list "Report to External Agency" (4% vs. 24%).

In the Technology and Business subject categories, the greatest proportion of uses were in the "Financial and Budgetary Concerns" category (46% for the Technology category, 50% for the Business category), followed by "Report to Management" (41% and 47%), and "User and Use Analysis" (29% and 36%). "Report to Management" was most frequently cited by libraries in the Social Sciences (45%) and Medical (46%) categories. Libraries in the Social Sciences and Medical categories were much more likely to list uses in the "Report to External Agency" category than were libraries in the other subject categories. Libraries in the Law category most frequently cited "Financial and Budgetary Concerns" (45%) and "Collection Analysis and Inventory" (45%). Law libraries listed "Collection Analysis and Inventory" much more often than did libraries in the other subject categories, while Business libraries were least likely to cite that category of use. This variation according to subject category is shown in graphic form in Figure 3.

The number of employees whom the library was primarily intended to serve and the position of the head librarian in the structure of the organization do not appear to have any substantial relationship to the uses of collected data. Libraries with one or more FTE staff with a

FIG. 3: USES FOR MEASURES KEPT



graduate degree in library and information science were more likely to list "Report to Management" as a use than were those with less than one FTE (50% vs. 32%), but less likely to list "Report to External Agency" (2% vs. 13%).

The relationship between the types of measures listed and the types of uses associated with those measures was also examined, as shown in Table A8. The specific measures were divided into those related to technical services functions and those related to public

services functions. The public services measures were further divided into two categories: those which were simple counts, such as the number of people who use the library; and those which involve further analysis, such as the number of people from each of several departments who use the library. Technical services measures were found to be used for "Collection Analysis and Inventory" proportionately more often than were public services measures (29% vs. 27%), while "User and Use Analysis" was more frequently associated with public services measures than with technical services measures (35% vs. 29%). Public services measures requiring simple counts were more frequently associated with the "Report to Management" (53% vs. 45%) and "Report to External Agency" (22% vs. 16%) categories of use than were those involving further analysis, but were less frequently associated with "Financial and Budgetary Concerns" (48% vs. 54%).

The variety of uses for statistical data cited by respondents to the survey is nearly as great as the varity of measures kept. As has been seen, however, these uses can be logically condensed into a very few categories. The emphasis on gathering data to support reports to organizational administration and for assistance in financial plannning gives some validity to the five purposes for measuring library activities identified by the Midwest Health Science Library Network (Basic Library Management for Health Science Librarians, p. C-6), and cited in the introduction to this report.

5 Case Studies

As a means of providing more in-depth descriptions of the ways in which statistical data can be used, interviews were conducted with selected librarians. Summaries of three of these interviews are presented here as examples of the use of statistical data in three rather dissimilar environments: a library in which the gathering of statistical data is guided by a particular management process, a library in which complex budgetary arrangements necessitate the collection of diverse data, and a library in which no statistical data are usually collected at all. It is hoped that these case studies will provide useful examples for other librarians working in similar situations.

5.1 Burnham Hospital, Champaign. Teresa Manthey, Librarian.

Burnham Hospital is a 214-bed facility with more than 700 employees, one of four hospitals in Urbana-Champaign. The library houses about 600 book volumes and subscribes to 200 periodicals. Teresa Manthey, who has been employed as librarian at Burnham for nearly three years, cites support of hospital staff as the primary role of the library, with support of the physicians taking precedence.

Ms. Manthey lists three major reasons for gathering statistical data: to assist in budget preparation and justification; to meet the requirements of the Joint Committee on the Accreditation of Hospitals; and to meet requests from the Midwest Health Science Libraries Network

and the Lincoln Trail Libraries System, of which the library is a member. She states that most data are gathered primarily for budgetary purposes, with requests from external agencies requiring very little additional effort. Since the hospital administration has rarely made specific requests for data, the data included in the library's annual budget requests are based on the librarian's decisions and the practices of her predecessors. The data kept are reviewed and assessed during the preparation of the annual report. The philosophy in this library is that statistics should be kept in order to answer specific questions, not just for the sake of keeping them in case they are ever needed, and that the library's budget can help determine what data need to be collected. "Start by looking at your budget and decide which services are supported by it, then what data are needed for justification." She also feels that it is important to develop and maintain a manual of library operations which includes, among other things, a detailed account of the procedures to be followed in collecting, compiling, and presenting data; this codification will help ensure that such procedures are followed completely and consistently.

Data collection and manipulation do require an appreciable amount of time: the library's one LTA spends about an hour each day working with statistical data, and Ms. Manthey devotes most of one week each year to the preparation of the library's annual report. She feels that this is not only justified but essential, if the library is to maintain an acceptable budget and provide adequate service. She is convinced that the hospital administration's present favorable view of the library is based in large part on the statistical portion of the annual

report. "It is worth the effort for me; I have never had a budget request cut."

Ms. Manthey has initiated a number of measures during her tenure as librarian, and emphasizes avoiding "reinventing the wheel." For many of her ideas she has been able to locate sources in the literature which could be adapted for the library's purposes. She also stresses the need to test data collection forms before finalizing them in order to assure that they are workable.

There are some problems that she has not yet been able to solve. The first is that of measuring quality of service as well as quantity. Two methods which she has tried are a survey of user attitudes toward specific library services, and a library suggestion card. The first was of minimal use because all of the respondents were laudatory and had no specific suggestions for change; the suggestion card did not draw enough responses to be useful. A second, related, problem area is that of demonstrating the relationship between library service and patient care. In a hospital, the ultimate justification of library services should be a positive effect on the primary functions of the hospital; it would be highly desirable to be able to measure this relationship, but she feels there is no workable, direct way to do so. A third problem is that of comparison with other libraries; although data are gathered by the regional medical consortia and the Illinois library systems, they are limited in scope and are not generally published, nor do standards for accreditation provide a means of comparative analysis.

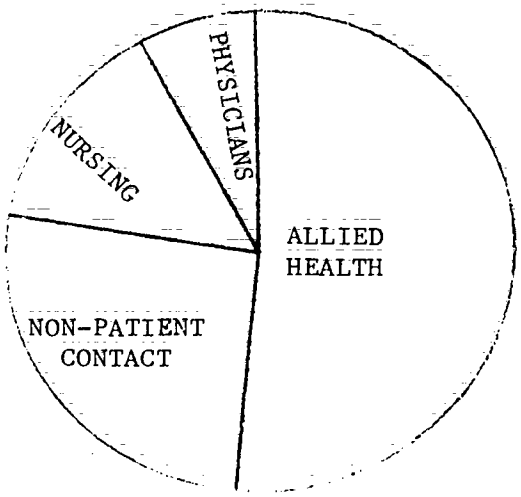
A more immediate problem for Ms. Manthey is that the library is located in a separate annex building, with a small collection of journals and books located in the physicians' lounge, which is in the hospital proper. Ms. Manthey suspects that this leads to underutilization of the library by certain segments of the hospital staff such as the nursing staff, and she has lobbied unsuccessfully to have the library moved from the annex to the hospital building. She has collected data on the mode of inquiry of requests -- in-person vs. by telephone -- as one way of documenting the need for having the library located closer to the working places of most of the hospital employees, and feels that the preponderance of telephone requests (50% of all patron inquiries in 1980/81) does provide some evidence of that need.

Each year a very detailed annual report is submitted by the library to the hospital administration. Most of the data in the annual report are presented in tabular form, with appropriate cross-tabulations. Circulation, for instance, is analyzed by type of material and by month, with totals, averages and percentages given when appropriate. Some data are also presented in graphic form; two such graphs are reproduced in Figure 4. Each section of the report includes a definition of the data being presented and suggestions for interpreting the data. The library utilizes a Management by Objectives (MBO) planning process, and the annual report includes a statement of the library's success in meeting the past year's objectives, as well as a list of objectives for the coming year.

FIG. 4: GRAPHS USED IN BURNHAM HOSPITAL LIBRARY ANNUAL REPORT

ILL BORROWED; DETAILED BY CATEGORY OF PERSONNEL

Physicians	11%
Nursing	15%
Allied Health	51%
Non-Patient Contact	23%



COMPARISON OF LIBRARY SERVICES; 1979-1982

Circulation	1982	4435
	1981	3888
	1979	3097
Reference	1982	579
	1981	473
	1979	307
ILL Borrowed	1982	989
	1981	719
	1979	653
ILL Lent	1982	536
	1981	424

The format of the MBO process makes decisions as to what statistical data need to be kept fairly straightforward: those data are kept which make it possible to assess the library's progress towards meeting its objectives. This is a sound approach for any library; even if a formal MBO process is not utilized, it seems clear that the gathering and ultimate use of statistical data should be based on a firm foundation of perceived needs and clearly formulated objectives. This foundation is present in the Burnham Hospital Library.

5.2 Marsteller Inc., Chicago. Ellen Steininger, Manager, Information Services.

Marsteller Inc. is a large, international advertising and public relations firm. The library contains 4,500 book titles and subscribes to 1,300 periodicals. Ellen Steininger, the firm's first professional librarian, was hired about fifteen years ago and has seen the library grow from a space "the size of a large closet" to the present facility which occupies about 1,000 square feet of floor space and employs three professional and two nonprofessional staff.

As is true for many libraries serving advertising, public relations or legal firms, all activities of Marsteller Inc., including library services, are charged to the firm's clients. Although there are provisions in the budget for general library activities, each employee is responsible for maintaining a weekly report which indicates the amount of time spent on each client served during that week. These reports comprise the only numeric data which are regularly collected by

the library.

Ms. Steininger has adopted a policy of collecting statistical data only when and if they are actually needed, and sees no reason for compiling statistics on an ongoing basis. Although she agrees that being able to gauge changes over time might be interesting, she feels that it would be of little practical value in her situation. The firm's management is not interested in library statistics, and "if nobody wants something, why should you count it?"

Counting specific things for specific purposes, however, can be useful. One one occasion, the number of times the library's telephones rang was used as justification for the acquisition of an additional telephone. A count of the hours worked overtime by the staff was used to support a successful request for additional staffing. Occasional counts of the number of people using the library have been used to determine the feasibility of expanding shelf space or otherwise altering the space available for library users.

Records are sometimes kept concerning reference questions, but the emphasis of such records is on the nature of the questions rather than the number of questions; the data collected are used for evaluation of the strengths and weaknesses of the library's resources.

A general survey of the firms's employees was conducted once in order to assess satisfaction with the library's services, but the return was not great and the usefulness of the results was limited. Given the purposes and functions of the library, Ms. Steininger feels that the library's users would be quick to point out any deficiencies, and the library does receive suggestions and criticisms from the firm's

employees.

In general, it is Ms. Steininger's feeling that quick counts, sampling and "educated guesses" can take the place of constant data collection. Since the library itself has no need to know the number of books it owns, precise counts can be replaced by an estimate based on the number of shelves and the approximate number of items per shelf. Although this does not yield a precise count, Ms. Steininger does not feel requests from outside agencies justify the time and effort which would be required to keep precise figures. This is actually a very good method of measuring size of the collection, especially for a library in which use depends on in-library use rather than circulation. Traditional counting methods generally do not account for book losses, and therefore do not result in an accurate figure for current holdings; the method of estimating holdings used by Ms. Steininger avoids this potential for error.

Although the methods used in this library might not be applicable to all situations, the system does work when all expenses are charged to clients; and the philosophy of keeping only those statistics which can be demonstrated to be necessary and immediately useful is one which might well be adopted by libraries of all types.

5.3 IAA & Affiliated Companies, Bloomington. Rue E. Olson, Librarian.

Although it is generally held that no one can serve multiple masters, the Illinois Agricultural Association and Affiliated Companies Library must account to the three related but independent entities which make up the "Farm Bureau Family of Companies." The Farm Bureau itself is a membership organization whose major function is to provide legislative, consulting, and other services to the state's farmers; the Country Companies group offers insurance services to the organization's members; Growmark is a feed and farm supply cooperative. These three groups of companies operate under separate managements, but share a common purpose of helping farmers increase their incomes and productivity. They also share a common office building and a single library.

The library, which was established about 22 years ago, has a staff of nine, a book collection of about 23,000 volumes, and 500 periodical subscriptions. Since the budget for the library is shared by the three major IAA companies, it is necessary to maintain extensive records of library activities which show the monetary responsibilities of each company. The need to account to a library committee consisting of representatives of each company forms the basis for most of the library's data gathering and compilation activities.

As the companies and the library have grown, the activities of the library have become more diversified, and it has therefore been necessary to increase the amount of statistical data gathered. Ms.

Olson's response to the survey questionnaire indicates that seventeen separate items of data are tabulated on a regular basis, and two on an occasional basis. According to Ms. Olson, one of the hazards of diversification is that the organization's management tends to believe that the reported statistics represent all library activities, which is increasingly less true.

Ms. Olson identifies reference statistics as most important, "since in a special library reference is our biggest and most important service." As a result, a refined method of analyzing reference transactions based on their "weighted-time-value" has been developed. This approach is based on the assumption that the length of time it takes to answer a reference question is an indicator of the difficulty of the reference question. Questions are broken down according to a number of time categories, each of which is assigned a weight; the weighting factor increases as a function of the amount of time required to supply an answer. The form used for gathering reference data is reproduced as Figure 5, and the scaling factor currently in use for the weighted-time-value is reproduced in Table 3. The library's report to management includes not only a count of the total number of reference questions asked, but also of the total weighted-time-value of those questions and the total number of persons asking questions.

As a means of validating the weighted-time-value approach to reference statistics, a study was conducted during 1982 in which staff members appraised the amount of expertise required to answer reference questions, and a point value was assigned to each transaction on that basis. Comparison of the results of that study with the

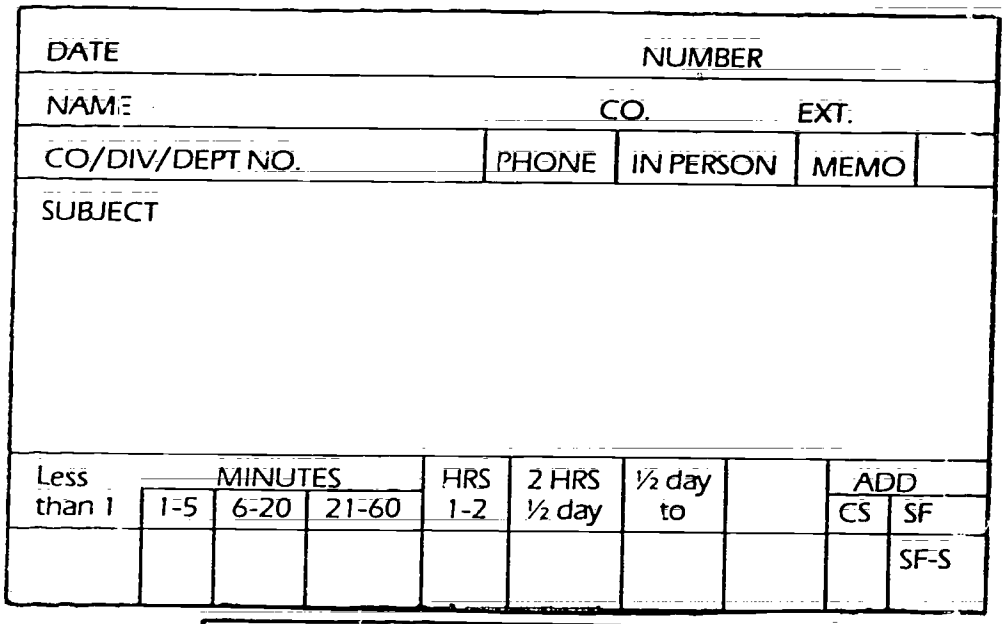
TABLE 3: WEIGHTED-TIME-VALUES USED BY IAA AND AFFILIATED COMPANIES LIBRARY

Length of Time Spent on Question	Points	
Less than one minute	1	
1 to 5 minutes	2	
6 to 20 minutes	4	
21 to 60 minutes	12	
1 to 2 hours	24	
2 hours to 1/2 day	32	
1/2 day or more	32	for each 1/2 day
Add for:		
Computer search	10	
Use of subject file	6	
Subject file search	18	

weighted-time-value approach revealed a very close correlation between the two methods, indicating that the time spent answering a question can be successfully used as an indicator of the difficulty of the question.

Routing of periodicals is also an important service, and statistics on routing have been kept since the library was founded, as one measure of volume of use. An automated system for maintaining routing lists has been developed for use on the organization's Wang minicomputer; this system includes the ability to generate statistics on routing activities.

FIG. 5: CARD USED FOR COLLECTION OF REFERENCE DATA IN IAA AND AFFILIATED COMPANIES LIBRARY



DATE NUMBER

NAME CO. EXT.

CO/DIV/DEPT NO. | PHONE | IN PERSON | MEMO |

SUBJECT

Less than 1	MINUTES 1-5	6-20	21-60	HRS 1-2	2 HRS ½ day	½ day to		ADD CS	SF
									SF-S

Day of Week
1 MO
2 TU
3 WE
4 TH
5 FR
6 SA or SU

Time of Day
1 8-8:15
2 8:15-9
3 9-11
4 11-1
5 1-3
6 3-4:30
7 4:30-

Question type
1 Directional - Where is
2 Reference

Action taken
1 Directions
2 Information on policy
3 Other help
4 Recommendation (inter-company source)
5 Use (by staff of inter-company source)
6 Interpretation
7 Instruction
8 Referral (outside library)
9 Copying

Reference Type
1 Do you have?
2 Spelling or definition
3 Address or phone number
4 Biography
5 Statistics
6 Information on specific subject

Sources Used
1 None used, personal knowledge
2 Card catalog
3 KRIS
4 Abstracts/indexes
5 Bibliographies
6 Reference books
_____
7 Specialized reference books-Encyclopedia, dictionary, atlas
8 Series
_____
9 Books/Pamphlets
_____
10 Periodicals/Newspapers
11 Phonefiche
12 Computer search
13 Subject file folder
14 Subject file search
15 Knowledgeable non-librarian
16 Trips to ISU
17 Interlibrary loan
18 Other

Person(s) Assisting

3

Ms. Olson does not consider circulation of library materials a very useful measure of library performance, since the focus of the IAA Library is on telephone reference and in-library use of materials. She believes it would be useful to be able to count in-library use, and has counted users, but has not been able to devise an accurate way of determining which materials are being used. She reports that one division of the organization is "on a campaign to get people to do their own research in the library," apparently as an economy measure. Ms. Olson feels that this is evidence that management does not really understand the nature of library service, since the cost of acquiring and processing materials is the same regardless of whether the materials are circulated or used in the library.

In addition to the usage statistics which are kept on an ongoing basis, occasional surveys have been conducted as a means of assessing overall satisfaction with the services offered by the library, or of appraising individual services such as the library's monthly acquisitions list. Ms. Olson feels that such surveys are valuable, but that they must be kept simple and direct if they are to be successful.

For the most part, the statistics collected by the library staff include not only the number of uses of a particular service, but also, at the request of the library committee, the number of users. This allows for the determination of what proportion of the total staff of the organization and of the individual companies actually utilize the library and its services. Ms. Olson estimates that 25% of the organization's 2,000 employees could be classed as "regular" users.

Compiling such data also makes it possible to determine whether certain companies or departments appear to be underutilizing given services. Workshops and orientation sessions emphasizing such services are employed as a means of encouraging their use.

Many of the data-gathering forms used by the library serve nonstatistical as well as statistical purposes. The form used for collecting data on reference questions, for instance, can also be used to determine weaknesses in the library's resources; if a relatively large number of questions in a given subject area require referral to external sources, it may be desirable to increase the library's holdings in that area.

Although most of the processing of statistical data is done by hand, certain procedures have been computerized, including data on routing and subscriptions. Preliminary efforts at computerizing other data, such as reference transactions, have been made, but the availability of programming assistance is limited and more extensive automation will probably not be initiated in the near future.

Ms. Olson's recommendation to others is that they let the circumstances of their budget and management demands determine the need to keep statistics. "A person would have to keep a certain amount of statistics," but simpler budget arrangements should require less data. She also predicts, however, that "as the library grows, the need for statistics will grow along with it."

As mentioned in section 4 of this report, the most frequently cited use for statistical data was for reports to management; the IAA and Affiliated Companies Library seems to be typical in this aspect.

The majority of the data kept are kept specifically for purposes of dividing the library's budget among the companies it serves. What makes this library a particularly good example is the thought and planning that have gone into the selection of the data to be collected and the emphasis on making those data serve multiple purposes. Although the number of statistics kept is relatively large, the emphases are nonetheless on keeping the least data possible and deriving the largest good from the statistics kept.

6 Conclusion

This survey indicates that special libraries in Illinois are for the most part heavily involved in the collection of statistical data. There is evidence to suggest, however, that the collection of such data is not always purposive or meaningful. A number of respondents provided no indication of the reasons for which data were kept, even though they did indicate collecting data of one or more kinds; when some of these were contacted by telephone, they were still unable to supply a description of the uses made of the data they collected. One respondent's reply that "we keep it in case we ever need it" is typical. There seems to be a common belief that certain kinds of data, such as circulation and reference question counts, must be collected even if they are put to no immediate use. Obviously the individual needs of each library should dictate what data should be kept for what purposes. The effective collection and utilization of statistical data requires much planning, review and, especially, time. Since time is a

valuable commodity in most libraries, it is important to be certain that any and all data gathered are collected for a purpose, and that the data do in fact serve that purpose.

The responses to this survey indicate that special libraries in Illinois are for the most part interested in public services statistics. The average respondent regularly kept records concerning 3.4 technical services measures and 6.4 public services measures. The majority of the additional measures listed in Table A4 are related to public services. This implies that public services measures are of more importance to special libraries than are technical services measures. Technical services statistics tend to be input-oriented, dealing with activities which reflect the actual performance of the library in an indirect manner if at all. Since the major reason for collecting statistical data in special libraries seems to be the justification of the library's activities to the administration of the organization served, one might expect measures of output and service to be of more importance than measures of input. Public services measures, however, are not so easily identified or measured as are technical services measures. Very few additions to the list of six technical services measures were provided by respondents to the survey questionnaire, and most of these six measures were kept by a majority of the respondents. Very few of the public services measures listed on the questionnaire were kept by a majority of the respondents, and a large number of public services measures not listed on the questionnaire were volunteered by respondents. It seems, then, that public services measures are both more important than and less

clear-cut than technical services measures.

There is also a definite tendency to record only those data that are easily collected. The measures kept by a substantial number of respondents were almost without exception those which required a minimum of analysis and which would yield only raw counts of data, or which could easily be compiled by counting entries in some exising record such as a serials check-in file or a shelf list. This tendency to count mostly those things which are readily countable is certainly not unique to special libraries.

A thorough analysis of the usefulness of various kinds of statistical data or of the procedures for gathering, analyzing and presenting data is beyond the scope of this report. The Selected Bibliography in Appendix 3 may provide a starting point for a more in-depth study of these issues. Although the analysis presented here is necessarily incomplete, it does show that special librarians in Illinois are involved to a considerable degree in the collection and use of a wide variety of statistical data. That the average number of years for which such data have been collected is only 6.7 suggests that the concern for quantification may be a relatively recent one, perhaps arising from changes in the economic status of the organizations served by special libraries. The fact that many special librarians are newcomers to the gathering and use of statistics also may explain the wide variety of approaches taken and measures used. At any rate, the popular notion that special librarians are not interested in statistics appears to be a myth.

Appendix 1: Survey Questionnaire

ID no. _____
(ISL use only)

Illinois State Library, Springfield, IL 62756

Performance Measures Survey: Statistics Kept by Special Libraries Which Are Affiliate Members of Library Systems

(Please complete and return this survey by no later than February 1, 1982.)

1. Name of organization: _____

2. Full address: _____

_____

3. Name of your regional Library System: _____

PART ONE

Below are listed several types of statistics and/or measures of performance which are kept in some libraries. Circle the number 1 opposite each measure which your library presently keeps on a continuous basis. Circle the number 2 opposite each measure which your library kept for one or more sample periods of time in the last year. Circle the number 3 opposite each measure which you do not use at all; count here statistics available from computer files but not actually produced or used. If you keep a type of statistics not shown, describe it briefly under "Other Measures" (lines 26-27), and circle number one or two as appropriate.

4-9. Technical Services	Keep Regularly	Collect Occasionally	Do Not Keep	
Number of -				
4. Items ordered	1	2	3	4
5. Items received	1	2	3	5
6. Items cataloged	1	2	3	6
7. Items withdrawn	1	2	3	7
8. Items in the library's collection	1	2	3	8
9. Periodical titles currently received	1	2	3	9

10-16. Public Services				
Number of -				
10. People using the library	1	2	3	10
11. Items borrowed from the library	1	2	3	11
12. People with books borrowed from the library	1	2	3	12
13. People getting magazines routed to them from the library	1	2	3	13
14. Photocopies made in the library of library materials and by or for patrons	1	2	3	14
15. Photocopies received from other libraries	1	2	3	15
16. Reference questions handled by the library staff	1	2	3	16

17-27. Public Services (continued)

Number of -	Keep Regularly	Collect Occasionally	Do Not Keep	
17. Reference questions analyzed by subject, time spent, type of patron, etc.	1	2	3	17
18. Form letters, preprinted handouts or bibliographies, etc. sent in response to queries	1	2	3	18
19. Computer searches of bibliographic data bases made by the library staff for patrons	1	2	3	19
20. Literature searches made by the library staff for patrons	1	2	3	20
21. Questionnaires to library patrons on any aspect of their use of or opinions on the library or on library service	1	2	3	21
22. Items sent to other libraries on interlibrary loan	1	2	3	22
23. Items received from other libraries on interlibrary loan	1	2	3	23
24. Notices sent to patrons concerning new materials in the library	1	2	3	24
25. Hours spent on any one patron, or project	1	2	3	25
Other Measures (specify):				
26.	1	2	3	26
27.	1	2	3	27

PART TWO

28. Choose any three statistics you presently keep. For each, show in column (a) its line number from above; show in column (b) when you started to keep this type of statistic; and show in column (c) specifically how you use the figures. Please supply us with a copy of the form you use, a compilation of the data for part or all of the last complete year, and any other relevant information (use other side if necessary).

(a) Line No.	(b) Kept Since When?	(c) Specific Uses for the Data

29. Future surveys of Illinois special libraries should concern subjects on which librarians want information. Circle the number(s) at the right hand edge for any topic in the list below which you would like to see the basis of a study (or add your own topic).

a.	The selection of materials for the library	1
b.	The various functions of a special library	2
c.	The division of duties between professional and non-professional staff	3
d.	Budgets, unit costs, expenditures, salaries	4
e.	Interlibrary loans	5
f.	Applications of computers to special libraries	6
g.	. . . . .	7

30. For one or more of these future studies, we may use only a random sample of all affiliate member special libraries. In such a case, it would be feasible to conduct the survey by telephone. Using this present survey as a specific example, would you have preferred to have answered it by telephone, with an advance copy of the questions (if so, circle 1); or would you have preferred to answer a mail questionnaire like this (circle 2); or would either method be equally acceptable to you (circle 3)?

Prefer	
phone	1
mail	2
either	3

31. Name of person answering these questions:

_____ Telephone no.: _____

Thank you for answering this survey. Please return one copy of the completed form to the headquarters of your regional library system.

Appendix 2: Reference Tables

TABLE A1: FREQUENCY WITH WHICH MEASURES ARE KEPT
(NUMBERS IN PARENTHESES ARE PERCENTAGES)

	NUMBER OF RESPONDENTS	KEEP REGU-LARLY	COLLECT OCCAS-IONALLY	DO NOT KEEP
Technical Services Measures				
Number of -				
1. Items ordered	297 (100)	159 (54)	28 (9)	110 (37)
2. Items received	299 (100)	170 (57)	36 (12)	93 (31)
3. Items cataloged	296 (100)	196 (66)	23 (8)	77 (26)
4. Items withdrawn	296 (100)	117 (40)	34 (11)	145 (49)
5. Items in the library's collection	297 (100)	163 (55)	67 (23)	67 (23)
6. Periodical titles currently received	301 (100)	216 (72)	45 (15)	40 (13)
Public Services Measures				
Number of -				
7. People using the library	298 (100)	101 (34)	59 (20)	138 (45)
8. Items borrowed from the library	299 (100)	169 (57)	32 (11)	98 (33)
9. People with books borrowed	296 (100)	96 (32)	25 (8)	175 (59)
10. People getting magazines routed	296 (100)	99 (33)	28 (10)	169 (57)
11. Photocopies made in the library	297 (100)	128 (43)	20 (7)	149 (50)
12. Photocopies received	301 (100)	156 (52)	21 (7)	124 (41)
13. Reference questions handled	301 (100)	142 (47)	53 (18)	106 (35)
14. Reference questions analyzed	298 (100)	54 (18)	56 (19)	188 (63)
15. Form letters, etc.	297 (100)	46 (15)	34 (11)	217 (73)
16. Computer searches	295 (100)	149 (51)	19 (6)	127 (43)
17. Literature searches	301 (100)	150 (50)	34 (11)	117 (39)
18. Questionnaires to library patrons	294 (100)	36 (12)	64 (22)	194 (66)
19. Items sent on ILL	299 (100)	196 (66)	21 (7)	82 (27)
20. Items received on ILL	297 (100)	216 (73)	29 (10)	52 (18)
21. Notices sent to patrons	297 (100)	88 (30)	38 (13)	171 (58)
22. Hours spent on patron or project	301 (100)	48 (16)	53 (18)	200 (66)

TABLE A2: ADDITIONAL MEASURES IDENTIFIED IN RESPONSE TO SURVEY QUESTIONS 26 AND 27

DESCRIPTION OF MEASURE	NUMBER OF RESPONDENTS	
	KEPT REGULARLY	KEPT OCCASIONALLY
Public Services Measures		
Number of -		
1. Audiovisual equipment use, including hardware, software, programs, routing, circulation and previewing	14	1
2. User characteristics/use by type of use or user group	10	1
3. Time required to fill interlibrary loan requests	9	1
4. Use by subject/type of material/title	9	3
5. Requests made, by mode of inquiry/general use of telephones	9	1
6. Special products of the library, including literature searches, current awareness publications, databases, etc.	7	0
7. Overdue notices sent/items overdue	3	0
8. Volumes shelved/reshelved	3	0
9. Time spent on user orientation/education/tours, etc.	2	0
10. Periodical titles routed	2	0
11. Books purchased for individual use	2	0
12. Circulations per user	2	0
13. Fees paid for interlibrary loan	1	0
14. Time users spend in library	1	0
15. Registrations of users from outside the organization	1	0
16. In-house collection use	1	0
17. Items scanned	1	0
18. Libraries to whom reference questions are referred	1	0
19. Messages delivered	1	0
20. Searches for in-house lab reports	1	0
21. Reference questions referred to another source	0	1

TABLE A2, CONTINUED

Technical Services Measures		
Number of -		
22. Preprints from journals	2	0
23. Expenditures for acquisitions	2	1
24. Items bound/sent to bindery	2	0
25. Items abstracted/indexed	2	0
26. Items subjected to conservation treatment	1	0
27. Additions/holdings of materials other than books and periodicals	1	0
28. Card sets made for library additions	1	0
29. Catalog card additions/deletions	1	0
30. Catalog records retrospectively converted	1	0
31. Time from order of materials to receipt	1	1
32. Items donated to the library	1	0
33. Materials processed for other departmental units or libraries	1	0
Other Measures		
Number of -		
34. Trips to other libraries and time spent on such trips	2	0
35. Expenditures for individual projects	1	0
36. Revenue from library activities	1	0
37. Company paid memberships	1	0
38. Hours worked/hours spent, by type of activity	1	1
39. Total expenditures	1	1
40. Meetings attended	1	0
42. Postage paid	1	0
43. Correspondence	1	0

TABLE A3: MEASURES KEPT REGULARLY BY AT LEAST 50% OF THE RESPONDENTS

MEASURE	NUMBER/PERCENT
1. Items received on ILL	216 (73)
2. Periodical titles received	216 (72)
3. Items cataloged	196 (66)
4. Items sent on ILL	196 (66)
5. Items received	170 (57)
6. Items borrowed	169 (57)
7. Items in collection	163 (55)
8. Items ordered	159 (54)
9. Photocopies received	156 (52)

TABLE A4: MEAN NUMBER OF MEASURES KEPT, BY EACH OF FIVE MAIN VARIABLES

MEAN NUMBER OF	PROFIT/NOT-FOR-PROFIT STATUS		MAJOR SUBJECT AREA					SIZE OF PRIMARY CLIENTELE		STAFF WITH MLS		PERSON TO WHOM LIBRARIAN REPORTS			ALL RESPONDENTS
	1	2	1	2	3	4	5	1	2	1	2	1	2	3	
1. All Measures															
kept regularly	8.1	11.0	8.3	9.6	9.0	7.3	12.2	8.5	11.5	9.8	10.1	9.9	10.2	10.0	10.0
kept occasionally	2.9	2.7	3.3	3.3	2.8	2.0	2.4	2.7	2.8	2.7	2.8	2.8	2.9	2.6	2.8
2. Technical Services Measures															
kept regularly	2.6	3.8	3.0	2.6	3.2	2.5	4.2	3.0	3.8	3.6	3.2	3.4	3.3	4.8	3.4
kept occasionally	0.8	0.7	1.0	1.1	0.7	0.3	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.4	0.8
3. Public Services Measures															
kept regularly	5.3	6.9	5.1	6.8	5.5	4.7	7.8	5.4	7.4	6.0	6.6	6.3	6.8	5.2	6.4
kept occasionally	2.0	1.9	2.3	2.2	2.1	1.6	1.7	1.8	2.1	1.9	2.0	2.0	2.1	1.2	2.0

Key:

Profit/Not-For-Profit Status -- 1=For-Profit; 2=Not-For-Profit
Major Subject Area -- 1=Technology; 2=Business; 3=Social Sciences & Humanities; 4=Law; 5=Medical
Size of Primary Clientele -- 1=Less than 250; 2=250 or more
Percent of Staff with MLS -- 1=Less than 1 FTE; 2=1 FTE or more
Person to Whom Librarian Reports -- 1=Upper Management; 2=Middle Management; 3=Other

TABLE A5: MEAN NUMBER OF YEARS SELECTED MEASURES HAD BEEN KEPT BY EACH OF FIVE MAIN VARIABLES

PROFIT/NOT-FOR-PROFIT STATUS		MAJOR SUBJECT AREA					SIZE OF PRIMARY CLIENTELE		STAFF WITH MLS		PERSON TO WHOM LIBRARIAN REPORTS			ALL RESPONDENTS
1	2	1	2	3	4	5	1	2	1	2	1	2	3	
5.8	7.2	7.6	6.3	6.4	2.5	7.2	5.7	7.8	6.5	6.8	7.3	6.1	2.8	6.7

Note: For key to codes, see Table A2.

TABLE A6: USES OF STATISTICS IDENTIFIED BY THE RESPONDENTS

	CATEGORY	NUMBER OF RESPONDENTS
1.	Report to management	130
2.	Financial and budgetary concerns Budget control Billing/Charge-back/Detailed breakdown of expenditures Verification of bills received Determination of monetary value of use of external resources Justification of resources Vendor evaluation	122
3.	User and use analysis User analysis Service/library/collection use Service evaluation Comparison with other libraries Use by ILL source/requestor	84
4.	Collection analysis and inventory Collection evaluation, development, selection Inventory	67
5.	Report to external agency (consortium, network, funding body, insurance company, accrediting body, etc.	49
6.	Personnel considerations Staffing patterns and work load analysis Staff evaluation	18
7.	Miscellaneous Establishment of goals and objectives To answer questionnaires	14
All Uses		301

Note: The figure for "all uses" does not represent the sums of the individual categories, since a given respondent could report more than one use.

TABLE A7: USES FOR STATISTICS KEPT, BY EACH OF FIVE MAIN VARIABLES

CATEGORY OF USE	PROFIT/NOT-FOR-PROFIT STATUS		MAJOR SUBJECT AREA					SIZE OF PRIMARY CLIENTELE		STAFF WITH MLS		PERSON TO WHOM LIBRARIAN REPORTS			ALL RESPONDENTS
	1	2	1	2	3	4	5	1	2	1	2	1	2	3	
Report to management	37 29%	93 72%	31 24%	17 13%	25 19%	6 5%	51 39%	61 47%	69 53%	38 39%	92 71%	79 65%	42 34%	1 1%	130 100%
Financial and budgetary concerns	53 43%	69 57%	35 29%	18 15%	13 11%	10 9%	46 38%	61 50%	61 50%	42 34%	80 66%	67 60%	42 38%	2 2%	122 100%
User and use analysis	30 37%	52 63%	22 26%	13 16%	12 14%	5 6%	32 38%	45 34%	39 46%	24 29%	60 71%	49 63%	29 37%	0 0%	84 100%
Collection analysis and inventory	24 36%	43 64%	17 25%	3 5%	10 15%	10 15%	27 40%	38 57%	29 43%	24 36%	43 64%	41 68%	17 28%	2 3%	67 100%
Report to external agency	4 8%	45 92%	1 2%	1 2%	9 18%	0 0%	38 78%	24 49%	25 51%	25 49%	24 49%	27 57%	19 40%	1 2%	49 100%
Personnel considerations	5 28%	13 72%	6 33%	1 6%	4 22%	0 0%	7 39%	10 56%	8 44%	7 39%	11 61%	8 57%	5 36%	1 7%	18 100%
Miscellaneous	3 21%	11 79%	5 36%	1 7%	1 7%	0 0%	7 50%	6 43%	8 57%	5 36%	9 64%	7 54%	5 39%	1 8%	14 100%
All respondents	112 38%	187 63%	76 25%	36 12%	55 18%	22 7%	112 37%	159 53%	142 47%	117 39%	184 61%	178 64%	94 34%	5 2%	301 100%

Note: For key to codes, see Table A4.

TABLE A8: USES FOR STATISTICS KEPT, BY TYPE OF MEASURE

CATEGORY OF USE	TECHNICAL SERVICES MEASURES	PUBLIC SERVICES MEASURES			ALL MEASURES
		ANALYZED	UNANALYZED	TOTAL	
1. Report to management	54	37	116	118	130
3. Financial and budgetary concerns	55	44	105	115	122
3. User and use analysis	35	32	77	83	84
4. Collection analysis and inventory	35	18	58	63	67
5. Report to external agency	16	13	49	49	49
6. Personnel considerations	11	8	16	18	18
7. Miscellaneous	10	6	8	11	14
All Uses	120	82	219	237	301

Note: The figures for "all measures" do not represent the sums of the individual subcategories, since a given respondent could report use in more than one subcategory. Similarly, the figures for the total number of public services measures do not equal the sums of "analyzed" and "unanalyzed" public services measures.

Appendix 3: Selected Bibliography

Basic Library Management for Health Science Libraries. Chicago: Midwest Health Science Library Network, 1975.

Brown, Maryann Kevin. "Library Data, Statistics, and Information: Progress Toward Comparability." Special Libraries 71 (1980): 475-484.

ILDS/ILLINET Route Directory. Springfield, Illinois: Illinos State Library, 1981.

Koenig, Michael. "Budgets and Budgeting." Special Libraries 68 (1977): 228-240.

Kok, John. "Now That I'm In Charge, What Do I Do? Six Rules About Running a Special Library for the New Library Manager." Special Libraries 71 (1980): 523-528.

Kramer, Joseph. "How to Survive in Industry: Cost Justifying Library Services." Special Libraries 62 (1971): 487-489.

Lancaster, F. W. The Measurement and Evaluation of Library Services. Washington: Information Resources Press, 1977.

Library Data Collection Handbook: Contractor's Report. Washington: National Center for Education Statistics, NCES 81-210, 1981.

Matarazzo, James M. Closing the Corporate Library: Case Studies on the Decision-Making Process. New York: Special Libraries Association, 1981.

Oldman, Christine. "Demonstrating Library Value: A Report of a Research Investigation." In Studies in Library Management, Vol. 7, pp. 117-143. Edited by Anthony Vaughan. London: Clive Bingley, 1982.

Randall, Gordon E. "Randall's Rationalized Ratios." Special Libraries 66 (1975): 6-11.

Rosenberg, Kenyon C. "Evaluation of an Industrial Library: A Simple-Minded Technique." Special Libraries 60 (1969): 635-638.

A Sampler of Forms for Special Libraries. New York: Special Libraries Association, 1982.

Strain, Paula M. "Evaluation by the Numbers." Special Libraries 73 (1982): 165-172.

Wallace, Danny P. 1981 Survey of Illinois Special Libraries. Illinois Library Statistical Report No. 2. Springfield, Illinois: Illinois State Library, 1982.

Wender, Ruth W. "The Procedure Manual." Special Libraries 68 (1977): 407-410.