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This report contains a series of recommendations for a uniform statistical report system for Pennsylvania public libraries, based on the assumption that many of the procedures in library work can be quantified in a meaningful manner. The types of data needed for the Commonwealth, individual library use, local reporting, and for research purposes are considered, and emphasis throughout the entire reporting system is on data that is meaningful to an informed lay group. Recommendations cover: classification of libraries, population served, cardholders, characteristics of the collection, reference material and questions, periodicals, staff, physical facilities, financial reporting, extension and school service, federated and county systems, and well-researched special reports emphasizing textual interpretations of statistics to be undertaken by the State Library. Regular reporting of circulation data is not recommended. Appended are notes on use of the reporting system for extension service statistics, the methodology used for the report, and a sample list of columnar headings for a state statistical report on public libraries. (JB)

A STATISTICAL REPORTING SYSTEM FOR LOCAL PUBLIC LIBRARIES

by KENNETH E. BEASLEY

PENNSYLVANIA STATE LIBRARY
MONOGRAPH No. 3

A STATISTICAL REPORTING SYSTEM FOR LOCAL PUBLIC LIBRARIES

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THE PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY PARK, PENNSYLVANIA. 1964

PENNSYLVANIA STATE LIBRARY MONOGRAPHS, No. 3

Pennsylvania State Library Monographs

1. Library service in Pennsylvania, present and proposed. Lowell A. Martin. 2 volumes. 1958.

2. A study and recommendations of library districts for Pennsylvania. Kenneth E. Beasley and Carl E. Robinson. 1962.

This is the third in the Pennsylvania State Library's Monograph series on practical problems in librarianship. The first was Lowell Martin's two volume *Library Service in Pennsylvania: Present and Proposed* and the second was Kenneth E. Beasley's *A Study and Recommendations of Library Districts for Pennsylvania.* Several other studies are in progress at present.

This report was undertaken by the Institute of Public Administration, The Pennsylvania State University under the direction of Dr. Kenneth E. Beasley, formerly Associate Professor of Political Science and Public Administration at the University. Dr. Beasley has since taken the post of Director of Research for the Legislative Council of the State of Kansas.

Although designed for Pennsylvania, we believe this report will be of interest to the profession at large. Dr. Beasley has taken a creative approach to the selection and use of library statistics. We are indebted to him and to the many librarians over the state who cooperated in this project.

Ernest E. Doerschuk, Jr.
Acting State Librarian

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FOREWORD

This study is the third to be conducted and published in the effort to up-grade Pennsylvania's public libraries so as to prepare them for the next decade.

These studies have been conducted for a variety of reasons. For one, a thorough and effective study makes the case for change sometimes when statements based on opinion, no matter how firmly held, do not. The study, properly accomplished and effectively publicized and employed, presents a line of reasoning and the facts on which the reasoning is based. It tends, thus, to reduce potential areas of misunderstanding — or, at least, to identify and restrict the areas of conflict. Carried out by persons experienced in research and able to produce generalizations from accumulated data rather than from habit or prejudice, reports such as these may significantly alter the course of librarianship. Anyone who looks seriously and without prejudice at the statistics of library service of all kinds cannot help but be convinced of the need for change.

Another reason for conducting and publishing studies such as this and the preceding two is that every sizable library has a responsibility to add to the store of objective data about librarianship. The practice of librarianship is too often based on rather arbitrary opinions rather than on tested hypotheses. Only as we accumulate a large body of objective studies will we be able to move from copying the solutions worked out as administrative problems in particular libraries toward the development of a coherent theory and practice of librarianship.

Very soon after The Library Code of 1961 was passed by the General Assembly of Pennsylvania, Doctor Beasley and I conferred on the prospect of his engaging in a study which might lead to the development of a system for the eventual evaluation of the program. One can expect legislative review of such a new and experimental program as set forth in The Library Code after a few years of operation. This study resulted from that conference, as did certain other study topics. The report deserves to be read and contemplated over a period of time by librarians especially in Pennsylvania, but also elsewhere. It represents the effort of a skilled and sensitive political scientist to bring this point of view to bear on a problem of public library administration.

Ralph Blasingame, Jr.
Associate Professor of Library Services, Rutgers, the State University; formerly Pennsylvania State Librarian

Harrisburg
January, 1964

INTRODUCTION

This manuscript contains a series of recommendations for a uniform statistical reporting system for Pennsylvania public libraries. Because the librarians have prepared and disseminated a wide variety of statistics in the past thirty years, there has been a great deal of previous experience and experimentation on which to base these recommendations. Some of them, therefore, are rather obvious and normally would not be challenged as an essential element in any reporting system. Some of the others, though, are a product of a much different line of thinking; they will probably be controversial and may need modification as they are tested. The recommendations greatly reflect my conviction that many of the practices and procedures in library work can be quantified in a meaningful manner. The Cost of Living Index prepared by the Department of Labor and the Benefit Ratio computed by the Corps of Engineers for hydro-electric projects are examples of complex statistical computation which are accepted for social decisions. These are much more complex than the activities of most library programs. This is not to deny that one can go too far in trying to quantify; I hope this error has not been made in the following report.

A change in statistical reporting systems is always approached cautiously by members of the profession. Some of the members feel more comfortable with an existing system because they have intuitively learned to adjust mentally to the statistics so that they are meaningful, even though on the surface they are misleading. At the same time, as new methodology is perfected, it should be accepted. Again, it is hoped that the recommendations in this report constitute a reasonable balance between the new and the preservation of the old.

At the present time there is a nation-wide study of statistical reporting with an orientation toward establishing standard definitions for some library terminology. For the most part, the results of this particular study will not affect the recommendations in this report but will actually make some of the recommendations more precise and meaningful.

A venture of the magnitude attempted here obviously could not be completed alone. Many librarians in the Commonwealth patiently listened to and answered questions that often showed the naivete of the author. The staff of the State Library constructively criticized many ideas I offered while at the same time showing an interest and offering encouragement. For this assistance, their reward unfortunately is only in that nebulous concept of "psychic income." Specifically, though, I must note the assistance of Mr. Ernest DeProspo who worked formally as graduate research assistant but whose contribution to the research clearly entitles him to be called a colleague.

PART I / PURPOSE OF COLLECTING STATISTICS

"Would you tell me, please, which way I ought to walk from here?"

"That depends a great deal on where you want to get to," said the Cat.

"I don't much care where," said Alice.

"Then it doesn't matter which way you walk," said the Cat.

". . . . . so long as I get somewhere," Alice added as an explanation.

"Oh, you're sure to do that," said the Cat, "if you only walk long enough."

Alice's Adventures in Wonderland

A mark of modern American civilization is the extensive use of statistics. There is almost an obsessive desire to learn more about a social phenomenon, to speculate on ramifications if certain things are true, and even to collect data out of curiosity to see if anything significant can be found. Sometimes this obsession results in new ideas and procedures which can be considered economically and socially useful. At the same time, it sometimes produces a bureaucratic administration which collects data just to have it available — as if large amounts of data were a bastion for protecting the decision maker. How to maximize the first result and minimize the impact of the second one is crucial in all plans of statistical reporting.

In administration, as in research, statistics perform a special function. In the first place, they constitute a special language to describe programs. They often show relationships clearly and more easily than words, and changes in the social scene do not affect their meanings.[1] Most important, statistics have emotive meanings only insofar as a reader feels impelled to create and use them. Statistics, in fact, constitute such a neutral and dispassionate language that they are often criticized for being too mechanistic and not reflecting the social and psychological values which give substance to individuality. This kind of criticism is valid if the statistics are presumed, improperly, to provide the final answer rather than describing factors and their relationships.

Librarians are great users of the statistical language, and, as a survey of annual reports and budgets clearly reveals, are even quite willing to allow this language to be the major method of communication to members of library boards and the public: Circulation figures are quoted proudly to show the use of the library, and by implication its value to the community. The book stock is reported in quantitative terms with an implied assumption that only quality items were acquired. The number of borrowers (cardholders) is cited to show wide participation by the community in the library program, and hence its social value. The stewardship of the administration during the year is also described in such terms as number of new books added, the upkeep of the building, and the activities which could not be accomplished with the limited budget. Standards of good library service are also couched in this statistical language: number of books per person, hours open, size of professional staff, and square feet of floor space. When queried about the meaning of these stand-

1. For example, "branch," "station," and "outlet" are now used interchangeably by many libraries, although at one time their definitions connoted specific types of service. The words "library service" themselves not only mean different things now as compared to the 1930's, but even within the profession there is and has been a lively discussion about the elements that are involved. In contrast, smaller units like "square feet of floor space," "number of periodicals listed in certain indexes," and "number of persons on a staff with a graduate degree in library science" are capable of rather precise definitions and can be applied to the 1930's or 1960's to describe what library service included.

ards, the formulators always stress their attainment is not necessarily evidence of the maximum quality possible. Although rarely stated bluntly in the literature, what is meant is that the *probability* of a library having "quality" is greater if it meets the standards than if it does not. A way in which to describe this probability, then, is a second function of statistics in administration.

Although librarians use statistics extensively, they do not utilize the same statistical symbols to describe the same program or event; and, moreover, do not agree on which symbols are important. Despite the fact that nearly all states, and the Library Service Branch of the U.S. Department of Health, Education and Welfare print statistical reports on local library service, the data is of little value if a person wants to determine differences or similarities among states. This failure to develop uniform reporting almost suggests a parochial feeling that the people of each state are trul, unique, a position which is hardly defensible in light of modern sociological and psychological knowledge. Even within a state, uniform symbols are not widely accepted.[2] As a result of these differences, one feels after reading a number of library reports that he is dealing with a *group* of languages which have a common origin but which are sufficiently different that communication is possible only after study. This may explain why significant national figures are not available. At least, one is impressed that national library service is "handled" in two or three pages in the *Municipal Year Book* and one page in the *U.S. Statistical Abstract*.[3]

This report, it is hoped, will offer some guides for stressing common elements and developing some new approaches acceptable to all the "dialects." While written primarily for Pennsylvania libraries, there is no evidence that the problems or solutions are limited to them. Pennsylvania libraries are an integral product of the national library movement.

ASSUMPTIONS AND RESEARCH METHODOLOGY

Any recommended statistical reporting system is based on a series of assumptions and, hopefully, sound research which the reader must understand in order to follow the reasoning behind specific suggestions. At this point, therefore, a short discussion of these is in order.

Data Must Measure Something

The basic reason for requiring the submission of any statistical data for use in a comparative report is that they describe or measure some specific characteristic, in this case a characteristic of a library program. Although it would be helpful, the data need not reveal the ideal or even establish a norm as long as they describe the characteristic precisely and in a consistent and logical manner so that some method of ranking can be developed by the professional librarian which will show such points as "good" or "excellent" or "acceptable."[4] A particular statistic or system of statistics does not need to reflect (and in most social phenomena cannot) all of the possible variations in a characteristic as long as the overall picture is accurately portrayed. For example, the value of some library statistics is in the depictment of library service in an entire state or region and not in the detailed description of the program of any one library. Indeed, if the statistical system is developed properly, there are special statistical tools (e.g., probable error and deviation) to help describe whether the features of the picture are blurred or sharply defined.

2. As an example, compare the reports of California, Ohio, New York, and Michigan. For illustrations within Pennsylvania, see *A Study and Recommendations of Library Districts in Pennsylvania,* Kenneth E. Beasley and Carl Robinson, Institute of Public Administration, The Pennsylvania State University, 1962.

   There is a great deal of literature on library statistics, but most of it contains pleas for better statistics rather than careful research to show what should be done. This may be due to doubts about the need for research as expressed in *Practical Administration of Public Libraries,* Joseph Wheeler and Herbert Goldhor. (New York: Harper and Row, 1962) p. 132. Some very good research was done in the 1930's and early 1940's.

   A special national research project is now underway, under financing from the American Council on Library Resources, to develop uniform definitions for library statistics. Its results will supplement this study which concentrates on the kind of data that should be collected. If a set of national definitions are eventually accepted by the profession, they could be applied easily to the recommendations in this report. The Library Science School of the Drexel Institute of Technology is also conducting a related study entitled "Method Study of Small Libraries."

3. There are, of course, other sources of library data, *e.g.,* U.S. Office of Education and salary statistics compiled by the Enoch Pratt Library.
4. For an individual library, comparisons are nearly always made on a historical basis.

Types of Data

From an examination of individual library programs and general professional literature, it is clear that four types of statistical data must be considered. First, there is that data which the Commonwealth needs in order to administer a state-wide program. Included in this category is information for decisions on state-aid, proper use of funds, and trends in library development. Second, certain data must be kept internally by individual libraries in order to facilitate daily decision-making. Although the form of this kind of data varies a great deal, there is apparently a marked agreement within the profession about the need for certain basic items. Third, some statistics are necessary for local public reporting; these often are highly individualized in the sense that they have special meaning for a particular community. An example would be the number of school classes that visited the library or the number of gift books received from a community club. Fourth, certain data must be collected for research purposes. Even though some statistics in this category are difficult to prepare and appear from an individual library's point of view to be senseless, the library profession has a responsibility to the public to explore in greater depth its contributions as a public program and how the contribution can be maximized with a given amount of resources. Research data are also essential if new entrants into the profession are to do more than mimic the actions of their elders.[5] Notwithstanding their importance, research data do not necessarily take precedence over the operation of a program. Information certainly should not be collected unless there is a serious intention to use it; and it should be as much as possible a by-product of the other three types.

Each of the four types of statistical data has special functions, but at the same time they are interrelated and should be viewed collectively as elements of a total statistical system. If the total system is properly devised, inclusion of any one of the four types should not constitute a significantly added administrative cost for any library, but its omission would mean a serious gap in the knowledge of the public and the library profession.

5. Unfortunately, antiquated administrative systems often provide the best data. The old "Newark charge-out system," for example, is almost unexcelled for studying the characteristics of patrons and book use. The problem of getting reliable data from streamlined administrative systems is well illustrated in *Patterns in the Use of Books in Large Research Libraries,* Herman H. Fussler and Julian L. Simon. (Chicago: University of Chicago Library, 1961, 283 pp.)

Responsibility of the State Library

Gathering and reporting data are not obligations of local librarians alone. A state has corresponding obligations to advise librarians about procedures and the possible uses of data *and,* even more important, to support them with central services for compiling and analyzing the statistics. Given the recent advances in automatic data processing, this means designing and developing a statistical system predicated on the submission of raw data by local libraries which is then refined and printed centrally by computers.[6] Collecting raw data without checking for accuracy or using them, as a number of states apparently do, is an empty exercise which adds nothing to the total fund of knowledge. Centralized service is particularly meaningful for compiling research data which librarians can use for internal administration but which an individual library could prepare in only unusual situations.

Three Year Plan

Because of the wide variety of current practices, any system of uniform statistical reporting will require changes in local procedures. For some libraries, basic changes will be necessary, including the collection of more data than is the practice now. Others may find they are collecting too much and can reduce the expenditure devoted to this function. Regardless of which extreme is involved, it is assumed in this report that implementation of uniform reporting should be gradual over a period of at least three years. This interim period will allow an opportunity for discussion and for librarians to examine their internal administrative structure as it relates to the development of statistical reports.

Standard Definitions

The most difficult part of establishing a reporting system is formulating definitions and outlining the style of the standard forms. In the first place, both are clear manifestations of change which will meet with resistance, particularly when a librarian sees for the first time how his or her program compares with those of neighboring librarians, or begins to visualize the difficulty of explaining a new system to the local board.

6. In terms of the scope of the following recommendations, the data for all libraries can be punched on two or three cards for each library in approximately 20 hours; and in 30 minutes a printed version of them can be prepared for offset reproduction. Special computations such as percentages and index numbers can be processed from the original cards in almost a correspondingly short time.

The definitions pose a problem also because they can be formulated only after a basic philosophical question is answered: To whom should the data be addressed: the public or the librarian? Unfortunately, the tendency in American culture is to resolve such an apparent conflict by saying "both." Clarity and simplicity as a result are all too often sacrificed. The recommendations in this report, in sharp contrast, are based on a conviction that statistics should be collected primarily in a form meaningful to the citizen and that professional librarians can make any necessary adjustments for administrative purposes easier than the public can make the reverse adjustment. In some instances, such as classification schedules for personnel, administrators need more detail than the public demands. Where this occurs, special research reports should be prepared.

Is there any justification to this approach (which carries the implication that formulating definitions is a mechanistic process once the philosophical questions are answered) other than a person's conviction? Within the short space available in this report, note can be made of the public character of the library profession. Librarians are more than custodians of property or technicians trained to store and locate information. Within a given community, they determine in many cases what ideas (and the form) will be readily and easily disseminated to all individuals on an equal basis. At the same time, the librarian is not the Platonic philosophic king who by definition makes superior decisions. The individual whose intellectual curiosity is being developed by the librarian's selection of material for the library is developed even further when he participates in the decision-making process. Before he can do this, though, within a 20th century concept of rationality he must be supplied (as in other areas of his life) with the information precedent to a sound decision. Pursuing this reasoning even further, he should have access to a descriptive and critical statement of administrative action as well as professional attitudes. A secure profession will provide this information on its own initiative.

Statistical Concepts of Quantity and Quality

Not only do the definitions in this report reflect a primary interest in the public, but they are based also on statistical concepts which librarians use, but without formal recognition. Library work by its very nature deals in large numbers (e.g., book stock, circulation, and cardholders.) From such large numbers, trends or general emphases can be determined accurately since minor deviations are either absorbed without causing a significant change in final results or they cancel out each other. For example, a collection of 30,000 volumes can be described statistically in a number of meaningful ways about as easily as a collection of 10,000 volumes or 100,000; and quality judgments could be made in all three cases by examining the titles of 400 to 600 books.

Often, though, knowing the *general* characteristics or trend is not sufficient. In some instances, it is useful to know whether the general emphases revealed are indeed the true ones. In still other instances, it may be more important to know some of the details within an emphasis, their causes, and their relationships. The first need is partially fulfilled by concepts of probability: What are the chances that a particular emphasis or generalization is correct? How much variation can one normally expect in the characteristics of similar libraries? The second need is fulfilled partly by concepts of both probability and correlation.

An illustration will show more clearly the application to library work. A collection of 80,000 volumes, selected at random from several collections of this size, has a very high probability that it is better (more useful to more people) than one of 40,000 volumes. In this case, whether the 80,000 contained 1,600 or 2,500 volumes on religion is probably not significant; in fact one can be fairly sure (from known characteristics) that if professional librarians are employed, the 200's will constitute between 2, and 3.5 per cent of the 80,000. Now, whether the 1,600 volumes is the *best* 1,600 is another issue which can only be explored by more refined statistical tools and the evaluation of professional personnel. The probability that it is a *good* 1,600, though, can be partially determined by looking at the number of professional librarians on the staff, number of periodicals, general book budget, number of past acquisitions, supplementary community programs, and perhaps an examination of a random sample of titles. Or, to state it differently, there appears to be a correlation or relationsh[illegible] among many elements of a library program. Why such correlations exist we do not always know, but ignorance in this case does not prevent us from drawing valid conclusions. Even such questions as whether an 80,000 volume collection is adequate for its community and whether it receives maximum use can be analyzed by use of statistical data and methods.[7]

7. For an excellent example of the use of statistical concepts, see *Patterns in the Use of Books in Large Research Libraries,* Herman H. Fussler and Julian L. Simon. (Chicago: University of Chicago Library, 1961, 283 pp.)

Limitations

This report is not the proper place to present a long discourse on applied statistics. The discussion up to this point has been necessary, nevertheless, to indicate that the form of some statistical reporting recommended in later sections is devised in order to take advantage of some of these statistical concepts. It is recognized that this impersonal approach is contrary to many of the personal values expressed by librarians and that it differs from the general professional stress on the individuality of libraries. Individuality, though, is not destroyed or even attacked if statistical reporting is viewed as a tool or language to help clarify issues. Statistics obviously cannot provide the entire description of a library program. A southern librarian beset with integration problems, wherein tables and chairs were removed from the library to discourage Negro use, wrote in his 1962 report: "A recounting of this unfortunate situation has thus seemed appropriate to explain both the brevity of this year's *Report,* and the lack of far reaching recommendations for the future. Year by year evaluations will provide little accuracy this time, and future plans would be hazardous until the Library's existing status becomes reasonably resolved." No number of statistical tables could provide the perspective contained in this prose.

Moreover, statistical reports cannot measure precisely the cultural impact of an aggressive library program on a community. The *real* value of the library in this sense is measurable only in terms of generations. In the interim, much of the program is necessarily justified on faith bolstered by what empirical evidence can be mustered. A good example of this is the use of bookmobiles. From recent discussions, it is clear that the "bookmobile" has reached and probably passed its zenith. Its use up to now has undoubtedly been worthwhile, but there is evidence that reliance on it to gain widespread use of books should give way to greater use of more permanent outlets and "library systems." In short, this inability of statistics to describe or measure fully cultural impact is not an argument against statistical reporting but rather an expression of its limitation.

PART II / RECOMMENDATIONS

The reporting system outlined in this report is described in two ways. The form in which data could be printed annually by the State Library is shown in Appendix C. The paragraphs which follow the charts describe the major elements of the system, outline definitions of terms, and suggest subjects for specialized research reports. Obviously, the use of a "state annual report" as a focus for discussion is merely a convenient way of organizing a subject. The local library itself could be the focus and the same results obtained.[8]

Classification of Libraries

LIBRARIES SHOULD BE CLASSIFIED IN A PRINTED REPORT AND COMPARED ON THE FOLLOWING BASIS OF SIZE (MEASURED IN TOTAL VOLUMES): (1) 0 TO 5,000 VOLUMES, (2) 5,000 TO 20,000 VOLUMES, (3) 20,000 TO 100,000 VOLUMES, (4) 100,000 VOLUMES AND OVER. THIS BREAKDOWN IS BASED ON CHARACTERISTICS OF PENNSYLVANIA LIBRARIES IN 1963 AND CAN BE MODIFIED AS THE CHARACTERISTICS CHANGE.

Nearly all statistical reports on library programs make no distinctions between libraries except as the reader infers them from the data. In part, this is a reflection of a popular tendency to compare all libraries with an ideal, the ideal usually being the large, well financed, and well managed institution. The notable exception is probably the county library which is presumed often to have a major rural extension and school function. There is an error in this approach. Actually, several quite distinct functions can be noted in library programs which suggest that only libraries with similar functions should be compared. In partially non-library terminology, these functions can be outlined as follows:

Circulating Function. In the small libraries under 20,000 volumes, the major service is circulation, with much of the adult circulation being fiction. These libraries are located for the most part in small communities where a branch type of service is not necessary, and probably could not be afforded. In Pennsylvania, in particular, their average collec-

8. For comments on methodology see Appendix B.

tion is 60 per cent fiction. They will have a few chairs for on-site reading and studying, perhaps one seminar-type reading room, and one professionally trained employee. They may loan a few musical or language records or pictures, but the value of this is more symbolism than anything else. Despite its simplicity, this function is useful and indeed important. The rating or evaluation, therefore, of these libraries should be based on how well they perform it, and not on how much they deviate from a norm set for all libraries.

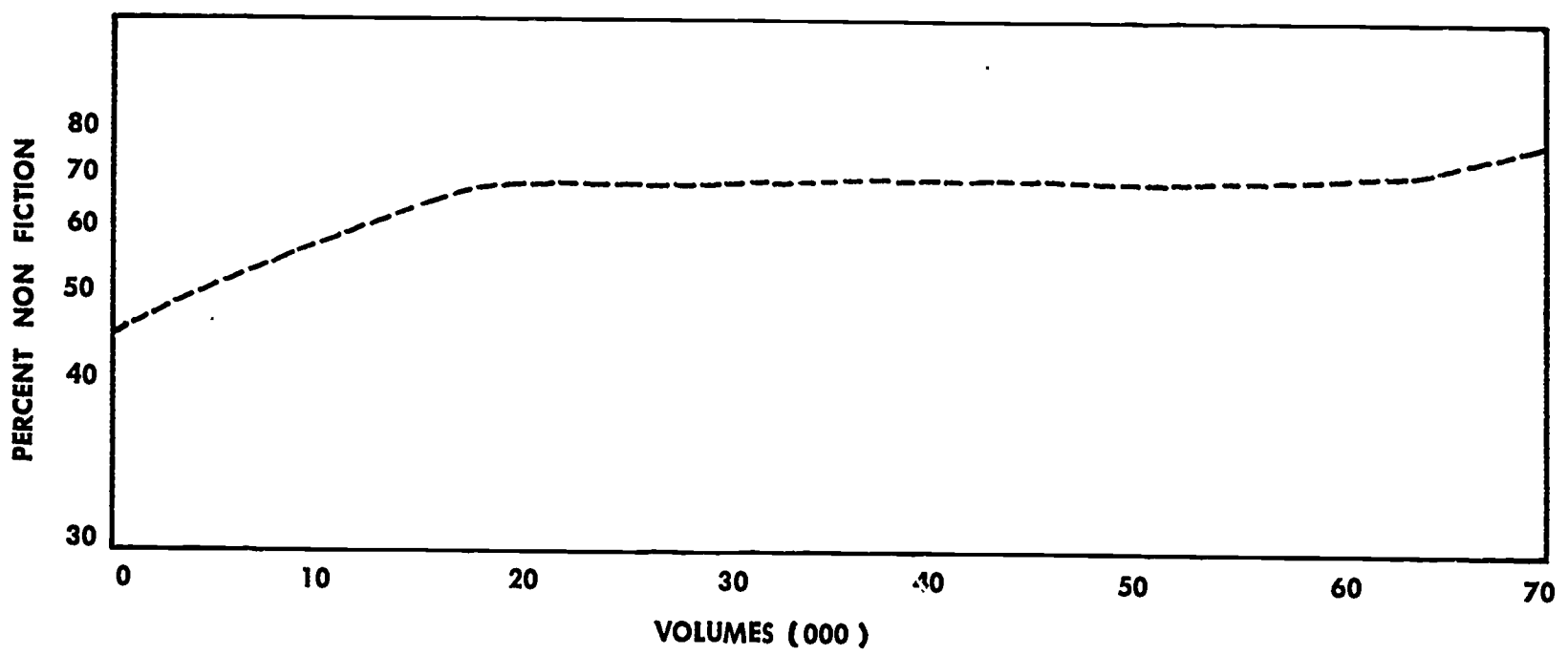
The separate category of libraries with less than 5,000 volumes is suggested because their collections are almost exclusively fiction, and they are open only a few hours a week. In many respects they most nearly resemble the small semi-independent station in medium size cities.

Study or Research Function. Chart I shows in curvilinear form that the character of a library's collection begins to change at about the 20,000 volume level. From this point on, the value of the library derives more and more from the *availability* of non-fiction items. Correspondingly, the amount of circulation *outside the library* becomes less important. In fact, it is presumed that only a specialized audience exists for each non-fiction title and that direct usage will be erratic. One can go a step further and say that in this case the value of the library is partly determined by the probability that a designated book will be in the library when requested. As the probability declines, so does the value. Circulation is still a significant function in these libraries with 20,000 to 100,000 volumes, but it differs qualitatively and quantitatively from that of the smaller institutions. Also, at this point in size, loaning books to other libraries begins to appear.[9]

Metropolitan Function. At approximately the 100,000 volume level, the character of the library program takes on two added characteristics. The research function becomes more pronounced, but a need also develops to set up special circulating libraries in the form of branches. What distinguishes these units from small independent libraries is their "membership" in a larger organization with the consequent more effective use of resources. In this larger library, also, general cultural activities both increase and become more specialized, partly because there is a broader community base on which to build and partly because of the availability of more money.[10] Very rarely is a cultural program

9. See the data on interlibrary loans for California public libraries in *News Notes of California Libraries.* (Sacramento: California State Library, Winter, 1962.)
10. This does not mean that its impact on the *total* community is necessarily greater than that of smaller libraries in smaller communities.

CHART I



GENERAL CURVE SHOWING PERCENTAGE OF TOTAL COLLECTION DEVOTED TO NON FICTION IN PENNSYLVANIA LIBRARIES WITH LESS THAN 70,000 VOLUMES*

* Collections over 70,000 show almost the same percentage as those with 70,000 volumes. Complete data are not available for all of the large collections.

established before the development of a large quality book stock. This more pronounced emphasis on cultural activities does not mean the metropolitan library has a greater impact on the total community than smaller libraries; such an evaluation is independent of any statistical classification scheme.

School Function. Many public libraries in the United States provide direct service for school classrooms. While Pennsylvania public libraries are no exception in this respect, they appear to have assumed this function more often than not as the result of many small demands peculiar to each community rather than a formalized decision to focus the program in this manner. The deposit of a large percentage of children's books permanently or semi-permanently in classrooms is the most obvious sign of a major school service. Although no specific study has been made, and exceptions exist, this emphasis appears to be peculiar primarily to the circulating type of library and specifically to county libraries. Statistically, the school function is easily identified by its reports of abnormally high circulation.

In a statistical classification scheme based on *function,* the population of the municipality tends to be of secondary importance. The community's decision on the existing size of the library is first accepted at face value. Then the library is described by using its "peers" as a base point from which comparisons are made. In this way, a citizen can determine easily the rank of his library in terms of such items as staffing, nature of the collection, number of periodicals, and supplementary services. All of these elements are related more directly (but not exclusively) to each other and the size of the collection than they are to population. One needs only to examine the tremendous variation in the size of libraries in similar communities to conclude that population is not necessarily the major determinant of appropriate library service.[11]

Whether a given library is "good" or "adequate" for a particular community cannot be determined by this suggested emphasis on comparison of libraries with similar functions. *This decision is a very complex one based on overall community needs and resources and therefore must be made completely independent of an evaluation or description of what exists.*

Two extreme examples will show the application of these concepts. A public library located in City A with a population of 30,000 and where there is a major college research library has a much different function than if it were located in City B, with the same population but no college library. In City A, the circulating function can be developed more extensively because the research function is already met. In City B, the available income must be devoted to developing both functions. In present statistical reports, there is an erroneous tendency to compare A and B because they are in the same size city; and, of course, present standards of adequate service imply the two libraries should have similar collections and programs. Another example is a Pennsylvania library located in a community of 6,000 that actually reports a collection of 55,000 volumes, and claims a service area of 52,000 people. Again, in most present reports and based on volume per person standards, this library at first glance has a good rating. However, if it were listed in a statistical report with libraries of a similar size, certain biases and distortions in its program would be revealed at once and a very low rating would be given — it has a staff of only five (three of whom are clerical); a reported circulation of 457,000 volumes, of which 93 per cent is juvenile; and an annual income of $26,000.

Population Served

THE SIZE OF THE POPULATION SERVED BY THE LIBRARY SHOULD BE REPORTED IN TWO WAYS: (1) POPULATION FOR WHICH STATE AID IS PAID, (2) ADJUSTED POPULATION TO SHOW EFFECTIVE SERVICE. "SERVICE" SHOULD BE DEFINED MORE PRECISELY SO THAT IT IS NOT CONFUSED WITH "ACCESS."[12]

The concept of "population served" is essentially anachronistic and as a statistic to describe library service not very meaningful.[13] In the first place, effective and realistic library service, like many

11. There are actually a large number of determinants of desirable library service. While all of them cannot be related to each other easily or precisely, every effort should be made to develop improved models of good library service which take into account as many of the determinants as possible. Setting so many standards of a program on a per capita basis, as the profession does now, over simplifies unnecessarily the function of a library program and for that reason may actually mislead rather than inform the public.

12. In *legal* terminology, an appropriate comparison is substance versus procedure.

13. State reports are far from uniform in their method of reporting population. A few like Pennsylvania and the U.S. Office of Education use population served without defining it precisely. Others, like California, use population of the reporting jurisdiction (county, city, township, etc.).

public programs, is not related to formal political boundaries except in a gross sense. Some residents within a city actually may not be served by their local library because its program is oriented to specific economic or social groups or because of too small a collection. Illustrations can be found in all states where public libraries cater to fiction reading, give minimal attention to culturally deprived areas, focus reference acquisitions on items of interest to businessmen, ignore the general needs of labor, or provide service for that small clientele that happens to know the location of the library and for unknown reasons is strongly motivated to use it.[14] On the other hand, individuals who live in surrounding areas outside a city and go into it for work or pleasure may find the library there useful for a variety of reasons. Indeed, a large and good library attracts people from some distance away.

Going a step further, the absurdity of any political boundaries as the *sine qua non* of library service is seen in long standing library policies. *Anyone* may normally use material in a library as long as it is not removed from the premises. No residence or taxpaying status is required. But if the material is checked out, either one or both of the foregoing qualifications may be enforced.[15] In a library with this approach to service, there are clearly at least two "populations served," and if the orientation of its other activities were examined, several other "populations served" could probably be identified.

In short, the notion that the existence of a library program means all interested persons are served (*i.e.,* have equal opportunity to benefit from it) or that need coincides with established political boundaries is much too simple for the middle Twentieth Century.[16] Established ideas, though, are repudiated slowly, and even the passage of the 1961 Pennsylvania Library Code will not result in an immediate reversal of thinking. In the *interim,* therefore, the realities of political allegiances, unequal facilities in neighboring areas, outmoded local tax systems, statutory requirements for state aid, and the need to have some device (however crude) to measure adequacy, compel some kind of measurement of the popular base for a library.[17]

The following formulation for measuring "population served" is designed to meet this present need.[18] Keeping in mind that until tests are conducted and until librarians become bolder in expressing the goals of the space-age public library less than the ideal must be accepted now.

1. The unit of government providing the major support should be considered the *primary* service area. If two or more units provide equal support, the population of the more inclusive one should be used. If cardholders must purchase cards, the number of cardholders is the service area.
2. On this basis, if the ratio for the number of books per person is less than .5, the "population served" should be reduced until this ratio is obtained.[19] The reasoning here is simple. First, if the library cannot provide the equivalent of one book for every two individuals in

14. To state these biases is not necessarily to condemn the profession—although some of them cannot be justified easily—because no existing library can anticipate and meet all present and potential needs. What is suggested here is to admit the obvious and discard the concepts based on it.

15. The situation is almost absurd if one articulates part of the apparent subconscious reasoning behind this dual approach to library use. (1) An outsider (non-taxpayer) can have a free ride and use the library as long as it is not "too long" or "too free." (2) People in the city are more honest than those outside, or in another city. (3) It is easier to check on a resident (*e.g.,* in Philadelphia compared to Lower Merion Township) and retrieve a book or collect a fine. The report by the Wayne County Library on lost volumes is most interesting in this respect. See "Are Registration Cards a Must," Walter H. Kaiser. *Library Journal,* Vol. 82, No. 11, (June 1, 1957) pp. 1393-1399.

16. The library profession may have done a major long-run disservice to itself and the public by the slowness with which it has admitted that the 1950's and 1960's are indeed different from the 1920's and 1930's.

17. The most accurate way would be to use a modification of the school concept of "average daily attendance." Applied to the library, it would mean the number of people who make use of library facilities for any reason in a year. An adjustment factor could be developed to reflect "stand-by" value. Implied in this approach is that a properly organized library would continually attract new users, that is, a larger number of people in every community would use a library if a way could be found to communicate meaningfully with them; the validity of this implication could be tested easily.

18. In interviews in Pennsylvania, librarians commonly talk about two or three areas, depending on the audience and purpose. The entire municipality is nearly always claimed. Surrounding areas may also be included if free borrowing procedures are allowed. In computing eligibility for state aid, the second area served may be increased or decreased in order to qualify for and maximize state aid.

19. This could be made more precise by including a requirement that the ratio apply to both adult and juvenile collections. This ratio is far below the A.L.A. interim standard for small libraries: Communities from 5,000 to 50,000 should have two books per person; communities under 5,000 should have three books per person.

the political jurisdiction at any one time, it is not really servicing the population but instead is merely making books available to a select group of fortunates. Second, librarians like other professionals are under pressure to show a large-scale operation in order to create an impression of a major program, (and one gets the feeling at times to stake out a "claim" for a certain geographic area) and therefore often unconsciously overstate the real area served.[20] In the long run, though, it is better to report honestly to the public and then push for a level of support that will make possible the attainment of the agreed upon professional goals. In using this .5 ratio, no distinction is made between the large and small community.[21]

20. In interviews in Pennsylvania, librarians talk about as many as three or four different service areas: (1) The basic one of the city, township, school district, or county, (2) Surrounding areas that contract for service by payment of a modest or token sum of money, (3) Surrounding areas to which free service is presumably given, (4) The area for which state aid can be collected. When asked about service area, some librarians draw a line which includes the most distant person that he knows who uses the library; this may be as far as 15 to 20 miles from the central building, or may include an entire county.

21. Present standards calling for a lower ratio for large cities are apparently based on the assumption that as total volumes increase the diversity of titles increase and the turnover or use of each book is greater. This approach has several theoretical weaknesses and is not consistent with present social, economic, and political knowledge of the urban complex. So far as is known, no studies show that a book is in fact used more, but there are many persuasive justifications by librarians for opening new branches in order to give fast service to patrons. Unless one assumes that each branch in a metropolitan area serves a completely unique neighborhood, all of them must be stocked similarly; to this extent the use of any one book is reduced because it is spread out over several copies. As the apparent demand for a title increases, new copies are added so that a person does not have to wait a long time to read it; there is certainly no evidence that the popularity of a book is greater in an urban than a rural area, and, therefore, the person will wait longer to get it. We also know that people will not drive long distances to a library or make repeated trips for the same item; hence, again branches are built. Would it not be more accurate, therefore, to say that a large city like Philadelphia is really composed of 20 communities of 100,000 each and that the need for copies and titles in each is about the same, despite the fact that it violates our puritan concept of economy to have duplicate collections within a few blocks of each other.

An urban complex is very dynamic and generates a demand for many more specialized items than does a stable rural small town. This demand is more properly a research or semi-research function; the persons involved are highly motivated; they will search and wait for a title; they will probably use it only once. A collection to serve this demand is very distinct from the one just discussed at branches and is truly a characteristic of a central library. The more dynamic or more complex the metropolitan area, the greater is the need for a larger collection. The complexity referred to here is only in part a function of numbers of people, for the complexity (interpersonal relations) increases at a faster rate than additions of persons. In short, the need for books may increase more rapidly than the population. If the line of reasoning proposed here is correct, the standard for books per capita should actually be the reverse of what it is now.

3. If branches or mobile stations are located in rural areas, only the actual number of users (cardholders) should be recorded if the unit has fewer than .5 books per person for the total population of the area of all branch locations and mobile stops.
4. If service outside the basic area is provided free, such as adjoining townships, only the population within six miles of the library (to the nearest full township) should be counted. This is the maximum distance the great majority of people will travel to use a library.

This definition, while novel and so far as is known not used in any state, is not as difficult to administer as it might seem on the surface. The population data are readily available from census reports, and once computed the results would remain the same until a major expansion or contraction of the program occurred. The great advantage of the definition is drawing a distinction between people actually *served* and people who have an *access* to the library. State aid can, and should, continue to be related to the access figure — it becomes the goal for service. In the first year of reporting in Pennsylvania, the immediate impact of this recommendation will be to reveal areas where service does not truly exist and which are hidden now by contract arrangements and other administrative devices that permit individuals to use a library if they demonstrate significantly more motivation than is expected of other users. Thirty-two counties in Pennsylvania do not meet the very low standard suggested above, and yet in current reports they report their total population as served. The definition also accentuates the importance of the *program* as contrasted with the existence of a *structure.*

Numerous objections will be made to this method of computing and reporting population served.

Most of them can be easily answered by making the formula more sophisticated. One objection, though, deserves special mention because it goes beyond the technique and raises the basic question whether the method is truly an improved way of communicating or whether it is merely a new way of expressing old ideas. To a certain extent the answer is yes. At the present time, an accurate description of the *level* of library service is made possible by setting high professional standards. A library, therefore, which claims a large service area but has a small collection and inadequate staff appears as below average in statistical reports. But this approach makes it difficult to communicate to the public that at some point the level of service is so low that in fact *no service* is provided for a substantial number of people. No matter how low the ratio of books per person drops, now there is always the impression that "we have service and all we need to do is gradually increase it." This is the Pollyanna of library service. Not to be dismissed lightly, either, is the fact that present standards are in part derived from the service that exists. Extremely marginal institutions, as a result, help to set the standard. One might wonder whether the level of present service would be expressed differently if a different standard were developed.

Cardholders

THE NUMBER OF CARDHOLDERS SHOULD NOT BE REPORTED ANNUALLY TO THE STATE. INSTEAD, DATA ON THE CHARACTERISTICS OF USERS OF A LIBRARY SHOULD BE COLLECTED PERIODICALLY BY USING STATISTICAL SAMPLING METHODS. A UNIFORM SYSTEM OF REGISTERING CARDHOLDERS SHOULD BE ADOPTED WHERE REGITRATION IS USED.

Several reasons support this recommendation. On a theoretical basis, the concept of registered cardholders should be buried if there is any truth to the proposition that ready access encourages use. In recent years, a few libraries have experimented with other means of identification than a card, and undoubtedly the development of a library system will encourage further efforts of this kind. Where cards are still used, though, they are seldom required as a condition of using resources on the premises. The *number* of cards outstanding, therefore, reveals little except to indicate that portion of the "population served" that has a *legal* privilege to take a book out of the library building.[22]

22. Research data from several libraries indicate these records may be highly inaccurate. Librarians are very reluctant to revoke a card unless the circumstances clearly demand it. In many areas, moving away (and in one case, dying) is not *ipso facto* a basis for cancelling a card.

Even further limitations on the value of this statistic can be noted. The gross percentage of cardholders to total population, which is the way in which comparisons of libraries are often made, is very misleading since it does not take into consideration the availability and use of other nearby libraries and the age distribution and educational level of the population. Likewise the growth in cardholders, reported most often as a net increase from the previous year, cannot be accurately analyzed by either the public or librarians unless adjustments are made for normal population growth, standard definitions of a "cardholder," and standard procedures for renewing registration. In one sense, librarians have prided themselves prematurely on the increased use of their facilities as reflected by new applications for cards without realizing this was almost inevitable with the growth in population and schooling. So far as can be determined, no one has ever systematically checked to see if the increase in active cardholders is *as great* or *greater* than that of the general population and the level of schooling. Until this statistical refinement is made, we cannot really say what is happening to the lending part of library service.

The arguments about reporting cardholders are not completely negative because there are some positive elements. In the first place, a record of cardholders is often necessary for internal management of a collection. As more people use presently established library resources, even those libraries with simple registration or identification systems will have to devote more effort to locating and recovering their material. Wayne County (Michigan), for example, has led a movement to abolish registration, and has gathered very convincing research data to support its position that a registration system is rather cumbersome and costly. Its data, though, also suggests some problem areas, such as a high loss rate in transient neighborhoods. As library service expands within district systems (similar to the Pennsylvania Plan) from the hard core of users who often place an intrinsic value on the book itself, a complete *laissez faire* approach may not be too practical. In general, large metropolitan units are already trying to find a solution to registration of cardholders and recovery of books with-

out becoming enmeshed in massive record systems and controls. Secondly, a review of borrowers alone will give *some* insight into the total library service.

Given all of these positive and negative factors, it would be preferable to gather data on cardholders on a three or five year basis so that the statistical adjustments and analyses mentioned above could be made. The goal would be a centralized system which provided useful data on library use and facilitated recovery of books, but which did not cost more to administer than the value of lost books. If librarians would agree on a uniform card and registration, the task would be greatly simplified since statistical sampling procedures could be used. Use of these procedures would make more analyses possible, and the processing could be done centrally at the state level on computers. A by-product of uniform cards would be another administrative step toward the goal of the Pennsylvania plan of public access to all libraries on an equal basis.

The following illustration shows one way to design a card which would provide the data necessary for both internal control and research. Unlike most registration systems, this one separates the age group of 13 through 20 years. For unknown reasons, this young age group is classified as adult in nearly all Pennsylvania libraries, and yet the present evidence on reading habits and general library use indicates the teen-agers are quite different from the general adult population. For example, the demands for non-fiction generated by this group are particularly significant.

A standard card obviously means a uniform term of issuance with compulsory renewal; no term will be completely satisfactory to all libraries since a long one would be desired for very stable communities and a short one might be justified for the dynamic cities.

On-site Users. Whenever a study of cardholders is undertaken, it should be balanced with a concurrent one of on-site users. A carefully prepared questionnaire given to *every person* who enters the library on certain sample days will furnish clues to probably the most important library unknown, namely *why* people come to the library at the time they do and what motivates them to use a public library. All that is necessary for this kind of study is volunteer help in monitoring the distribution of a standard pre-tested questionnaire similar to one used recently by the Wilkes-Barre League of Women Voters. A standard questionnaire has the

STANDARD PENNSYLVANIA LIBRARY REGISTRATION CARD

(Name) _____

(Address) _____

(Telephone) _____

Card No. 23-463-3890
(City or Library) (Date of Expiration) (Sequence Number)

Date Issued _____

Age

- ☐ 5 - 12 years
- ☐ 13 - 20 years
- ☐ 21 - 24 years
- ☐ Over 24 years

Could use different colors

If Student (Name of School) _____

Signature _____

OCCUPATION

- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

) Standard Classes

obvious value of allowing (1) central computations by the State Library and (2) comparisons among cities.

Characteristics of the Collection

THE BOOK COLLECTION OF THE LIBRARY SHOULD BE REPORTED AS FOLLOWS:

1. TOTAL VOLUMES OF BOOKS [AS DEFINED IN "DEFINITIONS FOR LIBRARY STATISTICS: A PRELIMINARY DRAFT, "AMERICAN LIBRARY ASSOCIATION, 1961. ITEM E1], ACCORDING TO (A) JUVENILE, (B) ADULT FICTIONS, AND (C) ADULT NON-FICTION. JUVENILE BOOKS ARE THOSE OF PRIMARY INTEREST TO THE AGE GROUPS 13 AND YOUNGER. YOUNG ADULTS WOULD NOT BE REPORTED.[23]
2. TOTAL NUMBER OF NEW TITLES IN EACH CATEGORY OF (A) ADULT NON-FICTION, (B) ADULT FICTION, AND (C) JUVENILE.[24]
3. THE CHARACTER OF THE ADULT COLLECTION SHOULD BE REPORTED AS:
   A. TOTAL NUMBER OF FICTION VOLUMES.
   B. NUMBER OF REFERENCE VOLUMES WHICH ARE CATALOGUED IN THE DEWEY SYSTEM WITH 000 AND HAVE AN "R" PREFIX. ALL DUPLICATES ARE COUNTED. LIBRARIES NOT USING THE DEWEY SYSTEM MUST USE THE EQUIVALENT NUMBERS WITHIN THEIR OWN SYSTEM. (IT IS POSSIBLE THAT THE NUMBER OF DIFFERENT TITLES OR REFERENCE ITEMS SHOULD ALSO BE REPORTED.)
   C. TOTAL NUMBER OF NON-FICTION VOLUMES ACCORDING TO MAJOR DEWEY CATEGORIES (e.g., 100's, 200's, 300's, etc.). THIS DATA SHOULD BE REPORTED AND PRINTED ONCE EVERY THREE YEARS.
   D. TOTAL NUMBER OF (A) VOLUMES OF MUSICAL SCORES, (B) RECORDS, AND (C) STANDARD FILE DRAWERS OF VERTICLE FILES. THIS SHOULD BE REPORTED ONCE EVERY THREE YEARS SINCE IT WILL NORMALLY NOT CHANGE MUCH. AT THE SAME TIME, ONCE COUNTED, AN ANNUAL RECORD WOULD BE EASY TO PREPARE.[25]
   E. WHETHER LIBRARY IS A FEDERAL DEPOSITORY FOR DOCUMENTS.

When all aspects of a library program have been examined, one always comes back to the basic *raison d'etre* for the public library—collecting and making available a body of knowledge for the public. Yet, present reporting of this body of knowledge is almost without exception in gross terms which not only hides important characteristics of individual collections but also provides little research data for use in setting standards or training young librarians.

This lack of statistical sophistication in the one area of library work that could profit the most from it stems apparently from a number of independent factors. One of these is nothing more than a lag in the thinking of some librarians. Reporting gross statistics was undoubtedly sufficient when many public libraries were "simple" institutions catering primarily to the elite fiction readers, and when the printing industry turned out relatively few new titles each year. "Total volumes" and "total acquisitions" were as advanced a measuring device as was necessary. Today, with libraries increasingly becoming multipurpose institutions, this approach misleads as much as it enlightens. Although some members of the profession recognize this change in purpose, they have mixed feelings about its import administratively: some are adamant in their belief that a body of knowledge gathered and stored in order to develop the mind can not be quantified and described in a mechanistic manner by the use of "neutral" numbers. Others basically agree with this position, but they also recognize that some reporting of a collection

23. The title of "young adults" should be discarded in favor of some other title which will not offend older persons with a reading ability equal to that of the young adult. In neighborhoods with a large number of adults with a 9th to 11th grade reading ability, books of this level should be stocked in large quantities.

24. See definition of new acquisitions on Page 27.

25. Films for general public use are not included in the reporting system because the alternative use by some libraries of a film circuit make a comparison almost impossible. Moreover, it is doubtful if public libraries in the future will stock these in any quantity in view of their ready access at such places as university audio-visual centers. Libraries will probably act as a coordinator in locating and ordering special items and providing equipment for showing.

is necessary. Still other members of the profession advocate improved statistical reporting but are reluctant to devote the administrative time demanded by any new system; unlike the true bureaucrat who is excessively enamored with techniques, the people in this group are almost solely action or program oriented. The compromise acceptable to all three of these groups is the present simplified statistics reported by most states.

Unfortunately, devising a suitable set of statistical data to describe accurately the nature of a collection is far more difficult than analyzing the causes of past non-action. The present data are a handicap in that they are not sufficiently accurate to form a sound base, but they are adequate enough to expose some of the errors and deficiencies of statistical manipulations. What is proposed, therefore, must be viewed as experimental and hopefully as a minimum program on which librarians can readily agree.

To determine the feasibility of collecting this kind of detail, and also to evaluate its usefulness, the collections of 10 libraries were counted (Table I). Assuming for the moment that these 10 are evaluated as a unit and that they represent *all* libraries, the data shows first a rather marked similarity in the relative weight given to certain subject matters. Indeed, the similarity is sufficiently great that one almost feels these librarians were told in their academic training or by some professional adviser that these were the proper percentages for each major category. Such was not the case, for none of the librarians involved (all professionally trained) had any idea what his or her collection was like until counted by outsiders. Do these percentages, therefore, reflect an "unconscious" partial definition of a *balanced collection* which can be used to measure statistically the deviation of a particular library from a norm? Obviously, with data on only a few libraries, no conclusive answer could be given to such a question. However, if libraries reported this kind of breakdown, and the same similarities occurred, the profession would have taken a major step forward in determining what is deposited in libraries and in developing statistical norms. From the research done to date, this author is convinced that a curvilinear equation can be developed to guide librarians in their acquisitions.

However, if few similarities developed, there would still be benefits from reporting the detail, for percentages are an easy way to identify certain peculiarities of a collection and to raise questions about them. In Table I, for example. why does

TABLE I

PERCENTAGE BREAKDOWN OF ADULT BOOK COLLECTION FOR 10 SELECTED LIBRARIES

	LIBRARY									
	A	B	C	D	E	F	G	H	I	J
Fiction	25.0	26.9	34.0	40.8	54.3	33.0	40.7	45.1	25.0	40.4
000	.8	.8	.7	1.5	.2	.6	.4	.2	3.1	1.7
100	2.1	1.3	1.4	1.6	1.6	1.8	1.5	1.5	3.1	2.0
200	3.2	2.0	3.1	4.2	1.0	2.4	2.0	2.9	3.3	1.7
300	7.1	5.6	8.2	7.8	3.8	7.6	4.0	5.8	8.2	6.5
400	1.0	.3	.7	.5	.7	.5	.3	.4	.8	.6
500	2.9	4.8	3.3	2.7	2.6	3.5	2.2	3.2	3.2	2.6
600	6.9	3.6	6.9	6.0	3.2	5.1	2.5	5.5	7.1	5.5
700	4.0	3.6	5.4	5.5	3.3	5.8	2.3	4.8	7.6	3.4
800	10.0	3	8.2	8.2	7.5	10.7	13.1	6.4	11.3	9.4
900	26.1	11.0	23.8	9.2	17.1	25.0	24.2	19.4	21.8	20.6
Reference	8.3	34.2	4.4	11.3	5.2	3.9	6.8	4.8	5.1	5.0
Miscl.	2.4	2.6	....	.8	....	....	....	....	....	....
N	61,845	30,984	12,930	55,660	9,188	18,206	12,567	15,960	22,096	20,542

Library B have 34.2% devoted to reference? Or why does Library D have such a large collection of religious books but a small collection of 900's?[26]

Relationship of Quality and Quantity

Reporting numbers *per se* means little (even if those recommended here are an improvement over present practices) unless they also indicate elements of quality. It is best to admit at the outset that no statistical report can outline accurately the quality of any one library collection without employing complex statistical sampling procedures; and even if these were used, it is doubtful if the results would be fruitful because the more specific the situation the more librarians disagree about quality. Nevertheless, reporting as recommended above does give clues about quality.

In the first place, it reveals major areas of strength or bias. The smaller the library the more revealing are the figures.

Second, quantity in libraries is more often than not evidence of quality. With the large amount of published material on the market, a library can only hope to acquire a sample of what is available. The larger the number of items the easier (and more likely) it is to make the sample reflect accurately the true universe of all published material. Therefore, given the wide range of needs for any one community, and assuming professional selection guides are utilized, a librarian could choose new acquisition on almost a random basis and be assured that the overall quality of the collection would go up. Since it is always possible that consistently bad selections will be made, supplementary information is necessary in order to measure the probability of its occurence. The key items to check would be the number of new acquisitions each year, distribution of the collection according to subject matter, and the existence of a systematic weeding plan. Estimating the unity of quantity and quality can be determined also from other known factors. For example, a library with a well trained professional staff is more likely to have a good "sample" than one without competent personnel. If the library has a good periodical collection, provides service to many groups within the community, is used extensively, and is open long hours during the week, the probability becomes even greater.

Using probability in this manner as a measuring device will not be easy for librarians to accept because the device itself is not precise. It is difficult to explain to laymen, and it makes library operations appear somewhat impersonal. No profession likes to admit that its decisions can be evaluated in such a manner. Misgivings, though, must be overcome and more time devoted to experimenting with statistics if some of the current library problems are to be solved. Certainly, no *other* tool for measuring quality is either respected or accepted by the profession. The time-honored checklist has the widest acceptance, but at the same time it is so consistently condemned that one gets the impression library researchers employ it out of a necessity to do something and to relieve "research frustrations."

Several possible research projects illustrate the kind of investigation and experimentation that is so essential to the development of the library profession. One is the applicability of sampling theory. Assuming for the moment its liberal application, one could argue that samples of the book and periodical collection of all recognized good libraries should be close to the ideal or true representation of the universe. From these samples, a mean or average could be computed to represent this ideal in statistical form. This average in turn could become a standard against which all libraries could be measured. It should be remembered that while samples of good libraries should be close to the ideal, any one sample could differ markedly from another. Sampling is used now in a very elementary form in setting some library standards, so the idea is not entirely novel to the profession.

Another project would be to develop a method of classifying fiction and juvenile material and to formulate an index number to show the overall character of each type of collection. A third research proposal is to test the validity of an idea mentioned above, namely, selecting books at random as opposed to so-called individual determination of value.

26. Like probably any system of classification, the Dewey system is not always discriminating enough. As an illustration, a strong "900" series can be weighted either in travel and biography or history; some fiction should be classified in the literature or social science series; and the line between the 300's and 900's is not always clear. One way to minimize this problem if librarians felt detailed reporting distorted the description of a collection, would be to report total volumes in (a) humanities and language arts, (b) social sciences, (c) physical sciences, and (d) biological sciences. While this grouping in my mind is not as desirable as the one proposed in the text, it is workable and does have the advantage of conforming roughly to the division of knowledge one usually finds in the academic community.

Mechanics of Counting the Collection

Because of the apparent work involved in reporting these statistics, some comment on mechanics is in order. Accuracy in the count is very important since so many services of a library are based on the body of knowledge available. Also, the result of the count affects (or should affect) selection policies. A number of libraries in Pennsylvania, though, have neither inventoried nor counted their collection in recent years. If the proposed statistics in this Report are to be useful to the librarian, the Commonwealth, and the profession in general, the following procedures should be followed.

Immediate Count. Each library should count its total holdings according to major Dewey classifications, if no count has been made in the past three years.

Annual Counts. As a minimum, a physical count should be made of one-fourth or more of the collection each year. For libraries that do not keep a formal catalogue of fiction books, this count would be very useful in keeping track of total losses.

Ideally, a *continuous inventory* should be made on a cycle of four to seven years. This suggestion disagrees with those of Wheeler and Goldhor in *Practical Library Administration.*[27] They argue that a normal loss is one per cent (or less) of the bookstock in a year; and, therefore, the high cost of an inventory would exceed any benefits. For very large libraries, this observation is perhaps true. In the smaller libraries, though, the value of a book or periodical is higher because it may represent the only material on that subject. In the interest of the reader in these smaller institutions, a library staff should make every reasonable effort to locate lost items and replace them. The reader alone should not be expected to do this by looking unsuccessfully for specific titles.[28] In short, this is one area of library work where gross numbers may be misleading. A one per cent loss on 80,000 volumes is 800 books a year. If the concept of sample, as discussed previously, is valid, this 800 has more meaning than "1 per cent" for the patron who comes into the library and looks unsuccessfully for specific information.

Identification of all items. No items should be kept in the library without some means of identifying them. In many libraries, as now administered, gift books, special collections, and paperbacks in particular would be affected. While this suggestion sounds dogmatic, it is far from being academic. In several libraries visited during this research there were significant collections which a patron would only discover if he asked the librarian for items which happened to be in the collection. And even in these cases, the librarian sometimes had to rely on physical inspection and memory in order to describe what was available or to locate the requested items. To the reader, these items were lost. Despite the very valid objections to added administrative chores, the urgent need to make the best use of all library resources necessitates a faster system of identifying and locating material than recollection and perusal of various titles on a shelf. A requirement of identification does not mean that all items must be processed and catalogued in the same manner.

Lost items. Items that are lost or cannot be located at the end of the reporting period should be removed from the records. Upon their return or recovery in a new reporting period, they should be listed as new acquisitions. Although this procedure may seem strange to many librarians, and perhaps may seem to involve library policy rather than statistical reporting, the method of handling lost items affects the accuracy of book counts. As far as known, none of the standard works on library administration deal with this matter except in very general terms.[29] The mechanical procedure suggested here has three major advantages: (1) It is simple to follow and can be adopted easily by all sizes of libraries. (2) It provides for and forces a systematic review of lost items. Impressions by librarians are plentiful about the reason for and number of lost items, but the validity of these impressions is unknown. (3) From a patron's point of view, it is the availability of knowledge that interests him. A lost book is not available no matter what the card catalogue says. Upon recovery,

27. *Practical Administration of Public Libraries,* Joseph Wheeler and Herbert Goldhor. (New York: Harper & Row, 1962), p. 476.

28. Counts and inventories are the easiest way to keep records current in libraries with collections of 200,000 or less. Pages, for example, can do much of it if there is a systematic plan of checking one-fourth or one-seventh of the holdings each year. As noted later, an inventory should not be the exclusive device to locate lost material.

29. If libraries had large book budgets, this would not present a problem because the book would be replaced at once. In practice, only a very few libraries are so fortunate. Probably stemming from a long history of deficient book budgets, librarians often are loath to declare an item lost even after several months of searching. The desire is to "retrieve" so that a new title instead of a replacement can be made. There is a certain amount of self-deception in this procedure which prevents replacement of major items while minor new ones are being added.

the impact on the total collection is the same as a new acquisition.

Reference Material and Questions

NO EXTENSIVE STATISTICS SHOULD BE KEPT ON REFERENCE MATERIAL (PROFESSIONAL SERVICES) UNTIL DEFINITIONS CAN BE FORMULATED BY THE PROFESSION. THE NUMBER OF EMPLOYEES DEVOTING ALL OR A MAJOR PART OF THEIR TIME TO REFERENCE WORK SHOULD BE REPORTED.

Reference material is probably the most difficult area in which to find meaningful data; and despite numerous discussions in the professional literature, no conclusions acceptable to the majority of librarians seem to have been formulated. This difficulty stems largely from the fact that librarians do not agree on a definition of reference. Two examples can be cited: One library in Pennsylvania defines reference narrowly and as a result places nearly all books of this kind on general circulation, although they are not often checked out of the building. Reference *questions* in this instance are minimized and self-help encouraged. From an overall view of this library's role in the community, it would be erroneous to rate it as low as a small formal reference collection might imply. All that one can say is that its program is *different*. In contrast, another library appears on the surface to have an unusually well developed reference program with a large number of reference questions, but a close examination of its operation shows that the number is partly a product of a policy of restricted access to a large number of titles (e.g., *Reader's Guide*). As a result, patrons must ask the staff more questions than would otherwise be necessary. Librarians could undoubtedly offer many variations of these two examples.[30]

If a uniform definition of reference material were formulated, a ranking system in the form of a reference index could be devised which in turn could become the basis for development of a meaningful standard. Such an index could be easily computed by a formula similar to the following:

$$\frac{T}{Q_1 + 1.5\ Q_2 + 1.75\ Q_3}$$

where Q_1 is the number of reference volumes up to 250, Q_2 is the next 500 reference volumes, and Q_3 is all remaining reference volumes, T is the number of titles, and the numerical values are abritrary weights. In libraries providing effective service to populations of less than 25,000 people, duplicate sets or titles would not be counted. "Q" could also be expanded to reflect different types of titles.

This formula would relate several kinds of reference programs to each other. The greater weight given the number of volumes over 250 recognizes that a point is reached in specialization where each added volume actually increases the value of the program in a greater proportion; whether 250 or 500 is the correct breaking point can only be decided by testing. The weights of 1.5 and 1.75 are also arbitrary at this point; if one wanted to work with smaller numbers, the weights could be .1 for Q_1, .2 for Q_2, and .3 for Q_3.

Dividing the number of titles by the weighted total volumes raises even more the value of the larger collections and prevents a library from having a high index number because its collection is composed primarily of a few standard encyclopedia sets. For the same reason, duplicate sets for small libraries are not counted because the added sets are not needed (although useful if given to the library) and do not add materially to its ability to give research or reference service. The formula could be adjusted to take into consideration such added factors as: study space, possession of certain generic groups of works, dates of publication, and personnel.

Reference Questions. The number of reference questions is not a meaningful statistic except for very large libraries where the impact on work load and staffing is measurable. Even in these cases, attempts to "catalogue" questions have often been only partially successful, and a catalogue system for all libraries would require more training and time of personnel than worthwhile to get accurate and uniform reporting. So far as is known, no one has been successful in measuring the quality or value of these questions, primarily because so many of them require only a simple short answer. A more productive way to approach the function of "reference questions" is to recognize that it cannot be developed on a whim but is a *joint product* of two other characteristics: (1) professional personnel and (2) size of collection. A large library in both respects will have a good reference service and indeed will generate a demand for the service in excess of almost any budgetary allocation made for it. Indeed, as the answering of reference questions gradually approaches research, the demand is probably unlimited. In support of this position is one

30. Attitudes toward trustworthiness of patrons and existing physical facilities appear to influence this phase of library work greatly.

study that suggests that reference questions are partly a function of the basic borrowing clientele of a library, *i.e.*, a large juvenile or adult borrowing will produce respectively many juvenile or adult questions.[31]

There is one precise and meaningful way to measure this activity and that is in terms of the number of employees who devote their time primarily or exclusively to reference work. A person spending less than half-time would not be reported on the premise that he could not in this amount of time develop special reference skills. This almost arbitrary definition of half-time does not mean other professional employees do no reference work; all of them do some in the area of their specialty. It is merely a way to isolate and show as precisely as possible the relative emphasis a library places on this function. Where there are collections under 25,000 volumes, libraries should not be expected to report any figure here because by definition they have limited book and personnel resources. Their contribution to the community has a different emphasis.[32]

Theoretical Statement. The foregoing is recommended in part, also, because of a strong conviction that the profession's basic approach to reference questions has been wrong. Three lines of reasoning can be cited. First, the literature, reflected specifically in ALA standards,[33] emphasizes that *all* libraries should have a strong reference service. At the same time, it is readily admitted by librarians with small collections that they cannot offer reference service because they do not have adequate book or personnel resources. What we are really saying, then, in these cases is that the libraries *should* have large collections so people can find answers to their questions. With this, there can be little disagreement; but whether one likes to admit it or not only a few libraries can ever own a large collection. The great majority of libraries can never offer more than an elementary form of reference service.

Second, it would be even more accurate to say that reference questions are really queries about how to use the resources of a library. Presumably, the more informed the public is about techniques of searching for data the fewer the questions, but few questions according to present concepts implies poor service. One could argue that the idea of recording reference questions developed in part because some enterprising librarian wanted to show his board how much of his staff's time was diverted from the acquisition and cataloguing of books. Certainly, there is no purpose for the most part in encouraging people to ask questions if they cannot be answered by a search of *available* resources. In this respect, "reference questions" are an *administrative* cost like cataloguing, and the emphasis should not be on the *librarian* answering questions but teaching the patron himself how to search. *This would be the most effective use of resources and would raise the level of ability of the patron as well.*

A still third line of reasoning can be offered which raises doubts about the present approach to reference service. Reference questions might be considered in some libraries as the equivalent of research. But if this is true, then the present staffing in most libraries is wrong--staff members should be functional specialists. In this case, no effort would be made to quantify service because the quantity would be "one research service" and justification for budget purposes would be based on this quantity at some defined level of sophistication or specialization.

In short, what is being suggested is that reference questions *per se* do not indicate either "good" or "bad." All that questions tell us is (a) the number of persons who were motivated to approach the library and (b) whether the library had the resources to provide the answer. No other conclusions can be drawn unless one assumes that similar communities should generate the same questions, that there is a similar basic latent motivation in each community to ask questions, or that people in small towns ask only questions which a small library can answer. If any of these assumptions are true, a comparison could be made, but this author would not want the task of defending their validity. If a librarian wants to measure the *public image* of his library (as some do) by using the number of reference questions, this would be valid. Such a measurement could best be made by analyzing the very unusual or what one might call "pathological"

31. "Reference Questions -- How Well Do We Answer Them?," Edith P. Bishop, *Library Journal* 85: 3159-3161, September 15, 1960. One also gets the feeling from this study that perhaps people ask questions that they think can probably be answered.

32. As the integrated system develops, librarians in small communities will funnel or forward questions to other larger units. It is quite possible that sometime in the future this activity will be a significant element in the workload.

33. See *Post-War Standards for Public Libraries,* published by American Library Association and discussed in *Practical Administration of Public Libraries,* Joseph Wheeler and Herbert Goldhor. (New York: Harper & Row, 1962) p. 332.

questions. These are questions which clearly should not have been directed to the library, but by their asking indicated a public respect and confidence in the library's research capabilities.

Periodicals

PUBLISHED STATISTICS ON PERIODICALS SHOULD INCLUDE AS A MINIMUM: (1) TOTAL NUMBER OF PERIODICALS (TITLES) RECEIVED AND (2) TOTAL NUMBER OF VOLUMES OF PAST ISSUES. AN INDEX NUMBER SHOULD BE COMPUTED SHOWING THE RELATIVE RANK OF EACH LIBRARY.

In most statistical reports libraries now report the number of periodicals received, and within the professional literature one can find references to recommended minimum numbers that libraries of different sizes should own. As in book selection, there is a real problem in evaluating quality from these numbers. The possible variations in collections can be illustrated from a compilation of holdings in nine small "test" libraries.[34]

1. The nine libraries collectively had 591 different periodicals.
2. Of the 591, only 70 titles were available in 4 or more of the libraries; only 32 in 6 or more of the libraries; and only 3 titles were available in all 9 libraries. These three were: *Saturday Review, Time,* and *U.S. News and World Reports.*
3. The number of titles actually displayed differed significantly (both over and under) from the number reported in the previous annual reports to the Pennsylvania State Library. This indicates lack of uniformity in defining terms.
4. One library (not the largest) maintains extensive back files. Another maintains them for a few select titles, and the other seven keep back numbers for no more than five years.

Admittedly, this same variation would not be found in all libraries, but it does indicate a need for more preciseness if statistics on periodicals are to be useful. To this end, the following suggestions are made.

Definition. For general reporting, only periodicals indexed in the standard guides should be included. If there are a significant number of others, they should be reported in a footnote. No distinction should be made between those subscribed to and those received as a gift. Periodicals which are not available for general use (*e.g.* deposited permanently in public school professional libraries) should not be counted. Even though they are printed at regular intervals, religious tracts and special promotional items which are given to the library for general use and display should be excluded.

Classification. The periodicals should then be classified to show any special emphasis in the collection. For public libraries, six distinct classes can be identified easily: (1) Professional journals, (2) Current Serious Feature Magazines, (3) Technical-Special Journals, (4) News Magazines, (5) Current Popular Feature Periodicals, (6) Sponsored Publications. If such a classification were adopted, it would be relatively easy to move to the next step of setting standards for certain sizes of libraries.

Back Issues. Ideally, libraries should report the number of back issues because they have a direct relationship to research capacity. Whether they are bound or not is a technical administrative matter which does not affect an evaluation of the collection.

Index Number. In order to compare libraries, an index number should be computed using the following formula:

$$\text{Periodical Index} = .5\left(\frac{M_1-N_1}{T_1}\right) + .4\left(\frac{M_2-N_2}{T_2}\right) + .3\left(\frac{M_3-N_3}{T_3}\right) + .2\left(\frac{M_4-N_4}{T_4}\right) + .1\left(\frac{M_5-N_5}{T_5}\right)$$

where M is the total number (volume)[35] of back issues of that category of periodicals, N is the number of current volumes up to five years old, the subscripts are the classes outlined in the section on classification, T is the number of titles of that category, and the decimals are an abritrary weight of quality for each category.[36] An index number of this kind has several values. First, it provides a "neutral number" to show the relative rank of each library to each other. It cannot measure quality *per se,* but it can show deviation from an agreed upon ideal standard. Second, it is applicable to all sizes of libraries. Third, it places the various elements of a periodical collection in perspective. As expressed above, the formula takes into consideration whether the library has a few periodicals with

34. Total volumes in the adult non-fiction collections of each were: 77,301; 30,984; 18,206; 15,960; 61,046; 16,366; 9,188; 12,930; 12,547.

[35] Volumes here refer to the volume numbering system set by the publisher of each periodical.

[36] The weights can be adjusted. Before actual use, one statistical modification should be made in the formula so that the index number would be based on a scale of 100.

SAMPLE CLASSIFICATION OF PERIODICALS WITH WEIGHTED FACTORS FOR A PERIODICAL INDEX

Current Popular Feature Periodicals (.1)
- Better Homes and Gardens
- Saturday Evening Post
- American Mercury
- Catholic World
- House Beautiful
- Readers Digest

News Magazines (.2)
- Newsweek
- Time
- Business Week
- Ebony
- Life
- Look

Technical Special Audience (.3)
- American Photography
- Self Realization Magazine
- Modern Office Procedure
- Office Management
- High Fidelity
- Model Aeroplane News
- [Trade Journals]

Current Serious Feature Periodicals (.4)
- Atlantic Monthly
- National Geographic
- Scientific American
- Science Digest
- Vital Speeches
- Consumer Bulletin

Professional Journals (.5)
- Analytical Chemistry
- Current History
- Journal of Accounting
- Personnel Journal
- American Economic Review
- Annuals of American Academy

Sponsored (0)
- Pretzel Baker
- Ford Times
- Railway Age
- Asphalt Institute
- Lutheran Women
- Lions Club

The number is the weight in the formula on Page 33.

many issues or a large number dating back fewer years, a weight factor to reflect the value of keeping certain kinds of back issues, and a factor to distinguish circulating and research libraries. For example, the smaller the library the closer its index number would be to zero. A library with back issues of *Readers Digest* would have a lower number than one with *Harpers*. As a library grew and added more professional journals, its index would rise.

Since again no library has a complete set of all periodicals, this mechanical method is an easy way to give an indication of the relative amount of information available at any one place. Psychologically, it will be difficult to accept the use of an index number because librarians (and others) tend to view the lower rating as a criticism or value judgment of "bad." This use of the Periodical Index, however, is wrong. The index number has meaning in this restricted sense only as it applies to almost identical libraries. The difference in the index numbers of libraries should be viewed *first* as reflecting differences in overall functions. "Good" or "bad" is determined after libraries with similar functions are identified. The formula can be modified in several ways to show different emphases.

Staff

THE STAFF OF A LIBRARY SHOULD BE REPORTED AS THE TOTAL FULL TIME EQUIVALENT EMPLOYEES WHO HAVE DISCRETION ABOUT THE QUALITY OR QUANTITY OF SOME ASPECT OF THE PROGRAM. THERE SHOULD ALSO BE A BREAKDOWN SHOWING THOSE WHO MEET REQUIREMENTS FOR CERTIFICATION.

The current methods of reporting personnel vary, although nearly all formal systems attempt to differentiate between the professional and nonprofessional. The recommendation in this report differs from most others, including the federal system, because the stress is on the measurement of a program or service from the viewpoint of the public as well as the public librarian. Viewed in this light, both detailed personnel data and a gross total have limited value. Research data shows that the total number of employees does not increase in

proportion to the size of library but follows instead an "increasing at a decreasing rate" curve. Moreover, the dispersion around any point on the curve is large. Unless a citizen or librarian knows, therefore, where his library falls on the curve he cannot visualize clearly what the "total staff" means—and even then he can only make deductions if his staff deviates markedly from the others.

Further complicating the understanding of personnel statistics is the vague definition of "professional" and the specific problem of ascertaining what kind of staff is needed by the small library. Small libraries have few professional personnel, and they perform a much different function than those in larger organizations.

Finally, note must be made of the differences in definitions of job classifications and the fact that the use of personnel in any one organization depends on a very large number of factors: One can even argue that the good librarian is a person who can adapt the personnel he inherits to the type of service that must be rendered.

Despite the apparent gross diversities, and like most other areas of library administration, certain similarities or generalizations can be extracted. First, what both the public and the profession really want to know about a staff is how many people make decisions about the character of the library's program. Secondly, they want to know whether these decision-makers have technical competence and breadth of interest, exert leadership, and most important display independence—all of which have a direct bearing on the quality and quantity of service that can be given. Although admittedly not a precise measurement, most professions have found that possession of a license or certification is the most feasible way to indicate that these qualities exist at least above some minimal point.

If this recommended scheme were followed, secretaries, custodial crews, bookmobile drivers, guards, and persons who work only at a charge-out desk in large libraries would normally not be reported. Whether a library has two or four secretaries or whether proper building service requires a janitor and boiler engineer is not too significant. In contrast, an administrative assistant to a director of a large library and the head of a fiscal division would be included. In small libraries, some clerical employees would be included because they make decisions about the library's program. For example, these people may actually run the library during certain parts of the week and what reader service is given at these times is their responsibility. Where this kind of staffing pattern is followed, the clerical personnel will show up on the statistical reports as decision-makers but without certification or a license. Now, the profession suspects this approach to staffing is common in smaller libraries, but there is no proof of it.

Every third or fifth year a special detailed report should be prepared on all employees. Such data (showing such items as classification, pay scales, hours of work, etc. of employees) would be of primary interest to the profession in showing how different libraries staff for both professional as well as housekeeping duties. Vacant positions might be reported at this time as a guide to recruiting entrants into the profession.

Objections. Although they have been alluded to previously, an extended comment is probably in order on at least two objections that will be made to this method of reporting. Some people will say that any definition of employees who have discretion about the quality and quantity of a program "will be vague and will prevent uniform reporting." This is true only to the extent that librarians do not want to assess their organizations objectively. Far more complex definitions have been formulated (as in cost of living indexes) and are used. Even the large libraries are not complex administrative units because the types of service rendered are interrelated, and an examination of curricula at library schools shows such a marked similarity that one can only conclude that basic administrative procedures and organizations do not differ much. In Pennsylvania, where there are only two large atypical institutions, an agreement on definitions should be relatively easy.

A second and more valid objection will be that a library could have a large number of professionally trained personnel doing clerical work, in which case it would be rated statistically higher than it should be. Admitting for the moment that a librarian might staff in this manner, one still could not state with certainty that it was wrong. All professionally trained librarians are not equal in ability and motivation. If those who are marginal are paid lower salaries and given some routine duties, can one really argue they are misused? The goal is to determine the number of employees *above* a minimum level of quality as represented by certification. Other statistics must be examined to determine if most of them can be graded "A," "B," or "C."

One must also recognize that all employees who control some aspect of a library program do not need to be trained as professional librarians. Whether one likes it or not, with the present short-

age of academically trained librarians, a concentrated effort will have to be made to outline areas where the "non-professional" but educated person can work. A person, for example, with a B.A. or M.A. in the social sciences or literature or music could become a good reference librarian in many medium size libraries. In this respect, the method of reporting suggested here has an advantage in that it will reveal for the first time the extent to which this type of person is now being utilized.

Physical Facilities

STATISTICS ON PHYSICAL FACILITIES OF THE MAIN LIBRARY SHOULD INCLUDE (A) GROSS SQUARE FEET OF BUILDING SPACE AVAILABLE FOR DIRECT PERSONAL LIBRARY SERVICE, (B) NUMBER OF STUDY PLACES, (C) AND NUMBER OF ROOMS AVAILABLE FOR GENERAL COMMUNITY USE.

EVERY FIVE YEARS, A DETAILED REPORT OF PHYSICAL FACILITIES SHOULD BE MADE.

Although a physical plant is fixed and easily described in architectural terms, anyone familiar with libraries knows the same space can be used to emphasize quite different kinds of programs. After visiting more than 60 libraries, it seemed to the author that three statistics best describe the choice of alternative uses of space made by any librarian and community. First, total gross square feet gives an idea of general community support, restrictions on growth, and general ability to furnish service. Second, the number of study or reading places for adults gives an indication of potential on-site use. As an illustration, Libary A that has study space for only eight to ten people and yet claims a service area of 25,000 population is clearly offering only an elementary service of check-outs; opportunities for reference work are minimal. Third, the number of rooms allocated for community use indicates the ability to give specialized services. So far as can be determined, the size of the rooms are not important since there are a variety of equally valuable services that could be geared to available facilities. Until the general social function of the library is clarified, it would be difficult to argue persuasively that one large assembly room is worth more or less than two smaller seminar rooms.

At first glance it may appear peculiar to exclude from a statistical report those sections of a building which are essential for the overall operation of a library but which are not used directly by a patron. On the other hand, their exclusion facilitates a comparison of *base* programs, *i.e.,* a comparison of the resources directly available for acquiring, storing and disseminating information. In most buildings there is no correlation between the size of a staff room or meeting room and effectiveness of an overall program. In contrast, relationships are easily observed when stack space, study facilities, and charge-out space are examined. From this statistical report, one will still not be able to determine whether the space for the reported areas is used properly, new facilities are needed, supplementary community programs are sponsored, or crowded offices impede administrative activities and lower morale. An evaluation of these items must be by some other means than comparative statistical data. What the concept of "space for direct personal library use" does allow is development of a meaningful *standard for basic space needs* to which other elements are added in accordance with the wishes of the librarian and community.

Some reservation will be voiced to these recommendations because an economizing local board could interpret all space above that needed for "direct personal service" as a frill. This kind of objection is certainly rooted in reality, but the reality of the *status quo* should not be a final control of all actions. If a new statistical reporting system set the stage for a serious discussion of library building needs based on more precise comparative standards than square feet per capita, a major professional contribution would result—a contribution which also would interest the local community in its efforts to allocate its resources among many competing demands.

In fairness to the reader, it should be noted that the statistics suggested in this report and the line of reasoning advanced in their support are not in agreement with the professional literature and many of the recent library surveys. For example, Wheeler and Goldhor use the figure of square feet per capita. This ratio, however, is not precise enough because it assumes that different elements of building needs are related in the same proportion to the number of residents. This is not true. Certain parts of a building are adjuncts of a direct library program and depend on peculiar community needs. Some libraries, for example, do not need to provide special auxiliary cultural services while others must do so if the service is to be provided. Moreover, under a system arrangement, square feet per capita is less meaningful, if not outmoded, because it assumes the traditional proportion of check-

out and on-site study uses. If, on no other basis, improvements in high school curricula have upset this balance by stressing the latter use. A more realistic measurement is one advanced two decades ago by Wheeler and Gitlens in *The American Public Library Building,* but unfortunately it has apparently never been amplified or systematically tested since then.[37] They proposed at that time a formula which took into consideration size of city, number of study places, circulation, and number of volumes.

Financial Reporting

ANNUAL REPORTS BY THE STATE SHOULD INCLUDE ONLY A MINIMUM NUMBER OF FINANCIAL ITEMS: (1) TOTAL EXPENDITURES, (2) TOTAL INCOME, AND (3) TOTAL EXPENDITURES FOR ACQUISITION OF LIBRARY MATERIALS (BOOKS, RECORDS, PERIODICALS, PICTURES, AND FILMS).

Very few areas of library administration offer as much opportunity as the financial area to gather and report statistics. In part, the opportunity stems from the public's insistence on detailed records of income and expenditures—although it is often very lenient, if not negligent, in criticizing the propriety of some expenditures. As income and expenditures increase (in terms of either a local library or a state library), the amount of record keeping also increases because "financial control" is one easy way to direct overall policies of a large organization. In Pennsylvania, therefore, with its state aid and movement for greater local fiscal support, one can expect to see financial records multiply rather rapidly. The only issue, as a result, is to be sure that (a) the growth is controlled, and (b) records are kept in such a way that *meaningful* information can be extracted from them. This meaningful information should include items for local use, items for comparison of local libraries, and items to aid the state and federal government in their advisory and control responsibilities. This report takes the position that these various demands are not mutually exclusive in developing a satisfactory financial reporting system.

State Reporting of Financial Data. The three basic items of (a) total expenditures, (b) total income, and (c) expenditures for library materials, in conjunction with the other statistical data suggested in previous sections, will show the general *level* and characteristic of the overall program. Because of variations in local tax structures and library needs, further breakdowns in a summary state report would not be too meaningful without considerably more supporting detail. Besides, the purpose of the greater detail is not to assess only the level or characteristic of the program but to *evaluate the proper method* for financing a library.

Uniform Budget and Accounting System. The quality of the state reports would be improved markedly if a uniform budgeting and accounting system were adopted by local libraries. In many respects, this is the most important change needed in Pennsylvania local libraries. Now, financial data can be interpreted as only broad indications of a local program because of the diversity with which similar items are reported. For example: Is "free rent" an income? Is free truck service by a school board income? Are books purchased for school use an expenditure of the *public* library or the school system? Is an appropriation from the borough council an "appropriation" and/or a "gift" and/or a "tax levy"?

Although many forceful objections will be articulated, there are several reasons why uniformity would assist the local librarians as well as the state. Most important, it would make possible comparisons of library programs, leading to the development of standards which are more than the educated guess of those in the profession. Secondly, a uniform system would simplify the work by both the local librarian and the State in computing eligibility for state-aid—in fact, if properly constructed, a local budget itself would provide any fiscal data which the State might need. Third, in the process of keeping the records, the most important data for local annual reports would be readily available.

By building on budget theories developed for general municipal programs, a library fiscal system can be formulated easily. The focal point is an *activity* budget from which a variety of reports can be prepared and for which the accounting records are devised. In a simplified form, the necessary steps to prepare a meaningful budget along these lines are as follows:

1. The total library program would be divided into activities. These activities would represent major ideas of service of interest to both the board and public and also major programs over which a librarian wants internal administrative control. These are:
   (1) General Administration
   (2) Acquisition of Books and Materials

37. *The American Public Library Building,* Joseph Wheeler and Alfred A. Gitlens. (New York: Scribner and Sons, 1941. 484 pp.).

(3) Direct Adult Service
(4) Direct Children's Service
(5) Special Services to Other Libraries
(6) Special Materials
(7) Maintenance
(8) Branch and Mobile Service
(9) Capital Investment

Most libraries perform all of these services in some degree now. Even if a library program does not include every one, the applicability of the system is not affected as long as standard definitions are applied to those that are present.

2. All expenditures in each activity would be classified according to (a) salaries and wages, (b) contractual services, (c) commodities, (d) capital equipment, and (e) capital investment. Expenditures would be given a standard code number (activity and classification) and assigned to a classification at the time of incurrence. For most libraries with budgets up to $200,000, each activity will constitute a ledger sheet to which expenditures are posted from the journals.

Total expenditures for either an activity or object are readily available from this classification. A single expenditure can be divided and posted to more than one activity. Salaries and wages can be divided in this manner also to show the amount of time devoted to each activity.

3. Income should be classified as (a) Direct Property Tax, (b) Appropriation of Local Tax Money, (c) State and Federal Aid, (d) Fines and Forfeitures, (e) Gifts and Donations, (f) Enterprise Income, (g) Income in Kind.

The following chart shows the format of a budget document and indicates possible standard definitions. A descriptive statement attached to the budget would be the Plan for State Aid. The extra detail in the budget could be analyzed on a research basis as needed. State aid would always be in a separate fund for both general administrative accountability and auditing; expenditures posted to the fund would be only those that were legitimate obligations of this source of income. Under this system, district centers would budget aid for this purpose as a separate service.

Because this system is based on standard definitions of expenditures, it is easily adapted to any size of library. Large libraries may well have extra services (service to the blind, research collections, etc.). Small libraries may be instructed not to use a service if no more than $100 (or perhaps a per cent of the total expenditures) are allocated to it.

What about the basic accounting records, such as journals and ledgers? Basically, these will not change in the more advanced accounting systems, with perhaps the exception of opening some new ledger sheets so that journal entries can be posted directly to the activity as well as the particular fund involved. In the smaller libraries (budgets under

SUGGESTED BUDGET FORM AND LIST OF ACTIVITIES FOR MEDIUM AND SMALL LIBRARIES

	Actual Expenditures 1959	Actual Expenditures 1960	Estimated Expenditures 1961	Budgeted Expenditures 1962
1. **Administration** (Librarian's Office, staff assistants, public relations, professional obligations necessary to a library program, accounting, records, board expenses, etc.)				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment				
Capital Investment				
TOTAL				

	Actual Expenditures 1959	Actual Expenditures 1960	Estimated Expenditures 1961	Budgeted Expenditures 1962
2. **Acquisition of Books and Periodicals** (Expenditure for books, replacement, rebinding and repair, cost of selection of books, cost of cataloguing, supplies for above, value of gift books received regularly, insurance. Periodicals: subscriptions paid by library, subscriptions paid by outside groups, binding and replacing, cost of selection, special equipment for display, etc.[1])				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment (Books and Periodicals)				
Capital Investment				
TOTAL				
3. **Direct Adult Service** (Service at charging desks, direct reference work, pages for reshelving, cost of special programs, displays, maintenance of cardholder registration, supervision of special collecions, cost of collecting fines, day guards, etc.[2])				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment				
Capial Investment				
TOTAL				
4. **Direct Children's Services** (Charging desk, cost of story hour, special service to/for teachers, supervision of school collections, maintenance of cardholder registration, cost of special collections if placed in schools.)				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment				
TOTAL				

[1] The value of gifts (books or periodicals) not received regularly are not budgeted. If desired, these could be reported as a separate activity outside of the regular system for previous years only (1959, 1960 columns). These items are received erratically for most libraries and have an undetermined value, partcularly for rare books. Acquisitions for children and adults could be separated if desired.

[2] Reference costs here are only those a direct result of a formal service. A small library where the librarian answers questions intermittently while doing other chores would not report this item.

	Actual Expenditures 1959	Actual Expenditures 1960	Estimated Expenditures 1961	Budgeted Expenditures 1962
5. **Special Materials** (Films, pictures, vertical files, records, loan and exhibit of special collections, clipping files, etc.)				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment				
TOTAL				
6. **Maintenance** (Rent, utilities, insurance,[3] minor repairs, janitorial salaries, janitorial supplies, small replacement items.)				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment				
TOTAL				
7. **Special Services to Other Libraries** (Interlibrary loan and direct district center activities.)				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment				
TOTAL				
8. **Capital Investment** (Contributions to a building fund, bond payments, mortgage payments, direct cost of capital improvement.)				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment				
TOTAL				
9. **Branch and Mobile Service**[4] (Operation of vehicles, drivers, supervision at stops, special insurance, etc. Books and other services are in the previous categories.)				
Salaries and Wages				
Contractural Services				
Commodities				
Capital Equipment				
TOTAL				

[3] Rent is included here if it is a cash payment. If a rent in kind is included as income, the same amount should appear here as an expenditure. In neither of these two cases will the amount automatically be included in computing local effort for state aid.

[4] A library with several large branches would probably want detailed records on each one of them . In this case, this same system can be used by treating each as a separate library. Then, adding services at each branch and the central unit will give a grand total for each service.

Source of Income[5]	Actual Expenditures 1959	Actual Expenditures 1960	Estimated Expenditures 1961	Budgeted Expenditures 1962
Direct Property Tax Levy				
Appropriate of Local Tax Money				
County				
City				
School District				
State and Federal Aid				
State Aid as Local Library				
State Aid as District Center				
Federal Grants				
Fines and Forfeitures				
Gifts and Donations				
United Fund				
Friends of Library				
Memberships				
Individual grants (cash and value of gifts received on regular basis.)				
Enterprise Income				
Rent of building, apartments, etc.				
Interest or realized gain on investments and endowments				
Income in Kind				
Rent[6]				
Utilities[7]				
Personnel[8]				
Other (Gift subscriptions to indexed periodicals. Books are not included.)				

[5]State aid as a local library and a district center should be treated as separate funds, and the normal fund integrity maintained in accounting records. For general annual statistical reporting, all of these categories would not be used. The data, though, would be available for research.

[6]Rent should be included as an income in kind, and as an expense for matching aid, if (a) the physical facilities are better than could be expected if they were owned, (b) for an interim period until new facilities can be purchased. In both instances, it is quite conceivable that only a per cent of the total rent should be allowed for matching purposes.

Each community should decide whether it is cheaper to rent or own. The state's interest enters the picture if (a) the community attempts to shift the cost for this element to the state, or (b) direct services to the public are starved as a result of uneconomic expenditures for this purpose.

This reasoning is based on the premise that each community has a basic responsibility to provide the physical plant for a library. As the concept of a district plan or integrated system is developed, this reasoning becomes invalid, and the state assumes an interest in establishing a certain kind of plant.

[7]All utility services received in kind should be included as income — and the corresponding amount as an expenditure — since they are considered operating expenses of any going plant.

[8]Personnel paid for direct by another public or private group should be listed as an income and expenditure. Volunteer help is not income in kind unless the persons are professionally trained and work the equivalent of half-time.

$100,000), several changes will probably be necessary since many of them use very simple financial accounting systems now. In most instances, periodic posting from a cash journal entry to an activity ledger sheet would be sufficient.

Extension Service

SERVICE OFFERED OFF THE PREMISES OF THE CENTRAL LIBRARY SHOULD BE REPORTED IN SUMMARY FORM AS FOLLOWS:

BOOKMOBILES: (1) TOTAL BOOKMOBILES AND TOTAL AVERAGE NUMBER OF HOURS OPEN FOR SERVICE IN A WEEK AT (A) SCHOOLS AND (B) NON-SCHOOL LOCATIONS. (2) AVERAGE TOTAL STOCK ON ALL BOOKMOBILES (ADULT AND JUVENILE) AT THE BEGINNING OF A CIRCUIT. PERIODICALLY, SAMPLE STATISTICS SHOULD BE COLLECTED ON CIRCULATION AND CHARACTERISTICS OF THE STOCK.

BRANCHES AND STATIONS: (1) TOTAL NUMBER OF VOLUMES AVAILABLE (ADULT AND JUVENILE).[38] (2) TOTAL SQUARE FEET OF FLOOR SPACE FOR DIRECT LIBRARY USE. (3) AVERAGE NUMBER OF HOURS ALL BRANCHES ARE OPEN DURING A WEEK. IF A STUDY WERE MADE OF BRANCHES, OTHER MORE SPECIFIC INFORMATION WOULD BE NEEDED.

Although extension service is a major element in many libraries, and especially is emotionally satisfying to advocates of bookmobiles, it is difficult to measure or describe in statistical terms. For one thing, the forms of extension service vary from the extremes of direct reader delivery service to the formalized branch or "regional" unit that approximates a complete and self-contained library program. Similarly, costs of such a service can be allocated in different ways, depending on whether one believes that extension service is a part of fixed overhead cost or a strictly variable cost.

Despite these difficulties, there are some areas of agreement on which meaningful statistics can be based. Two questions are paramount: (a) Is there an extension service? (b) Is the proper type used? The former is easy to demonstrate statistically. The latter poses more difficulty because of the reluctance of librarians to accept statistical descriptions of direct service. As explained earlier in this report, if statistics are viewed as a special language capable of succinctly expressing relationships, the problem is not as formidable. As an illustration, by employing two concepts of (a) maximizing use and (b) unit cost of access, a formula such as the following one can be applied to the raw data outlined at the beginning of this section.

$$\frac{\text{Number of books} \div \text{Capacity per hour multiplied by number of hours open in a week}}{\text{Cost of operation}}$$

This formula has not been tested and, therefore, can only be considered illustrative of the type of statistical description that is feasible. Nevertheless, an extended discussion of the concepts supporting the formula is probably in order because of the intense interest of the profession in measuring the kind and quality of extension service.

The capacity per hour is computed by assuming that it takes about 25 square feet for each person while in an extension facility (including book space) and that three different persons per hour could occupy this area. Obviously, such usage would border on congestion and be considered an intolerable condition by librarians. However, this condition does not invalidate the use of the two factors because the purpose is to determine some kind of maximum figure on which everyone can agree and then measure all libraries as deviations from it. Any other factors could be used as long as they reflected an extreme. The capacity per hour multiplied by the number of hours open in a week shows the ability to handle a maximum number of persons during this period.[39] As the hours open for service and/or the amount of space is increased, the larger is the number of people who can be served. Dividing this number of people into the number of books gives a ratio of books per person, a term well known to the library profession. If the ratio is high, say 2 or 3 books per person, the extension facility can encourage greater use and be assured it can truly give book service. Or, a high ratio could

38. It is assumed that the allocation of the books to the branch will be made by a professional and that the branch has access to the total collection in the central library. A detailed breakdown of the collection, therefore, is not necessary for a summary description.

39. This fact could be adjusted also by a factor to show the length of the checkout, but I think this would be too arbitrary, and create an impression that this element controls reading habits. One week is assumed to be the check-out period in the formula in order to get an estimate of the highest possible use. "Hours open" for a bookmobile is the total number of hours open at all (or each) stop in a week. "Cost of operation" is out-of-pocket cost, including rent and value of the collection; for a bookmobile, it includes annual amortization costs.

mean too many books are crowded into too small a space with too few open hours. Which of the two interpretations is applicable would be easy to determine. If the ratio is very low, say 1 book per person, the librarian would know that encouraging greater use would be self-deluding because there would not truly be books available for adequate service. A low ratio could also mean the facilities are open too many hours or there is too much space in terms of the number of books; neither of these two conditions can be justified. Whereas bookmobiles with very high circulation rates are now a point of pride, the approach suggested here would mark them as suspect on the premise that people were merely marching through the facility and picking up a book. It is difficult for this writer to see the value of a library service that precludes the use of any intellectual processes by the patron; and the use of intellectual processes has as a precedent *space, time,* and *books*. In short, this formula is designed in part to stress the individual more and circulation less.

Determination of Relative Costs. The next step is to divide the number of books per person by the actual operating costs for the branch, station, or mobile unit in question. The result is a unit cost to provide a *maximum service*. Technically this new figure is cost of service per book, but in line with previous comments its meaning is actually much broader and should be labeled as a *unit cost of access*. If this figure were computed for a large number of extension services, a standard could be formulated.

Perhaps the real value of a unit cost of access lies in its internal use within a library system. For example, a librarian can manipulate the figures to determine what form of service would theoretically produce the greatest access for a fixed number of dollars. Or, the cost of operation could be manipulated to determine what investment would be necessary to increase or decrease access. As can be seen from a casual inspection, this formula in almost all instances would rate a branch, a station, and a bookmobile in that order as the most economical method of service. While this ordering may seem obvious to many librarians, the advantage of computing it allows the establishment of fixed points from which measurements or comparisons can be made.

In order to make these measurements even more useful, two refinements can be made in the formula. One of them is to insert a factor for reference or study use. The second refinement is to relate the capacity of a facility to actual community needs. For example, one can assume that in an average community 30 per cent of the population over age five and within six miles of the library can be expected to use a library facility that is reasonably well stocked. By subtracting the factor of "capacity per hour times the hours open" from this number, the librarian would have a statistical measure of the *inadequacy* of present or proposed service.[40] A result of zero would indicate exact access needs were being fulfilled while a positive answer would indicate a deficiency. In Appendix A, there is an illustration to illustrate further the use of the formula.

In this approach, there is little need to define the difference between a branch and station, as California has done, since the emphasis is on describing the quality and quantity of extension service in a generic sense, *i.e.,* how many people can be serviced with a given facility. It is assumed (a) that the larger the facility the greater are the variety of services that can be offered, and (b) that size of collection, budget, and staff will readily indicate whether the facility stresses, as Wheeler and Goldhor state, "library service" or "book distribution."[41] Specific note must be made that this approach is different, but not necessarily inconsistent with the *Standards of Quality for Bookmobile Service.*[42] In this publication, it is assumed that a decision has been made to operate a bookmobile. Having made that decision, the next question is what are minimal standards for both effective and efficient operation of it. Here, though, the librarians are asked to do more precise thinking about *when* a bookmobile should be used as compared to a station or branch or individual delivery. This is discussed in very general terms in the section on "Role of the

40. Thirty per cent is a conservative estimate (based on present statistical reports) of the number of cardholders per population and hence an estimate of a basic demand for service in the community. This concept is also based on the tendency of a facility to generate its own demand. An education factor to reflect general educational level of the public could be added to the formula. ALA has set a standard for general library facilities which could be used.

    This constant assumes each person would visit the library once a week and is, therefore, a maximum figure. Some might argue this is misleading, and if so biweekly or triweekly visits could be substituted. Since the goal is to show deviations of alternative methods (*i.e.* ranking) I do not believe a significant distortion will occur.

41. *Practical Administration of Public Libraries,* Joseph Wheeler and Herbert Goldhor. (New York: Harper & Row, 1962) p. 412.

42. Chicago: *American Library Association,* 1963. 16 pp.

Bookmobile" in the *Standards of Quality for Bookmobile Service.*

Readers of early drafts of this manuscript took strong exception to this section on the grounds that in a community, political and social feelings will determine the form of extension service regardless of what cost or use statistics indicate. Certainly, in many instances this condition will prevail; and regardless of the popular image, library programs are not infrequently highly political (albeit a sophisticated or subtle form). To argue, though, from this alone that statistical data on extension service should not be collected is to be guilty of a *non-sequitur.* Local decision-makers should still know the relative costs and effectiveness of the different forms of extension programs. If they place a higher social value on one form than does another community, such is their prerogative. Resources for a library program must always be valued in relation to other alternative community needs. It is, therefore, quite reasonable to expect one community to place a much higher or lower demand on available resources for library service.

School Service

SCHOOL SERVICE SHOULD BE REPORTED AS FOLLOWS:

1. TOTAL NUMBER OF BOOKS CHECKED OUT TO OR LOCATED PERMANENTLY IN CLASSROOMS OR SCHOOL LIBRARIES ON A GIVEN DATE SHOULD BE LISTED.[43] IF THE BOOKS ARE CHECKED OUT TO THE SCHOOL FOR NOT MORE THAN TWO OR THREE WEEKS AND THE CHILDREN CAN TAKE THEM HOME, THE SCHOOL SHOULD BE CLASSED AS A SCHOOL STATION IN ORDER TO SHOW THE PECULIAR CHARACTER OF THIS KIND OF SERVICE. IF THE CHECK-OUT IS LONGER, THERE IS CERTAINLY PRESUMPTIVE EVIDENCE THAT THE PUBLIC LIBRARY IS PROVIDING TEACHING ASSISTANCE, ALTHOUGH THE USE MAY BE OFFICIALLY LABELED AS FREE TIME ENRICHMENT READING.
2. THE TOTAL NUMBER AND COST OF BOOKS PURCHASED EXCLUSIVELY FOR SCHOOL PURPOSES DURING THE REPORTING YEAR AND THEIR COST SHOULD BE REPORTED. BOOKS WHICH IN FACT ARE AVAILABLE IN THE GENERAL CHILDREN'S COLLECTION AT SOME TIME DURING THE YEAR SHOULD NOT BE REPORTED HERE. FOR EXAMPLE, BOOKS WHICH ARE CHECKED OUT TO A CLASSROOM FOR THREE MONTHS AND THEN ARE RETURNED TO THE SHELVES FOR PUBLIC USE WOULD NOT BE REPORTED. BOOKS WHICH ARE PURCHASED AND GO DIRECTLY TO A CLASSROOM OR SCHOOL LIBRARY AND ARE NEVER BROUGHT BACK TO THE GENERAL COLLECTION WOULD BE REPORTED.

43. If young adult books were readily available on a rotating basis, and the public library had sufficient stock, then a close liaison or cooperative program would be desirable.

One is impressed in Pennsylvania with the close ties between public libraries and school systems. A variety of factors are responsible, which range from outright financing of the entire library program by the school district and a feeling that the public library should help the school library to a realistic recognition by the librarian in some communities that if no public library service is given to the children they will receive no service at all. An appreciation of the importance of libraries to a quality curriculum is not a *forte* of many professional public educators.

Because of these problems stemming from the characteristics of individual communities, it is important to collect data so that all concerned will understand how current resources are being developed and utilized. From this data, a decision can be made about encouraging the emphasis on any particular system of school service. The data would be useful, also, for legislative purposes.

Federated and County Systems

ALL REPORTS SHOULD BE BASED ON INDIVIDUAL INDEPENDENT LIBRARIES (*I.E.*, HAVING AN INDEPENDENT LEGAL STATUS AS DISTINGUISHED FROM A BRANCH CREATED BY THE CENTRAL ORGANIZATION). IN ADDITION, THOSE WHICH ARE A PART OF A FEDERATED OR COUNTY SYSTEM SHOULD BE GROUPED TOGETHER. A SEPARATE AVERAGE SHOULD BE COMPUTED FOR THE SYSTEM.

A SEPARATE REPORT (OR SECTION)

SHOULD BE DEVOTED TO OUTLINING THE CHARACTERISTICS OF THE SYSTEM:

	Yes	*Partially*	*No*
1. Is there one central common budget for all units?	____	____	____
2. Is all personnel supervised centrally?	____	____	____
3. Are books and other material purchased centrally?	____	____	____
4. Are books and other material catalogued centrally?	____	____	____
5. Does each unit have its own independent governing board?	____	____	____
6. Is the tota_ collection rotated among all units?[44]	____	____	____
7. Are residents allowed free check-out of the material at any unit?	____	____	____

Federated and county systems pose a special problem. For the most part they are created in order to make maximum use of all resources. In this sense, the component units should be considered as "one" since the total resources are available to each component. On the other hand, the differences in the degree of integration of these systems are so great that this line of reasoning is only partially valid. One system in Pennsylvania, for example, exists as a unit only to qualify for county aid, and in no sense of the word are total resources used for a total program. The other extreme is the approach in Lower Merion Township where there is a distinguishable unity of individual components. There are also an almost unlimited number of ways to organize a system for cooperative use of certain resources.

Given such a variation, reporting on a *federated* basis exclusively is misleading. Truly federated systems in Pennsylvania tend to have a strong central unit and several weak satellite units. The actual availability of resources in these instances is not accurately reflected in an average because the individual units deviate markedly from each other as well as the central organization. An average would prevent identification of areas of very poor service. Another element must also be considered. Since people do not travel far for library service, and since inter-library loans are not administratively feasible for current high demand items,[45] each unit must perform a basic circulation function and to a lesser extent a study function. It is, therefore, this basic service which should be reported and measured. Supplementary services associated with a federated system should be reported separately.

Some libraries will object to this approach because the statistics will imply a lower level of service than current reports show. These libraries must be made aware that such is not the case and that they should compare themselves to other similar size libraries in a federated system. As federated or consolidated systems grow and the individual units take on the characteristic of a branch, statistical reporting should be based on the total system. In the meantime, areas of deficient service should not be hidden by the averages of a "system."

44. In only rare cases is a total collection rotated. In all probability, though, the smaller the central library the more likely that it should be rotated.

45. In the libraries visited, librarians usually said they made and received loans and shared their collection with the members of the system. In practice, the materials were available upon request. This is not sufficient for a label of "integrated system" since the burden is on the reader as the moving force. The librarians should be the major force by seeing to it that new or different bodies of information are presented to the major users of the independent units in the system.

District Library Centers

IN AN ANNUAL REPORT, DISTRICT LIBRARY CENTERS SHOULD BE DESIGNATED BY SOME SYMBOL SO THAT THE READER WILL KNOW THAT IT HAS A DIFFERENT LEGAL AND FINANCIAL STATUS THAN OTHER LOCAL LIBRARIES. IN ADDITION, A SEPARATE SECTION OF THE REPORT SHOULD LIST THE DISTRICT LIBRARY CENTERS ALONG WITH THE FOLLOWING INFORMATION ABOUT EACH ONE.

1. POPULATION OF THE DISTRICT.
2. COLLEGE LIBRARIES SERVING AS DISTRICT CENTERS SHOULD REPORT THE INFORMATION IN THIS SECTION PLUS TOTAL COLLECTION AND NUMBER OF PERIODICALS SUBSCRIBED TO.
3. NUMBER OF PERSONNEL DEVOTED EXCLUSIVELY TO DISTRICT DUTIES. FOR SMALL DISTRICT CENTERS, THIS WILL MEAN A FRACTION OF ONE PERSON'S TIME WILL BE REPORTED.
4. AMOUNT OF DISTRICT CENTER STATE-AID.
5. TOTAL NUMBER OF INTERLIBRARY LOANS MADE BY IT TO OR FROM ANOTHER LIBRARY. AN ITEM FROM A RESOURCE CENTER FOR A LOCAL LIBRARY WOULD BE COUNTED AS LOAN FROM THE RESOURCE CENTER AND A LOAN TO A LOCAL LIBRARY.
6. NUMBER OF REFERENCE QUESTIONS RECEIVED FROM LIBRARIES.

Activities of the district centers are not easily subject to statistical description. In all instances, leadership is the key to the success of the center, and the forms it can take are indeed varied. An aggressive librarian can take a poor collection and still make an imprint on a district by developing special services which he or she can provide at once. Without doubt, the best way to report district activities would be reproduction of the annual plans submitted for state-aid; but since this is not feasible, the State Library should give some thought to preparing special reports on district activities as compiled from the annual plans.

Interlibrary loans and reference questions are probably the best present statistical index of the demand for service, and they are a good device to measure historically the deficiencies (and their correction) in local libraries as well as the district center. For the immediate future, therefore, district centers should keep a detailed record of these transactions so that periodically an analysis can be made by researchers. To the extent that an item is borrowed from a resource center for a local library in the district, the number of interlibrary loans is inflated somewhat. But, the slight inflation can be justified in order to get a measure of the workload incurred by the district center. A reference question answered on the telephone at the time of inquiry should be counted separately.

The amount of district aid is important for the reader as an aid in placing the activities of the centers in some kind of perspective.

SPECIAL REPORTS

The value of an annual statistical report is not fully realized if no action is taken beyond its printing. As stressed several times in this report, no one set of statistics can describe fully, on either a city or state basis, a library program which by its nature deals with such broad intangibles as intellectual development, therapeutic reading, and economic advancement. In some instances the statistics must be supplemented or expanded in order to provide greater accuracy; and in nearly all instances the reader must be given some kind of perspective within which to interpret them. If the latter in particular is not done, the public is not only handicapped in using the collected data, but in a more fundamental sense an opportunity to provide leadership for the profession is lost.

This implied but strong plea for even more research than is represented by an annual statistical compilation is made with an awareness that research takes the time of personnel and material resources and that some people feel research has blossomed in the general American economy to the extent that it now supersedes the service which it was originally supposed to support. However, regardless of its merits in individual situations, this fear or misgiving about research is probably illusory. Certainly all evidence supports a thesis that the library must assume a more active role in order to supply the information needed to maintain (let alone expand) the present social and economic system. The real issue, therefore, is whether the library can "look at itself" objectively enough (*i.e.* determine what *is* being done rather than what *should* be done or what is *thought* to be occurring) to make rational and rapid decisions about needed changes.

It is for this reason that the State Library is urged to undertake a series of special reports oriented to Pennsylvania but not parochial to the extent they are out of the main stream of American library development. Primary emphasis should be given to textual interpretations of either existing or specially collected statistics by placing developments in a historical setting, relating certain services to the broader social setting in which the library functions as an institution, and raising questions about present practices and goals. In these reports, the State Library does not need to take a specific advocatory position, and probably should not, in the interest of encouraging local librarians to be critical.

If one report a year were prepared over a period of five to seven years, a large body of information would be available for local administrative use and as background reading material in academic library courses. Staff members at library schools might well be interested in preparing some of the reports.[46] A *Library Trends* based on specific research is the best example of the proposal suggested here.

46. California and Illinois are examples of two states that publish special materials.

Some illustrative subjects for special reports are listed below:

1. Description and analysis of personnel practices (salaries, training, classification, fringe benefits, vacancies, ethical problems of the profession, staffing in a scarce labor market, general employment trends and opportunities for the college graduate, etc.)
2. Physical plant (survey of existing facilities, new ideas in library design, economic and legal issues in renting *vs* owning, experiments in use of different types of branches and stations, critical appraisal of effect of different types of location on service, etc.)
3. Census data (reprint and analysis of census items which have a direct bearing on library service — *e.g.,* trends in age and educational achievement, population movements, income levels, industrial development and depression, etc.)
4. Library service in the metropolitan area (extent of actual use, service in culturally deprived area, analysis of overlapping service, present methods of financing, impact of metropolitan area on library service, feasibility of metropolitan library district, etc.)
5. Extension and Special Services (survey of types of service, impact they have on other library programs, cost, special groups that need library service, etc.)
6. Fiscal analysis (current and recommended budgeting procedures, economic issues in different methods of financing library service, current trends in financing, role of state aid, etc.)
7. Library users (characteristics of cardholders, number and characteristics of actual on-site users, reasons for using library, attitudes toward libraries, frequency with which suitable material is not found, effect on library users if hours or location changed, etc.)

CIRCULATION DATA

Some librarians may wonder at this point why circulation data are not recommended for regular reporting. This particular information is so rooted in traditional library practice that its omission borders on heresy and could only be so advocated by a *non-librarian.* Without apology, though, the evidence suggests to at least one writer that circulation data are among the least significant now commonly reported to a central agency.

Several deficiencies can be noted. The amount of circulation is in a large measure a product of the kind of library being administered, and this in turn is a product of numerous other social and professional factors. As commonly defined (check-outs), circulation is a very misleading measure of the use of a research library, a library that allows access to all stocks *vs.* one that must restrict access, a library that stresses fiction because a research library is located nearby, or a library that has an above average collection of periodicals and professional journals. Present circulation figures are also a very poor measure of the number of persons who actually use a library or the pervasiveness of community use. Since a reported circulation is influenced by the length of the check-out period, it even has limited value in measuring demand for certain items. Finally analyses made of check-outs in several libraries show that a small number of books are responsible for a large per cent of the circulation. Circulation figures, therefore, tend to reveal only the turnover of a very small per cent of books.

TABLE II

CIRCULATION OF TWO GROUPS OF SELECTED PENNSYLVANIA LIBRARIES WITH SIMILAR SIZE OF COLLECTIONS*

City	No. of Adult Volumes	Per Capita Circulation	Per Volume Circulation
Group I			
A	21,636	10.3	2.3
B	19,603	3.2	2.5
C	19,428	9.8	2.9
D	19,871	2.8	2.5
E	18,608	1.2	.3
F	24,687	1.7	1.0
Group II			
G	100,391	.4	.6
H	96,641	2.3	1.5
I	81,000	2.4	2.2
J	116,866	1.5	1.5
K	82,180	2.1	2.8

* Source: "Pennsylvania Public Library Statistics, 1960." Pennsylvania State Library.

Although the major evidence is against maintaining circulation statistics, it would be erroneous to conclude that they have no value. When properly collected, they do measure the volume of material that passes in and out of the library, and this is sometimes useful to know for internal administrative purposes, and it can indicate with other data whether a library program is over emphasizing lending service to the detriment of on-site use. For a discussion by a librarian who feels that circulation figures are useful in explaining a program and making decisions, see: Dean C. Gross, "A More Meaningful Statistical Report," *Wilson Library Journal,* Volume 32, December, 1957, p. 297. For these particular kind of uses, a much more efficient way to collect the statistics is by sample techniques. At the time the samples are taken, additional information could be collected on average length of check-outs, number of books checked out at any one time, and demand for certain types of material.

SUMMARY

A statistical reporting system can be made very complex and comprehensive without difficulty. A simplified one, though, geared to the realities of local library staffs and related to specific needs poses more problems than it solves. The system embodied by the foregoing recommendations is no exception. Every effort has been made to include only those items which when taken singly or in conjunction with others tells something about a particular library's program. In some instances, an item measures a particular characteristic of a program very accurately while other items—it is frankly admitted —describe only in general terms. In the latter instances, some accuracy has been passed over deliberately in an attempt to arrive at broad issues on which professional librarians can base generalizations and develop standards. Throughout the entire reporting system, the emphasis is on data that would be meaningful (or could be made so easily by a librarian) to an informed lay group.

The total recommended system is more complex than the present annual report of the Pennsylvania State Library or the periodic reports of the United States Office of Education. On the other hand, they are not as detailed as the report published by the California State Library. Once a record system is set up internally in the individual library, the data for each annual report can be easily prepared, and for the most part a librarian will seldom have to prepare other data for local community use and will not need to survey other libraries for data on special problems. In this sense, the system may result in less total work in some libraries.

In some respects, the key to the entire system is the willingness and ability to prepare well researched special reports. Without them there will be no supplementary bench marks to use in interpreting the data in the annual reports. Very important in this respect is a self-inventory showing which libraries have special collections of documents, rare books, and Pennsylvania materials.

APPENDIX A

Notes on Extension Service

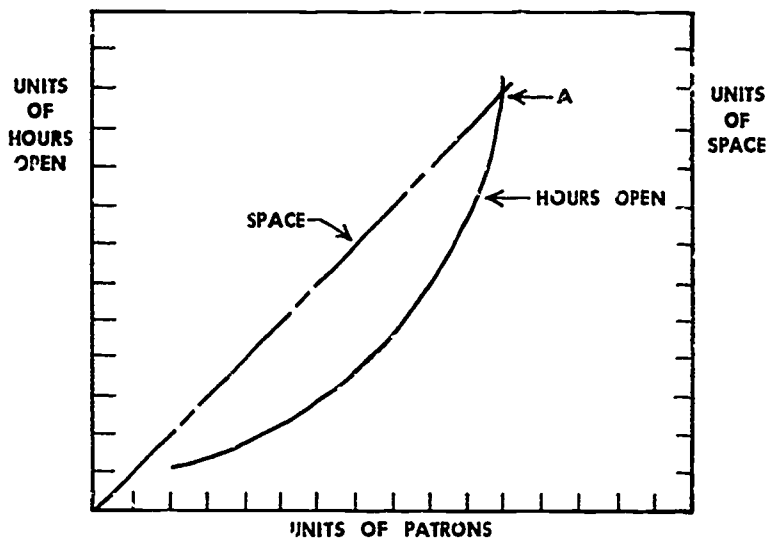
The use of the formula on extension service can be illustrated as follows.

	Volumes	Square Feet	Hours	Total Capacity	Index of Maximum Effective Use
A.	2,500	300 (mobile)	20	720	3.4
B.	2,500	700	50	2,520	.9
C.	2,500	1,000	40	4,800	.5

Assuming for the moment that community needs are for service to 2,000 people and that the desired Index of Use is "1" (one book per person), alternative B in this situation is the best of the three. It can handle about 2,520 at the desired level of service; and if fewer people actually use it the level of service is conceivably higher. Alternative A can offer very good service but only to 720 people. If more people are actually run through the mobile, and this is possible, the facility is overcrowded, and probably only a very rudimentary form of lending service could be offered, a level of service below that implied by the desired goal. Alternative C is low at the other extreme of the scale because it has space and/or hours to handle a clientele in excess of the book collection; if the collection cannot be expanded, economic factors would suggest smaller space and /or fewer open hours. If all three units functioned in some form in one system, the librarian would suspect from these figures that highly unequal services were being offered to the three clienteles.

The cost of each operation might change the rankings. As an extreme, if the facility at C were free and only personnel costs had to be paid, C would probably be chosen. While this sounds obvious, and could be deduced without statistical manipulations, there are very few cases where facilities are completely free, in which case cost and maximum effective service must be balanced in some way. This mechanistic approach has the advantage of establishing an initial point of balance to which other less tangible factors can be added before the final decision is made. Stated differently, self-deception and construction of rationales are reduced.

The hours open and space are clearly key elements in extension service, probably more so than for a central library. If a person studied his community, curves could be drawn to show the proper amount for each. For most communities, the curve would be similar to the following:



GRAPHICAL REPRESENTATION OF RELATIONSHIP OF HOURS OPEN, AMOUNT OF SPACE, AND NUMBER OF LIBRARY USERS

At the lower end of the scale, each added unit hour (at the appropriate time of the day) would add more than one unit of users. At the other extreme, (*e.g.*, say from 10:00 p.m. to 11:00 p.m.) each added hour open would result in less than 1 unit of users being added. The goal is obviously to reach as soon as possible the margin where an added unit in hours produces an added unit of users, and beyond this point budget factors would have to be considered more seriously. Space can be analyzed the same way except each added unit always allows 1 more unit of users. In the diagram, point A represents the point at which the amount of added space *and* hours produce the same number of users.

At the expense of repetition, the reader who objects *in toto* to any attempt to quantify elements of service should recognize that if devices like those discussed here are rejected, others must be developed to aid decision making. The price of increased library service is complexity and larger systems, which in turn create further demand for service. Ways must be found to identify areas of good and bad service more rapidly and accurately than can be done by surveys or opinions of professionals.

APPENDIX B

Notes on Methodology

Increasingly, readers of so-called research reports are demanding some statement on methodology which they can evaluate along with the conclusions. Since this report contains not only description but recommendations for change, a few methodological comments are mandatory.

The core of the data comes from personal visits to more than 60 libraries in 1960-61 in a study leading to the organization of 30 districts as provided in the 1961 Pennsylvania Library Code. During these visits, interviews were conducted with librarians, board members, and community leaders. In addition, the basic service of the libraries was examined, and special statistical data was collected from internal records and annual reports. An interview schedule was used for basic interviews, but the number of interviews in each community varied according to the special needs of that study.

This data, along with ideas written in the literature and an examination of other state and federal statistical reports, was the basis for compiling a lengthy list of items which ideally would be useful in describing a library program; problems and difficulties in collecting the statistics were not considered at this point.

At the same time, a case study was begun at the Mifflin County Library. A research assistant spent two months in the community (1) conducting special depth interviews with board members and community leaders, (2) conducting an organization and method study of internal library procedures, and (3) compiling and analyzing special statistics on library use. A special written questionnaire was tested and administered to a random sample of library users to determine the extent of their use of the library and their attitudes toward it. The purpose of this case study was twofold. First it was to develop sufficient rapport with a community so that some feeling could be gained about what it thought important about its library and what it knew (and wanted to know) about its operations. Secondly, the purpose was to test methods of collecting statistics and their accuracy in describing elements of a program. The results, in brief, for this report were a major editing of the lengthy list of items mentioned previously.

Then, 11 librarians agreed to let researchers go into their library and collect many of the statistics which now seemed most pertinent to measuring the quantity and quality of a library program. For the most part, the librarians did not know what or why items were being collected or tested. In this way the researchers could actually collect the statistics and thus determine how difficult it would be for the librarians themselves to do it, and in order also to minimize any bias occasioned by what the librarian thought was important. Among other things, total holdings were counted according to the Dewey classification, samples were taken of cardholders and the "300" series in non-fiction. Where records permitted, samples of fiction titles were taken to measure usage, and periodical holdings were tabulated. Staff members were also interviewed in order to find if there were unusual characteristics of the program not reflected in statistics, and, therefore, what degree of accuracy could be expected from certain items. From two to four days was spent in each of these libraries. Some more items were deleted as a result of this step and some others were added. Supplementing this data was an examination and analysis of the data in the statistical reports of 14 states and annual reports of numerous public libraries located in all sectors of the nation. Where possible, statistical analyses were made to determine correlations or relationships and to determine the extent to which Pennsylvania libraries differ from those in other states. But, as is evident from the subject of this report, *true testing* must await implementation of the uniform reports and definitions outlined in the preceding pages. Despite all the diversity of reports and programs, one still gets the feeling that there are more common elements among libraries than different ones, and that differences asserted by individual librarians are really not significant when viewed from the point of view of the community or the exploding printing industry.

The formulas suggested in the text are derivations from the above procedure. Obviously, they have not been tested since the raw data needed for them still must be gathered by visiting each library.

APPENDIX C

SAMPLE LIST OF COLUMNAR HEADINGS FOR A STATE STATISTICAL REPORT ON PUBLIC LIBRARIES

IDENTIFICATION

Name of Library
Location (by name of municipality)
Appointment of Board
Exclusively by another municipal body
Exclusively as a private association
Combination of appointment by municipal body and private association

POPULATION SERVED

Primary Service Area
Adjusted Population — Effective Service Area
Population for Which State Aid Claimed

COLLECTION

Total Volumes — Books
Total Volumes — Juvenile Books
Total Volumes — Adult Books
Total Volumes — Reference Books
Total Volumes — Fiction Books
Total Volumes — Non-Fiction Books
Total Volumes — 100 Series)
200 Series)
300 Series)
400 Series)
500 Series) Printed once every three to five years
600 Series)
700 Series)
800 Series)
900 Series)

Total Volumes — Acquisitions during the year
Total Volumes — Juvenile during the year
Total Volumes — Adult during the year
Total Volumes — Fiction during the year
Total Volumes — Non - Fiction during the year

Total Volumes — Musical Scores)
)
Total Volumes — Records)
) Printed once every
Total Number of File Drawers (Full Equivalent) — Vertical File) three to five years.
)
Library is Federal Document Depository (Yes or No))

CARDHOLDERS

Number of Cardholders Registered

PERIODICALS

Total Titles
Total Volumes — Five years or more old
Periodical Index Number

STAFF

Total Staff (With discretion over quantity and quality of service)
Total Staff Meeting Certification Requirements
Total Staff (Full-Time Equivalent) — Reference Service

PHYSICAL FACILITIES

Gross Square Feet for Direct Library Service
Number of Study and General Reading Places
Number of Rooms Available for Community Use

FINANCIAL REPORTING

Total Expenditures — General Operations
Total Expenditures — Library Materials
Total Expenditures — Salaries and Wages
Total Expenditures — Other
Total Income — General Operations
Total Income — Local Tax Money
Total Income — State and Federal Aid
Total Income — Gifts and Donations
Total Income — Other

BRANCHES, STATIONS, MOBILE SERVICE

Total Volumes — For All Units
Gross Square Feet Space — Direct Library Service, All Units
Average Number of Hours Open — All Units
Total Bookmobiles
Total Branches and Stations

SCHOOL SERVICE

Total Volumes — Checked Out to Schools
Total Volumes — Purchased Exclusively for School Use
Total cost

FEDERATED-COUNTY SYSTEMS

Is there central common budget for all units
Is all personnel supervised centrally
Are books and other materials purchased centrally
Are books and other materials catalogued centrally
Does each unit have its own independent governing board
Is total collection rotated among all units
Are residents allowed free check-out privileges at any unit

DISTRICT LIBRARY CENTERS

Population of the district
Total Volumes
Total Titles — Periodicals
Total Personnel — Devoted exclusively to district duties (full-time equivalent)
Total District Center State-Aid
Total Interlibrary Loans
Number of Reference Questions Received from District Libraries

SPECIAL REPORT ON EXPENDITURES

Total Expenditures by Activity
- Total Expenditures — Administration
- Total Expenditures — Acquisition of Books and Periodicals
- Total Expenditures — Adult Reader Service
- Total Expenditures — Direct Children's Services
- Total Expenditures — Station and Mobile Service
- Total Expenditures — Special Materials
- Total Expenditures — Maintenance
- Total Expenditures — Special Services to Other Libraries
- Total Expenditures — School Collections
- Total Expenditures — Capital Investment

Total Income
- Total Income — Direct Property Tax
- Total Income — Appropriation of local tax money
  - Total Appropriation — County
  - Total Appropriation — City
  - Total Appropriation — School District
  - Total Appropriation — Other

Total Income — State and Federal Aid
- Total State Aid to Local Library
- Total State Aid to District Center
- Total Federal Aid

Total Income — Fines and Forfeitures

Total Income — Gifts and Donations

Total Income — Enterprises, Investments

Total Income — Income in Kind

Printed along with other financial data once every three to five years for the current year. Or, printed periodically as historical document with data for each year.

Data are reported to State each year.