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SYSTEMS AND ITS RELATIONSHIP TO THE LEVEL
OF SERVICE OFFERED BY MEMBER LIBRARIES.

University of Illinois at Urbana-Champaign,
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1971

ADMINISTRATIVE STRUCTURE OF PUBLIC LIBRARY SYSTEMS
AND ITS RELATIONSHIP TO THE LEVEL OF SERVICE
OFFERED BY MEMBER LIBRARIES

BY

BARBARA OLSEN SLANKER
B.A. COLORADO STATE UNIVERSITY
M.S. UNIVERSITY OF ILLINOIS
1959

THESIS

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I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY
SUPERVISION BY BARBARA OLSEN SLANKER
ENTITLED ADMINISTRATIVE STRUCTURE OF PUBLIC LIBRARY SYSTEMS AND ITS
RELATIONSHIP TO THE LEVEL OF SERVICE OFFERED BY MEMBER LIBRARIES
BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY

Ray Garrison

In Charge of Thesis

W. B. Davis

Head of Department

Recommendation concurred in†

W. B. Davis

George Mayberry

C. K. Brown

W. B. Davis

Committee
on
Final Examination†

† Required for doctor's degree but not for master's.

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CHAPTER I

BACKGROUND AND DEVELOPMENT OF THE PROBLEM

The provision of materials and services of a uniformly high quality to all the people in the country is the goal of the public library in the United States. Attainment of this goal has presented many problems of a large order, because public library service, as it developed originally, was provided by a self-enclosed and self-supported municipality to a specified segment of the urban population. This pattern of urban service was set with the establishment of the Boston Public Library in 1851, and since it became one of the important public libraries, it influenced the organization and administration of subsequent libraries.¹ For a number of years independent public libraries in large and medium-sized cities were able to provide relatively adequate service to the residents of their cities, but the urban libraries made no effort to serve rural residents (who made up a large segment of the population at this time) and as a result, persons who did not live in cities were almost entirely without public library service.

To make library service available to the total population, a different pattern of organization had to be devised. At first, additional independent urban libraries were established, but it became apparent that they did not solve the problem, for the rural population still did not have access to service. As the library needs of the rural residents were recognized, efforts were begun to extend public library service to them. Methods of

extending service (such as branches, sub-branches, stations, and deposits) were devised to take library services to the non-urban population. New York State's "traveling libraries," collections of publicly owned books taken to rural groups upon request, are an example of one of the early means of extending library service to persons without access to city or town libraries. Morgan suggests that the traveling libraries may be considered as predecessors of the county libraries even though they were still used in some states after county libraries were established.²

The county library, according to Sandoe, may be defined as

. . . an attempt to apply the techniques of organization and control developed in the large urban library to the village or county community. To secure funds necessary for effective operation, the tax-and-population-service-base has been enlarged. Such a library serves its people usually through a central reservoir of books, supplemented by an extension system of branches, sub-branches, stations, and/or bookmobile service.³

The library laws of most of the states allow the county government to form single or multi-county libraries, and the organizational patterns of the county libraries took a number of different forms since they were influenced by varying factors, such as differing state library laws, local custom, political expediency and momentary advantage, as well as different ideas about library organization and management. Although the county libraries showed a great variety of governmental forms, there were similarities underlying the surface differences. Jowckel distinguished three categories of county libraries as 1) those that are part of the county government only, 2) those that are part of both the city and county government, and 3) libraries that serve the county by contract.⁴

The first county library was established in 1898 in Ohio, but it was not until 1910 that county libraries began to be established with any frequency throughout the country. Progress was slow and by 1935 only two states, California and New Jersey, had numerous and successful county libraries. Several factors were responsible for the slow development of county libraries to serve rural areas, and probably the most important was finance. It was difficult to persuade areas of relatively low tax income to devote part of it to a new service. Also, rural persons were only beginning to work together in such organizations as the Grange and the Farm Bureau.

County libraries in the South and California.--Slowly county libraries were established in most parts of the United States, but those that developed in the Southern states and in California are of special interest in this discussion. Socio-economic conditions in the Southern states during the first part of this century were factors that restrained the development of county libraries as they were being formed. In their study, Wilson and Wight pointed out that geography, wealth, and characteristics of the population were especially important factors during this formative period.⁵

Geography is the first factor Wilson and Wight considered because it determined certain other factors. In some sections of the South, conditions were favorable for the growing of cotton which, though it is a rich crop, requires a vast amount of cheap hand labor. Other sections of the South had submarginal land and eroded soil which made it difficult to support a satisfactory standard of living. In terms of wealth, the South had abundant natural resources, but lacked accumulated wealth and current income to provide necessary social services.

Characteristics of the population form an important part of the Southern background, Wilson and Wight point out. First, the white South was predominantly early native stock that had almost no foreign elements mixed with it; and second, according to the 1930 Census, more than two-thirds of the Negroes in the United States lived in the South. Three further characteristics of the population merit careful consideration, for they are important in the development of county libraries in the South: 1) the predominantly rural nature of the population, 2) the steady loss of population to other regions of the country, and 3) the high ratio of children to adults in the total population.

The Julius Rosenwald Fund sponsored a county library demonstration in eleven counties in the Southern states for the five year period, 1929-1934. The purpose of the demonstration was to stimulate library service on a county-wide basis to all residents of the counties. The Fund appropriated approximately \$500,000 to match local appropriations to finance the project. The eleven counties chosen for the demonstration were not representative of counties in the South because most of them were urban in nature, and as such they had greater population and wealth, a higher level of education, and a lower ratio of children to adults in the total population.

In evaluating the success of the demonstration, Wilson and Wight noted that the county had proved to be a satisfactory unit in the eleven demonstration counties, but since the sample was not representative, generalizations could not be made to all the counties in the South. From one-half to three-fourths of all the counties in the South were too small, too poor, and too sparsely populated to serve as a successful local unit

of administration of public library service,⁶ In their conclusions, Wilson and Wight suggested that

. . . the extension of library service in the South should be carried out by contracts with established libraries, both city and county, by union of several counties to form a more favorable unit, or, as in the case of schools in some states, by using the state as a unit.⁷

By way of summary it may be said that the county library has played an important role in the extension of library service to rural residents who never before had access to a library. Even more important has been the role the county library has played in the development of regional library service. With the county library, the initial step was taken toward the development of regional organization, because the first attempt was made to use a tax and service unit larger than the township. Although the county library has enlarged the resources and improved the service of many town and village libraries, a valuable contribution in itself, it has not succeeded in bringing about complete library coverage in even one state. Far from being a failure, as Morgan observed, this shortcoming has been extremely valuable because it

. . . has contributed to the progress of library extension work, since realization of the limitations of the county unit have led to greater flexibility in legislation and organization, to greater co-operative efforts among libraries of all kinds, to the concept of still larger units of service, and to the conviction that state or federal aid, or both, will be necessary before the privilege of free library service is universal throughout the United States.⁸

County libraries in California were different from the county libraries in the Southern states, not only because they were notably more successful in their operation, but also because they were organized into

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regional units. The county library law of 1911, one of the important factors in the success of the California libraries, contained several features of particular importance in fostering the developing county libraries:

- 1) provision for the establishment of the library as a county department by vote of the county supervisors
- 2) flexible provision for county service by contract with another county or with a city library
- 3) permissive arrangement whereby established city libraries may join the county library

A combination of several other factors was instrumental in the success of the county libraries and their later organization into a regional system of service. The presence of strong county government in the state was the first factor in the success, and the size and wealth of the counties was the second factor. Brilliant leadership by James Gillis, California State Librarian, was the final factor in the combination that led to the success. The State Library maintained general supervision of all the county libraries and also served as a resource library for them, lending books and providing specialized services (such as reference service) that would not be available otherwise. The close association of the State Library with the individual county libraries has been one of the most important aspects of the California library systems.

With this special combination of circumstances, it was possible to consolidate the local independent county libraries into a regional system. Participation in the program was optional and not all the counties in the state chose to participate, but the ones that did were able to give a level of service to the sparsely populated areas of the state that was more nearly comparable to the level of library service which previously had been

available only in metropolitan areas.¹⁰ The success of the regional organization in California demonstrated that the idea could work.

Another step in the development of the concept of regional libraries came in the decade of the 1930's when five regional libraries were created as part of the educational program of the Tennessee Valley Authority; the Work Projects Administration assisted in the creation of the libraries. The program was designed to provide adequate library facilities for the personnel engaged in building sixteen major dams along the Tennessee River; many persons consider the program one of the most imaginative systems of library service devised. The T.V.A. was the first governmental agency to include library service in its plans, and in this respect, it stands as a marked contrast to the handling of large scale construction activities by other federal agencies.¹¹

The T.V.A. was a new form of regional agency and one of its basic tenets was to carry out its programs through local institutions in the region.¹² The organization of the regional libraries was based on existing libraries; the local library units were strengthened and extended to enable them to provide service to a larger area. The pattern of federal-state-local support of library service which developed under the T.V.A. proved to be a valuable experience, because the presence of federal money for library service stimulated and supplemented local resources, encouraged cooperation among libraries, and made experimentation possible.¹³ The success of the T.V.A. libraries added further evidence to support the workability of the concept of regional organization.

Development of Regional Organization

One of the earliest published statements recommending regional

organization of library service was made by C. B. Joeckel in his book Government of the American Public Library. In developing his position, Joeckel focused attention on the inadequacy of the prevailing practice of establishing additional independent local libraries to meet needs. He pointed out that locally governed and supported libraries had inherent limitations that made it impossible for them to provide adequate library service to the country as a whole. He emphasized that

The small library, no matter how carefully its reference and circulating books are selected, remains a small library. Its collection is not fluid. Unused materials on its shelves cannot be shifted to a central reservoir and replaced with other materials from the same source. Its reference work is at best, elementary ... 14

The plan Joeckel proposed was to organize the public libraries as regional institutions and make their service areas coterminous with the natural trading areas of the country. Libraries that were already established in the regions would be organized to form a regional library and Joeckel suggested a set of principles that he felt should be followed in the development of regional libraries.¹⁵

The central advantage to be gained from regional libraries, according to Joeckel, derived from

... an enlarged consciousness of the importance of a system of libraries, of the problem of library service as a whole, rather than about the library as a matter of concern only to individual communities. ... 16

Problems and difficulties stemming from the structure of local governments and the reluctance to give up local control were certain to be encountered in the implementation of a regional plan. The goal of good service to all users of libraries could be attained only with the broadening of library objectives to a regional basis.

Joeckel's plan for the regional organization of public libraries stands as a turning point in the development of larger units of service, for it represents a new approach to the problem of offering adequate library service to all segments of the population. Joeckel proposed that the library should be regional instead of municipal, and that regional libraries should be created by the re-organization of existing libraries into federations in each of a state's natural regions without respect to the local political boundaries.

Active planning for regional libraries began during the depression when there was a move to extend more federal aid to state and local government services. The momentum of this trend was reduced with the outbreak of the Second World War, but shortly after the War began, planning was started to prepare a national program for post-war public library development. The plan was to be ready for implementation in the economic depression that was expected to follow the end of the War. The publication of two sets of standards was the immediate result of this planning effort: Post-War Standards, issued in 1943, and the National Plan for Public Library Service, published five years later in 1948. Committees were responsible for the two sets of standards, but Joeckel was chairman of both of them and the influence of his thought is unmistakable.

The appearance of the two sets of standards had an impact on the continued development of the concept of regional libraries. Leigh notes that the pattern of library organization presented in the Post-War Standards is a compromise between the older concept of independent public libraries and the new one of regional library units large enough to provide adequate service.¹⁷ Although one section of the standards advocates the formation of larger service units, the other sections are set up for independent

libraries of all sizes.

The Post-War Standards recognized that the process of establishing larger units of library service would be a long and complex one, and to be successful would require the joint efforts of state and local authorities. In many instances units larger than counties would have to be used if minimum standards of size were to be met. Six patterns of administrative structures (see p. 24) considered satisfactory were listed, but it was noted that the type of system would differ according to the requirements of the situation.¹⁸

The National Plan for Public Library Service, which was published in 1948, focused more strongly on Joeckel's plan for regional organization. The standards clearly recognize the importance of developing larger units of service and note that

One of the great tasks of library planning . . . is the organization of a structure of public library units large enough and financially strong enough to provide effective service. . . . A body of experience accumulated through the last quarter of a century demonstrates that a union of small units into a county or regional library provides the most economical and efficient method of supplying books and library service to all the people. . . . Obviously continued progress in the creation of larger units of library service is urgently needed.¹⁹

While recognizing that the pattern of organization must remain flexible enough to meet the differing needs of various sections of the country, the National Plan enumerated the six patterns of organization of large library units which had been outlined earlier in the Post-War Standards. Examples of all but one of the six patterns were in operation at the time the National Plan was written.

In evaluating the National Plan and its contribution to furthering

the development of larger units of service, Leigh criticized it for an overall lack of flexibility; in his opinion, it failed to make adequate allowances for the growth of political institutions in a federal society.²⁰ Far more significant than the shortcomings of the National Plan was the attention it drew to Joeckel's plan for regional library systems. Joeckel's concepts formed the basis for the standards in the National Plan and in this form they were discussed actively and at some length by the members of the profession.

Two other events which occurred in 1948, in addition to the publication of the National Plan, were instrumental in furthering the concept of regional organization of public library service. The first event was the beginning of an experimental implementation of the regional concept of service in New York State, and the second event was the beginning of the Public Library Inquiry.

The experiment with regional service was undertaken in New York State when the low level of public library service in the state was recognized. An indication of the level of service may be derived from the estimate that in 1940 approximately one and one-half million persons in the state had no local public library service. The unserved group constituted more than 10 percent of the state's total population and 25 percent of the upstate population. The educational resources of the unserved population were seriously limited by this lack of public library service.²¹

In view of this inadequacy, the New York Library Association asked the Research Division of the State Department of Education in 1944 to conduct "a complete study of the present and future status of state-wide library service." A preliminary report of the study made two suggestions: that a regional system of public library service be established and that

local libraries be given increased state financial aid.²² The complete report of the study proposed a major reorganization of library service in the state, and the magnitude of the program involved prompted the Regents to pass a resolution asking for "... the establishment of an experimental program of regional library service in one region for a period of approximately three years..."²³ In 1948 the Legislature appropriated \$100,000 to support the experimental program, and the Watertown region was chosen to serve as the subject of the study.

The purpose of the experiment was twofold. First, it was set up to determine if regional organization would improve and extend library service, and if it did, to determine if the regional organization should be used in other regions of the state. The second purpose was to determine what modifications in the original plan for regional organization would have to be made after it had been used in an actual operation.

The Watertown Regional Center was established on an experimental basis April 1, 1948. Library service from the Center covered a three county area--Lewis, Jefferson, and St. Lawrence Counties--and a Regional Library Service Center, headquartered in Watertown, was a key feature of the plan. The importance of retaining local control for some operations and at the same time the advantages to be gained by giving other functions to the state agency were recognized. The Regional Plan provided for library functions to be divided between state and local agencies.²⁴

At the end of the stipulated three year trial period, the success of the experiment was evaluated by the Research Division of the State Education Department. In presenting the results of the evaluation, Armstrong concluded that

The experiment in regional library service has demonstrated that the program advanced by the Regional Plan is sound and workable. . . . There is no question but that the Plan has resulted in improved local library service. . . . Local communities have increased their dollar support of local libraries during the period of the experiment. . . . The Regional Plan for Library Service has been particularly successful in establishing good working relations between State and local officials. . . . The Regional Plan for Library Service has approximately met the original expectations as to efficiency. . . . The idea of a library service center that would give a wholesale service to individual libraries is proved to be sound.²⁵

The success of the regional organization of public libraries was clearly demonstrated in the evaluative report of the Watertown Regional Center published in 1952. That same year the New York State Legislature passed a statute making state aid available for county and multi-county systems of public libraries. State standards which were derived from the definition of minimal adequacy in the National Plan had to be met before the library could qualify for aid.²⁶

The statute also stipulated that in order to qualify for state aid the administrative structure of the system must be either a consolidation or a federation. The rigidity of this requirement proved to be prohibitive and only two new regional library systems were established under the provision of this statute. A new law passed in 1958 provided for a third type of system, the cooperative system. One important quality distinguishes this type of system from the consolidated and federated systems: the cooperative system is established by the action of the boards of trustees of the libraries that will be members of the system.²⁷ This provision is of particular importance because it allows county officials to be by-passed in the process of system formation. The new law had great success and a number of new systems were established under its provisions.

After the New York experiment with regional organization proved to be successful, other states began to set up regional library systems. The implementation of the regional concept of California is of particular interest because careful study and discussion of the plan by the state's leaders in public library service and the members of the state library association preceded the adoption of the plan. Two workshops were held to discuss the proposed standards that would serve as criteria for the adequacy of public library service in California.²⁸ The standards adopted by the state in 1933 embodied unequivocally the concept of regional systems of public libraries.

The second event in 1948 that furthered the development of regional organization of public libraries was the beginning of the Public Library Inquiry. Conducted primarily by non-librarians whose backgrounds were in the social sciences, the Inquiry examined public library objectives, programs, structure, operations, and problems from the outsiders' point of view. Though the findings of the Inquiry suggested no new solutions for the problems of public library organization, they supported and developed Joeckel's plan for regional libraries.

The Inquiry observed that the reluctance of local libraries to relinquish control of their operations through consolidation was a reaction that had occurred in other instances when local public services were consolidated. Taking this reaction into account, the Inquiry suggested that better results might be obtained by federations of libraries than by legal consolidations of independent libraries. A gradual approach was recommended as more satisfactory than compulsory consolidation.

In The Public Library in the United States, the final volume in the Public Library Inquiry, Robert Leigh emphasized the fact that the present

dominant library structure (unorganized independent units) is only one way of providing public library service. Other ways could be devised that would be equally good and perhaps superior. As an example of a public service that operates on an integrated national level, Leigh cited the post office. It offers service on both a national and an international level, and by contrast the public library offers service primarily on the local level by means of a system of unrelated units.²⁹

In discussing the organization of library service, Leigh notes that emphasis traditionally has been placed in three areas: local initiative, citizen participation, and adaptation of the service to the interests and conditions of individual communities. There had been a minimum of effort spent to develop larger units of operation which would give economy and efficiency of operation. Stressing the importance of the larger units of operation, Leigh stated that

. . . It is one of the assumptions of the Inquiry that in a large-scale modern democratic, industrial society there are advantages both in local initiative and participation and in larger units of administration; that neither should be neglected, but the governmental structure should be contrived to give the greatest possible scope to both principles.³⁰

Reorganization of service in related areas.--At the time independent public libraries were developing an awareness of the advantages of larger units of administration, similar movements were underway in other public service agencies, as well as in business and industry. The reorganization of public health services provides a good comparison with the situation in public library service. Public health services were reorganized so that the simplest health needs are met in the local community; the next level of service is a better equipped central hospital. The highest level

is the research center which serves a larger region or an entire state or a group of neighboring states.³¹ In business and industry, examples of consolidation and regional organization may be seen in branch banks, chain stores, and in mail order houses with district offices.³²

The reorganization of the public school system into larger administrative units is comparable in many respects, though different in others, to the reorganization of public library service. In this discussion, it is examined in greater detail than the public health services or consolidation in business and industry because of the many similarities with public libraries. The movement to reorganize the public schools and to consolidate many small units began a number of years before it began in the public libraries. About the middle of the 19th century, the consolidation of small rural schools was begun in New England when certain small school districts were abolished and attached to others. Consolidation was recognized as one of several ways of reducing the vast number of small administrative units. Horace Mann, Henry Barnard, and Horace Eaton were among the early advocates of consolidation of schools into larger units.³³

In his discussion of the history of consolidation of schools, Abel notes four stages in the growth of the concept of consolidation. The period 1840 to 1880 saw the principle of centralization of schools established in urban communities; from 1880 to 1894 the extension of consolidation was slow, but interest was revived from 1894 to 1910 when there was a general rapid enactment of consolidation and transportation laws and greater use was made of them. During the final period, 1910 to 1922, Abel noted that the efforts to bring about consolidation showed more unification and direction.³⁴

A number of factors contributed to the development of the consolidation movement. First was the greatly increased demand for education; education for the masses was becoming a reality and more pupils were enrolled in school than had ever been before. Next, laws permitting consolidation were passed and most state departments of education actively supported the consolidation of small rural schools. Along with the legal sanction, many states provided financial aid to consolidated schools. The amount of aid varied widely, but was an important impetus to consolidation. Finally, improved roads and transportation made consolidation possible.³⁵

Consolidation of local units was difficult because each locality clung tenaciously to its right to administer its own schools. When the small units could be consolidated, the school system was centralized and strengthened. Dawson points out that although the school district reorganization and consolidation have been brought about in a number of different ways, the procedures can be put into five general categories: evolution, compulsion, semi-compulsion, leadership and stimulation, and planning and opportunity.³⁶ The evolutionary process has been the most common means of bringing about consolidation and in a number of instances it has preceded the other processes mentioned.

There were many benefits to be gained from the consolidation of small, independent school districts into larger units of administration. Possibly the most important benefit was the potential for improvement the larger unit presented, because it provided a more adequate structure for operation. In general terms, larger units permitted economy and greater educational efficiency. Specifically they made possible specialization of teachers and a curriculum enriched to meet the needs of the children better. Wider and richer social contacts were possible for children in the enlarged units.³⁷

Fitzwater suggests several other important benefits that could be realized: elimination of the duplication of a dual elementary and high school district structure; the closing of non-operating districts and their incorporation into active districts; increased local control in areas where parents sent students on a tuition basis to schools over which they had no control; equalization of tax burdens within the larger unit where gross inequities formerly had existed among smaller units.³⁸

Historically the trends in school district organization have shown no single clear pattern, but a great variety of patterns which appear to have been dependent upon the type of local and state government in the region. Since 1932 there has been one clearly distinguishable trend: the number of school districts has been decreasing steadily. In 1932 there were 127,529 school districts in the United States, and in 1950 there were 84,468, a reduction of 33.8 percent. Slightly less than one-half the one-teacher schools were abolished during the period 1930 to 1948, and it is likely that they will continue to decrease, especially in the least rural states and the states that have larger school districts.³⁹ Dawson suggests that

It seems reasonable to expect school district re-organization to continue at an accelerated rate during the next decade (i.e. 1960). If all states had adequate school district structures, there would be only 10,000 to 12,000 school districts in the 48 states. . . .⁴⁰

Development of Public Library Systems

As the movement to extend library service gained momentum, it became apparent that the loose patterns of organization being used were not satisfactory. County libraries, for instance, did not provide adequate service because the individual counties generally did not have the financial

resources to support the libraries. The libraries found, however, that they could band together, and by pooling their resources, they could obtain the potential for providing adequate service. The success of the multi-county libraries supported the concept of regional organization of public library service, and by the middle of the twentieth century the regional organization of service was beginning to achieve general acceptance as the most logical and efficient means of providing service to the greatest number of people.

Standards and legislation.--Evidence supporting the workability of the concept of regional organization of public library service accumulated. Gradually library services were organized into the larger units Joeckel had first recommended in the 1930's, and the regional units of service developed into public library systems. During the decade 1956 to 1966 several events occurred that were important to strengthening the concept of regional organization as embodied in the public library systems. Two sets of standards for public library service were published by the American Library Association and two major pieces of federal legislation affecting public library service were passed.

The new standards for public library service which were adopted by the American Library Association in 1956 were especially important to the development of public library systems because they were set up specifically for systems of libraries. Previous standards for service had supported the concept of public library systems, but they were written largely in terms of individual libraries. The following statement in the standards makes clear the importance placed on systems:

Libraries working together, sharing their services and materials, can meet the full needs of their users. This

cooperative approach on the part of the libraries is the most important single recommendation of this document. Without joint action, most American libraries probably will never be able to come up to the standard necessary to meet the needs of their constituencies.⁴¹

With their orientation toward systems of libraries, the new standards provided a means of putting into practice the concepts of public library organization Joeckel had proposed two decades earlier.

The same year that the new standards were adopted, 1956, the federal Library Services Act was signed into law by President Eisenhower. This Act was the first major federal legislation passed for the support of public libraries. The Act required the formulation of acceptable state plans for the use of federal funds before the money was available. Since the extension of service to rural areas was one of the main purposes of the Act, many of the plans included sections outlining larger units of service which were proposed as a means of extending service to the rural population. In a number of the plans, there was specific mention of public library systems as they were set up in the new national standards for public library service.⁴² When the state plans included plans for the formation of public library systems, financial assistance could be obtained from funds made available by the Act.

Before the Library Services Act expired, legislation for its extension was passed, and in 1964 the Library Services and Construction Act came into existence. It was somewhat different from the earlier Act which stipulated that funds must be concentrated on extension of service to the rural population. The Library Services and Construction Act was broader in its scope and almost no restrictions were placed on the use of the funds as long as they were used in accordance with an accepted state

plan. An important provision of the Act was for monies to be used for extension of service in urban areas where central libraries of systems frequently are located. The provision of high quality service to all users of libraries, urban and rural, was the primary concern of the Act.

Minimum Standards for Public Library Systems, 1966, was adopted by the Public Library Association of the American Library Association in July, 1966. The practicality of library systems for providing service had been demonstrated in many different situations during the ten years since the first standards specifically for public library systems had been adopted. The principles stated in the new standards mark the culmination of three decades of effort to improve the level of public library service by having an organization of regional units replacing local independent libraries.

The impact on the development of public library service made by these two pieces of federal legislation can hardly be overemphasized. Of primary importance was the availability of federal funds for public libraries for the first time in their history. Regarding the impact of the availability of federal money from the Library Services Act, Lowell Martin stated that

. . . under LSCA . . . there has been experimentation, and . . . in my view some of these new forms hold more promise for quality library service in the next five years than primary dependence on county or multicounty units. . . . And, to my mind, one of the most promising and not necessarily new forms is the building of county units upon strong city libraries. . . .43

Types of public library systems.--Since public library systems evolved from the regional units of service, the administrative structure of the systems was based on those of the regional units. The administrative structure of the regional units fell into distinct patterns, and Schenk

distinguished the following seven patterns:

- 1) Multi-county regional libraries supported by local and state taxes (Arkansas, Georgia, Missouri, North Carolina)
- 2) Regional district libraries supported by local tax (Illinois, Washington)
- 3) State regional supplementary service to independent or federated libraries (Vermont, Massachusetts)
- 4) Direct state-supported service (Tennessee)
- 5) State regional partial (or wholesale) service (New York)
- 6) State agency branch service (Rhode Island, Delaware)
- 7) State regional advisory service (Michigan)⁴⁴

In the early stages of the development of public library systems, relatively little attention was paid to the type of administrative structure that was used. Greater effort was devoted to the more immediate problem of gaining acceptance of the larger unit of service and then making it operational. Later, when attention began to be directed to the administrative pattern of the system, greater importance was put on flexibility.

The local government of the area in which the system was located is one of the most influential factors in deciding the type of administrative structure the system would adopt. Reluctance to surrender any part of the local control has presented a difficult problem in the development of systems. When Joeckel proposed the plan for regional organization of public libraries, he was fully aware that there would be problems caused by the local governments within the regions. Garceau criticized the regional unit with the observation that it

. . . inherently involves a multiplication of administrative cramps even more baffling than the county-town relations. The counties as component members are even harder for non-political citizen groups to handle than town governments, being more remote, less meaningful, and therefore traditionally more directly in the undisputed control of a few professional politicians. The regions constructed out of neighboring counties have in most cases no real political meaning whatever. No

pride of territorial area can usually be developed on which to build a sense of library standards and service . . . The appeal can only be to rational motives of less cost for better service. Faced with these inherent strains, it is no wonder that the record still raises doubts as to the viability of this unit of service.⁴⁵

The social scientists who conducted the Public Library Inquiry observed the consistent opposition of municipal and county officials and local libraries to give up any portion of the legal control of their libraries. This reaction had been observed in other situations when attempts had been made to consolidate traditionally local services, and it was considered a characteristic reaction. In light of the situation, the Public Library Inquiry concluded that

. . . federations of libraries represent a more promising political process for achieving adequate units of library service than does legal consolidation . . .⁴⁶

Winslow was concerned with the problem of larger units of service as they related specifically to library services in metropolitan areas. Although her observations refer to that particular situation, they are presented here for consideration in the larger context of the non-metropolitan situation. Winslow suggested that the administrative structure of metropolitan library service developed through a series of evolutionary stages. The first stage was cooperative procedures entered into for efficiency; the second stage was a functional co-ordination, but short of complete integration. Voluntary consolidation which could be achieved by contractual arrangements was the third stage. The fourth stage was enforced consolidation; and it might be effected, Winslow theorized, if library governing bodies were faced with a serious shortage of funds, because consolidation would provide the most effective use of the funds available. When the

article was written in 1944, only the first stage of development had been reached.⁴⁷

In the Post-War Standards the variety of different types of system patterns that had been developed was recognized. The following six types of library units were included:

- 1) Independent city libraries, to which may be added adjoining communities or contiguous territory by contract or other arrangement
- 2) County libraries serving the entire area of large counties
- 3) County libraries in large counties in which one or more cities constitute independent library units
- 4) Regional or multi-county libraries, consisting of several counties
- 5) A federated group of libraries in a natural region, not a unified governmental agency, but with carefully integrated cooperative services approximating those of a county or regional library
- 6) Special units, such as a small state organized as a single library unit, or state districts served by branches of the state library.⁴⁸

In the Post-War Standards it was suggested that the municipal and county libraries would become the most common administrative pattern because they served the principal units of local government. In a number of areas, however, it would be necessary to go beyond the county unit if the minimum size was to be met.

Five years later, the same six types of library units that had appeared previously in the Post-War Standards were enumerated in the National Plan. At the time the National Plan was published five of the six patterns were in operation but there were no library systems yet organized according to the fifth pattern, federated groups of libraries.

In presenting the different patterns, the National Plan pointed out some of the distinctive features of the patterns and their advantages and

disadvantages. The regional or multi-county library it termed "an emerging pattern of rapidly growing importance."⁴⁹ The pattern had been successful in other fields of government, such as public health, and it was expected to be especially applicable to states where a variety of factors, such as sparse population or low tax-paying ability, had prevented development of local community libraries. There are two principal advantages of this pattern: 1) it creates natural service areas strong enough to maintain effective libraries, and 2) it eliminates expensive duplication of resources and administrative overhead.⁵⁰

The fifth pattern is federated groups of libraries; later in this study the concept embodied in the "federated groups of libraries" is referred to as the cooperative library system. This type of library unit was well suited to the parts of the country where large numbers of small, independent libraries were already well established. The pattern is based on active cooperation between a group of small libraries in a region and the library in the central city of the region to achieve a goal of providing jointly a carefully planned program of service to the entire region. Although the libraries are joined together to give service, they retain complete institutional independence. The advantage gained is the co-ordinated program of service to the region, and the disadvantage is the limitations imposed by using voluntary cooperation as the basis of the program.⁵¹

The standards published in 1956, Public Library Services: A Guide to Evaluation with Minimum Standards, urged libraries to join systems so that they could work together to provide the best library service. If libraries pooled their resources and developed a well-organized administrative structure, it would be possible for them to offer high quality service to

the readers in a small remote community and to the city residents, too.

Neither the 1956 standards nor the more recently published Minimum Standards for Public Library Systems, 1966, specify the organizational patterns of the systems as the previous standards had done. Although the Minimum Standards mention briefly that there has been diversity in the development of systems, there is no discussion of specific types of systems. A contribution to the understanding of systems is made by the definition of systems given in the Standards; there are two basic elements of a system: 1) the provision of accessibility of service and 2) a pool of resources and services in depth and variety. In the early stages of system development, emphasis had been placed on improving the accessibility, and the Minimum Standards point out the present need for devoting attention to the second aspect of systems, the resources and services.⁵²

The Nelson Associates study of public library systems notes the existence of five predominant patterns of organizational structure. This group of patterns differs slightly from the earlier lists mentioned because it does not include the independent city library. The five patterns Nelson Associates identifies are:

1. County libraries
2. Multi-county or regional libraries
3. Special district libraries
4. State supplementary libraries
5. State-wide, state-governed systems⁵³

Three types of public library systems generally are recognized at the present time: cooperative, federated, and consolidated systems. The types of systems are distinguished from one another by the manner in which they are created and the amount of authority centralized in the director of the system. The cooperative system is formed by the action of the

trustees of the member libraries that will be part of the system; no action by the governing bodies of any of the political units is necessary. The director of the system serves in an advisory capacity to the member libraries and has no direct authority over them.

A federated system is established by the action of the county board of supervisors who appoint a board of trustees to govern the system. As with the cooperative system, the duties of the director of the system are advisory in nature. A consolidated library system is formed when all the libraries in an area are administered as an autonomous unit by a single director and board of trustees. In the consolidated system, administrative authority is centralized in the director of the system.

Development of the Problem

In this discussion of the development of the regional organization of public library service and public library systems there has been an underlying conflict between the provision of service to urban areas and the extension of service to the rural population. Urban public libraries were developed first, and it was a long time before there was any service beyond the city. County libraries were established to serve non-city residents; in some cases they operated independently of the city library and in other cases, the city and county libraries were integrated to provide more complete coverage of the area. In some urban areas the city, county and independent libraries worked together to provide service to all the persons in the area. In some urban areas there was no county library and service had to be provided by the city library and the independent libraries in the area.

With the organization of library service into formalized systems,

the conflict between provision of service to urban areas and extension of service to the rural population was resolved because the systems presented a means of providing relatively more adequate library service to the total population. The patterns of urban service described above became cooperative, federated, or consolidated systems depending on the manner in which they were formed and the amount of authority centralized in the director of the system.

Related literature.--The literature of organizational theory and management contains a great deal of material on the problems of organizational structure and consolidation of services, but the nature of the organizations involved (profit-making rather than public service) creates a somewhat different frame of reference for the problem. Much has been written about the advantages and disadvantages of centralization, but the effect of centralization on organizational effectiveness, the topic of the present study, is a complex and little-studied area. Since defining the concept of effectiveness adequately is very difficult, this area of investigation has received relatively little attention. Georgopoulos summarizes the difficulties involved with the following remarks

The concept of organizational effectiveness is an important and widely used notion in the study of social organization. A considerable gap, however, exists between theoretical and empirical approaches. Because there is little theory that adequately treats this concept, research efforts have generally proceeded unsystematically, without sufficient consideration of the conceptual aspects of the phenomenon, and in terms of ad hoc criteria not systematically related to theoretical frameworks consistent with our knowledge of organizations.⁵⁴

In the literature of library science, there is a fairly large body of descriptive literature about general aspects of public library systems,

but there is almost nothing dealing directly with the topic of the administrative structure of systems. No theory exists to guide the formulation of hypotheses for study in the area. Reported research in this specific area is very limited, and no published study on the relationship between the administrative structure of the system and the level of service given by the members of the system has been found.

Two recently published studies have touched briefly on the administrative structure of public library systems. Emerging Library Systems, an in-depth evaluation of public library systems in New York State, mentions the three types of administrative structures that have developed in the state: consolidated, federated, and cooperative systems. There is no evaluation of the effectiveness of the different structures in terms of the service given by the member libraries.

The majority of the public library systems in New York State are cooperative systems. The study attributes a large part of the state's success in creating public library systems to the use of the cooperative structure which "attempts to build on existing strengths and fully respects local autonomy." The New York plan of building upon the independent community library is based on the theory that

. . . there are certain strengths and virtues in local initiative and local control; that it should be possible to retain these and at the same time, by means of the system, provide the services which are otherwise available only from larger libraries.⁵⁵

While the permissive and undemanding qualities of the cooperative systems were important factors in making it possible to organize public library service throughout the state on a system basis in a relatively short period of time, these same qualities have prohibited the

reorganization of public library service in some areas of the state on a more efficient basis. If consolidation had been the structural form of the systems, administrative authority could have been used to make the needed changes, but with the cooperative systems, only advisory action was possible. Persuasion and example had to be employed to promote needed changes.⁵⁶

Public Library Systems in the United States, the recently completed study done by Nelson Associates for the Public Library Association, considers briefly the administrative structure of public library systems. The major portion of the study is an intensive investigation of six library systems, and on the basis of the results of the examination of these six systems, Nelson Associates makes the following statement:

With respect to internal organizational structure there appear to be almost no generalizations to draw from the organizations of these six systems without running head-on into a contradiction, as small as the group is. Two of the most successful systems, for example, are at opposite poles with respect to centralization of authority. Results, as measured by improved library service to users, are not predetermined in the structure of the systems.⁵⁷

Since the above statements about organizational structure of public library systems were made on the basis of an examination of six systems, it is not possible to generalize from them to the universe of systems. Also, the comparability of the structure of the systems is questionable because they are greatly divergent in nature. Systems serving urban and rural populations and populations of widely differing size are put together.

After an examination of the history of the development of the regional organization of services and public library systems, a question regarding the relative effectiveness of the administrative structure of the different

types of systems arises. Can the goals of service (i.e., adequate service to the total population) be attained equally well by each of the three different types of library systems? When public library systems were beginning to be formed in New York State, for example, two forms of systems were considered best, and it was stipulated that either the federated or the consolidated form of system had to be used. The administrative structure of these two types of systems called for the surrender of a large amount of local control and the public libraries in New York State were unwilling to comply with such requirements.

Instead of trying to convince the administrators of the public libraries of the advantages to be gained by use of these types of systems, an alternative form of system, the cooperative system, which involved no loss of local control was established. A contrast to this situation may be seen in the process of consolidating public school units. Consolidation was recognized as the best form of organization of public schools and all efforts were concentrated on achieving it. In spite of the difficulties that arose, no compromise forms were used.

The present study proposes to examine the question posed above to determine if the administrative structure of the public library systems does affect the effectiveness of the system in terms of goal attainment. It is suggested that the administrative structure bears a direct and positive relationship to the realization of the service goals of the system, and further, it is hypothesized that the administrative structure with the greatest centralization of authority in the director will most nearly achieve the goals of service.

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CHAPTER 11

DESIGN OF THE STUDY

This chapter has the two-fold purpose of presenting the hypotheses used to guide the study and the method of conducting the proposed investigation. An important part of the method of investigation is the construction of a model of public library systems. The measures serving as indicators of the independent variable, the dependent variable, and the causal factor, as well as the hypothesized relationships among the three variables, are described in the model. The statistical tests used in the investigation are outlined in the discussion of the method.

The Hypotheses

A discussion of the development of the regional organization of public library service which culminated in the formation of public library systems was presented in the first chapter. Generally it is acknowledged that the organization of public libraries into larger administrative units provides a more satisfactory means of offering a higher level of service to more people than the independent local public library, and one part of the present study will test this assumption. On the basis of the previous observations, a general hypothesis may be stated as follows:

Other things being equal, public libraries that belong to systems will provide a higher level of service than

public libraries that do not belong to systems because of the benefits systems offer to their member libraries.

The discussion in the preceding chapter concluded by focusing attention on the importance of the administrative structures of the public library system. Although the administrative structure affects all aspects of the operation of the system, this study is limited to the effect the administrative structure has on the level of service member libraries of the system offer.

Relatively little notice has been given to the particular type of administrative structure that has been used in public library systems. Flexibility has been emphasized as a desirable thing in the statements in the standards for public library service, but the choice of the type of administration has been left to the individual system. In most cases, the type of administrative structure most acceptable to the local governments concerned has been the deciding factor. Since the cooperative form of system administration makes the fewest demands on the participating libraries, involves the least loss of local control, and yet provides a significant number of system benefits, it has been the most widely used form of administrative structure.

An examination of the role of the administrative structure in the success of the public library system has led to the development of the following hypothesis. It is suggested that there is a direct positive relationship between the type of administrative structure of the system and the level of service the member libraries give. The benefits the systems offer to their member libraries are expected to be the cause of the differences in the level of service. The focus of this statement may be

sharpened by specifying the types of administrative structure as follows:

Other things being equal, public libraries that belong to consolidated systems will give a higher level of service than either the public libraries that belong to cooperative systems or non-system libraries because of the benefits consolidated systems offer to their member libraries.

In this statement of the hypothesis, the administrative structure of the systems (consolidated, cooperative, and non-system libraries) serves as the independent variable; the level of service member libraries offer is the dependent variable; and the benefits the system offers to its member libraries is the causal factor.

Definition of terms.--Definitions of the terms used in the hypotheses, as well as other terms used with a special meaning in the study, are given below. The first three definitions are those established by the Public Library Association.¹

Public library system - an association of autonomous local public libraries or a group of branch libraries working together to improve library service for all the residents of a given area.

Consolidated system - a public library system whose administration consists of a single library board and an administrator who directs all the libraries in the area as a single autonomous unit.

Cooperative system - a public library system whose administrative structure consists of a board made up of representative board members of the local libraries that belong to the system.

Non-system libraries (or libraries that do not belong to systems)- a library (and its branches) in the central city of a Standard Metropolitan

Statistical Area plus the public libraries in all the towns included in the SMSA. All the libraries are independent units and there is no formal system structure in the area. To make the non-system libraries comparable to the systems of public libraries, the library in the central city is treated as if it were a headquarters library and all the libraries in the towns in the SMSA are treated as if they were member libraries of the system. These groups of public libraries are treated as systems in this study.

System benefits - benefits the central library or the headquarters unit offers to the member libraries of the system. An example of a system benefit is aid in book selection.

Member library - a unit of a consolidated or cooperative system or non-system library.

Method of Investigation

A descriptive study has been chosen as the means of investigating the hypothesized relationship between the administrative structure of the systems and the level of service offered by the member libraries. Since there is no published work in this specific area, the present study will of necessity be exploratory in nature. Although statistical tests will be used as a means of obtaining as much information as possible about the variables and the relationships among them, the study will not depend entirely upon the results of statistical analysis.

A model of public library systems was constructed to guide the proposed study of the hypothesized relationships.² Models are used extensively in mathematics, logic, and the physical sciences, but they are not used widely in the social sciences. A model may be defined as "a structure

of symbols and operating rules which is supposed to match a set of relevant points in an existing structure or process.³ The model does not replicate the real situation, but extracts the main parts of the problem under consideration and reduces them to the most simple terms possible. In this process, an orderly arrangement of functions may be established and the relationships between the different parts of the model may be sorted out and studied. Internal consistency and the amount of simplification achieved are two characteristics of a good model.

Caplow points out that the most obvious difference between a model and the real world, aside from the difference in the degree of complexity, is that the model must be treated as a closed order if it is to function properly. After the model has been established, it has no further contact with the real world for the duration of its existence. The condition of "all other things being equal" applies to the model throughout its existence and the parts of the model remain unchanged from the time of their original definition.⁴

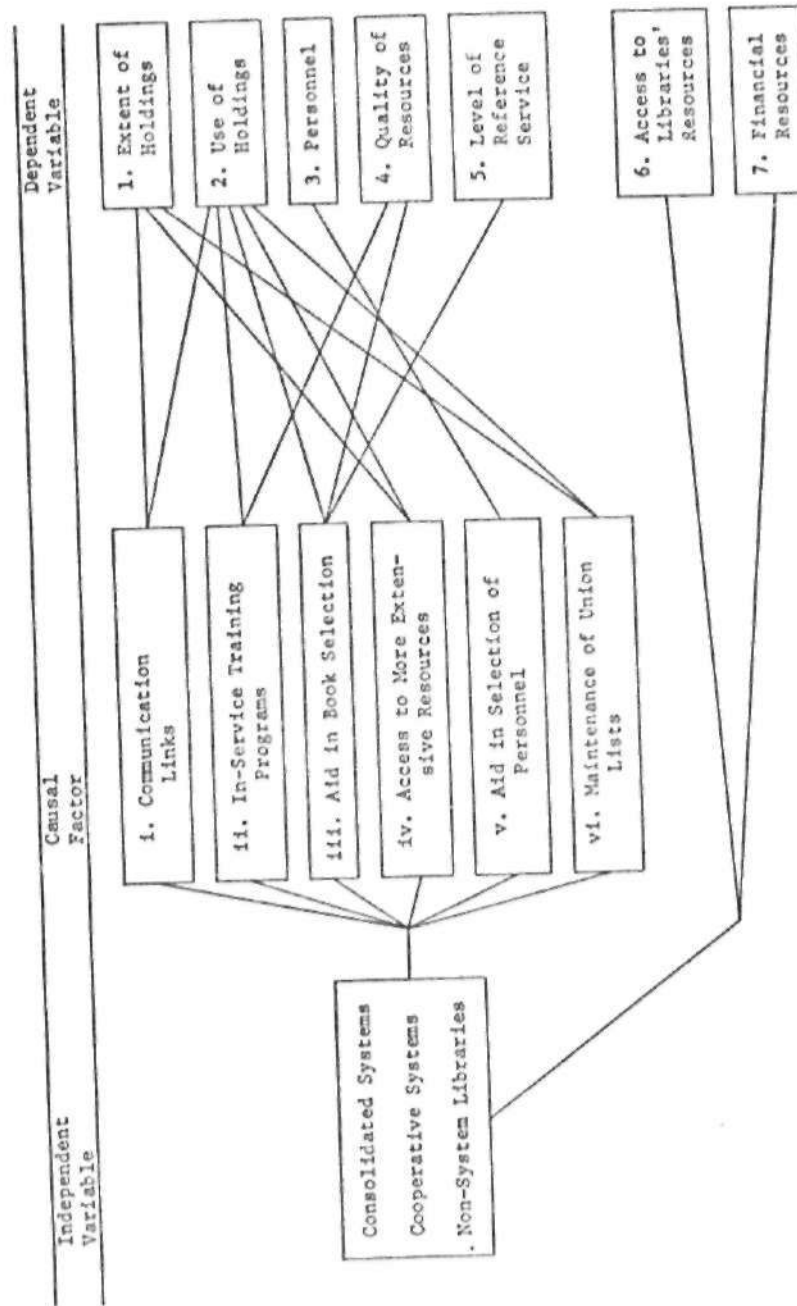
Model of public library systems.--The model developed to study the problem involving the administration of public library systems is made up of three parts: the independent variable, the dependent variable, and the causal factor. The independent variable is the type of administrative structure of the public library systems, and three different structures are used--consolidated systems, cooperative systems, and non-system libraries. The dependent variable is the level of service offered by the member libraries of the systems; several different measures of the levels of service are used. The final part of the model is the causal element which is thought to be the factor which produces the expected changes in the dependent variable. The benefits systems offer to their

member libraries serves as the causal factor in the model and several different benefits are used in the model. A diagram of the Model of Public Library Systems is shown in Figure 1.

The Public Library Association's Minimum Standards for Public Library Systems, 1966, formed the basis for the construction of the Model of Public Library Systems. Each of the three parts of the model has different aspects, and the first step in building the model was to define the general outline the parts would take. Since the Standards suggest many benefits systems may offer to their member libraries and there are a number of different ways the levels of service offered by the member libraries might be measured, all the possibilities had to be examined and the relevance to the model evaluated. After the most pertinent aspects of the two parts of the model had been determined, it was necessary to re-evaluate the selected aspects in terms of the available data. If data were not kept by the libraries and could not be collected by the investigator during field visits, then different aspects of the two parts of the model would have to be chosen.

Although initially there were a great many different aspects of public library systems from which to choose the parts of the model, this number was restricted first by relevancy of the aspects to the problem being investigated and second by the availability of data that could be used to measure the different aspects of the model of public library systems. Even the available data have serious limitations because in most instances they are collected by poor measures with inconsistent and inaccurate recording methods. These conditions create major handicaps for conducting research in the field of library science.

FIGURE 1
MODEL OF PUBLIC LIBRARY SYSTEMS



Model element one - administrative structure of public library systems.--The first element of the Model, the administrative structure of public library systems, serves as the independent variable in the investigation. Three types of public library systems generally are recognized: cooperative, federated, and consolidated. Federated systems were eliminated from use in the study for two reasons; first, because they are similar in administrative structure to the cooperative systems; and second, since there are relatively few federated systems in the United States, it would be difficult to find examples to use in the study.

Cooperative and consolidated systems were chosen for use in the study because their administrative structures show the greatest amount of contrast of the three possible pairs of systems. Although the administrative structure of the two types of systems differs markedly in theory, in reality the two structures often are not sharply differentiated. Aspects of the administrative structure considered characteristic of the consolidated systems, for example, may be found in a modified form in the cooperative systems and even in some instances, in the non-system libraries. This overlap of characteristics poses problems in this study because it affects the results of the analysis and shapes the conclusions drawn from the analysis.

A third type of administrative structure of public libraries is included in the Model. The libraries in this category form a simulated public library system; although they have no formal system structure, they are bound together by their common location in a metropolitan area. These groups of urban libraries are called non-system libraries in this study.

Model element two - level of service offered by member libraries.--

The second element of the Model, the level of service offered by the member libraries, is treated as the dependent variable in the study. The following seven measures of the dependent variable are used in the Model of Public Library Systems: 1) extent of holdings, 2) use of holdings, 3) personnel, 4) quality of resources, 5) level of reference service, 6) access to libraries' resources, and 7) financial resources.

For measures one, two, three, six, and seven data were collected by the libraries; and for measures four and five data were collected by the investigator. The data collected by the libraries have serious limitations for a number of reasons, but most importantly because definitions of the measures vary from library to library and because there are no standards for the recording of accurate information.

The first measure, the extent of holdings, is defined as the number of volumes added to the collection per year and the number of volumes held by the libraries. It is assumed that a larger collection of books will contribute to the provision of a higher level of service; the staff of the member library will be able to give a higher level of service when they have more books with which to work. Also, there will be more books for patron selection than would be possible with a smaller collection.

The second measure, the use of holdings, is defined as the circulation of materials outside the library. It is assumed that amount of use may serve as an indicator of the level of service because better resources are more likely to be used more (i.e. circulated more) than inferior resources. The availability of resources of a higher level thus contributes to the provision of a higher level of service by the member libraries.

The third measure, personnel, is concerned with two aspects of personnel: 1) the professional or clerical status of the staff, and 2) the amount of time worked by the staff members (i.e. full-time or part-time). It is assumed that member libraries with more professional staff members will be able to offer a higher level of service than member libraries with fewer professional staff members. Since it is thought that professional education makes it possible for staff members to offer a higher level of service, it may be assumed that professional staff will be able to offer a higher level of service than non-professional staff members. Finally, it is assumed that full-time staff members will be able to offer a higher level of service than part-time staff members because the former are able to give more continuity to the service.

The fourth measure, the quality of the collection, is based on an evaluation of one subject area in the collection and the periodical holdings. American history was chosen for the subject area because it is a subject most likely to be used by the public libraries' largest group of users, secondary school students. If the collection meets the needs of this group of users, a minimum level of quality presumably has been met. It is assumed that making the materials available will contribute to the provision of a higher level of service by the member libraries.

An evaluation of periodical holdings was used as part of the measure of the quality of the collection because it is assumed that the presence of periodicals (a non-book resource) in a collection contributes to the provision of a higher level of service than would be possible with only book resources.

The fifth measure, the level of reference service offered, is based on the performance of the reference librarians in answering a set of

ten sample reference questions. Reference service was chosen to represent the services offered by the libraries because it is thought to be one of the most important services the library offers to the public. The level of reference service offered contributes to the raising of the general level of service offered by the member libraries.

The sixth measure, access to the libraries' resources, is measured in terms of the number of hours the library is open per week and the provision for books to be borrowed from and returned to any library in the system. It is assumed that a library open a greater number of hours per week will be able to offer a higher level of service than a library that is open fewer hours per week because the materials will be available to the users a greater amount of time.

It is assumed that making provisions for books to be borrowed from and returned to any member library in the system contributes to a higher level of service because it makes use of the materials more convenient. A delivery service operated by the system is the usual means of returning the books to the proper library.

The seventh measure, financial resources, is defined as the amount of operating expenditures for books and other materials, personnel, and other expenses, as well as the total expenditures. It is assumed that libraries with greater financial resources have the potential for providing a higher level of service than libraries that have fewer financial resources because the amount of money available greatly influences the number, kind, and level of services libraries are able to offer.

Model element three - benefits systems offer to member libraries.--The final element of the Model, benefits systems offer to member libraries, functions as the causal factor in the hypothesized relationship. It is

thought that the measures making up this element of the Model are responsible for the changes that are expected to occur in the dependent variable. The following six measures of the causal factor make up the Model: 1) communication links, 2) in-service training programs, 3) aid in book selection, 4) access to more extensive resources, 5) aid in selection of personnel, and 6) maintenance of union lists of system holdings.

For all six measures of the causal factor data were collected by the investigator. Although the data are consistent because they were collected by the same person during a month and a half period of time, they are limited, nevertheless, by their subjective nature.

The first measure, communication links, may take a variety of different forms: telephones (including toll-free calling areas, provision of credit cards, WATS lines), teletypes, and regularly published newsletters. It is assumed that communication links within a system contribute to a higher level of service because of the increased ease of access to materials they provide, making it more convenient for the user to determine the location of items wanted. In this sense the links extend the libraries' resources because they make more materials available to the user. Since the communication links make the resources of the member libraries in a system more readily available to each other, it will be possible for the libraries to coordinate their collections; in time this will affect the extent of the member libraries' holdings. For these two reasons, it is expected that the communication links will affect both the use of holdings and the extent of holdings.

The second measure, in-service training programs, is defined as programs sponsored by the system for the benefit of the librarians of the member libraries. It is assumed that information offered by the programs

will increase the librarians' knowledge of library practice and procedures. Since many of the persons in charge of the small member libraries have no professional library training, these programs provide some background for them. The underlying assumption is that persons with professional library training will be able to offer a higher level of service than persons without such training. It is anticipated that the in-service training programs will affect the use of holdings, the quality of the collection, and the level of reference service.

The third measure, aid in book selection, is defined as a regular selection service the system offers to the member libraries. The system maintains a staff of librarians experienced in book selection and provides them with the necessary tools (reviewing journals, standard lists, etc.) for selection of books according to professional standards. This staff compiles a list of recommended titles which appears at regular intervals and is made available to the member libraries who may select titles to add to their collections from the lists. It is assumed that collections built by this selection procedure will be of a higher level than those built by individual librarians who have no professional training in book selection and tend to buy books on the basis of advertisements or salesmen's recommendations. Research studies provide some support for this assumption; it has been found that there is a small to moderate relationship between library science education and performance in book selection.⁵ It is anticipated that the aid in selection will affect the use of holdings, quality of the holdings, and the level of reference service.

The fourth measure, access to more extensive resources, is defined as the system's provision of a larger collection of books from which the member libraries may borrow. It is assumed that member libraries will

be able to offer a higher level of service if they have access to more extensive book resources than if they had only their own collections upon which to draw. It is expected that the member library's having access to more extensive resources will affect the extent of the holdings and the use of holdings.

The fifth measure, aid in selection of personnel, is defined as a personnel service the system offers to its members by means of a central personnel office that seeks candidates to fill positions on a system-wide basis. It is assumed that the central personnel office will have more extensive resources for securing candidates for positions than would an individual library and therefore the former may be expected to find a higher level of candidate than the latter. In turn, it is anticipated that the higher level personnel hired as a result of these facilities will be able to offer a higher level of service to library users than less well qualified persons.

The sixth measure is the maintenance of a union list of system holdings. The union list may take different forms, e.g. a card catalog or a computer-produced catalog. It is assumed that libraries with access to a union list of system holdings are able to provide a higher level of service than libraries without recourse to a union list because the former are able to provide rapid information about the presence or absence of a requested title in the system. The union list of holdings may be used in conjunction with the communication links and both factors are expected to have an effect on the extent and the use of holdings.

Statistical test.--A statistical test was selected to determine if there is a relationship between the independent variable and the dependent

variable as stated by the hypotheses.⁶ Since the present study is descriptive in nature, the principal criterion for selection of the statistical test was that it give the greatest possible amount of information about the relationship between the two parts of the model. The sample of systems used in the study was not chosen by a random process from a normally distributed population, so the results of the test cannot be generalized to the universe of public library systems in the United States. The results of the test can be used correctly to describe only the nine public library systems in this study.

Analysis of variance is the statistical test chosen to determine the presence of a relationship between the independent variable (administrative structure of public library systems) and the dependent variable (the level of service offered by the member libraries.) The data from the dependent variables are grouped by the administrative structure of the system (consolidated and cooperative systems and non-system libraries) and tested to determine if there is a relationship between them. The statistical null hypothesis being tested is that the independent variable will cause no change in the dependent variable and therefore the means of the three groups of data will be equal, i.e. $H_0 = \bar{X}_c = \bar{X}_o = \bar{X}_n$, where \bar{X}_c = mean of the consolidated systems, \bar{X}_o = mean of the cooperative systems, and \bar{X}_n = the mean of the non-system libraries. The results of the tests are expressed in F ratios and the level of significance set at .05.

Footnotes Chapter II

¹Public Library Association, A Primer About Library Systems (Chicago: Public Library Association, n.d.) (Leaflet)

²For a discussion of models, see Abraham Kaplan, The Conduct of Inquiry: Methodology for Behavioral Science (San Francisco: Chandler Publishing Company, 1964), pp. 258-293.

³Foundation for Research on Human Behavior, Modern Organization Theory, edited by Mason Haire (New York: John Wiley, 1959), p. 129.

⁴Theodore Caplow, Principles of Organization (New York: Harcourt, Brace & World, 1964), p. 91.

⁵John Anthony McCrossan, "Library Science Education and its Relationship to Competence in Adult Book Selection in Public Libraries" (Unpublished PhD dissertation, University of Illinois, Urbana, 1966), p. 163.

⁶Hubert M. Bialock, Jr., Social Statistics (New York: McGraw-Hill Book Company, 1960), pp. 283-292.

CHAPTER III

COLLECTION OF DATA

Procedures for the collection of data were developed after the Model of Public Library Systems was constructed. A sampling plan for the selection of six public library systems and three non-systems is described. The procedure used for the selection of a subsample of member libraries of the systems is outlined.

The instruments designed for gathering data took several different forms--interviews, questionnaires, checklists, and a performance test. Before the instruments were used in the field, they were pre-tested and necessary changes were made. Data were collected from the libraries in the nine systems by mail questionnaires and by field visits. The various forms of the data are described and the limitations imposed on the data are discussed.

Sampling Design

The library systems used in the study were selected by several different sampling methods. The sample so drawn meets the requirements for this descriptive study.

The universe of public library systems identified by Nelson Associates for their study¹ was used for the initial definition of the universe

in this study. Nelson Associates defined a system as a multi-jurisdictional unit in operation on January 1, 1964. After identifying as many systems as possible, Nelson Associates next asked the state librarian of each state to list the systems in his state that met the requirements of the above definition. The universe defined by Nelson Associates was enlarged for this study by the addition of libraries that have no formal system structure and are located in Standard Metropolitan Statistical Areas (see definition below) having a population of 100,000 to 500,000.

Within this expanded universe, two strata are defined. The first stratum limits the library systems to be considered in the study to those in urban rather than rural areas. The differences between rural and urban public library systems are too great to permit the use of both types of systems in a study of this nature, and a choice between them was necessary. *The selection of urban public library systems makes the frame of reference of the study public library service in metropolitan areas.* The study is focused on the level of service offered to residents of metropolitan areas by public libraries bound together by their urban location and by differing organizational structures.

The second stratum, which is contained within the broad scope of the first stratum, is more limited, and it includes systems that have their headquarters in the central city of a Standard Metropolitan Statistical Area² (hereafter referred to by the abbreviation SMSA) having a population of 100,000 to 500,000. *Medium sized urban areas were selected because library systems in cities of this size show the desired differences in organizational structure, yet they are less complex than those in larger urban areas.*

After the two strata of the universe had been defined, the nine units to be used in the study were chosen. Random selection of the library systems was neither desirable nor possible because the best available definition of the universe of public library systems in the United States is not sufficiently precise to insure the drawing of systems with the desired organizational structures.

In choosing the systems to be used in the study, several criteria were used as guides. The first criterion was that the systems be good systems in terms of services offered and resources held. Good systems were chosen, rather than either poor systems or both good and poor systems, because if differences were found to exist in good systems, it is reasonable to expect that they will exist in all systems. The advice of several persons knowledgeable in the field of public library systems and familiar with the quality of the systems being considered provided the basis for the decision.

Location in different geographical regions of the country, rather than in a single region, was the second criteria for selection. Several factors prohibited the representation of every geographical region; in some areas of the United States, systems are predominantly rural and do not fit the first stratum defined above. In other regions, even the urban systems are too weak to form a good basis for comparison with systems from other regions.

Within this sampling framework, six library systems and three non-system libraries were chosen. The three consolidated systems are: Evansville and Vanderburgh County Public Library, Indiana; the Public Library of Charlotte and Mecklenburg County, North Carolina; and Tulsa

City-County Library System, Oklahoma. The three cooperative systems are: Illinois Valley Library System, Peoria, Illinois; Onondaga Library System, Syracuse, New York; and San Joaquin Valley Library System, Fresno, California.

The three non-system libraries chosen for use in the study meet the same requirements as the six public library systems. The difficulties experienced in finding three SMSA's with public libraries that meet the above requirements and have no formal system structure are noted in Chapter VI. The three non-system libraries and their SMSA's are: New Haven (Connecticut) Public Library; Omaha (Nebraska) Public Library; and Wichita (Kansas) Public Library.

Selection of the subsample.--After the sample of systems and non-system libraries was selected, a subsample was chosen. Ten percent of the total number of member libraries plus the nine central libraries or headquarters units was considered an adequate subsample for the study.

To choose the group of member libraries, all the libraries in each system were listed and the number of volumes held by each was given. If a library had branches, each branch was considered as a separate unit and its holdings were listed. Although the branches are part of larger units, they provide service to a segment of the metropolitan population, justifying their treatment as independent units for the purpose of this procedure. Counting the branch libraries as separate units gives a larger total number of libraries than if a main library and its branches were counted as one unit. This in turn permits the drawing of a larger number of member libraries than would be possible if the library and its branches were counted as a single unit. It is desirable to have as large a group of member libraries as possible in order that they may be more nearly

representative of all the libraries in the sample.

The libraries and their holdings were put in order by the number of volumes held, with the library having the largest holdings first, the library having the second largest holdings next and so on; 10 percent of the member libraries with the largest holdings and not part of the city library were drawn. In one system (Tulsa City-County Library System) a further requirement was made that the member libraries must be in different regions of the system. In one non-system library, one of the two largest member libraries declined to participate in the study and another member library was substituted.

The selection of member libraries was made in this manner rather than by a random means of selection because the largest member libraries are more likely to have a sufficient number of resources to study. The resources of some of the smaller member libraries are seriously limited and therefore are less satisfactory for study. Ten percent of the member libraries (or 21 libraries) plus the nine system headquarters or central libraries from the subsample of 30 libraries.

Data Collection Instruments

Instruments were designed to collect data for the measures serving as indicators of the dependent variable (the level of service offered by member libraries) and the causal factor (benefits systems offer to their member libraries), as specified by the Model of Public Library Systems in Chapter II. Only the instruments actually used in the study are discussed in this chapter.

A group of instruments was included to gather descriptive data (such as the age of both the central library and the system, the length

of the director's tenure, population served by the system, number of volumes held by the central library.) These instruments are not discussed.

Data collection instruments for dependent variable.--Three different types of instruments were used to collect data about the dependent variables: a questionnaire, two checklists, and a performance test. The questionnaires were sent by mail to all the libraries in the nine systems (N = 138).³ The two checklists and the performance test were used by the investigator to collect data during the field visits to the 30 libraries in the subsample.

In constructing the questions used in the questionnaire, modifications were made for the following three anticipated differences: 1) between the two types of systems; 2) between systems and non-systems; and 3) between directors of systems and member libraries of systems. The questions were stated in such a way as to obtain equivalent data that could be analyzed together. Questions called for the actual values of factual data; no opinions or attitudes were sought. The questions were structured in this manner in order to produce data of interval level measure.

Information for varying periods of time was requested by the questions. In some cases, information was required for only one fiscal year (1967/68) while in others, data for three fiscal years (1967/68, 1966/67, and 1965/66) were requested.

The questionnaire is the instrument used to collect data about the following five parts of the dependent variable: 1) extent of holdings; 2) use of holdings; 3) personnel; 6) access to libraries' resources; and 7) financial resources. (Arabic numerals refer to the Model of Public Library Systems, Figure 1.) To collect data for these five parts of the dependent variable from each of the libraries in the nine systems (N = 138), the following questions were used:

- 1) Extent of holdings
 - a. Volumes held at the end of 1967/68
 - b. Volumes added (1967/68, 1966/67, and 1965/66)
- 2) Use of holdings
 - a. Circulation (1967/68, 1966/67, and 1965/66)
 - Children
 - Adults
 - Total
- 3) Personnel
 - a. Total number of staff members (full-time and part-time)
 - b. Status of staff members
 - Professional (full-time and part-time)
 - Clerical (full-time and part-time)
- 6) Access to libraries' resources
 - a. Number of hours the library was open each day of the week during the month of October, 1968.
 - b. Provision for reciprocal use
 - May books be borrowed from any library in the service area?
 - May books be returned to any member library in the service area, regardless of where they were borrowed?
- 7) Financial resources
 - a. Operating expenditures (1967/68, 1966/67, and 1965/66)
 - Books and other materials
 - Personnel
 - Other expenses
 - Total operating expenditures

The two checklists and a performance test are the instruments used to gather information about the final two parts of the dependent variable. The two checklists were used to collect data about the quality of the resources (part 4 of the dependent variable according to the Model) and the performance test served as a means of collecting data about the level of reference service (part 5 of the dependent variable according to the Model).

The two checklists provided a standard for evaluation of the periodical holdings and one subject area of the collections (American history) of the libraries in the subsample. The checklist of periodical titles was

made of the 157 titles indexed by the Readers' Guide to Periodical Literature, August, 1968. The list of American history titles was the 100 most important titles in American history for high schools, compiled by John E. Wiltz, a professor of history at Indiana University.⁴ Goldhor used the same list in his study, "A Plan for the Development of Public Library Service in the Minneapolis-Saint Paul Metropolitan Area."⁵

The performance test used to collect data about the level of reference service consisted of a set of ten reference questions. The questions were first used in the evaluative study of public library systems in New York State⁶ and more recently by Goldhor in his study of metropolitan libraries in the Minneapolis-Saint Paul area.⁷ Although the statement of the questions was modified for this study, the basic pattern remains the same.

The ten questions were sent to the 30 libraries in the subsample prior to the investigator's visit with instructions requesting that the questions be treated no differently from an ordinary patron request for information. Only the source of the information and the amount of time taken to find it were required. The answered questions were collected by the investigator during the field visits.

Data collection instruments for causal factor.--One type of instrument served for the collection of data for the causal factor: structured interviews. The instrument was used to gather information from only the 30 libraries in the subsample. Interview schedules were sent ahead so that interviewees could prepare their answers to the questions if they desired. Interviews were conducted by the investigator during the field visits.

The persons interviewed approached the questions with different points of view; members of systems had a somewhat different perspective from members of non-systems; and directors of systems had a different point of

view from directors of member libraries of systems. These differences had to be taken into account, and the questions were designed to produce comparable data that could be analyzed together.

The questions in the interview schedule serve as the instrument used to gather information about the following six parts of the causal factor: i) communication; ii) in-service training programs; iii) aid in book selection; iv) access to more extensive resources; v) aid in selection of personnel; and vi) maintenance of union lists of holdings. (Lower case Roman numerals refer to the Model of Public Library Systems, Figure 1.)

The interview questions designed to collect data from each of the libraries in the subsample (n = 30) for the six parts of the causal factor are given below. Questions preceded by (D) are for the directors of systems; questions preceded by (M) are for the member libraries. Questions designated by (N) are for the non-system libraries.

i) Communication

(D,N) "Does the system have a network of rapid communication with an outside reference center?"

(M) "What kinds of communication do you have within the system?"

ii) In-service training

(D) "Has your library system sponsored any kind of in-service training programs during the last fiscal year?"

(M) "Have you or any members of your staff participated in any library in-service training programs sponsored by the system during the last fiscal year?"

(N) "Has your library sponsored any kind of in-service training programs for the members of your own staff and the members of the staffs of other libraries in the SMSA?"

iii) Aid in book selection

- (D) "What role does the system play in the selection of materials for the collections of libraries that are members of the system?"
- (M) "What role does the system play in the selection of books for your library?"
- (N) "Is there any effort to co-ordinate the selection of books in the libraries of your SMSA?"

iv) Access to more extensive resources

- (M,N) "Do you have access to a larger collection of books from which you can borrow volumes to add to your collection temporarily?"
- (M,N) "Do you have access to a film collection outside your library?"
- (M,N) "Do you have access to a collection of recordings (disc or tape) outside your library?"

v) Aid in the selection of personnel

- (M) "Who hires the personnel who work in your library?"

vi) Maintenance of union lists of holdings

- (D) "Do you maintain a list of system-wide holdings?"
- (N) "Do you have a union list of library holdings in your SMSA or a wider area?"

Nature of the Data

Before the data collection instruments were taken into the field, they were pre-tested in a regional cooperative public library system (the Lincoln Trail Libraries, Champaign, Illinois) and in one of the two central libraries of the system (the Champaign Public Library). After the results of the pre-test were examined, necessary modifications were made in the instruments.

Field trips to the 30 public libraries in the subsample were made by the investigator to collect data with the interviews and checklists.

Mail questionnaires were used to collect data from all the libraries in the sample. After data collection was completed, the raw data were prepared for analysis. The data have limitations which it is important to note and consider in the analysis.

The pre-test and field visits.--The interview schedules were tested by the Director of the Lincoln Trail Libraries and the Librarian of the Champaign Public Library. Both librarians are experienced in systems operations and they pointed out unclear questions and areas where further definitions were needed. The questionnaires used to obtain data about the level of library service were tested with the same two librarians. They noted ambiguities and questions that needed clearer limits and definitions. The suggestions made in both cases were included in the revised form of the instruments.

Both the interviews and the completion of the questionnaires were timed during the pre-test, and the results of these tests formed the basis for an estimate of the amount of time each activity would take in the field.

The checklists were tested in the Champaign Public Library. The checklist of periodical titles was checked against the Library's list of periodical holdings and the 100 American history titles were checked through the Library's card catalog. Neither procedure appeared to present any problems and timing the actual checking provided an estimate for the amount of time needed for this operation, too.

During the fall of 1968 the investigator made field visits to the 30 public libraries in the subsample. Prior to the field visits, the questionnaires, interview schedules, and reference questions were sent to the libraries. The questionnaires were accompanied by the request that the forms be filled in by the time the investigator visited the library. The 10

reference questions were sent to the reference librarian with the note that the investigator wanted to collect the completed questions during the field visit to the library. The interview schedules were sent ahead to allow the interviewees to prepare their answers to the questions if they desired.

Form of the data.--The first group of data is that collected by the mail questionnaires. After two follow-up letters, a total of 92 percent of the questionnaires were returned; although a goal of 100 percent was set, 92 percent is a relatively high rate of response and it was considered acceptable for this study. The response is shown in Table 1. All the

TABLE 1
QUESTIONNAIRE RESPONSE RATE

Library System	Number Sent	Questionnaires	
		Number Returned	Percent Returned
<u>Consolidated Systems</u>			
Evansville and Vanderburgh County Public Library	9	9	100
Public Library of Charlotte and Mecklenburg County	15	15	100
Tulsa City-County Library System	20	20	100
<u>Cooperative Systems</u>			
Illinois Valley Library System	28	27	96
Onondaga Library System	22	17	77
San Joaquin Valley Library System	5	5	100
<u>Non-System Libraries</u>			
New Haven Public Library & SMSA	13	11	84
Omaha Public Library & SMSA	8	8	100
Wichita Public Library & SMSA	18	15	83
ALL SYSTEMS	138	127	92

questionnaires received were used. In some cases, all the questions were not answered, but the questions for which there were responses were used.

Data collected from the 30 libraries with the two checklists were assembled and scored. For the first checklist (periodical titles held) scoring was simply a matter of counting the number of titles held by the libraries; only the presence or absence of a title was noted. A score was given to each library by allowing one point for each title held; the highest possible score was 157.

For the second checklist (the 100 American history titles) two points were given for each title held. A weighting factor was used to recognize older editions and partial holdings of multiple volume sets. When a title with an earlier date of publication was held, it was checked to determine if it was a revised edition or a reprint. The titles in question were checked in the card catalog of the University of Illinois Library and the printed catalog of the Library of Congress. In the scoring, one point was given for earlier editions of a given title or for holding incomplete parts of a multi-part work. The highest possible score was 200.

Interviews with the nine directors of the systems and the 21 member librarians conducted according to the interview schedule were obtained during the field visits. The interviews were tape recorded to insure the collection of complete and accurate information. Upon returning from the field, the investigator transcribed the interviews on cards with the response to each question put on a separate card to facilitate evaluation and analysis.

Limitations of the data.--Three factors produce limitations on the data used in this study; they are the manner in which the sample was drawn, the nature of the public library systems from which the data were collected,

and the nature of the data themselves.

The first limitation stems from the manner in which the sample of public library systems was selected. The systems used in the study were not chosen by a random process and this limits the use of the data that were collected from the systems. The data cannot be used to form the basis for generalizations to the universe of public library systems; they can be used only to describe the nine public library systems that make up this sample.

The structure of the systems themselves introduces limitations to the data. The response rate of the questionnaire is the first instance of this type of limitation. All the questionnaires from the consolidated systems were returned because the system is administered as an entity. Member libraries of the consolidated systems provided the information they could and then the central library filled in the remainder and returned all the questionnaires. The 100 percent response rate for the consolidated systems adds a bias in favor of the consolidated systems because there is more information from them than from either of the other two types of systems.

The varying size of the N is a limitation that is a result of both the system structure and the nature of the data. In the consolidated systems, the member libraries do not keep individual records of certain types of data (i.e. circulation, holdings, volumes added, operating expenditures, etc.), but this information is sent to the central library where it is recorded and kept for the entire system. Thus, for the consolidated systems there is one response for the entire system, but for the cooperative systems and the non-system libraries there are responses from each of the member libraries. This limitation restricts the comparability of the data from the consolidated systems with that from the cooperative

and the non-system libraries.

The size of the n varies for the data used as indicators of the causal factor. Due to the nature of the questions, in some instances there are responses from only the directors ($n = 9$) or from only the member libraries ($n = 21$). Finally there are some measures where there are responses from both directors and members ($n = 30$).

A final statement about the treatment of the data must be appended to this discussion of the limitations of the data. Although nine public library systems are used in the study, the nine systems are composed of 138 member libraries. It must be understood that when an aspect of the system is being considered, it is being done in terms of all the member libraries that constitute the systems.

Footnotes Chapter III

¹Nelson Associates, Public Library Systems in the United States: A Survey of Multijurisdictional Systems (Chicago: American Library Association, 1969), pp. 2-3.

²The definition of an SMSA includes two elements; first, there must be a city of at least 50,000 population to serve as a central city and to identify the county in which it is located as the central county. The second element is the identification of economic and social relationships with contiguous counties which are metropolitan in character. (U.S. Bureau of the Budget, Office of Statistical Standards, Standard Metropolitan Statistical Areas, 1967. Washington, D.C.: U.S. Government Printing Office, 1967, p. 1)

³"N" indicates the 138 libraries in the nine systems and "n" indicates the 30 libraries in the subsample.

⁴John E. Wiltz, Books in American History: A Basic List for High Schools (Bloomington, Ind.: Indiana University Press, 1964), pp. 141-143.

⁵Herbert Goldhor, A Plan for the Development of Public Library Service in the Minneapolis-Saint Paul Metropolitan Area (St. Paul: Minneapolis Department of Education, Library Division, 1967), p. 22.

⁶New York (State) University, State Education Department, Division of Evaluation, Emerging Library Systems: The 1963-1966 Evaluation of the New York State Public Library Systems (Albany: 1967), p. 3.

⁷Goldhor, op. cit., p. 28.

CHAPTER IV

CONSOLIDATED SYSTEMS

Several characteristics of the administrative structure of the consolidated public library systems distinguish this type of system from the other types of systems. Although a number of variations of the basic structure may be cited, usually a single administrator who directs all the libraries in the area as an autonomous unit serves as the head of the consolidated system. Also, generally there is one board for all the libraries in the system. Typically this type of system is administered in a manner very similar to that of a central library and its branches in that each member library is treated as a subordinate of the system.

Consolidated systems usually have developed in cities where there was a strong central library with branches. In some cases there was also a separate county library located in the city; in other situations, as the city library extended service beyond the city limits, independent libraries in the service area co-ordinated their resources and services with those of the central library. There are other instances where consolidated systems have developed by absorbing municipalities. These systems lack a central city with its strong public library which is usually characteristic of a consolidated system, but they still function as a consolidated system.

Usually a consolidated system is formed when all or most of the libraries in an area merge their resources in a single unified operation.

In instances when the county library and the city library were joined to form the system, frequently the names of both libraries were used in the name of the new organization, e.g. Charlotte and Mecklenburg County Public Library, Evansville and Vanderburgh County Public Library.

Since the libraries that make up the consolidated systems are administered as parts of a single entity, they are able to provide more nearly wholly unified service, but at the cost of autonomy for the member libraries. Although the member libraries are an integral part of the system and generally are consulted on matters of policy regarding the system, they are not able to act independently of the system. The system administration has authority over the member libraries and is in a position to establish policy and direct the activities of all the libraries in the system.

The advantages of the centralized administrative control in the consolidated systems is clearly recognized, but equally clear are the difficulties encountered in establishing consolidations because the independent libraries oftentimes are unwilling to give up their local control to become part of a consolidated system. The characteristic of centralized authority which is considered to be one of the main advantages of the consolidation is at the same time the single greatest disadvantage that prevents libraries from joining consolidations.

Three consolidated systems were selected for this study: Charlotte and Mecklenburg County Public Library, Evansville and Vanderburgh County Public Library, and Tulsa City-County Library. Each of the three systems is described and examined in this chapter.

Public Library of Charlotte and Mecklenburg County

Although 1903 is the date recognized as the official beginning of the Public Library of Charlotte and Mecklenburg County, the origin of the Library goes back into the nineteenth century when the Charlotte Literary and Library Association was incorporated in 1891. Membership in the Association was available for the fee of fifty cents per month. When the Library was transferred to the School Commissioners in 1901, it became known as the Charlotte Public School Library.

Andrew Carnegie first gave the city \$20,000 for a Free Library building provided that they met certain conditions; later he increased the amount to \$25,000.¹ The Charlotte Carnegie Public Library which was built with the Carnegie grant was opened in 1903. A gift of \$15,000 was given to the Library in 1915 for the addition of a children's room and auditorium to the main building.²

The Public Library also provided service to the public schools and in 1922 the Charlotte Board of Education made all the school libraries branches of the Public Library. After the Library became free to all residents of the County in 1925, the libraries in all the county schools were made branches of the Public Library. A separate library with its own board offered service to Negroes; later it was made a branch of the Public Library.³

The Library began to offer service to all the residents of Mecklenburg County in 1929 and within two years it had branches in the five towns in the county and a number of stations in the public schools.

As part of its county library demonstration in the South, the Julius Rosenwald Fund appropriated \$80,000 to Mecklenburg County in 1929. The money was to be spent over a period of five years in Mecklenburg County

to improve the Library. The Charlotte Carnegie Public Library had been selected to be part of the demonstration because it had characteristics that the Fund considered desirable; it was a unified system under a single director and it provided service both to the community and the schools and to white and Negro citizens. During the first two years of participation in the project, the Library's book stock was enlarged by 40,000 volumes and the size of the staff was increased significantly.⁴

Charlotte's participation in the project was terminated in 1932 when the Library's income was cut to less than one-third of what it had been (from \$66,000 to \$20,000), making it impossible for the Library to match the appropriation from the Rosenwald Fund. State and local governmental expenditures generally were sharply reduced in North Carolina during this period. No agreement was made for Charlotte to renew its participation in the project on a lower financial basis.⁵ Charlotte was the only library of the eleven in the demonstration project that did not continue through the entire five-year program.

The units of the Library began operating as a consolidated system in 1940 when the present director, Mr. Hoyt Calvin, assumed the position of librarian. In the spring of 1944 a survey of the Library was made under the sponsorship of the American Library Association. One of the recommendations of the survey was that the county-wide service of the Library be recognized and in 1945 the name was changed officially to the Public Library of Charlotte and Mecklenburg County.

In December, 1952, a bond issue was passed for a new library building. The old Carnegie building was razed and a new building was erected on the same site. The new building was occupied November, 1956.⁶

A brief examination of the current status of public libraries in North Carolina is helpful in gaining better understanding of the Public Library of Charlotte and Mecklenburg County in context. One fact about North Carolina public libraries overrides all others because it affects all aspects of their operation; by any recognized standard, North Carolina public libraries are seriously underfinanced. There are two reasons for the low support: the low per capita income in the state and the state's tax law. The per capita income of the state in 1966 was \$2,235, compared to the United States average of \$2,940, which makes North Carolina rank 43d among the 50 states in per capita income. The tax law affecting the support of the public libraries states that libraries are not a public necessity and therefore can not be supported from ad valorem taxes without a local referendum. The law was passed in the nineteenth century and has not been changed. As a result of the law, many libraries must depend for their support entirely upon non-tax monies which come from intangibles or the sale of liquor.⁷

A legislative commission was appointed to study the problem of library support in the state in 1968. Chaired by David Stick, the commission concluded that the majority of North Carolina residents were not receiving adequate modern library services such as were available to the citizens of most of the states; furthermore, they could not expect to receive adequate library service under the present system of financing public libraries. In view of this situation, the Commission recommended, in part, that the "State should gradually assume equal responsibility with local government for public library support."⁸

Local support of the county library system is somewhat better than that of individual libraries; it ranges from a low of \$3,730 to a high of

\$512,023. The latter high figure is for Mecklenburg County, and although it is the highest in the state, it is \$2.63 per capita which is below the AIA recommended level of support.⁹

Since low per capita income and sparse population make it difficult for even the counties to support public library service, larger regional units of organization have been attempted. At the present time, 47 of the 100 counties in North Carolina have become part of the 15 regional systems. More than half of the counties have been reluctant to join the regional systems in spite of the benefits offered by the State Library in the form of grant money, but some of the benefits of regional organization have been gained by a number of less formal and less permanent arrangements, such as contracts for service.¹⁰

Downs noted that probably there is no one ideal organization for a state-wide system of public libraries in North Carolina because there is not one plan that would be universally acceptable. Increased financial support and clarification of the legal status of public libraries are essential to whatever plan is worked out.¹¹

Socio-economic characteristics.--Two characteristics about the metropolitan areas are valuable for comparison with the other two consolidated systems as well as with the cooperative systems and the non-system libraries. The first characteristic (gross assessed valuation of property subject to local general property taxation) is related to the economy of the area and it serves as an indication of the potential for supporting public library services. For each of the nine library systems the valuation is given for the central city of the SMSA. The second characteristic is the educational level attained by the residents of the area, and it serves as an indicator of the amount of use of library resources. A number of studies have shown

that persons with more education tend to make greater use of public library services; among the most recent of the studies showing this trend is one done by Kronus.¹²

For the city of Charlotte in 1966, the gross assessed valuation of property subject to general property taxation was \$907,812,000.¹³ The median years of school completed by the residents of Mecklenburg County in 1960 was 11.6 years.¹⁴

At the present time a total of fourteen member libraries, in addition to the Central Library, constitute the service units of the Public Library of Charlotte and Mecklenburg County. The libraries and their holdings are shown in Table 2. Branches of the city library located in Charlotte and

TABLE 2
HOLDINGS OF THE PUBLIC LIBRARY OF CHARLOTTE AND MECKLENBURG COUNTY

Library Unit	Volumes Held
Central Library	456,367
Branches:	
Cornelius	10,000
Davidson	12,000
Derita	n/a
East	23,300
Huntersville	11,400
*Matthews	12,000
Mint Hill	6,000
North	7,700
Northwest	6,300
Piedmont Courts	6,000
Pineville	10,800
*Sharon	14,600
South	25,400
Tryon Mall	17,250
West	12,800

* Library included in sample of member libraries

Source: American Library Directory, 1968/69. 26th ed. New York: R. R. Bowker, 1968, p. 642.

the libraries located in communities in Mecklenburg County are co-ordinated to form the consolidated system of public libraries. The central library serves as the administrative headquarters for the system and as such holds a key position in the operation of the system.

Since the Public Library provides service for all the residents of Mecklenburg County (314,000 persons in 1967/68 according to a Charlotte Chamber of Commerce estimate), it achieves complete coverage of Mecklenburg County, but not for the Charlotte SMSA which consists of Mecklenburg and Union Counties. The population of Union County is a relatively small portion of the total population of the SMSA (14.1 percent or 44,760 persons, according to the 1960 Census) and library service for the residents is provided by the Union County Public Library.

System characteristics.--Data collected by questionnaires and structured interviews with the director of the system and a sample of the member libraries are used as a basis for the description of the specified aspects of the following selected characteristics of the system: the administrative structure of the system, benefits offered by the system, means of getting feedback, and opinion about membership in the system.

Two areas are considered in the category of administrative structure: 1) the encouragement of innovation and 2) the role of the member libraries in the making of system policy. In the consolidated system authority is centralized in the director of the system and this allows for less individual participation in problem solving situations. The day to day operational routines are standardized for all the libraries, but within this framework member libraries feel that they are encouraged to suggest new and better ways of handling operations. Also, the director of the system tries to

encourages ideas for new procedures that will improve existing operations.

In the making of policy for the system, the member libraries felt that they did not have a large role in the procedure. Most of the policy, they felt, was formulated at the central library, and only if the policy concerned the member libraries directly were they consulted.

Membership in a system gives certain benefits to member libraries, and assistance with difficult reference questions is one of the benefits examined. When member libraries are unable to answer a reference question, they may call the reference department of the central library which has both more extensive resources and more experienced personnel for answering questions than any of the member libraries. Both member librarians interviewed have used this service, but they do not use it extensively because they find that generally their resources are adequate for answering the questions their users ask.

If the reference department of the central library does not have the resources to answer a question, they contact the North Carolina State Library for help. The Reference Service of the State Library has an in-WATS line and also teletype connections to the University of North Carolina Library and North Carolina State University Library. These facilities greatly increase the reference resources that are readily available to the reference department of the central library.

The system offers several other services to its member libraries. When there are temporary staff shortages, substitutes are sent out from the central library. Consultants to help the member libraries weed their collections are retained by the central library. The children's librarian at the central library serves as the co-ordinator of children's services.

for the system.

Book and non-book resources.--Another important benefit of belonging to a system is that the member libraries gain access to a more extensive collection of book and non-book resources. When member libraries do not have an item requested by a patron or the resources to answer a question in a particular subject area, they are able to draw upon the much larger resources of the central library. In this system the central library, according to its records, had a collection of 243,863 volumes at the end of the 1967/68 fiscal year.

Three types of non-book resources were selected for examination: periodicals, films, and recordings; in each case the resources are compared with the standards recommended by the ALA Minimum Standards for Public Library Systems, 1966.¹⁵ The central library received 1,176 periodical titles during the 1967/68 fiscal year and kept 999 of them for five years or longer. To meet the ALA recommended standard of one title for each 250 persons in the service area, the central library should have 1,364 titles; the present holdings of 1,176 titles are 13.8 percent below the recommended minimum.

The system owned 629 films at the end of the 1967/68 fiscal year and added 38 titles during the same period. One part of the ALA standards for audio-visual materials, which are intended for system collections with access to a resource collection at the state or regional level, recommends that there should be one film title for every 1,000 population served, but no collection should have fewer than 1,000 titles. The system's holdings of films is 37.1 percent below this recommended level.

The system owned 3,932 recordings at the end of the 1967/68 fiscal year and added 392 recordings to the collection during the same period.

The ALA standards recommend that the collection contain one disc or reel of tape for every 50 persons in the service area, but no collection should contain less than 5,000 discs and reels. To meet this standard the system would have to have 6,820 discs and reels; the present collection is 42.3 percent below the recommended level.

The system does not have any formalized means of getting feedback about its services. Occasionally individuals make comments to the staff about their satisfaction or dissatisfaction with the library's services. The system does not have an organized procedure used regularly to evaluate how well it is meeting the needs of its users.

Opinions about system membership.--Opinions about the system form the last part of this section about characteristics of the system. Several benefits derived from membership in the system were singled out by the persons interviewed. The sharing of talent was felt to be one of the greatest benefits, for the system makes it possible for all the member libraries to profit from the special abilities of individual staff members. Another benefit cited was the availability of a much larger collection of books at the central library.

Drawbacks to system membership were difficult for the respondents to isolate because in general they felt that there were no disadvantages to system membership. Similarly, they were not able to say what it had meant to them to be a member of a system because the Public Library has been a system for several decades.

Evansville and Vanderburgh County Public Library

Evansville and Vanderburgh County Public Library was founded in 1912 as Evansville Public Library. The first few years of its existence, the library served only the city of Evansville, but in 1919 the city library was merged with the county library to extend service to all of Vanderburgh County. The director of the system, Mr. Edward A. Howard, has held the position since 1962.

Indiana was one of the first states to make legal provision for city-county library service. In an effort to improve the relationship of the two governmental units (city and county) acting together to provide service, four county members are appointed to the library board of the city agreeing to give service. In his Government of the American Public Library, Joeckel pointed out that

These Indiana county libraries have several important advantages. They provide wholly unified library service, at least for that portion of the county served. In particular, the library of the county-seat city is not detached from the system. The book resources of the library of the central city are thus placed fully at the disposal of the whole county. Administratively, the outlying agencies are attached to the central library and are served and supervised by its staff. . . . 16

At the end of 1967, public libraries in Indiana provided service to 87.9 percent of the state's population, leaving 12.1 percent of the total population without direct access to a public library. Most of the persons who did not have library service lived in rural areas (as defined by the 1960 Census this was population living in towns under 2,500 and all population outside of towns.) Geographically there are 246 public libraries in 92 counties in the state.¹⁷ Of the 246 public libraries, 244 receive their chief support from public library tax funds. For the state as a

whole, receipts from all sources averaged \$4.02 per capita for the 241 public libraries reporting.¹⁸

Pursuant to the Acts of 1947, Chapter 321, Section 4, public libraries in the state of Indiana are grouped in two classes. Class I libraries are those organized under the Act or converting to it by board resolution. At the end of December, 1967, there were 227 libraries in this category. Class II libraries are those administered by school boards or are endowed libraries, independent township libraries, and libraries organized under certain special laws. There are four school board libraries, five township libraries, and ten libraries that are either endowed or organized under special laws.¹⁹

Socio-economic characteristics.--In terms of the socio-economic characteristics of this area, the city of Evansville in 1966 had a gross assessed valuation of property subject to local general property taxation of \$223,825,000.²⁰ The median years of school completed by the residents of Vanderburgh County was 10.2 years for 1960.²¹

Nine libraries make up the system that provides service to all the residents of Vanderburgh County. The libraries and their holdings are shown in Table 3. The libraries are the city library and its branches; although there are several small towns in Vanderburgh County, there are no community libraries, and all the residents of the county depend on the Evansville and Vanderburgh County Public Library for service. The member libraries of the system are located in different sections of the city of Evansville, and one bookmobile is used to extend service to county residents.

Administration of the entire system is handled by the central library which plays a key role in the operation of the system and in the formulation of policy for the system. The central library and the nine

TABLE 3
HOLDINGS OF THE EVANSVILLE AND VANDERBURGH
COUNTY PUBLIC LIBRARY

Library Unit	Volumes Held
Central Library	390,331
Branches:	
Cedar Hall	6,700
East	20,000
Glenwood	8,500
Harper	6,000
Howell	9,500
*McCollough	30,000
North	12,500
West	18,000

* Library included in sample of member libraries

Sources: American Library Directory, 1968/69, 26th ed. New York: R. R. Bowker, 1968, p. 253-254.

member libraries are operated as a closely integrated unit.

According to the most recent figures available (Special Census, 1966), the system serves a population of 168,000, or all the residents of Vanderburgh County. To this extent the system provides complete coverage of the area. The Evansville SMSA includes two counties in addition to Vanderburgh County (Warrick County, Indiana and Henderson County, Kentucky) but the system does not offer service to the residents of these counties. Of the three counties that constitute the Evansville SMSA, Vanderburgh is the largest, containing about three-quarters of the total population (74.6 percent or 165,794 persons, according to the 1960 Census) and an area of 241 square miles. Warrick County contains 10.6 percent (or 23,577 persons) and Henderson County 14.9 percent (or 33,139 persons) of the total population of the SMSA. Since one of the three counties is in Kentucky, the

SMHA is bi-state in nature, but this does not affect the fact that the system does not provide service to the entire Evansville SMHA.

Two public libraries in Warrick County (Boonville and Newburgh) provide service to residents of those cities; there is no county-wide service. In Henderson County, Kentucky, service is provided by the Henderson Public Library which serves all the residents of the city and the county.

System characteristics.--Data collected by questionnaires and structured interviews with the director of the system and a sample of the member libraries form the basis for the description of the specified aspects of the following selected characteristics of the system; the administrative structure of the system, means of getting feedback, and opinions about membership in the system.

In the category of administrative structure of the system, two aspects are considered: 1) the encouragement of innovation and 2) the role of the member libraries in making system policy. Although the daily operating routines of the system are standardized in order to present a uniform image of the library to the public and so that library personnel may work in any service unit without difficulty, innovation of new and better ways of handling problems is encouraged.

Innovation is encouraged by the availability of a formalized method of presenting suggestions for new procedures. Ideas are introduced to the Staff Council at its monthly meeting. The Staff Council is composed of the head librarians of all the member libraries plus a representative from the Staff Association; the Council acts in an advisory capacity to the system administration. After the suggestion has been discussed, the Council decides whether or not to implement it. If the decision is an affirmative

one, the procedure is tried for six months, and at the end of the trial period an objective evaluative report, such as a statistical report or an opinion poll, is submitted to the Staff Council. On the basis of the report, the Council decides to continue the procedure or drop it. Since this method of presenting new ideas is formalized and available to all units of the system, the member libraries feel that they are encouraged to try new and different procedures.

The Staff Council serves another important function in making possible the participation of the member libraries in the development of system policy. Each member library has a representative on the Council and opinions and suggestions may be expressed through this representative.

An important benefit that member libraries gain from system membership is assistance with difficult reference questions. When member libraries receive a reference question that cannot be answered with their own resources, they may call the central library reference department for help. The member librarian interviewed used this service several times a day and found that it worked well; patrons seem to be satisfied with the results. The central library is part of a teletype network linking 25 large public and college libraries in Indiana; this facility may be used to augment the reference department's resources if necessary.

Book and non-book resources.--Another important benefit of being a member of a system is the access it provides to a more extensive collection of book and non-book resources. The central library of this system, according to its records, had a book collection of 170,327 volumes at the end of the 1967/68 fiscal year.

Three types of non-book resources were chosen for examination: periodicals, films, and recordings. The Evansville and Vanderburgh County Public Library received 715 periodical titles during the 1967/68 fiscal year and kept 85 of them for five years or longer. To meet the ALA recommended standard of one title for each 250 persons in the service area, the central library should have 672 titles; the present holdings exceed this recommended minimum by 6.4 percent.

At the end of the 1967/68 fiscal year, the system owned 271 films and had added 7 titles during the fiscal year. The ALA standards for audio visual materials, which are intended for system collections with access to a resource collection at the state or regional level, recommend that there should be one film title for every 1,000 persons served, but no collection should have fewer than 1,000 titles. The present collection falls 72.9 percent below the recommended minimum level.

The system owned 4,547 recordings at the end of the 1967/68 fiscal year and added 200 recordings during the fiscal year. The ALA standards recommend that the collection contain one disc or reel of tape for every 50 persons in the service area, but no collection should contain less than 5,000 discs and reels. To meet this standard, the system would need to have at least 5,000 recordings; the present collection is 9.1 percent below this recommended level.

With its tradition for self-study, the Evansville and Vanderburgh County Public Library has developed several formalized means of getting feedback about its services from the persons who use them. One type of feedback used fairly frequently is the keeping of a very careful record of the amount of use certain services receive. In another instance, a

questionnaire was used to conduct a survey of library users. The results of the study were tabulated, analysed, and reported. Although a number of objective means of getting feedback about the services are used, the director feels that they are inadequate, principally because the things they are trying to study are elusive and difficult to measure.

Opinions about system membership.--The last part of this section concerns opinions about the system. The director felt that the greatest single advantage derived from the system was the book pool. Materials in the pool can be sent to any member library in the system. Copies of best sellers are rented from the American Lending Library and sent to member libraries where the titles are in demand. The book pool appears to work well because it makes books easily available; records of location are not permanent and can be changed with a minimum amount of effort.

For the member libraries, the greatest single advantage noted was having the processing of books handled by the central library. Freed from this task, the librarians have more time to select books for their collections, give reader's advisory service, and answer reference questions.

In the director's opinion, the greatest single drawback of the system was the difficulty presented by the need to have an equal quality of service at all service points in the system. Establishing and maintaining quality service is difficult because of costs and the continuing need for additional service points in the system. For members, the drawback singled out was that of being limited by system procedures, but it was mentioned only in the absence of any other drawbacks.

In May, 1963, the Library joined a teletype network that connects it with 25 large public and college libraries in Indiana. Experimental in

nature, the project is sponsored by the State Library and uses federal funds to encourage inter-library cooperation and borrowing.²²

Tulsa City-County Library System

Established in 1913, the City Library of Tulsa served only the city for almost half a century; in 1962 the service area was extended to include the county, and the Library became the Tulsa City-County Library System. Since the formation of the System, great progress has been made in expanding the service of the library; and development, expansion, and improvement of staff, buildings, collections, and services have taken place. The present director, Mrs. Allie Beth Martin, has been director of the System since its inception in 1962.

The new central library building was occupied July 1, 1965. The contemporary design of the building is noteworthy for the manner in which it combines beauty, efficiency, and economy.

Tulsa City-County Library System is the most successful system in the state of Oklahoma; with few exceptions, the level of public library service in the state as a whole is generally poor. The need for improvement has been apparent for some time, and in 1963 the Oklahoma State Legislature created the Oklahoma Council on Libraries to study the critical situation in which the state's libraries found themselves. At the Council's request, the Governor called the First Governor's Conference on Libraries which was held September, 1964.²³

Two factors are largely responsible for the low level of public library service in Oklahoma; these factors are the sparse population of the state and the inadequate financial support available to the libraries.

Oklahoma has two areas of relatively dense population--Oklahoma City and Tulsa; the remainder of the state is sparsely populated. Of the 77 counties in the state, almost one-third (or 20 counties) have less than 10,000 inhabitants, and only 7.7 percent (or 6 counties) have over 50,000 residents. In addition, there appears to be a trend for the rural population to shift to urban areas, leaving the rural areas even less densely populated. During the decade of 1950, 64 counties in Oklahoma lost population and 13 gained; each of the 13 counties that gained population contained a relatively large city.²⁴

In his survey of Oklahoma libraries, St. John noted that one of the obvious reasons for the poor quality of library service is the very low financial support available. More than one-half (54.6 percent or 63 libraries of the total of 119) of the present public libraries in the state receive less than \$1.00 per capita support per year. The Oklahoma Library Association established \$2.00 as a minimum level of support for public libraries several years ago, and although this standard has not been revised upward to account for increased costs of materials and services, most of the libraries in the state still cannot meet it. Only 7 libraries in the state equal or exceed the old standard, and no library in the state meets the ALA standard of \$3.82 per capita per year.²⁵

Encouraging the development of systems of public libraries appears to be the best method of raising the level of public library service in Oklahoma. A Constitutional Amendment was adopted by the electorate in July, 1960, making this approach possible. Counties have not taken advantage of this enabling legislation to the extent that might have been expected, and St. John suggests that probably the most important reason for this is that the people do not know the value of good library service

because they have never had it.²⁶

The importance of strong leadership at the state level cannot be stressed too much; if the level of service is to be improved, the state must accept its share of responsibility for developing larger units of public library service. When the Library Development Committee of the Oklahoma Library Association published the Oklahoma Library Plan in 1954, it made the following statement about responsibility for development at the state level:

We have witnessed the transfer of responsibility for schools, hospitals, public welfare, road construction and other services to state and federal jurisdiction. Little has been done to alter the organizational and financial structure of libraries. All of these governmental services have one thing in common: they cost more than most communities by themselves can afford.

From the experience of other states, it is apparent that Oklahoma must provide the legal framework which will stimulate library growth and development. Libraries must be organized into large multi-county service units to reach economical and effective proportions. Revisions of the tax structure must be made to increase revenue for the support of libraries and make it feasible for cities to extend their services beyond their boundaries. . . .²⁷

Socio-economic characteristics.--Two socio-economic characteristics are being used as indicators that can be compared with the same type of library system and with different types of systems. The first indicator is the gross assessed valuation of property subject to local general property taxation; in Tulsa in 1966 this valuation of property was \$408,157,000.²⁸ The second indicator is the median years of school completed; in 1960 the residents of Tulsa County completed 12.1 years of school.²⁹

Eighteen libraries, in addition to the central library, constitute the Tulsa City-County Library System. The libraries and their holdings are

shown in Table 4. The member libraries of the system include both branches of the city library and community libraries located in the county.

TABLE 4
HOLDINGS OF THE TULSA CITY-COUNTY LIBRARY SYSTEM

Library Unit	Volumes Held
Central Library	301,808
Branches:	
*Bixby Public Library	5,919
Broken Arrow Public Library	7,287
Brookside	14,612
Collinsville Public Library	4,290
East Second	13,349
Florence Park	19,594
Jenks Public Library	6,129
*Nathan Hale	17,986
North Harvard Public Library	9,770
Owasso Public Library	5,891
Page Memorial (Sand Springs, Oklahoma)	6,519
Prattville Public Library	5,796
Red Fork	12,218
Seminole Hills	21,159
Sheridan	18,169
Skiatook Public Library	5,307
Suburban Acres	12,369
West Tulsa	12,246
Woodland View	11,040

* Library included in sample of member libraries

Sources: American Library Directory, 1968/69. 26th ed. New York: R. R. Bowker, 1968, p. 710.

As with the other two consolidated systems, the administration of the entire system is handled by the central library. Policy for the system is formulated in the central library. Centralization of system services, it is felt, has improved the efficiency of the entire system operation. The organization of the System is being modified by the establishment of regional centers. The member libraries will be under the

supervision of the regional centers which in turn will be directed by the central library.

According to the most recent figures available, which were compiled by the Tulsa Chamber of Commerce, the System served a population of 412,000 in 1967/68. The System provides service to all the residents of Tulsa County, but not to all the residents of the Tulsa SMSA which includes two other counties (Osage and Creek Counties) in addition to Tulsa County. Tulsa County contains the bulk of the population of the SMSA (82.6 percent of the total, according to the 1960 Census.) In Creek County library service is supplied by the public libraries of Bristow and Sapulpa. The public libraries in five towns in Osage County (Barnsdale, Bartlesville, Fairfax, Hominy, and Pawhuska) provide library service for their residents. All the residents of these two counties do not have access to free public library service; only the residents of the eight towns specified above have the service.

Part of the city of Tulsa lies in Osage County, but the System does not offer service to those city residents who live outside Tulsa County. In some cases Tulsa residents living in Osage County are closer to the central library than those living in Tulsa County, but the former do not have free access to the Library's resources.

System characteristics.--Data collected by questionnaire and structured interviews with the director of the system and a sample of the member libraries form the basis for the following description of specified aspects of selected characteristics of the system: the administrative structure of the system, benefits offered by the system, means of getting feedback, and opinions about membership in the system.

Two aspects of the administrative structure of the system are considered; they are 1) the encouragement of innovation and 2) the role of

the member libraries in the making of system policy. As with the other two consolidated systems, the daily operating procedures are standardized, but within this framework, routines have been modified to meet the needs of different libraries. Member libraries felt that they were especially encouraged to experiment with different methods in which they developed programs to meet the specific needs of their patrons. When the regional organization of the system is completed, it was felt that there would be even more encouragement of individuality from that administrative level.

The recently established regional organization of the systems has made it possible for member libraries to play a greater role in the formation of system policy. At the regional meetings policy matters are discussed and the opinions of the regional librarians are conveyed to the central library. Member libraries said that their opinions were asked and their suggestions were always welcome when policy was being made. At the same time there was a feeling that the central library had an inordinately large role in the development of system policy and that member libraries should be consulted more about the needs of their operations and patrons.

Assistance with difficult reference questions is an important benefit libraries derive from membership in a system. When a member library receives a question that cannot be answered with its own reference resources, it may call the reference department of the central library for assistance. The member librarians interviewed ask the central library reference department for help on reference questions with some frequency and they reported that the arrangement appears to work well.

The Tulsa City-County Library System is a member of the Oklahoma Teletype Information Service (OTIS) which provides rapid access to the Reference Service at the Oklahoma State Library. The OTIS network is

fairly new and to date the System has not made extensive use of the resources it offers.

The System offers other services to its member libraries. For instance, at the central library, there is a staff member in charge of public relations for the entire system and another staff member who serves as the community services co-ordinator. In addition, consultant services are offered to the member libraries; there is a co-ordinator of both adult services and children's services and the subject specialists on the central library staff are available for consultation.

Book and non-book resources.--One of the most important benefits of system membership is having access to a more extensive collection of book and non-book resources. The central library of the system, according to its records, held 246,632 volumes at the end of the 1967/68 fiscal year. Periodicals, films, and recordings are the non-book resources chosen for examination. The central library of the system received 2,098 periodical titles during the 1967/68 fiscal year and kept 703 of them for five years or more. To meet the ALA recommended standard of one title for every 250 people in the service area, the Library should have 1,648 titles. The present holdings exceed this recommended minimum by 27.3 percent.

The central library owned 192 films at the end of the 1967/68 fiscal year and added 23 titles during the same period. The ALA standards for audio visual materials recommend that there should be one film title for every 1,000 persons served, but no collection should have fewer than 1,000 titles. The Library's holdings fall short of this recommended minimum by 80.8 percent.

At the end of the 1967/68 fiscal year, the central library owned 3,481 recordings and had added 663 recordings during the same period. The

ALA standards recommend that the collection contain one disc or reel of tape for every 50 persons in the service area, but no collection should contain less than 5,000 discs or reels. To meet this standard, the library would have to hold 8,240 recordings; the present collection is 57.8 percent below this recommended minimum level.

Although the system is very interested in developing new techniques for measuring the effectiveness of its services, it has not done so yet and has to rely on the traditional measures (such as the number of books circulated, the number of reference questions asked and answered, and the number of persons attending special programs.) In October, 1968, the System was studying its effectiveness in filling interlibrary loan requests using Oklahoma's ISCA-funded teletype network.

Opinions about system membership.---Opinions about the System make up the last part of this section dealing with the characteristics of the system. The director of the system felt that the greatest benefit derived from the system organization was the broader base, in terms of population and income, the system afforded. The first year of the system's existence, its income tripled because of this broader base from which it could draw. Member libraries singled out the benefits of having professional advice available and the access to the book pool. The sample of persons interviewed essentially could see no drawbacks to membership in the system. Several potential problem areas that might develop as a result of the system were mentioned, but they did not exist yet.

Summary

The three consolidated public library systems share a number of similar characteristics resulting from their similar administrative structures, but there are also a number of differences among them. The administrative authority of each of the three systems is centralized in the central library of the system. In each case, the system is operated as a single, unified entity and one library board serves the system.

The origin of each system was a city library that began to extend service beyond the city limits and at the same time to cooperate with the libraries in the area. When the city library and all the community libraries merged, a city-county consolidated library system was formed. In one case, Evansville and Vanderburgh County Public Library, no community libraries in Vanderburgh County were involved; the Evansville Public Library and the Vanderburgh County Public Library formed a consolidation to provide service to all the residents of the county.

The central libraries of the three systems are about the same age, since all of them were founded during the first two decades of this century. Two of the three libraries, as may be seen in the following table, have been operating as consolidated systems for a much longer period than the third.

TABLE 5
AGE OF CENTRAL LIBRARIES AND SYSTEMS

System	Year of Founding of Central Library	Year System Operation Began
Public Library of Charlotte & Mecklenburg County	1903	1929
Evansville & Vanderburgh County Public Library	1912	1919
Tulsa City-County Library System	1913	1962

None of the three systems gives service to the entire population of the SMSA in which the system is located, because in each case the SMSA consists of more than one county and each system serves only one county. Each of the systems provides service to all the residents of the county in which it is located.

The socio-economic characteristics used as indicators are summarized in Tables 6 and 7.

TABLE 6
PER CAPITA ASSESSED VALUATION OF PROPERTY
FOR THE CENTRAL CITIES OF THE
THREE SMSA'S IN 1967
WITH 1960 POPULATION

Central city	Total Assessed Value Per Capita Subject to Tax after Deduction of Exemptions (in thousands of dollars)
Charlotte, North Carolina	4.50
Evansville, Indiana	1.58
Tulsa, Oklahoma	1.58

Source: U. S. Bureau of the Census, Census of Governments, 1967, Vol. 2: Taxable Property Values, Washington, D.C.: U. S. Government Printing Office, 1968.

TABLE 7
 MEDIAN SCHOOL YEARS COMPLETED BY POPULATION
 SERVED BY THE THREE CONSOLIDATED SYSTEMS
 1967

System	Median School Years Completed
Public Library of Charlotte & Mecklenburg County	11.6
Evansville & Vanderburgh County Public Library	10.2
Tulsa City-County Library System	12.1
Source: U.S. Bureau of the Census. County and City Data Book, 1967. Washington, D.C.: U.S. Government Printing Office, 1967.	

The book and non-book resources of the central libraries of the systems are summarized in Table 8.

TABLE 8
 BOOK AND NON-BOOK RESOURCES OF THE
 CENTRAL LIBRARIES OF THE THREE CONSOLIDATED SYSTEMS
 1967/1968

Central Library of System	Volumes Held	Periodical Titles Held	Films Held	Recordings Held
Public Library of Charlotte and Mecklenburg County	243,853	1,176	629	3,932
Evansville & Vanderburgh County Public Library	170,327	725	271	4,347
Tulsa City-County Library System	246,632	2,098	192	3,481

Footnotes Chapter IV

¹Martha Watkins Flourney, A Short History of the Public Library of Charlotte and Mecklenburg County, Charlotte, North Carolina (Charlotte: The Library, 1952), p. 2.

²Louis R. Wilson and Edward A. Wight, County Library Service in the South: A Study of the Rosenwald County Library Demonstration (Chicago: University of Chicago Press, 1935), p. 47.

³Ibid., 48.

⁴Ibid.

⁵Ibid., 48-49.

⁶Public Library of Charlotte and Mecklenburg County, Annual Report, 1956/57 (Charlotte: 1957), p. 1.

⁷Jules M. Mersel et al., Overview of the Library Services and Construction Act--Title I (New York: R. R. Bowker Company, 1969), p. 105.

⁸Ibid., 104.

⁹Ibid., 118.

¹⁰Ibid., 116.

¹¹North Carolina, Governor's Commission on Library Resources, Resources of North Carolina Libraries, edited by Robert B. Downs (Raleigh: 1965), p. 67.

¹²Carol Kronus and James W. Grime, "Public Opinion in Illinois Regarding Public Library Support and Use," Studies in Public Library Government, Organization and Support, edited by Guy Garrison (Washington, D.C.: U. S. Department of Health, Education and Welfare, Office of Education, Bureau of Research, 1969), p. 140.

¹³U.S. Bureau of the Census, Census of Governments, 1967. Vol. II: Taxable Property Values (Washington, D.C.: U. S. Government Printing Office, 1968), p. 107.

¹⁴U.S. Bureau of the Census, County and City Data Book, 1967 (Washington, D.C.: U.S. Government Printing Office, 1968), p. 263.

¹⁵Public Library Association, Standards Committee, Minimum Standards for Public Library Systems, 1966 (Chicago: American Library Association, 1967), pp. 43-45.

¹⁶Carleton Bruns Joeckel, Government of the American Public Library (Chicago: University of Chicago Press, 1935), p. 270.

¹⁷Indiana, State Library, Statistics of Indiana Libraries, 1967
(Indianapolis: 1968), p. 1.

¹⁸Ibid., 2.

¹⁹Ibid., 1.

²⁰U. S. Bureau of the Census, Census of Governments, p. 90.

²¹U.S. Bureau of the Census, County and City Data Book, p. 113.

²²Evanaville Public Library and Vanderburgh County Public Library,
Annual Report, 1965 (Evanaville: 1965), p. 2.

²³Francis R. St. John, Oklahoma Library Survey: A State-Wide Survey
of Libraries and Plan for Library Development in Oklahoma (New York: Library
Consultants, Inc., 1965), p. ii.

²⁴Ibid., 3-6.

²⁵Ibid., 12-13.

²⁶Ibid., 17.

²⁷Ibid., 20.

²⁸U.S. Bureau of the Census, Census of Governments, p. 110.

²⁹U.S. Bureau of the Census, County and City Data Book, p. 303.

CHAPTER V

COOPERATIVE SYSTEMS

Cooperative public library systems are formed by the joint action of local public libraries in an area. When the local libraries decide to establish a system, the trustees of all the libraries involved meet and elect members to serve on a system board which will direct the activities of the system. Among its first duties, the newly formed system board must establish a headquarters unit, designate a central library, and determine what services the system will offer.

The formation of the cooperative system does not affect the functioning of the boards of the local libraries; they do not cease to function after the establishment of the system as is the case with the consolidated system, but they continue to direct the activities of the local libraries while the system board directs the activities of the system. The hierarchy of governing boards in the cooperative system distinguishes it from the consolidated system where there is only one board for the entire system.

Cooperative systems are based on the principles of voluntary cooperation, local initiative, and local control. Each of these principles may be viewed alternately as the greatest advantage and the greatest disadvantage of this type of system structure. Voluntary cooperation and local initiative are taken together to emphasize that the choice to join

or not to join a system is left entirely to the local library. Logic is firmly on the side of system membership, but the local library does not have to accept this if it chooses not to do so.

The retention of local control by the member libraries presents several important considerations. First, the system does not have the authority to set policy or determine how service will be offered; the member libraries are able to continue serving their users in the manner they have found to be most effective. Second, the local library retains its same governing and taxing authority, but may receive additional financial grants from the system. Finally, while the local library gains strength and many benefits from membership in a larger organizational unit, it maintains its identity because the system exists in an advisory capacity only.

The central library in the cooperative system plays a far different role in the operation of the system than it does in the consolidated system. In the cooperative system, the central library is the strongest library around whose collection the system is built; it serves as the resource library for the member libraries. In the consolidated system, the central library occupies a more pivotal position, for the administration of all the libraries in the system is handled in this library.

The cooperative system probably is the most widely accepted and therefore the most frequently found type of public library system in the United States. Its general acceptance may be based on the fact that the member libraries are required to give little to the system, but gain a great many benefits from system membership.

Three cooperative systems were selected for this descriptive study: the Illinois Valley Library System, Peoria, Illinois; the Onondaga Library System, Syracuse, New York; and the San Joaquin Valley Library System, Fresno, California.

Illinois Valley Library System

Although the Illinois Valley Library System was established in 1966, the central library upon which the system is built, the Peoria Public Library, was founded in 1880. The System is fortunate to have the resources of this Library which has the largest book collection in downstate Illinois.¹ The new building for the Peoria Public Library was occupied in December, 1967, and officially dedicated March, 1968. The director of the System, Mr. William Bryan, who is also librarian of the Peoria Public Library, has held the position since the inception of the System; he has been director of the Peoria Public Library since 1955.

The development of public library systems in Illinois began in 1961 when concern with the status of public library service in the state was manifest by the Illinois Library Association's appointment of a Library Development Committee to study the situation. After due consideration, the Committee recommended to the Association that there be established a public library development project whose goal would be a completed developmental plan for the public libraries of Illinois within one year. Robert H. Rohlf, at that time Director of the Dakota-Scott Regional Library, West St. Paul, Minnesota, was selected to be the project director.

Rohlf found that in fiscal 1963 the total tax expenditure for Illinois public libraries was \$1.67 per capita; if Chicago were left out, the tax expenditure dropped to \$1.43 per capita.² The level of support was well below the ALA recommended minimum.

Although the relatively low level of financial support was responsible for many of the problems besetting Illinois public libraries, Rohlf identified a number of additional problem areas. Illinois library laws

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were a problem because they were both contradictory and vague. Also, they discouraged the formation of larger organizational units because the permissive tax rates were lower for district libraries than for individual city or village libraries. The reaction of trustees to larger organizational units was a second problem area; many trustees feared that they would lose control over the local library if they participated in cooperative ventures. They tended to be defensive about the current status of library service offered, refusing to recognize inadequacies.³

School consolidation and student use were two closely related problem areas. With the consolidation of the public schools, non-resident students wanted to use public library resources and resisted paying the non-resident fee. In addition to the number of students using the public library, the demands they make are increasingly sophisticated and difficult to satisfy. The relatively small size of the existing library units in the state was pointed out as another problem area. The severe limitations placed on the libraries by the limited tax area produced small libraries. Although in 1963 there were over 500 libraries in Illinois, only three of them served an area as large as a county, and more than two and one quarter million residents of the state were without local public library service.⁴

Another problem area was created by the shift in population from rural areas to the urban areas. This trend has been nation-wide. Finally, it is important to note that in 1963 the public libraries in Illinois did not have plans for any large scale cooperative ventures. Rohlf attributes this failure to the lack of strong leadership within the library community.⁵

To solve the problems facing the public libraries in Illinois Rohlf proposed the establishment of a network of public library systems. More specifically he recommended the following four-fold long range program

for library development in Illinois:

- 1) A state aid payment of an equalization nature to all qualifying local libraries
- 2) Creation and financing of cooperative library systems throughout the entire state
- 3) Financing of four reference centers to serve as library material & resource centers for the entire state
- 4) Creation by the State Library of a Union Catalog and Union List of Serials held by selected Illinois libraries⁶

After Rohlf's report was accepted by the Illinois Library Association, the next step in the implementation of his plan was wide publication of it throughout the state. A series of meetings sponsored by the State Library and the Illinois Library Association was held throughout the state to explain the system plan and gain support for it. In the fall of 1964, legislation containing the main proposals of the Rohlf plan was drafted and introduced into both houses of the legislature in the spring of 1965. The Illinois General Assembly passed the Library Development Act with an overwhelming majority of affirmative votes and on August 17, 1965, the Governor signed the bill into law. The Act provided a program of state grants designed to aid in the establishment and development of a network of public library systems for the entire state.⁷

Significantly, the state's financial responsibility for encouraging the improvement of public libraries is stated in the first section of the Law; public libraries are considered part of public education for which there must be state support. Stenstrom notes that this instance is the first time the obligation to support public libraries had been explicitly and officially stated in Illinois.⁸ The State Librarian was designated as administrator of the Law.

Rohlf's original plan called for the formation of 21 systems, but that number was modified and at the end of 1968 there were 18 systems in operation in the state of Illinois. Although the systems cover almost the entire geographic area of the state, there are still approximately 808,922 persons who do not have access to public library service. These persons are residents of districts that have not joined systems or districts that have been assigned to a system but still do not have service.⁹ The number of persons without library service has been greatly reduced from the two and a quarter million unserved residents in 1963, but the goal of public library service to all the residents of the state is yet to be achieved.

The establishment of the Illinois Valley Library System was facilitated by the existence of a successful cooperative enterprise in the Peoria area. The Illinois Valley Film Cooperative had been in operation for a number of years and along with providing satisfactory services, it had fostered the establishment of lines of communication that functioned well. The success of this cooperative project created a favorable climate, and area librarians were willing to try another form of cooperation.

Socio-economic characteristics.--Two socio-economic characteristics are being used as indicators that can be compared with the same type of system and with different types of systems. The first indicator is the gross assessed valuation of property subject to local general property taxation; in Peoria the valuation was \$542,361,000 in 1966.¹⁰ The second indicator is the median years of school completed by adult residents of the area. For the seven counties served by member libraries of the Illinois Valley Library System (Peoria, Tazewell, Woodford, Stark, Bureau, Henry,

and Marshall Counties), the median years completed was 10.7 for 1960.¹¹

The Illinois Valley Library System consists of 26 public libraries that are located in six counties in the Peoria area. The libraries and their holdings are shown in Table 9. According to the statistics supplied

TABLE 9
HOLDINGS OF THE ILLINOIS VALLEY LIBRARY SYSTEM

Library Unit	Volumes Held
Central Library - Peoria Public Library	340,174
Member Libraries:	
Bradford Public Library	5,948
Buda - Mason Memorial Library	n/a
Chillicothe Township Free Library	12,433
Creve Coeur Public Library	15,355
Delavan - Ayer Public Library	13,436
*East Peoria - Fon du Lac Township Library	22,475
Eureka Public Library	12,376
Galva Township Public Library	16,444
Henry Public Library	11,227
*Kewanee Public Library	65,342
Lacon Public Library	13,069
La Fayette - Ira C. Reed Public Library	3,081
Mackinaw Township Library	7,906
Marquette Heights Public Library	3,565
*Metamora - Illinois Prairie District Library	46,112
Minier Public Library	3,272
Morton Public Library	18,576
Neponset Public Library	15,129
*Pekin Public Library	43,819
Peoria Heights Public Library	19,770
Princeville - Lillie M. Evans Memorial Library	9,268
South Pekin Public Library	3,412
Toulon Public Library	8,291
Tremont - Esther Washburn Public Library	5,988
Washington Public Library	13,852
Wyoming Public Library	11,481

* Library included in sample of member libraries

Source: American Library Directory, 1968/69. 26th ed. New York: R. R. Bowker, 1968.

by the System, a population of 348,694 was served by the members of the System during fiscal year 1967/68.

Peoria Public Library, with its six branches, serves the dual function of central library and headquarters of the System. The director of the Peoria Public Library is also the director of the System; in three other Illinois systems (Northern Illinois, Starved Rock, and Western Illinois Library Systems) the director of the central library is also the director of the system.¹² The administrative structure of the Illinois Valley System is unique in Illinois, however, because the System services and staff are completely merged with those of the Peoria Public Library. For services rendered and use of the collections and facilities, the System pays the Public Library a fixed sum.¹³

The central library, Peoria Public Library, serves as a resource library for the system. Its collection of book and non-book resources is available for use by the member libraries; the services of its reference department may be used by any of the member libraries. Since the central library of this cooperative system serves only as a resource library, its role is much different from that of the central library in the consolidated systems, as described in Chapter IV.

The System provides almost complete coverage for the three counties included in the Peoria SMSA (Peoria, Tazewell, and Woodford Counties) because the majority of the libraries in these three counties are members of the System. In Peoria County, two public libraries (Brimfield and Dunlap) are not System members; in Woodford County one library (El Paso) is a member of the Corn Belt Library System; and all the public libraries in Tazewell County are members of the Illinois Valley Library system. Stark County is not part of the Peoria SMSA, but all the public libraries

In the county belong to the System.

In the three remaining counties (Bureau, Henry, and Marshall) some of the public libraries belong to the Illinois Valley Library System, but some also belong to the three systems that are contiguous to the Illinois Valley System: Starved Rock, River Bend, and Western Illinois Library Systems.¹⁴

System characteristics.--Data collected by questionnaires and structured interviews with the director of the System and a sample of the member libraries are used as a basis for the description of the specified aspects of the following selected characteristics of the System: the administrative structure of the system, benefits offered by the system, means of getting feedback, and opinions about membership in the system.

Two aspects of the administrative structure of the System are considered; they are 1) the encouragement of innovation and 2) the role of the member libraries in the making of System policy. Since each member library operates as an autonomous unit, there is no standardization of routine operations as there is in the consolidated systems, and this situation gives a somewhat different frame of reference to the discussion. The director of the System encourages the use of new procedures in the member libraries; an example of System encouragement is the recent project to change the charging systems of the member libraries to make reciprocal borrowing possible. The System fostered the innovation to the extent that it bought all the charging machines and supplies for the first year of operation for the libraries that agreed to be part of the project. Since the director of the System does not have any authority over the member libraries, he can only encourage and suggest changes he thinks might improve service.

Librarians of the member libraries interviewed expressed a variety of different opinions about the System's encouragement of new procedures. They ranged from a feeling that the System encouraged innovation by pointing out advantages and disadvantages of contemplated changes to the opinion that encouragement of new procedures was not a proper system function. In between these two extremes were the opinions that the System might offer more encouragement after it had been in operation a little bit longer, and that though there was no particular encouragement, neither was there discouragement when new procedures were proposed.

In most cooperative systems, the member libraries participate in the formation of system policy through their trustee representative on the system board. Policy for the Illinois Valley Library System is made by the System board, but in addition, the member libraries play a greater role in the making of System policy than is usually the case in cooperative systems by means of their membership in the Pere Marquette Association. All the librarians whose libraries are members of the System are eligible for membership in the organization. Independent of the System, the Association provides a means for member libraries to express their opinions and ask questions about matters of proposed policy. At the same time, the Association acts in an advisory capacity to the System. Member librarians felt that the Association provided a highly satisfactory means for their participation in the formation of System policy.

System membership offers numerous benefits to the individual library; help with difficult reference questions is one of the benefits considered in this study. If a member library receives a reference question that it does not have the resources to answer, it may call the Reference Department of the Peoria Public Library for assistance. The Reference Department

serves the member libraries of the Illinois Valley Library System as well as the residents of Peoria. The System provides its member libraries with telephone credit cards so that they can call Peoria toll-free when they need reference assistance.

Two of the member librarians interviewed reported that they regularly asked the Reference Department of the Peoria Public Library for help; sometimes they called the Department with the question and sometimes they asked the patron to contact the Department himself. In the latter case, the member librarian called the Reference Department first to make sure a staff member would be able to handle the query.

One member librarian called the Reference Department occasionally, but did not always pursue questions until a satisfactory answer was found. A fourth member librarian had not made a practice of using the reference service provided by the System because varying results had been received with the procedure.

When the Reference Department of the Peoria Public Library cannot answer a reference question, it goes first to the State Library for assistance, as specified by the State's Reference and Research Plan. The collection of materials at the Illinois State Library has been developed to meet the needs of the state's public libraries and since Peoria Public Library has this additional resource to draw upon, it is able to provide excellent reference service.

The Illinois Valley Library System offers several other services to its member libraries. An administrative consultant was added to the System staff in July, 1968; this consultant is available for any kind of consulting the member libraries want--book selection, weeding, etc. A public relations assistant whose services also are available to all

member libraries recently was added to the System staff. Since both positions are fairly new, the member libraries have not made extensive use of the two consultants yet.

Book and non-book resources.--Access to a larger collection of book and non-book resources is one of the most important benefits of membership in a system. The central library of the Illinois Valley System, the Peoria Public Library, held 340,049 volumes at the end of the 1967/68 fiscal year, according to its records.

Non-book resources chosen for examination are periodicals, films, and recordings. During the 1967/68 fiscal year the central library received 1,193 periodical titles and kept 415 titles for five years or more. According to the ALA recommended standards there should be one title for every 250 persons in the service area, or 1,395 periodical titles available. The holdings of the central library fall 14.5 percent below the recommended minimum level.

The central library held 1,266 films at the end of the 1967/68 fiscal year and added 182 titles during the same period. The ALA standards for audio visual materials recommend that there should be one film title for every 1,000 persons served, but no collection should have fewer than 1,000 titles. The central library's holdings exceed the minimum level by 26.6 percent. The presence of the Illinois Valley Film Co-operative, which had existed for many years before the System was established, probably is one factor responsible for the Library's extensive film holdings.

At the end of the 1967/68 fiscal year the central library held 11,359 recordings and added 853 recordings during the same period. The ALA standards recommend that the collection contain one disc or reel of tape for every 50 persons in the service area, but no collection should contain

less than 5,000 discs or reels. To meet this minimum, the Library would have to hold 6,963 discs or reels; the holdings exceed this minimum by 62.9 percent.

The director of the System felt that the Pere Marquette Association provided a very good means for getting feedback about the System services. There is good interaction between the members of the Association (who represent the member libraries) and the administration of the System.

Opinions about system membership.--Opinions about the System make up the last part of this section concerning the characteristics of the System. The director of the System felt that the greatest benefit of the System was that it brought the advantages of a larger library to people who live in small communities and would not have good library service without the System. The System makes it possible for the central library to provide this service and to be compensated for it.

Member libraries cited a number of different benefits that they considered to be important. Regular communication with other librarians in the area was mentioned several times; reciprocal borrowing cards were thought to be one of the important advantages; and access to a good film collection was also considered to be important.

Drawbacks to system membership were more difficult to isolate, because generally it was felt that there were no drawbacks. At times there had been temporary drawbacks, but the situations had been resolved satisfactorily. It was suggested that perhaps the System had not been in operation long enough for serious drawbacks to have developed.

The drawbacks suggested by the member libraries were concerned mainly with the time consumed by System activities; for instance, interlibrary loans must now be sent through the System, a procedure which takes longer

than borrowing the book directly. Reciprocal borrowing has created an additional amount of work. The majority of the librarians interviewed felt that the time was well spent on System-related activities; they felt amply re-paid for their efforts because as a result of System membership they were able to offer better service to their users.

Onondaga Library System

Chartered in November, 1961, the Onondaga Library System was the last public library system formed in New York State. The System became operative in April, 1962; the rapidity with which the System was made functional was due in large part to the cooperation of the staff of the Syracuse Public Library.¹⁵ Members of the Technical Processing Department of the Library became System employees and processed books for both the Library and the System. Syracuse Public Library, which was founded in 1893, serves as the central library of the System and its well-developed collection provided the strength upon which the System was built.

Mr. Reid Hoey who is present director of the System has held that position since the founding of the System. Mr. Henry McCormick, director of the Syracuse Public Library, has held that position since 1962.

The public library situation in New York State came under close examination in the 1940's when librarians and educators in the state recognized the necessity for the organization of independent public libraries into larger units of operation if the level of service was to be improved. The first incentive to form library systems came in 1950 with the passage of the State Aid and Systems Law, but the provisions of this law were not sufficiently attractive to engage the interest of the larger public libraries around which the systems were to be developed.¹⁶

In 1958 the legislation was amended according to the recommendations of the Commissioner of Education's Committee on Public Library Service, and there followed a period of intense development of system organization. By 1961 the last area in the state having sufficient population to constitute a separate system had been organized. The basic structure of the system network had been firmly established and the next step was the long, difficult task of putting the public library system concept into effective practice on a statewide basis.¹⁷

The New York Library Association has been instrumental in public library development in the state. Along with personnel from the State Library, the Association has worked to influence decisions affecting libraries on the state level. The Library Trustees Foundation has also been an active force in developing support for public libraries in the state; the combined efforts of these two groups have been important factors in building the strong support public libraries receive from the state government.¹⁸

The organization of public library service in New York State has undergone an almost complete transformation during the decade 1956 to 1966. At the beginning of the period, the independent, local public library was the predominant unit of organization; there were only eight systems in the entire state and three of them were in New York City. A total of thirteen counties plus the Watertown Regional Service Center were part of the systems. At the end of the decade, the system was the predominant pattern of organization; 22 systems included 62 counties in the state and served over 98 percent of the state's area and population. Only eight counties were not wholly served by systems. The framework is flexible and capable of meeting changing and growing needs.¹⁹

The achievement of this decade may be summed up as follows:

This virtual completion of the system structure stands by itself as a major accomplishment and a turning point in the State's library history. Not only has the proportion of State residents that are seriously unserved been reduced from 9.8 percent in 1956 to about 0.8 percent at the end of 1964 (despite a rate of population growth in the State of 13 percent), but it has now become the right of nearly every person in the State to tap, through his own local library outlet, the entire chain of library resources which are linked together by system organization.²⁰

The organization of public libraries into systems has affected almost every aspect of their operation. Financial support has been particularly affected, but equally important have been the effects on improved resources, the extension of services, and the higher quality of public services offered. The influence of the system organization on the financial support available to the public libraries is difficult to overestimate; not only did the systems help promote increased county support of public libraries, but also the system structure provided a channel for bringing Federal aid into a direct bearing and relationship with problems of service at the local and regional level. The difference system organization has made in the financial support of public libraries may be seen by examination of Table 10.

Resources of the libraries were improved because the system made book pools and rotating collections available; in addition, system grants were given to the member libraries to aid in strengthening the collections. Also, member libraries gained access to films and records through the system. The systems were important because they made library materials available to persons who had not had access to public libraries before; for example, bookmobiles were used to take books to places where other

TABLE 10
FINANCIAL SUPPORT OF PUBLIC LIBRARIES
IN NEW YORK STATE

	Total in Dollars 1956	Percent of Total 1956	Total in Dollars 1965	Percent of Total 1965
Local support	22,464,000	91	46,837,000	76
State aid	2,350,000	9	10,200,000	17
Federal aid	---	--	4,597,000	7

Source: New York (State) University, State Education Department,
Division of Evaluation, Emerging Public Library Systems, the
1963-1966 Evaluation of the New York State Public Library
Systems, (Albany: 1967), p. 6.

outlets were not possible.

In several respects the systems made it possible for the member libraries to offer an improved level of public service. Centralized processing offered by the system freed the member libraries from processing tasks and gave them more time to help library users. Also, the system-sponsored training programs upgraded the ability of the local staff.

Socio-economic characteristics.--Two socio-economic characteristics are being used as indicators that can be compared with the same type of library system and with different types of systems and non-system libraries. The first indicator is the gross assessed valuation of property subject to local general property taxation; in Syracuse the valuation was \$414,346,000 for 1966.²¹ The second indicator is the median years of school completed by the adult residents of the area; for Onondaga County the median years of school completed was 11.7 years in 1960.²²

The Onondaga Library System is made up of the 21 public libraries located in communities in Onondaga County; the libraries and their holdings

TABLE 11
HOLDINGS OF THE ONONDAGA LIBRARY SYSTEM

Library Unit		Volumes Held
Onondaga Library System		24,512
Member Libraries		
Baldwinsville Library Association		12,115
Brewerton Free Library		4,481
Camillus - Maxwell Memorial Library		16,242
Cicero Free Library		n/a
Dewitt Community Library Association		10,414
East Syracuse Free Library		9,630
Elbridge Free Library		6,991
Fairmont Community Library		8,579
*Fayetteville Free Library		13,136
Jordan Free Library		6,237
LaFayette Public Library		11,481
Liverpool Public Library		15,389
Manlius - Fayetteville-Manlius Library		11,474
Marcellus Free Library		13,084
Mattydale - Salina Free Library		8,412
Minoa Free Library		8,446
North Syracuse Free Library		11,572
Onondaga Hill - Onondaga Free Library		6,651
*Solvay Public Library		18,752
*Syracuse Public Library		357,866
Branches:		
Beauchamp	24,266	
Betts	19,854	
Elmwood	9,014	
Hazard	17,139	
Mundy	9,403	
Paine	21,248	
Petit	19,246	
Soule	17,272	
White	15,524	
Tully Free Library		4,888
* Library included in sample of member libraries		
Source: American Library Directory, 1968/69. 26th ed. New York:		
R. R. Bowker, 1968.		

are given in Table 11. Syracuse Public Library with its nine branches serves as the central library of the system. Its collection of over 350,000 volumes serves as a resource for all the member libraries; and its reference staff is available to help with questions member libraries may not be able to answer.

The headquarters of the System is housed in a remodeled bank building several blocks from the Syracuse Public Library. Most of the System activities are carried out in the headquarters building, but some operations, such as processing and reference service, are handled for the System by the Syracuse Public Library. Telephone service within Onondaga County is toll-free, facilitating the communication among the member libraries and between the member libraries and the System headquarters.

The System served all the residents of Onondaga County during the fiscal year 1967/68; according to the Interim Census, 1965/67, the population of the County was 481,041 persons. Although the System provides total coverage of Onondaga County, it does not serve the entire Syracuse SMSA because the SMSA includes Oswego and Madison Counties in addition to Onondaga County. The population of Onondaga County constitutes three-quarters of the total population of the SMSA, with Madison and Oswego Counties having the remaining one-quarter of the population. Library service to 33,178 residents of Oswego County is provided by the Onondaga Library System by means of a contract with the North Country Library System. Madison County belongs to the Mid-York Library System.

System characteristics.--Data collected by questionnaires and structured interviews with the director of the system and a sample of the member libraries are used as a basis for the description of the specified aspects of the following selected characteristics of the System: the administrative structure of the system, benefits offered by the system, means of

getting feedback, and opinions about membership in the system.

Two aspects of the administrative structure of the System are considered; they are 1) the encouragement of innovation and 2) the role of the member libraries in the making of system policy. Each of the 21 libraries in the System operates as an independent unit and there is no standardization of routine operations as there is in the consolidated system. The administration of the cooperative system acts in an advisory capacity to the member libraries which creates a situation somewhat different from that in the consolidated system.

Innovation of new procedures is encouraged by the System administration; members of the System staff go out to the member libraries to help them implement new procedures. Member libraries felt that the System was interested in helping them with new ideas and encouraged them, but never insisted on different procedures. It is important to the member libraries to be able to call on the System staff when help and advice are needed.

The member libraries have both a formal and an informal role in the making of System policy. A trustee from each library serves on the System board and the member libraries may act through this representative. Informally member libraries may bring up matters of policy with the System; on other occasions the System administration may consult informally with member libraries. The initiative usually is left up to the member library.

One of the benefits a system offers to member libraries is assistance with difficult reference questions. The Onondaga Library System does not maintain a reference staff at its headquarters, but contracts with the Syracuse Public Library for the provision of reference service to member

libraries. This arrangement is similar to that of the Illinois Valley Library System where the Peoria Public Library provides reference service for both system members and city residents.

The member librarians interviewed did not call the Reference Department of the Syracuse Public Library regularly for assistance with reference questions. If their users had questions that could not be answered with the libraries' resources, the member librarians suggested that the user contact the Reference Department himself.

The Syracuse Public Library uses the System's TWX when it needs to augment its resources to answer a reference question. Usually the Library goes first to the State Library for assistance, but if it is appropriate, they may ask the Syracuse University Library for help.

A variety of other services are offered to member libraries by the System; for example, System personnel will help member libraries weed their collections and explain why titles should be removed from the collection. In this way the member librarian will learn the principles of weeding and be able to perform the job on a continuing basis.

Book and non-book resources.--Access to a larger collection of book and non-book resources is one of the most important benefits system membership offers. The central library of the Onondaga System, the Syracuse Public Library, held 357,866 volumes at the end of the 1967/68 fiscal year, according to its records. In addition to these resources, the System headquarters held a collection of 10,000 volumes which were available to member libraries for loan.

Periodicals, films, and recordings are the non-book resources chosen for examination. The central library received 594 periodical titles

and the System headquarters received 31 periodical titles. According to the ALA recommended standards, there should be one title for every 250 persons in the service area, or 1,924 periodical titles available. The holdings of the central library and the System headquarters combined (a total of 625 titles) fall 69.1 percent short of this minimum level.

Both the central library and the System headquarters group all audio visual materials together rather than counting films and recordings separately. This method of counting does not allow measurement by the ALA recommended standards for audio visual resources. The central library has 5,483 units of audio visual materials and the System headquarters, 2,290 units. The System has access to the extensive film collection at Syracuse University and the State Library at Albany; since these collections of materials are available, there has been less need to build the resources of the System.

The director of the System felt that feedback about System services was gotten from the System board which is made up of representatives from each of the libraries that are members of the System. There are no formal, objective means of obtaining feedback about the System's services.

Opinions about system membership.--The greatest single benefit of the organization of public libraries into the System, the director felt, has been that it made professional help available to the small libraries. Consultants are available to member libraries; work-shop programs are planned by the System staff for the member libraries; book selection lists compiled by professionally trained librarians are circulated at regular intervals.

The views of the member librarians concerning benefits of System membership reflected a variety of outlooks. To the central library, the

greatest benefit was that additional funds and services were made available by the System. State funds are available to public libraries only through the systems. Other member librarians interviewed mentioned the help in book selection and processing and the ease in obtaining inter-library loans as the greatest benefits.

No drawbacks to system membership were expressed.

San Joaquin Valley Library System

The history of the San Joaquin Valley Library System began in July, 1964, when the System was established. The strength of the central library of the System (the Fresno County Free Library) upon which the System is built has been developing since its establishment in 1909. Mrs. Alice Reilly serves as director of both the System and the central library; she has held the latter position since 1960 and the former since 1964.

As was the case in New York State, California librarians recognized that local support alone was not adequate for the provision of high quality public library service. Public libraries were established as independent local units and due to the limitations imposed by this type of organization, they had not been able to provide uniformly adequate service to all the residents of the state. The state's responsibility included the promotion and support of public libraries. When it was realized that public libraries were not receiving the support they needed, action to correct the situation was begun.

Since the California Library Association traditionally has played an influential role in the improvement of public library service in the state, it, along with the California Public Library Commission, the State

Librarian, and library leaders in the state worked together to formulate recommendations for a Master Plan for Public Libraries in California. Systems of public libraries were considered to be the best means of attaining the goal of uniformly adequate service to all residents. With the organizational structure of the system, it would be possible to make materials and services easily accessible to any locality. Local control of the member libraries would be retained, and the system would provide for maximum and economical pooling of materials, professional personnel, and technical services.²³

A statement of basic standards for public library service was drawn up during the Standards Workshop sessions; Dr. Robert Leigh conducted the sessions which were held in the spring of 1953.²⁴ The workshop groups were made up of librarians representing the different sizes and types of county and municipal public libraries, as well as the different geographic regions of the state. All the public library members of the California Library Association's Standards Committee participated in the workshops.

In 1962 the California Library Association adopted the Master Plan; and the culmination of all the efforts came during the following year when the Legislature approved the California Public Library Services Act of 1963 (PLSA). The passage of the Act is considered to be a milestone in the history of public library service in California, and in importance it is often compared with California's County Library Laws of 1909 and 1911. The purpose of the Act was to assist public libraries in establishing, improving, and extending library services and to encourage systems in areas where such cooperation would facilitate improved library services. To implement the Act, the State Legislature appropriated \$850,000 for fiscal year 1963/64.²⁵

In intent the PLSA is similar to the Federal Library Services Act in that financial support is made available for special demonstration projects in both instances. PLSA made three types of grants available-- planning, establishment, and per capita grants.²⁶

The development of library systems with state and federal funds was the central idea around which the Master Plan for California Public Libraries was built. The system concept was supported by the requirement that to be eligible for one of the three types of grants, the library had to be a member of a system or planning to become part of such a configuration. Non-renewable planning grants were made so that the parameters for a system or a demonstration project could be determined. Establishment grants, usually made for a two-year period, were to be used to establish a system; publicity was to be used to stimulate local support for the system at the termination of the grant. Per capita grants were allocations intended to maintain an established system which had demonstrated its success, but whose local support was inadequate because of the low tax base or the small population.²⁷

Table 12 shows how the support of public libraries in the state has increased since the systems were established. In spite of the greatly increased income available to the public libraries, the funding of the PLSA has never been adequate to meet the minimum needs of all the public libraries in the state. The number of public library systems approved under the Act has continued to grow; in 1967/68 the number of libraries participating in the state's 20 systems increased to 89, but the appropriation for the program was cut to \$800,000.²⁸

Preparation for system organization in the Fresno area was provided by the establishment of the San Joaquin Valley Information Service.

TABLE 12
INCOME OF CALIFORNIA PUBLIC LIBRARIES
1963/64 - 1967/68

Fiscal Year	Income from Taxation (in dollars)
1963/64	48,031,183
per capita	2.72
1964/65	54,243,408
per capita	2.98
1965/66	73,059,223
per capita	3.90
1966/67	74,623,477
per capita	3.89
1967/68	79,884,564
per capita	4.09
Source: News Notes of California Libraries, LXIV (Winter, 1969), p. 35.	

Made possible by LSCA funds, the Service began in May, 1960, and was highly successful.²⁹ When planning for the System was begun in the fall of 1962, much of the preliminary work done for the Information Service could be used, and planning money for the System was used to prepare plans for system services and eventually for evaluation of the System before the two-year grant expired.³⁰

The continuance of the Information Service as part of the System was a top priority in the organization of the System. Centralized processing had a high priority, too; and instead of setting up a separate processing center, arrangements were made for the Fresno County Free Library to order and process books for the member libraries. A teletype network was set up in the five libraries belonging to the System to facilitate rapid location of materials, the transmission of reference questions, and administrative communication.³¹

Socio-economic characteristics.--Two socio-economic characteristics are being used as indicators that can be compared with the same type of library system and with different types of systems and with the non-system libraries. The first indicator is the gross assessed valuation of property subject to local general property taxation; in Fresno the valuation was \$234,267,000 for 1966.³² The second indicator is the median years of school completed by the adult residents of the area; for the three counties in the San Joaquin Valley Library System (Fresno, Kings, and Madera Counties), the median years of school completed was 9.7 in 1960.³³

The San Joaquin Valley Library System is made up of four public libraries located in Kings and Madera Counties and the central library, Fresno County Free Library, which is located in Fresno County. Each of the member libraries has at least one branch, and the Kings County Library has four branches. The libraries and their holdings are given in Table 13.

Fresno County Free Library with its eight branches and 586,700 volumes serves as the central library of the System. Its extensive collection of book and non-book resources, as well as the services of the reference staff, are available for use by any member library. The System facilities are housed in the Fresno County Free Library and the director of the central library is also the director of the System, as was the case with the Illinois Valley Library System. There is no separate System staff; members of the Fresno County Free Library staff also perform System services for the member libraries.

The member libraries of the System serve all the residents of three counties--Fresno, Kings, and Madera Counties; according to the California Statistical Abstract, 1967, the population of these three counties was 530,794 persons at the end of the 1967/68 fiscal year. The System

TABLE 13
HOLDINGS OF THE SAN JOAQUIN VALLEY LIBRARY SYSTEM

Library Unit	Volumes Held
Central Library - Fresno County Free Library	586,668
Branches:	
Clovis	16,001
Fig Garden	20,105
Gillis	18,176
North Fresno	26,879
Reedley	18,045
Sanger	21,707
Selma	23,112
Sunnyside	17,926
Member Libraries:	
Coalinga Unified School District Library	49,929
Branches:	
Huron	6,581
Hanford Public Library	65,855
*Kings County Library	87,000
Branches:	
Armona	9,500
Avenal	10,300
Corcoran	10,100
Lemoore	13,900
*Madera County Free Library	79,681
Branches:	
Chowchilla	11,983
* Library included in sample of member libraries	
Sources: American Library Directory, 1968/69. 26th ed. New York:	
R. R. Bowker, 1968.	

complete coverage to an area larger than the Fresno SMSA because the SMSA contains only Fresno County, and the System serves the total population of two additional counties. The service area of the System encompasses 9,509 square miles.

System characteristics.--Data collected by questionnaires and structured interviews with the director of the System and a sample of the member libraries are used as a basis for the description of the specified

aspects of the following selected characteristics of the system: the administrative structure of the system, benefits offered by the system, means of getting feedback, and opinions about membership in the system.

Two aspects of the administrative structure of the System are considered; they are 1) the encouragement of innovation and 2) the role of the member libraries in the making of system policy. The System encourages innovation in new procedures by example in the central library; if a new procedure is tried and found to be successful in the central library, it is demonstrated to the member libraries and the advantages of the new procedure noted. Though the member libraries are not forced to try new procedures, they are encouraged in this manner. The member librarians felt that the System was willing and ready to provide advice and help when it was needed in the development of new procedures. With this reassurance, the member libraries felt more free to try new procedures.

Member libraries play both an informal and formal role in the formation of System policy. When policy is being developed, the opinions of member libraries are asked. The System board, which is made up of representatives from each of the member libraries is formally charged with the responsibility for making System policy.

Member libraries gain numerous benefits by belonging to the System; one of the benefits considered in this study is assistance with difficult reference questions. Members of the San Joaquin Valley Library System may refer their difficult reference questions to the San Joaquin Valley Information Service. Before the System was formed, area librarians could not use the Information Service. The member librarians interviewed felt that access to the Information Service was a great advantage; they use the service often and find that it enables them to offer an improved level

of reference service. One member librarian interviewed does not use the teletype to send reference questions to the Information Service unless the reader is in a hurry; instead, reference questions are sent by mail to insure greater accuracy. A standard form is used for the submission of questions to the Information Service.

The Reference Department of the Fresno County Free Library, the central library of the System, may refer its difficult questions to the Information Service, which is housed in the basement of the Library building, or it may use the System's TWX to send its questions to the California State Library in Sacramento.

A number of other services are offered to the member libraries by the System. System staff consult with member libraries about public relations problems; they give advice about displays and other techniques for presenting the library to the public. Specialists from the Fresno County Library staff may also serve as consultants to any of the member libraries that request their services.

Book and non-book resources.--One of the most important benefits system membership offers is access to a larger collection of books and non-book resources. The central library of the San Joaquin Valley Library System, the Fresno County Free Library, held 616,929 volumes at the end of the 1967/68 fiscal year, according to its records.

Periodicals, films and recordings are the non-book resources chosen for examination. Fresno County Free Library received 2,311 periodical titles during the 1967/68 fiscal year and kept 1,082 of them for five years or more. According to the ALA recommended standard, there should be one periodical title for every 250 persons in the service area, or in this System, 2,203 titles. The holdings of the central library (2,311 titles)

exceed the minimum standard by 4.9 percent.

The central library held 379 films at the end of the 1967/68 fiscal year and added 38 films during the same period. The ALA standards for audio visual materials recommend that there should be one film title for every 1,000 persons served, but no collection should have less than 1,000 titles. The central library's holdings fall short of this minimum level by 62.1 percent.

At the end of the 1967/68 fiscal year, the central library held 6,701 recordings and added 1,141 during the same period. The ALA standards recommend that the central library's collection contain one title (disc or reel of tape) for every 50 persons in the service area, but no collection should contain less than 5,000 discs or reels. The central library's holdings of 6,701 recordings exceed the recommended minimum level by 34.0 percent.

Feedback about System services is obtained from the member libraries during meetings that are held every two months. Members of the administrative council have developed good rapport with the member librarians and they speak frankly at the bimonthly meetings. In addition, some feedback is obtained during the in-service training sessions. By means of these two sources of feedback, the System can form a relatively accurate evaluation of how well it is meeting the needs of the member libraries.

Opinions about system membership.--Opinions about the System, specifically the benefits and drawbacks derived from the System, form the last part of this section concerning the characteristics of the System. The director of the System felt that the greatest benefit of the System is that it gives the member librarians an opportunity to know each other.

Both the personal contact and the greatly increased resources available are tremendous advantages to the smaller libraries. Member librarians felt that the greatest benefit of System membership lay in the greatly expanded resources that it made available to them; they had access to Fresno County Free Library's collection and reference staff, as well as access to the San Joaquin Valley Information Service. Access to each of these resources means that the member libraries are able to offer a much higher level of service to their users.

From the director's point of view, the greatest single drawback of the System is that the large central library tends to give more than it gets in return. The large library usually is willing to give as much assistance as possible, but the persons who allocate tax monies sometimes question this generosity. No drawbacks directly related to the System were given by member libraries.

Summary

A number of characteristics are common to the three cooperative systems discussed in this chapter, but within this similarity there are differences that distinguish one system from another. In each case, the system administration acts in an advisory capacity to the member libraries; the system has no authority over the member libraries and can only give them advice and suggestions. By contrast, in the consolidated systems, authority for the operation of the entire system is concentrated in the system administration.

Each of the cooperative systems was formed when the public libraries in an area decided to pool their resources and form a system. All three systems were established in the decade of the 1960's. The central libraries

of the systems were founded within a three decade span at the end of the 19th century and beginning of the 20th century; it will be noted that the Fresno County Free Library was founded somewhat later than the other two central libraries. These characteristics are shown in Table 14.

TABLE 14
AGE OF CENTRAL LIBRARIES AND SYSTEMS

System	Year System Established	Year Central Library Founded
Illinois Valley Library System	1966	1880
Onondaga Library System	1961	1893
San Joaquin Valley Library System	1964	1909

In two cases (the Illinois Valley and San Joaquin Valley Library Systems) the director of the system is also the director of the central library; in these two cases the system operation is housed in the central library building and the staff of the central library serves as the staff of the system. Although the Onondaga Library System has a separate director, headquarters building, and staff, its operation is closely integrated with that of the central library whose staff performs many system services.

The central library in the cooperative system plays a much different role than the central library in the consolidated system. In the cooperative system, the central library serves as the strongest resource around which the system is built. Although the central library in the consolidated system plays this role, too, it has the additional function of administering the operation of the entire system.

Two of the systems (the Illinois Valley and the San Joaquin Valley Library Systems) serve multi-county areas, and one system (the Onondaga Library System) serves only a single county. The two multi-county systems provide service to an area greater than the SMSA in which the central library is located. The San Joaquin Valley Library System extends service to the three counties that make up the system, but the Fresno SMSA encompasses only one county. The Illinois Valley Library System gives service to the residents of six counties; it serves almost all the residents of the three counties that constitute the Peoria SMSA; only three public libraries in these counties do not belong to the System. The Onondaga Library System provides service to only one of the three counties that make up the Syracuse SMSA; the one county served by the System is the most populous and service is provided to all the residents of the county.

The socio-economic characteristics used as indicators are summarized in Tables 15 and 16.

TABLE 15

PER CAPITA ASSESSED VALUATION OF PROPERTY
FOR THE CENTRAL CITIES OF THE
THREE SMSA'S IN 1967
WITH 1960 POPULATION

Central City	Total Assessed Value Per Capita Subject to Tax After Deduction of Exemptions (in thousands of dollars)
Peoria, Illinois	5.26
Syracuse, New York	1.92
Fresno, California	1.75

Sources: U. S. Bureau of the Census, Census of Governments, 1967, Vol. 2: Taxable Property Values, Washington, D.C.: U.S. Government Printing Office, 1968.

TABLE 16

MEDIAN SCHOOL YEARS COMPLETED BY POPULATION
SERVED BY THE THREE COOPERATIVE SYSTEMS
1960

System	Median School Years Completed
Illinois Valley Library System	10.7
Onondaga Library System	11.7
San Joaquin Valley Library System	9.7
Source: U.S. Bureau of the Census. <u>County and City Data</u> Book, 1967. Washington, D.C.: U.S. Government Printing Office, 1967.	

The book and non-book resources of the central libraries of the three systems are summarized in Table 17.

TABLE 17

BOOK AND NON-BOOK RESOURCES OF THE
CENTRAL LIBRARIES OF THE THREE COOPERATIVE SYSTEMS
1967/1968

Central Library of System	Volumes Held	Periodical Titles Held	Films Held	Recordings Held
Peoria Public Library	340,049	1,193	1,266	11,359
Syracuse Public Library	357,866	394	a)	
Fresno County Free Library	616,929	2,311	379	6,701
a) all audio visual resources counted together. Syracuse Public Library held 5,463 units of audio visual materials.				

Footnotes Chapter V

¹"Statistics of Library Service: Library Systems in Illinois," Illinois Libraries, L (October, 1968), p. 747.

²Robert H. Rohlf, A Plan for Public Library Development in Illinois (Aurora, Ill.: Library Development Committee, Illinois Library Association, 1963), p. 9.

³Ibid., 10.

⁴Ibid., 11.

⁵Ibid., 18.

⁶Ibid., 22.

⁷Alex Ladenson, "Bringing Books to People in Illinois, 1818-1968," Illinois Libraries, L (September, 1968), p. 603.

⁸Ralph H. Stenstrom, The Emergence and Development of Public Library Systems in Illinois ("Research Series," no. 15; Springfield, Ill.: Illinois State Library, 1968), p. 10.

⁹Ibid., 15.

¹⁰U. S. Bureau of the Census, Census of Governments, 1967. Vol. II: Taxable Property Values (Washington, D.C.: U.S. Government Printing Office, 1968), p. 89.

¹¹U. S. Bureau of the Census, County and City Data Book, 1967 (Washington, D.C.: U. S. Government Printing Office, 1968), p. 93.

¹²Stenstrom, op. cit., p. 26.

¹³Ibid., 77-78.

¹⁴"Statistics of Library Service: Library Systems in Illinois," Illinois Libraries, LI (October, 1969).

¹⁵New York (State) Library, State Education Department, Profiles of the Public Library Systems in New York State (2d ed.; Albany: 1966), p. 78.

¹⁶Jules M. Mersel et al., Overview of the Library Services and Construction Act--Title I (New York: R. R. Bowker Company, 1969), p. 60.

¹⁷New York (State) University, State Education Department, Division of Evaluation, Emerging Library Systems, The 1963-1966 Evaluation of the New York State Public Library Systems (Albany: 1967), p. 1.

¹⁸Mersel, op. cit., p. 63.

- 19New York (State) University, State Education Department, Division of Evaluation, Emerging Library Systems, p. 5.
- 20Ibid.
- 21U.S. Bureau of the Census, Census of Governments, p. 105.
- 22U.S. Bureau of the Census, County and City Data Book, p. 253.
- 23"Proposed Public Library Service Standards for California," News Notes of California Libraries, XLVIII (July, 1953), p. 377.
- 24Carma R. Zimmerman, "The California Public Library Standards Project," News Notes of California Libraries, XLVIII (July, 1953), p. 357.
- 25"Annual Report: Public Library Development Act, 1963-64," News Notes of California Libraries, LIX (Fall, 1964), p. 419.
- 26Ibid., op. cit., p. 273.
- 27Ibid., 275-276.
- 28"Statistics and Directory Issue," News Notes of California Libraries, LXIV (Winter, 1969), p. 16.
- 29For a history of the Information Center, see Alice F. Reilly, "California: Demonstrated Success," Library Journal, LXXXIX (April 15, 1964), pp. 1683-1687; and Barbara L. Wynn, "Information Unlimited! The Story of the San Joaquin Valley Information Service," News Notes of California Libraries, LVIII (Summer, 1963), pp. 313-334.
- 30Marvin Mounce, "San Joaquin Valley Library System," News Notes of California Libraries, LIX (Fall, 1964), p. 468.
- 31Ibid., 469.
- 32U.S. Bureau of the Census, Census of Governments, p. 82.
- 33U.S. Bureau of the Census, County and City Data Book, p. 33.

CHAPTER VI

NON-SYSTEM LIBRARIES

The general pattern of organization of public library service in the United States has changed to such an extent in the last two decades that there are very few metropolitan areas left where there is no system of any kind. The medium size metropolitan areas, such as are being considered in this study, tend to be organized into systems, and it is difficult to find areas where there is a complete absence of system structure.

Where there is no system organization, all the local libraries in an area act independently of each other in providing service to their users. Since each of the libraries provides service to its specified service area only (usually the region within the city limits), there are residents of the metropolitan area who do not have access to free public library service. In most cases, non-residents may obtain service from the city library by paying a fee, but this is not an entirely satisfactory substitute for the ready availability of free library service.

In metropolitan areas where there is no system structure, the independent libraries usually make little effort to co-ordinate their collections. As a result, there is a great deal of duplication of some materials and a lack of others that would provide valuable resources.

Since there is no formal organization among the libraries in areas where there is no system structure, there is usually a limited amount of cooperation among the various libraries. What cooperation exists usually is based on personal contacts made by the librarians in the area. Such cooperation relies upon good will rather than on formal agreements.

In this study of public library systems in medium-size metropolitan areas, three metropolitan areas lacking formal system structures are included as a third type of organizational structure that contrasts with the consolidated and cooperative systems. All the libraries in each of the three SMSA's are taken together and considered in a manner comparable to the organized systems. The library in the central city of the SMSA is treated as the central library of the system and the libraries located in the SMSA, as member libraries of the system.

The three Standard Metropolitan Statistical Areas chosen for the study are New Haven, Connecticut; Omaha, Nebraska; and Wichita, Kansas.

New Haven Standard Metropolitan Statistical Area

The New Haven Standard Metropolitan Statistical Area encompasses part of New Haven County and contains ten towns in addition to the central city of New Haven. The library of the central city, the New Haven Free Public Library, was established in 1886. Mr. Meredith Bloss has been librarian since 1959.

Most recently concern with the condition of the public libraries in Connecticut was expressed early in the 1960's, but there had been efforts in 1938 to improve library service by means of regional organization of libraries. Free regional service centers were begun in 1939 using W.P.A. funds. Some years later the Connecticut General Assembly established the

state's first Library Service Center which was to serve as a "wholesaler" for the 26 public libraries in the region, making books available from a pool collection at least every other month. This first Center was established as a pilot project and appeared to function satisfactorily.¹

In 1962 the Governor's Committee on Libraries was appointed. Composed of lay citizens and librarians, the Committee studied the current status of library service in the state and made a report to the Governor in 1963.

The Committee found "a large gap between the demands and expectations of our citizenry and the actual performance of our libraries." The Committee analysed the library situation and proposed a number of recommendations, foremost among them being the reorganization of library service at the state level. Another recommendation, pertinent to the present discussion, concerned public libraries in metropolitan areas. That recommendation was that

. . . The now independent public libraries in metropolitan areas should be encouraged by state-aid grants to organize into federated or consolidated systems of libraries or in some similar cooperative organization to use most effectively limited staff, to eliminate costly duplication of effort and materials and generally to improve services to their entire area. . . .²

Legislation was introduced in 1963 to enable the Committee's recommendations to be carried out, but the Legislature did not pass the proposed measures. Undiscouraged by this set-back, another committee, the Committee on Library Improvement, was appointed to continue the study of the problem in order to find an acceptable solution to the need for stronger library service at the state level.

In a statement made for National Library Week in 1963, John Hersey focused attention on the lamentable condition of the state's libraries. The blunt fact was, he pointed out, that

Of the State's 169 towns, 154 fail to meet even the minimum recommended standards, as far as per capita expenditure for free public libraries is concerned. This minimum standard is \$3.50 per citizen. Nowadays \$3.50 will barely buy one book.

Equally shocking is the fact that 142 towns fail to meet the minimum standards as to size of collections. One shudders to think of the quality of these substandard collections. . . .³

The Committee on Library Improvement engaged the services of two consultants, Roger H. McDonough and Mildred P. McKay, to study library services in Connecticut and to suggest a possible pattern of organization. In their report to the Committee, McDonough and McKay's first recommendation was that

. . . a single, coordinated State Library agency be created based on the existing State Library, to which would be added the present Bureau of Library Services of the State Department of Education. The new agency would be governed by a State Board of Libraries which would appoint a State Librarian. The new State Board of Libraries should be given a broad grant of authority similar to that assigned to the State Board of Education to enable it to provide leadership of a high order in developing and coordinating the total library resources and services of the State.⁴

A strong State Library was the most important element in providing leadership for all the libraries in the state. The latter was essential if the libraries were to be brought together into a meaningful system that would unify library resources in the state and at the same time maintain the traditional strength that comes from local initiative and local control. The report of the Committee on Library Improvement, made in

1963, was based largely on the findings of McDonough and McKay.

The Development Committee of the Connecticut Library Association prepared and presented a Report to the Executive Board of the Association in March, 1968. The report contained sections on staffing, strengthening the library collections, improving physical facilities, extending the services of the State Library, financing library service in the state, and promoting interlibrary cooperation. The final point mentioned in the report is of particular interest to this discussion, for the report pointed out that Connecticut needed a plan of actual working arrangements among the various kinds of libraries in the state. Many possibilities for cooperative projects existed; one example cited was the eleven-library teletype network. Another possibility being considered was a union catalog of the holdings of Connecticut public libraries.⁵

Socio-economic characteristics.--Two socio-economic characteristics are being used as indicators that can be compared with both the two types of systems and the non-system libraries. The first indicator is the gross assessed valuation of property subject to local general property taxation; in New Haven this valuation of property in 1966 was \$594,633,000.⁶ The second indicator is the median years of school completed by the adult residents of the area; in 1960 the median years of school completed by the residents of New Haven County was 10.8.⁷

Each of the eleven towns contained in the New Haven SMSA has a public library, and two towns (Branford and North Branford) have two public libraries each. In the SMSA there is a total of 13 public libraries; the libraries and their holdings are given in Table 18.

According to the 1960 Census, the New Haven SMSA had 320,836 residents; and the population of New Haven (132,048 persons) accounted

TABLE 18
LIBRARIES AND HOLDINGS IN THE NEW HAVEN SMSA

Library Unit		Volumes Held
New Haven Free Public Library		437,920
Bethany - Clark Memorial Library		9,259
*Branford - James Blackstone Memorial Library		45,829
Branford - Willoughby Wallace Memorial Library		10,552
East Haven - Haganan Memorial Library		30,042
Guilford Free Library		26,410
*Hamden Library		110,017
Branches:		
Community	29,068	
Miller Memorial	33,665	
Mount Carmel	20,447	
State Street	6,817	
Whitneyville	19,990	
North Branford - Atwater Memorial Library		9,755
North Branford - Edward Smith Library		7,771
North Haven Memorial Library		36,769
Orange Public Library		16,693
*West Haven Public Library		81,804
Branches:		
Allington	16,403	
West Shore	13,847	
Woodbridge Town Library (Clark Memorial)		18,642
* Library included in sample of member libraries		
Source: American Library Directory, 1968/69. 26th ed. New York:		
R. R. Bowker, 1968.		

for almost one-half (47.4 percent) of the total population. The New Haven Free Public Library with its seven branches provides service to all the residents of New Haven. The Hamden Library, second largest public library in the SMSA, serves 12.8 percent of the population; and the West Haven Public Library, third in size in the SMSA, serves 13.4 percent of the population. Since there is at least one public library in each of the towns in the SMSA, it may be assumed that all the residents of the cities in the SMSA have access to free public library service.

Characteristics of the libraries.--Data collected by questionnaires and structured interviews with the director of the central city library and a sample of the libraries in the SMSA form the basis for the following remarks about the New Haven SMSA. Included are the coordination of library services in the SMSA, the means of getting feedback about services, and benefits and drawbacks derived from cooperative ventures.

Two aspects of coordination of services in the SMSA are considered; they are 1) provisions for cooperation and 2) coordination of book selection in the SMSA. The director of the central library and the area librarians agreed that there were no formal provisions for cooperation among the libraries in the New Haven SMSA except for interlibrary loan. There were, however, several organized groups in the area through which cooperation could be achieved. The first is an organization composed of all the administrators of all the public libraries in the area. Started in the fall of 1966, it is called the Southern Connecticut Association of Library Administrators (SCALA). The group holds monthly meetings and has about 20 member libraries. SCALA has compiled a directory of its member libraries and a union list of periodicals held by its member libraries; both lists have been used extensively.

The Swap Group is another organization with potential for promoting area-wide cooperation. This group holds meetings three times a year and all the staff members of all the area libraries may attend. Area librarians pool the light fiction, westerns, and mysteries that are no longer needed in their libraries; from this pool as many books as desired may be taken and kept three months until the next meeting. The procedure has proved to be highly successful.

A proposal has been submitted for the establishment of the South Central Film Cooperative; this would be another group that would have the potential for providing a basis for cooperation in the area. The film cooperative is planned to be a central pool type of operation rather than a circuit.

The public libraries located in an SMSA may call on the reference department of the strong central library for assistance with difficult reference questions. This service is extended to area libraries as a courtesy, but in public library systems, reference assistance is offered to the member libraries as one of the benefits of system membership.

Librarians in the New Haven SMSA indicated that they frequently called upon the Reference Department of the New Haven Public Library for assistance with difficult reference questions. If the answer to the question is not found by the New Haven Public Library, the librarians then go to the State Library, but this second step is necessary very rarely.

The Connecticut State Library has a project underway to develop the collections of five large public library reference departments into strong regional reference centers. Funds from ISCA, Title I were obtained to buy reference materials and to reimburse the reference departments for service they extended to non-residents. Since the New Haven Public Library

is one of the five regional reference centers, area libraries have greater access to the Library's reference resources than they did formerly.

At the present time there is no effort to co-ordinate the book selection by public libraries in the New Haven SMSA although there has been some consideration of the possibility of such an action. The plan being considered is that each library would develop a strength in a certain subject area, but now it appears that every library needs to have materials in all subject areas.

Book and non-book resources.--The book and non-book resources of the New Haven Public Library are the strongest in the New Haven SMSA. At the end of the 1967/68 fiscal year, according to its records, the Library held 437,920 volumes. The holdings of non-book resources during the same period were 1,502 periodicals received and 2,412 recordings held; the Library does not have films. These resources are included for each of the three non-system libraries as part of the description of the Standard Metropolitan Statistical Area; the resources cannot be measured against the ALA standards as was done for the consolidated and cooperative systems because the standards are set up for public library systems.

The libraries in the New Haven SMSA do not have any formal means of getting feedback about their services. What feedback they get must be entirely through informal means, such as comments people make or letters they happen to write. The need for some reliable means of feedback was expressed.

Opinions about cooperation.--Isolating benefits and drawbacks derived from cooperative procedures was difficult because there have been few cooperative procedures among the public libraries in the New Haven SMSA. A procedure, such as the film cooperative, which is being planned,

would have the benefit of making films available to the libraries. The cooperative organizations currently in operation (SCALA and the Swap Group) have provided the benefits of exchange of ideas and discussion of common problems among librarians in the area, and the pooling of resources has enlarged the resources available to the individual libraries.

No actual drawbacks resulting from cooperative procedures were mentioned. A possible drawback involved in cooperation was finding capable staff who would be able to set up the programs and have the time to keep them in operation. Also, there appears to be a lack of understanding of how cooperation works, for there is a reluctance to have a person outside the library interfering with routine operations.

Omaha Standard Metropolitan Statistical Area

Three counties are included in the Omaha SMSA; Douglas and Sarpy Counties are in Nebraska and Pottawattamie County is in Iowa, making the SMSA bi-state in nature. The Omaha Public Library was founded in 1877, and Mr. Frank Gibson has been director of it since 1937.

Attention has been focused on the public libraries in Nebraska in recent years. At the annual meeting of the Nebraska Library Association in 1959, the Nebraska Library Development Committee was appointed at the request of the Nebraska Public Library Commission. At the Committee's second meeting, held in February, 1960, the recommendation was made that a "fact-finding survey of existing public library resources and services ... with recommendations for action and future development" should be conducted. A survey staff consisting of three persons was engaged; Harold Lancour who was then Associate Director of the University of Illinois Graduate School of Library Science was director of the team and Harold Goldstein

and Kathryn Gesterfield were members of the team. Richard Videbeck was appointed as a consultant.

The survey team found that among the public libraries in Nebraska, there were two outstanding libraries: Omaha Public Library and the Lincoln City Libraries. The other libraries in the state, for the most part, were inadequate, and over one-half of the communities in Nebraska had no library service at all. Of the communities that did have public libraries, only ten (out of a total of 255) even came close to providing adequate library service by current standards.⁸

On the basis of their findings, the survey team felt that if library services were to be improved the effort must be statewide in concept and execution; all libraries, public and private, of every type should work together to supplement and complement each other and to form the Nebraska Library System.⁹

The survey recommended that a project called the 20 x 66 Project be set up; the first figure represented a chain of 20 selected libraries loosely linked in an integrated and cooperative statewide library project. The second figure stood for 1966, the year when the second five-year period of the Library Services and Construction Act would end. The collection of each of the 20 selected libraries was to be strengthened and equipped and staffed to give at least minimally adequate library service to the residents of the community and its surrounding area. There would be contracts for payment for services provided to adjacent areas served by the library centers. Part of the funds to sponsor the Project were to come from increased state aid which in turn came from funds from the Federal Library Services Act.¹⁰

The purpose of the Project was to achieve a statewide library

program of reasonable quality within a five-year period. Further, the Project was planned to provide service to 80 percent of the state's population. The Nebraska Public Library Commission was to plan and administer the Project. A central feature of the Project was the setting up of the centralized acquisition and processing of all materials added to the participating libraries.¹¹

The report of the survey team was accepted by the Nebraska Library Development Committee and was used as the basis for the formulation of a long-range plan for public library development in Nebraska. The resulting appeared in 1962 under the title Regional Organization for Nebraska Libraries, and it set up the outline for library systems and cooperative planning for Nebraska public libraries. According to the plan, 12 regional systems were proposed and six additional systems were projected; minimum standards for libraries serving as regional centers were established. The plan provided a satisfactory foundation for stronger and broader library service in the state, and several cooperative ventures have been undertaken successfully under its aegis.

The original plan was revised and expanded in 1967 and appeared under the title Nebraska's Plan for Library Service. Adjustments had to be made in the regional systems in order to create regions more in line with expressed preferences and natural access. The standards for the regional centers were revised also to conform to the Public Library Association's Minimum Standards for Public Library Systems, 1966. The scope of the state plan had to be enlarged to accommodate the continually increasing emphasis placed on cooperation among libraries of all types.

As part of the regional plan, the Omaha Public Library provided free library service to all the residents of Douglas County for the two-year

period July 1, 1967 - June 30, 1969. The extension of service to all residents of Douglas County has been accomplished by opening all agencies of the Omaha Public Library for use without charge and by bookmobile. The program is a demonstration project supported by LSCA funds under the terms of an agreement with the Nebraska State Library Commission. It was anticipated that the service would be continued at the end of the demonstration period with funds from Douglas County. The Omaha Public Library has served as an interlibrary loan center for all public libraries in Nebraska; a TWX network throughout the state is part of the project which is supported by LSCA funds.¹²

Although Council Bluffs, Iowa (the county seat of Pottawattamie County) is separated from Omaha by the Missouri River, it is part of the Omaha SMSA. The Council Bluffs Free Public Library is housed in a building which was financed by Andrew Carnegie in 1904. Since the building has been well maintained, it is in surprisingly good physical condition, but it is inadequate, inefficient, and crowded for the needs of the present library.¹³

In 1968 the Board of Directors of the Free Library of Council Bluffs authorized a survey of the Library, and Peter Bury and Donald Wright were engaged to conduct it. At the time Bury and Wright made the survey, there were four public libraries in Pottawattamie County; the County had a population of 83,000 residents and over 20 percent (21.6 percent or 18,000 persons) did not have direct and free access to a public library.¹⁴ The surveyors recommended an immediate program to develop county-wide library service and support. Also, the surveyors suggested that the Library should investigate the possibility of cooperation with other libraries in the County; for instance, centralized purchasing and processing, joint book selection, and a reference center were possibilities that might be

investigated.¹⁵

Attention was also directed to possible cooperative programs with the Omaha Public Library, for that Library has a stronger collection than the Council Bluffs Library, especially since it is a U.S. Documents Depository. A cooperative film program and cooperative cataloging were suggested projects that the two libraries might consider.¹⁶

The demonstration project in Omaha and Douglas County has introduced some system-like services and some cooperative projects in the Omaha SMSA. This situation caused some difficulty in using the Omaha SMSA as a non-system library in the study, but after examination of the demonstration project, it was decided that its effect had not yet changed the situation so much as to prevent the use of the Omaha SMSA. For several reasons this position is defensible; first, the demonstration project makes direct service available to only one of three counties (Douglas County) in the SMSA; Sarpy and Pottawattamie Counties, whose populations constitute one-quarter of the total population of the SMSA, receive no benefits of service from the project. Second, although the demonstration operates in a system-like manner to extend service to all residents of Douglas County, it is a temporary organization and differs substantially from the formally organized systems considered elsewhere in this study.

Socio-economic characteristics.--Two socio-economic characteristics are being used as indicators that can be compared with both the two types of systems and the non-system libraries. The first indicator is the gross assessed valuation of property subject to local general property taxation; in Omaha this valuation was \$798,552,000 for 1966.¹⁷ The second indicator is the median years of school completed by the residents of the three

counties that make up the Omaha SMSA (Douglas, Sarpy, and Pottawattamie Counties); in 1960 the median years of school completed by the adult residents of the three counties was 11.9 years.¹⁸

In the three counties that make up the Omaha SMSA there are seven libraries in addition to the Omaha Public Library. Sarpy County has one public library and Pottawattamie County has four public libraries. The libraries and their holdings are given in Table 19.

TABLE 19
LIBRARIES AND HOLDINGS IN THE OMAHA SMSA

Library Unit		Volumes Held
Omaha Public Library		401,770
Branches:		
Benson	34,540	
Florence	9,830	
North	26,373	
South	34,191	
Swanson	58,685	
Willa Cather	46,907	
Avoca (Iowa) Public Library		7,718
Bellevue Public Library		14,790
*Council Bluffs (Iowa) Free Public Library		101,563
Millard Public Library		5,550
Oakland, Iowa - Eckels Memorial Library		9,883
*Ralston Public Library		11,099
Valley Public Library		4,340
* Library included in sample of member libraries		
Source: American Library Directory, 1968/69. 26th ed. New York:		
R. R. Bowker, 1968.		

The Omaha SMSA had 457,873 residents according to the 1960 Census; and the city of Omaha had 301,598 residents in 1960. According to a more recent Chamber of Commerce estimate, the population of the city had grown to 374,000 by 1968. The Omaha Public Library with its six branches serves all the residents of the city and Douglas County; the latter

extension of service is part of the demonstration project described above. The other residents of the SMSA have access to library service only if they live in one of the seven areas that has a public library, because none of the libraries extends service beyond its defined service area.

Characteristics of the libraries.--Data collected by questionnaires and structured interviews with the director of the central city library and a sample of the libraries in the SMSA form the basis for the concluding remarks about the Omaha SMSA. Included in the discussion are the coordination of library service in the SMSA, the means of getting feedback about services, and benefits and drawbacks derived from cooperative ventures.

Two aspects of coordination of service in the SMSA are considered; they are 1) provision for cooperation and 2) coordination of book selection in the SMSA. The demonstration project in Douglas County has promoted cooperation among the libraries in that County. The Supervisor of Extension Services at Omaha Public Library has served as coordinator of the project and in that position he has worked in a consultant-like capacity with the libraries in the County. For the librarians in the County, staff members have given orientation tours of the Omaha Public Library and have opened their book selection meetings to anyone who wanted to attend.

The Library's participation in the teletype network for inter-library loan, funded by LSCL, is a good example of cooperation that includes more than the Omaha SMSA. In matters of policy, procedures, services, book selection and buildings and equipment, the Omaha Public Library has provided service in the form of advice and assistance to the libraries in the region on an informal basis for a number of years.

Enabling legislation has been passed by the Iowa General Assembly making cooperation between the libraries in Nebraska and Iowa possible, but in the Omaha SMSA (which includes Council Bluffs, Iowa) there has been no bi-state cooperation. Although the potential is there for cooperative programs, none have been started yet.

In the Omaha SMSA the libraries in Douglas County have access to the Reference Department of the Omaha Public Library because of the demonstration project, but the libraries in the other two counties in the SMSA (Sarpy County, Nebraska, and Pottawattamie County, Iowa) do not have formal access to the service. The librarian in Douglas County interviewed for the study referred reference questions to the Omaha Public Library Reference Department with some frequency, but the Pottawattamie County librarian interviewed does not call upon the Omaha Public Library for assistance with reference questions.

When the Omaha Public Library Reference Department cannot answer a reference question, they may refer it to the Nebraska Public Library Commission, but this is not done very often. The Commission does not maintain a central reference center.

There has been no attempt in the Omaha SMSA to co-ordinate book selection in the public libraries. There are relatively few libraries in the SMSA and Omaha and Council Bluffs have the strongest collections. There is not a strong network of public libraries that could co-ordinate their book selection.

Book and non-book resources.--In both book and non-book resources the Omaha Public Library has the strongest collection in the SMSA. According to its records, the Library held 401,779 volumes at the end of the 1967/68 fiscal year. The non-book resources examined were periodicals,

films, and recordings; the Library received 330 periodicals during the 1967/68 fiscal year; during the same period the Library held 208 films and 5,455 recordings.

Its relatively strong collection and its geographic position make it necessary to consider the Council Bluffs Public Library as an important resource in the Omaha SMSA. Its records show that the Library held 101,563 volumes at the end of the 1967/68 fiscal year. During the same period, it received 431 periodicals; four films constituted the Library's holdings of that resource, and 1,762 recordings were part of the collection at the end of the 1967/68 fiscal year.

With one exception, the libraries of the Omaha SMSA do not have any formal, systematic means of getting feedback about the services they offer to the public. Since this is the case, they must rely on personal contact with the public as a means of getting feedback. The exception to this general situation is the user survey the Omaha Public Library conducted in February and March, 1967; the survey method of getting feedback has been used on only one occasion.

Comments concerning benefits derived from cooperation were limited to libraries in Douglas County because there had been no cooperation in the other counties in the SMSA. The establishment of good will throughout the county was cited as one of the most important benefits; another was the additional money made available through the demonstration project for purchase of books. No drawbacks to cooperation were given.

Wichita Standard Metropolitan Statistical Area

The Wichita Standard Metropolitan Statistical Area contains two counties--Sedgwick and Butler. The Wichita Public Library was founded in 1870. Construction of the new central library building was begun in May, 1965, and by the end of the year, the work had passed the half-way mark. The building was opened to the public March, 1967.¹⁹ The present director, Mr. Ford Rockwell, has held the position since 1948.

Public libraries in Kansas became a matter of active concern in 1959 and at that time interest was expressed in a statewide survey of the state's library services. A Library Survey and Development Committee was formed by the members of the Kansas Library Association; later the committee was enlarged and became known as the Governor's Library Development Committee. The survey of Kansas libraries proposed by this Committee was to have two purposes: 1) to provide guidelines for the Legislature when it considered requests for changes in legislation concerning establishment and financing of local library services; and 2) to form the basis for a statewide plan essential to the receipt and proper use of federal funds.²⁰

In 1964 the Kansas Legislative Council's Committee on Education was asked to conduct a survey of the state's library services. The survey focused attention on the current status of the libraries, the enabling legislation, organization, and financial support of public libraries. The Committee found that the state had 350 identifiable public libraries, most of which served small rural communities. Their collections were small; 89 percent of the libraries held less than 20,000 volumes and 70 percent of the libraries had fewer than 10,000 volumes. More than half of the libraries (59 percent or 180 libraries) owned fewer than 5,000 volumes. Only nine libraries in the state had more than 50,000 volumes.²¹ Not only

were the collections of the public libraries limited, but the librarians tended not to borrow from the State Library to supplement their resources.

Each county in the state has at least one public library, but the majority of the libraries are concentrated in the central and northeastern sections of the state, and to a lesser extent in the southeastern section. The western half of the state and the area along the northern border have smaller libraries and fewer of them. Although the libraries are distributed throughout the state, there are 19 counties where the majority of the residents lived outside the service area of the library and hence do not have access to free public library service.²²

The average per capita expenditure on public libraries for the entire state in 1963 was \$1.44. On a county basis the per capita expenditure ranged from \$0.0 to \$2.56; more than one-half (56 counties) of the total of 105 counties spent less than \$1.00 per capita on public libraries. The 350 public libraries in the state spent a total of \$3,149,265 in 1964, but one-half of the total amount was expended by the six largest libraries, and the remaining one-half by the other 344 public libraries.²³

The State Library has played a relatively small role in public library development in Kansas because from the time of its founding in 1873 until it was reorganized in 1963, its primary function was to serve the State Legislature. The Kansas Traveling Libraries Commission was created to aid in the development of local public library service. A reorganization in 1963 merged the Traveling Libraries Commission and the State Library and placed the agency under the Governor as a regular executive agency.²⁴

The recommendations made by the Legislative Council's Committee on Education at the conclusion of its report are based on the concept that

provision of library service is no longer a matter of local option, but a legitimate state function for which the state has an obligation to provide funds. The creation of seven district library systems which include all the counties in Kansas was the Committee's recommendation. The systems were to be formed by the union of regional cooperating libraries whose territories encompassed one or more counties, and the systems were given taxing authority. The recommendation was presented to the legislature in 1965 by the Committee and it was used to form the basis for the Regional Systems of Cooperating Libraries Law which was passed in the same year.²⁵

Following the completion of the survey, the Kansas Library Association sponsored a series of seven regional meetings throughout the state to acquaint the local libraries with the findings of the survey and to get their reactions to it. The lively discussions and the numerous questions raised at the regional meetings were an indication of considerable popular interest in public library development. There was particular concern expressed about inadequate funds and an inability to use existing resources in a productive way. Preservation of local autonomy and control were among the questions that arose when library systems were discussed.²⁶

After the passage of the Systems Law, each of the seven regions was given a grant to apply to operating expenses until tax funds were available; funds for the initial grants came from an LSCA Title I appropriation. The regional system boards had been given the authority to levy an ad valorem tax of $\frac{1}{2}$ mill except in areas presently taxed regularly for $\frac{1}{2}$ mill or more for library services. Money derived from this tax was to be used within the system in a manner to permit all member libraries to share in its benefits. Participating libraries were not allowed to charge

for service to persons who lived outside the service area.

The Systems Law defined the seven multi-county regional systems and specified that if a local library chose to join a system, it would not lose its autonomy; the local library would continue to operate as an individual unit. The library board of each participating library elected a member to serve on the regional library system board. This board was empowered to create an executive board which handled all the routine business of the system except preparation of the annual budget. Within these broad outlines, each system was free to meet the needs of its users in any way it chose, and the systems have followed a number of different patterns in providing service.

A teletype network linking the six largest public libraries in the state was planned concurrently with the regional systems of public libraries. Named the Kansas Information Circuit (KIC), the network began operation in September, 1965, and from its inception all funds for it have been provided by appropriations from LSCA Title I. Although the network is primarily for reference and interlibrary loan, it served an especially useful function during the development of regional systems by providing bibliographic access on a statewide basis to the six largest public library collections in the state, facilitating the greatest possible use of existing resources while the regional systems were building up their resources.²⁷ In 1967 the Kansas State Library and the Kansas State University Library were added to the network.

Efforts have been made to increase the usefulness of KIC by devising different means of operating. One project was undertaken to determine ways in which to reduce the percentage of unfilled requests. Part of this study was done in conjunction with the Denver Bibliographic

Center; requests that could not be filled by the KIC libraries were sent to the Bibliographic Center. The latter was able to furnish locations for a little over 80 percent of the unfilled requests.²⁸

Although the development of regional library systems in Kansas has produced some conditions that have given the Wichita SMSA some system-like characteristics, it was decided that these characteristics were not sufficient to disqualify the SMSA's inclusion in the study. The regional systems did not become fully operative until January 1, 1969, several months following the collection of data for this study. The concept upon which the Kansas systems are based is somewhat different from that usually underlying library systems. When a local library joins a system in Kansas, it loses none of its autonomy or its local control. Under these circumstances the system structure is much less organized than it is with library systems generally. The libraries participating in a "system" are free to conduct their internal operations as they see fit, offering administrative services if they deem necessary or not offering any at all, as the case may be. The Kansas "systems" are more nearly loosely organized groups of cooperating libraries than library systems, as the latter structure is generally understood.

Socio-economic characteristics.--Two socio-economic characteristics are being used as indicators that can be compared with both the two types of systems and the non-system libraries. The first indicator is the gross assessed valuation of property subject to local general property taxation; in Wichita this valuation was \$473,967,000 in 1966.²⁹ The second indicator is the median years of school completed by the residents of the two counties (Sedgwick and Butler) that make up the Wichita SMSA; in 1960 the median years of school completed by the adult residents of the two

counties was 11.8 years.³⁰

In the two counties that make up the Wichita SMSA there are 17 public libraries in addition to the Wichita Public Library. The public libraries are almost evenly divided between the two counties; Sedgwick County has eight public libraries and Butler County has nine public libraries. The libraries and their holdings are given in Table 20.

According to the 1960 Census the Wichita SMSA had 381,626 residents and the city of Wichita had 254,698 residents. The population of the city had grown to 281,169 when a more recent Chamber of Commerce estimate was made in 1967/68. With its central library and five branches, the Wichita City Library serves all the metropolitan population, but also the Library recently eliminated its non-resident fee and now offers free library service to any resident in the state. Since this is the case, all the residents of the Wichita SMSA have access to free public library service.

The Wichita SMSA is included in the South Central Kansas Library System whose central library is the Hutchinson Public Library. Although the Wichita Public Library is the largest in the System, it was not made the central library because when the system was being planned, the Wichita Public Library was constructing its new building.

Characteristics of libraries.--Data collected by questionnaires and structured interviews with the director of the central city library and a sample of the libraries in the SMSA form the basis for the concluding remarks about the Wichita SMSA. Included in the discussion are the coordination of library service in the SMSA, the means of getting feedback about services, and benefits and drawbacks derived from cooperative ventures.

TABLE 20
LIBRARIES AND HOLDINGS IN THE WICHITA SMSA

Library Unit		Volumes Held
Wichita City Library		237,655
Branches:		
Boulevard	30,000	
Minnea	18,000	
Oliver Square	30,000	
Seneca	20,000	
Westlink	12,000	
Andover - Fred Wilson Public Library		3,794*
Augusta Public Library		20,000
Benton Community Library		n/a
Cheney Public Library		4,005*
Clearwater Public Library		3,130*
Colwich City Township Library		3,300*
Derby Public Library		9,521
Douglas - Copeland Memorial Library		14,720
*El Dorado - Bradford Memorial Library		24,501
Leon Public Library		2,200*
Mount Hope Public Library		8,010
Mulvane Public Library		11,807
*Newton Free Public Library		40,855
Potwin Public Library		n/a
Towanda Public Library		3,223*
Valley Center Public Library		n/a
Whitewater City Library		n/a
* Library included in sample of member libraries		
# Information taken from: Kansas State Library, Statistics: Kansas Public Libraries, 1968. Topeka, 1969.		
Source: American Library Directory, 1968/69. 26th ed. New York: R. R. Bowker, 1968.		

Two aspects of coordination of services in the SMSA are considered; they are 1) provisions for cooperation and 2) coordination of book selection in the SMSA. Although the presence of the regional system will facilitate cooperation among the libraries, at the time the interviews were conducted, there were no provisions for cooperation among the libraries in the Wichita SMSA. There are plans for the Wichita Public Library to become a film center for the system and also plans are being formulated for different means of extending service beyond the Wichita City limits; perhaps a small trailer or a bookmobile will be used. Since the library is participating in the system, it cannot charge a non-resident fee for its services.

The Kansas Information Circuit makes cooperation between libraries possible. Reference resources, professional expertise, and book and non-book resources may be shared through the facilities of the Circuit. It has proved to be an excellent means of cooperation among the public libraries in the state.

As part of the demonstrations prior to the beginning of the system operation, there have been meetings of member libraries in the system. During the first year the system was organized there were 10 meetings in different towns in the region.

When libraries in the Wichita SMSA have reference questions they cannot answer, they usually call on the Reference Department of the Wichita Public Library for assistance. One librarian interviewed asked for help fairly often, but the other librarian interviewed did not call the Reference Department herself; instead she suggested to her patrons that they might call the Department for information.

If the Wichita Public Library cannot answer a question, it may ask the State Library for assistance. The Kansas Information Circuit also

offers reference service, but the Wichita Public Library does not use this resource very heavily for help with reference questions.

There has been some effort to coordinate the book selection within the city of Wichita, but none in the SMSA or in the larger area included in the system. Within the city, the Public Library consults with the college and university libraries and the schools before expensive items are added to the collection. Coordination of selection by the 17 libraries in the SMSA or the larger group of libraries in the multi-county system has not been practiced. Each library has selected what it needed to meet the needs of its own users.

Book and non-book resources.--The Wichita Public Library has the strongest book and non-book resources in the SMSA and the system; by comparison, the library resources in the surrounding area are almost non-existent. The Library and its branches held 257,655 volumes at the end of the 1967/68 fiscal year according to its statistics. The Library received 815 periodical titles; in audio visual resources, the Library held 658 films and 6,441 recordings at the end of the 1967/68 fiscal year.

The libraries in the Wichita SMSA have no formal means of getting feedback about the services they offer. Unless the libraries get complaints from users, they assume that they are providing satisfactory service. They have not conducted a user survey or made an objective study of the reaction of the public to their services.

Benefits received from the Kansas Information Circuit were singled out as the greatest benefits derived from cooperation between the libraries in the SMSA. The meetings of librarians in the regional system provided excellent means of getting acquainted with area libraries. No serious

drawbacks to cooperative ventures were given; the only possible drawback was the amount of time cooperative ventures took away from regular library business. The latter was not considered a serious drawback because it would be eliminated after the organizational phase of the system had been completed.

Summary

Three Standard Metropolitan Statistical Areas and the public libraries contained in them are included in this study as examples of library organization in metropolitan areas where there is no formal system structure. Since most of the libraries in medium-size metropolitan areas are organized into systems of some sort, it was difficult to find three metropolitan areas where there were no systems. Two of the SMSA's chosen have some system-like characteristics, but they were not considered sufficient to disqualify the use of the SMSA's.

The Omaha SMSA has participated in a demonstration project which has extended service to all the residents of the county in which Omaha is located (Douglas County). The project has been temporary and the organizational pattern is somewhat different from that of a public library system. The system of which the Wichita SMSA will be a part became fully operative January 1, 1969. When the data were collected for this study in the fall of 1968, there were on-going demonstration projects, but the system had not begun to function yet. Also, the nature of the Kansas systems is somewhat different from other public library systems because they tend to be groups of cooperating libraries with a very loose organizational structure. The New Haven SMSA has no system-like characteristics.

The libraries in the central cities of the three SMSA's are about the same age, since each was founded during the last three decades of the 19th century. The New Haven Public Library was founded in 1886; the Omaha Public Library, in 1877; and the Wichita Public Library, in 1870.

Two of the three SMSA's are multi-county, but the New Haven SMSA contains only part of New Haven County. The Wichita SMSA encompasses two counties and the Omaha SMSA, three counties. Only in the Wichita SMSA do all the residents have access to free public library service; as part of the demonstration project, the Wichita Public Library discontinued its non-resident fee and now offers free service to any resident of the state. In the Omaha SMSA, the Omaha Public Library offers service to Omaha and through a demonstration project to all the residents of Douglas County, but not to the residents of the other two counties in the SMSA. Each of the towns in the New Haven SMSA has a public library that serves the residents of the town; persons who do not live in one of the eleven towns do not have access to free public library service.

The libraries in the three SMSA's have made no effort to coordinate their book selection. To the extent that its budget permits, each library buys what it needs to meet the needs of its users.

There are some cooperative organizations and projects in each of the three SMSA's. In the New Haven SMSA, there are two cooperative organizations--the Southern Connecticut Association of Library Administrators (SCALA) and the Swap Group. Omaha SMSA has had the demonstration project to extend service county-wide and also the Omaha Public Library has participated in the state-wide teletype network. The Wichita SMSA has been part of the demonstration project to extend service in connection with the regional system, and the Wichita Public Library, as one of the six

largest libraries in the state, has belonged to the Kansas Information Circuit.

The socio-economic characteristics used as indicators are summarized in Tables 21 and 22.

TABLE 21

PER CAPITA ASSESSED VALUATION OF PROPERTY
FOR THE CENTRAL CITIES OF THE
THREE SMSA'S IN 1967
WITH 1960 POPULATION

Central City	Total Assessed Value Per Capita Subject to Tax After Deduction of Exemptions (In thousands of dollars)
New Haven, Connecticut	3.91
Omaha, Nebraska	2.65
Wichita, Kansas	1.86

Sources: U.S. Bureau of the Census, Census of Governments, 1967, Vol. 2: Taxable Property Values. Washington, D.C.: U.S. Government Printing Office, 1968.

TABLE 22

MEDIAN SCHOOL YEARS COMPLETED BY POPULATION
IN THE THREE SMSA'S
1960

SMSA	Median School Years Completed
New Haven	10.8
Omaha	11.9
Wichita	11.8

Sources: U.S. Bureau of the Census, County and City Data Book, 1967. Washington, D.C.: U. S. Government Printing Office, 1967.

The book and non-book resources of the libraries in the central cities of the SMSA's are summarized in Table 23.

TABLE 23
BOOK AND NON-BOOK RESOURCES OF THE
CENTRAL CITY LIBRARIES OF THE THREE SMSA'S
1967/1968

Central City Library	Volumes Held	Periodical Titles Held	Films Held	Recordings Held
New Haven Public Library	437,920	1,502	---	2,412
Omaha Public Library	401,779	330	208	3,455
Wichita Public Library	257,655	815	658	6,441

Footnotes Chapter VI

¹Virginia Lord, Regional Library Service in Connecticut, Its History and Development ("Occasional Paper," no. 48; Urbana, Ill.: University of Illinois Library School, 1957), p. 7.

²Connecticut, Governor's Committee on Libraries, A Study of Library Services in Connecticut (Hartford, Conn.: January, 1963), p. 5.

³Connecticut Committee for National Library Week, High Time Something Was Done, by John Hersey (n.p.: 1963), p. -1-.

⁴Roger H. McDonough and Mildred P. McKay, State Library Service in Connecticut: A Suggested Pattern of Organization. A report submitted to the Committee on Library Improvement, September, 1964. Issued with: Connecticut, Governor's Committee on Library Improvement, Report (Hartford, Conn.: 1964-1965), p. 51.

⁵Connecticut Library Association, Development Committee, Report to the Executive Board (n.p.: March, 1968), p. 9.

⁶U.S. Bureau of the Census, Census of Governments, 1967. Vol. II: Taxable Property Values (Washington, D.C.: U.S. Government Printing Office, 1968), p. 84.

⁷U. S. Bureau of the Census, County and City Data Book, 1967 (Washington, D.C.: U.S. Government Printing Office, 1968), p. 43.

⁸Nebraska, Library Development Committee, Nebraska Libraries Face the Future: A Report of a Comprehensive Survey (Lincoln, Nebraska: 1961), p. 29.

⁹Ibid., 83.

¹⁰Ibid., 84.

¹¹Ibid., 85.

¹²Letter from Mr. Frank Gibson, Director, Omaha Public Library, September 24, 1968.

¹³Peter Bury and Donald E. Wright, "Public Library Services in Council Bluffs, Iowa: A Survey and Report" (n.p.: 1968), p. 33.

¹⁴Ibid., 49.

¹⁵Ibid., 50.

¹⁶Ibid., 56-57.

¹⁷U.S. Bureau of the Census, Census of Governments, p. 103.

¹⁸U.S. Bureau of the Census, County and City Data Book, p. 233 and p. 123.

¹⁹Wichita Public Library, Wichita's Living Rooms: Annual Report of the Wichita Public Library (Wichita: 1967), p. 1.

²⁰Kansas, Legislative Council, Committee on Education, Survey of Library Services in Kansas (n.p.: 1965), p. 1.

²¹Ibid., 55.

²²Ibid.

²³Ibid., 35-36.

²⁴Ibid., 40.

²⁵Jules M. Mersel et al., Overview of the Library Services and Construction Act--Title I (New York: R. R. Bowker Company, 1969), p. 201.

²⁶Kansas, Legislative Council, Survey of Library Services in Kansas, p. 2.

²⁷Mary A. Hall, "Kansas Information Circuit ... An Introduction," Kansas Library Bulletin, XXXVI (Spring, 1967), pp. 12-13.

²⁸Mersel, op. cit., p. 221.

²⁹U. S. Bureau of the Census, Census of Governments, p. 93.

³⁰U.S. Bureau of the Census, County and City Data Book, p. 133 and p. 123.

CHAPTER VII

RESULTS OF ANALYSIS

In this chapter the analysis of the data collected for the study is considered descriptively and statistically; greater emphasis is placed on the descriptive analysis because of the research design of the study and the limitations of the data. Statistical analyses are used where appropriate as a means of obtaining additional information about the data and this in turn is used to strengthen the descriptive analysis. The results of these two types of analysis are presented and discussed according to the Model of Public Library Systems and in terms of the support they provide for the statements of the hypothesis given in Chapter II. Four variables are presented as possible alternative hypotheses that may explain the differences found in the dependent variable.

Analyses of the Dependent Variables and the Causal Factors

For five of the seven dependent variables, data were collected from all the libraries in the nine systems ($N = 138$), but for two of the dependent variables (quality of resources and level of reference service) data were collected from only the libraries in the subsample ($n = 30$). Data for all seven dependent variables are interval level measure. For the six causal factors, data were collected from the member libraries in the

subsample only ($n = 21$); and since they were evaluated according to an ordinal scale, they are ordinal level measures.

Four of the dependent variables (extent of holdings, use of holdings, personnel, and amount of financial resources) were put on a per capita basis using the figures for the population legally served the libraries supplied on the questionnaire. Although the source for this figure varies, in each case it is the population the library uses to determine the number of persons it serves. In the case of personnel, the resulting values are given in terms of 10,000 population, rather than per capita.

The personnel variable is also divided by circulation to give an estimate of the amount of work performed by the staff. The values are given in terms of personnel per 10,000 circulations.

In performing the statistical analysis on the dependent variables, the data for each variable were first grouped into three categories according to the type of administrative structure of the system, i.e. consolidated and cooperative systems and non-system libraries. The standardized values for the four dependent variables put on a per capita basis were used in the analysis. A one-way analysis of variance was then performed on the three groups of data.

Data from the six variables serving as indicators of the causal factor were evaluated by ordinal scales, grouped into three categories according to the type of administrative structure of the system, and displayed in tabular form. A statistical analysis to measure the amount of association between the dependent variable and the causal factors (such as a two-way analysis of variance) would have been highly desirable, but the small number of responses for the variables ($n = 21$) made such an analysis impossible to perform. The present grouping of the scaled

responses gives an estimate of the causal factor.

The results of the analyses of each of the seven dependent variables are discussed systematically according to the pattern outlined below. First, a mean value for the variable is given for each of the nine systems and then a mean value for each of the three categories of systems is given. When the difference among the three category means is statistically significant, this fact is noted. Next, the causal factors that were expected to produce changes in the dependent variable are discussed both in terms of the pattern which the responses took and the manner in which they appear to have affected the dependent variable. Finally, the relationship between the results of the analysis of the dependent variable and the pattern of the causal factor are considered with respect to the extent to which they support the two statements of the hypothesis given in Chapter II.

Dependent variable one: extent of holdings.--Data collected for the first dependent variable (extent of holdings) are divided into two sections: 1) volumes added to the collections for three fiscal years (1967/68, 1966/67, and 1965/66); and 2) volumes held by the libraries at the end of the fiscal year 1967/68. These data were put on a per capita basis and the standardized values were used in the analysis and the accompanying discussion.

Mean volumes per capita added to the collections during the three fiscal years are shown in Table 24. The volumes added are broken down into three categories: 1) adult fiction and non-fiction; 2) children's volumes; and 3) total volumes. In the earliest fiscal year (1965/66) the non-system libraries added the greatest mean number of volumes per capita in all three categories. This trend changed in 1966/67; during that year and the next (1967/68), the cooperative systems added the greatest mean

TABLE 24
DEPENDENT VARIABLE 1: EXTENT OF HOLDINGS
MEAN VOLUMES PER CAPITA ADDED TO COLLECTIONS
1967/68, 1966/67, 1965/66
N = 127

System	1967/68			1966/67			1965/66		
	Adult & Non- Fiction	Child- ren's Books	Total	Adult & Non- Fiction	Child- ren's Books	Total	Adult & Non- Fiction	Child- ren's Books	Total
Consolidated									
CVC	0.007	0.007	0.013	0.006	0.002	0.008	0.005	0.004	0.010
EVC	0.008	0.025	0.013	0.009	0.005	0.014	0.016	0.009	0.025
TCC	0.004	0.001	0.005	0.003	0.001	0.004	0.003	0.001	0.004
Category \bar{X} ^{a)}	0.006*	0.008*	0.009*	0.005*	0.002*	0.007*	0.007*	0.004*	0.010*
Cooperative									
IVLS	0.094	0.068	0.183	0.069	0.056	0.151	0.070	0.056	0.166
OLS	0.217	0.111	0.332	0.167	0.097	0.282	0.106	0.069	0.195
SJV	0.073	0.047	0.161	0.076	0.035	0.161	0.067	0.034	0.150
Category \bar{X} ^{a)}	0.129*	0.081*	0.235*	0.105*	0.069*	0.200*	0.083*	0.058*	0.175*
Non-System									
NH/SMSA	0.072	0.040	0.129	0.076	0.046	0.138	0.077	0.041	0.148
O/SMSA	0.103	0.073	0.176	0.121	0.067	0.189	0.156	0.096	0.253
W/SMSA	0.087	0.061	0.190	0.083	0.067	0.228	0.088	0.054	0.271
Category \bar{X} ^{a)}	0.086*	0.057*	0.167*	0.090*	0.060*	0.189*	0.101*	0.060*	0.227*

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

number of volumes per capita for each category. Throughout the period of time examined, the consolidated systems added the smallest mean number of volumes per capita in each category.

The mean volumes per capita held by the libraries in the systems at the end of 1967/68 are displayed in Table 25. For each type of holding, as well as for the total holdings, cooperative systems held the greatest mean number of volumes per capita. The consolidated systems held the smallest mean number of volumes per capita; and the non-system libraries held the second greatest mean number of volumes per capita.

When analysis of variance was performed on the data collected for the two sections of the dependent variable, all the twelve tests conducted were found to show statistical significance at the critical level selected. (Complete information about the results of the tests are given in Appendix H.) Finding statistical significance in all of the tests gives the results of the analysis greater strength.

According to the Model of Public Library Systems, three causal factors (communication links, access to more extensive resources, and maintenance of union lists of holdings) are responsible for the changes that appear in the first dependent variable (extent of holdings). In each case, the relationship between the causal factor and the dependent variable is an inverse one, i.e. the more the causal factor is acting, the less will be the amount of the dependent variable. The distribution of the responses for each of the causal factors is shown in Charts 1, 2 and 3.

The first causal factor is communication links. It is thought that the presence of a greater number of communication links makes resources in member libraries available to all the borrowers in the region and hence

TABLE 23
DEPENDENT VARIABLE 1: EXTENT OF HOLDINGS
MEAN VOLUMES PER CAPITA IN COLLECTIONS
1967/68
N = 127

	Adult Fiction & Non- Fiction	Children's Volumes	Total Volumes
System			
Mean Volumes Per Capita			
<u>Consolidated</u>			
QMC	0.054	0.033	0.087
EVC	0.110	0.069	0.194
TCC	0.043	0.014	0.056
Category $\bar{X}^a)$	0.061*	0.032*	0.096*
<u>Cooperative</u>			
IVLS	2.120	0.955	4.903
OLS	1.578	0.814	2.393
SJV	1.107	1.427	1.818
Category $\bar{X}^a)$	1.823*	0.951*	3.691*
<u>Non-System</u>			
NH/SMSA	0.485	0.349	1.822
O/SMSA	1.328	0.553	2.392
W/SMSA	1.096	0.564	3.366
Category $\bar{X}^a)$	0.953*	0.492*	2.637*

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

decreases the need for each library to build a large collection. This ease of access may result in relatively fewer holdings and fewer volumes added in member libraries where there are more communication links within the system.

According to the responses shown in Chart 1, the members of the consolidated systems have the greatest number of communication links; Tables 24 and 25 show that the consolidated systems added the smallest mean number of volumes per capita during each of the three fiscal years examined and held the smallest mean number of volumes per capita. The relationship between the causal factor and the dependent variable appears to occur as defined by the Model.

It was anticipated that the members of cooperative systems would have the second greatest number of communication links and would hold and add the second smallest mean number of volumes per capita. The results of the analyses indicate that the members of the cooperative systems have the second greatest number of communication links, but they held and added the greatest mean number of volumes per capita during 1967/68 and 1966/67. The non-system libraries have the fewest communication links, but they held and added the second greatest mean number of volumes per capita during 1967/68 and 1966/67. These results do not follow exactly the pattern defined by the Model.

The second causal factor thought to produce changes in the dependent variable (extent of holdings) is access to more extensive resources. Access to a book pool from which member libraries can borrow collections of books on a regular basis is a factor which may affect the extent of holdings. The availability of such resources makes it less important for each member library to build its individual collection. Thus, it is anticipated that

CHART 1
DISTRIBUTION OF RESPONSES FOR
CAUSAL FACTOR ONE:
COMMUNICATION LINKS
n = 21

Scale*	Consolidated Systems	Cooperative Systems	Non-System Libraries
1	1	7	7
2	2	2	0
3	2	0	0

*Scale: 1 = rapid communication (telephone, TWX)
and regular newsletter
2 = rapid communication and regular
meetings of staff
3 = rapid communication and newsletter
and regular staff meetings

Table should be read as follows: One member library
of a consolidated system had rapid communication and
regular newsletters; two member libraries of consoli-
dated systems had rapid communication plus regular
staff meetings. Two member libraries of consoli-
dated systems had rapid communication plus a
regular newsletter plus regular staff meetings.

libraries having greater access to more extensive resources and using them regularly will hold fewer mean volumes per capita and will add fewer mean volumes per capita to their collections.

Members of the consolidated systems, it was anticipated, would have the greatest access to book pools and would use them with the greatest regularity; this situation would result in the members of the consolidated systems holding and adding fewer mean volumes per capita than the members of cooperative systems or non-system libraries. The responses from the members of the consolidated systems are concentrated in the middle level of the scale, indicating that although they have access to a book pool, they do not use it on a regular basis. (See Chart 2) Despite this lack of regular use of book pools, the members of the consolidated systems held the fewest mean volumes per capita and added the fewest mean volumes per capita. The results of the analyses occur in the manner defined.

Responses from members of the cooperative systems are concentrated in the first levels of the scale, indicating that they have access to book pools, but do not borrow from them regularly, but these libraries held and added the greatest mean number of volumes per capita in 1967/68 and 1966/67. For the non-system libraries, the responses are almost evenly divided among the three levels of the scale, and these libraries held and added the second greatest mean number of volumes per capita during 1967/68 and 1966/67. The relationship between the causal factor and the dependent variable, as defined by the Model of Public Library Systems, does not appear to be operating on the cooperative systems and the non-system libraries.

Maintenance of union lists of holdings is the third causal factor thought to be responsible for changes in the first dependent variable

CHART 2
 DISTRIBUTION OF RESPONSES FOR
 CAUSAL FACTOR FOUR:
 ACCESS TO MORE EXTENSIVE RESOURCES
 n = 21

Scale*	Consolidated Systems	Cooperative Systems	Non-System Libraries
1	1	5	2
2	4	1	3
3	0	3	2

*Scale: 1 = have access to more extensive resources,
 but borrow only individual titles
 2 = have access to more extensive resources,
 and borrow collections of materials
 3 = have access to more extensive resources,
 and have a regular program of borrow-
 ing collections

Table should be read as follows: One member library
 of a consolidated system has access to more exten-
 sive resources, but borrows only individual titles;
 four member libraries of consolidated systems have
 access to more extensive resources and borrow
 collections of materials. No member libraries of
 consolidated systems have access to more extensive
 resources and have a regular program of borrowing
 collections.

(extent of holdings). The union list makes the materials held by participating libraries more easily accessible to all area library users. This ease of access may affect the extent of holdings by making it less necessary for each member library to build its collection extensively. The member libraries whose holdings are given in union lists are expected to have less extensive holdings than libraries whose holdings are not included in a union list.

The responses from the member libraries, shown in Chart 3, indicate

CHART 3
DISTRIBUTION OF RESPONSES FOR
CAUSAL FACTOR SIX:
MAINTENANCE OF UNION LISTS
n = 9

Scale*	Consolidated Systems	Cooperative Systems	Non-System Libraries
0	0	2	2
1	0	1	1
2	3	0	0

*Scale: 0 = no union list maintained
1 = partial list of holdings available
2 = union catalog maintained

Table should be read as follows: Three consolidated systems maintain union catalogs; two cooperative systems have no union list, etc.

that for all three consolidated systems, holdings of member libraries are given in union lists. The holdings of members of cooperative systems and non-system libraries are not represented in union lists. Members of the consolidated systems added and held the fewest mean volumes per capita in 1967/68 and 1966/67. Cooperative systems added and held the greatest

mean volumes per capita during 1966/67 and 1967/68; and the non-system libraries, the second greatest mean number per capita during the same period. The results of the analysis appear to confirm the pattern defined by the Model.

The results of the analysis of the first dependent variable and three causal factors follow the pattern defined by the Model of Public Library Systems for the consolidated systems. To the extent that members of the consolidated systems get the greatest amount of use from their materials because of their greater communication links and their union lists, they offer a higher level of service. These results support the second statement of the hypothesis.

The cooperative systems have fewer communication links, use book pools less, and do not have the holdings of member libraries listed in union lists, but in the last two fiscal years examined, they added the greatest mean number of volumes per capita and held the greatest mean number of volumes per capita. This combination of results indicates that the cooperative systems are able to give a higher level of service than the non-system libraries.

When all the results of the analyses are considered, it is found that both statements of the hypothesis are supported, although in somewhat different ways. Members of public library systems give a higher level of service than non-system libraries, and consolidated systems give a higher level of service than either cooperative systems or non-system libraries.

Dependent variable two: use of holdings.--Data were collected for the second dependent variable (use of holdings) for three fiscal years (1967/68, 1966/67, and 1965/66). Circulation statistics kept by the member libraries are the data collected. The circulation transactions are recorded according

to the type of borrower (children and adults) and the total number of circulations. The data were put on a per capita basis and the standardized values are used in the analysis and the accompanying discussion.

The mean number of circulations per capita for each of the nine library systems is shown for each of the three fiscal years in Table 26. During all three fiscal years, the members of the cooperative systems had the greatest mean number of circulation transactions per capita for both children and adult borrowers and for total borrowers. In two instances (mean per capita circulation to children and total per capita circulation during 1967/68) members of the consolidated systems have the second greatest number of mean per capita circulation transactions. In all other instances, the non-system libraries have the second greatest number of mean per capita circulations for both types of borrowers and for total circulations. The members of the consolidated systems have the smallest mean number of per capita circulations.

Of the nine statistical tests conducted on this group of data, five had results that are statistically significant at the stated critical level. The tests showing statistical significance are marked by an asterisk in Table 26 and the complete results of the tests are given in Appendix H.

The Model of Public Library Systems specifies five causal factors that may be responsible for changes that occur in the second dependent variable (use of resources). The five causal factors are 1) communication links; 2) in-service training programs; 3) aid in book selection; 4) access to more extensive resources; and 5) maintenance of union lists of system holdings. The distribution of the responses for each of the causal factors is shown in Charts 1, 4, 5, 2, and 3.

TABLE 26
DEPENDENT VARIABLE 2: USE OF HOLDINGS
MEAN PER CAPITA CIRCULATION
1967/68, 1966/67, 1965/66
N = 127

System	1967/68			1966/67			1965/66		
	Child- ren	Adults	Total	Child- ren	Adults	Total	Child- ren	Adults	Total
Mean Circulations Per Capita									
<u>Consolidated</u>									
CNC	0.0	0.0	3.915	0.0	0.0	4.007	0.0	0.0	4.018
EVC	4.973	2.920	7.894	4.804	2.967	7.770	4.983	2.633	7.616
TCC	2.235	2.002	4.237	2.566	1.984	4.550	3.057	1.903	4.960
Category \bar{X} ^{a)}	2.028*	1.496*	4.890*	2.139	1.498*	5.034	2.394	1.392*	5.187
<u>Cooperative</u>									
IVLS	3.016	2.830	6.884	2.948	2.494	6.582	2.657	2.335	6.883
OLS	3.050	3.418	6.472	3.013	3.391	6.697	3.168	2.925	6.094
SJV	2.254	3.775	6.029	2.368	4.056	6.424	2.515	3.922	6.437
Category \bar{X} ^{a)}	2.952*	3.136*	6.650*	2.913	2.973*	6.608	2.827	2.706*	6.554
<u>Non-System</u>									
NH/SNSA	1.879	2.049	4.629	2.433	2.654	5.089	2.548	2.598	5.491
O/SNSA	2.356	1.451	3.807	3.345	1.966	5.498	4.377	2.257	7.314
V/SNSA	1.901	1.922	4.539	2.044	1.751	5.104	1.806	1.727	5.131
Category \bar{X} ^{a)}	2.001*	1.852*	4.396*	2.476	2.094*	5.192	2.651	2.133*	5.761

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

The first causal factor thought to produce a change in the amount of use of resources is the number of different types of communication links the member libraries of the system have. In systems where the member libraries have more communication links, resources held by the member libraries are more easily accessible to all the borrowers in the area. This ease of access presumably makes it possible for the member libraries to offer a higher level of service than they otherwise could and this results in a greater use of resources. Members of consolidated systems, it is anticipated, will have the greatest number of communication links and also the greatest use of resources.

The responses, as shown in Chart 1, indicate that members of the consolidated systems have the greatest number of communication links, but in no case do they have the greatest mean per capita circulation; in only two cases do they have the second greatest mean per capita circulation (circulation to children and total circulation in 1967/68). Members of cooperative systems have the second greatest number of communication links, and in every case, they have the greatest mean per capita circulation. The non-system libraries have the fewest communication links, but in all the categories but two, they have the second greatest number of mean per capita circulations. The relationship between the causal factor and the dependent variable does not appear to operate in these data exactly in the manner defined by the Model.

The second causal factor that may be responsible for changes in the second dependent variable is the in-service training programs. Staff members who attend in-service training programs receive instruction that is thought to lead to their being able to give a higher level of service which is reflected in the greater use of materials. Responses from the

members of consolidated systems and from the members of cooperative systems are evenly distributed in the two highest levels of the scale (as shown in Chart 4). In each case, two-thirds of the responses are in the second and third levels of the scale. The members of the cooperative systems have the greatest mean per capita circulation in every instance, but in two instances, the members of the consolidated systems have the second greatest per capita circulation. These two results occurring together follow the pattern defined by the Model of Public Library Systems.

Non-system libraries have the lowest ranking for participation in in-service training programs, but in the majority of instances, they have the second greatest mean per capita circulation. This combination of results does not follow the pattern defined by the Model.

The third causal factor that may produce changes in the amount of use of resources is the aid in book selection provided to member libraries. When books are selected on the basis of recommendations of persons who have professional training and experience in book selection, presumably a collection with a higher level of resources will be built. This fact, it is assumed, will be reflected in greater use of the resources by the borrowers. Member libraries that receive the most aid in the selection of their resources, it is expected, will also have the greatest use of the resources.

All the responses from the members of the consolidated systems are concentrated in the category that indicates the greatest aid in book selection (see Chart 5), but in no instance do they have the greatest mean per capita circulation. In only two instances do they have the second greatest per capita circulation. Responses from the members of the cooperative systems show that they have available the second greatest amount of

CHART 4

DISTRIBUTION OF RESPONSES FOR
CAUSAL FACTOR TWO:
IN-SERVICE TRAINING PROGRAMS
n = 21

Scale*	Consolidated Systems	Cooperative Systems	Non-System Libraries
0	0	2	2
1	1	1	0
2	2	3	3
3	2	3	0

*Scale: 0 = does not apply or do not know how to answer
1 = programs available, but did not attend any
2 = attended one session during last year
3 = attended two or more sessions during last year

Table should be read as follows: One member library of a consolidated system did not attend in-service training programs, though they were available; two member libraries attended one session; and two member libraries of consolidated systems attended two or more in-service training programs during last year, etc.

CHART 5
DISTRIBUTION OF RESPONSES FOR
CAUSAL FACTOR THREE:
AID IN BOOK SELECTION
n = 21

Scale*	Consolidated Systems	Cooperative Systems	Non-System Libraries
0	0	1	0
1	0	4	6
2	0	4	1
3	5	0	0

*Scale: 0 - board selects books to be added
 1 - librarian handles all selection by reading reviews; may discuss selections with staff.
 2 - selection is made from list of recommended titles prepared by system. List appears regularly and in addition, meetings to discuss selections are held.
 3 - selection must be made from a list of recommended titles prepared and distributed regularly by the system. Meetings to discuss titles on lists are held.

Table should be read as follows: Five member libraries of consolidated systems select books by choosing titles from a list prepared by the system and distributed regularly. One member of a cooperative system has a board that selects the books for the library; in four member libraries of cooperative systems, the librarian handles all the selection with only reviews to read; and four member libraries of cooperative systems select books from recommended lists prepared by the system.

aid in book selection, but in every instance they have the greatest mean per capita circulation. Responses from the non-system libraries indicate that they have the least amount of aid in selection, but in all but two instances they rank second in the number of mean per capita circulations. The results of these analyses do not follow the pattern defined by the Model of Public Library Systems.

The fourth causal factor that may be operating on the second dependant variable is access to more extensive book resources, i.e. a book pool. When member libraries may borrow groups of books from a central book pool, they are able to increase the extent of their resources and presumably this will enable them to offer a higher level of service to their borrowers which will result in greater use of materials. The member libraries that have access to a book pool and borrow from it on a regular basis are expected to be the libraries whose resources are used the most.

The responses from the member libraries indicate that the members of the cooperative systems have the most access to book pools and that they borrow from them on a regular basis. (See Chart 2) In every case, members of the cooperative systems have the greatest mean per capita circulation. Responses from the non-system libraries indicate that they have the next greatest access to book pools and use them on a regular basis. In all but two cases, the non-system libraries have the greatest mean per capita circulation. Finally, the responses from the members of the consolidated systems indicate that although they have access to book pools, they do not borrow from them on a regular basis; also, in all but two instances, they have the lowest mean per capita circulation. The results of these analyses are an indication that the causal factor is acting on the dependent variable in the manner defined by the Model of

Public Library Systems.

The fifth causal factor defined by the Model as producing an effect on the second dependent variable is the maintenance of a union list of system holdings. A union list of holdings allows for greater ease of access to the resources held by member libraries and this higher level of service presumably provided by the greater access results in a greater use of the resources. Member libraries that have access to union lists of system holdings, it is expected, will circulate more volumes per capita than member libraries that do not.

The responses from the libraries indicate that only the members of the consolidated systems have access to union lists of system holdings (see Chart 3), but in no instance do they have the greatest mean per capita circulation. Members of cooperative systems and non-system libraries have the same amount of access to union lists, but cooperative systems have the greatest mean per capita circulation in every case. In all but two instances, the non-system libraries have the second greatest mean per capita circulation. The results of the analysis do not occur exactly as defined by the Model.

The results of this series of analyses support the first statement of the hypothesis that member libraries of public library systems provide a higher level of service than non-system libraries as indicated by the fact that the cooperative systems have the greatest mean per capita circulation during each of the three fiscal years examined. The support provided by these results is strengthened because the differences in the mean per capita circulation appear to occur in conjunction with two of the specified causal factors (in-service training and access to more extensive resources.)

The second statement of the hypothesis (members of consolidated systems provide a higher level of service than members of either cooperative

or non-system libraries) receives no support from the analyses of these data.

Dependent variable three: personnel.--Data were collected for two aspects of the third dependent variable (personnel): 1) status of staff members (professional or clerical); and 2) amount of time worked (full-time or part-time). The mean number of staff members per 10,000 population for each category is given in Table 27; the mean number of staff members per 10,000 circulations is shown in Table 28. The following discussion is in terms of personnel standardized by population and in terms of the ratio of personnel to circulation.

The mean number of professional and clerical staff members and the total mean number of staff members per 10,000 population, as well as the amount of time they worked (i.e. full-time or part-time) are shown in Table 27. The consolidated systems have the smallest mean number of staff members in each of the six categories. The cooperative systems have the greatest mean number of staff in four categories: 1) part-time professional staff; 2) full-time clerical staff; 3) total full-time staff; and 4) total part-time staff. Cooperative systems and non-system libraries have the same mean number of staff members in two categories: 1) full-time professional staff and 2) part-time clerical staff.

Analysis of variance was performed on each of the six categories shown in the table and each result was significant at the .05 level. Complete information about the results of the statistical tests is given in Appendix H. Finding statistical significance in each test adds strength to the evidence presented by the variable.

According to the Model of Public Library Systems, there is one causal factor that may be responsible for the changes that occur in the third

TABLE 27
DEPENDENT VARIABLE 3: PERSONNEL
MEAN NUMBER OF PROFESSIONAL AND CLERICAL STAFF MEMBERS
PER 10,000 POPULATION
1967/68
N = 121

System	Professional Personnel		Clerical Personnel		Total Staff	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
<u>Consolidated</u>						
CMC	0.07	0.002	0.1	0.02	0.2	0.01
EVC	0.09	0.02	0.3	0.04	0.4	0.06
TCC	0.1	0.01	0.03	0.02	0.1	0.03
Category \bar{X}^a	0.1*	0.01*	0.1*	0.02*	0.2*	0.03*
<u>Cooperative</u>						
IVLS	4.0	2.0	2.0	2.0	6.0	4.0
OLS	0.3	2.0	1.0	3.0	1.0	7.0
SJV	1.0	0.07	4.0	0.7	5.0	1.0
Category \bar{X}^a	2.0*	2.0*	2.0*	2.0*	4.0*	5.0*
<u>Non-System</u>						
NH/SMSA	1.0	0.8	1.0	3.0	3.0	4.0
O/SMSA	1.0	2.0	1.0	2.0	3.0	4.0
W/SMSA	3.0	1.0	2.0	2.0	4.0	3.0
Category \bar{X}^a	2.0*	1.0*	1.0*	2.0*	3.0*	4.0*

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

dependent variable (personnel) and it is aid in selection of personnel. Aid in the selection of personnel is offered to member libraries by a central personnel office that has more extensive resources for securing candidates for positions than an individual library. Presumably these resources result in the securing and hiring of a higher level of personnel than would be possible otherwise.

From the responses shown in Chart 6, it may be seen that members of consolidated systems receive the greatest aid in the selection of personnel, and neither the members of cooperative systems nor non-systems have any help in selection of personnel. On the basis of these responses, it is anticipated that the members of consolidated systems will have the greatest mean number of personnel (both professional and clerical), but the analysis of the data shows that consolidated systems have the smallest mean number of full-time and part-time professional and clerical staff members. Cooperative systems have the greatest number of full-time professional and clerical staff members, and the non-system libraries have the second greatest mean number of staff members. It would appear that the causal factor is not acting on the dependent variable in the manner defined by the Model of Public Library Systems.

The results of these tests provide moderate support for the first statement of the hypothesis that members of public library systems are able to give a higher level of service than non-system libraries. In each of the three categories, the cooperative systems have the greatest mean number of personnel; in two categories the cooperative systems and the non-systems have the same mean number of staff members. There is no support for the second statement of the hypothesis that consolidated systems give a higher level of service than cooperative systems, because

CHART 6
DISTRIBUTION OF RESPONSES FOR
CAUSAL FACTOR FIVE:
AID IN SELECTION OF PERSONNEL
n = 21

Scale*	Consolidated Systems	Cooperative Systems	Non-System Libraries
0	1	1	0
1	0	6	7
2	4	0	0

*Scale: 0 = does not know or has not hired anyone
1 = librarian or librarian and board hire personnel
2 = system personnel office secures applicants; member librarian makes final decision

Table should be read as follows: One member of a consolidated system had not hired any personnel; no members of consolidated systems had hired personnel independently. Four member libraries of consolidated systems hired candidates that had been secured by the system personnel office.

the consolidated systems have the least mean number of staff members in each category examined.

After obtaining the results discussed above, the personnel variable was combined with the extent of use variable (circulation) forming a ratio of work performed. In this relationship, circulation serves as a control on the personnel variable. The ratio may serve as an estimate of the efficiency of the staff because the smaller the number of staff members in relation to the amount of work performed, the higher the level of efficiency because fewer staff members are doing more work, as measured by the number of circulations.

The mean number of professional and clerical staff members and the total mean staff members per 10,000 circulations are shown in Table 28. The consolidated systems have the smallest number of personnel in each of the six categories. The cooperative systems and the non-system libraries have the same number of staff in three categories: 1) full-time professional personnel; 2) full-time clerical personnel; and 3) total full-time personnel. The cooperative systems have the greatest number of part-time professional staff members; and the non-systems have the greatest number of part-time clerical staff and total part-time staff.

Analysis of variance was performed on each of the six categories shown in Table 28; four of the six categories had differences in means that were statistically significant at the .05 level. (The significant means are marked with an asterisk in the table and the complete information about the results of the statistical tests is given in Appendix H.) The categories full-time and part-time professional personnel do not have significant differences which indicates that these categories of personnel are working at approximately the same level of efficiency in the nine

TABLE 28
DEPENDENT VARIABLE 3: PERSONNEL
MEAN NUMBER OF PROFESSIONAL AND CLERICAL STAFF MEMBERS
PER 10,000 CIRCULATIONS
1967/68
N = 121

System	Professional Personnel		Clerical Personnel		Total Staff	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
<u>Consolidated</u>						
CMC	0.02	0.0005	0.03	0.004	0.04	0.003
EVC	0.01	0.003	0.04	0.005	0.05	0.008
TCC	0.04	0.003	0.007	0.004	0.03	0.006
Category \bar{X} ^{a)}	0.02	0.002	0.02*	0.004*	0.04*	0.005*
<u>Cooperative</u>						
IVLS	0.7	0.5	0.2	0.3	1.0	0.9
OLS	0.08	0.4	0.2	0.3	0.2	1.0
SJV	0.2	0.02	0.5	0.1	0.8	0.3
Category \bar{X} ^{a)}	0.4	0.4	0.2*	0.3*	0.7*	0.9*
<u>Non-System</u>						
NH/SHSA	0.3	0.1	0.2	0.8	0.6	1.0
O/SHSA	0.2	0.6	0.2	0.5	0.5	1.0
W/SHSA	0.7	0.1	0.2	2.0	0.9	3.0
Category \bar{X} ^{a)}	0.4	0.3	0.2*	1.0*	0.7*	2.0*

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

systems. With full-time and part-time clerical personnel and total staff, the differences are statistically significant, indicating that the consolidated systems are working at a higher level of efficiency because they have the fewest mean staff members per 10,000 circulations.

Clearly the consolidated systems are performing at the highest level of efficiency because they are doing the most work (as measured by the number of circulations) with the fewest staff members. The non-system libraries and the cooperative systems are performing at lower levels of efficiency because they have a greater number of staff members; the non-systems have slightly more staff members which makes them least efficient.

When the data are analyzed in this way, they provide strong support for the second statement of the hypothesis that the consolidated systems give a higher level of service than the cooperative systems or the non-systems. In the consolidated systems both the professional and the clerical personnel are giving more efficient service and this may be considered as a higher level of service.

Dependent variable four: quality of resources.--The measure used for dependent variable four (quality of resources) consists of two sections: an evaluation of holdings in one subject area (American history) and of periodical holdings. Data for both sections were collected by the investigator from the subsample of 30 libraries by means of two checklists. The highest possible score for the American history checklist was 200 and for the periodical checklist, 157. The mean titles held by the nine systems for each checklist are shown in Table 29.

For both checklists, the consolidated systems hold the smallest mean number of titles and the non-system libraries hold the greatest mean number of titles. The cooperative systems hold the second greatest mean

TABLE 29
DEPENDENT VARIABLE 4: QUALITY OF RESOURCES
MEAN AMERICAN HISTORY TITLES AND PERIODICAL TITLES
HELD BY LIBRARIES IN SUBSAMPLE
n = 29

System	Mean American History Titles Held	Mean Periodical Titles Held
<u>Consolidated</u>		
CMC	86	72
EVC	104	96
TCC	55	70
Category Means ^{a)}	79	77
<u>Cooperative</u>		
IVLS	84	78
OLS	75	84
SJV	119	110
Category Means ^{a)}	91	88
<u>Non-System</u>		
NH/SHSA	118	98
O/SHSA	116	89
W/SHSA	98	88
Category Means ^{a)}	110	92

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

number of titles on both checklists.

When analysis of variance was performed on the data collected with these two checklists, the results indicated that the differences among the means were not statistically significant at the critical level selected. (Complete results of the statistical tests are shown in Appendix H.) The differences among the means may have occurred by chance, and consequently the collections of the libraries sampled may be considered to be approximately the same in these two respects.

Two causal factors (in-service training programs and aid in book selection) may be responsible for the changes anticipated to occur in the dependent variable, according to the Model of Public Library Systems. Both causal factors are expected to affect the level of book selection; in-service training programs because oftentimes they include instruction on how to select books, and aid in book selection because it provides professional expertise on a regular basis to guide the selection of books. The distribution of the responses for these two causal factors is displayed in Charts 4 and 5.

The responses for the factor in-service training (Chart 4) indicate that members of consolidated and cooperative systems attended about the same number of in-service training programs, but the non-system libraries attended fewer such programs. The non-system libraries, however, hold the greatest mean number of titles on both checklists.

Members of consolidated systems have the greatest amount of aid in book selection, as shown by the distribution of responses in Chart 5, and members of cooperative systems have the next greatest amount of aid in selection. Non-system libraries have the least amount of aid, but on both checklists they have the greatest mean number of titles.

For both checklists, the causal factor appears to be functioning in a manner inverse to that defined by the Model of Public Library Systems. The Model states that the more in-service training programs attended and the more aid in book selection available, the greater will be the number of checklist titles held by the libraries. The results of the analysis do not follow this pattern.

The two statements of the hypothesis gain no support from the results of these analyses.

Dependent variable five: level of reference service.--The instrument used to collect data about dependent variable five (level of reference service) was a set of ten reference questions distributed to the 30 libraries in the subsample. The questions had been used in two previous investigations and they are designed to measure the performance of reference librarians. The answers to the questions were scored and the highest possible score was 20. The mean scores for each of the nine systems are given in Table 30.

The consolidated systems have the lowest mean score on the performance test, and the non-system libraries have the highest mean score. The cooperative systems have the second highest mean score. When analysis of variance was performed on these data, the results were not statistically significant at the critical level selected. (Complete results of the statistical tests are shown in Appendix H.) The differences that appear among the three types of systems thus may be accounted for by chance and it may be said that the level of reference service offered by the nine systems was approximately the same, according to the results of this test.

The Model of Public Library Systems states that two causal factors (in-service training programs and aid in book selection) may be responsible

TABLE 30

DEPENDENT VARIABLE 5: LEVEL OF REFERENCE SERVICE
 MEAN SCORES ON PERFORMANCE ON REFERENCE QUESTIONS
 n = 29*

System	Mean Score
<u>Consolidated</u>	
CMC	11.6
EVC	14.5
TCC	12.3
Category Mean ^{a)}	12.6
<u>Cooperative</u>	
IVLS	11.4
OLS	11.0
SJV	16.0
Category Mean ^{a)}	12.6
<u>Non-System</u>	
NH/SMSA	16.8
O/SMSA	14.0
W/SMSA	12.7
Category Mean ^{a)}	14.7

*n = 29 because the Headquarters of the Onondaga Library System does not maintain a reference staff

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

for the changes that are expected to occur in the dependent variable. The first factor (in-service training programs) is expected to cause a change in the dependent variable because in-service training programs often include instruction on how to improve the reference service. The distribution of responses given in Chart 4 shows that about the same number of members of consolidated and cooperative systems attended the in-service training programs and the non-system libraries attended fewer such programs. The non-system libraries have the highest mean score on the performance test and the cooperative and consolidated systems have the second and third highest mean scores respectively.

Aid in book selection is the second factor and it is expected to affect the dependent variable by means of its role in the building of a higher level collection which in turn enables the reference librarian to give a higher level of reference service to users. According to the Model, it is expected that libraries receiving the greatest amount of aid in selection of materials will also have the highest mean score on the performance test.

The responses displayed in Chart 5 show that the consolidated systems had by far the greatest amount of aid in book selection and the cooperative systems had the second greatest amount of aid in selection, but the non-system libraries received no aid in selection. The non-system libraries, however, have the highest mean score on the performance test.

Neither of the two causal factors appears to be acting on the dependent variable in the manner defined by the Model. The two statements of the hypothesis receive no support from the results of these analyses.

Dependent variable six: access to libraries' resources.--The sixth dependent variable, access to libraries' resources, consists of two sections:

1) the number of hours per week the libraries are open; and 2) provisions for area residents to borrow books from and return them to any member library in the system. Data for these measures were collected from all the libraries in the nine systems (N = 138).

The mean number of hours the libraries were open during a typical week in 1968 are shown in Table 31. The consolidated systems were open a mean of 45.48 hours per week which is the greatest mean number of hours open. The cooperative systems were open a mean of 34.81 hours per week, the second greatest number of mean hours open. The non-system libraries were open a mean of 34.72 hours per week. Although the cooperative systems and the non-systems were open nearly the same mean number of hours per week, the consolidated systems were open ten hours per week more.

The difference among the means was tested with the analysis of variance and it was found to be statistically significant at the critical level selected. Complete information about the results of the statistical test is given in Appendix H.

Responses serving as indicators of the provision for reciprocal use of materials by the libraries are shown in Table 32. Questions used to collect data for this measure were phrased in such a way as to obtain a yes/no answer. In coding the responses, a "yes" was given a value of 1 and a "no" a value of 0.

In Table 32 it may be seen that consolidated systems allow area residents to borrow from all member libraries in the system; to a large extent the cooperative systems and the non-system libraries also allow use of their materials by any area resident. The consolidated systems permit books to be returned to any member library in the system, but the cooperative systems and the non-system libraries do not permit this to

TABLE 31

DEPENDENT VARIABLE 6: ACCESS TO LIBRARIES' RESOURCES
 MEAN NUMBER OF HOURS LIBRARIES ARE OPEN PER WEEK
 1968
 N = 127

System	Mean Hours Open
<u>Consolidated</u>	
CHC	52.47
EVC	50.11
TCC	37.76
Category Mean ^{a)}	45.48*
<u>Cooperative</u>	
IVLS	30.83
OLS	35.44
SJV	54.00
Category Mean ^{a)}	34.81*
<u>Non-System</u>	
NH/SMSA	46.14
O/SMSA	37.63
W/SMSA	24.80
Category Mean ^{a)}	34.72*

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

TABLE 32
 DEPENDENT VARIABLE 6: ACCESS TO LIBRARIES' RESOURCES
 PROVISION FOR RECIPROCAL USE
 N = 81

System	Any Area Resi-	Books May Be
	dent May Borrow	Returned to
	Materials	Any Library
	Yes = 1	
	No = 0	
	Mean Values	
<u>Consolidated</u>		
CMC	0.067	0.067
EVC	0.111	0.111
TCC	0.053	0.053
Category Mean ^{a)}	1.000	1.000*
<u>Cooperative</u>		
IVLS	0.852	0.481
OLS	1.000	1.000
SJV	1.000	1.000
Category Mean ^{a)}	0.979	0.750*
<u>Non-System</u>		
NH/SMSA	0.818	0.182
O/SMSA	1.000	0.125
W/SMSA	0.933	0.067
Category Mean ^{a)}	0.912	0.121*

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

the same extent as the consolidated systems.

When the means of these two groups of data were subjected to analysis of variance, it was found that the results of the test on data regarding the borrowing of materials were not statistically significant. The differences could have happened by chance and thus it may be said that the libraries are approximately the same in allowing area residents to borrow materials from any library in the system. The means of the data concerning the return of materials were found to be statistically significant at the critical level selected.

The causal factor responsible for the changes in the sixth dependent variable is the administrative structure of the systems. The Model of Public Library Systems does not specify a separate causal factor as it did with the first five dependent variables.

The results of these tests provide strong support for both statements of the hypothesis. In both the number of hours the libraries are open and the provisions for reciprocal use of materials, the system libraries clearly offer a higher level of service than the non-system libraries. Since the consolidated systems are open the greatest mean number of hours per week and provide for the most reciprocal use of materials, they offer a higher level of service than either cooperative systems or the non-system libraries. The statistical significance found in these tests gives added strength to the support of the hypothesis.

Dependent variable seven: financial resources.--Operating expenditures of the libraries serve as indicators of the seventh dependent variable (financial resources). Data collected for the measure are divided into four categories of operating expenditures: 1) books and other materials;

2) personnel; 3) other expenditures; and 4) total operating expenditures. Information for three fiscal years (1967/68, 1966/67, and 1965/66) was collected from all the libraries in the nine systems (N = 138). The data were put on a per capita basis and the standardized values are used in the analysis of the data and in the accompanying discussion.

Mean per capita operating expenditures in dollars are shown in Table 33 for the four categories of expenditures during each of the three fiscal years examined. In the first category of expenditures (books and other materials) the cooperative systems have the greatest mean per capita expenditures during each of the three time periods examined. During the two most recent fiscal years, the consolidated systems have the second greatest mean per capita expenditures in the category, but in the earliest fiscal year (1965/66), the non-system libraries have the second greatest mean per capita operating expenditures.

In the second category, expenditures for personnel, the consolidated systems have the greatest mean per capita expenditure and the cooperative systems have the second greatest mean per capita expenditure during each of the three periods of time examined. This pattern is the same in the category of "other expenditures"; the consolidated systems have the greatest mean per capita expenditures and the cooperative systems have the second greatest mean per capita expenditures.

In the final category (total expenditures) the consolidated systems had the greatest mean per capita expenditures during 1967/68 and 1965/66. The cooperative systems had the second greatest mean per capita expenditures. In 1967/68 the cooperative systems had the greatest mean per capita expenditures and the consolidated systems the second greatest

TABLE 33
DEPENDENT VARIABLE 7: FINANCIAL RESOURCES
MEAN PER CAPITA OPERATING EXPENDITURES
1967/68, 1966/67, 1965/66
N = 127

System	1967/68				1966/67				1965/66			
	Books and Other Materials	Per-sonnel	Other Expenditures	Total Expenditures	Books and Other Materials	Per-sonnel	Other Expenditures	Total Expenditures	Books and Other Materials	Per-sonnel	Other Expenditures	Total Expenditures
Dollars Per Capita Spent												
<u>Consolidated</u>												
CNC	0.504	1.497	0.267	2.267	0.435	1.379	0.270	2.084	0.411	1.366	0.261	2.038
EVC	0.536	2.212	0.792	3.540	0.550	1.905	0.822	3.077	0.452	1.791	0.500	2.743
TOC	0.375	2.123	0.862	3.360	0.391	1.971	0.634	2.996	0.281	1.945	0.664	2.927
Category \bar{X} ^{a)}	0.453*	1.523*	0.640*	3.017*	0.439	1.751*	0.504	2.695	0.362	1.711*	0.489	2.578
<u>Cooperative</u>												
IVLS	0.572	1.385	0.604	2.730	0.539	1.253	0.594	2.590	0.502	1.050	0.574	2.328
OLS	0.773	1.121	0.273	2.264	0.616	0.990	0.278	2.169	0.583	0.860	0.243	1.688
SVV	0.765	3.572	0.621	4.959	0.759	3.169	0.678	5.480	0.740	3.128	0.607	4.875
Category \bar{X} ^{a)}	0.664*	1.508*	0.486*	2.785*	0.589	1.350*	0.488	2.727	0.555	1.190*	0.458	2.312
<u>Non-System</u>												
NH/SMSA	0.611	1.780	0.518	2.909	0.648	1.765	0.572	2.985	0.600	1.669	0.621	2.891
O/SMSA	0.210	0.614	0.117	0.941	0.403	0.909	0.192	1.503	0.396	0.944	0.237	1.577
W/SMSA	0.295	0.645	0.322	1.455	0.244	0.576	0.358	1.488	0.439	0.649	0.367	1.574
Category \bar{X} ^{a)}	0.377*	1.005*	0.337*	1.804*	0.412	1.039*	0.388	1.976	0.481	1.048*	0.419	2.001

a) Category means were tested for statistical significance using analysis of variance. Means significant at the .05 level are marked with an asterisk (*).

mean per capita expenditures. The non-system libraries had the smallest mean per capita expenditures during each period.

When analysis of variance was performed on the data collected for the four categories of the dependent variable, six of the twelve tests were found to show statistical significance at the critical level selected. The statistically significant tests are marked with an asterisk in the table and the complete information about the results of the tests is given in Appendix H.

The causal factor responsible for the changes in the different categories of the seventh dependent variable is the administrative structure of the systems, as was the case with the sixth dependent variable. The Model of Public Library Systems specifies this direct relationship between the independent variable and the dependent variable.

The results of these tests provide strong support for both statements of the hypothesis. In every category of the variable, the system libraries have a greater mean per capita expenditure than the non-system libraries, indicating that the system libraries have the greater financial resources necessary to provide a higher level of service. In two-thirds of the categories, the consolidated systems have greater per capita expenditures than either the cooperative systems or the non-system libraries. These results support the second statement of the hypothesis to the extent that the consolidated systems have greater financial resources to provide a higher level of service.

Results of analyses of dependent variables considered together.--The results of the analysis of several of the dependent variables were examined together to determine if the results occurred in the manner expected. Since the dependent variable financial resources was made up of expenditures for

books and other materials and expenditures for personnel, the results of the analyses of these two parts of the variable could be considered in conjunction with the results of the analyses of the two dependent variables extent of holdings and personnel. It is reasonable to expect that when there are greater expenditures for books and other materials and greater expenditures for personnel, there will also be more volumes added to the collections and more staff members. The results of the analyses of the three dependent variables were examined together to determine if the results occurred in this manner. The standardized values of the expenditures and extent of holdings variables (i.e. mean per capita values) and the mean number of personnel per 10,000 population are used in the analyses and in the following discussion of them.

The results of the analysis of the expenditures for books and other materials in 1967/68 are considered with respect to the total volumes added by the libraries during the same period; the two groups of results are shown in Table 34. These results show that the cooperative systems had the greatest expenditures for books and other materials and also that they added the greatest number of volumes. These results occur in the manner anticipated.

The consolidated systems had the second greatest expenditures for books and other materials, but they added the third greatest number of volumes. The non-system libraries had the least expenditures for books and other materials, but they added the second greatest number of volumes. These results do not occur as expected. No reason for these results occurring as they do can be suggested.

TABLE 34
RESULTS OF ANALYSES OF EXPENDITURES
FOR BOOKS AND OTHER MATERIALS
AND TOTAL VOLUMES ADDED
1967/68

Systems	Mean Per Capita Expenditures for Books and Other Materials (in dollars)	Total Mean Vol- umes Per Capita Added to Collections
Consolidated	0.453*	0.006*
Cooperative	0.664*	0.129*
Non-system	0.377*	0.086*

* Category means were tested for statistical significance using analysis of variance; means marked with an asterisk (*) were found to be significant at the .05 level.

The results of the analysis of the expenditures for personnel are considered along with the results of the analyses of personnel, and the groups of results are shown in Table 35. In Table 35 it may be seen that the consolidated systems had the greatest expenditures for personnel, but in no category did they have the greatest number of staff members. The cooperative systems had the second greatest expenditures for personnel, and in four categories they had the greatest number of personnel. In two categories they had the same number of staff members as the non-system libraries. The non-system libraries had the smallest expenditures for personnel, but in four of the six categories they had the second greatest number of personnel.

The results of the analyses of the expenditures for personnel and the number of staff members do not occur as anticipated. No reason for this lack of concurrence can be suggested at this time.

TABLE 35
RESULTS OF ANALYSES OF EXPENDITURES
FOR PERSONNEL AND NUMBER OF
PROFESSIONAL AND CLERICAL STAFF PER 10,000 POPULATION
1967/68

Systems	Mean Per Capita Expendi- tures for Personnel (in dollars)	Mean Pro- fessional Personnel Per 10,000		Mean Clerical Staff Per 10,000 Population		Mean Total Staff Per 10,000 Population	
		Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Consolidated	1.923*	0.1*	0.01*	0.1*	0.02*	0.2*	0.03*
Cooperative	1.508*	2.0*	2.0 *	2.0*	2.0 *	4.0*	5.0*
Non-system	1.005*	2.0*	1.0 *	1.0*	2.0*	3.0*	4.0*

* Category means were tested for statistical significance using analysis of variance; means marked with an asterisk (*) were found to be significant at the .05 level.

Alternative Hypotheses

Four descriptive variables presented and discussed in Chapters IV through VI serve as possible alternative hypotheses that may explain the differences found in the dependent variable (level of service offered by the member libraries). The four variables are: 1) population served by the system; 2) wealth of the areas, as measured by the per capita assessed valuation of property in the central city of the SMSA; 3) the educational level of the population served, as indicated by the median years of school completed by the residents; and 4) book resources of the systems.

The data for each variable were grouped into three categories according to the administrative structure of the system, i.e. consolidated and cooperative systems and non-system libraries. Analysis of variance was performed on each variable to determine if there was a statistically significant difference among the three means. The results of each of the four analyses are discussed below.

Descriptive variable one: population served.--The size of the population served by the system is the first descriptive variable that may explain the differences in the dependent variable. The systems used in the study were selected from the population of systems located in metropolitan areas of 100,000 to 500,000 population. Selection of the sample in this manner meant that the systems were located in medium-sized metropolitan areas of approximately the same size.

The population served by the nine systems is shown in Table 36. When analysis of variance was calculated on the three groups of populations, it was found that the F ratio was not significant at the .05 level. This result indicates that the differences might have occurred by chance, and

TABLE 36
POPULATION SERVED BY SIX SYSTEMS
AND THREE NON-SYSTEM LIBRARIES
1967/68

System	Number of Persons Served	
<u>Consolidated Systems</u>		
Public Library of Charlotte and Mecklenburg County	341,000	
Evanville and Vanderburgh County Public Library	168,000	
Tulsa City-County Library System	412,000	
	TOTAL	921,000
	MEAN	307,000
<u>Cooperative Systems</u>		
Illinois Valley Library System	348,694	
Onondaga Library System	481,041	
San Joaquin Valley Library System	550,794	
	TOTAL	1,381,182
	MEAN	460,394
<u>Non-System Libraries</u>		
New Haven SMSA	379,910	
Omaha SMSA	466,478	
Wichita SMSA	337,679	
	TOTAL	1,175,067
	MEAN	391,689

F = 1.75
df = 2 and 6
pr > .25

it may be concluded that the populations served by the nine systems are approximately the same size.

Descriptive variable two: wealth of the area.--The wealth of the area served by the system, as measured by the per capita assessed valuation of property in the central city of the SMSA in which the system is located, is the second variable that might account for the differences in the dependent variables. If the per capita assessed valuation is higher in one area than another, more money may be available for library services and a higher level of service will be possible regardless of the administrative structure of the system.

The per capita assessed valuations of property in the nine central cities are shown in Table 37. When the analysis of variance was calculated, the F ratio was .053 which is significant at the .949 level. This result indicates that the differences may have occurred by chance, and the per capita assessed valuation of property in the central cities are approximately the same.

Descriptive variable three: educational level.--The educational level of the areas served by the nine systems was measured in terms of the median number of years of school completed by the residents of the area. This variable serves as the third descriptive variable that might act as an alternative explanation for the differences in the dependent variable. It is generally recognized that persons with more education use the library more than those with less education. Presumably persons who use the library more require a higher level of service than those who use it only occasionally.

The median number of school years completed by the residents of the nine areas are shown in Table 38. When the analysis of variance was calculated on the data, the F ratio was .649 which is significant at the

TABLE 37

ASSESSED PER CAPITA VALUATION OF PROPERTY
FOR CENTRAL CITIES OF THE NINE SMSA'S
WITH 1960 POPULATION

Central Cities	Assessed Per Capita Valuation (In Thou- sands of Dollars)
<u>Consolidated Systems</u>	
Charlotte, North Carolina	4,504
Evansville, Indiana	1,581
Tulsa, Oklahoma	1,580
<u>Cooperative Systems</u>	
Peoria, Illinois	5,257
Syracuse, New York	1,918
Fresno, California	1,749
<u>Non-System Libraries</u>	
New Haven, Connecticut	3,211
Omaha, Nebraska	2,647
Wichita, Kansas	1,860

F = .053

df = 2 and 6

pr = .949

Source: U.S. Bureau of the Census. Census of Govern-
ments, 1967. Vol.2: Taxable Property Values.
Washington, D.C.: Government Printing Office,
1968.

TABLE 38

MEDIAN SCHOOL YEARS COMPLETED BY POPULATION SERVED BY
SIX SYSTEMS AND THREE NON-SYSTEM LIBRARIES
1967

System	Median School Years Completed
For all persons 14 years old and over	11.8*
<u>Consolidated Systems</u>	
Public Library of Charlotte and Mecklenburg County	11.6
Evansville and Vanderburgh County Public Library	10.2
Tulsa City-County Library System	12.1
<u>Cooperative Systems</u>	
Illinois Valley Library System	10.7
Onondaga Library System	11.7
San Joaquin Valley Library System	9.7
<u>Non-System Libraries</u>	
New Haven SMSA	10.8
Omaha SMSA	11.9
Wichita SMSA	11.8

F = .649
df = 2 and 6
pr > .25

Sources: U.S. Bureau of the Census. County and City Data Book,
1967. Washington, D.C.: U.S. Government Printing
Office, 1967.

*Sources: U.S. Bureau of the Census. Current Population Reports:
Population Characteristics - Educational Attainment,
March, 1967, Series P-20, no. 169, February 9, 1968,
Washington, D.C.: U.S. Government Printing Office,
1968.

.562 level. This result indicates that the differences might have occurred by chance and the residents of the nine areas have completed approximately the same number of years of school.

Descriptive variable four: book resources.--The final variable that may be the cause of the changes in the dependent variables is the book resources of the systems. This variable has two parts: 1) the book resources of the central library and 2) the total resources of the system. Presumably if the central library has more volumes and the member libraries of the system have access to them, the member libraries will be able to offer a higher level of service because they have access to more extensive resources. Also, if the total holdings of the system are greater, the member libraries will be able to offer a higher level of service because more extensive resources are available to them.

The holdings of the central libraries and the total system holdings are shown in Table 39. The data were tested for significant differences by the analysis of variance. The *F* ratio obtained was .633 which is significant at the .563 level. The total system holdings were tested and the resulting *F* ratio was 0.15 which is significant at the .985 level. Since the differences that occurred in both parts of this variable might have happened by chance, it may be said that the holdings of the central libraries and the total system holdings are approximately the same in the nine systems.

Conclusion.--Since the results of the analyses of each of the four variables do not show statistical significance at the .05 level, it is possible to accept the null hypothesis that there is no difference in the three groups of systems with respect to these four variables. The four

TABLE 39

PER CAPITA VOLUMES HELD BY THE NINE CENTRAL LIBRARIES
AND THE TOTAL SYSTEM HOLDINGS FOR THE
SIX SYSTEMS AND THREE NON-SYSTEM LIBRARIES
1967/68

System	Per Capita Volumes Held by Central Library	Total System Holdings (Per Capita Volumes)
<u>Consolidated Systems</u>		
Public Library of Charlotte and Mecklenburg County	0.715	0.861
Evansville and Vanderburgh County Public Library	1.013	2.657
Tulsa City-County Library System	0.598	1.069
<u>Cooperative Systems</u>		
Illinois Valley Library System	0.976	2.164
Onondaga Library System	0.845	1.113
San Joaquin Valley Library System	1.120	1.526
<u>Non-System Libraries</u>		
New Haven Public Library and SMSA	1.180	2.186
Omaha Public Library and SMSA	0.861	1.199
Wichita Public Library and SMSA	0.763	1.120
<div> <div> F = .633 df = 2 and 6 pr. = .563 </div> <div> F = .015 df = 2 and 6 pr. = .985 </div> </div>		

variables may not serve as possible alternative explanations for the differences in the dependent variable because the systems may be considered to be approximately the same in these four respects. The four variables may be used as controls.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

The purpose of this study has been to investigate the relationship between the type of administrative structure of public library systems and the level of service offered by the member libraries of the systems. A descriptive study was selected for the investigation, and a sample of nine public library systems, including three consolidated systems, three cooperative systems, and three non-system libraries, was chosen.

A Model of Public Library Systems, consisting of three parts, was constructed to guide the investigation. The three parts of the Model are the independent variable, the dependent variable, and the causal factor. The three types of administrative structure of systems (consolidated, cooperative, and non-system) serve as the independent variable in the study. The level of service offered by the member libraries is the dependent variable; seven measures of the dependent variable are defined by the Model: extent of holdings, use of holdings, personnel, quality of resources, level of reference service, access to libraries' resources, and financial resources.

The benefits systems offer to member libraries act as the causal factor which is expected to be responsible for the changes that occur in the dependent variable. Six measures of the causal factor are used in the

study; communication links, in-service training programs, aid in book selection, access to more extensive resources, aid in selection of personnel, and the maintenance of union lists of holdings.

Data for the variables were collected by mail questionnaires from all the libraries making up the nine library systems ($N = 138$). In addition, data were collected from a subsample of libraries ($n = 30$) by the investigator during field visits; checklists and structured interviews were used to gather these data.

The data were analyzed and the results were examined to determine the amount of support they provide for the two statements of the hypotheses: 1) public libraries that are members of systems will offer a higher level of service than public libraries that do not belong to a system; and 2) members of consolidated systems will give a higher level of service than either libraries that belong to cooperative systems or libraries that do not belong to systems. In both hypotheses, the cause for the difference in the level of service is the benefits the systems offer to their member libraries.

This chapter consists of five sections: 1) a summary of the results of the analyses of the data; 2) a statement of the assumptions and limitations that apply to the findings; 3) the conclusions that are drawn from the results of the analyses; 4) reasons for the failure of the Model of Public Library Systems; and 5) suggestions for further research.

Summary of the Results of Analyses of Data

A summary of the results of the analyses of the data are reported below. The findings are discussed in three groups; the first group consists of the results of the analyses of the dependent variable; the second group is the results of the analyses of the causal factor. In the third group, the results of the analyses of the dependent variable and the causal factor are considered together; and a summary of the estimates of the interaction between the two groups of results is presented. Within each of the three groups, the results are discussed according to the order of the Model of Public Library Systems.

The Dependent variables.--The results of the analyses performed on the seven dependent variables are reported below.

1. Extent of holdings

a) Consolidated systems added the smallest mean number of volumes per capita during the three fiscal years examined. Cooperative systems added the greatest mean number of volumes per capita during the last two fiscal years examined. Non-system libraries added the second greatest mean number of volumes per capita.

b) Consolidated systems held the smallest mean number of volumes per capita at the end of 1967/68. Cooperative systems held the greatest mean number and non-system libraries held the second greatest mean number of volumes per capita.

2. Use of holdings

Cooperative systems circulated the greatest mean number of volumes per capita to adults and children during each of the three fiscal years studied. Consolidated systems circulated the second greatest mean number of volumes in 1967/68 to children and to all borrowers, but in all other

cases they ranked third in the mean number of circulations per capita. Except in the two instances noted above, non-system libraries ranked second in the mean number of circulation transactions per capita; in the two instances noted, they ranked third.

3. Personnel

a) Consolidated systems had the least mean number of staff per 10,000 population. Cooperative systems have the greatest mean number and non-systems have the second greatest mean number of staff per 10,000 population.

b) Consolidated systems have the fewest mean staff members per 10,000 circulations; and cooperative systems have the next smallest mean number of staff per 10,000 circulations. The non-system libraries have the greatest mean number of staff per 10,000 circulations.

4. Quality of resources

a) Non-system libraries held the greatest mean number of titles on the American history checklist. Cooperative systems held the second greatest mean number of titles and consolidated systems, the smallest mean number of titles.

b) Non-system libraries held the greatest mean number of periodical titles on the checklist. Cooperative systems ranked second and consolidated systems ranked third in the mean number of periodical titles held.

5. Level of reference service

The non-system libraries had the highest mean score on the test of reference performance. Cooperative systems ranked second and consolidated systems third in the mean score on the test.

6. Access to libraries' resources

a) Members of consolidated systems are open the greatest mean number

of hours per week. Cooperative systems are open the second greatest mean number of hours per week and the non-system libraries are open the fewest mean hours per week.

b) Members of consolidated systems make the greatest provision for users to borrow and return books to any library in the system. Cooperative systems rank second and non-system libraries rank third in provision of reciprocal use of library materials.

7. Financial resources

a) Cooperative systems had the greatest per capita expenditures for books and other materials during the three fiscal years studied. For the last two fiscal years, consolidated systems had the second greatest per capita expenditures and non-system libraries had the least per capita expenditures for books and other materials.

b) Consolidated systems had the greatest per capita expenditures for personnel during all three fiscal years examined. Cooperative systems had the second greatest per capita expenditures and non-system libraries, the least per capita expenditures for personnel.

c) Consolidated systems had the greatest per capita expenditures for other expenses during each of the three fiscal years examined. Cooperative systems had the second greatest per capita expenditures and non-system libraries the least per capita expenditures for other expenses.

d) Consolidated systems had the greatest per capita total expenditures for 1967/68 and 1965/66; during 1966/67, they ranked second in total per capita expenditures. Cooperative systems ranked second during 1967/68 and 1965/66 and first in 1966/67. The non-system libraries ranked third in total per capita expenditures during each of the three years.

The causal factors.--The results of the analyses of the data from the six causal factors are presented below.

1. Communication links

Consolidated systems had the greatest number of different communication links and cooperative systems had the second greatest number. Non-system libraries had the fewest number of different communication links.

2. In-service training programs

Members of consolidated and cooperative systems attended about the same number of in-service training programs. Non-system libraries attended fewer in-service training programs.

3. Aid in book selection

Members of consolidated systems received the greatest aid in book selection. Members of cooperative systems and non-system libraries had about the same amount of aid in selection; in both cases the aid was advisory in nature.

4. Access to more extensive resources

Member libraries of cooperative systems have access to more extensive resources and borrow from them on a regular basis to a greater extent than members of consolidated systems or non-system libraries.

5. Aid in selection of personnel

Members of consolidated systems receive the greatest aid in the selection of personnel. Neither the cooperative systems nor the non-system libraries have any help in the selection of personnel.

6. Maintenance of union lists of holdings

The three consolidated systems maintained union lists of system holdings; the cooperative systems and the non-system libraries have only partial lists of holdings.

The causal factor and the dependent variables.--The results of the analyses of the causal factors and the dependent variables are considered together according to the manner specified in the Model of Public Library Systems. Estimates of the extent of the relationship between the two variables are presented.

1. Communication links

The number of communication links was expected to have an effect on both the extent of holdings and the use of holdings. The relationship with the extent of holdings was expected to be an inverse one, i.e. the greater the number of communication links, the fewer the holdings.

Consolidated systems had the greatest number of communication links and they added and held the least mean number of volumes per capita. Cooperative systems had the second greatest number of communication links, but they added and held the greatest mean number of volumes per capita. Non-system libraries had the fewest communication links, but they added and held the second greatest mean number of volumes per capita. The relationship appears to exist for the consolidated systems, but not for the cooperative systems or the non-system libraries.

With the second dependent variable (use of holdings), the number of communication links was expected to have a direct effect, i.e. the more communication links, the greater the circulation. The relationship does not appear to function as anticipated because although the consolidated systems have the greatest number of communication links, they have the least mean per capita circulation transactions in all but two cases (circulation to children and total circulation, 1967/68) when they rank second.

2. In-service training programs

The in-service training programs attended by the staff members of the libraries was expected to produce a change in two dependent variables-- the use of holdings and the quality of the resources. In both cases it was anticipated that greater attendance at in-service training programs would result in greater use of holdings and a higher quality of resources. Members of consolidated and cooperative systems attended about the same number of in-service training programs. Cooperative systems had the greatest mean per capita circulation during each of the three fiscal years, but the non-system libraries (whose staff attended the fewest in-service training programs) had the second greatest mean per capita circulation during the three years. Consolidated systems (whose staff members attended about as many programs as members of cooperative systems) had the smallest mean per capita circulation during each of the three fiscal years. The causal factor does not appear to operate on the dependent variable in the manner anticipated.

This causal factor was expected to have an effect on the quality of the resources. According to the results of the statistical tests, the differences that occurred in the two measures of quality of the resources could have occurred by chance. Thus, it is not possible to say that the causal factor had a role in causing the slight differences that appear in the measures of the quality of the resources.

3. Aid in book selection

Aid in book selection, the third causal factor, was anticipated to operate on the following dependent variables: 1) use of holdings; 2) quality of the resources; and 3) level of reference service. Provision of aid in book selection was anticipated to result in greater use of resources and

a higher quality of resources and a higher level of reference service.

Members of the consolidated systems received the greatest aid in book selection, but they had the least mean number of per capita circulations except for circulation to children and total circulations in 1967/68 when they ranked second. The members of the cooperative systems and the non-system libraries received about the same amount of aid in book selection (all of the aid was advisory in nature). The cooperative systems had the greatest mean per capita circulation transactions during each of the three fiscal years examined. In most instances the non-system libraries ranked second in mean number of per capita circulation transactions. Aid in book selection does not appear to have the anticipated effect on the use of holdings, as measured by the mean per capita circulation transactions.

The results of the statistical tests conducted on the data collected for the two dependent variables (quality of resources and level of reference service) indicate that the differences that occur in the two variables could have occurred by chance. Thus, it cannot be said that aid in book selection was responsible for the slight differences that appear in these two dependent variables.

4. Access to more extensive resources

Access to more extensive resources (i.e. book pools) was expected to have an effect on two dependent variables: 1) extent of holdings and 2) use of holdings.

The relationship of the causal factor with the first dependent variable (extent of holdings) was expected to be an inverse one; the greater the access to more extensive resources, the fewer the resources in the library itself. Members of cooperative systems have access to more extensive resources (book pools) and borrow collections from them on a

more regular basis than the non-system libraries or the consolidated systems. During the last two fiscal years examined, the cooperative systems added the greatest mean number of volumes per capita; and at the end of 1967/68 they held the greatest mean number of volumes per capita. The non-system libraries added the second greatest mean number of volumes per capita during the last two fiscal years; and at the end of the 1967/68 fiscal year they held the second greatest mean number of volumes per capita. Consolidated systems ranked third in terms of mean volumes per capita added and held.

The relationship between the causal factor and the first dependent variable does not appear to occur as anticipated.

The causal factor was expected to have a direct effect on the second dependent variable (use of holdings) and the greater the access to more extensive resources the greater would be the use of the holdings. Members of cooperative systems have access to more extensive resources (book pools) and borrow from them on a more regular basis than the non-system libraries or the consolidated systems. During each of the last three years examined, the members of cooperative systems had the greatest mean per capita circulation. The non-system libraries had the second greatest mean per capita circulations and the members of consolidated systems ranked third in all but two cases, circulation of children's materials and total circulation in 1967/68, when they ranked second.

It appears that access to more extensive resources has the anticipated effect on the use of holdings for all three types of systems.

5. Aid in the selection of personnel

Aid in selection of personnel was expected to operate on one dependent variable: personnel. Member libraries that receive aid in the selection

of personnel were expected to have a greater number of professional and clerical staff members who worked full-time than member libraries that did not have this benefit. Only the members of the consolidated systems received aid in selection of personnel, but in each category examined they had the least mean number of staff members per 10,000 population and per 10,000 circulations. The cooperative systems and the non-system libraries have no aid in selection of personnel, but they had the greater mean number of personnel per 10,000 population and per 10,000 circulations in all the categories. Aid in selection of personnel does not appear to produce the changes defined by the Model of Public Library Systems.

6. Maintenance of union lists of system holdings

The final causal factor, maintenance of union lists of holdings, was expected to cause a change in two dependent variables: 1) extent of holdings and 2) use of holdings. The increase in accessibility provided by the union lists was expected to result in fewer holdings, but greater use of holdings.

Only the consolidated systems maintained complete union lists of system holdings, and they ranked third in the mean number of volumes per capita added and held. The cooperative systems and the non-system libraries had about the same number of partial union lists; members of cooperative systems ranked first in the mean number of volumes per capita added and held. Non-system libraries ranked second in the mean number of volumes per capita added and held. The relationship between the maintenance of union lists of system holdings and the extent of holdings appears to occur as expected.

Although the consolidated systems maintain complete union lists of system holdings, they have the least mean circulation per capita of the

three systems. The cooperative systems and the non-system libraries have about the same number of partial union lists, and the cooperative systems ranked first in mean per capita circulation transactions and the non-system libraries ranked second. With the data from the second variable, the causal factor does not appear to operate as anticipated.

The Model of Public Library Systems includes two dependent variables in which changes were expected to occur as a result of the direct action of the independent variable on them. These two variables are access to libraries' resources and financial resources.

Access to libraries' resources is divided into two parts: 1) the mean number of hours the libraries are open per week and 2) the provisions for reciprocal use of materials. According to the Model, it was anticipated that the consolidated systems would be open the greatest mean number of hours per week and would make the greatest provisions for reciprocal use of materials. Results of the analyses show that consolidated systems are open the greatest mean number of hours per week and make the most provision for reciprocal use of materials. The cooperative systems rank second and the non-system libraries rank third in both parts of the variable. The differences found in the dependent variable follow the Model of Public Library Systems.

The second dependent variable, financial resources, is divided into four parts: expenditures for 1) books and other materials; 2) personnel; 3) other expenditures; and 4) total expenditures. It was anticipated that consolidated systems would have the greatest financial resources and cooperative systems the second greatest financial resources.

For the categories "personnel" and "other expenditures" the consolidated systems had the greatest mean per capita and the cooperative systems

had the second greatest mean per capita expenditures during each of the three fiscal years examined. Cooperative systems had the greatest mean and consolidated systems the second greatest mean per capita expenditures for the category "books and other materials" for 1967/68 and 1966/67. For "total expenditures" the consolidated systems had the greatest mean and the cooperative systems, the second greatest mean per capita expenditures during 1967/68 and 1965/66. The results of these analyses occur as defined by the Model of Public Library Systems.

Assumptions and Limitations

1. It is assumed that the libraries in the subsample ($n = 30$) are representative of all the libraries in the nine systems ($N = 138$).
2. Four factors produce limitations on the data used in this study; they are the manner in which the sample was drawn, the relatively small size of the sample, the nature of the public library systems from which the data were collected, and the nature of the data themselves. Due to these limitations, the conclusions drawn can be applied only to the nine library systems in this sample.
3. Only representative measures of the three parts of the Model of Public Library Systems have been included in the study. The conclusions about the relationships among the three parts of the Model must be drawn on the basis of these measures only; generalizations to other measures of the three parts of the Model are not permitted.
4. Data from the causal factor could not be analyzed statistically because of the small number of responses.

Conclusions

In Chapter II the following two statements of the hypothesis were presented for testing:

Statement One

Other things being equal, public libraries that belong to systems will provide a higher level of service than public libraries that do not belong to systems because of the benefits systems offer to their member libraries.

Statement Two

Other things being equal, public libraries that belong to consolidated systems will give a higher level of service than either public libraries that belong to cooperative systems or non-system libraries because of the benefits consolidated systems offer their member libraries.

The data collected for the study were expected to provide evidence to support the two statements of the hypothesis. The results of the analyses of the data provide somewhat less support than was anticipated; and there is more evidence supporting the first statement of the hypothesis (public libraries that belong to systems will provide a higher level of service than public libraries that do not belong to systems) than the second statement of the hypothesis (public libraries that belong to consolidated systems will give a higher level of service than either public libraries that belong to cooperative systems or do not belong to systems.) On the basis of these results, it may be concluded that in the nine systems

examined membership in a public library system is more important to the level of service offered by the member libraries than the specific type of system to which the library belongs.

Since the strongest differences occur in the dependent variable when the independent variable acts on it directly, it is suggested that in these nine systems the factor hypothesized to be the cause of the changes in the dependent variable is not responsible for the differences that occur in the data. Using one causal factor to explain the differences that occur in the dependent variable is a simplistic approach to the problem of causality because it is much more likely that the cause will be composed of a number of factors acting either singly or in combination. In this study, the simplified approach to causality can be justified by the exploratory nature of the study.

These two general conclusions about the relationship that exists between the administrative structure of the public library systems (the independent variable) and the level of service offered by the member libraries (the dependent variable) in the nine systems examined in this study are drawn from the results of the analyses of the data. The results of specific analyses upon which the conclusions are based are discussed below; evidence supporting the first statement of the hypothesis is considered first and then the evidence supporting the second statement of the hypothesis is considered.

Evidence supporting first statement of hypothesis.--Results of the analyses of the following five dependent variables provide evidence that supports the first statement of the hypothesis: 1) extent of holdings; 2) use of holdings; 3) personnel; 4) access to libraries' resources; and

5) financial resources.

Results of analysis of the extent of holdings indicate that the cooperative systems both added and held the greatest mean number of volumes per capita of the three types of systems. Since the cooperative systems had the greatest resources, according to the Model of Public Library Systems, they are able to offer a higher level of service. This result supports the first statement of the hypothesis to the extent that libraries belonging to a public library system offer the highest level of service.

The analysis of the second dependent variable (use of holdings) shows that the cooperative systems had the greatest mean per capita circulations for all three fiscal years examined. Since the amount of circulation serves as an indicator of the level of service, as defined by the Model, it may be said that the cooperative systems offer a higher level of service than the other two types of system. To the extent that libraries belonging to a public library system offer the highest level of service, the results of the analysis provide evidence to support the first statement of the hypothesis.

When the third variable (personnel) was analyzed in relation to the variable extent of use (circulation) it was found that both the consolidated and cooperative systems have fewer mean staff members per 10,000 circulations than the non-system libraries. These results are an indication that the two groups of system libraries are offering a more efficient level of service than the non-system libraries because they are doing more work with fewer staff members. It may be said, therefore, that they are offering a higher level of service than the non-system libraries.

When the fourth variable (access to libraries' resources) was analyzed, the results added strong evidence to support the first statement of the hypothesis, because the members of both the consolidated and cooperative systems provide greater access to their resources than the non-system libraries. Since the amount of access to the resources is a measure of the level of service, it may be said that the system libraries offer a higher level of service than the non-system libraries.

Analysis of the final dependent variable (financial resources) adds further strong evidence to support the hypothesis. The consolidated and cooperative systems had the greatest per capita operating expenditures. Since per capita operating expenditures serve as measures of financial resources, it may be said that system libraries offer a higher level of service than non-system libraries.

Evidence supporting second statement of hypothesis.--Results of the analyses of the following four dependent variables provide evidence to support the second statement of the hypothesis: 1) extent of holdings; 2) personnel; 3) access to libraries' resources; and 4) amount of financial resources.

When the results of the analysis of the data on extent of holdings are considered alone, they offer no support for the second statement of the hypothesis. Of the three types of systems examined, these analyses show that the consolidated systems added and held the smallest mean number of volumes per capita. When the results are considered in conjunction with two of the causal factors, some supportive evidence emerges from the combination of results. The consolidated systems had the greatest number of communication links and they were the only group of systems that maintained union lists of holdings. These two factors are thought

to increase access to all the materials in the members' libraries making it less important for each library to build its individual resources. Viewed in this manner, it may be said that the results provide some support for the second statement of the hypothesis that member libraries of consolidated systems provide the highest level of service.

When personnel were considered in relation to the number of circulation transactions handled, it was found that the consolidated systems have the least mean number of staff per 10,000 circulations. This result indicates that the consolidated systems are operating at a more efficient level than either the cooperative systems or the non-system libraries and therefore it may be said that the consolidated systems are giving a higher level of service. These results provide substantial support for the second statement of the hypothesis.

When the third variable (access to libraries' resources) was analysed, the results indicated that the consolidated systems provide the greatest access to the resources in terms of hours open per week and provisions for reciprocal borrowing. Since these results are statistically significant, they add strong support for the second hypothesis that members of consolidated systems provide the highest level of service.

Analysis of the final dependent variable (financial resources) indicates that the consolidated systems have the greatest per capita expenditures for personnel, other expenses, and total expenditures during the last fiscal year examined. Since amount of expenditures serves as a measure of financial resources, on the basis of these results, it may be said that members of consolidated systems provide the highest level of service. The results of the analysis are statistically significant and thus provide strong support for the second statement of the hypothesis.

Reasons for Failure of the Model of Public Library Systems

The Model of Public Library Systems states that the members of public library systems are able to provide a higher level of service than libraries that do not belong to systems. Also, it states that libraries that belong to consolidated systems are able to give a higher level of service than either libraries that belong to cooperative systems or do not belong to a system. In each case, the cause of the higher level of service is the benefits the system offers to the member libraries.

When the data collected for the study were analyzed, the results did not occur entirely as predicted by the Model of Public Library Systems, as noted in the preceding sections of this chapter. While the results of the analyses offer some support for both statements of the hypothesis, the support is not as strong as was anticipated. Three reasons which may be responsible for the failure of the Model to operate as strongly as anticipated are: 1) the greatly differing per capita expenditures for libraries in the states where the nine systems are located; 2) the overlapping of system characteristics; and 3) the limitations of the data. Of the three reasons suggested, the first appears to exert the greatest influence on the results of the analyses.

Table 40 shows the per capita expenditures for libraries in each of the nine states considered in this study. Immediately apparent is the great difference between the per capita expenditures for the states containing the consolidated systems (North Carolina, Indiana, and Oklahoma) and the per capita expenditures for the states containing the cooperative systems and the non-system libraries (Illinois, New York and California; and Connecticut, Nebraska, and Kansas.) In the case of the two consolidated systems, North Carolina and Oklahoma spent less than \$1.50 per capita

TABLE 40
 PER CAPITA EXPENDITURES
 FOR PUBLIC LIBRARIES IN NINE STATES
 1966/67

State	Per Capita Expenditures (in dollars)
<u>Consolidated Systems</u>	
North Carolina	\$1.34
Indiana	3.31*
Oklahoma	1.41
<u>Cooperative Systems</u>	
Illinois	3.01*
New York	4.46
California	4.24
<u>Non-System Libraries</u>	
Connecticut	3.91
Nebraska	2.08*
Kansas	2.25*

* approximations derived from information given in American Library Directory, 1968/69.

Sources: American Library Directory, 1968/69. 26th ed.
 New York: R. R. Bowker, 1968.

for libraries in 1966/67, but New York and California spent over \$4.00 per capita and Illinois spent \$3.00 per capita during the same period. The per capita expenditures for the states containing the non-system libraries provide somewhat less dramatic contrast with that for the states containing the consolidated systems, but still the per capita amount spent by Connecticut, Kansas, and Nebraska is greater than that spent by North Carolina, Indiana, and Oklahoma.

The amount of money spent by a state for public library services appears to have a determinative effect on the level of service the public libraries are able to offer whether they belong to a system or not. It may be concluded that adequate financial resources play a far more important role in the provision of a high level of public library service than was thought at the outset of the study.

The amount of per capita expenditures for public library service is thought to be the primary reason that the Model of Public Library Systems did not function as anticipated, but two other factors may have contributed to the malfunction. The overlapping of system characteristics is the first of the two secondary factors. Earlier in the study it was pointed out that in theory it is possible to define a public library system in terms of specific characteristics, but in reality, these characteristics are rarely clearly defined. Distinctive qualities thought to occur only in consolidated systems, for instance, may be found in cooperative systems or even in non-system libraries. It would be difficult to find examples of public library systems that had only the defined characteristics of that type of system, because although there are some characteristics that are clearly recognized as belonging to a particular type of

system, as the systems develop to meet specific situations, they tend to become hybrid in character.

The other secondary factor thought to contribute to the disappointing performance of the Model is the limitations of the data. These limitations, specified in Chapter II, center about the lack of standard definitions for the statistical records kept by the libraries. The information recorded for such things as circulation, volumes added and volumes held, number of personnel, and financial expenditures are subject to great variation because there are no standards. The error introduced by these limitations is difficult to measure, but certainly it may be suspected of contributing to the performance of the Model.

Suggestions for Further Research

The present study, as noted earlier, is exploratory in nature, and its purpose has been to investigate the relationship between the type of administrative structure of the systems and the effect it has on the level of service the member libraries are able to give. The study suggests a number of areas where further investigation of the different relationships is needed.

The first suggestion for further research is to use the present study as a guide in planning a study using a larger number of library systems than the nine used in this study. After the universe of public library systems is identified, the systems to be used in the study should be drawn from the universe by a random process. The measuring instruments used in the study should be refined and greater control of the variables should be attempted. One control that must be included is the state's per capita expenditure for public libraries. The data collected should

be of interval level measure to permit the use of statistical tests (such as correlation analysis) to measure the association between the variables.

A second general area for further research would be to use different indicators for the dependent variable and the causal factor. In this study, public services have been used as indicators of the dependent variable; in another study, the level of service could be measured in terms of the technical services provided to the member libraries of the system. Centralized processing by the central or headquarters library is an example of a technical service that might be used.

In this study, the benefits systems offer to their member libraries have served as the causal factor. There are several other causal factors that might be investigated. The centralization of authority in the administrative structure of the system is suggested as a causal factor to investigate. The effectiveness of the director of the system working within the limits of the administrative structure of the system is suggested as another possible causal factor.

A third general area for further research would be an expansion of the scope of the present study to include systems in different sized metropolitan areas and in different geographic sections of the country. Public library systems in larger metropolitan areas could be studied to see if the relationship exists in systems that serve a substantially larger population. Also, systems in rural areas with sparse populations could be studied to see if the relationship exists there. If the relationship between the administrative structure and level of service offered by the member libraries is found to exist in both the larger metropolitan areas and the less populous rural areas, evidence is added to support the hypothesis.

Since public library systems developed somewhat differently in different sections of the country, studies could be designed to concentrate on specific geographic regions, such as the eastern seaboard, the south, the midwest, and the west. If the relationship is found to be true in systems in different geographic areas, further evidence is added to the hypothesis.

A fourth general area suggested for further research is a thorough investigation of the administrative structures of the systems. In the present study, the administrative structure was accepted by definition and was not tested. In addition to the consolidated and cooperative forms of systems used in this study, federated systems should be added to the group of administrative structures studied.

In conclusion, it may be observed that the present study has suggested far more problems than it has solved. It has opened up an area of investigation which may well be instrumental in achieving the goal of public libraries--the provision of materials and services of a uniformly high quality to all the people in the country.

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APPENDIX A

QUESTIONNAIRES SENT TO CONSOLIDATED SYSTEMS
DIRECTORS OF SYSTEMS
MEMBER LIBRARIES

LIBRARY RESEARCH CENTER

UNIVERSITY OF ILLINOIS • 428 LIBRARY • URBANA

PUBLIC LIBRARY SYSTEMS STUDY

Your name _____ Position _____

Number of years you have held the present position _____

Year the library was established _____ Year system was established _____

Please indicate the limits of the fiscal year you use:

_____, 1967 - _____, 1968.
 month day month day

SERVICE AREA

1. Please indicate the population legally served by the library system for the last three fiscal years.

_____, _____, _____
 1967/68 1966/67 1965/66

Please indicate source if it is other than 1960 Census _____

2. Please indicate the number of square miles in the service area of the system during the last three fiscal years.

_____, _____, _____
 1967/68 1966/67 1965/66

Please indicate the boundaries of the area served by the library system _____

SERVICE

3. Hours Open

Please indicate the number of hours the central library is regularly open each day of the week during the month of October.

____ Monday _____ Wednesday _____ Friday _____ Sunday
 _____ Tuesday _____ Thursday _____ Saturday

4. Reciprocal Use

a. May persons living anywhere in the service area borrow books from any library in the service area? ____ Yes ____ No

- b. May a person return books to any library in the service area, regardless of the library from which the books were borrowed?
 _____ No _____ Yes

5. Reference Service

- a. Number of hours per week reference service is given by a professional librarian _____.
- b. Please give the number of reference questions handled during the last three fiscal years:
 _____ 1967/68 _____ 1966/67 _____ 1965/66

6. Intrasystem Loan

- a. Is there provision for loans between libraries in the system?
 _____ No _____ Yes
- b. If there are loans between libraries, please indicate the number of loans handled during the last three fiscal years.
 _____ 1967/68 _____ 1966/67 _____ 1965/66

COLLECTIONS

7. Books

- a. Please indicate the number of TITLES in each category that were added to the central library collection during the last fiscal year.
- | | |
|-------|--|
| _____ | adult non-fiction |
| _____ | adult fiction |
| _____ | children's books |
| _____ | TOTAL number of TITLES added to the collection |
- b. Please indicate the number of VOLUMES in each category added to the central library collection during the last three fiscal years.
- | | | | |
|---------|---------|---------|---|
| _____ | _____ | _____ | |
| 1967/68 | 1966/67 | 1965/66 | |
| _____ | _____ | _____ | adult non-fiction |
| _____ | _____ | _____ | adult fiction |
| _____ | _____ | _____ | children's books |
| _____ | _____ | _____ | TOTAL number of VOLUMES added to the collection |
- c. Please indicate the number of VOLUMES the central library contained in each category at the end of the last fiscal year.
- | | |
|-------|---|
| _____ | adult non-fiction |
| _____ | adult fiction |
| _____ | children's books |
| _____ | TOTAL number of VOLUMES contained in the collection |

8. Periodicals

- a. How many periodical titles currently received by the central library are being kept for more than five years? _____
- b. Please give the number of periodical titles, excluding duplicates, currently received by all the libraries that are members of the system _____.

9. Audio-Visual Materials

Please indicate the number of TITLES in each category.

- _____ Films (16mm sound) in the central library collection at the end of the last fiscal year.
- _____ Films (16mm sound) added to the central library collection during the last fiscal year.
- _____ Recordings (disc or tape) in the central library collection at the end of the last fiscal year.
- _____ Recordings (disc or tape) added to the central library collection during the last fiscal year.

CIRCULATION

10. Please indicate the circulation for each type of material (excluding non-print materials) for all the libraries in the system for the last three fiscal years.

<u>1967/68</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	children's books
_____	_____	_____	adult books
_____	_____	_____	TOTAL circulation

PERSONNEL

11. Please give the total number of persons on the library staff, excluding student help and custodial staff, at the present time
- | <u>Professional</u> | | <u>Clerical</u> | |
|---------------------|-------------|-----------------|-------------|
| <u>Full</u> | <u>Part</u> | <u>Full</u> | <u>Part</u> |
| <u>time</u> | <u>time</u> | <u>time</u> | <u>time</u> |
| _____ | _____ | _____ | _____ |
12. Education of the Library Staff
Please give the number of present staff members at the central library who are
- | | | |
|--|-------|-------|
| a. Graduates of a four year college and have at least one year of library school study (graduate or undergraduate level) | _____ | _____ |
| b. Graduates of a four year college, but have less than one year of library school study | _____ | _____ |
| c. All others | _____ | _____ |
| TOTAL | _____ | _____ |

13. Salary Scale

Please indicate for the current fiscal year the starting salary
for a professional librarian with no experience _____

FINANCE

14. Operating Expense

Please indicate the amount of money spent by the library system
for each category during the last three fiscal years.

<u>1967/68</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	books and other materials
_____	_____	_____	personnel
_____	_____	_____	other
_____	_____	_____	TOTAL operating expenditure excluding capital outlay

LIBRARY RESEARCH CENTER

UNIVERSITY OF ILLINOIS • 428 LIBRARY • URBANA

PUBLIC LIBRARY SYSTEMS STUDY

Name of library _____

System with which affiliated _____

Your name _____ Position _____

Year the library was established _____

Please indicate the limits of the fiscal year you use:

_____ month _____ day, 1967 - _____ month _____ day, 1968.

SERVICE

1. Hours Open

Please indicate the number of hours the library is regularly open each day of the week during the month of October.

_____ Monday _____ Thursday _____ Saturday
 _____ Tuesday _____ Friday _____ Sunday
 _____ Wednesday

2. Reference Service

a. Number of hours per week reference service is given by professional librarian _____.

b. Please give the number of reference questions handled during the last three fiscal years:

_____ 1967/68 _____ 1966/67 _____ 1965/66

3. Intrasystem Loan

a. Is there provision for loans between libraries in the service area? _____ Yes _____ No

b. If there are loans between libraries, please indicate the number of loans handled during the last three fiscal years.

_____ 1967/68 _____ 1966/67 _____ 1965/66

COLLECTIONS

4. Books

- a. Please indicate the number of TITLES that were added to the collection during the last fiscal year.

_____ adult non-fiction
 _____ adult fiction
 _____ children's books
 _____ TOTAL number of TITLES added to the collection

- b. Please indicate the number of VOLUMES in each category added to the collection during the last three fiscal years.

<u>1967/68</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	adult non-fiction
_____	_____	_____	adult fiction
_____	_____	_____	children's books
_____	_____	_____	TOTAL number of VOLUMES added to the collection

- c. Please indicate the number of VOLUMES contained in each category at the end of the last fiscal year.

_____ adult non-fiction
 _____ adult fiction
 _____ children's books
 _____ TOTAL number of VOLUMES contained in the collection

PERSONNEL

5. Please give the total number of persons on the library staff, excluding student help and custodial staff, at the present time

<u>Professional</u>		<u>Clerical</u>	
<u>Full</u>	<u>Part</u>	<u>Full</u>	<u>Part</u>
<u>time</u>	<u>time</u>	<u>time</u>	<u>time</u>
_____	_____	_____	_____

6. Education of the Library Staff
 Please give the number of present library staff who are

- a. Graduates of a four year college and have at least one year of study (undergraduate or graduate) of library science
- b. Graduates of a four year college, but have less than one year of library school training
- c. All others

_____	_____
_____	_____
_____	_____

PERSONNEL (cont.)

7. Salary Scale

Please indicate for the current fiscal year the starting salary
for a professional librarian with no experience _____.

PUBLIC LIBRARY SYSTEMS STUDY

Your name _____ Position _____

Number of years you have held the present position _____

Year the library was established _____ Year system was established _____

Please indicate the limits of the fiscal year you use:

_____, 1967 - _____, 1968.
 month day month day

SERVICE AREA

1. Please indicate the population legally served by the library system for the last three fiscal years.

1967/681966/671965/66

Please indicate source if it is other than 1960 Census _____

2. Please indicate the number of square miles in the service area of the system during the last three fiscal years.

1967/681966/671965/66

Please indicate the boundaries of the area served by the library system _____

SERVICE

3. Hours Open
 Please indicate the number of hours the central library is regularly open each day of the week during the month of October.

____ Monday

____ Wednesday

____ Friday

____ Sunday

____ Tuesday

____ Thursday

____ Saturday

4. Participating Libraries
 a. Do any libraries serving anywhere in the service area borrow books from any library in the service area? ____ Yes ____ No

- b. May a person return books to any library in the service area, regardless of the library from which the books were borrowed?
 _____ No _____ Yes
5. Reference Service
 a. Number of hours per week reference service is given by a professional librarian _____
 b. Please give the number of reference questions handled during the last three fiscal years:
 1967/68 1966/67 1965/66
6. Intrasystem Loan
 a. Is there provision for loans between libraries in the system?
 _____ No _____ Yes
 b. If there are loans between libraries, please indicate the number of loans handled during the last three fiscal years.
 1967/68 1966/67 1965/66

COLLECTIONS

7. Books
 a. Please indicate the number of TITLES in each category that were added to the central library collection during the last fiscal year.
 _____ adult non-fiction
 _____ adult fiction
 _____ children's books
 _____ TOTAL number of TITLES added to the collection
- b. Please indicate the number of VOLUMES in each category added to the central library collection during the last three fiscal years.
 1967/68 1966/67 1965/66
 _____ adult non-fiction
 _____ adult fiction
 _____ children's books
 _____ TOTAL number of VOLUMES added to the collection
- c. Please indicate the number of VOLUMES the central library contained in each category at the end of the last fiscal year.
 _____ adult non-fiction
 _____ adult fiction
 _____ children's books
 _____ TOTAL number of VOLUMES contained in the collection

8. Periodicals

- a. How many periodical titles currently received by the central library are being kept for more than five years? _____
- b. Please give the number of periodical titles, excluding duplicates, currently received by all the libraries that are members of the system _____.

9. Audio-Visual Materials

Please indicate the number of TITLES in each category.

- _____ Films (16mm sound) in the central library collection at the end of the last fiscal year.
- _____ Films (16mm sound) added to the central library collection during the last fiscal year.
- _____ Recordings (disc or tape) in the central library collection at the end of the last fiscal year.
- _____ Recordings (disc or tape) added to the central library collection during the last fiscal year.

CIRCULATION

10. Please indicate the circulation for each type of material (excluding non-print materials) for all the libraries in the system for the last three fiscal years.

<u>1967/68</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	children's books
_____	_____	_____	adult books
_____	_____	_____	TOTAL circulation

PERSONNEL

11. Please give the total number of persons on the library staff, excluding student help and custodial staff, at the present time
- | | <u>Professional</u> | | <u>Clerical</u> | |
|-------|---------------------|-------------|-----------------|-------------|
| | <u>Full</u> | <u>Part</u> | <u>Full</u> | <u>Part</u> |
| | <u>time</u> | <u>time</u> | <u>time</u> | <u>time</u> |
| _____ | _____ | _____ | _____ | _____ |
12. Education of the Library Staff
Please give the number of present staff members at the central library who are:
- | | | |
|---|-------|-------|
| a. Graduates of a four year college and have at least one year of library school study (graduate or non-graduate level) | _____ | _____ |
| b. Graduates of a four year college, but have less than one year of library school study | _____ | _____ |
| c. All others | _____ | _____ |
| TOTAL | _____ | _____ |

13. Salary Scale

Please indicate for the current fiscal year the starting salary
for a professional librarian with no experience _____

FINANCE

14. Operating Expense

Please indicate the amount of money spent by the library system
for each category during the last three fiscal years.

<u>1967/63</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	books and other materials
_____	_____	_____	personnel
_____	_____	_____	other
_____	_____	_____	TOTAL operating expenditure excluding capital outlay

LIBRARY RESEARCH CENTER

UNIVERSITY OF ILLINOIS • 428 LIBRARY • URBANA

PUBLIC LIBRARY SYSTEMS STUDY

Name of Library _____
 System with which affiliated _____
 Your name _____ Position _____
 Year library established _____ Year library affiliated with system _____
 Please indicate the limits of the fiscal year you use:
 _____ month _____ day, 1967 - _____ month _____ day, 1968.

SERVICE AREA

1. Please indicate the population legally served by the library for the last three fiscal years.

_____ 1967/68 _____ 1966/67 _____ 1965/66

Please indicate source if it is other than 1960 Census _____

2. Please indicate the number of square miles in the service area during the last three fiscal years.

_____ 1967/68 _____ 1966/67 _____ 1965/66

Please indicate the boundaries of the area served by the library _____

SERVICE

3. Hours Open

Please indicate the number of hours the library is regularly open each day of the week during the month of October.

_____ Monday _____ Wednesday _____ Friday _____ Sunday
 _____ Tuesday _____ Thursday _____ Saturday

4. Reciprocal Use

- a. May persons living anywhere in the service area borrow books from any library in the service area? ☐ Yes ☐ No
- b. May a person return books to any library in the service area, regardless of the library from which the books were borrowed? ☐ No ☐ Yes

5. Reference Service

- a. Number of hours per week reference service is given by a professional librarian _____.
- b. Please give the number of reference questions handled during the last three fiscal years:
- _____ 1967/68 _____ 1966/67 _____ 1965/66

6. Intrasystem Loan

- a. Is there provision for loans between libraries in the service area? ☐ Yes ☐ No
- b. If there are loans between libraries, please indicate the number of loans handled during the last three fiscal years:
- _____ 1967/68 _____ 1966/67 _____ 1965/66

COLLECTIONS

7. Books

- a. Please indicate the number of TITLES that were added to the collection during the last fiscal year.
- _____ adult non-fiction
- _____ adult fiction
- _____ children's books
- _____ TOTAL number of TITLES added to the collection
- b. Please indicate the number of VOLUMES in each category added to the collection during the last three fiscal years.
- | 1967/68 | 1966/67 | 1965/66 | |
|---------|---------|---------|---|
| _____ | _____ | _____ | adult non-fiction |
| _____ | _____ | _____ | adult fiction |
| _____ | _____ | _____ | children's books |
| _____ | _____ | _____ | TOTAL number of VOLUMES added to the collection |
- c. Please indicate the number of VOLUMES that were contained in each category at the end of the last fiscal year.
- _____ adult non-fiction
- _____ adult fiction
- _____ children's books
- _____ TOTAL number of VOLUMES contained in the collection

CIRCULATION

8. Please indicate the circulation for each type of material for the last three fiscal years.

<u>1967/68</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	children's books
_____	_____	_____	adults' books
_____	_____	_____	TOTAL circulation

PERSONNEL

9. Please give the total number of persons on the library staff, excluding student help and custodial staff, at the present time
- | | <u>Professional</u> | | <u>Clerical</u> | |
|-------|---------------------|-------------|-----------------|-------------|
| | <u>Full</u> | <u>Part</u> | <u>Full</u> | <u>Part</u> |
| | <u>time</u> | <u>time</u> | <u>time</u> | <u>time</u> |
| _____ | _____ | _____ | _____ | _____ |
10. Education of the Library Staff
Please give the number of present library staff members who are
- | | | |
|--|-------|-------|
| a. Graduates of a four year college and have at least one year of library school study (graduate or undergraduate level) | _____ | _____ |
| b. Graduates of a four year college, but have less than one year of library school study | _____ | _____ |
| c. All others | _____ | _____ |
| TOTAL | _____ | _____ |
11. Salary Scale
Please indicate for the current fiscal year the starting salary for a professional librarian with no experience _____.

FINANCE

12. Operating Expense
Please indicate the amount of money the library spent for each category during the last three fiscal years.
- | <u>1967/68</u> | <u>1966/67</u> | <u>1965/66</u> | |
|----------------|----------------|----------------|---|
| _____ | _____ | _____ | Books and other library materials |
| _____ | _____ | _____ | Personnel |
| _____ | _____ | _____ | Other |
| _____ | _____ | _____ | TOTAL operating expenditure, excluding capital outlay |

APPENDIX C

QUESTIONNAIRE SENT TO NON-SYSTEM LIBRARIES

LIBRARY RESEARCH CENTER

UNIVERSITY OF ILLINOIS · 428 LIBRARY · URBANA

URBAN PUBLIC LIBRARY STUDY

Name of library _____

Your name _____ Position _____

Year library was established _____

Please indicate the limits of the fiscal year you use:

_____, 1967 - _____, 1968.
month day month day

SERVICE AREA

1. Please indicate the population legally served by the library for the last three fiscal years.

1967/68 1966/67 1965/66

Please indicate source if it is other than 1960 Census _____

2. Please indicate the number of square miles in the service area during the last three fiscal years.

1967/68 1966/67 1965/66
_____Please indicate the boundaries of the area served by the library

SERVICE

- 3.
- Hours Open

Please indicate the number of hours the library is regularly open each day of the week during the month of October.

____ Monday _____ Wednesday _____ Friday _____ Sunday
____ Tuesday _____ Thursday _____ Saturday

- 4.
- Use

a. May persons living outside the library's service area borrow books from the library? _____ Yes _____ No

b. Do books have to be returned to the library from which they were borrowed? _____ No _____ Yes

5. Reference Service

- a. Number of hours per week reference service is given by a professional librarian _____.
- b. Please give the number of reference questions handled during the last three fiscal years:
- _____ 1967/68 _____ 1966/67 _____ 1965/66

6. Interlibrary Loan

- a. Is there provision for loans between libraries? ☐ No ☐ Yes
- b. If yes, please indicate the number of interlibrary loans handled during the last three fiscal years.
- _____ 1967/68 _____ 1966/67 _____ 1965/66

COLLECTIONS

7. Books

- a. Please indicate the number of TITLES in each category that were added to the library's collection during the last fiscal year.

_____ adult non-fiction
 _____ adult fiction
 _____ children's books
 _____ TOTAL number of TITLES added to the collection

- b. Please indicate the number of VOLUMES in each category added to the library's collection during the last three fiscal years.

<u>1967/68</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	adult non-fiction
_____	_____	_____	adult fiction
_____	_____	_____	children's books
_____	_____	_____	TOTAL number of VOLUMES added to the collection

- c. Please indicate the number of VOLUMES contained in each category at the end of the last fiscal year.

_____ adult non-fiction
 _____ adult fiction
 _____ children's books
 _____ TOTAL number of VOLUMES contained in the collection

8. Periodicals

- a. How many of the periodical titles currently received by the library are being held for more than five years? _____
- b. Please give the number of periodical titles, excluding duplicates, currently being received by the library _____

9. Audio-Visual Materials

Please indicate the number of TITLES in each category:

_____ Films (16mm sound) in the library's collection at the end of the last fiscal year

_____ Films (16mm sound) added to the library's collection during the last fiscal year

_____ Recordings (disc or tape) in the library's collection at the end of the last fiscal year

_____ Recordings (disc or tape) added to the library's collection during the last fiscal year

CIRCULATION

10. Please indicate the circulation for each type of material (excluding non-print materials) for the last three fiscal years.

<u>1967/68</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	children's books
_____	_____	_____	adult books
_____	_____	_____	TOTAL circulation

PERSONNEL

11. Please give the total number of persons on the library staff, excluding student help and custodial staff, at the present time
- | | <u>Professional</u> | | <u>Clerical</u> | |
|-------|---------------------|------------------|------------------|------------------|
| | <u>Full time</u> | <u>Part time</u> | <u>Full time</u> | <u>Part time</u> |
| _____ | _____ | _____ | _____ | _____ |
12. Education of the Library Staff
Please give the number of present library staff members who are
- | | | |
|--|-------|-------|
| a. Graduates of a four year college and have at least one year of library school study (graduate or undergraduate level) | _____ | _____ |
| b. Graduates of a four year college, but have less than one year of library school study | _____ | _____ |
| c. All others | _____ | _____ |
| TOTAL | _____ | _____ |
13. Salary Scale
Please indicate for the current fiscal year the starting salary for a professional librarian with no experience _____

FINANCE

14. Operating Expense

Please indicate the amount of money spent for each category during each of the last three years.

<u>1967/68</u>	<u>1966/67</u>	<u>1965/66</u>	
_____	_____	_____	books and other library
_____	_____	_____	materials
_____	_____	_____	personnel
_____	_____	_____	other
_____	_____	_____	TOTAL operating expenditure,
			excluding capital outlay

APPENDIX D

REFERENCE QUESTIONS

In finding the answers to the following questions, please

- a) Use only the resources of your own library,
- b) Indicate the source (including the page number) where the answer was found,
- c) Keep a record of approximately how much time it took to find the answers,
- d) Give the questions no special consideration, but treat them as you would a patron's request for information.

1. Can you give me a copy of your State's Constitution?
2. Who were the stars in the 1966 Broadway production of Wait Until Dark?
3. What was the average retail price of anthracite stove coal in 1941?
4. What was the circulation of the St. Louis Post Dispatch in 1967?
5. I have a car with an automatic clutch, and I want to know how to make adjustments on it.
6. Is alcohol a stimulant or depressant?
7. I have been told that electricity is transmitted at high voltages over long distances to minimize losses from resistance. Can you give me some recent information on voltages in use, or prospective use, and the limiting factors?
8. I have heard that hybrid corn and other hybrid plants are usually strong. This is sometimes called hybrid vigor. Does hybridization always result in vigor?
9. I want to know the median income of persons living in Champaign County, Illinois, in 1959. I would also like to know the aggregate income of all persons in the County.
10. I understand that in experiments with mice research workers have found that they can greatly increase their efficiency by in-breeding and getting pure-bred strains. Can you give me information on the main breeding center for these mice?

APPENDIX E

INTERVIEW SCHEDULE FOR DIRECTORS OF CONSOLIDATED AND COOPERATIVE SYSTEMS

GENERAL

Systems of public libraries have provided the framework within which libraries can work together to improve library service for all residents of the area.

1. On the basis of your experience, what is the greatest single benefit of the organization of libraries into systems?
2. What is the greatest single drawback that has resulted from the system organization?
3. Do you encourage persons in charge of the member libraries to try new procedures even though some mistakes might be made in the process?

To improve the quality of service a library is giving, it is necessary to know how well the service is meeting the needs of the users.

4. What means do you have to get feedback about the services that are offered by the system?
 - a. How does this feedback affect your planning for future action?

PERSONNEL

Programs for in-service training in such public service areas as reference work, children's work, young adult's work are frequently offered by library systems for the staffs of the member libraries.

5. Has your library system sponsored any kind of in-service training programs during the last fiscal year?
6. If you have, what has been the nature of the programs? (e.g., short courses, conferences, workshops)
 - a. Approximately how many persons participated in the programs?
 - b. Was the effectiveness of the programs evaluated?
 - c. What means of evaluation was used?
7. In what other areas does the system offer personnel services to the member libraries? (e.g., consulting services, public relations)

COLLECTIONS

8. What role does the system play in the selection of materials for the collections of libraries that are members of the system?
 - a. To what extent are member libraries involved in the selection of materials?

SERVICE

Reference service is one aspect of the total program of service to the public that a system offers to its member libraries.

9. In your opinion, what is the role of reference service in this broad program of service?

What is the relative importance of reference service compared with the other services?
10. When the system receives requests for information that cannot be answered, how are they handled?
 - a. Does the system have a network of rapid communication with an outside reference center?
 - b. Do you use non-library resources (such as local businesses, banks, industry) to answer questions?
11. Do you maintain a list of system-wide holdings?
 - a. Is this list used to answer reference questions that are sent to you by the member libraries?
 - b. If it is used for this purpose, please estimate the number of times this resource was used to answer reference questions during the last fiscal year.
12. How do you rate the success (in terms of speed, accuracy, and efficiency) of the reference service of the system?

APPENDIX F

INTERVIEW SCHEDULE FOR MEMBERS OF CONSOLIDATED AND COOPERATIVE SYSTEMS

GENERAL

Systems of public libraries have provided the framework within which libraries can work together to improve the library service for all the residents of an area.

1. In general terms, what has it meant to your library to be a member of a system?
2. In your opinion, what is the greatest single benefit you have derived from system membership?
3. What is the greatest single drawback that has resulted from the system organization?
4. Are you encouraged to try new procedures, even though you may make mistakes in the process?
5. What is your role in the making of policy for the library system?
 - a. Is your opinion asked and considered, or must you follow what is established without questioning it?
 - b. Do you have access to the facts about issues that are concerned with policy-making?
 - c. What kinds of communication do you have within the system?

PERSONNEL

Programs for in-service training in public service areas such as reference and children's work are frequently offered to the staffs of libraries that are members of public library systems.

6. Have you or any members of your staff participated in any library in-service training programs sponsored by the system during the last fiscal year?
 - a. What has been the nature of the programs? (e.g., short courses, conferences, work shops)
 - b. What has been the value of the programs to you and the members of your staff?
7. Who hires the persons who work in your library?
 - a. Do you have a voice in deciding who is hired?

COLLECTIONS

8. How are books selected for your library?
 - a. What role does the system play in the selection process?
9. Do you have access to a larger collection of books from which you can borrow volumes to add to your collection temporarily?
 - a. Please estimate the number of books that were added temporarily during the course of the last fiscal year.
 - b. How successful do you think this procedure has been?
10. Do you have access to a film collection outside your library?
 - a. If you do, how many films did you borrow during the last fiscal year?
11. Do you have access to a collection of recordings (disc or tape) outside your library?
 - a. If you do, how many recordings did you borrow during the last fiscal year?

SERVICE

Reference service is one aspect of the total program of service to the public that a system offers to its member libraries.

12. In your opinion, what is the role of reference service in your total program of service?

Please estimate its importance when compared with other services offered.
13. How do you handle requests for information that you cannot answer?
 - a. Are unanswerable questions referred to the system headquarters?
 - b. Do you use non-library resources (such as local businesses and industry and banks) to answer questions?
 - c. Please estimate how many times during the past year you have used such resources.
14. Do you think the reference service you have been able to offer to your patrons is better because of your membership in the system?
15. How do you rate the success (in terms of accuracy, speed, and efficiency) of the reference service your library offers?

APPENDIX C

INTERVIEW SCHEDULE FOR NON-SYSTEM LIBRARIES

GENERAL

1. Have there been any provisions for cooperation among the libraries in the SMSA?
 - a. If yes, would you please describe the nature of these cooperative ventures.
2. What has been the greatest single benefit you have derived from any such cooperative ventures in which you have participated?
3. What has been the greatest single drawback of any such cooperative ventures in which you have participated?
4. Do you have any means of getting feedback about the service that the library offers?
 - a. If you do, what effect does this feedback have on your planning for future action?
5. Do you offer any service to the persons who live outside your legal service area?
 - a. If you do not at present, do you have any plans for extending the service area in the future?

PERSONNEL

6. Have you or any members of your staff participated in any in-service training programs offered by your library or another library in the area?
 - a. If yes, what has been the nature of the programs (e.g., short courses, conferences, on-day workshops)?
 - b. What has been the value of the programs to you and the members of your staff?

COLLECTIONS

7. How are books selected for your library?
8. Is there any effort to co-ordinate the selection of books in the libraries in the area?

For instance, do libraries in the area specialize in a subject and other libraries draw on that collection rather than building their own resources in that particular subject? Or, if you are purchasing an expensive set of books, do you check with other libraries in the area to see if they have the set or plan to purchase it?

9. Do you have access to a larger collection of books from which you can borrow volumes to add to your collection temporarily?
 - a. If yes, please estimate the number of books you have added in such a manner during the last fiscal year.
 - b. How successful do you think this procedure has been?
10. Do you have access to a film collection outside your library from which you can borrow?
 - a. If yes, how many films did you borrow during the last fiscal year?
11. Do you have access to a collection of recordings (disc or tape) outside your library from which you can borrow?
 - a. If yes, how many recordings did you borrow during the last fiscal year?

SERVICE

Reference service is one aspect of the total program of service to the public that a library offers to its patrons.

12. In your opinion, what is the role of reference service in your total program of service?
13. How do you handle requests for information that you cannot answer?
 - a. Do you refer the questions to a larger library?
 - b. Do you use non-library resources (such as local businesses, industry, and banks) to find the answers to questions?
 - c. Please estimate the number of times during the past year you have used resources outside your own library to answer reference questions.
14. How do you rate the success (in terms of accuracy, speed, and efficiency) of the reference service your library offers?

APPENDIX H

RESULTS OF THE ANALYSIS OF VARIANCE OF THE SEVEN DEPENDENT VARIABLES

F ratios significant at the critical level of .05 are marked by an asterisk.

Variable	Means			Degrees of Freedom	F Ratio	Proba- bility Level
	Con- solli- dated	Coop- era- tive	Non- Sys- tem			
1. Extent of holdings						
a) Mean vol. per capita added to collections 1967/68						
1) Adult fiction and non-fiction	0.006	0.129	0.086	2/124	10.173*	.00008
2) Children's vol.	0.008	0.081	0.057	2/124	13.152*	.00001
3) Total volumes	0.009	0.235	0.167	2/124	19.076*	.00001
1966/67						
1) Adult fiction and non-fiction	0.005	0.105	0.090	2/124	8.226*	.0004
2) Children's vol.	0.002	0.069	0.060	2/124	16.331*	.00001
3) Total volumes	0.007	0.200	0.189	2/124	18.194*	.00001
1965/66						
1) Adult fiction and non-fiction	0.007	0.083	0.101	2/124	12.635*	.00001
2) Children's vol.	0.004	0.058	0.050	2/124	17.074*	.00001
3) Total volumes	0.010	0.175	0.227	2/124	26.949*	.00001
b) Mean vol. per capita held, 1967/68						
1) Adult fiction and non-fiction	0.061	1.823	0.953	2/124	7.909*	.0006
2) Children's volumes	0.032	0.951	0.492	2/124	16.799*	.00001
3) Total volumes	0.096	3.691	2.637	2/124	18.117*	.00001
2. Use of holdings						
Mean per capita circulations 1967/68						
1) Children	2.028	2.952	2.001	2/124	3.129*	.047
2) Adults	1.496	3.136	1.852	2/124	6.999*	.001
3) Total circulation	4.890	6.650	4.396	2/124	3.966*	.021

Variable	Means			Degrees of Freedom	F Ratio	Proba- bility Level
	Con- sol- dated	Coop- era- tive	Non- Sys- tem			
2. Use of holdings (cont.)						
Mean per capita circulations						
1966/67						
1) Children	2.139	2.913	2.476	2/124	1.522	.222
2) Adults	1.498	2.973	2.094	2/124	5.402*	.006
3) Total circulation	5.034	6.608	5.192	2/124	2.302	.104
1965/66						
1) Children	2.394	2.827	2.651	2/124	.376	.668
2) Adults	1.392	2.706	2.133	2/124	4.956*	.009
3) Total circulation	5.187	6.554	5.761	2/124	1.399	.251
3. Personnel						
a) Mean number of pro- fessional and clerical personnel per 10,000 population						
1) Professional - full time	0.1	2.0	2.0	2/118	3.967*	.021
2) Professional - part time	0.01	2.0	1.0	2/118	4.360*	.015
3) Clerical-full time	0.1	2.0	1.0	2/118	5.712*	.004
4) Clerical-part time	0.02	2.0	2.0	2/118	5.869*	.004
5) Total - full time	0.2	4.0	3.0	2/118	9.826*	.001
6) Total - part time	0.03	5.0	4.0	2/118	16.657*	.00001
b) Mean number of pro- fessional and clerical personnel per 10,000 circulations						
1) Professional - full time	0.02	0.4	0.4	2/118	2.537	.083
2) Professional - part time	0.002	0.4	0.3	2/118	2.533	.084
3) Clerical-full time	0.02	0.2	0.2	2/118	8.288*	.0004
4) Clerical-part time	0.004	0.3	1.0	2/118	3.190*	.045
5) Total - full time	0.04	0.7	0.7	2/118	6.964*	.001
6) Total - part time	0.005	0.9	2.0	2/118	4.244*	.017

Variable	Means			Degrees of Freedom	F Ratio	Proba- bility Level
	Con- solli- dated	Coop- era- tive	Non- Sys- tem			
4. Quality of resources						
a) Mean American history titles held	79	91	110	2/26	.631	.540
b) Mean periodical titles held	77	88	92	2/26	.265	.769
5. Level of reference service						
Mean score on performance on reference questions	12.63	12.55	14.70	2/26	.745	.485
6. Access to libraries* resources						
a) Mean number of hours libraries are open per week	45.48	34.81	34.72	2/124	4.057*	.020
b) Provision for reciprocal use						
1) Any area resident may borrow materials	1.00	0.979	0.912	2/81	1.042	.358
2) Books may be returned to any library	1.00	0.750	0.121	2/81	27.419*	.0001
7. Financial resources						
Mean per capita operating expenditures (in dollars)						
1967/68						
1) Books & other materials	0.453	0.664	0.377	2/124	4.321*	.015
2) Personnel	1.923	1.508	1.005	2/124	6.727*	.002
3) Other expenses	0.640	0.486	0.337	2/124	4.895*	.009
4) Total expenditures	3.017	2.785	1.804	2/124	5.463*	.005
1966/67						
1) Books & other materials	0.439	0.589	0.412	2/124	2.787	.065
2) Personnel	1.751	1.350	1.039	2/124	4.751*	.010
3) Other expenses	0.504	0.488	0.388	2/124	.807	.448
4) Total expenditures	2.695	2.727	1.976	2/124	2.042	.134
1965/66						
1) Books & other materials	0.362	0.555	0.481	2/124	2.765	.067
2) Personnel	1.711	1.190	1.048	2/124	5.237*	.007
3) Other expenses	0.489	0.458	0.419	2/124	.260	.772
4) Total expenditures	2.578	2.312	2.001	2/124	1.457	.237

VITA

Barbara Olsen Slanker was born in Springville, Utah, July 15, 1934. She attended Colorado State University where she received her B.A. degree in English in 1956. After a year of graduate study in English at the University of New Mexico, Albuquerque, she entered the Graduate School of Library Science, University of Illinois and earned the M.S. degree in library science in 1959. She was elected to membership in Phi Kappa Phi and Beta Phi Mu; in 1962 she served as President of Alpha Chapter of Beta Phi Mu.

She held the position of Music Cataloger in the Reference Department of the New York Public Library and then returned to the University of Illinois where she was General Assistant in the Public Service Departments from 1960-1962 and Assistant Undergraduate Librarian from 1962-1965. In 1965 she joined the staff of the Library Research Center, University of Illinois, and while holding that position, she began work on the doctorate in library science in 1966. While completing work on the doctorate in 1969/70 she held the position of Bibliographer in the Acquisitions Department of the University of Illinois Library.

She is married to Raymond Larry Slanker.