

ED 022 492

AN EVALUATION OF THE NEW YORK STATE LIBRARY'S NYSILL PILOT PROGRAM.

Nelson Associates, Inc., New York, N.Y.

Pub Date Mar 68

Note- 159p.

Available from- Commerce Offset, 657 Commerce St., Thornwood, N.Y. 10594 (\$5.00).

EDRS Price MF-\$0.75 HC Not Available from EDRS.

Descriptors-COLLEGE LIBRARIES, *INTERLIBRARY LOANS, LIBRARIES, *LIBRARY COOPERATION, *LIBRARY PROGRAMS, *LIBRARY SERVICES, MEDICAL LIBRARIES, PUBLIC LIBRARIES, SPECIAL LIBRARIES, UNIVERSITY LIBRARIES

Identifiers-New York, New York State Library, *NYSILL

This report describes NYSILL, a project undertaken to expand interlibrary loan service to New York's public and private libraries. Contracts were made with 3 major public libraries as "area referral libraries" and 9 private libraries as "subject referral libraries" to aid the State Library in filling its interlibrary loan requests. The report analyzes data kept on 43,000 NYSILL requests received between March 22 and November 21, 1967, and data from questionnaires sent to participating libraries. Statistics showing how the system was used and who used it, in what subject areas materials were requested, the amount of time required to fill requests, the percentage of requests filled, the number of times requests were referred, and the cost per request are given. The impact of NYSILL on medical library interlibrary lending and academic interlibrary lending is also explored. The report's recommendation is that NYSILL be continued on an experimental basis at least through March, 1969, although the evidence has "not established the inherent value of this particular reference and research interlibrary loan concept." The evidence does indicate that NYSILL has been successful in gathering valuable data and "know-how" as well as in identifying key questions which must be answered before any statewide interlibrary loan program is set up. (CC)

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AN EVALUATION OF
THE NEW YORK STATE LIBRARY'S
NYSILL PILOT PROGRAM

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Nelson Associates, Incorporated

March 1968

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March 15, 1968

Miss Jean L. Connor, Director
Division of Library Development
The New York State Library
Albany, New York

Dear Miss Connor:

We are pleased to submit herewith our report on the operations of The New York State Library's pilot project in an expanded statewide reference and research interlibrary loan network--known as the NYSILL program--and our evaluation of the desirability of continuing this program beyond its scheduled termination on June 30, 1968. We hope this document will be a useful tool in planning for the further development of local, regional and statewide interlibrary loan networks aimed at the reference and research needs of those who live, work and/or study in New York State.

Nelson Associates is pleased to have had the opportunity to monitor so important and significant an undertaking as the NYSILL pilot project. We have received considerable assistance in these efforts from you and your colleagues at the State Library, including the hardworking staff of the Interlibrary Loan Unit; from representatives at each of the 12 NYSILL referral libraries; from librarians and library users throughout the state who shared with us their experiences with and reactions to the NYSILL program; and from Mr. S. Gilbert Prentiss, who provided wise counsel during the formulation of our conclusions and recommendations. We would like to express our gratitude to all those who so willingly aided us in carrying out this assignment.

Very truly yours,

NELSON ASSOCIATES, INCORPORATED

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Chapter I

INTRODUCTION

This chapter describes the operations of the NYSILL pilot program, outlines the objectives of this study, describes the monitoring period and reviews methods of data collection.

DESCRIPTION OF THE NYSILL PILOT PROGRAM

On March 22, 1967, The New York State Library instituted the pilot program in expanded interlibrary loan service (known as "NYSILL") in order to make information resources in the state more freely accessible to researchers. Contracts were made with three major public libraries ("area referral libraries") and nine private libraries with specialized subject strength ("subject referral libraries") to supplement the resources of the State Library in filling interlibrary loan requests. Under the NYSILL program, a request not found at the State Library can be referred on to one or more of the 12 contracting libraries. The libraries are:

Area Referral Libraries

Brooklyn Public Library
Buffalo and Erie County Public Library
Monroe County Library System

Subject Referral Libraries

Columbia University
Cornell University
Engineering Societies Library
New York University
Teachers College
The Metropolitan Museum of Art
The New York Academy of Medicine
The New York Public Library Research Libraries
Union Theological Seminary

All area and subject centers were affiliated with the pilot project from the start, except for New York University which was added on September 21, 1967.

In order to be eligible for referral beyond the State Library to one of these 12 libraries, the patron submitting a request must be at least 18 years old and cannot be an inmate of a mental or penal

institution. In addition, the material requested cannot fall into one of the following categories: fiction, ARCO-type books, textbooks, children's books, books available in paperback and new books in popular demand.

NYSILL requests can be initiated by any public or private library and sent to the State Library. However, the majority are channeled through a second library, such as a public library system headquarters, before being sent on to the State Library. When a library is unable to fill a request from its own collection, it usually sends the request--by mail or telephone--to the library serving as the clearinghouse for the area. If the needed material is not available at this library, the request is referred by teletype (TWX) to the State Library. Requests can, of course, also originate at this second library.¹ When the necessary material can be supplied by the State Library, it is mailed directly to the originating library. If the request cannot be filled at the State Library, and it is eligible for referral, it is sent to the appropriate area or subject center. Requests are usually referred first to an area library and then, if necessary, to a subject library. However, some requests are sent directly to a subject center.

The geographic location of the originating library determines which of the three area libraries receives the request. For example:

1. The Brooklyn Public Library serves the area covered by Westchester Library System, Nassau Library System and Suffolk Cooperative Library System.
2. The Buffalo and Erie County Public Library receives referrals for the area that includes Mohawk Valley Library Association, Upper Hudson Library Federation, Pioneer Library System, Chautauqua-Cattaraugus Library System, North Country Library System, Nioga Library System, Clinton-Essex-Franklin Library, Southern Adirondack Library System and Four County Library System.
3. The Monroe County Library System services requests for the area covered by Buffalo and Erie County Public Library, Chemung-Southern Tier Library System, Finger Lakes Library System, Onondaga Library System, Mid-York Library System, Brooklyn Public Library, The New York Public Library, Queens Borough Public Library System, Mid-Hudson Libraries and Ramapo Catskill Library System.

¹ When a request is searched at two libraries before being sent to the State Library, the first library is designated as the originating library and the second is termed the request transmission site. When a request is searched at only one library before the State Library, that one library is both the originating library and the request transmission site for the request.

Requests which can be filled at the area referral center are mailed to the library which originated the inquiry. If the needed material cannot be supplied, the center informs the State Library by teletype which, in turn, reports the information by teletype to the request transmission library. If the material is likely to be available at a subject library, the State Library then refers the request via teletype to the subject referral center that has contracted to supply material in the subject area of the request. If the material is available, it is mailed directly to the originating library; if it is unavailable, this information is reported to the State Library and the appropriate transmitting library is notified.

OBJECTIVES OF THE STUDY

Nelson Associates, as monitor of the NYSILL pilot program, was assigned the following objectives for this study:

1. to analyze and evaluate the pilot experience and ascertain the feasibility, from the standpoint of library services rendered, of an ongoing expanded statewide reference and research interlibrary loan network and, if appropriate, to suggest those revisions to current network design or operations that appear to offer the prospect of even greater improvements in service;
2. to determine the extent to which the participating public libraries were able to fill requests received through the network and to evaluate the concept of these area referral centers as an element of network design;
3. to determine the degree of success in filling requests among the private subject referral libraries and to establish whether the number and nature of subject referral centers was appropriate to the demand for various materials;
4. to ascertain the equity of the State Library's program for financial remuneration of participating public and private libraries;
5. to ascertain to what degree the New York State inter-library loan network assists agreements, practices and plans among the medical libraries in the state for the provision of informational materials and to make recommendations for the expansion of the pilot to better serve the interlibrary loan requirements of medical libraries; and

6. to study the quantity and characteristics of interlibrary loan transactions among college and research libraries outside the pilot program so as to ascertain those needs which are not anticipated or currently being met through the New York State interlibrary loan network and to make recommendations for the modification or expansion of the pilot so as to fulfill these needs.

MONITORING PERIOD

Originally, the NYSILL pilot program was to extend from March 22 to September 20, 1967, and the evaluation of the project as an ongoing network was to be based on the experience of the program during this period. However, by July, it was apparent that this schedule did not allow sufficient time to adequately assess the performance of the network. Most of the efforts during the first months of the program were aimed at rectifying fundamental procedural difficulties. Consequently little attention could be given to consideration of the basic concepts governing the network's operations. In order to allow time for experimentation and for collecting data over a longer period of time when colleges and universities would be in session, it was decided that both the program itself and the monitoring should be extended beyond the September 20 termination date. Contracts with participating libraries were extended, first, to March 31, 1968 and, later, until June 30, 1968. The monitoring period was increased by two months--until November 21, 1967. The report on the evaluation of the network, containing a recommendation on the advisability of continuing the network as an ongoing program, was to be issued in March 1968, in order to allow time for contract renewals beyond June 30 if that seemed advisable.

DATA COLLECTION

For this report, NYSILL requests are defined as all inter-library loan requests received at the State Library that fall into either of two groups: (1) those received by teletype whether or not they were filled at the State Library, and (2) those received at the State Library by mail, telephone or in person that could not be filled at the State Library and were referred to another library in the NYSILL network.

Although data collection for the study took several forms, the primary source of information on the operations of the network was a data sheet maintained at the State Library for every NYSILL request received. (A copy of this data sheet is reproduced in Appendix A.) The information on this sheet was supplied by both the originating library and the request transmission site, as well as the State Library.

Libraries where NYSILL requests originate, in addition to providing bibliographic information, were asked to classify requests as "eligible" or "ineligible" for referral beyond the State Library to one or more of the 12 referral libraries. At the beginning of the pilot program on March 22, 1967, the status of the requesting patron (student, faculty, "other" or ineligible) was the determining factor. On April 13, the category of "ineligible" was expanded to include specific types of requests, such as those for fiction, ARCÓ-type books, textbooks, children's books, books available in paperback and new books in popular demand.

If the request was eligible for referral beyond the State Library, the originating library was asked to submit the following additional information: patron status of the person making the request (student, faculty, or "other"), name and address of the originating library, time and date the request was submitted, media by which it was submitted (mail, telephone, in person, teletype or "other"), status of the request at the originating library and subject code assigned to the request.² If the request was searched at a second library such as a system headquarters before being sent to the State Library, that library was asked to provide data on the time, date and media for their receipt of the request as well as its status in their collection. These unfilled requests were then transmitted by teletype to the State Library.

During the first three months of the program (from March 22 to June 27), the State Library's original teletype sheets were the only records kept of requests that were not referred beyond the State Library. After an item had been searched, the status of the request was written next to the entry on the teletype sheet. If a request was to be referred, all information sent from the request transmission site concerning the request was cut out from a copy of the original teletype sheet and attached to a data sheet. Additional entries on this sheet included the time, date, and media for the receipt of the request at the State Library and its status there, along with similar information for each library to which the request was referred.

Starting on June 28, however, these data sheets were instituted in the format outlined above for every request received at the State Library, not just those that were referred. Throughout the program, requests received at the State Library by mail, telephone or in person that were referred into the NYSILL network were recorded on data sheets.

² A list of 55 codes to be used in classifying requests according to subject material was drawn up and distributed by the State Library. After September 21, 1967, the Dewey Decimal number was to be given instead of the code number for each eligible request.

Near the end of April, Nelson Associates distributed a postcard questionnaire to the State Library and all of the referral libraries, which was to be enclosed with each NYSILL request that was filled. (The postcard questionnaire is reproduced in Appendix B.) When the requested item reached the originating library, the accompanying questionnaire was to be answered in part by the librarian, completed by the patron, and returned to Nelson Associates. The questionnaire asked when the material had been received at the originating library and when the patron had obtained his loan. There were also questions about the patron's reactions to this new service.

The data collected on NYSILL requests from the data sheets and postcard questionnaires have been tabulated and analyzed, both for the entire monitoring period and for eight month-long intervals within the monitoring period. These intervals run from the 22nd of one month to the 21st of the next.

Another questionnaire was distributed to all institutions of higher education in New York State, excluding only those solely for religious aspirants. (A copy of this questionnaire can be found in Appendix C.) Questions on the academic library questionnaire sought information on the number of items borrowed through interlibrary loan in 1966 and 1967; whether the library had used NYSILL and, if so, was the service satisfactory; and the effect of NYSILL on in-state and out-of-state borrowing.

In order to assess the equity of the State Library's program of financial remuneration to the participating libraries, a study was initiated of the costs of processing and filling a NYSILL request at each of the 12 referral centers. Records maintained at each of the libraries, as well as interviews with the staff at each referral site, were utilized to gather the necessary data.

Finally, communication with State Library staff was maintained throughout the monitoring period, and interviews were conducted with representatives of the 12 referral libraries, librarians from a sample of academic libraries outside the NYSILL network, and representatives of four medical libraries.

The remaining chapters of this report discuss the use of the NYSILL network, its operations, the time consumed in filling requests, various reactions to the program, costs and our evaluation of this pilot project.

Chapter II

USE OF THE NYSILL NETWORK

Essentially, Chapter II treats four questions: How frequently is NYSILL used? Who uses the network? What endeavors does the NYSILL program contribute to? and What subject areas are represented in NYSILL requests?

VOLUME OF REQUESTS RECEIVED

In the eight months from April to November, 1967, The New York State Library received by teletype nearly 46,000 interlibrary loan requests, a 10.6% increase over the same period in 1966. A comparison of the number of requests received during each of these months for both years is shown in Table 2.1.

In 1967, after marked decreases during May and June, the volume of interlibrary loan requests increases in July and remains almost stationary through August. Volume rises again in September, is increased by almost three-quarters in October and then declines somewhat in the last period.

The overall increase of 10% from 1966 to 1967 is not distributed evenly among the several months of the monitoring period. The increases for the months of April, May and September are similar to that of the whole monitoring period. However, the number of requests received in June 1967 is almost 14% less than in June 1966, and volume during July and August is about the same in both years. In October and November 1967 volume increases 25% over those months in 1966. These two months alone account for much of the general increase.

The number of NYSILL requests, as defined in Chapter I, included in the tabulation for this report is as follows:

March-April	7,481
April-May	5,275
May-June	4,078
June-July	4,400
July-August	4,253
August-September	4,082
September-October	7,068
October-November	<u>6,586</u>
	43,223

Table 2.1

INTERLIBRARY LOAN REQUESTS RECEIVED
AT THE NEW YORK STATE LIBRARY BY TELETYPE
April-November, 1966 and 1967

	1966		1967		% Change 1967 Over 1966
	Number of Requests	Change in Volume (100= 5,167)*	Number of Requests	Change in Volume (100= 5,713)*	
April	5,770	1.12	6,463	1.13	+12.0%
May	4,409	.85	4,816	.84	+ 9.2
June	4,515	.87	3,896	.68	-13.7
July	4,464	.86	4,445	.78	- 0.4
August	4,351	.84	4,486	.79	+ 3.1
September	4,520	.87	5,006	.88	+10.8
October	6,879	1.33	8,615	1.51	+25.2
November	<u>6,430</u>	1.24	<u>7,976</u>	1.40	+24.0
Total	41,338		45,703		+10.6

*The change in volume is shown as an index and is computed by dividing the monthly volume by the average volume for eight months in 1966 or 1967.

These figures differ from the 1967 figures in Table 2.1 for several reasons:

1. The monthly time periods are not comparable. The figures for NYSILL requests are for requests received during monthly periods which extend from the 22nd of one month to the 21st of the next month. The figures in Table 2.1 represent the number of requests received between the first and last days of each month.
2. NYSILL requests include a few requests received at the State Library by telephone or in person, while figures in Table 2.1 are only for requests received via teletype. (About 2% of the 43,223 NYSILL requests in the data tabulated for this report were received at the State Library by means other than teletype.)
3. About 1,100 cases were eliminated from the NYSILL tabulations because missing or inaccurate request numbers caused duplications. These are evenly distributed in the several time periods and should not distort the analysis.
4. About 1,500 requests were received during the monitoring period that were incomplete in mid-December when the data sheets were collected at the State Library for data processing; almost all were received in the most recent months of the monitoring.¹ These requests are not included in this report. It is likely that requests that were still outstanding at least three weeks after they had been received at the State Library are eligible ones that had been searched and not found at the library and were then referred on in the network. In contrast, those that are completed from these periods would tend to be those filled at the State Library, those not filled but completed because they were ineligible for referral, plus some of those that were referred. Therefore, the lack of data for incomplete requests from the last time periods biases the tabulations in this study against eligible, referred requests. In turn, the proportion of requests filled at the State Library and at all libraries will be overstated, and the average time elapsed between the date the patron made his request and the date he received his material will be understated.

¹ "Completed requests" and "incomplete requests" are terms used by the State Library staff to differentiate requests that are no longer active from those still being searched in the network. Completed requests are those that have been filled plus those that have not been filled because they are either not available in the network or have been cancelled. Incomplete requests are those which are still being searched either at the State Library or at a referral site.

Although many analyses in this report are divided into time periods, the most significant and reliable data are for the monitoring period as a whole. Fifteen hundred incomplete requests excluded from one, or a few, monthly periods might produce serious distortions in a trend over time but their effect is largely dissipated over the entire eight months of the study. In addition, there are seasonal fluctuations in the data on NYSILL requests that are emphasized by studying the individual time periods but cannot be very reliably interpreted without historical data.

The analyses presented in the remainder of this report deal with the 43,223 tabulated NYSILL requests. General methodological problems are discussed in Appendix D.

PATRON STATUS

In order to determine the kinds of library users who submit NYSILL requests, the originating library was asked to indicate for every eligible request whether the patron was a faculty member, student or "other." There was also a patron status category termed "ineligible." However, as noted in Chapter I, during most of the monitoring period a request marked "ineligible" could refer to either ineligible kinds of patrons or ineligible kinds of materials. The ineligible cases, therefore, have been omitted from the analysis of patron status.² There was also some ambiguity concerning patron classification--for example, it was impossible to know whether a Ph.D. candidate with a teaching appointment was considered a "student" or "faculty." Finally, it must be emphasized that the data in this report refer to requests, not patrons. A single person may have made several requests at once or have used the service several times. Consequently, the actual number of patrons is less than the number of requests and may be distributed somewhat differently. For example, if faculty members tend to make several requests at once and if students tend to make a single request, the data would overstate the proportion of faculty patrons using NYSILL and understate the proportion of students.

With these reservations in mind, Table 2.2 presents a breakdown of patron status into the three categories (faculty, student, "other") for the overall study and for each of the month-long time periods within the study.

Almost three-fifths (58%) of all requests submitted during the entire monitoring period come from non-academic users ("others"), while the remaining cases are almost equally divided between the two academic groups ("faculty" and "students").

² This, of course, has the effect of making the eligible requests a sample of all requests. The analysis of patron use of material on page 14 seems to indicate that the eligible requests are a representative sample of all requests.

Table 2.2

PATRON STATUS BY TIME PERIODS

Percentage of Requests From:	Total, All Time Periods Combined	T I M E P E R I O D S									
		March-April	April-May	May-June	June-July	July-August	August-September	September-October	October-November		
Faculty	20.3%	10.0%	12.7%	16.5%	16.3%	19.3%	24.6%	26.3%	31.3%		
Students	21.4	27.1	23.3	10.7	16.5	14.2	11.4	25.2	27.0		
"Others"	58.3	62.9	64.0	72.8	67.0	66.5	64.0	48.4	41.7		
Total ^a	100.0%	100.0%	100.0%	100.0%	100.1%	100.0%	100.0%	99.9%	100.0%		
Case Base	(21,292)	(3,575)	(2,523)	(1,914)	(2,109)	(1,852)	(1,689)	(3,715)	(3,915)		
Ineligibles ^b	(10,808)	(2,059)	(1,784)	(1,384)	(1,150)	(1,363)	(1,290)	(831)	(947)		
NA, Patron Status	(11,123)	(1,847)	(968)	(780)	(1,141)	(1,038)	(1,103)	(2,522)	(1,724)		
Total N	(43,223)	(7,481)	(5,275)	(4,078)	(4,400)	(4,253)	(4,082)	(7,068)	(6,586)		

a May not total 100.0% due to rounding.

b Excluded from percentage base since this category may include certain kinds of requests as well as certain kinds of patrons.

c NA is used in the tables in this report to indicate "no answer."

Two trends emerge from the data for individual monthly periods. First, there is a consistent increase in the proportion of requests coming from faculty members. Second, the proportion of student requests appears to follow the academic terms--decreasing in late May and early June, increasing through the summer (but not to the levels attained earlier), decreasing again at the summer's end and rising back to spring term levels in September and October.

USE OF MATERIAL

The postcard questionnaire enclosed with each filled NYSILL request asked the patron to indicate how he intended to use the material: for academic coursework, independent research, business and/or professional work, recreation, or other purposes. (Patrons whose requests were not filled did not have the opportunity to respond to this question.³ Therefore, if there is a relationship between a particular kind of use and the filling of a request, these data will be biased accordingly. For example, if it is more likely that requests for research material will be filled than requests for material to be used for recreational purposes, the number of patron responses in these two "use categories" will reflect this fact. In addition, return of the postcard questionnaire was voluntary. It is possible that some categories of patrons might have been more likely to return their postcards than others, thus introducing additional biases. Appendix D examines the returned postcards for possible biases in favor of certain kinds of patrons or subjects. The results show that there does not seem to be any serious problem of distortion in the returns. Consequently, unless otherwise noted in the discussions below, data from the postcard returns are treated as a fair sample of all NYSILL requests.)

Table 2.3 shows how patrons intended to use the material obtained through NYSILL.⁴ The number of responses exceeds the number of returned postcards, since a patron could note more than one purpose for a single request. For example, about 2% of the requests are for both academic coursework and independent research. About two-fifths (39%) of the patrons indicate that the material is for coursework purposes; one-third cite independent research. The proportion of loans made for coursework, as might be expected, follows the academic terms. Recreational purposes are cited for 16% of the requests, business and/or professional use for 15% of the requests.

3 Postcard questionnaires were available for about one-third of all filled requests. Some additional postcards, although returned, could not be matched with their corresponding requests because of missing, incomplete or inaccurate request numbers.

4 Because the questionnaires were not available until late April, the number returned from the first time period is substantially lower than from other periods.

Table 2.3

USE OF MATERIAL BY TIME PERIODS

Percentage of Requests Which Patron Intends to Use For:	Total, All Time Periods Combined	T I M E P E R I O D S									
		March-April	April-May	May-June	June-July	July-August	August-September	September-October	October-November		
Academic Coursework	39.3%	23.8%	31.4%	20.2%	37.3%	27.1%	19.6%	62.7%	54.7%		
Independent Research	33.7	42.9	35.1	40.7	35.1	44.0	41.0	22.5	27.8		
Business and/or Professional Work	14.8	10.5	16.6	18.5	15.1	15.6	20.9	9.6	12.8		
Recreation	16.4	25.7	20.3	23.5	17.6	22.8	21.3	8.5	9.1		
All Others	3.5	4.8	3.9	4.7	3.3	3.0	6.4	2.2	2.3		
Total ^a	107.7%	107.7%	107.3%	107.6%	108.4%	112.5%	109.2%	105.5%	106.7%		
Case Base	(6,271)	(105)	(592)	(788)	(902)	(671)	(842)	(1,420)	(951)		
NA, Use of Material ^b	(36,952)	(7,376)	(4,683)	(3,290)	(3,498)	(3,582)	(3,240)	(5,648)	(5,635)		
Total N	(43,223)	(7,481)	(5,275)	(4,078)	(4,400)	(4,253)	(4,082)	(7,068)	(6,586)		

^a Total exceeds 100.0% due to multiple responses (more than one use).

^b Includes 1,202 cases which returned postcards but left item blank; 15,473 cases where postcards were applicable (a filled request) but not returned; and 20,277 cases where the request was not filled (so the patron could not have received a postcard).

There is a startling increase in the proportion of loans used for coursework in the last two time periods. Some increase was expected, but not such a large change. Apparently the academic term effect is especially crucial at the beginning of the school year.

Table 2.4 breaks down the intended use of the material cited by each kind of patron. Student requests are overwhelmingly for coursework purposes, while faculty requests tend to be for research as well as for coursework. Requests from patrons classified as "others" are distributed relatively evenly in all major categories. Some of these patrons are apparently taking courses but do not consider themselves students (or were not so considered by librarians); some are doing independent research. Most of the requests for "recreation" are from non-academic patrons.

A separate analysis of the intended uses of "ineligible" requests is given in Table 2.4. A comparison of ineligible and eligible requests shows that the distribution of uses is roughly the same for the two groups. The "ineligibles" tend to be more likely than the eligibles to cite recreation uses. This is due in part to the fact that ineligible cases include, by definition, requests for lower-level materials. Recreation is also cited by a large proportion of "other" patrons. In addition, ineligible requests are somewhat less likely to be those citing coursework uses. Thus it may be inferred from this analysis that the sample of eligible patrons used in this study is closely representative of the entire sample of NYSILL requests (eligible plus ineligible), although there is probably a slight bias in favor of students and against "others," with neither effect producing any major distortions.

The pronounced effects of the academic terms on patterns of intended use are shown in Figure 2.1. These graphs depict the proportion of all requests made by faculty members for independent research or academic coursework, and the proportion of student requests for coursework. In the case of faculty, "coursework" probably refers both to courses they are taking (as candidates for advanced degrees) and to courses they are teaching. When they are not using NYSILL as a coursework aid, they use it for research assistance. The proportion of requests for coursework reaches a peak just prior to the start of each term, while faculty loans for research purposes are highest during the summer session and, probably, during the middle of the spring semester.

For student patrons, the effects are just as pronounced but the peaks occur after the beginning of the term rather than before. The proportion of all student requests that are intended for coursework goes up to 90% in the fall. This is probably due to the influx of new students, plus the extra initial push that may result from the start of a new year in school.

Table 2.4

USE OF MATERIAL, BY PATRON STATUS,
FOR ALL TIME PERIODS IN STUDY

Percentage of Requests Which Patron Intends to Use for:	PATRON STATUS			Patron Status Coded "Ineligible" ^a	Entire Sample ^b
	Students	Faculty	"Others"		
Academic Coursework	78.3%	42.5%	24.4%	31.8%	39.3%
Independent Research	22.4	44.7	38.0	32.0	33.7
Business and/or Professional Work	3.4	15.1	18.5	15.0	14.8
Recreation	3.2	4.2	23.6	23.7	16.4
All Others	1.2	2.0	4.3	4.3	3.5
Total ^c	108.5%	108.5%	108.8%	106.8%	107.7%
Case Base	(734)	(728)	(2,157)	(1,236)	(6,271)

a Ambiguous; could refer to type of request as well as to the kind of patron.

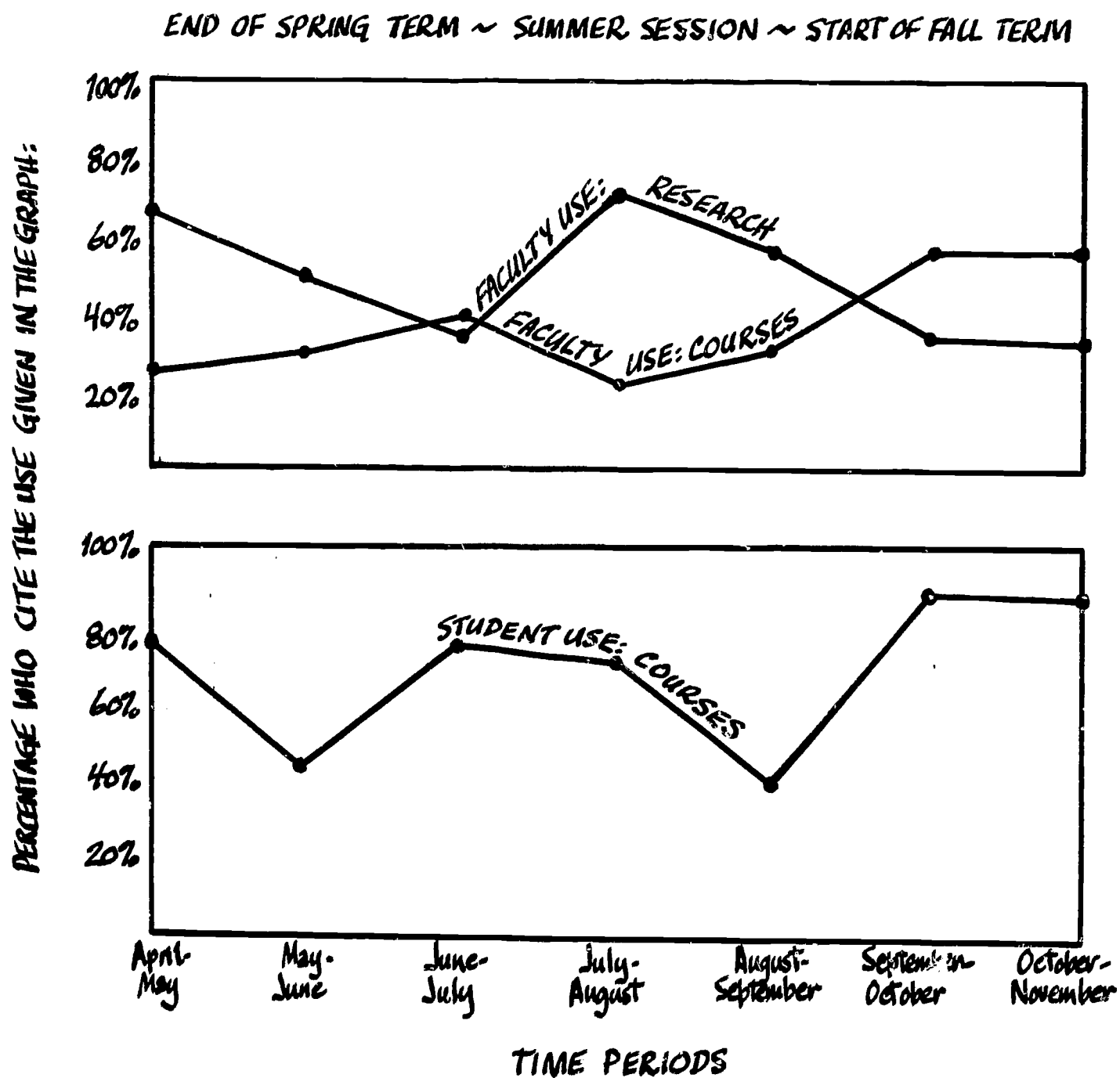
b Same as total for all time periods, Table 2.3. Includes NA cases on Patron Status.

c Total exceeds 100.0% due to multiple responses (more than one use).

Identified Patrons	3,619
"Ineligible" Cases	1,236
NA, Patron Status	1,416
NA, Use of Material	27,245
NA, Both Items	9,707

Total N 43,223

FIGURE 2.1. ACADEMIC TERM EFFECTS IN CHOICE OF REASONS FOR USE OF NYSILL MATERIAL, FOR FACULTY AND FOR STUDENTS*



* Data does not measure volume, but shows the percentage of all requests made by faculty and students which fall in these categories of "intended use." Data from March-April omitted; too few cases for reliable percentages.

SUBJECT MATERIAL OF REQUESTS

The eligible NYSILL requests were assigned a subject code from a list of 55 fields provided by the State Library. This is a unique scheme, unrelated to more common subject codes in library use, and was designed to serve two purposes: to classify requests by subject matter and to designate the subject library to be used if the request could not be filled at the State Library or an area referral center. However, many requests did not include a subject code. In some of these cases, it was reported that the requested material was not coded because it could not be included within any of the 55 available subject categories (a number of subjects, such as home economics and material on the history of the USSR, are missing from the list.) In September originating libraries were asked to supply the Dewey number for each NYSILL request instead of the code, since this classification provides complete subject coverage. However, not all libraries changed their reporting system and many eligible requests continued to have no data for subject matter.

Because many more requests had subject codes than Dewey Decimal numbers, the codes were used in tabulating the subject material of NYSILL requests. Data for the last two time periods were regarded with particular caution because of possible overlap between a three-digit (prefix only) Dewey Decimal code and a State Library code. However, the results indicate that Dewey numbers were not intermixed with subject code numbers to any significant extent.

Only 22% of the NYSILL requests tabulated had a subject code. Of those without a code, about a half were ineligible on patron status, and therefore were not to be coded for subject in the first place. Another 10% were coded with Dewey numbers in the last two time periods and were not tabulated for this analysis. Of the rest, (about 20%), in some cases the libraries evidently overlooked the subject code requirement, while in other cases the subject of the request may not have fallen into one of the original 55 fields. Because of this last factor, the information in Table 2.5 may understate those fields not explicitly identified in the original code.

The original 55 fields are grouped into twelve summary categories for presentation purposes: social sciences (except psychology, but including works on geographic regions, such as the general subject code "Africa"); history, both U. S. and foreign; all natural sciences and mathematics; medicine; education; philosophy and religion; fine arts; psychology; engineering and technology; English language

Table 2.5

SUBJECT MATERIAL OF REQUESTS BY TIME PERIODS

Percentage of Requests in Each a- Subject Category:	Total, All Time Periods Combined	T I M E P E R I O D S									
		March-April	April-May	May-June	June-July	July-August	August-September	September-October	October-November		
Social Sciences	18.3%	20.8%	19.1%	17.0%	17.9%	18.4%	14.0%	18.8%	23.3%		
History	13.3	12.6	12.8	14.2	12.5	12.4	13.3	15.8	14.8		
Science/Mathematics	9.2	7.7	9.8	8.7	9.9	10.8	9.5	8.2	6.9		
Medicine	9.0	5.6	5.3	6.5	5.0	10.0	14.9	16.7	13.6		
Education	8.6	7.3	7.2	8.8	11.3	7.4	6.8	9.9	12.3		
Philosophy/Religion	8.5	8.9	9.1	9.5	7.7	8.5	8.9	7.6	7.1		
Fine Arts	8.1	9.3	7.8	9.0	9.2	8.1	7.6	6.2	4.7		
Psychology	7.2	7.1	9.0	6.7	8.1	6.3	7.2	5.4	6.3		
Engineering/Technology	6.4	5.3	5.9	9.1	6.4	7.0	8.1	4.0	3.8		
English Language/Literature	6.4	9.9	8.5	5.9	6.4	6.1	4.2	4.0	3.2		
Foreign Language/Literature	2.6	2.7	2.6	2.2	3.9	2.0	2.9	2.0	2.0		
All Others	2.4	2.9	2.7	2.5	1.6	2.8	2.6	1.4	2.0		
Total ^b	100.0%	100.1%	99.8%	100.1%	99.9%	99.8%	100.0%	100.0%	100.0%		
Case Base	(9,705)	(1,488)	(1,301)	(1,158)	(1,613)	(1,340)	(1,325)	(974)	(506)		
NA, Subject	(33,518)	(5,993)	(3,974)	(2,920)	(2,787)	(2,913)	(2,757)	(6,094)	(6,080)		
Total N	(43,223)	(7,481)	(5,275)	(4,078)	(4,400)	(4,253)	(4,082)	(7,068)	(6,586)		

a See text for the exact subject areas included under each general heading.

b May not total 100.0% due to rounding.

and literature; foreign languages and literatures; and all others.⁵ As shown in Table 2.5 social sciences account for 18% of these requests and history for 13%. These two fields rank one and two, respectively, for six of the eight time periods; in the other two time periods, medicine is second in volume of requests. The volume for the other subject categories ranges from 2% to 9% with no very noticeable trends. The proportion of requests in some of the minor fields seems to be declining somewhat, but only in the case of English language and literature does the effect seem to be consistent.

Table 2.6 indicates the different kinds of patrons that tend to make requests in different subject areas. Faculty members account for more than their overall share of requests in the fields of science and mathematics, medicine, education, and foreign languages and literatures; they account for less than their overall share in the fields of social science, history, philosophy and religion, fine arts, psychology, engineering and technology, and the "other" subjects, which are mostly law and journalism requests. Students tend to request items in the social sciences, English language and literature, and the "other" fields; they are less likely to ask for materials in science, math, and engineering. Finally, the non-academic "other" patron is more likely to make requests in philosophy and religion, the fine arts, and engineering and technology; he is less likely to ask for loans in medicine, or in English and foreign languages and literatures.

⁵ The fields are given in the order of their contribution to NYSILL volume. The exact makeup of the summary categories is as follows:

social sciences: geography, economics, transportation, sociology, Africa, Middle East, Slavic, Japan, China, anthropology, political science, Southeast Asia, India/Pakistan
 history: French, German, English, Italian, Spanish, Scandinavian, Netherlands, U. S., Canadian, Latin American, classical
 science and mathematics: astronomy, geology, mathematics, physics, chemistry, zoology, botany, agriculture
 philosophy and religion: philosophy, religion
 fine arts: music, fine arts
 education: education
 medicine: medicine
 psychology: psychology
 engineering/technology: engineering, technology, technical reports
 English: American literature, English literature
 foreign language/lit: modern European, classical languages; Spanish, French, Italian, German literatures.
 others: journalism, bibliography, law, patents

Table 2.6

BREAKDOWN OF PATRON STATUS FOR
EACH MAJOR SUBJECT CATEGORY IN STUDY

Subject Heading ^a	Percentage of Requests in Subject Field Made by			Total ^b	Case Base	Patron Status Code "Ineligible"	NA, Patron Status	Total N
	Faculty	Students	"Others"					
Social Science	10.7%	26.1%	63.3%	100.1%	1,584	20	173	1,777
History	12.4	18.1	69.4	99.9	1,158	6	126	1,290
Science/ Mathematics	25.9	13.9	60.3	100.1	793	7	89	889
Medicine	34.0	16.7	49.3	100.0	791	7	73	871
Education	20.8	15.9	63.4	100.1	735	6	93	834
Philosophy/ Religion	5.7	14.3	79.9	99.9	767	5	56	828
Fine Arts	7.0	16.4	76.6	100.0	697	16	74	787
Psychology	10.5	22.0	67.5	100.0	640	11	47	698
Engineering/ Technology	9.2	10.6	80.2	100.0	556	3	65	624
English Language/ Literature	16.2	26.9	56.9	100.0	557	11	54	622
Foreign Language/ Literature	27.2	20.4	52.3	99.9	235	4	17	256
All Others	3.8	26.9	69.2	99.9	208	5	16	229
Total, All Subjects Combined	15.1%	19.0%	65.9%	100.0%	8,721	101	883	9,705

a See text for exact subject codes under each general heading.

b May not total 100.0% due to rounding.

Cases in Table..... 9,705
 NA, Subjects.....23,278
 NA, Both Subject
 and Patron Status..10,240
 Total N.....43,223

Chapter III

THE OPERATIONS OF THE NYSILL NETWORK

This chapter presents a summary of the performance and efficiency of the entire NYSILL network and then breaks this down for the various sections of the network--the originating libraries and request transmission sites, The New York State Library, and the referral libraries.

AN OVERVIEW OF THE NETWORK

The summary analysis presented in this section studies the performance of the NYSILL network in filling interlibrary loan requests. In particular, this section attempts to answer the following questions: What proportion of requests are filled in the network? Where are these requests being filled? What changes have occurred over the eight time periods?

In order to answer these questions, three factors have been considered:

1. Whether or not the request was referred, and if so, how many times;
2. Whether or not the request was filled; and
3. The changes that occurred during the eight-month monitoring period for each of the above. As noted in Chapter II, interpretation of data by time periods must take into consideration the fact that some requests were incomplete on the cut-off date for data processing and were not included in this study.

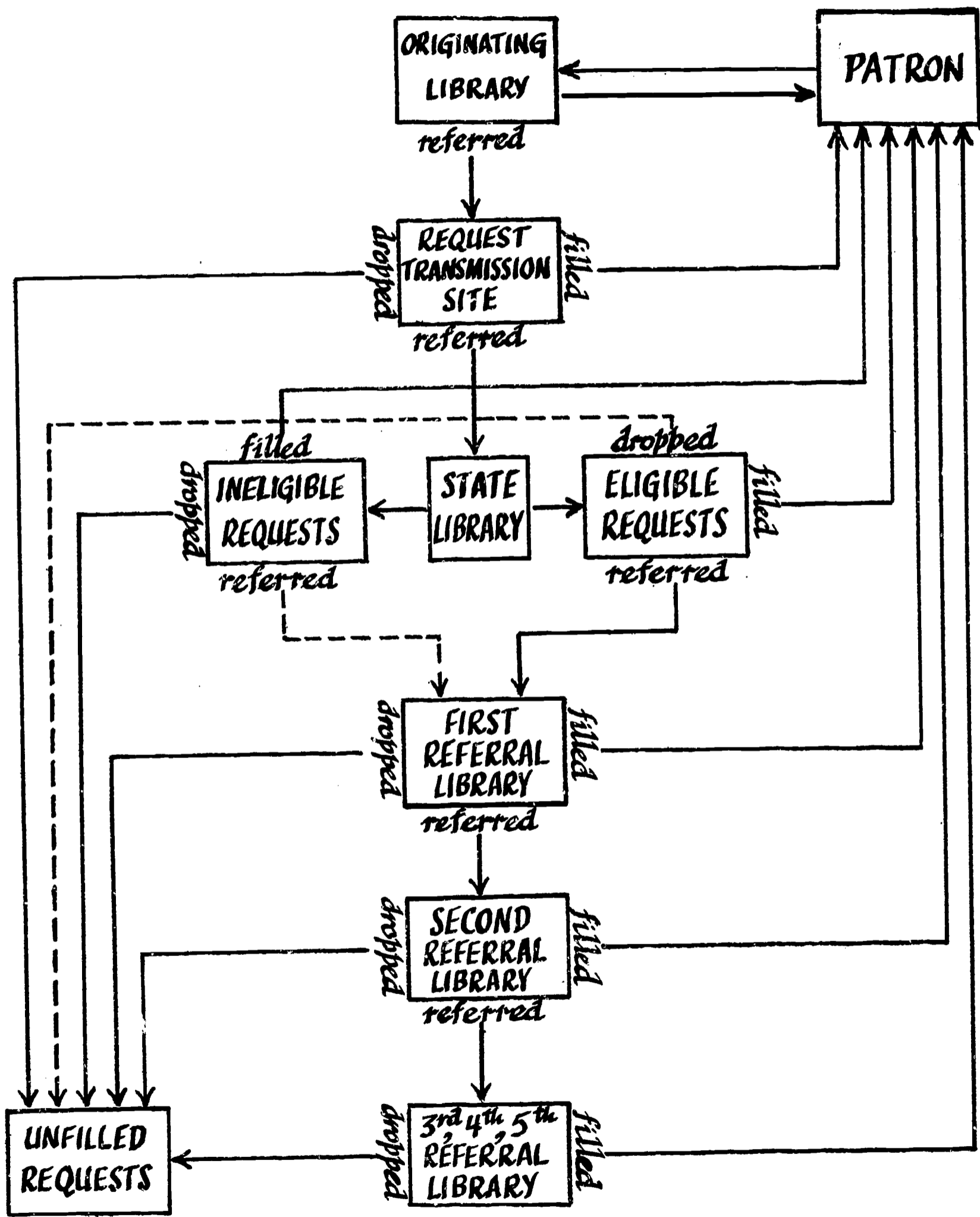
The overview follows the flow chart in Figure 3.1. This diagram isolates each point in the system where action is taken on a request, and shows each of the three possible outcomes:

1. Filled;
2. Not filled, but referred to another library; or
3. Dropped (neither filled nor referred).

If a request is not filled at the State Library, the outcome is largely determined by whether it is considered eligible or ineligible.¹

¹ The number of ineligible requests received during the monitoring period is estimated at between one-third and one-half of the total.

FIGURE 3.1. KEY CONTROL POINTS AND OUTCOMES IN THE NYSILL NETWORK (solid arrows point to "anticipated" outcomes, broken arrows point to "unanticipated" outcomes)



By definition, eligible requests are referred; ineligible ones are not. However, these guidelines may not always be followed. Some eligible requests are dropped at the State Library, and a few ineligible ones are referred. Since these last two events are exceptions to the usual handling of requests, they are depicted in Figure 3.1 with dotted lines. In these cases, the information on eligibility is apparently superseded--perhaps by a librarian at the State Library who has re-evaluated the request.

Table 3.1 shows what happens to the requests when they reach the State Library. Basic data about the total sample are given in Section A of the table. Section B presents more detailed information about items that were not filled at the State Library.

Section A shows that one-quarter (11,022) of all requests are referred on to at least one other library. The proportion for referred requests ranges from 21% in October--November to 30% in June--July. Over the eight months of the monitoring, 18% of all requests are referred to only one other library and 7% are referred to two libraries. A very small number of requests (0.2% of the total) are referred to three or more libraries.²

More than half (55%) of the requests tabulated for the overview are filled, with the State Library supplying 80% of the material.³ The rise in both of these percentages in the last two months is probably due to missing data from incomplete requests. During the monitoring period, the State Library fills 44% of the 43,223 requests it receives, a first referral library fills another 8% of these requests, a second referral library fills 2% and a third (or later) referral library fills less than 1%. There seems to be a slight rise over the study period in the proportion of requests filled at a first referral site.

Action taken on the 11,022 referred requests at each of the first two referral stations is shown in Section B of Table 3.1. Again,

² Most of the requests in this group originated as FACTS requests (requests in the State Library's pilot program in the facsimile transmission of library materials) and were handled as such at the State Library. This means that they could have been referred as many as five times. However, when these requests were filled, they were filled in the conventional interlibrary loan manner (i.e., by mailing a bound volume or photocopy) rather than by facsimile transmission. Their designation, therefore, was changed from FACTS requests to NYSILL requests and they were included in the tabulation of data for this study.

³ This number, not shown in the table, is obtained when the proportion of all requests filled at the State Library is divided by the proportion of all requests filled anywhere.

Table 3.1

OVERVIEW OF THE OPERATIONS OF THE
NYSILL NETWORK, BY TIME PERIODS

	Total, All Time Periods Combined	T I M E P E R I O D S										
		March- April	April- May	May- June	June- July	July- August	August- September	September- October	October- November			
Section A: For All Requests:												
Number of Cases	43,223	7,481	5,275	4,078	4,400	4,253	4,082	7,068	6,586			
Percentage...	18.1%	14.7%	20.2%	12.8%	19.1%	19.0%	18.1%	18.7%	17.9%			
... Referred Once	7.3	9.6	7.8	9.7	10.3	9.0	6.4	4.7	3.1			
... Referred Twice	<u>0.2</u>	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.3</u>	<u>0.0</u> ^b	<u>1.0</u>	<u>0.1</u>	<u>0.0</u> ^b			
... Referred Three or More Times	25.6	24.4	28.2	28.8	29.7	28.0	25.5	22.5	21.0			
Subtotal Referred	74.4	75.6	71.8	71.2	70.3	72.0	74.5	76.5	79.0			
... Not Referred												
... Filled at State Library ^a	43.9%	42.7%	43.2%	43.6%	40.9%	38.1%	41.0%	46.4%	51.0%			
... Filled at 1st Referral	8.5	6.3	7.3	6.6	9.5	9.6	10.5	9.7	9.2			
... Filled at 2nd Referral	..2	2.4	2.2	2.8	3.5	3.1	2.4	1.4	0.7			
... Filled at 3rd (or later) Referral	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.0</u> ^b	<u>0.0</u> ^b			
Subtotal Filled	54.7	51.5	52.9	53.1	54.0	50.9	54.0	51.5	60.9			
... Not Filled	45.3	48.5	47.1	46.9	46.0	49.1	46.0	42.5	39.1			

^a 422 requests noted as filled at the State Library were also coded as referred. In this table, these requests are counted as being filled at the State Library, although 252 were also filled at a referral library.

(continued on the following page)



Table 3.1
(continued)

	Total, All Time Periods Combined	T I M E P E R I O D S									
		March- April	April- May	May- June	June- July	July- August	August- September	September- October	October- November		
Section B.1: For All Re- quests Referred at Least One Time											
Number of Cases	11,022	1,808	1,479	1,168	1,295	1,187	1,041	1,659	1,385		
At First Referral Cen- ter, Percentage...											
...Filled	37.0%	29.3%	34.8%	30.1%	33.6%	36.0%	42.3%	42.5%	49.2%		
...Dropped	33.6	30.9	36.7	35.1	30.6	31.4	28.9	36.9	35.9		
...Referred On	29.4	39.8	28.5	34.8	35.8	32.6	28.8	20.6	14.9		
Section B.2: For All Re- quests Referred at Least Two Times											
Number of Cases	3,238	720	421	406	463	381	300	341	206		
At Second Referral Center, Percentage...											
...Filled	34.1%	35.3%	35.8%	36.4%	35.2%	33.2%	32.9%	31.5%	25.6%		
...Dropped	62.9	63.7	61.1	60.6	62.2	66.3	53.1	66.2	72.9		
...Referred On ^c	3.0	1.0	3.1	3.0	2.6	0.5	14.0	2.3	1.5		

b Less than one-tenth of one percent.

c No data are given for requests referred at least three times; the number of such cases is too small to justify per-
centages.



changes in the last time period are probably due to the lack of data on incomplete requests. However, these data do reflect the slight increase, noted in Section A, in the proportion of requests filled at a first referral center. Multiple referrals may have become less necessary if the State Library, through experience, became more adept at referring a request to the library most likely to fill it.

For the eight months as a whole, 37% of requests received at a first referral center are filled, 34% are dropped and 29% are referred on. At a second referral center, 34% of the requests are filled, 63% are dropped and 3% are referred on. Section A shows that 8% of all requests are filled at first referral libraries while only 2% are filled at second referral libraries. Section B, dealing just with referrals, shows that, in relation to the number of referrals they receive, second referral libraries fill almost as many requests as first referral libraries.

The comparable breakdown for third and later referral centers has not been given. So few requests reach these stages that percentage distributions within time periods are quite unreliable. Over the entire monitoring period, about 35% of all requests that are referred at least three times are eventually filled, the remainder being dropped.

ORIGINATING LIBRARIES AND REQUEST TRANSMISSION SITES

The originating libraries and the request transmission sites are the two stages⁴ where a request is handled before being sent to the State Library. To ascertain what kinds of originating libraries submit requests through NYSILL, they were classified according to type and then the volume of requests submitted, the percent referred and the percent filled were tabulated. Originating libraries were grouped as follows: public libraries; bookmobiles; library system headquarters; two-year colleges (mostly community colleges, plus a number of private junior colleges); four-year colleges (public and private institutions offering only the bachelor's or an equivalent first-professional degree); universities (institutions offering both undergraduate and graduate degrees); medical colleges (including medical research institutions, such as Roswell Park Memorial Institute); New York State agencies (such as the departments of Health and Education); special and industrial libraries (American Cyanamid, IBM, General Electric, the Adirondack Museum, the Dudley Observatory, etc.); hospitals; high schools; and all out-of-state libraries.

⁴ There is only one stage if an originating library is also a request transmission site. In these cases, the library is included in analyses for both originating libraries and request transmission sites.

The basic data on the types of originating libraries supplying requests are shown in Table 3.2. The number of requests tabulated is about half the total volume in this study, since 21,268 requests did not include the name of the originating library. The requests tabulated here are assumed to be mainly eligible ones and, in addition, are assumed to represent most of the eligible requests in this study. However, this may be somewhat imprecise for the following reasons: first, although the State Library did not require data for an originating library when the request was classified as ineligible, in some instances it may have been supplied anyway; and second, there are probably some eligible requests that did not include information on the originating library. As seen in Table 3.2, public libraries account for almost three-quarters (71%) of these requests, followed by academic libraries which initiate 26%. "Other" libraries originate a relatively insignificant proportion of requests (3%). The table also indicates that more requests from public libraries than from academic libraries tend to be referred. However, if the no answers on originating library (i.e., mostly ineligible requests) were included here, it is likely that the proportion of referred requests from academic libraries would equal or exceed the proportion from public libraries.

Of the eligible requests only those from medical schools and New York State agencies are exceptionally likely to be referred. The definition of NYSILL requests explains the high proportion from New York State agencies; requests received in person or by telephone (e.g., from a state agency) are not considered NYSILL requests unless they are referred to another library.⁵

Of the requests included in Table 3.2, 64% are ultimately filled at either the State Library or a referral site. Within the academic category, the proportions for two-year and four-year colleges are somewhat higher--72% and 73%, respectively.

Table 3.3 shows a breakdown of the volume of these 21,955 requests by major type of originating library (public, academic, and "other") for the eight time periods. Although the proportion of requests from academic libraries seems to be increasing, this must be regarded with caution. First, this may be a temporary effect of the academic terms. Second, although the proportion of requests originating at public libraries has gone down, the actual volume from public libraries has remained fairly stable. The percentage goes down only because of the increase in the number of requests from academic libraries, not because of a drop in non-academic use of the system. Third, if incompleting cases in the last part of the study tend to be those from non-academic

⁵ If a patron makes a request at the State Library and it is filled or not filled but not referred, it is similar to the procedure at any other originating library. Such requests, because they are not referred, are not considered as part of NYSILL.

Table 3.2

FOR ORIGINATING LIBRARIES: NUMBER AND PERCENT OF ALL REQUESTS FROM EACH TYPE OF LIBRARY; FOR EACH TYPE, PERCENT REFERRED AND PERCENT FILLED^a

Type of Originating Library	VOLUME		OUTCOMES FOR EACH TYPE	
	Number of Requests Submitted by Each Type	Proportion of Requests at Each Type	Percent Referred	Percent Filled
<u>Public</u>				
Public Libraries	14,282	65.1%	47.8%	63.9%
Bookmobiles	666	3.0	50.4	63.2
Library System Headquarters	656	3.0	48.2	64.7
Subtotal, All Public	15,604	71.1%	47.9%	63.9%
<u>Academic</u>				
Two-Year Colleges	211	1.0%	49.8%	71.5%
Four-Year Colleges	391	1.8	46.3	72.8
Universities	5,070	23.1	42.6	63.6
Medical Schools	108	0.5	80.6	60.0
Subtotal, All Academic	5,780	26.3%	43.9%	64.4%
<u>Others</u>				
New York State Agencies	68	0.3%	98.5%	52.2%
Special and Industrial Hospitals	403	1.8	55.6	65.2
High Schools	35	0.2	54.3	69.7
Out-of-State	57	0.3	50.9	57.4
	8	0.0 ^b	0.0 ^c	85.7 ^c
Subtotal All Others	571	2.6%	59.4%	63.4%
<u>Total, All Libraries</u>	21,955	100.0%	47.2%	64.0%

a May not total 100.0% due to rounding.
b Less than one-tenth of one percent.
c Not reliable: based on less than 30 cases.

Cases in Table: 21,955
NA, Orig. Lib.: 21,268
Total N: 43,223

Table 3.3

VOLUME OF REQUESTS BY TYPE OF ORIGINATING LIBRARY,
FOR EACH TIME PERIOD

	Total, All Time Periods Combined	T I M E P E R I O D S										
		March- April	April- May	May- June	June- July	July- August	August- September	September- October	October- November			
Type of Originating Library:												
All Public	71.1%	76.9%	73.4%	80.7%	78.7%	71.7%	68.7%	61.1%	60.9%			
All Academic	26.3	21.4	25.4	16.6	16.8	23.8	27.5	36.9	36.9			
All Others	2.6	1.7	1.1	2.8	4.5	4.5	3.8	2.1	2.2			
Total*	100.0%	100.0%	99.9%	100.1%	100.0%	100.0%	100.0%	100.1%	100.0%			100.0%
Case Base	(21,955)	(4,143)	(2,791)	(2,173)	(2,371)	(2,014)	(1,865)	(3,492)	(3,106)			(3,106)
NA, Originating Library	(21,268)	(3,338)	(2,484)	(1,905)	(2,029)	(2,239)	(2,217)	(3,576)	(3,480)			(3,480)
Total N	(43,223)	(7,481)	(5,275)	(4,078)	(4,400)	(4,253)	(4,082)	(7,068)	(6,586)			(6,586)

* May not total 100.0% due to rounding.

libraries, then the effects noted should be ascribed to bias in the data.

Table 3.4 shows, for each request transmission site, the kinds or originating libraries handled by that site.⁶ When transmission sites are also classified by type of library (public, academic or "other") there is a clear relationship with types of originating libraries. Public library requests are almost always sent through transmission sites that are public library system headquarters. Academic requests are routed either through a university⁷ or through a nearby public library system.

The data in Table 3.5 present the volume of requests from each request transmission site and the action taken on these requests (the percent referred and the percent filled at either the State Library or a referral library). In this table, which is analogous to Table 3.2, every request had data on the transmitting site. Consequently, there are no NA (no answer) responses and the total tabulated volume is about twice that of Table 3.2.

As shown in Table 3.5, only four transmission sites contribute more than 5% of the total NYSILL volume: Suffolk, Nassau, Ramapo Catskill, and Mid-Hudson. All of these libraries are located in the urbanized area around New York City. The proportion of requests handled by each transmission site does not vary significantly over the eight individual time periods of the monitoring.⁸

The percentage of items filled and referred at each transmission site does not seem to follow any discernible pattern until "no answer" responses on originating libraries (i.e., mainly ineligible requests) are taken into consideration. Table 3.6 presents a ranking of the request transmission sites according to the percentage of requests handled with no information on the originating library. This shows that there is a definite tendency for the percentage of requests referred to decrease as the percentage of those NA on originating library increases. There is a similar tendency for the percentage of items filled to decline as the NA's rise. These effects follow the "no answer" because the NA's are mostly ineligible requests. Thus, the more NA's, the fewer eligibles; the fewer eligibles, the fewer referrals; the fewer referrals, the fewer filled items. The relationship is even

⁶ This includes 21 public library systems; six major academic centers; requests received at the State Library by mail, telephone, or in person; special and industrial libraries; and an "others" group, mostly other academic libraries.

⁷ In most of these cases the originating library is also the request transmission site.

⁸ Ascertained by inspection of tabulations not presented here.

Table 3.4

FOR REQUEST TRANSMISSION SITES:
 PERCENT OF REQUESTS FROM EACH SITE
 WHICH ORIGINATE AT PUBLIC, ACADEMIC,
 OR OTHER TYPES OF LIBRARIES

Request Transmission Sites	Percent of All Requests Originating at			Total ^f	Case Base
	Public Libraries	Academic Libraries	"Other" Libraries		
<u>Public Libraries</u>					
Suffolk Cooperative Library System	91.8%	6.4%	1.8%	100.0%	2,813
Nassau Library System	66.4	33.2	0.4	100.0	277
Ramapo Catskill Library System	97.8	2.2	0.0 ^a	100.0	3,194
Mid-Hudson Libraries	73.8	25.5	0.6	99.9	1,258
Southern Adirondack Library System	84.0	15.6	0.4	100.0	551
Four County Library System	99.9	0.1	--- ^b	100.0	1,673
Mid-York Library System	91.0	8.9	0.1	100.0	1,391
Pioneer Library System	76.4	15.5	8.1	100.0	1,349
Chautauqua-Cattaraugus Library System	100.0	--- ^b	--- ^b	100.0	671
Nioga Library System	87.8	12.2	--- ^b	100.0	337
Mohawk Valley Library Association	99.7	0.3	--- ^b	100.0	298
Finger Lakes Library System	100.0	--- ^b	--- ^b	100.0	237
Chemung-Southern Tier Library System	99.9	0.1	--- ^b	100.0	948
Westchester Library System	98.9	1.0	0.1	100.0	792
Onondaga Library System	92.9	6.5	0.6	100.0	354
North Country Library System	97.9	0.2	1.9	100.0	582
Clinton-Essex-Franklin Library	84.1	0.7	15.2	100.0	145

(continued on following page)

Table 3.4
(continued)

Request Transmission Sites	Percent of All Requests Originating at			Total ^f	Case Base
	Public Libraries	Academic Libraries	"Other" Libraries		
<u>Public Libraries (continued)</u>					
Buffalo and Erie County Public Library	41.7%	56.9%	1.4%	100.0%	72
Brooklyn Public Library	---c	---c	---c	---c	None ^c
The New York Public Library Research Libraries	100.0 ^{d,e}	---b	---b	100.0	14
Queens Borough Public Library	100.0 ^d	---b	---b	100.0	3
<u>Academic Libraries</u>					
Union College	---b	100.0	---b	100.0	1,730
SUNY: Albany	---b	100.0	---b	100.0	864
SUNY College at Potsdam	1.2	96.7	2.2	100.1	600
SUNY: Buffalo	---b	100.0	---b	100.0	314
Cornell University	---b	100.0	---b	100.0	163
SUNY: Binghamton	---b	100.0	---b	100.0	128
Other Academic	0.5	95.3	4.2	100.0	191
<u>"Other" Libraries</u>					
Mail, etc., to The New York State Library	5.8	76.5	17.7	100.0	808
Special/Industrial	---b	---b	100.0	100.0	198
Total	71.1%	26.3%	2.6%	100.0%	21,955

a Less than one-tenth of one percent.

b No cases.

c All cases were NA on type of originating library; see text.

d Not reliable: too few cases (less than 30).

e These requests actually originated at The New York Public Library Research Libraries.

f May not total 100.0% due to rounding.

Table 3.5

FOR REQUEST TRANSMISSION SITES:
 NUMBER AND PERCENT OF ALL REQUESTS FROM EACH TRANSMISSION SITE;
 FOR EACH SITE, PERCENT REFERRED AND PERCENT FILLED

Request Transmission Sites	VOLUME		OUTCOMES FOR EACH SITE	
	Number of Requests Submitted by Each Site	Proportion of Requests at Each Site	Percent Referred	Percent Filled
<u>Public Libraries</u>				
Suffolk Cooperative Library System	7,316	16.9%	18.5%	50.1%
Nassau Library System	5,406	12.5	3.0	40.4
Ramapo Catskill Library System	5,135	11.9	29.6	57.1
Mid-Hudson Libraries	3,631	8.4	15.2	46.8
Southern Adirondack Library System	2,163	5.0	11.4	57.7
Four County Library System	1,707	3.9	52.0	63.5
Mid-York Library System	1,528	3.5	48.0	64.1
Pioneer Library System	1,439	3.3	54.2	62.0
Chautauqua-Cattaraugus System	1,202	2.8	25.3	61.3
Nioga Library System	1,163	2.7	12.1	56.4
Mohawk Valley Library Association	1,153	2.7	36.4	64.2
Finger Lakes Library System	1,119	2.6	11.3	49.3
Chemung-Southern Tier Library System	980	2.3	54.3	58.3
Westchester Library System	846	2.0	54.7	58.5
Onondaga Library System	785	1.8	23.7	54.4
North Country Library System	603	1.4	42.5	64.7
Clinton-Essex-Franklin Library	583	1.3	13.7	51.6

(continued on following page)

Table 3.5
(continued)

Request Transmission Sites	VOLUME		OUTCOMES FOR EACH SITE	
	Number of Requests Submitted by Each Site	Proportion of Requests at Each Site	Percent Referred	Percent Filled
<u>Public Libraries</u> (continued)				
Buffalo and Erie County Public Library	121	0.3%	38.8%	63.7%
Brooklyn Public Library	26	0.1	3.8 ^a	19.2 ^a
The New York Public Library Research Libraries	16	0.0 ^b	31.2 ^a	37.5 ^a
Queens Borough Public Library	4	0.0 ^b	100.0 ^a	0.0 ^a
<u>Academic Libraries</u> ^c				
Union College	2,182	5.0	20.4	63.8
SUNY: Albany	1,381	3.2	22.7	67.1
SUNY College at Potsdam	624	1.4	42.9	70.2
SUNY: Buffalo	421	1.0	44.4	63.1
Cornell University	164	0.4	59.8	60.9
SUNY: Binghamton	128	0.3	31.2	69.3
Other Academic	215	0.5	23.7	58.4
<u>"Other" Libraries</u>				
Mail, etc., to The New York State Library	978	2.3	93.1	52.7
Special/Industrial	204	0.5	42.2	71.9
Total	43,223	100.0%	25.9%	54.7%

a Unreliable: based on too few cases (less than 30).

b Less than one-tenth of one percent.

c Columbia and New York University did not submit requests.

Table 3.6

FOR EACH REQUEST TRANSMISSION SITE,
 PERCENT NA ON ORIGINATING LIBRARY, PERCENT
 REFERRED, AND PERCENT FILLED
 (DATA FROM TABLE 3.4 AND TABLE 3.5)

Request Transmission Sites	Percent NA on Originating Library	Percent Referred	Percent Filled
SUNY: Binghamton	0.0%	31.2%	69.3%
Cornell University	0.6	59.8	60.9
Four County Library System	2.0	52.0	63.5
Special/Industrial	2.9	42.2	71.9
Chemung-Southern Tier Library System	3.3	54.3	58.3
North Country Library System	3.5	42.5	64.7
SUNY College at Potsdam	3.8	42.9	70.2
Pioneer Library System	6.3	54.2	62.0
Westchester Library System	6.4	54.7	58.5
Mid-York Library System	9.0	48.0	64.1
Other Academic	11.2	23.7	58.4
Mail, etc., at New York State Library	17.4	93.1	52.7
Union College	20.7	20.4	63.8
SUNY: Buffalo	25.4	44.4	63.1
SUNY: Albany	37.4	22.7	67.1
Ramapo Catskill Library System	37.8	29.6	57.1
Buffalo and Erie County Public Library	40.5	38.8	63.7
Chautauqua-Cattaraugus Library System	44.2	25.3	61.3
Onondaga Library System	54.9	23.7	54.4
Suffolk Cooperative Library System	61.6	18.5	50.1
Mid-Hudson Libraries	65.4	15.2	46.8
Nioga Library System	71.0	12.1	56.4
Mohawk Valley Library Association	74.2	36.4	64.2
Southern Adirondack Library System	74.5	11.4	57.7
Clinton-Essex-Franklin Library	75.1	15.7	51.6
Finger Lakes Library System	78.8	11.3	49.3
Nassau Library System	94.9	3.0	40.4
Total, All Transmission Sites*	49.2%	25.9%	54.7%

* Brooklyn Public Library, The New York Public Library Research Libraries and Queens Borough Public Library are omitted from table due to lack of sufficient cases for reliable percentages.

clearer when only the public library transmission sites are considered. Nine libraries handle more than an average proportion of requests with no data on originating library. Of these, eight have less than the average proportion of referred requests, and six of these have less than the average filled. The one serious inconsistency is the data for Mohawk Valley Library Association. However, this library omitted data on originating libraries for all of its requests, both eligible and ineligible, since it wanted all filled items sent to the transmission site. Consequently, the NA responses here do not necessarily correspond to ineligible requests.

The extreme differences noted in Table 3.6 seem to be best explained by differing interpretations among the libraries of the term "eligible." Nassau, for example, would appear to be interpreting the term strictly; Four County would seem to be interpreting it generously.

STATUS OF REQUESTS AT THE STATE LIBRARY

The breakdown for the status of requests received by the State Library is shown in Table 3.7 for each of the time periods of the study. The number of requests that are NA on status decreases after June, reflecting the change in record-keeping at the State Library noted in Chapter I.

Overall, about 44% of the cases are filled at the State Library, but this proportion conceals a slight drop during the summer, followed by a rise to 51% in October-November (probably due to lack of data on incomplete requests). The other requests are not filled by the State Library for the following reasons: not in library (NIL)--36%; not on shelf (NOS)--17%; will not send (WNS)--2%; and "other"--1%. The one change over the monitoring period that seems noteworthy is that the proportion of requests which is NIL rises during the summer months. Lack of information on incomplete requests may be obscuring a similarly high level during the fall.

Table 3.8 presents the degree of success at the State Library in filling eligible requests classified in the various subject fields. At this stage of the NYSILL network, requests from the social sciences, education and engineering-technological fields have the greatest chance of being filled while those in foreign languages have the least chance. In between these two groups, requests for material in history, science and mathematics, medicine, psychology, and English are more often successful than those in fine arts. In turn, these enjoy greater success than those in philosophy and religion and the "others" category (primarily law and journalism). In some subject areas, such as medicine, philosophy and religion, and foreign languages, the State Library apparently does not have extensive holdings, since many of these items were reported NIL (not in library). Requests for items in history and, especially, in the "other" category, are more often coded WNS (will not send). Apparently this material is held at the State Library but its circulation is restricted. In the social sciences and psychology, the

Table 3.7

STATUS OF REQUESTS AT THE STATE LIBRARY,
FOR EACH TIME PERIOD, AND FOR ALL PERIODS

	Total, All Time Periods Combined	T I M E P E R I O D S									
		March- April	April- May	May- June	June- July	July- August	August- September	September- October	October- November		
Filled Requests	43.9%	42.7%	43.2%	43.6%	40.9%	38.1%	41.0%	46.4%	51.0%		
NIL (not in library)	35.8	33.3	33.2	35.0	40.5	42.1	40.3	35.0	31.9		
NOS (not on shelf) ^a	17.0	19.8	18.6	17.0	16.0	16.7	15.9	16.3	14.9		
WNS (will not send) ^b	2.3	2.4	2.5	2.2	2.4	2.5	2.4	2.1	2.1		
Other Statuses ^c	1.0	1.9	2.6	2.2	0.3	0.6	0.4	0.2	0.1		
Total ^d	100.0%	100.1%	100.1%	100.0%	100.1%	100.0%	100.0%	100.0%	100.0%		
Case Base	(41,869)	(7,096)	(4,917)	(3,837)	(4,309)	(4,214)	(4,039)	(6,986)	(6,471)		
NA: Status at NYSL	(1,354)	(385)	(358)	(241)	(91)	(39)	(43)	(82)	(115)		
Total N	(43,223)	(7,481)	(5,275)	(4,078)	(4,400)	(4,253)	(4,082)	(7,068)	(6,586)		

^a Includes items not on shelf, out, in binderies, and missing.

^b Includes items which library will not send or are not circulated.

^c Includes items which are not available, plus cancelled requests or requests which had passed a user-imposed deadline.

^d May not total 100.0% due to rounding.

Table 3.8

STATUS OF REQUESTS AT THE STATE LIBRARY,
FOR EACH SUBJECT CATEGORY

Subject of Request	Status: Percentage					Total ^e	Case Base
	Filled	NIL ^a	NOS ^b	WNS ^c	Other ^d		
Social Sciences	46.5%	30.9%	20.2%	2.0%	0.3%	99.9%	(1,726)
History	43.6	33.4	17.9	4.8	0.3	100.0	(1,241)
Science/Mathematics	43.7	38.0	17.1	1.2	-- ^f	100.0	(842)
Medicine	43.4	45.7	9.5	0.6	0.7	99.9	(820)
Education	48.4	29.0	19.9	2.6	0.1	100.0	(808)
Philosophy/Religion	33.3	54.8	11.3	0.5	0.1	100.0	(812)
Fine Arts	39.3	40.1	17.2	2.2	1.1	99.9	(760)
Psychology	43.1	33.9	22.1	0.9	-- ^f	100.0	(664)
Engineering/Technology	46.8	32.9	17.4	2.3	0.7	100.1	(605)
English Language/ Literature	43.1	37.4	18.4	0.8	0.3	100.0	(613)
Foreign Language/ Literature	25.8	65.1	7.5	1.2	0.4	100.0	(252)
All Others	33.9	31.3	11.6	23.2	-- ^f	100.0	(224)
Total	42.7	37.5	16.9	2.5	0.4	100.0	(9,367)

a Not in library.

b Not on shelf, out, in bindery, missing.

c Will not send, not circulated.

d Not available, cancelled, can't meet deadline.

e May not total 100.0% due to rounding.

f No cases.

Cases in	
Table	9,367
NA, Subject	32,502
NA, Status	338
NA, Both	<u>1,016</u>

Total N 43,223

library seems to hold many of the items; however, a slightly higher proportion is reported not on the shelf (NOS), presumably because of heavy demand.

A sample of 560 requests was reviewed in order to determine the nature of requests that are NIL at the State Library and are eligible for referral into the NYSILL network. This analysis shows that 28% of the titles are suitable for purchase by the State Library while 38% are appropriate for public libraries. (This latter figure includes a 3% overlap with titles suggested for the State Library.) The remaining 38% of the sample are too ephemeral in nature for acquisition at either level.

All of the titles suggested for State Library purchase plus a limited selection of those for public libraries (39% of the sample) represent requests which are considered suitable for referral beyond the State Library. The detailed analysis of the NIL sample is given in Appendix E.

REFERRAL LIBRARIES

In the overview, it was pointed out that a quarter of all requests handled by the State Library, or about 11,000 requests, are referred to one or more of the 12 referral centers because they cannot be filled at the State Library. Table 3.9 gives the breakdown of these 11,000 requests⁹ by status at the State Library, and then shows how the requests from each category are handled at the first referral library. Of all requests referred for the first time, 68% were NIL at the State Library, 28% were NOS, 4% were WNS and less than 1% were in the "other" category. Those which were NOS or WNS are items held at the State Library which they either would not or could not loan. It is reasonable to expect that such requests would be in the collections of the referral libraries, and the data in Table 3.9 show that this is, in fact, the case. The table also shows that one half of the referred requests that were NIL at the State Library are NIL at first referral libraries.

Overall, 36% of the requests referred once are filled. Of the requests that are not filled, 43% are NIL at the first referral library, 14% are NOS and 6% are WNS.

Table 3.10 gives the status at the referral library for all requests being referred for the first time. The majority (74%) of first

⁹ About 1,000 cases drop out of these tabulations due to lack of data on their detailed status.

Table 3.9

STATUS OF REQUESTS SENT TO A FIRST
REFERRAL LIBRARY, BY THEIR STATUS AT THE
NEW YORK STATE LIBRARY^a

New Status at the First Referral Libraries	Total, All Referred Requests	Requests in Each Status Category at NYSL			
		NIL (68.1%)	NOS (28.0%)	WNS (3.8%)	"Other" (0.1%)
Percent Filled	36.2%	34.1%	42.7%	26.2%	12.5% ^b
Percent NIL	43.3	50.9	26.1	33.2	62.5 ^b
Percent NOS	14.4	10.5	23.8	13.9	12.5 ^b
Percent WNS	6.0	4.3	7.3	26.7	-- ^c
Percent "Other"	0.1	0.1	-- ^d	-- ^c	12.5 ^b
Total ^e	100.0%	99.9%	99.9%	100.0%	100.0%
Case Base	(10,162)	(6,918)	(2,847)	(389)	(8)

- a 422 cases noted as "sent" at the State Library were also coded as "referred." Apparently 170 of these were actually referred and later filled by the State Library when returned for a second referral. The remainder were recorded as filled twice, by both NYSL and by a referral library.
- b Not reliable; based on too few cases.
- c None.
- d Less than one-tenth of one percent.
- e May not total 100.0% due to rounding.

Cases in Table	10,162
Sent by NYSL	18,385
NA, NYSL Status	391
NA, Status at 1st Referral	13,322
NA, Both	<u>963</u>
Total N	43,223

Table 3.10

VOLUME AND STATUS AT THE FIRST REFERRAL LIBRARY, FOR ALL
REFERRED REQUESTS, BY EACH REFERRAL LIBRARY

Referral Libraries	Volume		Status at First Referral: Percent...					Totala
	Number of Referrals	Percent of Total	Filled	NIL	NOS	WNS	" Other"	
<u>Area Referral Libraries</u>								
All Libraries	8,141	74.3%	30.1%	48.7%	16.8%	4.5%	---b	100.1%
Brooklyn Public Library	2,698	24.6	33.9	46.1	13.3	6.6	0.1%	100.0
Buffalo and Erie Public Library	3,090	28.2	33.9	44.6	17.9	3.6	---b	100.0
Monroe County Library System	2,353	21.5	20.6	56.9	19.3	3.3	---c	100.1
<u>Subject Referral Libraries</u>								
All Libraries	2,819	25.7	57.0	25.4	6.6	10.7	0.2	99.9
Columbia University	494	4.5	54.9	27.1	9.3	8.7	---b	100.0
Cornell University	510	4.7	67.6	15.7	6.3	10.0	0.4	100.0
Engineering Societies Library	220	2.0	60.5	33.6	2.3	3.6	---c	100.0
The Metropolitan Museum of Art	68	0.6	32.4	42.6	11.8	13.2	---c	100.0
The New York Academy of Medicine	562	5.1	64.6	22.6	9.8	3.0	---c	100.0

(continued on following page)

Table 3.10
(continued)

Referral Libraries	Volume		Status at First Referral: Percent ...					Total ^a
	Number of Referrals	Percent of Total	Filled	NIL	NOS	WNS	Other	
<u>Subject Referral Libraries</u> (continued)								
The New York Public Library Research Libraries	483	4.4%	65.6%	21.9%	3.5%	8.1%	0.8%	99.9%
New York University	124	1.1	33.9	52.4	4.8	8.9	---c	100.0
Teachers College	238	2.2	23.1	22.3	7.1	47.5	---c	100.0
Union Theological Seminary	120	1.1	49.2	40.8	---c	10.0	---c	100.0
Total, All Libraries	10,960	100.0%	37.0%	42.7%	14.1%	6.1%	0.1%	100.0%

a May not total 100.0% due to rounding.

b Less than one-tenth of one percent.

c None.

Cases in Table 10,960
NA, Libraries: 15
NA, Status: 46
NA, Both: 32,202

Total N 43,223

referrals are sent to area referral libraries. A tabulation by time period (not presented here) shows that this tendency is even more pronounced in the earliest months of the study, since after May many requests are referred directly to an appropriate subject library. Buffalo and Erie County Public Library receives the greatest volume of requests--28% of all first referrals, Brooklyn Public Library receives 25%, and Monroe County Library System handles 22%. Almost three-quarters of the requests sent first to subject area libraries are sent to Columbia University, Cornell University, The New York Public Library Research Libraries, and The New York Academy of Medicine.

Sixty percent of requests filled at a first referral library are filled by area centers and 40% by subject centers. Brooklyn and Buffalo and Erie County each fill about one-third of the items referred to them, while Monroe County, with its smaller collection, fills about one-fifth. When comparing the area libraries, it should be noted that Brooklyn draws not only on its own resources but on those of The New York Public Library Branch Libraries and the Queens Borough Public Library. Thus the requests that go to Brooklyn and are filled include some items actually provided by one of these other two libraries.

There is somewhat more variation among subject referral libraries in filling requests. They fall into two groups: six that fill about half or more of the requests they receive and three that fill a third or less (The Metropolitan Museum of Art, New York University, and Teachers College). Subject centers are more likely than area centers to report "will not send" concerning a request; only Engineering Societies Library and The New York Academy of Medicine have proportions in this category that are as low as the area libraries. Almost half (48%) of first referrals sent to Teachers College are reported WNS.

Of the 6,916 requests unfilled after a first referral, 3,947 are referred for a second time to another library in the network. Table 3.11 shows that 75% of these requests were NIL at the first referral, 20% were NOS and 5% were WNS. Requests which were previously NIL continue to be NIL; requests which were previously WNS tend to remain WNS; and items which were NOS (held but not on shelves) at first referral sites are more likely to be filled at second referral libraries. However, these differences should not obscure the fact that some requests get filled by these additional referrals no matter what their status was previously. Of requests referred a second time, about a third (34%) are filled at the second library, almost one-half (49%) are NIL, 7% are NOS and 11% are WNS.

The status for second referrals is shown for each library in Table 3.12. Almost 90% go to subject referral libraries with more than a quarter being handled by The New York Public Library Research Libraries. The other major referral center is Columbia University with almost 18%.

Table 3.11

STATUS OF REQUESTS
SENT TO A SECOND REFERRAL LIBRARY,
BY THEIR STATUS AT A FIRST REFERRAL LIBRARY^a

New Status at Second Referral Libraries	Total, All Referred Requests	Requests in Each Category at First Referral ^b		
		NIL (74.9%)	NOS (19.7%)	WNS (5.3%)
Percent Filled	34.1%	33.1%	36.0%	41.0%
Percent NIL	48.5	51.7	41.5	29.5
Percent NOS	6.6	5.8	9.8	5.7
Percent WNS	10.5	9.1	12.4	22.9
Percent "Other"	0.3	0.2	0.3	1.0
Total ^c	100.0%	99.9%	100.0%	100.1%
Case Base	(3,931)	(2,946)	(775)	(210)

- a Ten cases were noted as "sent" by a first referral library and were also recorded as referred to a second referral library.
- b All cases with an "other" status at the first referral library were apparently dropped without further handling.
- c May not total 100.0% due to rounding.

Cases in Table	3,931
Sent by NYSL	18,385
Sent by 1st referral library	4,059
NA, Status at 1st library	6
NA, Status at 2nd library	2,985
NA, Both	<u>13,857</u>
	43,223

Table 3.12

VOLUME AND STATUS AT THE SECOND REFERRAL LIBRARY, FOR ALL REFERRED REQUESTS, BY EACH REFERRAL LIBRARY

Referral Libraries	Volume		Status at Second Referral: Percent...					Total ^a
	Number of Referrals	Percent of Total	Filled	NIL	NOS	WNS	"Other"	
<u>Area Referral Libraries</u>								
All Libraries	421	10.7%	23.8%	56.5%	14.7%	5.0%	---- ^b	100.0%
Brooklyn Public Library	253	6.5	23.3	53.1	13.0	5.5	---- ^b	99.9
Buffalo and Erie Public Library	111	2.8	25.2	49.5	18.9	6.3	---- ^b	99.9
Monroe County Library System	57	1.5	22.8	63.2	14.0	---- ^b	---- ^b	100.0
<u>Subject Referral Libraries</u>								
All Libraries	3,496	89.3	35.4	47.4	5.6	11.2	0.3%	99.9
Columbia University	688	17.6	33.3	43.5	10.3	12.4	0.6	100.1
Cornell University	376	9.6	30.6	28.5	5.6	35.4	---- ^b	100.1
Engineering Societies Library	179	4.6	27.4	70.4	1.1	1.1	---- ^b	100.0
The Metropolitan Museum of Art	221	5.6	18.6	66.1	7.2	8.1	---- ^b	100.0
The New York Academy of Medicine	289	7.4	37.7	51.6	8.0	2.8	---- ^b	100.1

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Table 3.12
(continued)

Referral Libraries	Volume		Status at Second Referral: Percent...						Total ^a
	Number of Referrals	Percent of Total	Filled	NIL	NOS	WNS	Other		
<u>Subject Referral Libraries</u> (continued)									
The New York Public Library Research Libraries	1,064	27.2%	46.3%	42.8%	2.8%	7.5%	0.6%	100.0%	
New York University	153	4.0	20.3	67.7	3.2	8.9	---b	100.1	
Teachers College	238	6.1	19.7	50.0	9.2	21.0	---b	99.9	
Union Theological Seminary	283	7.2	43.8	53.0	2.1	0.7	0.4	100.0	
Total, All Libraries	3,917	100.0%	34.2%	48.4%	6.6%	10.5%	0.3%	100.0%	

a May not total 100.0% due to rounding.

b None.

Cases in Table 3,917
 NA, Status: 59
 NA, Library: 30
 NA, Both: 39,217
 Total N 43,223

Of the 1,340 requests filled at a second referral library, 7% are filled by area libraries and 93% by subject libraries. The differences among libraries in filling requests are much less pronounced than for first referrals. Area libraries fill 24% of the requests they receive compared to 35% filled by subject libraries. The New York Public Library Research Libraries and Union Theological Seminary fill more requests than the others, while Teachers College, The Metropolitan Museum of Art and New York University are again the least successful. As a second referral library, Cornell University reports WNS for more than a third of the requests they receive.

Of the 2,602 requests not filled at a second referral library, about 100 are referred on to a third. Tables 3.13 and 3.14 give data for these requests. The number of cases for percentages in these tables is too small to permit any but the most cautious interpretation. Table 3.13 shows that most (83%) of the requests being referred by the State Library for the third time were NIL after their second referral. At the third referral center 30% of all requests are filled, 57% are NIL, 11% are NOS and 2% are WNS.

Table 3.14 shows that half of the requests referred a third time are sent to area referral libraries, with over a third going to Brooklyn.

A few requests are referred beyond a third referral library-- 13 are referred four times and four are referred five times. These numbers are too small to be significant and they have not been included in this analysis.

Table 3.15 combines the information from Tables 3.10, 3.12 and 3.14, showing the status of all requests received at each of the 12 different referral libraries, ignoring whether they are being referred for the first, second or third time.¹⁰ The approximately 11,000 requests originally referred by the State Library eventually (due to multiple referrals) produce about 15,000 referrals. About three-fifths (58%) of these go to the three area referral libraries, the rest (42%) to the nine subject libraries. The volume handled by each area library follows that noted for first referrals, with Buffalo and Erie receiving the most and Monroe County the least. Among the subject libraries, The New York Public Library Research Libraries receives the greatest number of referrals, followed, in order, by Columbia, Cornell and The New York Academy of Medicine.

The table shows that the status of all referrals ever received by area referral libraries follows the results already depicted

¹⁰ For example, if a request is referred first to Brooklyn and then to Cornell, it is counted twice and its status at both libraries is recorded.

Table 3.13

STATUS OF REQUESTS
SENT TO A THIRD REFERRAL LIBRARY,
BY THEIR STATUS AT A SECOND REFERRAL LIBRARY^a

New Status at Third Referral Libraries ^b	Total, All Referred Requests	Requests in Each Category at Second Referral ^c		
		NIL (83.0%)	NOS (13.6%)	WNS (3.4%)
Percent Filled	29.5%	26.0%	41.7% ^d	66.7% ^d
Percent NIL	56.8	57.5	58.3 ^d	33.3 ^d
Percent NOS	11.4	13.7	-- ^e	-- ^e
Percent WNS	2.3	2.7	-- ^e	-- ^e
Total ^f	100.0%	99.9%	100.0%	100.0%
Case Base	(88)	(73)	(12)	(3)

a Seven cases were recorded as "sent" by the second referral library and were also noted as referred to a third library.

b No cases were recorded with "other" statuses after three referrals.

c All cases recorded with "other" statuses at the second referral were dropped without additional handling.

d Not reliable; based on too few cases (less than 30).

e None.

f May not total 100.0% due to rounding.

Cases in Table	
Sent by NYSL	18,
Sent by 1st Referral Library	4,
Sent by 2nd Referral Library	1,
NA, Status at 2nd Library	
NA, Status at 3rd Library	2,
NA, Both	<u>16,</u>
Total N	43

Table 3.14

VOLUME AND STATUS AT THE THIRD REFERRAL LIBRARY, FOR ALL REFERRED REQUESTS, BY AREA/SUBJECT REFERRAL LIBRARIES (COMBINED GROUPS)^a

	VOLUME		STATUS AT THIRD REFERRAL: PERCENT...					Total
	No. of Requests	Percent of Total	Filled	NIL	NOS	WNS	Other	
Area Referral Libraries ^b	49	51.6%	12.2%	69.4%	18.4%	-- ^c	-- ^c	100.0%
Subject Referral Libraries	46	48.4	45.7	45.7	4.3	4.3%	-- ^c	100.0
Total, All Libraries	95	100.0%	28.4%	57.9%	11.6%	2.1%	-- ^c	100.0%

a Collapsed to ARL/SRL, because there are not enough cases for reliable calculations at the library level.

b Most of these cases went to Brooklyn (37 out of 49).

c None.

Cases in Table	95
NA, Status	3
NA, Library	1
NA, Both	<u>43,124</u>
Total N	43,223

Table 3.15

STATUS OF ALL REFERRALS, BY REFERRAL LIBRARY
(each additional referral is counted as a new case)

Libraries	Volume		Status: Percent...					Total ^a
	Number of Referrals	Percent of Total	Filled	NIL	NOS	WNS	Other	
<u>Area Referral Libraries:</u>								
All Libraries	8,611	57.5%	29.6%	49.2%	16.7%	4.5%	0.0% ^b	100.0%
Brooklyn Public Library	2,988	20.0	32.8	47.4	13.3	6.4	0.1%	100.0
Buffalo and Erie Public Library	3,209	21.4	33.6	44.8	17.9	3.6	0.0 ^b	99.9
Monroe County Library System	2,414	16.1	20.6	57.1	19.1	3.2	0.0 ^b	100.0
<u>Subject Referral Libraries:</u>								
All Libraries	6,361	42.5	45.1	37.7	6.0	11.0	0.3	100.1
Columbia University	1,186	7.9	42.2	36.8	9.9	10.9	0.3	100.1
Cornell University	899	6.0	51.9	21.4	5.9	20.6	0.2	100.0
Engineering Societies Library	404	2.7	45.8	50.0	1.7	2.5	--- ^c	100.0
The Metropolitan Museum of Art	290	1.9	22.1	60.3	8.3	9.3	--- ^c	100.0
The New York Academy of Medicine	853	5.7	55.6	32.4	9.1	2.9	--- ^c	100.0

Table 3.15
(continued)

Libraries	Volume		Status: Percent....					Total ^a
	Number of Referrals	Percent of Total	Filled	NIL	NOS	WNS	Other	
<u>Subject Referral Libraries</u> (continued):								
The New York Public Library Research Libraries	1,562	10.4%	52.2%	36.4%	3.1%	7.6%	0.6%	99.9%
New York University	282	1.9	26.2	61.0	3.9	8.9	--- ^c	100.0
Teachers College	478	3.2	21.3	36.4	8.2	34.1	--- ^c	100.0
Union Theological Seminary	407	2.7	45.5	49.4	1.5	3.4	0.2	100.0
Total, All Referral Libraries ^d	14,972 ^e	100.0%	36.2%	44.3%	12.1%	7.2%	0.1%	99.9%

a May not total 100.0% due to rounding.

b Less than one-tenth of one percent.

c None.

d Because data in this table include a minimum of 422 referrals for requests that were actually filled at the State Library, they do not correspond exactly to data in Table 3.1, Section A. (See footnote a, Table 3.1, Section A.)

e All first referrals, plus all second referrals, plus all third referrals; for NA accounting, see Tables 3.10, 3.12, and 3.14.

for first referrals; status at the subject referral libraries, however, shifts to take both first and second referrals into account. The same three libraries--The Metropolitan Museum of Art, New York University, and Teachers College--fill markedly lower proportions than the others. The status for unfilled items shows that these low percentages of filled requests are related to high proportions of NIL's plus some NOS's and WNS's at the Museum; high proportions of NIL's plus some WNS's and fewer NOS's at New York University; and relatively low proportions of NIL's but quite high proportions of WNS's at Teachers College. The only other library with a very high percentage of requests noted WNS is Cornell. However, this library reports the lowest percentage of items NIL of any of the referral libraries. The Academy of Medicine fills proportionately more requests than does any other library, followed by The New York Public Library Research Libraries and Cornell University.

The table also shows that, out of about 15,000 referrals, 36% are filled. Of these, 47% are filled by area libraries and 53% by subject libraries.

Table 3.16 shows that the proportion of referrals filled at area centers ranges from 26% in May-June to 42% in October-November. The increase in the last month is probably due to missing data from incomplete requests; otherwise there is no significant trend in the slight changes noted over the different time periods. However, the proportion of referrals filled at subject centers increases somewhat over the eight months. What the table does not show is that there is greater use of second and third referrals in the early time periods than in later periods. A glance back at Section B.1 of Table 3.1 will underscore the point: from 29% to 40% of all first referrals were sent to a second referral library during the first four time periods; in the next three time periods (October-November is excluded because of biased data) 21% to 33% are referred on. Thus, the overall proportion of requests filled has not increased, but requests tend to be filled sooner, without extra handling.

Finally, what variations over time might there be for status breakdowns at each of the individual referral libraries? The answer is that changes for status at each library are negligible when they exist at all, and so the appropriate tabulations of status by time have not been presented. The only exceptions to the general patterns noted in Table 3.16 are these: the addition of New York University to the system results in a reduction of the volume of requests at The New York Public Library Research Libraries, as was anticipated by the State Library; and at Cornell University, contrary to the general trend in the other subject referral centers, the proportion of requests recorded as WNS is going down. For all other libraries and statuses, trends across time periods follow those noted in Table 3.16, allowing for the individual variations in Table 3.15.

Table 3.16

STATUS FOR ALL REFERRALS, BY TIME PERIODS,
FOR AREA REFERRAL CENTERS AND FOR SUBJECT REFERRAL CENTERS
(each additional referral is counted as a new case)^a

	Total, All Time Periods Combined	T I M E P E R I O D S							
		March- April	April- May	May- June	June- July	July- August	August- September	September- October	October- November
<u>Area Referral</u> <u>Libraries</u> Volume	8,611	1,784	1,394	1,042	1,074	891	823	959	644
Percent Filled	29.6%	27.7%	32.9%	26.3%	27.8%	26.7%	25.3%	32.7%	41.6%
Percent NIL	49.2	48.9	46.0	55.5	53.1	53.4	53.2	43.2	37.9
Percent NOS	16.7	18.5	15.6	14.0	14.5	15.3	16.3	21.2	17.4
Percent WNS	4.5	4.8	5.5	4.2	4.5	4.6	5.2	2.9	3.1
Percent Other	0.0 ^b	0.1	--c	--c	0.1	--c	--c	--c	--c
Total ^d	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<u>Subject Referral</u> <u>Libraries</u> Volume	6,361	991	616	619	765	763	582	1,085	940
Percent Filled	45.1%	38.2%	40.4%	41.8%	42.9%	45.2%	59.1%	46.8%	48.4%
Percent NIL	37.7	43.2	44.3	44.6	39.6	39.2	29.7	30.2	33.6
Percent NOS	6.0	5.4	5.7	5.3	8.1	4.7	4.6	7.4	6.1
Percent WNS	11.0	12.5	9.6	7.9	8.6	10.5	6.5	15.6	11.9
Percent Other	0.3	0.6	--c	0.3	0.8	0.4	--c	--c	--c
Total ^d	100.1%	99.9%	100.0%	99.9%	100.0%	100.0%	99.9%	100.0%	100.0%

a Same cases as in Table 3.15; for NA accounting, see Tables 3.10, 3.12, and 3.14.

b Less than one-tenth of one percent.

c None.

d May not total 100.0% due to rounding. Case base is given by entries for "volume."

Chapter IV

ELAPSED TIMES IN THE NYSILL NETWORK

This analysis of elapsed times provides information on 1) the average time that it took a request to travel between certain points in the NYSILL network during the eight months of the monitoring period, and 2) the changes in elapsed times between the average for the first four months of the program (March 22 to July 21) and the average for the second four months (July 22 to November 21).

To calculate these times, all data were converted to a real-time number, starting with midnight on January 1, 1967 as 000.0, and ending with midnight on December 31, 1967, as 365.9. By subtracting the first time from the second, the elapsed times in days between any two points in the network could be quickly computed and averaged over all requests. This convention, which includes weekends, nights, and holidays, was used rather than one which would allow for non-working hours, because the number of hours worked each week by libraries in the network varies widely. Furthermore, it is the total time elapsed in filling a request which concerns the patron.

There were 11 points in the network for which information on time was to be collected for each request if applicable:

1. Receipt of request at originating library;
2. Receipt at request transmission site;
3. Receipt at State Library;
4. Receipt at first referral library;
5. Receipt at second referral library;
6. Receipt at third referral library;
7. Receipt at fourth referral library;
8. Receipt at fifth referral library;
9. Receipt of filled request at the originating library;
10. Notification of the patron that the filled request had arrived; and
11. Receipt of material by the patron.

Two of these points--the fourth and fifth referral library times--occurred so infrequently that, in combination with "no answers" on other time items, the average elapsed times became meaningless. Therefore, a modified version of the third referral time was formulated as follows:

- Time of a fifth referral, if the request had one; otherwise
- Time of a fourth referral, if applicable; otherwise
- Time of a third referral.

This value for the elapsed time was then substituted for the third referral time.

A detailed list of the number of cases for each elapsed time is given in Table 4.1. This includes only those requests on which complete data--month, day, hour, and a.m. or p.m.--for both points in the combination are available. For almost all of the elapsed time computations, the number of cases is quite sufficient for good statistical reliability.

The postcard questionnaires, which were used to gather data on the times for the receipt of filled requests, were not distributed until the beginning of the second time period in the study. This means that any elapsed time figures for the March-April period that involve postcard data in combination with other information (the overall times and the times from the State Library or a referral library to the originating library) reflect only those cases which took a long time to fill: long enough that by the time the request was actually sent, postcards were ready for use. Consequently, this data for the first time period must be regarded with caution. At the same time it should be noted that this problem does not seriously affect either overall average elapsed times or the averages for the first half (March-July) of the study, because this bias is largely dissipated in the larger samples. The 154 requests on which postcard information exists for March-April constitute only 2% of all cases with postcard data, and only 5% of those cases in the first half of the study.

In addition, data on elapsed times for the eighth time period are understated in some instances because they represent only those requests that are completed as of mid-December. The incomplete requests from this period were still outstanding although they had been received by the State Library at least three weeks before the cutoff point. If complete data on these requests had been available for the computations in this report, elapsed times involving the stages in the system which follow the State Library would be longer, since it is likely that some of these requests had been processed along in the network and were still at referral libraries in mid-December. The effect of having no

data on approximately 1,500 requests from the end of the study period is lessened by using averages for the last four months of the combined (July-November) time periods, for which there are 21,989 completed requests. The effect is, of course, less important for the averages computed from the 43,223 requests for the entire eight-month monitoring period.

To evaluate elapsed times, a great body of data must be reduced to manageable terms and summarized. The usual statistics for this purpose are the measures of central tendency: the median, the mode and the mean. The third measure is used here, for the following reasons: first, means (averages) are readily interpreted; second, they have a formal mathematical interpretation, and therefore can be used to generate a great quantity of additional data. This characteristic is not shared by modes and medians; third, established tests exist to evaluate the significance of a mean, and additional measurements can be derived from them, such as standard deviations and standard errors. Again this is not the case with medians and modes.

One problem with means is that they are affected by extreme cases, where medians and modes are not. For example, if there were nine elapsed times of ten days each and one of 100 days, the mean would be 19 days. For data in this study, however, these effects are minor. As will be discussed later, it took a mean time of 22.14 days to fill a request during the eight months of the monitoring period. Included in this computation are 2,726 cases of which 22 cases have times of 100 or more days and an additional three cases have times of more than 200 days. If these 25 cases are removed, the mean changes by only .14 of a day: from 22.14 to 22.00. For these reasons, all computations in this report have used all of the available cases.

Two additional statistical measures are used to interpret the elapsed times. The first is the "standard error" of the mean; this measures how accurate an estimate the average is, based on the number of cases entering into the computation. In other words, the standard error will reflect the fact that averages computed on only ten cases are somewhat less reliable than those computed on several hundred cases. The following rule of thumb is suggested in using standard error statistics in this report: the mean has a probability of .99 of being accurate to plus or minus twice the standard error.

Using the example above, the mean is 22.14 days and the standard error of that mean is .36 of a day. Thus a cautious interpretation of this data would be that over the eight-month study period it took 22.14 days, plus or minus .72 days (twice the standard error), to process the average filled request--or from 21.42 days to 22.86 days. For most of the means discussed in this report, the standard error is very small.

Second, the "standard deviations" which help to allow for the effect of extreme cases, have been computed for each of the elapsed

times reported. These utilize the means as a starting point and provide an estimate of how many of the individual cases used in computing the average elapsed time will be found within a given range of days. If the data are normally distributed,¹ about two-thirds of all the cases which go into any average elapsed time will be found within a range of plus or minus one standard deviation from the mean. This two-thirds figure has been used here to arbitrarily define a "typical" request. In the above example, the standard deviation is 19 days and the mean is 22 days. Thus, for overall elapsed time, a typical request might take anywhere from three to 41 days (the mean plus or minus the standard deviation).

Summarizing the information gained from using these approaches, the average time for processing a filled NYSILL request during the monitored period is 22 days. This estimate is probably accurate to within one day, and most of the cases have individual elapsed times of between three and 41 days.

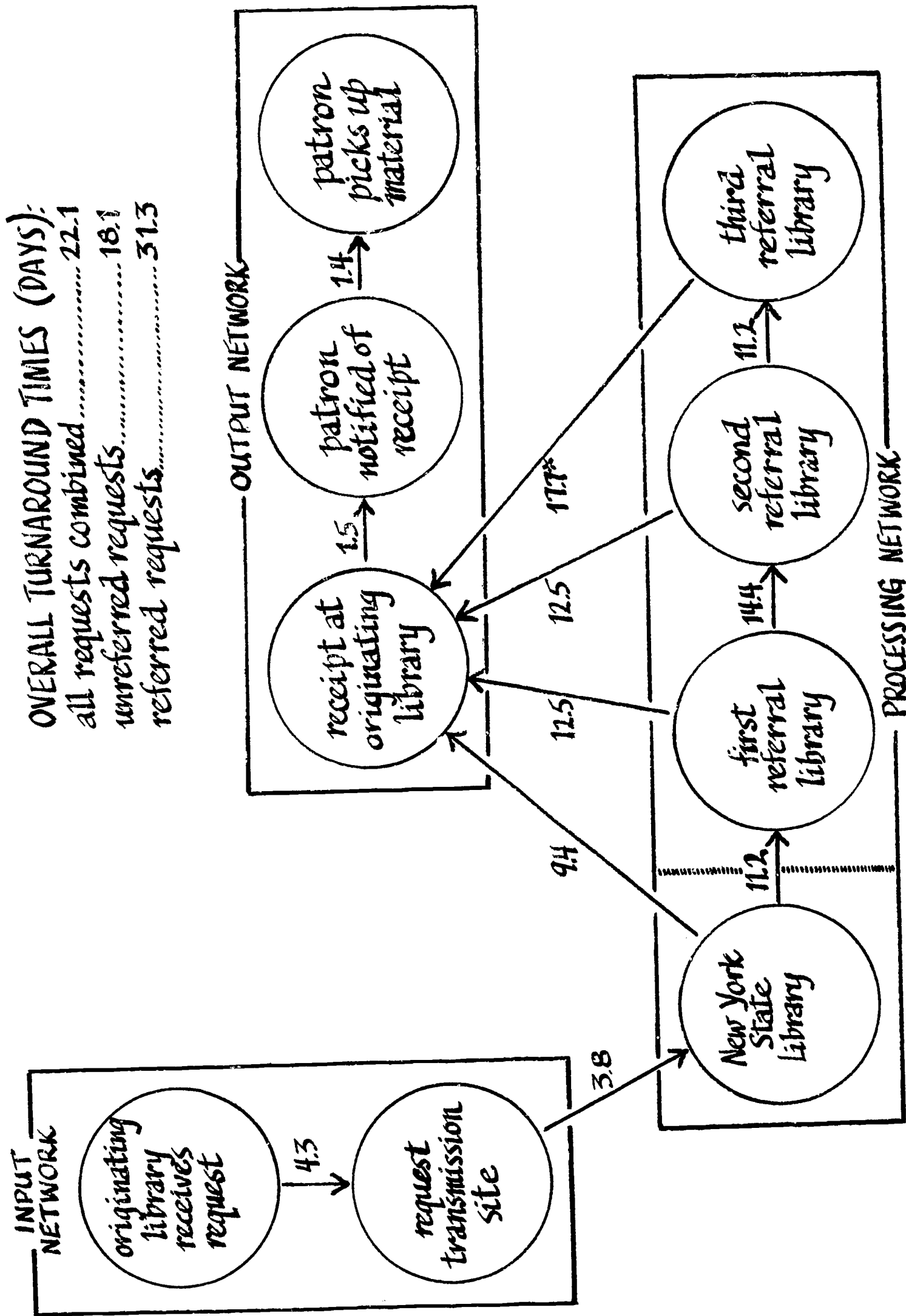
THE DATA: INPUT, PROCESSING AND OUTPUT NETWORKS

Figure 4.1 and Table 4.1 present, respectively, a flow chart of the points in the NYSILL network included in this analysis (annotated with elapsed times from point to point in days), and a detailed breakdown of statistics for each of the times on the chart. It should be noted that the annotation of Figure 4.1 reflects the experience during the entire monitoring period and conceals possible improvements in certain elapsed times which have occurred since the network's inception in March 1967. These improvements are shown in the "net change" column of Table 4.1, which compares the times for the two halves of the study (March 22 to July 21; July 22 to November 21). A negative number indicates a decrease in the amount of time consumed, which is evidence of improved service. Table 4.1 shows that such indications of improvement in service occur most often and that deterioration, when it does happen, is not very substantial (the sole sizable increase in time consumed is based on only nine cases, and is not a reliable estimate.) At the same time, since data from the first time period include only requests that took a long time to fill (due to late distribution of postcards) and that from the eighth period favors requests that took a short time to fill (due to incomplete cases), some of the improvement in service is illusory.

To clarify discussion, the NYSILL network in Figure 4.1 has been divided into three parts, according to function. These are:

¹ It should be noted that the data probably do not fit a normal distribution perfectly, since it is impossible to have a negative elapsed time; but in general this convention provides a reliable and consistent way to describe the variability of the requests.

FIGURE 4.1. AVERAGE ELAPSED TIMES TO PROCESS REQUESTS BETWEEN NINE KEY POINTS IN THE NYSILL SYSTEM (all figures are mean number of days; for case bases, standard deviations, and standard errors, see Table 4.1.)



*too few cases for reliability

Table 4.1

MEAN, STANDARD DEVIATION, STANDARD ERROR, AND NET CHANGE FROM FIRST TO LAST HALVES OF STUDY PERIODS, FOR ELAPSED TIME LINKAGES SHOWN IN FIGURE 4.1, PLUS SELECTED SUMMARIES

Elapsed Time	Basic Statistics				Net Change Data			Case Base
	Mean Elapsed Time (days)	Standard Deviation (days)	Standard Error (days)	Mean, March-July	Mean, July-November	Net, July-November less March-July		
1. OVERALL TURNAROUND TIMES								
<u>All Requests Combined</u>	22.14	18.65	.36	25.48	18.10	- 7.38	2,726	
Unreferred	18.10	15.39	.35	17.83	18.30	+ .47	1,891	
Referred	31.30	21.89	.76	41.87	23.12	-18.75	835	
2. INPUT NETWORK								
<u>Originating Library to the State Library</u>	8.05	14.20	.11	8.01	8.10	+ .09	16,980	
Originating library to request transmission site	4.28	10.23	.08	4.02	4.60	+ .58	16,148	
Request transmission site to the State Library	3.81	10.98	.08	3.86	3.76	- .10	19,964	
3. PROCESSING NETWORK								
<u>All Requests Combined</u>	12.12	13.42	.16	15.88	9.70	- 6.18	6,954	
State Library--	9.38	10.26	.14	10.70	8.59	- 2.11	1,417	
If filled, direct to output								
If referred and filled at referral library	22.82	18.14	.48	32.59	14.69	-17.90	5,537	

(continued on following page)

Table 4.1
(continued)

Elapsed Time	Basic Statistics				Net Change Data			Case Base
	Mean Elapsed Time (days)	Standard Deviation (days)	Standard Error (days)	Mean, March-July	Mean, July-November	Net, July-November less March-July		
3. PROCESSING NETWORK (continued)								
State Library to 1st referral	11.23	13.38	.13	16.95	4.93	-12.02	10,865	
1st referral-- If filled, to output	12.52	12.76	.34	15.55	10.18	- 5.37	1,369	
If not, to 2nd referral	14.42	16.53	.26	17.03	9.95	- 7.08	3,906	
2nd referral-- If filled, to output	12.48	11.14	.65	12.77	11.95	- .82	294	
If not, to 3rd referral	11.24	11.86	1.42	10.99	11.56	+ .57	70	
3rd referral*-- If filled, to output	17.69*	11.24*	3.75*	5.80*	19.16*	+12.36*	9*	
4. OUTPUT NETWORK								
<u>Originating Library to Patron Receipt</u>	2.62	7.86	.11	2.62	2.62	no change	5,119	
Originating library to notification of patron	1.52	8.15	.14	1.36	1.62	+ .26	3,650	
Notification of patron to patron receipt	1.44	4.89	.08	1.60	1.34	- .26	3,746	

* Includes data for twelve cases which had a fourth referral and two additional cases which had both a fourth and a fifth referral. In combination with missing data problems, resulting elapsed time variable has too few cases (only nine) for reliability. For further discussion of this item and NA (no answer) accounting for these items, see text.

- the Input Network--the originating library and request transmission site--through which requests pass in order to arrive at the major system center (The New York State Library);
- the Processing Network--the State Library and the referral libraries--through which requests pass when they have not been filled in the Input Network;
- the Output Network--the originating library, notification of patron and patron receipt--for which information on time has been collected for filled requests, whether filled at the State Library or at a referral center.

The overall turnaround times are noted in the upper right-hand corner of Figure 4.1. The general average of 22 days has already been discussed in some detail in the section on measurement above. The other two overall times separate unREFERRED requests from referred items. The unREFERRED cases take only 18 days, on the average to complete, while those which are referred take nearly twice as long: 31 days. The standard deviations show that the "typical" referred request takes from nine to 53 days.

Comparing the elapsed times for the two halves of the study, Table 4.1 shows that all filled requests, both referred and unREFERRED, take seven days less time in the July-November period than they do in the March-July period; of these, unREFERRED requests do not show any improvement at all, while referred requests take 19 days less time to fill.

For all of the requests processed between March 22 and November 21, Table 4.1 shows an overall elapsed time within the Input Network (from originating library to the State Library) of eight days. On the average, it takes slightly more than four days to route a request from its originating library to its request transmission site, and slightly less than four days for the request to go from the transmission site to the State Library. The large standard deviation for both of these elapsed times indicate that these averages are not, in fact, especially representative; in either case it is not unusual for a request to take as long as 15 days to go from one point to another, nor is it unusual for this time to have a value of zero.² The figures for net changes over the two halves of the study show only minor differences.

The next stage of the flow chart shows the linkages between the Processing Network and the Output Network, for both referred and unREFERRED requests. For unREFERRED requests, the linkage between the

² This could occur by rounding whenever requests get exceptionally fast handling, since the smallest value possible (other than zero) is a tenth of a day (2.4 hours).

State Library and the originating library is direct and takes an average of nine days; this is the mean overall time it takes to process a filled request at the State Library and get it to the originating library for patron pickup. Again, the standard deviation shows that the mean conceals a large amount of variation in individual times.

Requests that are not filled at the State Library are referred to area and subject referral libraries. The average elapsed time from the Processing Network to the originating library for requests which are filled by referral libraries is 23 days. All filled requests, whether or not it was necessary for them to be referred, average 12 days' time from the Processing Network to the originating library.³ Again, the standard deviations show an extremely wide range of time for individual requests--typically, from 5 to 41 days for referred requests, and from none to 20 days for unreferred requests. Net changes across the individual monthly intervals for these two times parallel those of the overall turnaround times noted above, with a small improvement of two days' time for unreferred cases, and a substantial improvement of 18 days for referred requests.

The elapsed time of 12 days from the Processing Network to the originating library is of particular interest, since it represents over half the total turnaround time of 22 days. For this reason, Figure 4.2 shows the detailed elapsed time for all eight time periods. Remembering that data for the first and eighth time periods must be regarded with caution, this graph reveals that the times for unreferred cases remain rather stable. In addition, the improvement of 18 days' time for referrals between the first and second halves of the study conceals the fact that service was even better during the summer, when the average time elapsed between the Processing Network and the originating library dropped as low as 11 days for filled requests.

It takes, on the average, 11 days for a request to be processed by the State Library and sent to the first referral library. Improvement in the last half of the study reduces the time needed for this step from 17 to 5 days. Again, the detail for individual time periods is of particular interest and is presented separately in Figure 4.3. The range of averages is from 27.7 days in April-May to only 2.1 days in July-August. Again, there is a rise in the amount of elapsed time required in recent months, similar to that noted for the entire referral process in Figure 4.2.

If the first referral library fills a request, it consumes an additional 13 days between the time the request is received at the referral library and time the material arrives at the originating

³ This is not a direct linkage and does not appear in Figure 4.1.

FIGURE 4.2. ELAPSED TIMES IN THE PROCESSING NETWORK, FROM THE STATE LIBRARY TO ORIGINATING LIBRARY, FOR REFERRED AND UNREFERRED REQUESTS (filled items only)

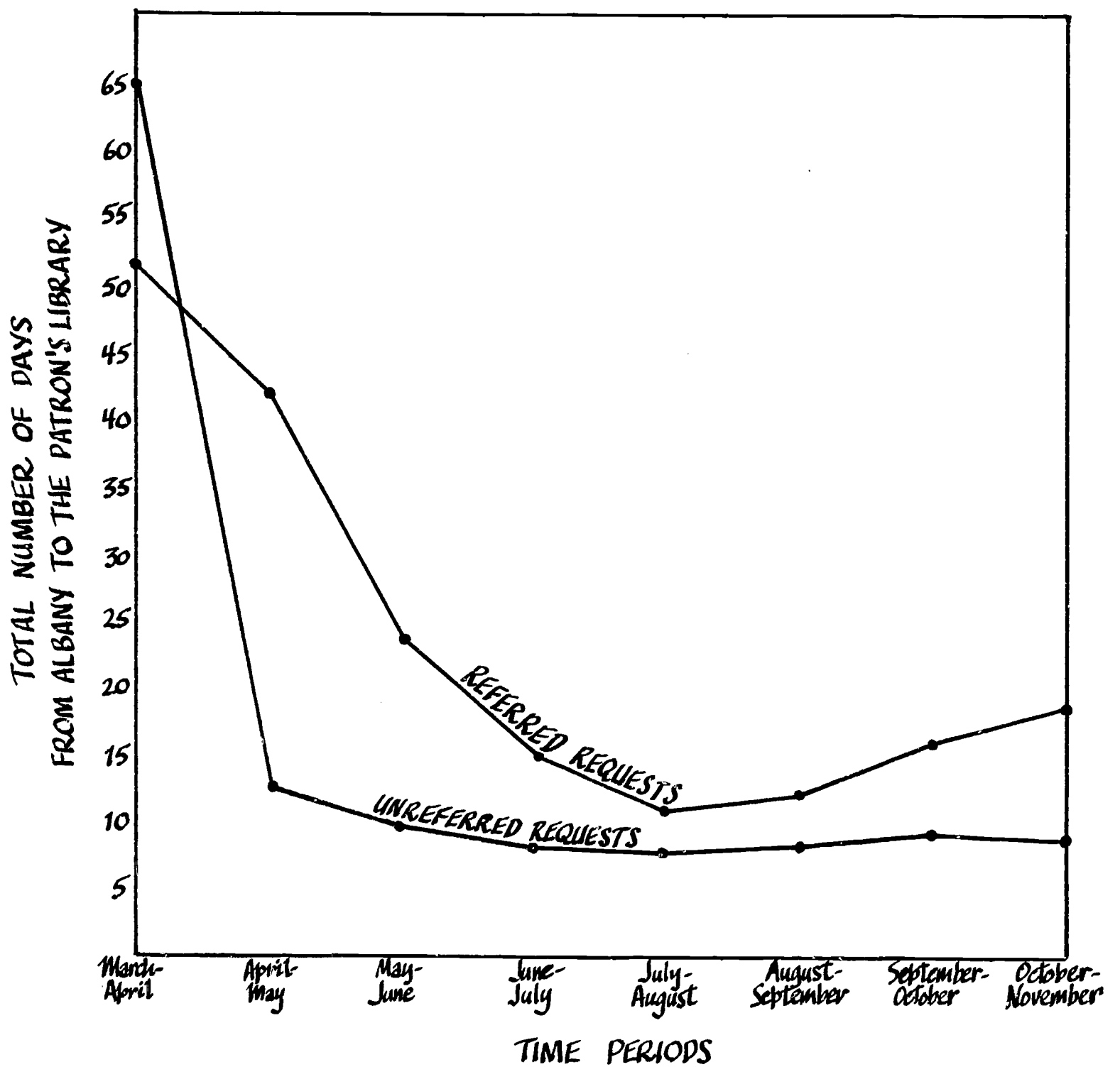
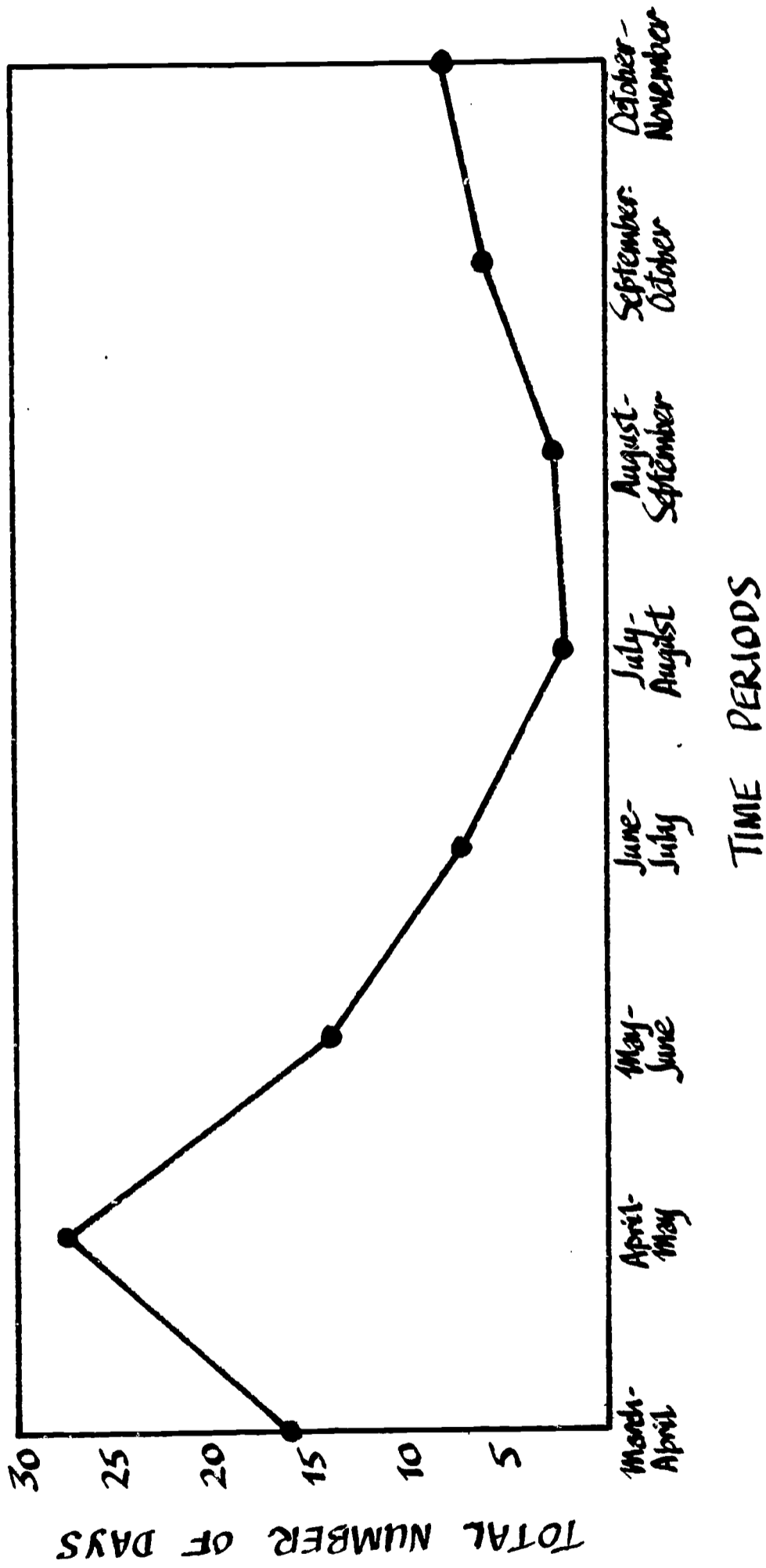


FIGURE 4.3. ELAPSED TIMES FROM RECEIPT AT THE NEW YORK STATE LIBRARY TO RECEIPT AT FIRST REFERRAL LIBRARY



library. If the request is not filled but is sent on to a second referral library, 14 days are involved. Again, these numbers conceal improvements in more recent months, and do not show the wide variation in individual cases.

After the request reaches the second referral library, an additional mean time of about 12 days is consumed for filled items; for those not filled, 11 days are involved before a request is received by a third (or later) referral library. (This latter figure has a large standard error, indicating that the "true" mean may be anywhere from 8.4 to 14.1 days; the instability is due to the fact that there are only 70 cases.) Finally, a very rough estimate is shown of the time it takes for a filled request to go from a third (or later) referral library to the originating library. Since there are only nine cases, the mean of 17.7 days cannot in any way be regarded as conclusive.

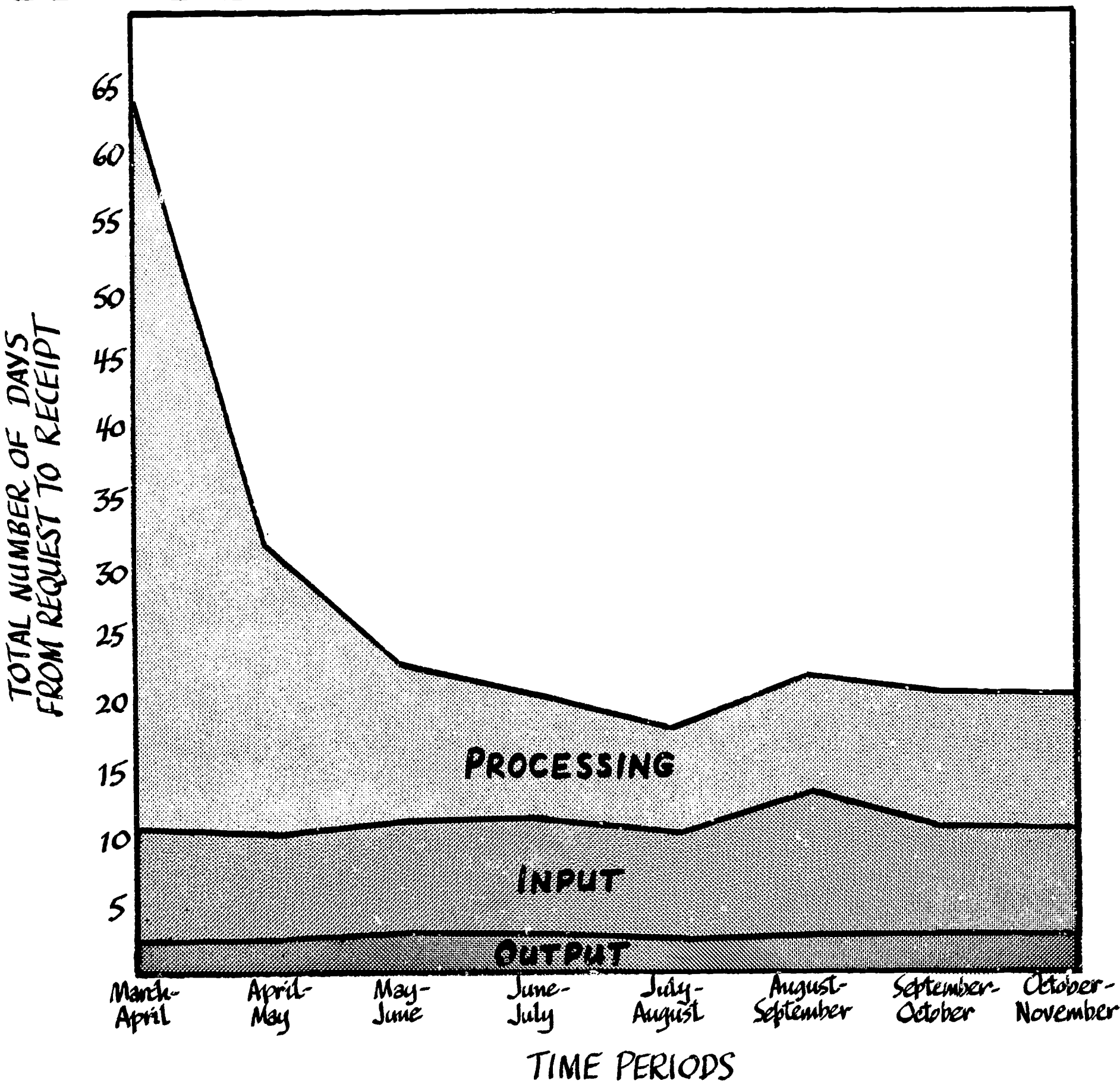
Once filled requests arrive at the originating libraries, times within the Output Network are short and quite consistent. In general, libraries are notifying patrons of the receipt of their material within a day and a half--very good time, since weekends and nights are included--and patrons are picking up their material within a day and a half.

It was noted above that the total elapsed time for a filled request in the NYSILL network is 22.14 days. Table 4.1 shows that this breaks down to 4.28 days for the request to go from the originating library to the request transmission site; 3.81 days from the transmission site to the State Library; 12.12 days for the request to be processed at the State Library and, if necessary, at referral libraries until the material reaches the originating library; and 2.62 days for the patron to be notified and pick up the material. The total of these four individual figures is 22.83 days, which corresponds closely with the computed figure of 22.14 days.

Figure 4.4 provides a summary and shows the changes in overall elapsed time over all eight time periods. In addition, this graph is divided into the proportion of the total time consumed by the Output Network, the Input Network and the Processing Network. The overall time consumption shows a considerable reduction since the inception of the study; notwithstanding the bias in the first and last periods, there is undoubtedly a considerable improvement in the speed with which requests are being processed. Times for the Output Network have varied little if at all. In the first half of the study, reduction in Processing Network times is the major factor contributing to the overall decrease; in the second half both Processing and Input Networks affect the elapsed times.

In order to determine whether there are variations in the time taken to handle requests at each of the different referral

FIGURE 4.4. ELAPSED TIME FROM REQUEST TO RECEIPT
 (input network, plus processing network, plus output network)



libraries, elapsed times for referred requests in Table 4.1 were broken down according to the 12 referral centers in the NYSILL network. A study was made of the elapsed time for handling requests filled and unfilled at each library.

1. For unfilled requests, the average number of days elapsed from the time the request was received at the first referral library until the time it was received at the second referral library.⁴
2. For filled requests, the average number of days elapsed from the receipt of the request at a first or second referral library to the receipt of the needed material at the originating library.⁵

When a request is filled, there is a direct link in the network between the two points mentioned--the referral library and the originating library. However, when a request cannot be filled and is referred, there is an intermediate step between the two referral libraries. Unfilled requests are not sent directly from one referral library to another; they are sent back to the State Library and then referred to a second referral center. Filled requests involve mailing or shipping time. However, the time at the State Library between referrals and the time involved in transit should not be biased for or against any one of the referral libraries.

Table 4.2 shows that for those requests which are not filled, the average time between the receipt of the request at an area referral library and its receipt at the next referral library is about twice as long for Brooklyn (22.3 days) as for either Buffalo and Erie County Library (10.8 days) or Monroe County Library (12.5 days). The longer elapsed time for Brooklyn is, in large measure, due to the fact that requests not filled at Brooklyn pass through a secondary referral network composed of The New York Public Library Branch Libraries and the Queens Borough Public Library; those not filled after being searched at all three libraries are then sent back to the State Library for further referral.

None of the subject referral centers had enough unfilled requests with complete data to provide reliable averages for times to a second referral. This is not unexpected, of course, since most multiple referrals go from an area referral center to a subject center.

4 The requests in this tabulation are those that appear in Table 4.1 in the data for "First Referral Library--if not filled, to Second Referral."

5 The requests in this tabulation appear in Table 4.1 in the data for "First Referral Library--If filled, to Output" and "Second Referral Library--If filled to Output."

Table 4.2

VARIATIONS IN ELAPSED TIMES AT REFERRAL LIBRARIES^a

	For Unfilled Requests: Average Number of Days to Receipt by Second Referral Library, When First Library Is the One Named Below	For Filled Requests: Average Number of Days to Receipt of Material at Originating Library from First or Second Referral Library
All Libraries Combined	14.42 (3,902)	12.50 (1,652)
<u>Area Referral Libraries</u>		
All Libraries	14.46 (3,834)	13.40 (1,029)
Brooklyn Public Library	22.30 (1,035)	15.36 (334)
Buffalo and Erie County Public Library	10.75 (1,482)	10.87 (530)
Monroe County Library System	12.47 (1,317)	17.57 (165)
<u>Subject Referral Libraries</u>		
All Libraries	12.29 (68)	11.02 (623)
Columbia University	13.41 ^b (8)	10.46 (147)
Cornell University	10.40 ^b (19)	14.57 ^b (16)
Engineering Societies Libraries	3.78 ^b (4)	6.12 (71)
The Metropolitan Museum of Art	--- (none)	10.08 (39)
The New York Academy of Medicine	19.04 ^b (5)	10.70 (200)
The New York Public Library Research Libraries	14.14 ^b (28)	22.99 (43)
New York University	--- (none)	6.70 ^b (2)
Teachers College	6.17 ^b (4)	17.07 ^b (12)
Union Theological Seminary	--- (none)	9.87 (93)

a The numbers in parentheses are the total number of cases entering into the computation of each mean. Four cases did not have the name of the referral library and are not included in the tabulation in the first column; eleven such cases are omitted from the tabulation in the second column.

b Not reliable; based on too few cases (less than 30).

For filled requests, the elapsed times between the receipt of the request at the referral library and the receipt of the material at the originating library take an unexpected turn. Despite the separate referral subsystem at Brooklyn, this area center does not have the longest elapsed time for filled items. The average time interval for Buffalo and Erie County Library is 10.9 days; for Brooklyn, 15.4 days; and for Monroe County, 17.6 days.

Six of the subject referral centers--Columbia University, Engineering Societies Library, The Metropolitan Museum of Art, The New York Academy of Medicine, The New York Public Library Research Libraries, and Union Theological Seminary--have sufficient cases with elapsed times on filled requests to provide reliable data. The time interval to the originating library for four of these--Columbia University, The Metropolitan Museum of Art, The New York Academy of Medicine, and Union Theological Seminary--averages 10 or 11 days over the 8 months. The average elapsed time for the other two is 6.1 days for Engineering Societies Library and 23 days for The New York Public Library Research Libraries. The longer time interval for The New York Public Library Research Libraries is probably due to the fact that the library does not send volumes from its collection. Instead, microfilm copies of the requested materials are prepared, thus consuming time in a procedure which is not necessary at the other libraries.

Chapter V

IMPACT OF THE NYSILL PROGRAM

This chapter reports on four special investigations that were included in the monitoring of the NYSILL pilot project:

1. An inquiry into the current and future status of medical library interlibrary lending in New York State;
2. An analysis of the quantity and characteristics of academic interlibrary loans being made outside the NYSILL network;
3. A survey of the conditions of participation and reactions of the 12 referral libraries to the operations of the NYSILL project; and
4. A tabulation of patrons' suggestions for improvement of the NYSILL service.

MEDICAL LIBRARY INTERLIBRARY LENDING

Medical libraries rely heavily on interlibrary loans to augment their collections and to supply their patrons with needed materials. The Survey of Medical Library Resources of Greater New York, funded by a grant from the Health Resources Council of the City of New York, included a study of interlibrary loan patterns in late 1963. As a part of this study, an "Interlibrary Loan Request Questionnaire" was sent to more than 400 medical, paramedical and hospital libraries in New York State, Northeastern New Jersey, Southern Connecticut, and the College of Physicians in Philadelphia. The 278 responding libraries reported that in the previous year they had received requests for more than 70,000 items and filled over 60,000 requests; in addition about 11,000 requests were directed to the National Library of Medicine of which about 10,000 were filled. Within New York City 84% of the medical libraries responding reported interlibrary loan activity, while all of the medical libraries in upstate New York reported activity. The largest lender was The New York Academy of Medicine, which supplied 22,000 items. It was estimated at the time of the survey that interlibrary loan activity among medical libraries had increased tenfold in ten years and was still increasing.

The resource needs of medical libraries are highly specialized and can usually be filled only by other medical libraries. In an

effort to facilitate interlibrary lending, the medical libraries in New York State have formed networks and instituted cooperative agreements. Although many libraries rely on the collection of the National Library of Medicine and many out-of-state libraries depend heavily on resources located in New York, these transactions are not discussed in this section.

Medical Library Center of New York

The largest and most complex network is the Medical Library Center of New York in Manhattan. Membership is available in three categories by applying to the Center: sponsoring institutions, such as medical schools, who pay the highest annual dues; participating institutions, such as hospitals, who pay the lowest dues; and commercial firms. At the present time there are 25 member libraries of which 12 are sponsoring institutions. These include: the medical schools of Columbia University, New York University, Cornell University, and Yeshiva University, the New York Medical College, Rockefeller University, Memorial Sloan Kettering Cancer Center, The New York Academy of Medicine, The Department of Health of the City of New York (two libraries), the New Jersey College of Medicine and Dentistry, and Mt. Sinai School of Medicine. In addition, there are 13 participating institutions (of which eight are hospitals). The Center was not organized as a research library but as a facility to explore and devise cooperative means to help medical libraries cope with their problems. A storage facility for little used materials has been established, which has more than 108,000 journals, 20,800 monographs, 20,600 government documents and institutional reports, and 209,000 medical dissertations that have been deposited by member libraries.

A computer-based Union Catalog of Medical Periodicals lists the holdings of 68 medical libraries in the New York metropolitan area and facilitates the location of needed items. The sponsoring institutions of the Center have had TWX machinery installed, for which the Center pays the message unit fees. To further facilitate borrowing, member libraries may send photocopies of restricted materials to other member libraries for which they are reimbursed at \$.10 a sheet by the Center. A delivery service among the 25 member libraries and the Medical Research Library of Brooklyn (formerly Downstate Medical Center Library), the Museum of Natural History and the New York Botanical Gardens speeds the delivery and pickup of interlibrary loans.

The Center in no way monitors the interlibrary loan transactions of its members nor does it interfere with their lending policies. Because the Center is not a research library, it does not borrow material and lends very little. In 1966 the Center loaned 1,359 items: 406 from its deposited collections plus 873 items from rental storage collections. However, the statistics of its delivery operation are indicative of the volume of interlibrary loans among its members:

January - October 1967	26,339 items picked up (including items to be deposited with the Center)
January - October 1967	23,428 items delivered

Medical Research Library of Brooklyn

In early 1967 the State University of New York Downstate Medical Center Library merged with the library of the Kings County Medical Society to form a 300,000 volume Medical Research Library of Brooklyn. This library received a grant from the National Library of Medicine to supply hospital and small medical libraries in Brooklyn and Long Island with needed materials on interlibrary loan.

Although the Medical Research Library of Brooklyn is not a member of the New York Medical Library Center, it is one of the major lenders of materials, and, as previously noted, is on the truck delivery route of the New York Center. In addition, it maintains a messenger service for those libraries in Brooklyn and Long Island which it serves under the NLM grant. From April through October of 1967, the Medical Research Library filled some 7,500 interlibrary loan requests including Xerox copies.

The Medical Research Library is primarily a lender, but occasionally requires non-medical materials, which it borrows mainly from Brooklyn College and members of the Council of Higher Educational Institutions in New York City. These include: Brooklyn College of Pharmacy, Brooklyn Law School, Long Island University, New York City Community College, Polytechnic Institute of Brooklyn, Pratt Institute, St. Francis College, St. John's University, St. Joseph's College for Women and the Medical Research Library. The libraries of these institutions maintain a union list of periodicals which facilitates the location and borrowing of materials in the Brooklyn area. In addition, the Medical Research Library of Brooklyn, which is part of the University of the State of New York Downstate Medical Center, is connected to medical libraries at SUNY-Buffalo, University of Rochester, and the SUNY-Upstate Medical Center by an IBM 27-40 communicator which is similar to the TWX.

Upstate Medical Interlibrary Loan Network

Several upstate health sciences libraries have formed an interlibrary loan network to help speed interlibrary loan service in

the area. Small health science libraries can request materials on loan from the three large medical libraries: SUNY-Buffalo, SUNY-Upstate Medical Center and the University of Rochester. If the donor library cannot fill the request, it is referred to the next likely library and a card is sent to the requesting library informing them of the disposition of the request. Requests are also channeled to the Medical Research Library of Brooklyn when necessary. This network is a loose cooperative agreement but has succeeded in eliminating five to eight days from a typical interlibrary loan transaction.

SUNY-Biomedical Communications Network

The medical libraries of the University of Rochester, SUNY-Buffalo, SUNY-Upstate Medical Center, Medical Research Library of Brooklyn and eventually the Medical Library at SUNY-Stony Brook will be linked to an on-line, real time computerized library system, the SUNY Biomedical Communication Network. The Network will make it possible for researchers, faculty and students to search the lists of recent medical books and journal articles in all participating libraries in less than two minutes. If the material is not available in the patron's library, the computer will automatically arrange for an interlibrary loan or a duplicate of the material, and will give an approximate delivery date.

Medical Library Assistance Act

The need for expanded medical library resources was recognized by the U. S. Congress when it passed the Medical Library Assistance Act of 1965. This contains provisions for the development of a national system of medical libraries to supplement the services of other medical libraries within the region. Regional medical libraries will be granted funds to increase their library resources and to provide loan services to qualified users.

The New York Academy of Medicine, which is a NYSILL subject referral center, was asked to submit a proposal to the National Library of Medicine to become the regional medical library for New York, although at this writing no final decision has been reached. As the second largest medical library in the world, the Academy is eminently qualified to serve as both the NYSILL subject referral center for medicine and as a regional medical library.

The New York Academy of Medicine is an independent association of physicians which makes its library resources available to the general public. The Academy library has a collection of over 530,000 volumes and a subscription list of over 4,500 periodical titles. The collection includes materials on medicine and all related fields and is particularly strong in foreign materials, history, bibliography and biography.

The collections of the Academy are open to everyone: to individuals and libraries. The Academy does not lend to other libraries on a regular basis. Both commercial and non-commercial libraries outside New York City wishing to borrow materials are permitted to borrow up to ten volumes a year without becoming a subscriber. Libraries which do not become subscribers are asked to direct their requests through NYSILL channels.

ACADEMIC INTERLIBRARY LOANS

In order to determine the quantity and characteristics of interlibrary loan transactions among institutions of higher education, and to determine the reaction of those institutions to NYSILL, a questionnaire was sent to all public and private colleges and universities in New York State (excluding those that are solely for religious aspirants). In all, 177 questionnaires were mailed out.¹ A copy of the questionnaire is reproduced in Appendix C.

There were 103 questionnaires (58% of those sent out) returned in time for machine data processing. The total volume of academic interlibrary loans reported on these questionnaires increases about 34% from 27,160 items in 1966 to 36,310 in 1967. Since not all schools responding have records for 1966,² it is more meaningful to study the number of items borrowed per school as a rough index of the academic volume of requests. This rises from 289 items per school in 1966 to 360 per school in 1967, or an increase of 25%.³ Over the same period the number of items borrowed from out-of-state sources increases by about 10% from 8,832 to 9,737. However, based on the number of schools responding in each year, the number falls from 132 items per school to 125 items per school.⁴ Of the 36,310 items loaned to schools in 1967, almost one-third (11,306) are borrowed through NYSILL. Another 9,700 items come from out-of-state sources. Total academic interlibrary loan volume in the state would be considerably greater, of course, since the

- 1 The schools were taken from 205 listed in Going to College in New York State, State Education Department, Albany, 1965. Of these, 35 that were "for religious aspirants only" were excluded. Seven units of City University of New York were added.
- 2 Nine schools did not report data for 1966; 2 did not report for 1967.
- 3 When 13 questionnaires that arrived too late to be data processed are included, the volume rises from 32,340 in 1966 to 42,700 in 1967, or 305 per school in 1966 and 375 items per school in 1967.
- 4 Thirty-six schools did not report data for 1966; 25 schools did not report for 1967. When the 13 late questionnaires are included, the volume rises from 11,634 in 1966 to 12,808 for 1967, or 176 items per school in 1966 to 164 items per school in 1967.

responding schools are only a sample of the college and university community in New York. Ninety-six of the 103 responding schools reported that they are aware of the NYSILL program. However, only 62 indicated that they have actually used the service.

In answer to the specific question, "Were you satisfied with the service NYSILL provided," 58 of the 62 users responded, with 39 of these indicating dissatisfaction. In an open-ended question these schools were asked to indicate why they were not satisfied. In addition, institutions were asked why they had not used NYSILL, if in fact they hadn't. Three major comments appear with remarkable frequency: 42 schools complain of slow service; 28 say that they can obtain needed materials locally or from other sources faster and/or with a better chance of getting requests filled; 21 complain of lack of referral information while awaiting word from The New York State Library. Primarily this last group report that they are not informed whether or not a long delay means that a request is being referred. Furthermore, when a request is not filled, some schools say they are not able to find out what, if any, sources have been approached.

Less frequent complaints are that referrals are often made to unlikely sources, that the NYSILL request forms are inadequate (too small to contain all information and no duplicates), and that the procedure is cumbersome.

Although favorable comments were not specifically invited, eight colleges express delight with the NYSILL program, two institutions say service is improving, and seven say they are hopeful that NYSILL will ultimately be useful to them. The availability of free photocopies is praised by three schools.

Institutions were asked to indicate from the following list⁵ what effect the NYSILL program had on their borrowing from sources outside the state. The number of schools checking each category is given in parens.

- NYSILL has no effect on out-of-state borrowing (52 schools checked this)
- Borrow more from out of state because of faster service than NYSILL can provide (15 schools)
- Borrow more from out of state because more requests are filled than through NYSILL (7 schools)
- Borrow more from out of state because of a preference for dealing directly with lending institutions,

⁵ Paraphrased from the original questionnaire wording.

and some of the in-state institutions used in the past now ask that requests be channeled through The New York State Library (11 schools)

- Borrow less from out of state because NYSILL has proven to be very satisfactory (8 schools)

Thus NYSILL has had no effect on the out-of-state borrowing practices of more than half of the schools responding to this question. Since multiple responses in the next three categories are possible, at least 15--and probably more--of the schools are borrowing out of state because they get better service. Only eight are borrowing less because of satisfaction with this program.

With respect to their borrowing in the state, schools were asked to indicate effects from the following list. Again, the number responding is given in parens.

- NYSILL has no effect on in-state borrowing (checked by 33 schools)
- Interlibrary loan requests are now channeled through the New York State Library (32 schools)
- In at least some instances, other in-state institutions are used directly rather than NYSILL participants which were formerly utilized (28 schools)

Thus the majority of schools responding reported either that NYSILL has had no effect on their in-state borrowing or that they are using non-participating libraries. (In the case of the "no-effect" response, some of these institutions may have used the resources of the State Library prior to the inception of NYSILL.) The number of schools noting that they now channel requests through NYSILL does not coincide with the 62 institutions answering "Yes" to the question, "Did you use NYSILL in 1967?" Probably this is due to the phrasing of the second question, which asked, "Do you now channel interlibrary loan requests through the New York State Library?" Some schools may have used NYSILL in the past but are not now using the service.

Summarizing, then, most schools know about NYSILL and two-thirds (62 out of 94) have used the program. But only one-third (19 out of 58) express satisfaction with the service. Although the volume of requests per school going out of state has not increased, the proportion of institutions seeking loans from out of state has risen. More than half of the schools indicate that NYSILL has either had no effect on their in-state borrowing or that they have, at least in some cases, switched to non-participating libraries to avoid NYSILL.

In order to see if different kinds of schools might react differently to NYSILL, each school was classified in four ways.

- Control: whether the school is public or private
- Location: New York City, suburban Westchester and Long Island, or upstate
- Specialty: liberal arts college or general university, technical (engineering, medical, etc.) school, or special (music, law, theology⁶, education, etc.)
- Level: two-year college, four-year college offering the B.A. only, a general university offering the B.A. and graduate degrees, or graduate school only

In the analysis below, the base for comparison is always all schools combined. For example, 66% of the total sample report that they used NYSILL in 1967, while only 35% of schools located in New York City do. Thus, a school located in the city is less likely to have used NYSILL in 1967. In addition, it should be pointed out that when the schools are broken down into these categories, some of the subgroups become very small. The reliability of the data in these instances is such that trends revealed must be interpreted with caution.

These four variables were also used to check the sample of responding schools for bias. Table 5.1 shows that when the 103 responding schools in New York State (excluding only those solely for religious aspirants) are broken down into these categories, they represent a valid cross-section of the educational community in the state. The only significant distortion is that the proportion of private schools responding is 13% higher than the proportion of all private schools in New York; however, this distortion is not large enough to introduce any major difficulties of interpretation.

Control: Public vs. Private

In almost all respects the responses of private and public schools follow those of the total sample fairly closely. In general, it appears that this distinction does not have any particular effect on academic use of NYSILL or the reaction of schools to the service.

Location: New York City, Suburbs,
and Upstate

When the schools are classified by geographic location, there are distinct differences between those in New York City and those outside the metropolitan area. A greater proportion of schools upstate reports that NYSILL has affected both their in-state and out-of-state borrowing practices and that they are now using NYSILL. Those located

⁶ Note again that schools for religious aspirants were not surveyed.

Table 5.1

ANALYSIS OF RESPONSE BIAS,
ACADEMIC LIBRARY STUDY

	Responded (N-103)	Did Not Respond (N-74)	All Schools (N-177)	Net, Percent Responded Less Percent for All Schools
1. Control: Public	39.8%	70.3%	52.5%	-12.7%
Private	60.2	29.7	47.5	+12.7
2. Location: NYC	28.2%	32.4%	29.9%	- 1.7%
NYC Suburb	12.6	16.2	14.1	- 1.5
Upstate	59.2	51.4	55.9	+ 3.3
3. Specialty: Liberal Arts	70.9%	70.3%	70.6%	+ 0.3%
Technical	16.5	9.5	13.6	+ 2.9
Special Schools	12.6	20.3	15.8	- 3.2
4. Level: Jr. (2-yr.)	26.2%	28.4%	27.1%	- 0.9%
B.A. Only	31.1	27.0	29.4	+ 1.7
4-yr. & Graduate	33.0	28.4	31.1	+ 1.9
Graduate Only	9.7	16.2	12.4	- 2.7

in the city report just the opposite. In addition, although proportionately fewer schools located in New York City report that they are borrowing more from out of state because of faster service, all of them register dissatisfaction with NYSILL.

The suburban schools show a third pattern of reactions. In line with the city schools, a greater proportion indicates that NYSILL has had no effect on their out-of-state borrowing. However, more note that they are channeling their requests through the New York State Library, and fewer are switching their requests to non-participating libraries. This may be due to the fact that many of these schools used the State Library prior to the NYSILL program.

Specialty: Liberal Arts, Technical,
or "Special"

The special schools--education, music, etc.--vary from the total sample in many more instances than the technical or liberal arts schools. Fewer of the special schools are aware of the NYSILL program. This may help to explain the fact that more of them report that NYSILL has had "no effect" on both their out-of-state and in-state interlibrary loans. All of the special schools responding to the question register dissatisfaction with the NYSILL program. Many of these schools and many of the technical schools indicate that they know where material is likely to be located, and deal with that library directly. In addition, more technical schools indicate that they are borrowing more from out of state because it is faster. It appears that both the special and technical schools already had fairly well established patterns of interlibrary loan service prior to NYSILL, patterns which have held constant because of dissatisfaction with the state's program.

Although a somewhat greater proportion of liberal arts schools use NYSILL, several note that they can get material faster locally or from the Library of Congress.⁷

Level: Two-Year Colleges, Four-Year Colleges,
Universities, or Graduate Schools Only

Compared with the total, NYSILL has had a special effect on the interlibrary loan practices of four-year colleges; more of them are channeling their requests to The New York State Library. However, these schools show the same kinds of reactions to NYSILL service as the total which, as noted previously, is not particularly favorable.

A greater proportion of two-year schools reports that NYSILL has had "no effect" on both their in-state and out-of-state borrowing.

⁷ The Library of Congress was consulted about the number of requests it received in 1966 and 1967 from colleges and universities located in New York State. However, these figures are not readily available.

Even so, seven of the eight schools noting that they are "delighted with the service" are two-year schools and, in comparison with the total, a much greater proportion are satisfied. It should be noted that relatively few of these schools do much borrowing out of state (of 24 respondents, 21 report that 10% or less of their requests go out of state). This, combined with the fact that few of these schools use NYSILL, seems to indicate that the material needed by two-year colleges is readily available at their own or other local libraries.

More of the universities (four-year colleges with graduate programs) indicate that NYSILL has had an effect on both their in-state and out-of-state borrowing. The universities are more likely to report that they are using NYSILL, and that they are using out-of-state source less because they are satisfied with the service. On the other hand, these schools are also more likely to report that they are borrowing more from out of state because they get faster service, they get more requests filled, and they prefer to deal with lending libraries directly; and they are more likely to have shifted to non-participating libraries. This seems to indicate that the NYSILL system is filling the needs of some but not all of these schools.

The total group of graduate-only schools is very small (eight cases) and it is difficult to make any trustworthy conclusions. NYSILL seems to have had little effect on their in-state and out-of-state borrowing. Fewer of them use NYSILL and they are more likely to turn to outside sources. All of the graduate schools responding to the questionnaire register dissatisfaction with NYSILL. It appears that they have regularly established patterns of library borrowing which are primarily out of state.

From the analyses of responses by college types, it appears that there are certain groups of schools where NYSILL has not had much, if any, effect on interlibrary loan practices. It is questionable whether the NYSILL program will ever play a large role in the library programs of such schools. These include: schools located in New York City (where a wealth of resource material is readily available); technical, special, and graduate-only schools (which have very specialized needs and seem to have established patterns of borrowing); and two-year colleges (where most needs appear to be satisfied by local libraries).

Schools located in upstate New York (and to a lesser extent, those in the New York suburbs), liberal arts schools, four-year schools and universities are in many cases using NYSILL. And, as shown in Table 5.2, these are the schools which initiate the greatest number of interlibrary loan requests. However, a large proportion of these institutions are not satisfied with the NYSILL service. Because of this, some of these schools are turning to sources out of state or using non-participating libraries. These findings are corroborated by interviews

Table 5.2

NUMBER OF INTERLIBRARY LOAN REQUESTS
IN 1966 AND 1967

	1 9 6 6				1 9 6 7			
	Number of Items Borrowed	Number of Schools Responding	Average Number of Items Per School	Number of Items Borrowed	Number of Schools Responding	Average Number of Items Per School		
Total	27,160	94	289	36,310	101	360		
1. Control: Public	12,810	39	328	19,220	42	458		
Private	14,350	55	261	17,090	59	290		
2. Location: NYC	3,720	25	149	4,530	28	162		
NYC Suburb	1,240	12	103	1,390	12	116		
Upstate	22,200	57	389	13,390	61	498		
3. Speciality: Liberal Arts	19,030	66	288	28,250	73	387		
Technical	7,220	15	481	7,050	15	470		
Special Schools	910	13	70	1,010	13	78		
4. Level: Jr. (2-yr.)	1,520	26	58	2,390	27	89		
B.A. Only	5,770	29	199	12,160	33	268		
4-yr. & Graduate	16,110	30	537	17,840	32	558		
Graduate Only	3,760	9	418	3,920	9	436		

which were held with librarians at a special school, a community college, a small liberal arts college located upstate, and two of the larger upstate universities.

Because of their highly specialized nature, special schools need materials which are generally available only at libraries of institutions concentrating in the same area. One four-year institution of higher education has a highly specialized collection in its field of approximately 34,000 volumes. This library has not relied on the State Library in the past, but instead has requested material from the most likely source, regardless of geographic location.

After the inception of the NYSILL project, however, this school directed about 25 requests through NYSILL channels and found that within a month's time only 11 requests had been filled. Because of the low success at the State Library and the length of time involved, this library is continuing to borrow heavily from out of state.

Two-year community colleges do not have the same need for research materials that four-year colleges or universities have. Consequently, they can usually supply the needs of their students and faculty from their own collections, or from local public library systems. The interlibrary loan transactions of two-year institutions are usually small, both in lending and borrowing.

One community college library, which has a collection of over 26,000 volumes, borrows about 50 to 60 items a year and lends about 20 items a year. This school reports that the NYSILL project has had little or no impact on its interlibrary loans.

Four-year liberal arts colleges, even with well established libraries, have found a growing need for interlibrary loans as student enrollments and faculty have increased and curriculum offerings have expanded. Under the American Library Association Interlibrary Loan Code, material cannot be borrowed for undergraduate students; but librarians request materials without regard to the code, make private arrangements with other colleges or universities, or request material directly from the State Library. In all cases, college librarians look to the quickest method of obtaining materials.

One liberal arts college, with a curriculum emphasizing independent study and honors work, has a good library collection of about 275,000 volumes and makes about 3,000 interlibrary loan transactions a year. Prior to NYSILL about 60% of their borrowing was from the State Library. However, since students cannot wait more than ten days for needed materials, this school presently relies on out-of-state libraries and another nearby college with which it has a reciprocal agreement. In the latter case, needed materials are requested by phone and delivered by United Parcel within 24 hours.

Two upstate universities routinely make requests to many out-of-state libraries as well as those participating in NYSILL. At

present only a small portion of this load is actually going to the state's system, because these schools feel that they cannot afford to submit requests to the network unless their own checks of bibliographic sources and union catalogs indicate that at least one--and usually several--participating NYSILL libraries have the needed material. In addition, they find that earlier procedures and present out-of-state sources provide much faster service (usually one week to ten days). These libraries are convinced that the network often fails to turn up materials which it should be able to supply. Also, the NYSILL system does not use the standard ALA interlibrary form, and--partly because of this--does not supply much of the data which these libraries feel is necessary, both about the libraries which may have been queried on a request and about the status of the request at those libraries.

Although the same complaints might be made at other libraries, they have a special significance at these schools because graduate students make up a heavy portion of patrons, and because these upstate schools do not have easy access to resources in the New York City metropolitan area. Consequently, they are in special need of an interlibrary loan system and are not opposed to NYSILL as such. However, they do not want their own patrons to pay too high a price for innovation, and after nearly a year's trial, they feel that NYSILL's relatively slow service makes it inadequate. In addition, the rules of the State Library create great difficulties for these institutions. For example, the proviso that libraries must use NYSILL if they are to tap the resources of participating libraries tends to force these schools to go out of state for interlibrary loans. The use of arbitrary referral rules according to subject seems senseless to these schools, when they have checked a union catalog and know where a volume may be located. In such cases, the State Library could save time and effort by referring the request directly to the library indicated as holding the material rather than the one that might be suggested by the subject classification.

INTERVIEWS WITH REFERRAL SITES

Interviews were held with a librarian at each referral library in order to discover what materials are restricted in circulation and not available for loan to NYSILL, when photocopy is sent instead of original material, whether the regular users of the library are neglected because needed materials were on loan to NYSILL and what their general reaction is to the program.

The limits on materials that can be lent to NYSILL vary from library to library. The collection of The New York Public Library Research Libraries is completely restricted and all requests are filled by microfilm. Most of the other libraries will not lend reference books, rare books, periodicals, and books in poor condition. Universities usually restrict books which are on reserve for their faculty and students. In addition, unbound materials, oversized volumes, those with loose plates, bibliography, indices, conference proceedings, recent books, local historical collections, genealogy and volumes from multi-volume sets are

not loaned by some libraries. However, in many cases, librarians report that each request is handled individually and restrictions can be waived depending on the actual material in question and the reason for the request.

Except for The New York Public Library Research Libraries most libraries photocopy only when the patron requests it or when the material is part of their restricted collection. However, four libraries reported that they photocopy "whenever possible"--i.e., whenever a request can be filled in 24 pages of photocopy.

Only one librarian reports that regular staff has been neglected because needed books were on loan to NYSILL and unavailable. All of the other librarians indicate that their users were not inconvenienced any more than with regular ILL.

Only one of the librarians interviewed thinks that the NYSILL program should be discontinued when contracts terminate at the end of June. He feels that the cost to the state is prohibitive in view of the slow service and the proportion of requests filled. All of the others agree that the program should be continued although none is completely satisfied with the mechanics of the network. As lenders, most of these libraries complain of garbled teletype messages and incomplete or incorrect citations. The referral libraries want to provide the best possible service and are loathe to give NIL reports when they have been unable to identify the requested material. As borrowers, they complain about the lack of reports on requests and the time lags involved. In addition, several subject referral libraries report that they are receiving requests that are not in their subject area. Although all of these libraries seem willing to fill these requests when they have the material, there is some concern about whether the unfilled requests eventually do get to the appropriate subject library and about the amount of time consumed in an extra unnecessary referral. One librarian suggests that, if the NYSILL program is extended and expanded, the subject libraries should receive further compensation so that they can purchase more titles in their subject field and thus be better able to fill more requests.

PATRONS' SUGGESTIONS FOR IMPROVEMENT OF SERVICE

An open-ended question on the postcard asked patrons to provide suggestions for improving the service of NYSILL. It should be noted that the resulting data shown in Table 5.3, reflect requests and not patrons. One person making several requests could fill out several postcards.

Table 5.3

SUGGESTIONS FOR IMPROVEMENT BY TIME PERIOD

Comments	Total ^a	T I M E P E R I O D									
		March- April	April- May	May- June	June- July	July- August	August- September	September- October	October- November		
Excellent service	40.1%	14.5%	38.9%	39.5%	39.2%	49.0%	45.1%	37.8%	37.7%		
Too slow	8.9	45.2	14.4	8.2	7.0	4.3	5.5	9.8	8.3		
Appreciation	3.1	1.6	5.4	3.0	4.6	2.6	2.4	2.2	3.1		
All others	12.1	16.1	8.6	14.5	6.2	11.9	12.1	15.4	12.5		
No suggestion	35.7	22.6	32.7	34.8	43.0	32.1	34.9	34.9	38.4		
Total ^b	99.9%	100.0%	100.0%	100.0%	100.0%	99.9%	100.0%	100.1%	100.0%		

^a Percentages based on 2,754 responses.

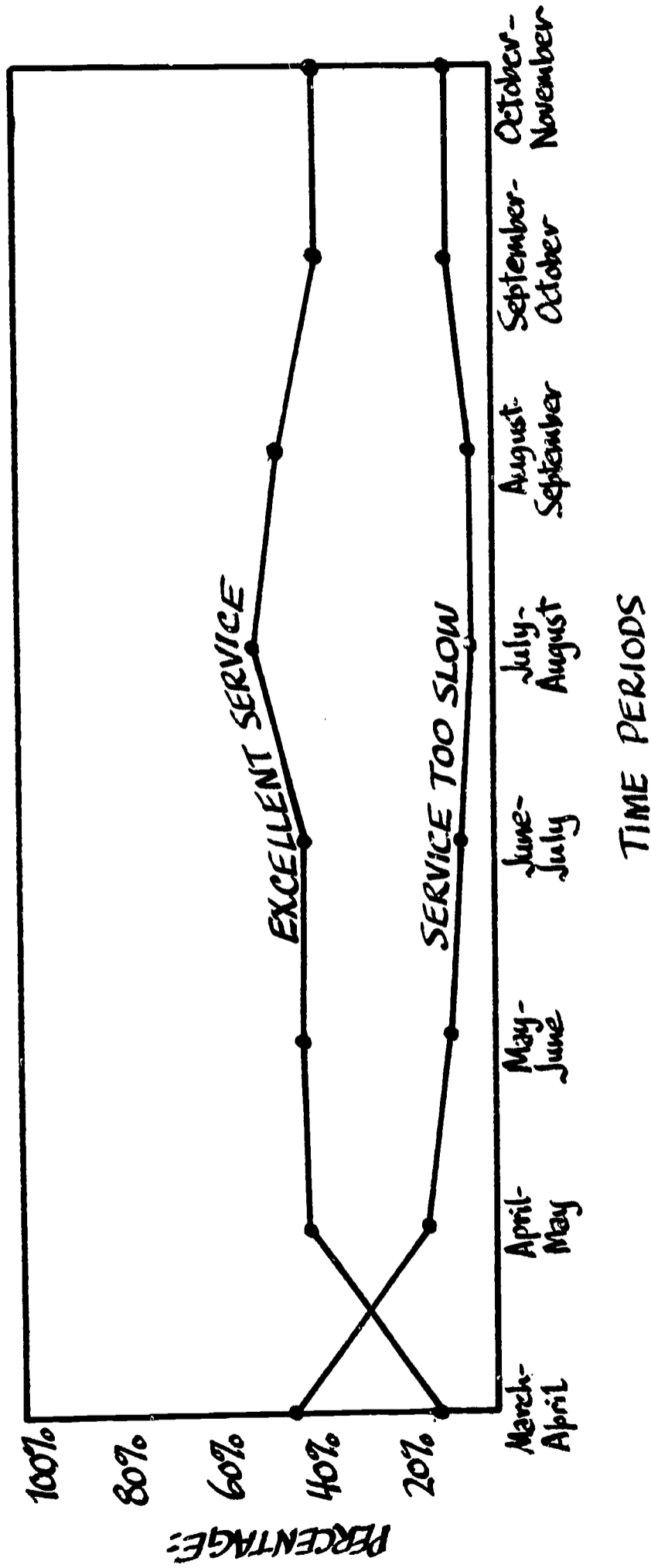
^b Totals may not equal 100.0% due to rounding.

⁸ Most of the 7,473 returned questionnaires do not answer the question. Of 2,754 which do respond to the question, 36% respond "no comment" (or just "no"). Another two-fifths simply mention their satisfaction with the service, making comments such as "request filled promptly." Three percent express their appreciation that the NYSILL program is available. The most frequent actual suggestion, the need for faster service, is cited by 9% of all those responding. Comments from the remainder, classified here as "all others," are too diverse to permit further breakdown. Included here are suggestions that the loan period should be longer, books should be renewable, a union catalog should be available, use of books should not be restricted to the library, and photocopies should be clearer.

Figure 5.1 shows graphically the percentage of respondents citing "excellent service" and "service too slow" for each of the eight time periods. Excellence of service is most often mentioned, and slowness of service is least often cited during the July-August time period when, as shown in Chapter 4, service was in fact the fastest.

⁸ Presumably these patrons do not have any special suggestions for improvement.

FIGURE 5.1. PATRON REACTIONS TO NYSILL OVER TIME (percent responding "excellent service" and "service too slow")*



* Data from first time period is biased toward those cases taking longest to fill. Percents are based on all those making comments of any kind, including the response "I have no suggestions to make," but excluding those not answering the item or not returning a card.

Chapter VI

COSTS OF REFERRED NYSILL REQUESTS

The 12 referral libraries in the NYSILL network receive payments from the State Library in the form of participation grants and unit referral fees. Participation grants are given to these libraries for their willingness to serve in the program and are based roughly on the volume of referrals that they are expected to receive. For the period from March 22 to August 31, 1967, each area center received a grant of \$3,500 while each subject center received either \$1,750 or \$5,000. When contracts with referral libraries were extended from August 31, 1967 to March 31, 1968, the area libraries each received \$4,083 and the subject libraries received \$1,750, \$2,041 or \$5,833.

The unit referral fees are intended to reimburse the referral libraries for costs incurred from participating in the NYSILL program. Area libraries are paid \$1.00 for each request referred to them; subject libraries are paid \$2.50. If the referred request is filled, both area and subject libraries are paid an additional \$2.00.

Table 6.1 shows the costs of the referral network, (taking into account participation grants and unit referral fees) in relation to the number of requests filled at the referral libraries during the monitoring period. Teletype costs and labor costs at the State Library have been excluded. During the eight months of monitoring, it cost an average of \$15.80 to fill a referred NYSILL request. The average cost for the three area libraries is \$11.33, and for the nine subject libraries, \$19.79. Two of the subject centers have an average cost similar to that for area libraries (\$11.85 and \$15.67), while the cost at five others is \$21 or \$22. The two remaining libraries have much higher costs than the rest--\$38.58 and \$52.95. These last two libraries receive a relatively small number of requests and fill a lower than average proportion of them.

In order to evaluate the equity of the unit fees in reimbursing libraries, the total unit cost of processing a referral--which applies to all requests referred--and the total unit cost of filling a referral--which applies only to requests actually filled--were calculated for each of the 12 referral libraries in the NYSILL network. (A detailed description of these cost analyses is given in Appendix F.)

Table 6.2 presents summary unit cost data for the three area referral and the nine subject referral centers. It is evident in this table that major variations in unit processing and filling costs do seem to parallel the basic distinction in the State Library's fee structure between area referral centers (public libraries) and subject

Table 6.1

ESTIMATED COSTS OF FILLING REFERRED NYSILL REQUESTS
MARCH 22 THROUGH NOVEMBER 21, 1967^a

Referral Libraries	Payments from the State Library		Costs per Unit Filled			
	Unit Referral Fees ^b	Participation Grants ^c	Total	Unit Fees Only	Participation Grants Only	Total
<u>All Libraries</u>	\$35,353.50	\$50,305.63	\$85,659.13	\$ 6.52	\$ 9.28	\$15.80
<u>Area Referral Libraries:</u>						
Total	13,717.00	15,215.88	28,932.88	5.37	5.96	11.33
Library "A"	5,363.00	5,071.96	10,434.96	4.98	4.71	9.69
Library "B"	4,946.00	5,071.96	10,017.96	5.05	5.18	10.23
Library "C"	3,408.00	5,071.96	8,479.96	6.86	10.20	17.06
<u>Subject Referral Libraries:</u>						
Total	21,636.50	35,089.75	56,726.25	7.55	12.24	19.79
Library "D"	1,387.50	2,535.78	3,923.28	7.50	13.71	21.21
Library "E"	3,965.00	7,245.70	11,210.70	7.93	14.49	22.42
Library "F"	3,080.50	2,535.78	5,616.28	6.50	5.35	11.85
Library "G"	1,399.00	2,535.78	3,934.78	13.72	24.86	38.58
Library "H"	5,537.00	7,245.70	12,782.70	6.79	8.88	15.67

(continued on following page)

Table 6.1
(continued)

Referral Libraries	Payments from the State Library		Costs per Unit Filled			
	Unit Referral Fees ^b	Participation Grants ^c	Total	Unit Fees Only	Participation Grants Only	Total
<u>Subject Referral Libraries:</u> (continued)						
Library "I"	\$ 853.00	\$ 2,535.78	\$ 3,388.78	\$13.33	\$39.62	\$52.95
Library "J"	853.00	673.75	1,526.75	11.53	9.10	20.63
Library "K"	3,181.50	7,245.70	10,427.20	6.81	15.52	22.33
Library "L"	1,380.00	2,535.78	3,915.78	7.46	13.71	21.17

a In addition to the costs enumerated in the table, the teletype bills for this period that have been received to date have amounted to \$4,331.21. These costs have not been included because of incomplete data. Also excluded are labor costs at the State Library.

b Derived from survey data in Chapter III. Area referral libraries were figured at \$1.00 for every item received plus \$2.00 for every item filled; subject referral libraries were figured at \$2.50 for every item received plus \$2.00 for every item filled.

c From data supplied by the State Library. Grants for the latter half of the year were prorated to take only the period to November 21 into account.

Table 6.2

SUMMARY OF UNIT COST DATA,
NYSILL REFERRAL LIBRARIES *

REFERRAL LIBRARIES	Average Unit Processing Cost Per Request (including all requests)	Average Unit Filling Cost Per Request (including filled requests only)
AREA REFERRAL LIBRARIES:	@ \$1.00 per request received	@ \$2.00 per request filled
Average for Area Referral Libraries	\$.40	\$.80
Library "A"	.59	.79
Library "B"	.28	1.13
Library "C"	.32	.47
SUBJECT REFERRAL LIBRARIES:	@ \$2.50 per request received	@ \$2.00 per request filled
Average for Subject Referral Libraries	1.67	1.07
Library "D"	.59	1.17
Library "E"	.71	.70
Library "F"	3.57	.70
Library "G"	1.15	1.35
Library "H"	3.87	1.47
Library "I"	1.43	1.91
Library "J"	2.29	.92
Library "K"	.65	.49
Library "L"	.76	.94

* Summary of data from Tables F.1 - F.12.

referral centers (non-public libraries). The area centers have distinctly lower unit processing costs, in general, than the subject centers. Similarly, the unit filling costs at the area referral centers are below, on the average, those at the subject centers, although the difference between the two categories of libraries is less marked here than in the case of processing costs.

The State Library's unit reimbursement for each filled referral --\$2.00--adequately covers the actual cost of filling a request at each of the 12 NYSILL referral libraries. At all but two of the libraries, both subject centers, the reimbursement for handling a referral--\$1.00 for area centers and \$2.50 for subject centers--also provides for the costs incurred in processing a NYSILL request. The unusually high total unit processing cost at each of these two subject referral libraries is entirely attributable to the substantial allocations of administrative time submitted by each institution during the NYSILL cost analysis (see Appendix F). Reduced to a per-unit basis, each of these libraries estimates that high-salaried administrative librarians spend about 15 minutes, on the average, processing every NYSILL request referred. There is some evidence to believe that at least some of these administrative charges should not be included in the cost of processing a referral and are more appropriately viewed as expenses covered by the State Library's "willingness to serve" grants.

The analysis of unit costs at the NYSILL referral libraries appears to validate the equity of the present fee structure. However, data analyzed in this study reflect costs incurred by the referral libraries in late 1967. Already some of these costs, such as those for postage, may be understated.

Chapter VII

EVALUATION OF THE NYSILL PROGRAM

The analyses presented in Chapters II through VI cover the operations of the NYSILL pilot program from March 22 to November 21, 1967. The most essential findings for that eight-month period can be summarized as follows:

- F1. Between March 22 and November 21, 1967, The New York State Library received about 46,000 NYSILL requests. Most of these (98%) were received via teletype. The volume of incoming teletype requests for the eight months from April through November 1967 represents an 11% increase over the volume for the comparable time period in 1966. Data on slightly more than 43,000 requests were tabulated and analyzed for this report.
- F2. Librarians where NYSILL requests originate were asked to classify requests as "eligible" or "ineligible" for referral beyond the State Library to one or more of the 12 referral libraries in the NYSILL network. Data such as patron status, name of originating library, and date and time for receipt of the request were collected only for eligible requests. Judging from the number of "no answers" to these questions, ineligible requests represented from one-third to one-half of all NYSILL requests received during the monitoring period. Ineligible requests cannot be determined with any more precision because "no answers" also occurred due to occasional missing data for eligible requests. Because of these two factors, several analyses in this report are based on data for about one-half of all requests. However, unless otherwise noted, requests with data are considered to be representative of all NYSILL requests received during the monitoring period.
- F3. Almost three-fifths (58%) of the NYSILL requests from the monitoring period were for patrons classified as "other," with the remaining requests divided about equally between faculty members (20%) and students (21%). There was an increase over the eight time periods in the proportion of requests submitted by faculty members.
- F4. Postcard returns indicated that 39% of the filled requests were for use in academic coursework, 34% for independent research, 15% for business or professional

activities, 16% for recreation and 4% for other purposes. There was a dramatic increase in the last two time periods in the proportion of requests used for coursework.

Requests from students tended to be for academic coursework purposes, and requests from faculty reflected research needs as well as coursework. Requests from "other" patrons were more evenly distributed among the four major categories of use.

- F5. Less than one-quarter (22%) of all requests received during the monitoring period could be included in the analysis of subject areas of NYSILL requests. Requests were coded at the originating library from a list of 55 subject categories provided by the State Library. It is likely that some eligible requests were not coded because they did not fall within one of these categories. Because of this, the analysis on subject areas may understate fields not explicitly identified in the State Library scheme. Of requests analyzed, 18% were in the field of social science and 13% were for history.
- F6. About half of the requests received (assumed to be mostly eligible requests) had data on the originating library. Almost three-quarters (71%) of these requests originated at public libraries, one-quarter (26%) at academic libraries, and 3% at "other" libraries. The proportion of requests originating at public libraries would undoubtedly increase substantially if data on the originating library for ineligible requests could have been included.
- F7. Only four transmission sites individually contributed more than 5% of the total request volume during the monitoring period: Suffolk, Nassau, Ramapo Catskill, and Mid-Hudson. Requests originating at public libraries were almost always sent through transmission sites that were public library system headquarters; academic requests were routed either through a university or through a nearby public library system.
- F8. Of all requests received at the State Library, 44% were filled there, 25% were not filled and were referred to another library in the NYSILL network, and 31% were not filled but not referred. (This last group is assumed to be mainly ineligible requests).
- F9. Most (71%) of the referred requests were referred only once. Another 29% were referred twice and less than 1% were referred three or more times.

F10. In the following analyses on referrals, a request is counted separately each time it is referred to a different library. For example, a request referred first to an area referral library and then to a subject referral library is counted twice and its status at both libraries is recorded. The approximately 11,000 unique requests referred by the State Library during the monitoring period eventually (due to multiple referrals) produced about 15,000 referrals.

About three-fifths (58%) of all referrals were sent to area referral libraries. The Brooklyn Public Library and Buffalo and Erie County Public Library each filled about a third of the referrals they received, while the Monroe County Library System filled one-fifth.

The majority of referrals sent to subject referral libraries (42% of all referrals), were sent to Columbia University, Cornell University, The New York Academy of Medicine and The New York Public Library Research Libraries. The five other subject libraries each received less than 3% of all referrals. Six of the subject referral libraries each filled about 40% of the referrals they received and three (The Metropolitan Museum of Art, New York University and Teachers College) each filled one-quarter or less of NYSILL referrals sent to them.

F11. Of all filled referrals, area libraries filled 47% and subject libraries filled 53%. Individually, Buffalo and Erie County filled 20% of all filled referrals; Brooklyn filled 18%; The New York Public Library Research Libraries filled 15%; and Monroe County, Columbia, Cornell and The New York Academy of Medicine each filled 9%. The five other libraries--all subject libraries--each filled 3% or less of all filled referrals. (It should be noted that data for New York University are for only two months since they were not added to the network until September 21, while the data for the other libraries are for the entire eight-month monitoring period.

F12. First and second referral libraries each filled about one-third of the referrals (37% and 34% respectively) they received.

F13. In all, about half of the unique requests that were referred beyond the State Library were filled. (This somewhat overstates the contribution of the referral

network because 252 requests filled at referral libraries were also filled at the State Library and 170 requests that were referred but not filled, were later filled by the State Library.)

- F14. Altogether (counting requests filled at both the State Library and a referral library as being filled only at the State Library), 55% of the 43,223 requests received during the monitoring period were filled, with the State Library supplying 44%, a first referral library filling another 8%, a second referral library filling 2% and a third, or later, referral library filling less than 1%. There was a slight increase over the study period in the proportion of requests filled at a first referral library.
- F15. The analysis of a sample of eligible requests that were NIL at the State Library indicates that 28% of such requests are suitable for purchase by the State Library and 38% are suitable for acquisition by public libraries in the state. (This latter figure includes a 3% overlap with those titles that could legitimately be acquired by the State Library.) The remaining 38% of all eligible requests that were NIL at the State Library appear to be too ephemeral in nature for purchase at either level.
- F16. The sample of eligible requests that were NIL at the State Library were also analyzed to determine the proportion that were suitable for referral to another library in the NYSILL network. From this analysis it appears that 61% of the requests that had been designated by an originating library or a request transmission site as eligible for referral probably were not, in fact, appropriate requests for referral.
- F17. The overall elapsed time in the NYSILL network from the time the patron submitted his request at the originating library until he received material in response to his request averaged 22 days during the monitoring period. This breaks down to 4 days from the time the request was received at the originating library until it was received at the request transmission site, another 4 days between its receipt at the request transmission site and receipt at the State Library, 12 days from the time it was received at the State Library until it arrived back at the originating library (an average made up of 9 days for unreferred requests and 23 days for referred requests), and 2-1/2 days from the time the material arrived at the originating library until the patron picked up his material.

The overall time lapse shows a decrease of seven days between the two halves of the monitoring period; most of this improvement in overall elapsed time is due to faster handling of referred requests.

- F18. In order to determine whether there were variations in the time taken to process requests at each of the 12 referral libraries, the following elapsed times were studied for requests filled and unfilled at each library: (1) for unfilled requests, the average number of days elapsed from the time the request was received at the first referral library until the time it was received at the second referral library; and (2) for filled requests, the average number of days elapsed from the receipt of the request at a first or second referral library to the receipt of the material at the originating library. Although elapsed time computations for the first interval include time spent at the State Library between referrals and calculations for the second interval include mailing or shipping time, these additional times should not be biased for or against any library.

The study shows that, among the three area referral libraries, Brooklyn took about twice as long as Buffalo and Erie County or Monroe County to handle unfilled requests (22 days vs. 11 and 12 days respectively). This is in large measure due to the fact that requests not filled at Brooklyn pass through a secondary referral network composed of The New York Public Library Branch Libraries and the Queens Borough Public Library.

The time lapse in handling filled requests at these three libraries--the interval between the time the request is received at the referral library and when it is received at the originating library--was more nearly comparable, averaging 13 days.

Six of the subject referral centers had sufficient cases with elapsed times for filled requests to provide reliable data. The time interval from the filling site to the originating library for four of these--Columbia University, The Metropolitan Museum of Art, The New York Academy of Medicine, and Union Theological Seminary--averaged 10 or 11 days over the eight months. The average elapsed time for the other two was 6 days for the Engineering Societies Library and 23 days for The New York Public Library Research Libraries. (The

latter time lapse is probably due to the fact that data in this report include six months when this library, which does not loan its materials, received referred requests which had to be filled by microfilming the material.)

- F19. A 1963 survey of 278 of the medical, paramedical and hospital libraries in New York State, Northeastern New Jersey, Southern Connecticut and the College of Physicians in Philadelphia established that a minimum of 70,000 interlibrary loan requests had been received at such libraries during the previous year. Interlibrary loan activity was reported by 84% of the medical libraries responding from New York City and all medical libraries responding from upstate. The largest lender was The New York Academy of Medicine, which supplied 22,000 items.

Resource needs of medical libraries are highly specialized and can usually be filled only by other medical libraries. In an effort to facilitate interlibrary lending, the medical libraries in New York State have formed networks or made other cooperative agreements among themselves, such as the Medical Library Center of New York and a cooperative arrangement among upstate libraries that draws on the resources of SUNY-Buffalo, SUNY-Upstate Medical Center and the University of Rochester.

Under the Medical Library Assistance Act of 1965, a national system of regional medical libraries will be established, with these libraries being granted funds to increase their library resources and provide loan service to qualified users. The New York Academy of Medicine, which is the second largest medical library in the world, has been asked to submit a proposal to the National Library of Medicine to become the regional medical library for New York. This institution appears to be the best one to participate in the NYSILL network if the program is to include subject strength in the medical field.

- F20. Responses from 101 institutions of higher education (almost three-fifths of the state's total) indicate that these schools borrowed 36,310 items through interlibrary loan in 1967. Of these, a minimum of 9,737 items were borrowed from out of state and a minimum of 11,306 through NYSILL. Most of the schools knew about NYSILL and two-thirds had used the program at one time or another during the eight months.

However, only one-third of the users expressed satisfaction with the service they had received. More than half of the schools indicated that NYSILL has had no effect on their out-of-state borrowing. Regarding their in-state borrowing, one-quarter of the schools stated that, at least in some instances, they had switched to non-participating libraries to avoid using NYSILL. Another one-third of the schools said that NYSILL has had no effect on their in-state borrowing. However, some of the schools in this latter group may mean that they sent their interlibrary loan requests to the State Library in previous years and are continuing to do so even though the State Library's operation now include the NYSILL program.

- F21. NYSILL has apparently not had much if any effect on (1) the interlibrary loan practices of colleges and universities located in New York City (where a wealth of resource material is readily available); (2) on technical, special, and graduate-only schools (which have very specialized needs and seem to have established patterns of borrowing); and (3) on two-year colleges (where most needs appear to be satisfied by their own or local public libraries). Colleges and universities located in upstate New York (and to a lesser extent, those in the New York City suburbs), liberal arts schools, four-year schools, and universities are more prone to use NYSILL. These are the schools which, according to data tabulated for the 101 schools on interlibrary loan volume, initiated the greatest number of requests. However, a large proportion of these institutions are not satisfied with the performance of the NYSILL network. Accordingly, some of these institutions are turning to sources out of state or borrowing from non-participating in-state libraries.
- F22. Almost two-thirds (63%) of the 7,473 postcard returns from patrons whose requests were filled did not contain an answer to the question on suggestions for improvement of service. Of those patrons that did respond, more than one-third explicitly said they had no suggestion, two-fifths cited some aspect of excellent service, and 3% expressed their appreciation that the NYSILL program is available. The most frequently cited suggestion for improvement was the need for faster service--mentioned on 9% of the postcards with answers.

- F23. Only one of the librarians questioned at the 12 referral libraries thinks that the NYSILL program should be discontinued when present contracts terminate June 30, 1968. This librarian feels that the cost borne by the state is prohibitive in view of the slow service being provided and the proportion of requests being filled. All others feel that the program should be continued, although none is completely satisfied with the mechanics of network operations. As lenders, representatives of the 12 libraries complain of garbled teletype messages and incomplete or incorrect citations. Librarians at the 12 referral libraries who borrow through NYSILL for their patrons complain about the lack of reports supplied by the State Library on requests they have submitted and the time lags involved.
- F24. Considering unit fees and participation grants, and excluding teletype and labor expenses at the State Library, it cost \$15.80 to fill a referred request during the monitoring period.

Payments made to each of the 12 referral libraries in relation to the number of requests they filled create a wide variation in the cost of filling a request at each of the different institutions. The average cost for the three area libraries was \$11.33, and for the nine subject libraries, \$19.79. Two of the subject centers had an average cost similar to that for area libraries (\$11.85 and \$15.67), while the cost at five others was \$21 or \$22. The two remaining libraries had much higher costs than the rest--\$38.58 and \$52.95. These last two libraries received a relatively small number of requests and filled a lower than average proportion of them.

- F25. In order to evaluate the equity of the State Library's unit fees for reimbursing referral libraries, the total unit cost of processing a referral--which applies to all requests referred--and the total unit cost of filling a referral--which applies only to requests actually filled--were calculated for each of the 12 libraries. An analysis of these costs appears to validate the equity of the present reimbursal fees; major variations in unit processing and filling costs seem to parallel the basic distinction in the fee structure between area referral libraries and subject referral libraries.

The State Library's unit reimbursement for each filled referral--\$2.00--adequately covers the actual

cost of filling a request at each library. At all but two of the libraries, both subject libraries, the reimbursement for handling a referral--\$1.00 for area libraries and \$2.50 for subject libraries--also provides for the costs incurred in processing a NYSILL request. The unusually high total unit processing cost at each of these two subject referral libraries is entirely due to the substantial allocations of administrative time submitted by each institution during the cost analysis. Such costs might be more appropriately viewed as expenses covered by the State Library's participation grants.

CONCLUSIONS AND RECOMMENDATIONS

As is often the case in large-scale research projects--and clearly the NYSILL program must be viewed and evaluated as a major experimental undertaking--the multitude of "findings" do not readily suggest self-evident, straightforward conclusions. This is as it should be. The identification of new questions requiring the attention of those responsible for planning, implementing and administering innovative services is, after all, one of the important objectives of pilot endeavors. From this standpoint, the NYSILL project is quite legitimately considered a success. A wealth of valuable information has been generated, essential "know-how" has been developed and at least some of the critical issues requiring further study have been identified. This is not to say, however, that the operations of the NYSILL network have conclusively demonstrated the need for this particular statewide mechanism for meeting the reference and research interlibrary loan requirements of those who live, work and/or study in New York. The performance of the NYSILL network has, in fact, been disappointing in several fundamental respects and has not yet produced evidence that dramatic improvements in the service being provided can be expected in the near future.

The present NYSILL contracts will expire on June 30, 1968. What should be the State Library's position regarding this scheduled termination of the NYSILL program? Our interpretations of the findings presented in this report have led us to the following conclusion:

Although the operations of the NYSILL network through November 21, 1967 have not established the inherent value of this particular reference and research interlibrary loan concept, the NYSILL program has been and could continue to be an important source of the kind of data and expertise that will be absolutely essential to intelligent planning for the long-term development of any cooperative program(s) financed by New York State--whether local, regional or statewide--for meeting reference and research needs through interlibrary loan.

At the present time, very little is actually known about just how reference and research interlibrary loan requests should be processed within the state in order to insure the greatest success in locating materials, in the shortest possible time, at the lowest cost to the public purse. What has become increasingly evident, however, is that the ultimate solution will not likely consist of a simple, single state-wide referral network. That being the case, the investigations that will be required in the months and years ahead can be stated in terms of the following general question: Are there certain kinds of requests (identified by patron status, format of material and/or subject area) which should be referred to particular types of libraries in specific sequences in order to maximize the overall effectiveness of interlibrary loan operations?

The NYSILL pilot project represents the first meaningful attempt in New York State, and possibly elsewhere, to develop answers to that basic question. Further testing is essential, however, if NYSILL's potential contribution to the ultimate development of a configuration of reference and research interlibrary loan networks is to be realized. We therefore recommend the following:

The NYSILL program should be continued on an experimental basis at least until the end of the state's next fiscal year. Renewal of NYSILL operations beyond March 31, 1969 should be contingent on the State Library's demonstrable needs for further research as well as on the calibre of the interlibrary loan services actually provided by the NYSILL network during the next 12 months.

If the operations of the NYSILL network are, in fact, continued beyond the present June 30 termination date, a number of changes in the network's design and procedures ought to be implemented. Some suggestions aimed at improving the performance of the NYSILL program and some proposals for additional research are listed below:

1. Academic libraries should be free to borrow among themselves without having to channel their requests through the State Library. The costs of such borrowing and lending should not, however, be reimbursed by the state (except perhaps as part of a limited pilot project). Therefore, those institutions serving as NYSILL referral libraries that prefer having interlibrary loan requests screened by the State Library instead of receiving them directly should be encouraged to make this preference widely known throughout the state.
2. The use of the Brooklyn Public Library's secondary referral network (consisting of The New York Public Library Branch Libraries and the Queens Borough Public Library) should be discontinued. It is not yet clear that NYSILL referrals should be searched through three area libraries before being referred to a subject library. This suggested procedural change should have the effect of considerably reducing Brooklyn's average time lapse in reporting on unfilled referrals.

3. Contracts with at least two of the subject referral libraries--The Metropolitan Museum of Art and Teachers College--should not be renewed after June 30. The number of requests these institutions receive and fill makes the cost of filling a referral at these subject libraries prohibitive.
4. Originating libraries should be given more explicit guidelines for defining eligible requests. In addition, all eligible requests should be screened by professional staff at the State Library before being referred to an area or subject library.
5. A system for handling urgent interlibrary loan requests should be developed.* Such requests should be handled on a priority basis and, when filled, mailed by special delivery to the originating library.
6. The State Library, when reporting to a request transmission site that material requested is not available in the NYSILL network, should also report where the request was searched and what its status was at these particular referral libraries. Thus, if the patron or librarian wants to continue to search for the material, he will not duplicate efforts already made by the State Library.
7. The contracts between the State Library and the referral libraries should mention a specific amount of time in which a request should be filled or reported unfilled. This might help assure that the administration and staff at these referral libraries are aware that some priority should be given to NYSILL requests.
8. The State Library should establish an ongoing procedure that would enable those responsible for the development of the State Library's collections to review NYSILL requests for materials not held by the library. Similarly, the Division of Library Development ought to be formulating plans that would provide for public library system acquisition of materials that should neither be purchased by the State Library nor referred into the NYSILL network.
9. Bibliographic citations for requests should be transmitted by teletype in a format that will make them more understandable and, therefore, easier to search. Punctuation and spacing between the various bibliographic elements

* See An Evaluation of the New York State Library's Pilot Program in the Facsimile Transmission of Library Materials, Nelson Associates, Inc. 1967, pp.55-56.

would do much to alleviate some of the present operating problems. In addition, the possibility of using TWX-paper printed in the ALA interlibrary loan format should be investigated. Each piece of information would be placed in a specific location on the TWX sheet, thereby insuring that data is recorded in a consistent and systematic way. It is possible that such an approach could be linked with punched paper tape output from the teletype console, in which case the information sent from a transmission site could be picked up on tape at the State Library. If referrals were needed, this tape could be used to create a duplicate of the request form as sent by the transmission site, with additional data added as required by the State Library.

10. Requests should be precoded for referral at the State Library in advance of their first referral. The request would be marked: "If not filled, refer to X library," or "If not filled, do not refer on." The first referral library would handle the request and then report back to the State Library: 1) "Request filled;" 2) "Request not filled, dropped;" or 3) "Request not filled, referred to X." This should eliminate some of the time lost at the State Library between the return of a request from the first referral library and the second referral.
11. A directory should be prepared listing all libraries that route interlibrary loan requests through each of the request transmission sites, giving the codes assigned to each library by the transmission site, the name of the library, its address and zip code. This directory would be distributed to the NYSILL referral libraries. As new libraries begin using a particular transmission site, the pertinent information would be teletyped to all referral libraries to be added to the directories.
12. In the months ahead, the Division of Library Development should initiate investigations aimed at the following questions:
 - a. Since it takes anywhere from one to three weeks for NYSILL referral libraries to fill requests referred by the State Library, would it be faster on the average to hold requests that are NOS at the State Library and wait for the material to be returned rather than refer such requests into the network?
 - b. What kinds of materials are represented in requests that the referral libraries were unable to fill because the desired item was NIL? Are these

materials too ephemeral for referral, being referred to the "wrong" area or subject referral libraries or simply not held anywhere in New York State?

- c. What portion of referrals filled by subject referral libraries could have been filled by an area referral library if the requests had actually been referred to the latter?

13. Finally, since it seems inevitable that reference and research interlibrary loan in New York will ultimately be serviced by a series of complementary regional and state-wide networks, the State Library and the nine 3 R's Regions need to investigate and characterize the volume of academic, commercial and industrial interlibrary loan currently handled outside the NYSILL program. In particular, samples of such requests should be analyzed to determine what portion: 1) could be filled by the State Library or one of the NYSILL referral libraries; 2) could be (or are being) filled by resources available in New York State but not represented in the NYSILL program; and 3) can only be filled at resource centers located outside the state. Such studies should also attempt to categorize requests by type of material being requested, since certain materials (for example, those that can be photocopied) lend themselves to greater resource centralization than others. Information of this kind is absolutely essential to the planning of efficient and economic schemes for handling those reference and research needs throughout the state that cannot be met with resources available locally.

APPENDIXES

Appendix A

FACTS AND NYSILL DATA SHEET

REQUEST NO.	AUTHOR			2	TITLE							3
1												
PERIODICAL OR PUBLISHER				4	VOLUME	ISSUE NO	DATE	PAGES	PATRON STATUS			
					5	6	7	8	9 S F O I			
REFERENCE VERIFICATION	ORIGINATING LIBRARY				DATE REC	TIME REC	MEDIA	STATUS				
10					11	12	13	14 T TWX M IP O	15 NIL NOS			
RTS	SUBJECT	DATE REC	TIME REC	MEDIA	STATUS	N Y S L		DATE REC	TIME REC	MEDIA	STATUS	
16	17	18	19	20 T TWX M O	21 NIL NOS WNS			22	23	24 T TWX FAX M O	25 NIL NOS WNS C	
ARC	FEE	DATE REC	TIME REC	MEDIA	STATUS			SRC	FEE	DATE REC	TIME REC	MEDIA
26	27	28	29	30 T TWX FAX M O	31 NIL NOS WNS C	32	33	34	35	36 T TWX FAX M O	37 NIL NOS WNS C	
REFERRAL SITE	FEE	DATE REC	TIME REC	MEDIA	STATUS	REFERRAL SITE	FEE	DATE REC	TIME REC	MEDIA	STATUS	
38	39	40	41	42 T TWX FAX M O	43 NIL NOS WNS C	44	45	46	47	48 T TWX FAX M O	49 NIL NOS WNS C	
REFERRAL SITE	FEE	DATE REC	TIME REC	MEDIA	STATUS	FACTS RECEPTION SITE	DATE REC	TIME REC	PAGES COPIED	TIME REQUIRED	TOTAL FEE	
50	51	52	53	54 T TWX FAX M O	55 NIL NOS WNS C	56	57	58	59	60	61	

TYPE OF REQUEST	TYPE OF MATERIAL	FINAL STATUS
62 FAX BV P	63 MO SER	64 C NF

- LEGEND
- | | |
|------------------------------|-------------------------------|
| ARC - AREA REFERRAL CENTER | NOS - NOT ON SHELF |
| BV - BOUND VOLUME | O - OTHER |
| C - COMPLETED | P - PHOTOCOPY |
| F - FACULTY | RTS - REQUEST TRANSMISSION |
| FAX - FACSIMILE TRANSMISSION | S - STUDENT |
| I - INFLIGIBLE | SER - SERIAL |
| IP - IN PERSON | SRC - SUBJECT REFERRAL CENTER |
| M - MAIL | T - TELEPHONE |
| MO - MONOGRAPH | TWX - TELETYPE |
| NF - NOT FOUND | WNS - WILL NOT SEND |
| NIL - NOT IN LIBRARY | |

NYSILL AND
FACTS REQUEST
FORM

Appendix B

NYSILL POSTCARD QUESTIONNAIRE

REQUEST NO. _____

We would appreciate your assistance in collecting data about the New York State Interlibrary Loan Network through which this material has been secured by filling out and mailing this postcard. This will facilitate evaluation of the program.

The New York State Library

TO BE ANSWERED BY LIBRARIAN:

1. When did you receive this material? _____ (time) _____ (date)
2. How did you receive it? Mail United Parcel Other (please specify) _____

TO BE ANSWERED BY PATRON:

1. Did you request material by author and/or title? Yes No
If yes, is this the material you requested? Yes No
2. Is this material satisfactory for your needs? Yes No
If no, why not? _____
3. When did you receive this material? _____ (time) _____ (date)
How? Picked it up at library Mail Messenger Other (specify) _____
4. Were you notified that the material had arrived at the library? Yes No
If yes: how? Mail Telephone Other (please specify) _____
when? _____ (time) _____ (date)
5. How will you use the material? Business or professional activities
 Academic course work Independent research
 Recreation Other (please specify) _____
6. Have you suggestions for improvement of service? _____

Col.

3. Did you use NYSILL for your interlibrary loan requests in 1967? Yes No 16-
-1 -2
- If no, why not? _____ 17-
_____ 18-
_____ 19-
- If yes: Approximately what percent of your total interlibrary loan 20-
requests were channeled through NYSILL? _____% 21-
- Were you satisfied with the service NYSILL provided? Yes No 22-
-1 -2
- If no, why not? _____ 23-
_____ 24-
_____ 25-
4. What effect has the NYSILL program had on your borrowing from sources
outside the state? (Please check whichever apply)
- No effect 26-1
- Borrow more from out of state because we receive faster service than
through NYSILL 26-2
- Borrow more from out of state because more requests are filled than
through NYSILL 26-3
- Borrow more from out of state because we prefer to deal directly with
the lending institutions and some of the in-state institutions we
borrowed from in the past now ask that we channel our requests through
The New York State Library 26-4
- Borrow less from out of state because NYSILL has proven to be very
satisfactory 26-5
- Other (Please specify) _____ 26-6
27-
5. What effect has the NYSILL program had on your borrowing from sources
in the state? (Please check whichever apply)
- No effect 28-1
- We now channel our interlibrary loan requests through The New York
State Library 28-2
- In at least some instances, we use other in-state institutions directly
rather than NYSILL participants from which we used to borrow 28-3
- Other (Please specify) _____ 28-4
29-

6. Please feel free to make any other comments regarding your own interlibrary loan practices and the NYSILL program. _____ Col.
 _____ 30-
 _____ 31-
 _____ 32-
 _____ 33-
 _____ 34-
 _____ 35-

 Name of Responding Institution 36-38

Type of Institution (Check one)

- 2 year 39-1
- 4 year undergraduate 39-2
- graduate and undergraduate 39-3

Appendix D

NOTES ON METHODOLOGY

Again, methodology rears its ugly head. We did not begin with the intention of writing a treatise on methodology. Appearances to the contrary notwithstanding, we have tried to limit the presentation of methodological problems to the very minimum necessary for the critical reader to grasp the rationale of our procedures. The truth of the matter is, however, that many an issue ordinarily treated only verbally...turns out to hinge on principles of methodology as soon as we consider how the issue could conceivably be resolved by empirical inquiry.*

This report uses a number of statistical techniques and the interpretation of the resulting data is, of course, crucial. Most of the following guidelines are no doubt obvious and are reviewed here merely to insure that they have not been forgotten in the interpretative process.

1. If a table shows, for example, that the percentage of requests filled has gone up, it also shows that the percentage not filled has gone down. Since tabulating the latter proportion does not add to what is already known, it has been included only when it was important to emphasize the data from both points of view.
2. Percentage distributions do not, by themselves, indicate actual volume. For example, suppose the NYSILL network had the following characteristics (hypothetical data):

	<u>Number of Requests From:</u>	
	<u>First Half of Study</u>	<u>Second Half of Study</u>
Patrons who are Graduate Students in Library School	30	15
All Others	70	15

* From an unpublished manuscript by Otis Dudley Duncan.

Under these circumstances, even though volume from library students has dropped, the proportion of library student requests has risen from 30 to 50%. In most tables in this report, proportions are given, but case bases have been provided so that the original volume data can be recapitulated.

3. Throughout this study, it has been necessary to determine whether missing information represents a "legitimate" or "illegitimate" outcome. If the NYSILL record keepers have merely occasionally and unsystematically failed to fill in the needed information, then the appropriate course would be to assume that the cases on which data do exist constitute a fair sample of all those cases on which data ought to exist. Usually, however, it is impossible to know with any certainty that missing data are merely a chance effect. Often some systematic loss of information occurs, because some specific type of library, patron, or process is less likely to provide data. For this study, the problem has been handled by always taking this type of missing data out of the base on which calculations are made. This treats the remaining cases as a sample, and wherever necessary it has been pointed out what biases this sample might have. Where the problem of "no answer" responses for missing data is especially troublesome, the effects on interpretation have been taken up in the body of the report.
4. In an attempt to make the tables in this report as readable as possible, we have tried to keep redundant information to a minimum. For instance, the numerators of percentages are not included since this information can be recapitulated by multiplying the percentage by its case base.
5. The smaller the number of cases taken into account for any statistic, the more likely it is that random chance can effect the results. Statistical significance tests provide one means out of this dilemma, by indicating whether or not some figure is reliably distinct from another. The data collected for this study, however, do not meet the conditions required for the use of these tests because: (1) too many requests did not have complete information and (2) frequently the data were not drawn from a random sample. Accordingly, findings based on less than 30 cases have been discounted. Differences of as little as 1% between two contrasted groups are probably reliable, however, because most percentages in the main body of this

report are based on at least several hundred cases.

6. Two questionnaires were used to gather information for the monitoring of the NYSILL project: a postcard questionnaire that accompanied filled requests and a questionnaire mailed to academic libraries seeking information on college and university interlibrary loan experience. Potential bias in the return of the latter was discussed in Chapter V.

It is possible that information contained in the returned postcard questionnaires is biased, since these were distributed only with filled requests and return of the postcard was voluntary. If particular kinds of users were more likely to return the postcard, for example, this could affect the analyses in the report: overall elapsed times might be distorted, the interpretation of patron reaction would be more difficult and the study of the use of NYSILL material might be misleading.

Table D.1 presents a comparison, in terms of four key variables, of all requests received during the monitoring period against those for which postcard data were available. The column of net percentage differences between the two groups shows that the cases of bias are infrequent, and that the effects are not very marked when they do occur. Thus, the distortions inherent in the postcard questionnaire data are not great enough to seriously weaken the interpretations made in the text of the report. It must be remembered, nevertheless, that only those patrons whose requests were filled had the opportunity to complete a postcard. Consequently, there is no data available on the reactions of patrons who used NYSILL but did not have their requests filled.

Table D.1

COMPARISON OF ALL REQUESTS WITH REQUESTS
ON WHICH POSTCARDS WERE RETURNED,
FOR ANALYSIS OF RESPONSE BIAS
(all cases: 43,223; all postcards: 7,473)

Variable	Postcard Cases Only	All Requests	Net Percentage Differences
1. Patron Status^a			
Faculty	15.1%	13.4%	+1.7%
Students	15.1	14.2	+0.9
Others	44.3	38.7	+5.6
Ineligibles	25.5	33.7	-8.2
2. Type of Originating Library^b			
Public Libraries	65.5%	65.1%	+0.4%
Bookmobiles	2.7	3.0	-0.3
Library Systems	2.8	3.0	-0.2
Two-Year Colleges	0.4	1.0	-0.6
Four-Year Colleges	1.7	1.8	-0.1
Universities	24.2	23.1	+1.1
Medical Colleges	0.7	0.5	+0.2
New York State Agencies	0.3	0.3	0.0
Special/Industrial	1.6	1.8	-0.2
Hospitals	0.1	0.2	-0.1
High Schools	0.1	0.3	-0.2
Out-of-State	--- ^c	--- ^d	0.0

Table D.1
(continued)

Variable	Postcard Cases Only	All Requests	Net Percentage Differences
3. <u>Subject of Request</u>^e			
Social Sciences	20.3%	18.3%	+2.0%
History	11.9	13.3	-1.4
Science/Mathematics	9.3	9.2	+0.1
Medicine	7.8	9.0	-1.2
Education	9.7	8.6	+1.1
Philosophy/Religion	9.5	8.5	+1.0
Fine Arts	7.1	8.1	-1.0
Psychology	6.8	7.2	-0.4
Engineering/Technology	7.3	6.4	+0.9
English Language/Literature	6.1	6.4	-0.3
Foreign Language/Literature	2.5	2.6	-0.1
All Others	1.7	2.4	-0.7
4. <u>Number of Referrals</u>^f			
None	79.8%	74.4%	+5.4%
One Referral	16.6	18.1	-1.5
Two Referrals	3.5	7.3	-3.8
Three or More Referrals	0.1	0.2	-0.1

a Based on 32,100 cases in full tabulation; 5,794 postcards.

b Based on 21,955 cases in full tabulation; 4,531 postcards.

c None.

d Less than one-half of one percent.

e Based on 9,705 cases in full tabulation; 2,100 postcards.

f Based on 43,042 cases in full tabulation; 7,454 postcards.

Appendix E

ANALYSIS OF NYSILL REQUESTS NOT HELD BY THE NEW YORK STATE LIBRARY THAT WERE ELIGIBLE FOR REFERRAL

In order to determine the nature of eligible NYSILL requests that were not held by the State Library, a random sample of requests was reviewed. This sample included all eligible requests which were received at the State Library and were recorded as not in the library (NIL) for the following days: August 15, 16, 18, 28 and 29; September 11, 12, 19 and 21; October 3, 5, 16 and 20; and November 3, 10, 13 and 15. Answers to the following specific questions were sought: (1) Should these titles have been in the State Library, the system headquarters library or the local public library? (2) Should they have been purchased under the Central Library Book Aid? (3) Should they have been referred on into the NYSILL referral network because they were of a serious nature which is of a research level not properly found in the State Library's collection? and (4) Are there gaps in particular subject areas of the State Library's collection? in the NYSILL contract coverage?

Table E.1 shows that 191 titles were excluded from the total sample of 751 requests. More than half of these were requests where the material is actually held at the State Library. Many of these requests were missed because they suffered from inadequate or inaccurate information. A number of new books were requested before the books had reached the State Library shelves, or before they had been ordered. One at least was selected from Forthcoming Books and had not as yet been listed as published. Not a few of the titles were overlooked by the State Library's staff for no discernible reason. Although most of the requests had been verified, the information found in the verification source was not always passed on to the State Library and some titles were not in the sources listed.

Books which have been lost and not as yet replaced, periodicals for which the State Library has files but lacks the requested volume and books which are on order have been included in Table E.1.¹

Titles requested of which the State Library has other editions were also excluded. Many of the titles would obviously have been acceptable in any readable and comparatively recent edition, but only one

¹ Periodicals which have only scattered volumes in the library are numbered with those for State Library purchase. There are 57 periodicals in the group for State Library contemplation.

Table E.1

CLASSIFICATION OF TITLES EXCLUDED FROM TOTAL SAMPLE

Dewey Decimal* Classification	Total	000	100	200	300	370	400	500	600	610	700	800	900
Duplicate requests	21					2		3	3		6	2	5
Held at New York State Library	110	2	10	2	23	6		14	12	6	11	9	15
On order at New York State Library	13					2		1	9				1
Other editions held at New York State Library	25	1	2		4	2		1	1	2	2	7	3
Title lost at New York State Library	17		1	1	2			2	3	1	4	2	1
New York State Library has periodical but lacks needed volume	5		2	1	1				1				
Totals	191	3	15	4	30	12		21	28	10	23	20	25

*Dewey Decimal Classification Scheme:

- 000 - General Works
- 100 - Philosophy
- 200 - Religion
- 300 - Sociology
- 370 - Education
- 400 - Philology
- 500 - Pure Science
- 600 - Technology
- 610 - Medicine
- 700 - Fine Arts
- 800 - Literature
- 900 - History

Education and Medicine are listed separately because of the number of requests.

request (and this was a title not held by the State Library which would not be considered for purchase) stated that any edition would do. The date is important for verification of a title but unless a specific edition is needed the request should indicate that any is acceptable.

All libraries acquire a great many pamphlets. In the State Library, current ones considered to be of permanent interest, are fully cataloged and some of these appear in Table E.1 with "Held at New York State Library." There were also a certain number of duplicate requests.

Although there are titles which should obviously be purchased by the State Library or the system library or the local library, there is a wide margin of overlap which is necessary for practical reference purposes. This is seen in Table E.2 which shows the number of books in each field which the State Library or the public libraries should consider buying. Of these, 28% were designated for purchase by the State Library, 38% by the public libraries,² while 38% were cited as too ephemeral in nature for purchase. None of the requests that are clearly not for the average public library are outside the State Library's acquisition policy except perhaps several requests for sheet music. The State Library does collect sheet music if of historical interest, and always if related to New York State.

Included in this sample are older titles, many now out of print, some of which would be of value to the State Library collections and others useful in the public libraries. One, at least, goes back to the 17th century and almost a hundred others are mostly in the 19th and the first half of the 20th centuries. The average public library regularly removes from its collections those items for which there have been no requests. Perhaps it now becomes the province of the system library to preserve these for future occasional requests and become in itself a backstopping collection for this type of material.

It is probable that some of the requests made are in the system libraries or their member libraries but are requested because they are not immediately available for a reader. These are legitimate requests if the State Library can be expected to have the titles. However, there should not be the dependency on the State Library that there seems to be to supply any title in sufficient quantity to obviate the necessity on the part of the local library to buy an adequate number of copies for community demand for a popular title. It would seem the province of the system library to aid its member libraries in this respect; and the Central Library Book Aid Program would not hinder them in doing so.

² Of this total, 3% represent on overlap of titles also suggested for purchase by the State Library. In Table E.2 these books have been enumerated separately.

Table E.2

CLASSIFICATION OF NIL TITLES FOR PURCHASE AND REFERRAL

Dewey Decimal Classification ^a	Total	% of Sample	000	100	200	300	370	400	500	600	610	700	800	900
For purchase by New York State Library	156	27.9%	4	7	10	20	4	3	19	12	18	23	16	20
For purchase by Public Library	194	34.6	1	22	17	30	5	4	10	13	12	17	42	21
Not suggested for purchase ^b	210	37.5	0	13	43	9	11	3	12	28	21	33	17	10
Total number analyzed	560	100.0	5	42	70	59	20	10	41	53	51	73	75	61
For purchase by both State Library and Public Library	18	3.2	0	2	2	1	1	0	0	1	2	3	3	3
Appropriate for referral to network	216	38.6	5	17	14	29	6	3	22	16	19	25	26	34

^a Dewey Decimal Classification Scheme:

- 000 - General Works
- 100 - Philosophy
- 200 - Religion
- 300 - Sociology
- 370 - Education
- 400 - Philology
- 500 - Pure Science
- 600 - Technology
- 610 - Medicine
- 700 - Fine Arts
- 800 - Literature
- 900 - History

Education and Medicine are listed separately because of the number of requests.

^b This includes paperbacks, juveniles, fiction and textbooks not considered appropriate for purchase by New York State Library or Public Libraries.

The enumeration of requests that should have been referred into the NYSILL network is also presented in Table E.2. All of the titles suggested for The New York State Library purchase and a limited selection of those suggested for public library purchase were chosen. The selections were made on the basis of the book's possible interest to a serious reader. This is in a special sense an arbitrary choice. A title that seems to be of a popular nature may in certain circumstances be of some importance to the research of a scholar, particularly if it fits into some sequence in his work. In such a case the system library should state the case for referral.

The "gap" in the State Library's collections does not exist in any one field--the NIL's selected for purchase are pretty well distributed (in relation to the total number of NIL's for each class) except in religion and philosophy, and in these fields there is such a proliferation, largely of popular material on the occult sciences and moral theology, that all libraries need to exercise restraint in selection. The NIL's do show a time lag--that is books missed in the years of insufficient book funds. With the advent of book reproduction processes and the proliferation of reprint firms this gap is gradually being filled in. It is perhaps the periodical collection that has suffered the most from this poverty period but the desired periodicals are also gradually being picked up in reprint editions and also those still in progress are being acquired currently.

Of the 751 eligible not-in-library requests reviewed, 25% (191 requests) were excluded from the analysis. More than one-quarter (28%) of the remaining 560 requests were designated for purchase by the State Library, almost two-fifths (38%) for purchase by public libraries, while the rest were not suggested for purchase. Although 38% of the items were of a serious enough nature to warrant referral into the NYSILL referral network, all are within the acquisitions policy of the State Library and could be considered for purchase there. There appear to be no systematic gaps in the State Library's collection.

Appendix F

EVALUATION OF UNIT REFERRAL FEES

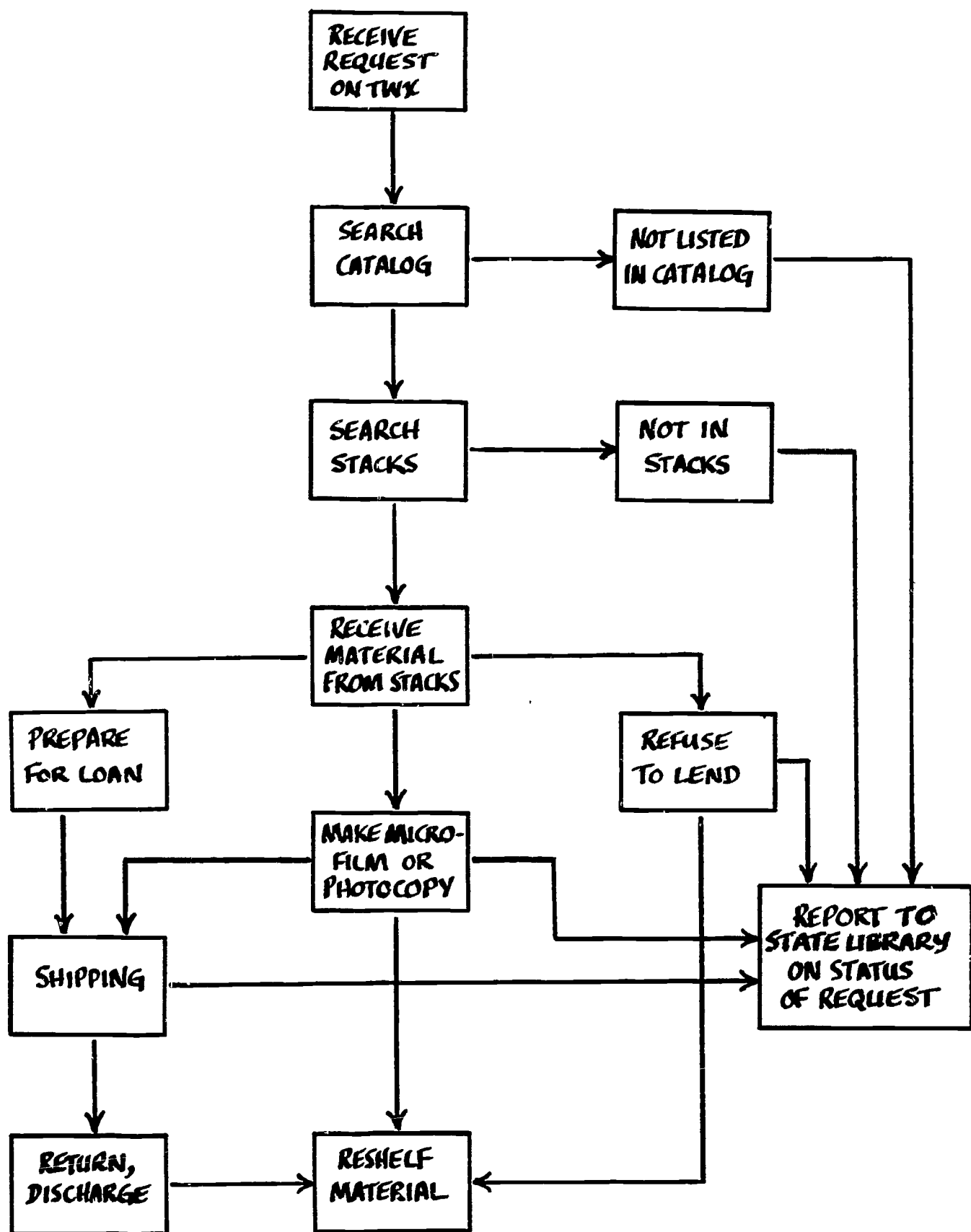
The New York State Library established the following unit fees in order to reimburse the 12 referral libraries for costs incurred as a result of participation in the NYSILL pilot program: public libraries are paid \$1.00 for every request referred to them by the State Library; non-public libraries receive \$2.50 for each request referred by the State Library; moreover, both the public and the non-public referral libraries in the NYSILL network are paid an additional \$2.00 for each referred request that they are able to fill. Thus, the maximum unit reimbursement for any of the three public libraries participating in the NYSILL program is \$3.00, and for any of the nine private libraries is \$4.50. This appendix describes our evaluation of the equity of this fee structure.

Figure F.1 on the following page presents a flow chart of the general manner in which each of the referral libraries handles requests referred to it by the State Library. (Of course, the detailed procedures vary from one NYSILL participant to another. Figure F.1, which approximates the overall flow of work in these libraries, merely served as a basis for comparative data collection and analysis.) Some of the activities depicted in the flow chart can be associated with the processing of all referrals received and some of the activities are encountered only when a request is in fact filled. The former were studied in order to ascertain each library's "unit processing cost" while the analysis of the latter determined each library's "unit filling cost."

The computation of unit costs included both personnel and non-personnel expenditures. The NYSILL-related personnel charges for each of the 12 institutions were derived, in most cases, by first ascertaining the average number of minutes a particular staff member worked on the searching, charging, photocopying, etc., of a NYSILL referral and then multiplying this average by the applicable labor cost.¹ The results by individual were summed by task (searching, charging, etc.), thereby producing unit personnel costs for the basic activities shown in Figure F.1. These activity costs were weighted according to the proportion of all referrals received at the library that reached each activity level, in order to obtain the average unit personnel costs associated with the processing and filling of a NYSILL request. This completed the computation of the total "unit processing cost" (since this cost consisted solely of personnel expenditures at each of the libraries). Finally, non-personnel unit costs were added, again on a weighted basis, to the unit personnel cost for filling a referral in order to arrive at the institution's total "unit filling cost." Both total unit costs could then be compared with the State Library's corresponding fees.

¹ Fringe benefits were included. Salary rates were calculated on a cost per minute basis.

FIGURE F.1. GENERAL FLOW CHART OF THE PROCEDURE FOR HANDLING A NYSILL REFERRAL RECEIVED FROM THE NEW YORK STATE LIBRARY (not a detailed chart; see text)



Before proceeding to the results of the 12 institutional case studies, a number of special considerations need to be reviewed:

Computation of Per-Minute Rates. Where annual salary figures were provided, these were reduced to hourly rates by multiplying the number of hours in the work week times a full 52 weeks. This underestimates personnel costs, because of vacations and holidays. Since the latter vary from library to library and individual to individual, however, this simplified approach was adopted.

Minimum Fringe Benefits. Many of the libraries reported no fringe benefits for part-time or non-professional personnel. Nevertheless, the minimum fringe calculation used here is 4.4%, to allow for social security costs.

Postal costs. Postal rates increased as of January 8, 1968. The rates used in this analysis are the old rates--those prevailing in the time period in which the data was actually obtained.

Overhead Costs. Each institution was presented with an explanation of how such indirect costs as building maintenance, etc., might be chargeable to NYSILL. In all but one case, the library's spokesman (for this kind of data, usually the business office administrator and not a librarian) concluded that these overheads were negligible and not worth including. For the remaining library,² overheads were approximated at 1.4% of total unit costs. This amounted to \$.05 additional for the total unit processing cost. With these results in mind, overheads were left out of the final analysis altogether.

Materials Costs and Labor Costs. For two of the institutions, the estimates of materials expenses include labor costs--for photocopies at Library "K" and packaging at Library "I". Thus, interlibrary comparisons of materials costs are a bit misleading. This circumstance did not, however, affect the total cost of filling a referral at either of the two institutions with mixed data.

Multiple Personnel Situations. It is possible for a work task to require the simultaneous effort of two or more people. The data for most of the libraries include such multiple personnel situations: in a typical situation, a request necessitating a conversation between a clerk and a reference librarian generated time data for the clerk under "catalog searching" and the librarian under "administration."

² Identified as Library "F" in this appendix.

Sometimes, however, time was reported only once when two people were actually involved, especially in the case of telephone conversations. In these instances, the appropriate salary figures were ascertained, added together, and the sum used to calculate costs.

Instability of Staffing. A number of personnel changes in each of the 12 libraries occurred during the course of the study. Moreover, several of the institutions either underwent or are anticipating general salary increases. The figures presented in this appendix should not, therefore, be interpreted as precise indications of long-range costs.

Referrals to the Brooklyn Public Library. NYSILL requests which are referred to the Brooklyn Public Library and cannot be filled there are sent, via TWX, to The New York Public Library Branch Libraries.³ The latter institution fills whatever requests it can and transmits the list of requests, with notations for those it has filled, via TWX to the Queens Borough Public Library. This institution fills what it can of the remaining unfilled requests, notes this fact on the list, and teletypes the entire list of referrals back to the Brooklyn Public Library for transmission to the State Library. The materials for filled requests are mailed from each of the three libraries directly to the originating library. The New York Public Library Branch Libraries and the Queens Borough Public Library filled approximately one-half of the referrals sent to the Brooklyn Public Library between May and October 1967. The Brooklyn Public Library is paid \$1.00 for each request referred to it and \$2.00 for each request filled by any of the three libraries. Presently, the other two New York City libraries are not sharing this income. The evaluation of the unit referral fees reported in this appendix excludes the costs at The New York Public Library Branch Libraries and the Queens Borough Public Library.⁴

THE CASE STUDIES

With the above considerations in mind, the 12 case studies are presented on the following pages. It should be noted that, in general, the data is presented exactly as reported by the institutions themselves.

3 Actually, all the requests referred to BPL are sent to NYPL Branch Libraries, and those which BPL has filled are so noted.

4 This was done because our task was to evaluate the reimbursement schedule for area referral libraries functioning independently. Clearly, if the present New York City arrangements were continued, NYPL Branch Libraries and QBPL should be reimbursed for requests they process and for those they fill according to the State Library's rates for area referral libraries.

Library "A"

This is one of the three area referral libraries. More requests were filled here than at any other referral library in the NYSILL network. Cost data were collected by recording the minutes spent by various staff on NYSILL work during the period October 25-November 14, 1967. Additional information was provided by library personnel, working from guidelines supplied by Nelson Associates.

Processing costs at Library "A" are fairly low, the result of both an inexpensive personnel mix and relatively short processing times. Filing costs are also low, in part because so few requests are filled by photocopying. Library "A" follows the practice of insuring the materials it mails at postal rates.

NYSILL operations at this library are relatively structured; that is, the various tasks are divided among more staff than is the case at the specialized NYSILL referral libraries. In particular, a junior librarian performs the NYSILL catalog searches, resulting in a lower cost for this operation than would be the case if a more senior staff person participated in this stage of the work.

The detailed cost data for this library are presented in Table F.1.

Table F.1

COST BREAKDOWN, LIBRARY "A"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	.50	\$.0538	\$.0269	100%	\$.0269
Catalog Search	Yes	1.35	.0837	.1130	100%	.1130
Stack Search	No	4.74	.0538	.2550	52%	.1326
TWX Output	No	.50	.0538	.0269	100%	.0269
Administration	Yes	3.25	.1088	.3536	83%	<u>.2935</u>
TOTAL UNIT PROCESSING COST						\$.5929
B. Unit Filling Costs--for filled requests only						
Copying	No	5.00	\$.0538	\$.2690	5%	\$.0134
Charging	No	1.00	.0538	.0538	95%	.0511
Delivery to Shipping	No	1.33	.0391	.0520	95%	.0494
Packaging, Mailing	No	1.82	.0495	.0901	95%	.0856
Discharging	No	.67	.0538	.0360	95%	.0342
Reshelving	No	3.33	.0391	.1302	100%	.1302
Plus Materials:						
--Copies	---b	---b	---b	.5000	5%	.0250
--Packaging	---b	---b	---b	.0900	95%	.0855
--Postage	---b	---b	---b	.1100 ^c	100%	.1100
--Insurance	---b	---b	---b	.2150	95%	<u>.2042</u>
TOTAL UNIT FILLING COST						\$.7886

a Based on data for 282 requests; labor costs include fringes at 24.4% of salary plus \$.0012 per minute for fixed benefits.

b Does not apply.

c Includes five cents for sending notices to patron.

Library "B"

Library "B" is an area referral library. The volume of referrals it receives is fairly high. Almost all of the work in processing NYSILL referrals is performed by lower cost staff. Administrators intervene only for special problems. Therefore, Library "B" has the lowest unit processing cost in the NYSILL network.⁵ On the other hand, filling costs are relatively high. This is due almost entirely to a rather time consuming packaging-and-mailing operation, which Library "B" is presently studying in order to determine if the use of jiffy bags would produce savings. Costs are further increased by the need to use postal insurance.

Cost data for this institution are shown in Table F.2.

⁵ This may, in part, be a consequence of another circumstance: the fact that referrals sent to Library "B" are also searched at two other libraries not serving under contract as NYSILL referral centers. Processing time at Library "B" may be low because the institution knows that its unfilled referrals will be searched against the collections of these two neighboring libraries before being returned to the State Library.

Table F.2

COST BREAKDOWN, LIBRARY "B"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	.50	\$.0482	\$.0241	100%	\$.0241
Catalog Search	No	1.67	.0482	.0805	100%	.0805
Stack Search	No	3.56	.0482	.1716	66%	.1133
TWX Output	No	.50	.0482	.0241	100%	.0241
Administration	Yes	.36	.1163	.0419	100%	<u>.0419</u>
TOTAL UNIT PROCESSING COST						\$.2839
B. Unit Filling Costs--for filled requests only^b						
Charging	No	2.06	\$.0482	\$.0993	100%	\$.0993
Delivery to Shipping	No	1.77	.0482	.0853	100%	.0853
Packaging ^c	No	4.27	.0543	.2319	100%	.2319
Mailing	No	3.12	.0852	.2658	100%	.2658
Receipting, Discharging, and Reshelving	No	3.00	.0482	.1446	100%	.1446
Plus materials:						
--Postage	---d	---d	---d	.0600	100%	.0600
--Packaging ^c	---d	---d	---d	.0450	100%	.0450
--Insurance	---d	---d	---d	.2000	100%	<u>.2000</u>
TOTAL UNIT FILLING COST						\$1.1319

a Based on updated version of earlier study done by library's own personnel, supplemented with data from this study. Labor Costs (in cents per minute) include fringes at 21% of salaries for all personnel.

b No photocopying was done for requests sampled in this study.

c Library is anticipating the use of jiffy bags, hoping higher materials costs will be balanced by savings in man-time.

d Does not apply.

Library "C"

This area referral library has the lowest unit filling cost and the second lowest unit processing cost of the 12 NYSILL participants. Library "C" accounted for 11% of the filled referrals during the first six months of the pilot project.

Cost data at Library "C" were collected in two ways: data for the operations of the interlibrary loan unit were supplied for requests handled in the period October 19-25; information on filled requests was secured by interviews with the library's circulation staff. NYSILL operations at Library "C" involve only a few people and can be characterized as less formal and more tight-knit than those of most of the other referral libraries.

A heavy use of student personnel and the fact that this library has the smallest collection of any of the area referral centers results in the low unit costs. Processing times are short, probably because of the compact physical layout. No requests in our data sample were reported as having been filled with photocopies. In general, a few are handled in this fashion, but the proportion is so small that effects on overall filling costs are negligible. There are no insurance costs at this library.

Table F.3 presents the cost breakdown for Library "C."

Table F.3

COST BREAKDOWN, LIBRARY "C"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	.67	\$.0401	\$.0269	100%	\$.0269
Catalog Search	No	2.21	.0401	.0886	100%	.0886
Stack Search	No	2.17	.0401	.0870	44%	.0385
TWX Output	No	.63	.0401	.0253	100%	.0253
Administration	Yes	1.77	.0815	.1443	100%	<u>.1443</u>
TOTAL UNIT PROCESSING COST						\$.3236
B. Unit Filling Costs--for filled requests only^b						
Delivery to Circulation	No	1.38	\$.0401	\$.0553	100%	\$.0553
Charging	No	1.00	.0347	.0347	100%	.0347
Delivery to Shipping	No	.50	.0313	.0156	100%	.0156
Packaging, Mailing	No	1.00	.0573	.0573	100%	.0573
Unpacking	No	1.00	.0573	.0573	100%	.0573
Discharging	No	.33	.0347	.0115	100%	.0115
Reshelving	No	2.00	.0294	.0588	100%	.0588
Plus Materials:						
--Packaging	---c	---c	---c	.1220	100%	.1220
--Postage ^d	---c	---c	---c	.0600	100%	<u>.0600</u>
TOTAL UNIT FILLING COST						\$.4725

a Based on a sample of 52 requests for processing costs, plus interviews with library personnel for filling costs. Salaries include fringes at 20% plus \$.0009 per minute for fixed benefits.

b No photocopies were made for the requests in this sample.

c Does not apply.

d No insurance costs.

Library "D"

This is one of the specialized NYSILL referral libraries. About 3% of all filled requests were filled by this library during the initial six months of the NYSILL program.

Unit processing costs are low at Library "D" while unit filling costs are moderately high. Since the overall mix of salary scales for those handling NYSILL referrals does not include a high proportion of expensive administrative time, personnel costs are relatively low for both the processing and filling of requests. The higher total unit filling cost is mostly due to a fairly time-consuming mail operation. Although this library has several special collections to handle, as noted in the detail from Table F.4, the proportion of requests which require searching in these collections is low enough that overall costs are little affected.

NYSILL operations at Library "D" are informal. The volume of referrals is not heavy and most of the work is done by a single staff person (not a professional librarian). This, of course, is more easily accomplished in this institution than in one which handles referrals for many subject fields.

Cost data for this library were generated by following the processing of each NYSILL referral, noting times and personnel as applicable, during the period September 15-October 20, 1967. A summary of this experience was prepared with the assistance of the library's staff and was supplemented with additional information obtained from the library. Since these data were gathered, procedures at Library "D" have altered slightly, resulting in an estimated increase in the total unit cost of filling a referral of about \$.15.

Table F.4

COST BREAKDOWN, LIBRARY "D"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	1.50	\$.0448	\$.0672	100%	\$.0672
Catalog Search	No	3.00	.0448	.1344	100%	.1344
--Doublecheck	No	10.00	.0448	.4480	5%	.0224
Stack Search	No	4.00	.0295	.1180	45%	.0531
--Open Collections	No	4.00	.0448	.1792	10%	.0179
--Check NOS's	Yes	5.00	.0958 ^b	.4790	10%	.0479
--Recalls:						
Request	No	2.00	.0448	.0896	5%	.0045
Sent	No	5.00	.0510	.2550	5%	.0128
--Re-searches:						
Request	No	2.00	.0448	.0896	5%	.0045
Sent	No	10.00	.0793 ^b	.7930	5%	.0396
TWX Output	No	2.50	.0448	.1120	100%	.1120
Administration	Yes	1.00	.0775	.0775	100%	<u>.0775</u>
TOTAL UNIT PROCESSING COST						\$.5938
B. Unit Filling Costs--for filled requests only						
Copying	No	---c	---c	---c	---c	---c
Charging	No	5.00	\$.0448	\$.2240	97%	\$.2173
Labeling, Mailing	No	12.00	.0295	.3540	100%	.3540
Unwrapping	No	2.00	.0295	.0590	97%	.0572
Discharging:						
--Circulation	Yes	1.00	.1285 ^b	.1285	97%	.1246
--ILL Unit	Yes	2.00	.0775	.1550	97%	.1504
--Reshelving	No	3.00	.0295	.0885	97%	.0858
Plus Materials:						
--Copies	---d	---d	---d	\$.5000	3%	\$.0150
--Packaging	---d	---d	---d	.1220	97%	.1183
--Postage ^e	---d	---d	---d	.0500	100%	<u>.0500</u>
TOTAL UNIT FILLING COST						\$1.1726

a Based on data for 164 requests; labor costs (in cents per minute) include fringes at 16% of professional salaries, 4.4% of others.

b Total costs for two persons working together.

c Personnel costs included under other entries.

d Does not apply.

e Borrowers are asked to insure material when it is returned.

Library "E"

This subject referral library is one of several large university libraries in the NYSILL network. Its processing and filling costs are moderate: they are pushed upward by the complexity of the institution's interloan operation, but an inexpensive mix of professional and non-professional staff helps keep overall expenses down.

The cost data shown in Table F.5 reflect experience with NYSILL referrals during the period October 21-30, 1967. The time and personnel involved in handling referrals were recorded and these data were then analyzed both by the library's staff and by the consultants. Where necessary, it was augmented with information from interviews.

In most cases, the labor cost figures are weighted averages (combining rates in proportion with the amount of work contributed by each worker) since many persons are involved in the NYSILL operations at Library "E." The latter are very specialized and formally structured, having in general been merged with the library's ongoing inter-library loan activities. A good deal of special checking is done, however, usually involving telephone conversations with other personnel in the university's library complex. These dual NYSILL personnel costs were handled by doubling known salary figures, on the assumption that staff usually contact others with roughly the same duties. This appeared, on checking with the library's staff, to be a sensible rationale.

Table F.5

COST BREAKDOWN, LIBRARY "E"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	1.00	\$.0348	\$.0348	100%	\$.0348
Catalog Search	Yes	3.32	.0744	.2470	100%	.2470
Request Slips	No	1.00	.0413	.0413	20%	.0083
Shelf Search	No	6.00	.0416	.2496	20%	.0499
Contact Other Departments	Yes	3.23	.1483 ^b	.4790	36%	.1724
--Other Searches	No	3.90	.0416	.1622	36%	.0584
TWX Output	No	.50	.0339	.0170	100%	.0170
Administration	Yes	1.48	.0849	.1256	100%	<u>.1256</u>
TOTAL UNIT PROCESSING COST						\$.7134
B. Unit Filling Costs--for filled requests only						
Charging ^c	No	2.06	\$.0413	\$.0851	61%	\$.0519
Copying	No	4.13	.0413	.1706	39%	.0655
Packing:						
--Photocopies	No	1.00	.0369	.0369	39%	.0144
--Others	No	6.00	.0369	.2214	61%	.1350
Discharging	No	1.00	.0413	.0413	61%	.0252
Reshelving	No	2.00	.0416	.0832	100%	.0832
Plus Materials:						
--Photocopies	---d	---d	---d	.4000	39%	.1560
--Packaging	---d	---d	---d	.1220	100%	.1220
--Postage ^e	---d	---d	---d	.0500	100%	<u>.0500</u>
TOTAL UNIT FILLING COST						\$.7032

a Based on 85 requests sampled for study. Salaries (in cents per minute) were augmented with fringe costs at 8% for professionals and 4.4% for non-professionals.

b Salary cost doubled to allow for effort by two persons (contact is generally made by telephone).

c This entry also allows for time consumed in sending materials to ILL staff.

d Does not apply.

e No insurance costs.

Library "F"

Library "F" is another of the specialized subject referral centers in the NYSILL network. It is one of three referral libraries which added especially high proportions of administrative time to the calculation of the unit costs of processing NYSILL referrals. This is evident in Table F.6. There is some reason to believe that the resulting administrative allocation is excessive, insofar as it includes time spent on the NYSILL program which is probably more appropriately viewed as part of the institution's "willingness to serve" commitment (and thus partially covered, at least, by the State Library's participation grants).⁶

Filling costs for Library "F" appear, in Table F.6, to be similar to those at many of the other NYSILL referral centers. This is somewhat misleading, however, because staff time devoted to charging is included in the "Reference Supervision" reported under unit processing costs. The cost of materials for packaging is low since the library uses reclaimed materials. This fact might, on the other hand, partially account for the higher cost (\$.1454) for personnel engaged in shipping activities than prevails at many of the other referral libraries.

⁶ If these administrative charges were omitted from the unit cost analysis (note that some professional time devoted to the supervision of the processing of individual referrals would still remain), the total unit processing cost at Library "F" would be consistent with the unit cost for the majority of the other referral libraries.

Table F.6

COST BREAKDOWN, LIBRARY "F"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	2.00	\$.0514	\$.1028	100%	\$.1028
Catalog Search	No	5.14	.0577	.2966	100%	.2966
Reference Supervision ^b	Yes	4.11	.0753	.3095	100%	.3095
Stack Search ^c	No	4.41	.0394	.1738	60%	.1044
TWX Output	No	2.00	.0514	.1028	100%	.1028
Administration	Yes	12.78 ^d	.2075 ^e	2.6518	100%	<u>2.6518</u>
TOTAL UNIT PROCESSING COST						\$3.5679
B. Unit Filling Costs--for filled requests only^f						
Letters, Labels	No	4.64	\$.0514	\$.2385	100%	\$.2385
Shipping	No	3.93	.0370	.1454	100%	.1454
Discharging	No	2.90	.0558	.1618	100%	.1618
Reshelving	No	1.10	.0396	.0436	100%	.0436
Plus Materials:						
--Packaging	---g	---g	---g	.0500	100%	.0500
--Postage ^h	---g	---g	---g	.0600	100%	<u>.0600</u>
TOTAL UNIT FILLING COST						\$.6993

a Based on library's internal studies and interviews with staff. Labor costs include fringes at 15% of salary.

b Includes charging costs.

c Includes search of current periodicals (housed separately).

d Based on administrator's estimates; see text.

e Combined costs for two administrators.

f Library has no photocopy costs; these are covered by a grant for that purpose.

g Does not apply.

h No separate insurance costs.

Library "G"

This library handles referrals in just one subject field. Its unit processing and filling costs are quite high compared to other specialized NYSILL referral centers. Although labor costs per se are not very high, so much clerical time is consumed in handling NYSILL referrals that the total unit expense is fairly substantial. This situation can partly be ascribed to the rather low volume of inter-library loan requests generally received by Library "G." With low volumes, it is much less likely that unit costs can be reduced by handling referrals in batches. Moreover, the NYSILL operation at this library is not especially compact, and considerable time is expended in going to the stacks, preparing items for shipping, and so forth. Cost data for Library "G" was gathered by analyzing NYSILL requests received during the period October 20-30, 1967. This was augmented with the institution's own records covering the entire NYSILL experiment. The data for this library are given in Table F.7.

The library's administrative personnel experimented with a second approach to cost estimation, asking each person handling NYSILL referrals to report on the proportion of his time that was taken up with NYSILL work. The results of that inquiry indicate that cost estimations rise dramatically with this methodology: half again as much as the costs generated by the analysis of individual referrals.

Table F.7

COST BREAKDOWN, LIBRARY "G"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	1.10	\$.0373	\$.0410	100%	\$.0410
Catalog Searches:						
--Books, Dissertations	No	16.00	.0373	.5968	67%	.3999
--Periodicals	No	10.00	.0373	.3730	33%	.1231
Stack Searches:						
--Books, Dissertations	No	30.00	.0373	1.1190	39%	.4364
--Periodicals	No	5.00	.0373	.1865	20%	.0373
TWX Output	No	1.00	.0373	.0373	100%	.0373
Administration	Yes	.84	.0843	.0708	100%	<u>.0708</u>
TOTAL UNIT PROCESSING COST						\$1.1458
B. Unit Filling Costs--for filled requests only						
Copying	No	37.00	\$.0373	\$1.3801	26%	\$.3588
Charging, Labels	No	20.00	.0373	.7460	74%	.5520
Shipping	No	3.00	.0485	.1455	74%	.1077
Discharging	No	.50	.0468	.0234	74%	.0173
Reshelving	No	5.00	.0280	.1400	74%	.1033
Plus Materials:						
--Photocopies	---b	---b	---b	.5600	26%	.1456
--Packaging	---b	---b	---b	.0250	74%	.0185
--Postage ^c	---b	---b	---b	.0500	100%	<u>.0500</u>
TOTAL UNIT FILLING COST						\$1.3535

a Based on an analysis of NYSILL requests received at this library in October 1967, with staff positions and time consumed noted for each step of the work for every request. Labor costs include fringes at 12% of salary for all personnel except for the administrator, whose fringes were set at 16% of salary.

b Does not apply.

c No special insurance costs.

Library "H"

This subject referral library accounted for 16% of all filled referrals during the first six months of the NYSILL program, a greater percentage than any of the other subject centers.

Cost data for this study were collected in several ways: by gathering information on NYSILL requests handled during the period October 25-November 2, 1967; by examination of the library's own detailed statistics on referrals; and by inquiries into certain unusual costs, such as for microfilming.

Library "H" has the highest total unit processing cost in the NYSILL network and the second highest total unit filling cost. The former circumstance results from the allocation of substantial administrative costs to the NYSILL operation,⁷ while the latter is a consequence of the fact that the library filled some NYSILL referrals by microfilming the requested material.⁸ In addition, certain other factors contribute to higher costs at Library "H" than at other NYSILL referral libraries: salaries of administrators involved in supervising the NYSILL operation are relatively high; low-level personnel are also more costly than elsewhere (pages, for example, are paid \$1.00 an hour more than they would get at upstate libraries in the NYSILL network); the NYSILL procedures at this library are complex and entail difficult searches; finally, the library maintains very detailed statistics on its NYSILL activities.

The cost breakdown for this referral library is shown in Table F.8.

7 These administrative costs are probably somewhat overstated in that they undoubtedly reflect staff efforts which should be "charged" to the "willingness to serve" grant, not to NYSILL's unit fees.

8 This procedure was discontinued in late September. Thereafter, Library "H" was only supposed to fill requests that could be filled by photocopying.

Table F.8

COST BREAKDOWN, LIBRARY "H"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	1.00	\$.0630	\$.0630	100%	\$.0630
Catalog Search	No	7.98	.0630	.5027	100%	.5027
Stack Search	No	13.91	.0444	.6176	56%	.3459
TWX Output, Records, Reports	No	10.45	.0630	.6584	100%	.6584
Administration	Yes	16.63 ^b	.1385	2.3033	100%	<u>2.3033</u>
TOTAL UNIT PROCESSING COST						\$3.8733
B. Unit Filling Costs--for filled requests only^c						
Copying ^d	No	8.17	\$.0383	\$.3129	51%	\$.1596
Microfilming: Delivery and Pickup; Records	No	5.00	.0261	.1305	49%	.0639
Packing, Mailing	No	7.93	.0444	.3521	100%	.3521
Reshelving	No	2.33	.0444	.1034	100%	.1034
Plus Materials: ^d						
--Microfilm	---e	---e	---e	1.1000	49%	.5396
--Packaging and Postage:						
Photocopies	---e	---e	---e	.1000	51%	.0510
Microfilms	---e	---e	---e	.4000	49%	<u>.1960</u>
TOTAL UNIT FILLING COST						\$1.4650

a Based on data for personnel time expended on NYSILL requests for the period October 25-November 2, 1967. Labor costs include 25% fringe benefits for full-time staff, 4.4% for others.

b Based on administrator's estimates; see text.

c No charging or discharging costs; see text.

d No materials costs for copies; the copying machine supplied by the state for the FACTS project is used. No special insurance costs.

e Does not apply.

Library "I"

This subject referral center experienced a low volume of NYSILL referrals during the monitoring period. Data for Table F.9 were gathered by studying a sample of referrals for the period October 27-November 3, 1967. This information was supplemented with interviews with the library's staff, a check of the average cost of interlibrary loan packing and mailing expenses, and a review of the library's own data on the NYSILL program.

Most of the actual work on NYSILL referrals is performed by a part-time student employee. Although administrative charges are a significant proportion of the total processing cost at Library "I," the need for careful supervision of what is lent would appear to justify the inclusion of these expenses in the NYSILL unit cost calculations. Likewise, the high unit filling cost is attributable to the library's desire to protect its materials by careful hand-wrapping, sometimes even packing them in excelsior, and by insuring items lent at sizable valuations.

Table F.9

COST BREAKDOWN, LIBRARY "I"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input and Catalog Search	No	5.92	\$.0365	\$.2161	100%	\$.2161
Reference Check	Yes	2.22	.0841	.1867	100%	.1867
Stack Search	No	2.35	.0365	.0858	63%	.0540
--Card File ^b	No	3.67	.0365	.1340	22%	.0295
--Staff Check ^c	Yes	14.33	.1191 ^c	1.7067	11%	.1877
--Approvals ^d	No	4.00	.0739	.2956	44%	.1301
TWX Output	No	.74	.0365	.0270	100%	.0270
Administration	Yes	5.00	.1194	.5970	100%	<u>.5970</u>
TOTAL UNIT PROCESSING COST						\$1.4281
B. Unit Filling Costs--for filled requests only^e						
Copying	No	11.00	\$.0365	\$.4015	25%	\$.1004
Charging	No	1.00	.0739	.0739	75%	.0554
Labels, Letters	No	10.37	.0365	.3785	75%	.2839
Unpacking	No	3.00	.0739	.2217	75%	.1663
Discharging	No	.50	.0545	.0273	75%	.0204
Reshelving	No	.50	.0690	.0345	100%	.0345
Plus Materials:						
--Photocopies	---f	---f	---f	.2500	25%	.0625
--Packaging ^e	---f	---f	---f	1.0000	75%	.7500
--Postage and Insurance: Books	---f	---f	---f	.5500	75%	.4125
--Postage, Photocopies	---f	---f	---f	.1000	25%	<u>.0250</u>
TOTAL UNIT FILLING COST						\$1.9109

a Data from a sample of 27 requests. Labor costs include fringes at 18% of salary for professionals, 4.4% for others when on part-time status.

b For NOS check.

c To obtain materials on loan to institutional staff; labor costs for two persons.

d Non-professional supervisor checks physical condition of books.

e Labor costs for packaging are included with materials costs.

f Does not apply.

Library "J"

This subject referral center was relatively new to the network at the time the study of costs was conducted. Therefore, less formal data-gathering methods were employed to avoid interfering with the institution's efforts to organize a standard procedure to handle NYSILL referrals. Information was obtained from the library's own records of referrals processed during its first months of participation, from interviews with appropriate personnel and from previous studies conducted by the library itself.

The bulk of the NYSILL work is handled by a single staff member. Due to the complexity of the interloan operation at Library "J"--materials are obtained not just from this library's main facility but from divisions spread around New York City--costs were to be expected to be fairly high. Even so, it appears that administrative charges are somewhat excessive, at least by comparison with most of the other referral libraries. Probably a portion of these costs, like those at Libraries "F" and "H," should be viewed as being covered by the state's "willingness to serve" grants.

Table F.10 details the unit costs for processing and filling a NYSILL referral at Library "J."

Table F.10

COST BREAKDOWN, LIBRARY "J"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input and Catalog Search	No	3.00	\$.0469	\$.1407	100%	\$.1407
Reference Check ^b	Yes	15.00 ^b	.0825	1.2375	100%	1.2375
Stack Searches:						
--Main Divisions	No	2.00	.0469	.0938	20%	.0188
--Requests to Other Divisions	No	2.50	.0469	.1173	15%	.0176
--Contact with Other Divisions	No	3.00	.0938 ^c	.2814	10%	.0281
--Stacks, Other Divisions	No	2.00	.0328	.0656	15%	.0098
--Deliveries	No	1.00	.0338	.0338	15%	.0051
TWX Output	No	.33	.0469	.0155	100%	.0155
Administration ^b	Yes	7.96	.1030	.8199	100%	<u>.8199</u>
TOTAL UNIT PROCESSING COST						\$2.2930
B. Unit Filling Costs--for filled requests only						
Photocopies ^d	No	15.00	\$.0469	\$.7035	41%	\$.2884
Charging	No	1.00	.0469	.0469	59%	.0277
Packing, Labeling	No	2.00	.0469	.0938	59%	.0553
Mailing	No	.50	.0338	.0169	100%	.0169
Discharging	No	1.00	.0469	.0469	59%	.0277
Reshelving	No	2.00	.0328	.0656	59%	.0387
Plus Materials:						
--Copies	---e	---e	---e	\$.4000	41%	\$.1640
--Packing	---e	---e	---e	.1220	100%	.1220
--Postage	---e	---e	---e	.0600	100%	.0600
--Insurance	---e	---e	---e	.2000	59%	<u>.1180</u>
TOTAL UNIT FILLING COST						\$.9187

a Data reflects statistics kept by the library, plus interviews with staff personnel. Labor costs include fringes at 12.5% of salaries.

b Both professional entries reflect administration estimates; see text.

c Telephone conversations; salary costs are doubled to allow for two persons.

d Includes obtaining and reshelving photocopied materials.

e Does not apply.

Library "K"

This subject referral center is one of the large university libraries participating in the NYSILL network. Despite a very complex interloan operation, the total unit processing and filling costs at Library "K" are quite low. This results from a combination of factors, including an inexpensive mix of personnel, a well-established and highly specialized procedure for handling interlibrary loans, and the fact that many of the NYSILL referrals did not require or receive as much attention as non-NYSILL requests.

Cost data were obtained for referrals handled during the period November 1-20, 1967. The resulting information was analyzed and supplemented with other data gathered by both telephone and personal interviews. The results of these investigations are given in Table F.11.

A few special considerations which apply to Library "K" should be noted. First, any individual referral might be routed to one of several divisional libraries via a messenger system. Rather than attempt to work out the proportion of referrals which were routed two, three, four or more times, these additional handling costs were calculated by recording the total time consumed by all referrals and averaging the results. Similarly, paging costs were combined without regard for the particular library facility where the paging had actually been done. The cost of the messenger service itself was not included, on the grounds that the NYSILL requests did not increase these costs.

Table F.11

COST BREAKDOWN, LIBRARY "K"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input	No	2.58	\$.0452	\$.1166	100%	\$.1166
Arranging, Sorting	No	.79	.0516	.0408	100%	.0408
Catalog Search	No	4.56	.0395	.1801	100%	.1801
Bibliographic Checking	Yes	5.75	.0610	.3507	25%	.0878
Charge Cards ^b	No	1.57	.0472	.0741	31%	.0231
Paging	No	7.47	.0320	.2390	53%	.1267
Messenger Requests	No	1.69	.0549	.0928	34%	.0315
Checking for Special Project ^c	No	5.00	.0662	.3310	1%	.0033
Record Keeping	No	.89	.0519	.0462	62%	.0285
TWX Output	No	.25	.0367	.0092	100%	.0092
Administration	Yes	.09	.0673	.0061	100%	<u>.0061</u>
TOTAL UNIT PROCESSING COST						\$.6537
B. Unit Filling Costs--for filled requests only						
Copying ^d	No	6.53	\$.0375	\$.2449	21%	\$.0514
Billing, Charging ^b	No	.40	.0499	.0200	79%	.0160
Packing, Mailing	No	1.85	.0379	.0701	100%	.0701
Discharging and Reshelving	No	1.00	.0311	.0311	79%	.0290
Plus Materials:						
--Packaging	---e	---e	---e	.0500	100%	.0500
--Photocopies	---e	---e	---e	1.0000	21%	.2100
--Postage ^f	---e	---e	---e	.0600	100%	<u>.0600</u>
TOTAL UNIT FILLING COST						\$.4865

a Data reflects sample of 129 NYSILL requests. Labor costs include fringes at 18% of salary.

b If a request goes to library's circulation division, a charge card is made up as a requesting slip; other charges included below.

c Some materials requested are in library's reclassification project.

d These copying costs are for preparation of copy orders, internal delivery, etc. Materials costs for photocopying include charges for machine operator.

e Does not apply.

f No special insurance costs (covered by blanket policy).

Library "L"

Library "L" is another of the highly specialized NYSILL subject centers. The volume of referrals received is moderately low. Each referral is handled as a matter of routine by persons whose major duties lie elsewhere. Even the TWX operation is streamlined to the point where its costs become negligible: secretaries simply tear off messages on their way past the TWX machine on other errands and deliver them to the reference librarian. The interloan operation is quite compact, resulting in the lowest average time consumption for processing a referral of any of the subject referral libraries. Filling costs include first-class postage for letters of notification which are mailed out to every NYSILL patron whose request has been filled.

Cost data for Library "L" are presented in Table F.12.

Table F.12

COST BREAKDOWN, LIBRARY "L"^a

ITEM	Work Done by a Professional?	Time Consumed (in minutes)	Labor Costs (in dollars)	Unit Cost (in dollars)	Percent of Cases Which Apply	Weighted Cost for an Average Request
A. Unit Processing Costs--applies to all requests						
TWX Input and Catalog Search ^b	Yes	3.00	\$.0905	\$.2715	100%	\$.2715
Stack Search	No	5.00	.0348	.1740	40%	.0696
TWX Output	No	1.00	.0566	.0566	100%	.0566
Administration	Yes	2.84	.1291	.3666	100%	<u>.3666</u>
TOTAL UNIT PROCESSING COST						\$.7643
B. Unit Filling Costs--for filled requests only						
Photocopying	No	5.00	\$.0476	\$.2380	67%	\$.1595
Charging	Yes	1.00	.0905	.0905	33%	.0299
Letters, Labels ^c	No	2.00	.0566	.1132	100%	.1132
Discharging	Yes	3.00	.0905	.2715	33%	.0905
Reshelving	No	1.00	.0348	.0348	100%	.0348
Plus Materials:						
--Photocopies	---d	---d	---d	.2500	67%	.1675
--Packaging and Book Postage	---d	---d	---d	.6000	33%	.2000
--First Class Postage: Books ^c	---d	---d	---d	.0500	33%	.0165
--First Class Postage: Copies	---d	---d	---d	.1875	67%	<u>.1256</u>
TOTAL UNIT FILLING COST						\$.9375

a Compiled from library's own records and interviews with staff. Labor costs include fringes at 4.5% of salary plus \$.0015 per minute for fixed benefits; fringes for pages were calculated at 4.4% of salary for social security.

b Input is handled by a secretary at no cost (time consumed too small to take into account).

c A first class letter is mailed to every patron receiving a loan, to notify him that the material is on the way. There are no special costs for insurance.

d Does not apply.

SOME GENERAL OBSERVATIONS

A considerable amount of information about the costs of handling interlibrary loans can be inferred from the data presented in the 12 case studies. The sample of institutions is far too small to permit unassailable conclusions, of course, but the general trends indicated are nonetheless worth mention.

Filing costs are the more straightforward. The expenses associated with the filing of a referral appear to be a simple additive function of the work performed, being essentially a matter of whether or not the library engages in certain services: extensive photocopying, microfilming, special packaging, special insuring, etc. Unit costs, in most cases, reflect the presence or absence of such factors. Although a few libraries seem to take rather long periods of time to perform these tasks, such effects are minor compared to the variances contributed by presence or absence of the task itself.

Processing costs are more complex; even so, a definite pattern emerges. Without meaning to imply any order of importance, the major contributing factors seem to be high versus low interloan volume; high versus low administrative cost estimates; subject center referrals versus area center referrals; and the availability or lack of capable personnel at low salary levels. The particular kind of interloan operation, on the other hand, does not seem to make too much difference: some libraries operate very well by having a single person do all of the work for NYSILL, while others do equally well by merging the handling of NYSILL referrals with their existing specialized interlibrary loan procedures. All of these factors are interrelated in a complicated fashion. Low NYSILL volume, for example, seems to take on major effects only in those institutions which did not do much interlibrary loan work prior to the NYSILL program. In such instances, personnel may spend part of a day handling a single referral, going through all the steps associated with the processing of a request without being able to take advantage of the cost-cutting that is possible when several referrals are searched simultaneously. Thus, the factors contributing to processing costs are not additive, but combine in peculiar patterns to produce high or low unit costs. The exact nature of such patterns cannot be determined without studying many more libraries. It appears, however, that private, non-academic libraries with large collections, low interlibrary loan volume, and an expensive mix of personnel will tend to have the highest unit processing cost.