

DOCUMENT RESUME

ED 252 244

IR 050 986

AUTHOR Bills, Linda G.
TITLE Interlibrary Loan before and after OCLC. Illinois Valley Library System OCLC Experimental Project. Report No. 7.
INSTITUTION Illinois State Library, Springfield.
PUB DATE Dec 84
NOTE 131p.; For related documents, see ED 241 011, ED 241 055, ED 241 063, and ED 250 004.
PUB TYPE Reports - Research/Technical (143)
EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Academic Libraries; *Interlibrary Loans; Library Catalogs; *Library Cooperation; *Library Expenditures; *Library Networks; *Library Personnel; Library Research; Library Technical Processes; Online Systems; Operating Expenses; Public Libraries; School Libraries; Special Libraries; Tables (Data)
IDENTIFIERS *Illinois Valley Library System; *OCLC; Online Catalogs

ABSTRACT

From January 1980 through December 1982 the Illinois Valley Library System (IVLS) and 33 of its participating libraries conducted an experimental project to test the costs and benefits of OCLC use in small and medium-sized libraries. This report, one of eight describing the results of the OCLC Experimental Project, examines interlibrary loan activities before and after the OCLC interlibrary loan (ILL) subsystem was used in the project libraries. Comparisons are made in terms of time, costs, and staffing levels. The second part of the report examines resource sharing patterns in the IVLS and how they changed during the project. Finally, the attitudes of library staffs toward online ILL are reviewed. Multiple graphs, tables, and figures summarize the data. Appendices include the following: (1) statistical information on project libraries; (2) IVLS Interlibrary Loan Protocols and Summary Card for Terminal Operators; (3) IVLS Request Form and Flow Chart of IVLS Interlibrary Loan Department Procedures; (4) Transaction Study Form; (5) IVLS Interlibrary Loan Department Worklog Study Form and Instructions; (6) Library Interlibrary Loan Worklog Study Forms and Instructions for Terminal Activities and OCLC-Related Work; and (7) Library Log Form for Non-OCLC Interlibrary Loan Activity. (THC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED252244

**U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)**

This document has been reproduced as received from the person or organization originating it

Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
I. Bostian

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Interlibrary Loan Before and After OCLC

by Linda G. Bills
OCLC Project Director
Illinois Valley Library System

Illinois Valley Library System
OCLC Experimental Project
Report No. 7

Jim Edgar
Secretary of State
and State Librarian

Illinois State Library
Springfield, Illinois
December 1984

Funded by a Library Services and Construction Act Grant

This is one of eight reports to be published by the Illinois State Library describing the results of the OCLC Experimental Project. The Project was conducted by the Illinois Valley Library System and thirty-three of its participating libraries from January 1980 to December 1982. The Project was funded by LSCA grant I-79-IX-C awarded by Alan J. Dixon, Illinois Secretary of State and State Librarian, through the Illinois State Library.

Illinois Valley Library System
OCLC Experimental Project
Reports

- I. OCLC Experimental Project Description
- II Implementing OCLC in Small and Medium-sized Libraries
- III Cataloging Before and After OCLC
- IV Attitudes about OCLC in Small and Medium-sized Libraries
- V OCLC Use by Library Clusters
- VI OCLC Public Access Terminals in Small and Medium-sized Libraries
- VII Interlibrary Loan Before and After OCLC
- VIII OCLC Experimental Project -- Summary and Conclusions

Illinois Valley Library System
845 Brenkman Drive
Pekin, IL 61554
(309) 353-4110

Interlibrary Loan Before and After OCLC

Table of Contents

Table of Contents	1
List of Tables	iii
List of Figures	v
Introduction	1
The Interlibrary Loan Environment	2
Interlibrary Loan Protocols	5
Interlibrary Loan Before the Project	6
Interlibrary Loan Costs - Centrally Processed Requests	
Transaction Study - Description	11
Transaction Study - Results	12
Worklog Study - Description	15
Worklog Study - Results	16
Pre-Project Interlibrary Loan Costs	21
Interlibrary Loan Costs - Library Online Requests	
Library Worklog Study - Description	23
Costs of Library Borrowing on OCLC	24
Costs of Library Lending on OCLC	30
Interlibrary Loan Costs - Comparison	34
Effects of the Project on Resource Sharing Patterns	
Interlibrary Loan Requests Sent	35
Changing Patterns of ILL Activity	44
Results from the Transaction Study (Fall 1980)	45
Study of IVLS Paper Requests (1978-1982)	47
Study of OCLC Interlibrary Loan Requests (1981-1982)	49
Fill Rates	52
Fill Method	56
Fill Time	58
Delayed Requests	61
Fill Source	62
Location of Lending Library	62
Lending Library Type	65
System-mediated Loans	72
IVLS Libraries as Lenders	73
ILL Use and Staff Attitudes	77
Conclusions	79

APPENDIX A:	Statistical Information on Project Libraries and Map of Illinois Valley Library System	83
APPENDIX B:	Illinois Valley Library System Interlibrary Loan Protocols and Summary Card for Terminal Operators	91
APPENDIX C:	Illinois Valley Library System Interlibrary Loan Request Form (4 Part NCR) and Flow Chart of IVLS Interlibrary Loan Department Procedures	99
APPENDIX D:	Transaction Study Form	105
APPENDIX E:	Illinois Valley Library System Interlibrary Loan Department Worklog Study Form and Instructions	109
APPENDIX F:	Library Interlibrary Loan Worklog Study Forms and Instruction for Terminal Activities and OCLC-Related Work	119
APPENDIX G:	Library Log Form for Non-OCLC Interlibrary Loan Activity	133

Interlibrary Loan Before and After OCLC

List of Tables

VII-A:	MAJOR EVENTS AFFECTING IVLS INTERLIBRARY LOAN	3
VII-B:	GROWTH OF LOCAL HOLDINGS CODES IN THE OCLC DATA BASE	4
VII-C:	TRANSACTION STUDY RESULTS Cost of Interlibrary Loan Activities in Libraries	13
VII-D:	TRANSACTION STUDY RESULTS Cost of Interlibrary Loan Activities at System Headquarters	14
VII-E:	WORKLOG STUDY RESULTS Interlibrary Loan	17
VII-F:	WORKLOG STUDY RESULTS Summary	18
VII-G:	INTERLIBRARY LOAN COSTS Paper Requests Processed by IVLS	22
VII-H:	LIBRARY WORKLOG STUDY RESULTS Online ILL Requests Sent: Time and Salaries	25
VII-I:	LIBRARY WORKLOG STUDY RESULTS Borrowing Library Updates	26
VII-J:	INTERLIBRARY LOAN COSTS Requests Sent by Libraries on OCLC	28
VII-K:	INTERLIBRARY LOAN COSTS Requests Searched on OCLC but Sent as Paper Requests to IVLS	28
VII-L:	INTERLIBRARY LOAN COSTS Requests Searched on OCLC and Filled by Telephone Calls	29
VII-M:	LIBRARY WORKLOG STUDY RESULTS Lender Responses to Pending Requests	31
VII-N:	LIBRARY WORKLOG STUDY RESULTS Lending-Related Updates and Other Searches	31
VII-O:	LIBRARY WORKLOG STUDY RESULTS Summary of Lending Costs in Libraries	33

VII-P:	INTERLIBRARY LOAN BORROWING COSTS Comparison of ILL Methods Studied	34
VII-Q:	INTERLIBRARY LOAN REQUESTS IN IVLS	38
VII-R:	RECIPROCAL BORROWING IN IVLS	39
VII-S:	TRANSACTION STUDY RESULTS Days for ILL Request Forms to Reach System	45
VII-T:	TRANSACTION STUDY RESULTS Days for ILL Requests to be Filled After Receipt at System	46
VII-U:	TRANSACTION STUDY RESULTS Sources of Material and Turnaround Time	46
VII-V:	FILL RATES IVLS Paper Requests by Quarter	53
VII-W:	METHODS USED TO FILL ILL REQUESTS AT IVLS Percent of Fill from Each Method	57
VII-X:	TURNAROUND TIME FOR PAPER REQUESTS	59
VII-Y:	TURNAROUND TIME FOR ONLINE REQUESTS	60
VII-Z:	LENDING LIBRARY LOCATION Paper Requests by Quarter from Sample	63
VII-AA:	LENDING LIBRARY LOCATION Online Requests	64
VII-AB:	FILL-TIME FOR ONLINE REQUESTS By Location of Lending Library	65
VII-AC:	SOURCES FOR PUBLIC LIBRARY ILL FILLS Paper Requests	66
VII-AD:	SOURCES FOR PUBLIC LIBRARY ILL FILLS Online Requests	66
VII-AE:	SOURCES FOR PUBLIC LIBRARY INTERLIBRARY LOANS By Size of Library	69
VII-AF:	TURNAROUND TIME FOR ILL REQUESTS Direct and IVLS-mediated Loans	72
VII-AG:	LENDING BY IVLS LIBRARIES Borrowing Library Location	75
VII-AH:	TYPES OF LIBRARIES BORROWING FROM IVLS LIBRARIES By Location	76

Interlibrary Loan Before and After OCLC

List of Figures

VII-1:	ONLINE HOLDINGS IN IVLS Growth of the Database by Quarters	4
VII-2:	IVLS INTERLIBRARY LOAN ACTIVITY All Libraries, Paper and OCLC Requests	37
VII-3:	PAPER ILL REQUESTS SENT TO IVLS From OCLC and Non-OCLC Libraries	42
VII-4:	ILL REQUESTS SENT ONLINE Project and Pre-Project Libraries	42
VII-5:	INTERLIBRARY LOAN ACTIVITY Paper and OCLC Requests, by Month	43
VII-6:	IVLS PAPER REQUESTS - FILL METHODS Methods Used to Fill Requests, by Quarter	57
VII-7:	PAPER REQUEST TURNAROUND Days to Reach Percent of Fills	59

INTRODUCTION

From January 1980 through December of 1982 the Illinois Valley Library System (IVLS) and thirty-three of its participating libraries conducted an experimental project to test the costs and benefits of OCLC use in small and medium-sized libraries. A detailed description of the System, the Project and the libraries involved in the experiment is given in the first report in this series. The tables from that report, giving descriptive statistics for the Project libraries, are included as Appendix A of this report.

In all Project reports, certain terminology is used consistently. The "System" or "IVLS" refers to the Illinois Valley Library System; "Project" refers to the OCLC Experimental Project, whereas "project" may refer to any local undertaking, particularly retrospective conversion projects in each library; "librarian" or "library director" refers to the person responsible for library operations, representing persons with various levels of education. Libraries in the Project were organized in "clusters" with one "host" library where the terminal was located throughout the Project. The "guest" libraries in the cluster had no permanent terminal in-house but generally used the one in the host library.

In all Project reports, it is assumed that the reader is familiar with the OCLC system and, in particular, with the cataloging and interlibrary loan subsystems. A brief description of this automated library service as it existed at the time of the Project can be found in the brochure On-line Library Systems (Dublin, OH: OCLC, [1982]).

This report will examine interlibrary loan activities before and after the OCLC interlibrary loan subsystem was used in the Project libraries. The comparison is made in terms of time, costs and staffing levels. The second part of the report examines resource sharing patterns in the System and how

they changed during the Project. Finally, the library staff attitudes toward online interlibrary loan will be reviewed.

Many of the studies reported here involve sampling. The results are reported as clearly as possible, but I do not have a background in statistics, so it was not possible for me to evaluate them rigorously in terms of significance or other statistical measures. The data used are, at the time this report is being written, available on punched cards or in its original format - should anyone wish to explore it more thoroughly.

THE INTERLIBRARY LOAN ENVIRONMENT

Several important changes took place during the OCLC Project which may have affected the results of the various studies. This section is a brief overview of these conditions.

Before the Project began, almost all the System libraries got their ILL requests filled by sending paper request forms to IVLS. Various methods were used there to obtain the material, in accordance with a statewide set of protocols. By the end of the Project, participating libraries were filling many of their own requests over OCLC, the database of local holdings had more than doubled, a new statewide delivery system was introduced, and other changes had taken place. Table VII-A below outlines these events some of which will be discussed in detail in other sections.

TABLE VII-A

MAJOR EVENTS AFFECTING IVLS INTERLIBRARY LOAN

<u>Date</u>	<u>Event</u>
Late 1979	Most ILL requests go through System - methods used include telex, telephone, route list, ALA paper forms, purchase, OCLC ILL subsystem, and University of Illinois Automated Circulation System (LCS)
April 1980	Project participants begin cataloging on OCLC, adding more local holdings symbols to the database Telex use dropped by IVLS
August 1980	Illinois State Library begins a statewide delivery system which speeds document delivery from non-IVLS libraries, formerly handled by mail
Fall 1980	Project participants begin retrospective conversion projects, adding large numbers of holdings symbols to the OCLC database
Winter 1980	Transaction study of ILL costs begins IVLS stops purchasing materials to fill ILL requests
January 1981	Project participants begin using OCLC ILL subsystem for many requests
1981	Additional academic libraries in the state begin using the University of Illinois LCS system, giving IVLS access to their holding information
Fall 1981	Worklog study of OCLC activities in libraries including ILL
January 1982	Worklog study of IVLS interlibrary loan department retrospective conversion projects finished
July 1982	OCLC Project support for libraries ceases. Some libraries drop out of OCLC, some do less ILL work online
November 1982	Publication and distribution of the IVLS union list of serials

One Project-related event that may have affected interlibrary loan patterns and costs was the growing number of local library holding symbols in the database. Table VII-B and Figure VII-1 below both illustrate this growth. Without the input of the Project libraries, the existing IVLS OCLC libraries would have contributed a steady number of location symbols. The Project more than doubled this resource and, moreover, changed it from almost exclusively academic materials to a more even balance of academic and public library holdings.

BEST COPY AVAILABLE

TABLE VII-8

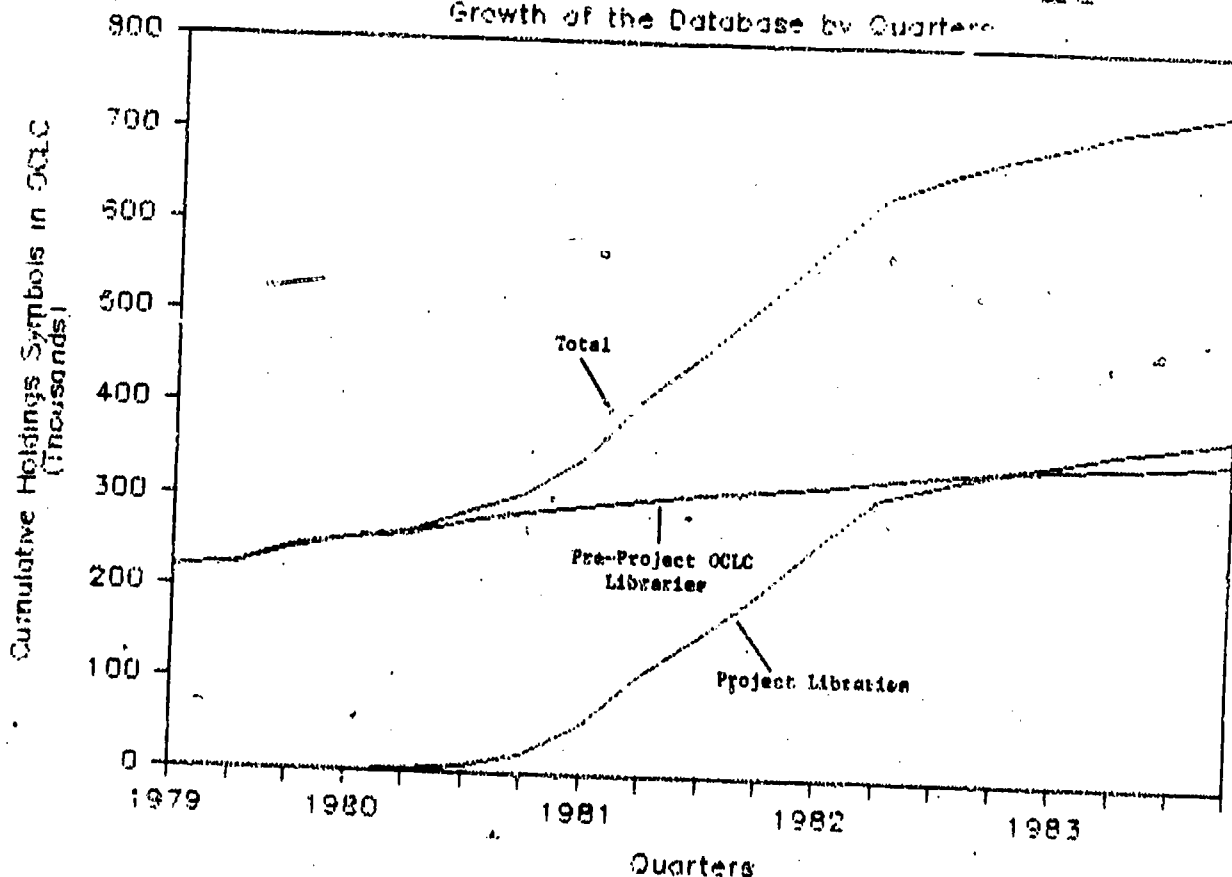
GROWTH OF LOCAL HOLDINGS CODES IN THE OCLC DATA BASE

Quarter	Pre-Project Library Holdings	Project Library Holdings	Total IVLS Library Holdings
1979 June	221,145	0	221,145
3rd	233,055	179	233,234
4th	242,577	481	243,058
1980 1st	254,082	740	254,822
2nd	260,156	2,494	262,650
3rd	275,445	9,612	285,057
4th	285,549	22,413	307,962
1981 1st	293,953	55,379	349,332
2nd	302,756	110,891	413,647
3rd	308,939	155,530	464,469
4th	314,240	203,352	517,592
1982 1st	320,559	257,043	577,602
2nd	328,247	309,678	637,925
3rd	334,746	325,693	660,439
4th	340,973	340,162	681,135
1983 1st	345,849	351,893	697,742
2nd	349,834	364,176	714,010
3rd	352,662	373,166	725,828
4th	355,908	382,413	738,321

This table shows the cumulative number of holdings symbols on the OCLC database for libraries in the IVLS area. Pre-Project libraries are those which used OCLC before the Project. This column shows the amount of online information on local resources that would have existed without the Project. Some "Project Library" holdings appear before the official beginning of the Project in 1980 because two of the Project libraries had trained staff and used other libraries' terminals while waiting for the Project to begin.

FIGURE VII-1

ONLINE HOLDINGS IN IVLS
Growth of the Database by Quarters



This graph shows the cumulative level of holdings symbols on OCLC for IVLS libraries, including IVLS headquarters.

Interlibrary Loan Protocols

At the time the Project began, the Illinois State Library had an established set of protocols for routing interlibrary loan requests. Basically, the protocols called for exhausting local resources before sending a request to any outside agency. Libraries were required to send interlibrary requests to the system headquarters. Systems were required to exhaust local (system and system library) resources available to them before they sent a request on to a Resource and Reference Center in the state. According to these protocols, the paperwork actually had to flow through the System to get from the local library to any library in a different system.

The Reference and Resource (R & R) Centers play an important role in Illinois interlibrary loan. They are four major libraries which are reimbursed by the Illinois State Library for supplying material on loan. The centers are the University of Illinois Library (UI), the Southern Illinois University Library (SIU), the Illinois State Library (ISL) and Chicago Public Library (CPL). In the statewide protocols, they are generally the next source for material after local resources are exhausted. They in turn have the authority to refer the request to other sources.

With the advent of automated networks, this protocol became less and less satisfactory. By installing OCLC in the libraries and encouraging them to use it for interlibrary loan, we separated the interlibrary loan process from its paper forms. It was necessary, therefore, to adapt the statewide protocols to meet the new situation. Protocols which were used by the Illinois Valley Library System libraries during the Project are attached to this report as Appendix B. They call for exhausting local resources known to the library, a check of System headquarters before the request goes out-of-System, a pref-

erence in out-of-System libraries for the Resource and Reference Centers before other Illinois libraries, and exhausting Illinois holdings known to the library before going out-of-state.

We found that these protocols worked very well for the libraries. We felt that they were in keeping with the spirit if not the letter of the Illinois protocols. The Project results discussed later indicate that using these guidelines did not have any great impact on the distribution of ILL lenders.

Interlibrary Loan Before the Project

Before the introduction of OCLC in the Project libraries, interlibrary loan was chiefly a function of the System office. The library staff, in consultation with the patron, would fill out a multi-part interlibrary loan request form (see Appendix C). The form was sent through the IVLS delivery vans to System headquarters for processing. At the time this Project began, System headquarters had the following resources available to it for filling interlibrary loan requests.

Union Card Catalog. Since 1967, the System had been maintaining a union catalog of the holdings (except juvenile materials) of eleven medium-sized libraries in the System area. These libraries comprised the larger public libraries in the area with the exception of the largest library, Peoria Public. Efforts were made to keep the card file current with new holdings and deletions as they were reported by the eleven libraries. Once OCLC use was initiated in many of these libraries as a result of the Project, their cards were no longer filed in the union catalog since access to their holdings was available on OCLC.

OCLC. At this time the System headquarters had one OCLC terminal devoted exclusively to interlibrary loan use. It was used to locate local, state and national holdings. Before the Project, six System libraries were OCLC members, and three of them had done or were completing total retrospective conversion.

Peoria Public Library Collection. The Illinois Valley Library System had one part-time staff member who checked the catalog and collection of Peoria Public Library.

Route Lists. When more convenient methods of finding local holdings failed, a title was put on a want list which was sent to each IVLS library through the delivery route. Each library checked their collection and notified the System if they could supply any titles on the list.

System headquarter collections. IVLS maintained several small collections - on-demand purchases, rotating books, large print books, reference collection, professional collection and Hanna City Youth Center collection. If the IVLS symbol showed up on OCLC, these collections were searched. Rotating books (the largest collection) were sometimes difficult to locate since they were sent to libraries on a 3-month rotation schedule.

Purchase. Libraries were expected to buy their own copies of heavily requested titles, but if a title had a steady, medium rate of demand it might be purchased by IVLS for the on-demand collec-

tion. By the end of the Project, on-demand buying had stopped, but the existing collection was still available to fill requests.

Bradley University Library Collection. The System had access to all Bradley holdings over OCLC. It also maintained a part-time staff member at Bradley University Library to verify citations using their National Union Catalog or other special tools.

LCS. Each System headquarters in the state of Illinois has an on-line terminal connected to the automated Library Circulation System of the University of Illinois. During the time of this Project, this circulation system was being used by additional academic libraries in the state. For the University of Illinois, and later Western Illinois University, the System had check out authorization. Once an item was identified as "on shelf" the System staff member could initiate a charge-out. A printed message at the University was used to pull and ship the item. For the other academic users, the System staff could use LCS to locate holdings and use OCLC to send the request.

R & R Center Microfilms. The Reference and Research Centers of the state of Illinois had their catalog cards recorded on microfilm cassettes or fiche. For two centers the fiche were up-to-date. For the others, recording ended in 1975 when OCLC was adopted. These cassettes and a motorized reader were available at System headquarters to verify titles and holdings information. After verification on these microfilms, a title could be requested either through OCLC, LCS or a paper form.

IVLS Union List of Serials. At this time, the System was working on a union list of the serial holdings of libraries in its area. This list was not completed in book form until August, 1982, but it was on paper cards in an alphabetized file. Although somewhat out of date, it was available for the interlibrary loan staff.

Other Union Lists of Serials. The interlibrary loan department also had on-hand the Union List of Serials, New Serials Titles and union lists of serials from several libraries and consortia in the state.

All of the holdings, with a few exceptions, of all of the libraries in the System were available for loan to other libraries. The methods outlined above were used to locate needed materials. Requests generally went through a regular series of steps depending on the type of material. In some cases, the process could be re-routed because of special knowledge by a staff member or special conditions. The normal procedure for monograph materials is outlined below. For a flow chart see Appendix C.

ILL Procedures

1. Titles are checked in the union catalog. If holdings locations are found, they are noted on the request form.
2. Titles are checked in OCLC for verification. The holdings screens are printed out.
3. If OCLC shows System headquarters as a holding library, titles are checked in IVLS collections. If they are available, they are sent to the requesters.
4. If local libraries have a title, as indicated in OCLC or the union catalog, they are contacted by phone. If the title is available, they are told where to send it. It is sent directly to the borrowing library and returned directly to the lending library without further System action.

5. Titles most likely to be found through the route list are separated and batched into a list sent to most IVLS libraries. Libraries that can supply any of the titles notify headquarters which then tells them where to send the material.
6. Titles inappropriate for the route list or not found by that method are searched at Peoria Public Library. If located, they are sent directly to the borrowing library.
7. Titles are reviewed and appropriate ones are purchased from System funds.
8. If no local holdings are found and the title is not purchased, the LCS terminal is checked. If the title is located in a library with direct checkout (UI or WIU), the transaction is entered. A print out of the transaction is used by the university staff to retrieve and send the book. When it arrives at IVLS, department records are updated and the book is put on the delivery route for the request. Returned books must also be processed by the System. For LCS libraries without direct check out, a note is made of the location.
9. Appropriate titles are checked on the R & R Center microfilm/fiche. Locations are noted.
10. Titles are requested over OCLC using R & R locations first, then other Illinois locations and finally out-of-state libraries. Up to three successive OCLC requests may be sent if appropriate. Materials are received and transshipped at IVLS on their way to the requester and on their return to the lender.
11. Titles are requested on ALA paper ILL forms if the holding library does not use OCLC, or if a paper form is required by the lender. This is especially common for genealogical materials and NUC locations.

At the time of the Project, the System interlibrary loan department was staffed with one full-time librarian, one and a half LTA IIs, two clerical workers, and one part-time student. The department was supervised by another librarian who was in charge of both interlibrary loan and information services (reference).

INTERLIBRARY LOAN COSTS - CENTRALLY PROCESSED REQUESTS

Transaction Study - Description

One method used to study the costs, staffing levels, and time required for interlibrary loan before library use of the OCLC subsystem was a transaction study. For this study, sheets listing the possible steps in an ILL request were stapled to interlibrary loan request forms which were sent to the Project libraries. As these ILL forms were filled out in response to patron requests, library staff kept track of the steps that took place in the library. The transaction form stayed with the interlibrary loan request when it was sent to the System interlibrary loan department. The staff there also noted the various steps used to process each request, the time that each took, and their initials. Finally, when the ILL status sheet was sent back to the libraries, the transaction sheet went with it and the library staff kept track of the final on-site steps. The number of transaction sheets sent to each library depended on its normal ILL rate. A total of 468 transaction forms were sent out to libraries, from which 412 usable forms were returned for analysis. A copy of the transaction form is attached in Appendix D.

From this transaction survey, we got information about which steps were needed in the libraries, for what percent of requests they were likely to occur, and approximately how much time and what level of staff were required. From the Illinois Valley Library System end, we found which steps were required in what proportion of the requests, how long these steps took, where and how materials were located, and the staffing levels. Since stopwatches were used at IVLS, the times given by IVLS personnel were more exact than those recorded in the libraries. Some batched activities, such as filing forms, were timed as a batch during the study, with an average time per item

being established and used in reporting the activity for any particular request.

The study was done in the fall of 1980, so it does not perfectly reflect the pre-Project state. Most libraries had been doing current cataloging on OCLC since summer and many had started retrospective conversion, so the number of local holdings found on OCLC by the IVLS interlibrary loan staff may have been increased, with a subsequent decrease in the time needed to locate local resources.

Transaction Study - Results

Of the 412 usable forms obtained from the study, 366 or 88.8% represented requests that had been filled by the time the study ended 200 days after it was begun. This fill rate is exactly the same as that for all System-processed requests in 1980.

The major purpose of the transaction study was to establish the labor/time costs that could be associated with processing an average ILL paper request. Tables VII-C and VII-D below show the results of the study in terms of cost in staff time for ILL activities before the large-scale use of the OCLC subsystem.

BEST COPY

TABLE VII-C

TRANSACTION STUDY RESULTS
Cost of Interlibrary Loan Activities in Libraries

	<u>Minutes/ Item</u>	<u>Hourly Salary Rate</u>	<u>Cost/Item</u>	<u>Percent Used</u>	<u>Average Cost Per Request</u>	
<u>Request Preparation</u>						
Form preparation/ patron interaction	4.454	\$ 5.12	\$0.3799	100.00%	\$0.3799	
Verification ¹	4.1952	\$ 5.12	\$0.3579	67.00%	\$0.2398	
Filing library copy	0.832	\$ 4.85	\$0.0672	94.40%	\$0.0635	
Sending form to IVLS	1.0828	\$ 4.91	\$0.0887	100.00%	<u>\$0.0887</u>	
					\$0.7718	Total for request preparation
<u>Item Receipt and Return</u>						
Item receipt/record updates	2.5356	\$ 4.37	\$0.1846	81.10%	\$0.1497	
Patron notification ²	1.7949	\$ 4.40	\$0.1317	72.80%	\$0.0959	
Check out	1.0047	\$ 4.41	\$0.0738	70.40%	\$0.0520	
Renewal	3.3214	\$11.49	\$0.6360	1.90%	\$0.0121	
Check in ³	1.6797	\$ 4.25	\$0.1189	69.40%	\$0.0825	
Return to lender/IVLS	0.988	\$ 4.17	\$0.0687	75.3%	<u>\$0.0517</u>	
					\$0.4439	Total for item receipt and return
					\$1.2157	Total library staff cost per request

(N=412)

The Transaction Study yielded 412 usable forms; 330, or 80.1% of the requests involved were filled within the time period of the study. The next to the last column shows the percent of requests on which a certain step was needed. In the last column, the cost for each step is multiplied by the percent of requests in which it was used to determine the processing cost for the average ILL request.

¹ The time needed for request verification (generally Books in Print) was recorded in Step 1 by some libraries.

² Some of the filled requests did not require special patron notification because the patron was a staff member or a regular library user who would be given the item on their next regular visit.

³ Because some ILL items are never picked up by patrons, check in and check out steps were not always needed.

BEST COPY

TABLE VII-0

TRANSACTION STUDY RESULTS
Cost of Interlibrary Loan Activities at System Headquarters

Description	Minutes/ Item	Hourly Salary Rate	Cost/Item	Percent Used	Average Cost Per Request
Request receipt	0.596	\$4.02	\$0.0399	100.00%	\$0.0399
Check union catalog/list	1.063	\$4.08	\$0.0723	93.20%	\$0.074
Call IVLS holding libraries	1.439	\$4.50	\$0.1079	42.96%	\$0.0464
Photocopy at IVLS	3.883	\$4.50	\$0.2912	0.24%	\$0.0007
OCLC verification/holdings	2.225	\$4.08	\$0.1513	54.85%	\$0.0830
LCS check	0.681	\$4.50	\$0.0511	37.38%	\$0.0191
Check Peoria Public	3.107	\$4.02	\$0.2082	12.14%	\$0.0253
Check/photocopy at Bradley	21.626	\$4.56	\$1.6436	14.56%	\$0.2394
Check R & R microfilm	4.15	\$4.50	\$0.3113	12.14%	\$0.0378
Check serial union lists	2.013	\$4.50	\$0.1510	3.40%	\$0.0051
OCLC ILL request initiation	3.11	\$4.26	\$0.2208	18.93%	\$0.0418
2nd OCLC ILL request initiation	1.975	\$4.14	\$0.1363	1.21%	\$0.0017
Send paper request	2.918	\$4.44	\$0.2159	5.34%	\$0.0115
Route list	0.727	\$4.38	\$0.0531	13.83%	\$0.0073
Purchase	7.749	\$5.46	\$0.7052	3.64%	\$0.0257
Cancellation	0.911	\$5.94	\$0.0902	10.19%	\$0.0092
Item receipt processing	0.403	\$4.02	\$0.0270	50.24%	\$0.0136
Updating records	0.558	\$4.02	\$0.0374	48.79%	\$0.0182
Charge out to library	1.747	\$4.02	\$0.1170	50.24%	\$0.0588
Sorting for delivery	0.527	\$4.02	\$0.0353	55.58%	\$0.0196
Check in returned items	0.633	\$4.02	\$0.0424	49.76%	\$0.0211
Updating records	0.208	\$4.50	\$0.0156	49.76%	\$0.0078
Item return to lender	0.827	\$4.02	\$0.0554	47.09%	\$0.0261
Miscellaneous	0.687	\$4.50	\$0.0515	43.69%	\$0.0225
Totals	Time per item	11.78550	Labor cost per request	\$0.8489	

Weighted by % of items needing each step

(N=412)

The Transaction Study yielded 412 usable forms; 330, or 80.1% of these were filled within the time period of the study. Only the first step was used on all requests, since requests are routed in the department depending on the likelihood of a certain option being successful. The next to the last column shows the percent of requests on which a certain step was used. In the last column, the cost for each step is multiplied by the percent of requests in which it was used to determine the processing cost for the average ILL request.

If material was obtained from an IVLS library, the headquarters staff was not involved in shipment or return, so later updating steps were not needed.

According to these results, the labor costs directly associated with processing an interlibrary loan request are:

Library request preparation	\$.77
IVLS staff work	.85
Library receipt/return	.45
Total	\$2.07

Several non-labor costs can also be directly associated with processing a request:

	Cost	% of Requests	Average Per Request
ILL request form	\$.05	100%	.05
OCLC ILL request (1st and 2nd)	1.20	16.8%	.20

The total cost of labor, charges and materials is \$2.32.

This study did not take note of other charges that might be associated with a specific request such as long distance phone costs, postage or photocopy costs. These expenses are considered as part of the second cost study of manual interlibrary loan discussed below.

Besides data on the costs of interlibrary loan processing, the transaction study also brought out some patterns of sources for materials and turnaround time. These results will be discussed in a later section.

Worklog Study - Description

There are many on-going costs involved in maintaining an interlibrary loan service which are not linked to any specific request. These include equipment maintenance, OCLC and other fees, delivery service, telephone service, and staff time involved in running the department and maintaining the files. In order to quantify this last factor, a worklog study of the IVLS Interlibrary Loan Department was conducted for three weeks in January of 1982.

In preparation, all the activities of the department, whether occasional or frequent, were put on a worklog form with the help of the staff. A copy of this form is in Appendix E. Each staff member kept track, with a stopwatch, of the time spent on each activity and the number of items done in that time. Telephone calls - made and answered, were recorded on special sheets by each phone. Total time spent on the phone and the type of call were recorded.

Between the time of the transaction study and that of the worklog study several factors in interlibrary loan processing had altered. The statewide delivery routes had become increasingly busy, which meant more time packing and unpacking delivery bags for locations outside IVLS. On-demand purchasing by IVLS had stopped, so one source of fills from the transaction study does

not appear. Also, the worklog study took place after most Project libraries had completed retrospective conversion to OCLC of all titles published in 1975 or later. This meant a much larger amount of local holdings information was available over OCLC.

By 1982, most Project libraries were initiating many of their own requests on OCLC. This had several effects on the work of the IVLS department. First, in accordance with the protocols some of these requests came to IVLS over OCLC. The staff would check the union catalog and LCS before letting these requests go on. Second, fewer paper requests were received at IVLS for these libraries and those that did come were generally for more difficult materials that the library couldn't get easily over the automated system.

Worklog Study - Results

The results of the worklog study are given in Table VII-E below.

TABLE VII-E
WORKLOG STUDY RESULTS
Interlibrary Loan

Action	Description	Items	Time (Minutes)	Minutes/Item	Percent Total Time
1	Request receipt/sorting	1516	283.017	0.19	1.72%
2	Verification	40	109.883	2.75	0.67%
3	Search/print OCLC	607	1580.333	2.60	9.60%
4	Locate IVLS-owned items	56	64.167	1.15	0.39%
5	Search union catalog	777	687.467	0.88	4.18%
6	Search LCS/order	738	602.317	0.82	3.66%
7	* Count requests to/from Peoria	513	65.967	0.13	0.40%
8	Search Peoria/pull item	287	298.650	1.04	1.81%
9	Reserve Peoria items	18	46.083	2.56	0.28%
10	Search R & R microfilm	60	428.617	7.14	2.60%
11	Verify at Bradley	43	292.967	6.81	1.78%
12	Search Bradley/pull item	24	125.667	5.24	0.76%
13	Arrange route list requests	124	9.967	0.08	0.06%
14	Type route list	124 (four lists)	80.540	0.65	0.49%
15	Label route list	124	29.133	0.23	0.18%
16	Route list-processing returns	186 (six lists)	71.317	0.38	0.43%
17	OCLC ILL request produce	162	643.883	3.97	3.91%
18	* Printout OCLC pending file	423	430.700	1.02	2.62%
19	* Update OCLC pending requests	444	408.033	0.92	2.48%
20	Type/send ALA request	88	339.467	3.86	2.06%
21	Cancel requests	134	198.017	1.48	1.20%
22	Search HILC union list	362	144.017	0.40	0.88%
23	Search IVLS union file	301	182.933	0.61	1.11%
24	Search U of I union list	121	204.467	1.69	1.24%
25	Check other union lists	87	170.033	1.95	1.03%
26	Search ULS/NST	34	74.567	2.19	0.45%
27	* Search OCLC union list	21	55.717	2.65	0.34%
28	Xerox articles	99	651.583	6.58	3.96%
29	* Unpack/sort state delivery	1034	416.483	0.40	2.53%
30	Opening/sorting mail	181	44.400	0.25	0.27%
31	* Sorting slips to bins	(26 bin checks)	45.150		0.27%
32	Unpack/sort route brx	1725	423.167	0.25	2.57%
33	Check in receipts/update	877	1145.483	1.31	6.96%
34	* OCLC file work (general)		278.350		1.69%
35	* Count/pack state delivery	943	519.333	0.55	3.16%
36	Sort route to bins	701	255.733	0.36	1.55%
37	Pack/stamp US mail/UPS	32	99.717	3.12	0.61%
38	* General counts/statistics		143.300		0.87%
39	* Counting cancellations		37.617		0.23%
40	* Monthly stat. report prep.		102.000		0.62%
41	* Miscellaneous filing		308.300		1.87%
42	* Union catalog maintenance		260.883		1.59%
43	* Union catalog, refiling project				0.00%
44	Carding/shelving books	14	17.450	1.25	0.11%
45	* Travel to Bradley		90.217		0.55%
46	Decision-making/discussion		1496.417		9.09%
47	* Overage processing	66	81.300	1.23	0.49%
48	* Meetings (total staff time)		206.000		1.35%
49	* Other		1243.533		7.56%
50	Phone calls (in and out)	1558 queries/replies	963.333		5.85%

Time spent on these 50 activities was recorded by ILL department staff in January, 1982. The starred activities are those not included in the earlier transaction study.

The largest operations in terms of staff time are searching OCLC to print out records and holdings screens (9.6%), discussions among staff members and/or examination of requests to decide further strategy (9.1%), checking in

received materials and updating files (7%) and making or receiving telephone calls (5.8%). The fifty separate activities are combined into more general classes in Table VII-F below.

TABLE VII-F

<u>Activity</u>	<u>Percent of Total Time</u>
Locating and securing loan (books/microfilm) (Steps 2,3,4,5,6,9,10,11,17,20,46,50)	44.07%
Locating and securing loan (photocopies) (Steps 22,23,24,25,26,27,28)	9.01%
Handling books and materials for mail, route, state delivery (Steps 8,12,29,30,32,33,35,36,37,44)	20.33%
Manipulation of forms/records (including OCLC files) (Steps 1,7,13,14,15,16,18,19,21,31,34,38,39,47)	13.13%
Background, department maintenance and administration (Steps 40,41,42,43,45,48,49)	13.44%

This table combines operations from Table VII-E into more general categories of activity. The step numbers refer to those in the earlier table.

Steps used in the worklog study which did not appear in the transaction study account for 28.52% of the department's work. Some of this work may have increased or decreased due to the Project itself. For instance, by the time of the worklog study, most Project libraries were using OCLC to send ILL requests. Since the protocols required the use of the IVLS holdings symbol before any out-of-system libraries were queried, the check of the OCLC pending request file by System staff would have increased. On the other hand, because almost all the libraries that had contributed to the union catalog were now on OCLC, the work maintaining that file was much less.

The work categories in the transaction study were broken down to make sense in terms of a single request. The worklog categories reflect more precisely the batching practices in the department itself. It is, therefore,

not possible to compare the results on most steps in terms of minutes per request. Some steps which are comparable were:

<u>Step</u>	<u>Transaction Study</u>	<u>Worklog Study</u>
Article photocopying	3.88 min/request	6.58 min/request
Search/print OCLC record	2.22	2.60
Check LCS	.68	.82
Search R&R microfilm	4.15	7.14
Produce OCLC request	3.11	3.97
Type ALA request	2.92	3.86
Cancellation	.911	1.48

All of these activities were taking more time in the worklog study (1982) than in the transaction study (1980). One possible explanation for some, but not all, of these differences is that, with more libraries doing their own easy requests, more difficult requests were coming to the System.

Another difference in the results of the two studies is the percent of requests which required particular steps. This could be accurately determined for the transaction study, but can only be estimated in the worklog study. In this second study, since the activity of the department as a whole was studied, specific requests were not tracked. However, a rough idea of the percent of requests requiring a single step can be obtained by taking the total requests/titles handled for each activity and dividing that by the number of paper requests received during the study. Some rough comparisons may indicate changes in departmental activity caused by the Project:

<u>Activity</u>	<u>Transaction Study (1980)</u>	<u>Worklog Study (1982)</u>
OCLC search/print out	55%	40%
LCS check/order	37%	49%
Union catalog check	86%	51%
R&R microfilm check	12%	4%
Bradley check	14%	2.8%
Peoria Public search	12%	19%
OCLC request sent	19%	11%

Fewer searches of OCLC may be due to Project libraries which, if they sent a paper request to the System, would also attach an OCLC print out or notation of OCLC holding libraries as part of the request. The apparently higher rate of LCS checks in 1982 is probably due to checks made in response to requests received from IVLS libraries over the OCLC pending file. In the new protocols, all OCLC requests were referred to the System for a check of LCS and the union catalog. These were not counted as incoming paper requests, however, so the percent of LCS checks relative to paper requests received is misleadingly high.

The same applies to union catalog checks, which means that the decrease in the occurrence of these from 1980 to 1982 is even greater than shown here. By 1982, almost all Project libraries had completed their retrospective conversion of recent (1975-82) publications. Since most union catalog participants were also Project participants, the Union Catalog had become a second line of inquiry, after OCLC. It was used chiefly for items published in 1968-1975.

Microfilm from the collections of Southern Illinois University, Chicago Public and the Illinois State Library became less important simply through age. Current acquisition and increasing amounts of retrospective conversion were available on OCLC. The apparent decline in the use of Bradley resources may be the result of two factors. Perhaps the ever-increasing size of the OCLC database made verification from printed resources at Bradley, such as NUC, less necessary. Also, staffing shortages at IVLS probably lead to this time-consuming step being used as little as possible.

The apparent increase in searches of the Peoria Public collection to pull and check out books may be due to the total retrospective conversion undertaken by that library. OCLC requests, on the other hand, seem to have de-

clined. Since OCLC requests initiated by IVLS always go outside the System, this may indicate that more requests were being filled from inside the IVLS area. Also, by 1982, another major research collection - Western Illinois University Library - was available for direct check out over LCS, so requests to them also bypassed the OCLC ILL subsystem.

Pre-Project Interlibrary Loan Costs

The per request labor costs of interlibrary loan in 1980 can best be determined by adding library staff costs per request to IVLS staff costs per request. The labor costs of operating the ILL department may be prorated on a per request basis using the average monthly labor costs for the whole department multiplied by the percent of staff time spent on activities not recorded by the transaction study - approximately 28.5% according to the worklog study - and divided by the average monthly request rate. The final labor factor is the supervisor's time, since the head of Information Services spent approximately 10% of her time working with the ILL department. Table VII-G below summarizes all the identifiable costs of the ILL operation before Project libraries began using the OCLC interlibrary loan subsystem.

TABLE VII-G
INTERLIBRARY LOAN COSTS
Paper Requests Processed by IVLS

<u>Staff Costs</u>	
<u>Description</u>	<u>Per Request</u>
Library request preparation	\$.77
IVLS staff request processing	\$.85
Library receipt/return	\$.45
IVLS general departmental activities (28.5% of total staff cost)	\$.68
IVLS supervision of department (10% of supervisor's salary)	\$.89
Staff benefits (11% of all staff costs)	<u>\$.40</u>
TOTAL STAFF COSTS	\$4.04

<u>Other Costs</u>		
<u>Description</u>	<u>Monthly</u>	<u>Per Request</u>
ILL paper form	—	\$.05
OCLC charges (\$1.20 times 20.14% of requests)	—	\$.2417
OCLC terminal maintenance	\$ 33.00	\$.0197
OCLC modem fee ¹	\$ 50.00	\$.0298
Printer maintenance	\$ 19.00	\$.0173
Equipment amortization ²	\$ 45.00	\$.0268
LCS telecommunications charges ³	\$231.00	\$.1377
Telephone service charges	\$ 40.26	\$.0240
Long distance charges ⁴	\$130.34	\$.0777
Postage	\$ 21.12	\$.0126
Postal insurance	\$ 6.25	\$.0037
Photocopy charges	\$ 35.00	\$.0209
Printer paper	\$ 10.00	<u>\$.0060</u>
TOTAL NON-STAFF COSTS		\$.6679
TOTAL COST PER REQUEST		\$4.71

All costs are for 1980. Monthly costs are divided by 1677, the average number of requests per month in 1980. All OCLC costs are based on ILLINET charges.

¹ IVLS had two terminals, one modem, so this figure is half the modem fees.

² Ten year amortization on OCLC terminal and printer.

³ The LCS terminal is provided by the State free-of-charge and without maintenance fees to the System. Telecommunications, however, were paid.

⁴ All long distance charges to or from the ILL department line. Libraries charged calls to IVLS on a credit card supplied and paid by IVLS.

The only major cost that is not estimated here is the delivery system - vans, drivers, gas, etc. - that IVLS runs among the libraries. The proportion of this cost that should be attributed to ILL service (as opposed to film

BEST COPY

delivery, reference and other services) would be difficult to determine. Since this service would remain the same regardless of the ILL communications system used it has not been added in either case.

INTERLIBRARY LOAN COSTS - LIBRARY ONLINE REQUESTS

Library Worklog Study - Description

In January of 1981, all Project libraries with in-house terminals were trained in ILL subsystem use. At that time, this included the ten host libraries and two guest libraries which had public access terminals. As other guest libraries got public access terminals, they were also trained. In addition, two guest libraries were trained to use a shared dial access terminal for interlibrary loan. The four partial participants had already been using the subsystem.

By the end of 1981, OCLC libraries in IVLS were sending more than twelve thousand requests online. This heavy use of OCLC by the Project participants shifted some of the ILL costs from the System headquarters to the local libraries. The amount of staff time needed in the libraries, both to send and to respond to requests, increased.

In order to measure the library staff time needed for ILL after the use of the OCLC subsystem began, a worklog study was undertaken in the fall of 1981, after libraries had had time to gain some facility in the new procedures. Each library was asked to record, for four weeks, time spent at the terminal and doing OCLC-related work. Most libraries chose to spread this data gathering over four months, using one week from each month, from September, 1981 to January of 1982. A couple of libraries preferred to do all four weeks of data gathering at once. Twenty-four libraries participated in this study. Some libraries did not have terminals in-house but had arranged

to have their interlibrary loan done by their host library. In this case, the host libraries kept track of terminal activities. All libraries kept track of time spent on ILL-related activities away from the terminals.

Non-terminal operations related to lending were also recorded on worklogs during the four week study. The items included not only actions taken to fill OCLC requests, but also the time needed for processing phone requests (from libraries or System) and ALA paper requests which libraries were receiving because their holdings symbols were on OCLC.

The forms used to collect the data are attached to this report as Appendix F. Timing was done by stopwatches. Staff members were told to start the stopwatch as they began each operation - before a search request was entered on the terminal. The timing was completed when the entire operation was done. In these terms, a new request began when the first search was entered and was completed when the request was sent and/or printed or when the search was abandoned. Thus, initiating a single new request may have involved trying several search keys and/or examining several related records for holdings information, as well as actually preparing the online request form and making any necessary notes.

During data analysis, 1980 level salaries were used so results would be comparable to earlier studies. However, 1981 OCLC charges were used to obtain total costs because they were more typical of OCLC costs during the Project as a whole than the much lower 1980 costs.

Costs of Library Borrowing on OCLC

There were 945 new ILL requests searched in the library worklog study. A little over 14% were not found on the database. These were presumably sent to the System Interlibrary Loan Department for further investigation or returned

to the patron for further information. Of the 86% found on OCLC, 625 or 66% of all titles sought were requested over the ILL subsystem. The remaining 187 were not requested over OCLC. Some libraries preferred to make local requests by telephone rather than over the terminal. Also, if holdings were few and/or remote they may have preferred to send requests to IVLS. Table VII-H below shows the request initiation pattern with staff time and costs involved.

TABLE VII-H

LIBRARY WORKLOG STUDY RESULTS
Online ILL Requests Sent: Time and Salaries

<u>Action</u>	<u>Min./Request</u>	<u>Cost/Request</u>	<u>Salary Level</u>	<u>Percent of Sample</u>
Item found, no OCLC request sent	2.79	\$.267	\$ 5.74/hr.	15.9%
Item found, no OCLC request sent, printout made	2.27	.253	6.69/hr.	3.9%
Item found, OCLC request sent	5.63	.711	7.58/hr.	10.5%
Item found, OCLC request sent, printout made	4.92	.548	6.68/hr.	55.6%
Item not found	2.36	.265	6.74/hr.	14.1%

The total number of new ILL requests recorded in the study was 945. One recorded operation included the total time from initiating the first search to completing terminal work for the item. A "search" therefore could include the use of several OCLC search keys, as well as recording the results.

Finding an item on the database took an average of 2.79 minutes. Finding it and sending a request took about 5.63 minutes. This indicates that once an item is located on the database, the actual request initiation - filling out and producing the online ILL form - takes about 2.84 minutes. The search itself seems to take less time (2.36 minutes rather than 2.79) if it is not successful. Also, as was noted in the cataloging study, using a printer saves time, about 19% of the time needed to search and record the results and 12% of the time needed to search and send a request.

Initiating the request of course automatically involves the library in later updating operations on the terminal. During the study 1,131 such borrower update operations were recorded.

TABLE VII-I
LIBRARY WORKLOG STUDY RESULTS
Borrowing Library Updates

	<u>Minutes</u>	<u>Cost</u>	<u>Salary Rate</u>	<u>Percent</u>
Message file search	1.20	.112	\$5.60/hr.	3.6%
Message file search, printout	1.22	.115	\$5.66/hr.	3.6%
ILL number search	.93	.094	\$6.06/hr.	35.9%
ILL number search, printout	1.72	.147	\$5.13/hr.	36.2%
Other search	1.99	.269	\$8.11/hr.	1.3%
Other search, printout	1.51	.161	\$6.40/hr.	3.6%
Search unspecified	3.43	.346	\$6.05/hr.	16.1%
Search unspecified, printout	4.56	.360	\$4.74/hr.	2.6%
Reply to conditional answer	2.17	.247	\$6.83/hr.	.1%

(N=1131)

This table gives a breakdown of online interlibrary loan activity by libraries acting as borrowers. The breakdown is by the type of search used and whether a printout was made.

The worklog study did not isolate the exact activity, such as receipt, return, or information search, but simply identified operations by the library's role as "borrower" and by the type of search made. The most popular, as well as the fastest way to access the borrowing record was to search by the unique "ILL" number assigned to each transaction. Very few borrowing updates were started from the message file. The most time-consuming operations were those where the operator did not specify on the report sheets the kind of search made.

The average time for a borrower-related activity (other than initiation) was 1.75 minutes at a cost of \$.165. For each new request initiated on OCLC during the study (625) there were 1.81 borrower-related updates. At first this number may seem out of line because when an item is received through an online request, that request should be updated once to indicate receipt and again to indicate return - or at least two updates per request initiated. Some factors that may lower this to an average of 1.81 are expired or unfilled requests, cancelled requests, photocopy requests where only receipt is re-

BEST COPY

corded, and requests where receipt and return updates are done as a single operation. Finally, this study did not track individual requests but rather recorded four weeks worth of terminal work, so exact per-request counts cannot be established. If, however, 1.81 updates per request can be taken as an average, the staff cost of this updating activity is approximately \$.30 per OCLC request initiated.

The online interlibrary loan process in the libraries involved several non-terminal operations. First, a staff member must get the information from the patron, and possibly do some preliminary verification - particularly in guest libraries. (In libraries with public terminals, patrons sometimes located the title themselves and then gave the information to a staff member - perhaps even including the OCLC number.) For those requests sent over the terminal, the library might still keep a paper record of the transaction that would be filed. For those items which are received, some of the pre-OCLC steps would still be followed as well - patron notification, check out, check in and shipping back to the lender. Times and frequencies for these operations were obtained in the transaction study of pre-OCLC operations (see Table VII-C).

The library worklog study suggests three patterns of borrowing which use OCLC. First, the completely online transaction with an OCLC search, initiation and updating as well as other steps outlined above. For other requests, the borrowing library verified the item on OCLC but chose to make the request another way - by phoning a local holding library or by sending a paper request to IVLS headquarters. Finally, items not found on OCLC may have been returned to the patron for further information or sent to IVLS on paper requests. The tables below outline the costs for these three options.

TABLE VII-J
INTERLIBRARY LOAN COSTS
Requests Sent by Libraries on OCLC

<u>Description</u>	<u>Minutes</u>	<u>Cost/Item</u>	<u>Percent of Items</u>	<u>Average Cost</u>
Patron interaction	4.45	\$.380	100.0%	\$.380
OCLC search and request	5.03	\$.574	100.0%	\$.574
OCLC updates (1.81 per request)	3.17	\$.299	100.0%	\$.299
Filing forms	.83	\$.067	94.4%	\$.063
Patron notification	1.80	\$.132	72.8%	\$.096
Check out	1.005	\$.074	70.4%	\$.052
Renewal	3.321	\$.064	1.9%	\$.001
Check in	1.680	\$.119	69.4%	\$.083
Return	.988	\$.069	91.1%	\$.056
OCLC use charges		\$ 1.20	100.0%	\$ 1.20
OCLC annual fees		\$.64	100.0%	\$.64
OCLC terminal amortization		\$.18	100.0%	\$.18
TOTAL COST				\$ 3.624

Salary costs are based on 1980 salaries in order to be comparable to manual studies. Other charges are at 1981 rates. OCLC annual fees reflect the cost to an Illinois library for one terminal and one modem. This cost is prorated by the amount of time in the study used for ILL activities (51%), divided by the average number of ILL searches done on a Project terminal during 1981 (104). Terminal amortization is based on the same allocation of terminal time and on a 10-year amortization of the 1981 terminal cost (\$3,700). Time needed for OCLC terminal operations are averaged for operations with and without a printer.

TABLE VII-K
INTERLIBRARY LOAN COSTS
Requests Searched on OCLC but Sent as Paper Requests to IVLS

<u>Description</u>	<u>Minutes</u>	<u>Cost/Item</u>	<u>Percent of Items</u>	<u>Average Cost</u>
Patron interaction	4.45	\$.380	100.0%	\$.380
OCLC search	2.55	\$.265	100.0%	\$.265
Filing form	.83	\$.067	94.4%	\$.064
Form to IVLS	1.08	\$.089	100.0%	\$.089
IVLS costs (See Table VII-G)		\$ 3.354	100.0%	\$ 3.354
Receipt and file updates	2.54	\$.185	91.1%	\$.150
Patron notification	1.79	\$.132	72.8%	\$.096
Check out	1.00	\$.074	70.4%	\$.052
Renewal	3.32	\$.636	1.9%	\$.012
Check in	1.68	\$.119	69.4%	\$.082
Return of item	.988	\$.069	75.3%	\$.052
OCLC annual fees		\$.64	100.0%	\$.64
OCLC terminal amortization		\$.18	100.0%	\$.18
TOTAL COST				\$ 5.416

Salary costs are based on 1980 salaries in order to be comparable to manual studies. Other charges are at 1981 rates. OCLC annual fees reflect the cost to an Illinois library for one terminal and one modem. This cost is prorated by the amount of time in the study used for ILL activities (51%), divided by the average number of ILL searches done on a Project terminal during 1981 (1047). Terminal amortization is based on the same allocation of terminal time and on a 10-year amortization of the 1981 terminal cost (\$3,700).

¹ Average search time and cost regardless of whether the item was found.

TABLE VII-L

INTERLIBRARY LOAN COSTS
Requests Searched on OCLC and Filled by Telephone Calls

<u>Description</u>	<u>Minutes</u>	<u>Cost/Item</u>	<u>Percent of Items</u>	<u>Average Cost</u>
Patron interaction	4.45	\$.380	100.0%	\$.380
OCLC search ¹	2.69	\$.264	100.0%	\$.264
Telephone calls ²	1.90	\$.172	115.0%	\$.198
Telephone long distance charges ³		\$.078		\$.078
Receipt and file updates	2.54	\$.185	81.1%	\$.150
Patron notification	1.79	\$.132	72.8%	\$.096
Check out	1.00	\$.074	70.4%	\$.052
Renewal	3.32	\$.636	1.9%	\$.012
Check in	1.68	\$.119	69.4%	\$.082
Return of item	.988	\$.069	75.3%	\$.052
OCLC annual fees		\$.64	100.0%	\$.64
OCLC terminal amortization		\$.18	100.0%	\$.18
TOTAL COST				\$ 2.184

Salary costs are based on 1980 salaries in order to be comparable to manual studies. Other charges are at 1981 rates. OCLC annual fees reflect the cost to an Illinois library for one terminal and one modem. This cost is prorated by the amount of time in the study used for ILL activities (51%), divided by the average number of ILL searches done on a Project terminal during 1981 (1047). Terminal amortization is based on the same allocation of terminal time and on a 10-year amortization of the 1981 terminal cost (\$3,700).

¹ Average search time and cost for found items regardless of whether printer was used.

² The transaction study of the IVLS interlibrary loan operations shows that requests filled by phone took an average of 1.15 calls per request.

³ Long distance charges are estimated based on the IVLS headquarters experience. Libraries filling by phone would normally prefer non-toll calls, so this estimate may be high.

The balance of these methods varied from library to library. The library worklog study showed 33.8% of items searched on OCLC did not generate new requests. In the last half of 1981 the System received 2,171 paper requests from Project libraries which also used the OCLC terminal to send 4,245 online requests. At this time about a third of the requests from libraries were being sent to IVLS on paper forms and two thirds directly to other libraries through the terminals. The percentage of online requests varied from less than 1% to 66% in different libraries. Special libraries sent nearly all requests over OCLC. Among the public libraries, the smaller libraries had a tendency to send a lower proportion of requests over OCLC (5 - 31%) while larger libraries used OCLC for anywhere from 21% to 66% of their requests.

No continuous count was kept of requests filled by direct telephone calls between local libraries. However, for one month (May, 1982) libraries were asked to keep a log of borrowing and lending activities which were not on the OCLC ILL subsystem. (See Appendix G for the forms and instructions used.) The results of this brief survey indicate that for every 19 paper requests sent by OCLC libraries, one request was filled by a telephone call by the requesting library. 37% of these phone requests were made to IVLS headquarters, indicating that they were made for rush requests rather than as an effort to contact holding libraries directly.

The proportion of requests sent by each method - over OCLC, by phone or by paper to IVLS - would depend on many factors that vary by library, by the type of request and over time in each library. Some of these may be the budget (how many OCLC use charges can the library afford), staff time, holdings locations, whether the bibliographic record was found, the type of material, the ILL workload at the time, and the urgency of the request.

Costs of Library Lending on OCLC

During the library worklog study, 641 pending requests were answered by the libraries - approximately the same as the number of requests (625) sent over OCLC. Table VII-M below shows the distribution and costs of the initial answers to "pending" requests. Table VII-N shows the other lending-related updates.

TABLE VII-M

LIBRARY WORKLOG STUDY RESULTS
Lender Responses to Pending Requests

<u>Answer</u>	<u>Minutes Per Response</u>	<u>Cost Per Response</u>	<u>Salary Rate</u>	<u>Percent of Pending Requests</u>
Yes	2.94	\$.290	\$5.92/hr.	47.7%
No	.975	\$.072	\$4.43/hr.	32.0%
Conditional	2.06	\$.300	\$8.73/hr.	3.1%
Future Date	1.01	\$.116	\$6.89/hr.	17.2%
Average	1.95	\$.191	\$5.88/hr.	
(N=641)				

TABLE VII-N

LIBRARY WORKLOG STUDY RESULTS
Lending-Related Updates and Other Searches

<u>Type of Search/Printout</u>	<u>Minutes Per Operation</u>	<u>Cost Per Operation</u>	<u>Salary Rate</u>	<u>Percent of Updates</u>
Message file search	1.41	\$.147	\$6.26/hr.	20.3%
Message file search, printout	1.17	\$.111	\$5.69/hr.	20.8%
ILL number search	.88	\$.116	\$7.91/hr.	25.1%
ILL number search, printout	1.48	\$.130	\$5.27/hr.	18.8%
Other search	2.13	\$.306	\$8.62/hr.	4.3%
Other search, printout	1.61	\$.168	\$6.26/hr.	.3%
Search unspecified	2.56	\$.242	\$5.67/hr.	.8%
Search unspecified, printout	<u>1.66</u>	<u>\$.130</u>	<u>\$4.70/hr.</u>	1.5%
Average	1.28	\$.136	\$6.38/hr.	
(N=1036)				

When a request is received over OCLC, a library has five options. It can agree to lend the item and answer "yes" to the request. This response will involve the library in further work (check out and shipping) and future OCLC updates. On the other hand, the library may answer "no" to the request and have no further work to do. If the material is available only under certain conditions such as a charge or in-library use, the potential lender may give a "conditional" answer and await a response by the borrowing library. If the borrowing library accepts the conditions, a "yes" or "no" response may still be made. If the material is not presently in-house but is expected back, the

library may specify a "future date" for the loan request to be retried - if it has not been filled by then. If the request eventually comes back on the retry date, "yes" and "no" are still available as responses. Finally, the library may not respond at all. A request will be held four days, then if no response is received it will be routed to another potential lender.

A "yes" answer to pending requests is the most time-consuming, but not the most expensive since the "conditional" answers required more highly paid staff. "No" answers required less time on several counts. First, it takes much less terminal time to enter the response. Secondly, 37% of "no" answers were begun with a message file request, whereas only 17% of "yes" answers began that way. It seems likely that some of these answers were given when the request was first examined, without checking the library collection. This could occur if the operator knew the item was unavailable or library policy dictated that it not be lent to other libraries.

Nearly half the updates and other uses of the ILL subsystem for lending-related activities were begun through a message file search - which is generally the first encounter a library has with incoming requests. For most libraries a message file search and printout of pending items (for a shelf check) would proceed any response to "pending" requests. Later updates, including many answers to pending requests, would be as likely to start through the unique ILL number search or other search keys. Lending operations begun with an ILL number search seem to be the fastest, particularly if no printout was needed. They were not, however, the least expensive. Message file searches with printouts, probably a routine printing out of pending requests, were done at a low salary rate.

The total staff cost for lending-related terminal operations may be estimated for this group of libraries using the assumption that the balance of

operations found in the study is typical. Taking the "yes" answer as the base, a library will receive 2.09 pending requests for each one answered "yes." For every yes answer there will be .67 "no" answers, .07 "conditional" answers and .36 "future date" answers given. Also, for every item lent ("yes" answer) there will be an average of 3.39 other times the library will access the ILL files related to lending activities - to check the pending file, update records or check on record status. The total terminal-related staff time for these various lending operations is 8.44 minutes at a cost of \$.46. This number multiplied by the number of items lent approximates the cost to Project libraries for terminal operations related to lending. This summary applies only to the balance of operations experienced in these libraries overall during the worklog study. Such a cost estimate must vary greatly for libraries that receive more or fewer requests.

Table VII-0 below combines terminal and non-terminal activity for an ILL request received over the OCLC terminal. It includes all lending-related activities so the final average cost indicates the cost to the library for all lending interactions relative to the number of "yes" answers given.

TABLE VII-0
LIBRARY WORKLOG STUDY RESULTS
Summary of Lending Costs in Libraries

<u>ILL Operation</u>	<u>Minutes</u>	<u>Cost</u>	<u>Percent Per "Yes"</u>	<u>Average Cost</u>
"Yes" answer on OCLC	2.94	\$.290	100.0%	\$.290
"No" answer on OCLC	.975	\$.072	67.0%	\$.048
"Conditional" answer on OCLC	2.06	\$.300	5.5%	\$.020
"Future date" answer on OCLC	1.01	\$.116	35.9%	\$.042
Other lending access/updates	1.28	\$.136	338.6%	\$.460
Checking catalog and shelves	1.38	\$.116	142.2%	\$.165
Checking circulation files	1.56	\$.120	54.9%	\$.066
Updating paper files (check out and check ins, etc.)	1.35	\$.117	268.0%	\$.314
Packing, shipping, placing on route, etc.	1.86	\$.159	95.8%	\$.152
Miscellaneous investigation, overdues, etc.	2.34	\$.228	13.5%	\$.035
TOTAL COST				\$1.512

If the request was received on an ALA form the cost would be approximately \$.91 as opposed to \$1.53 for requests received online. The cost to process a telephone request would be approximately \$.90. These costs do not include postage or mailing supplies for out-of-state fills. Also, preliminary investigation indicated that very few photocopy requests were received by Project Libraries, so no attempt was made to study the cost of filling such requests.

INTERLIBRARY LOAN COSTS - COMPARISON

The total costs of borrowing materials - both for the borrowing library and for IVLS - are compared in Table VII-P.

TABLE VII-P

INTERLIBRARY LOAN BORROWING COSTS Comparison of ILL Methods Studied

<u>Method</u>	<u>Cost to Library Per Request</u>	<u>Cost to System Per Request</u>	<u>Total Cost Per Request</u>	<u>Library Staff Time Per Request</u>
Paper request to IVLS, no online activity at library	\$ 1.36	\$ 3.35	\$ 4.71	\$ 15.18 min.
Online request sent by library	\$ 3.62	-	\$ 3.62	\$ 17.48 min.
Online search by library, paper request sent to System	\$ 2.07	\$ 3.35	\$ 5.42	\$ 14.90 min.
Online search by library, request by telephone	\$ 2.18	-	\$ 2.18	\$ 15.37 min.

All labor costs are based on 1980 salary levels plus 11% for benefits. All OCLC costs are based on 1981 ILLINET charges for OCLC use.

The least expensive way to borrow materials was for the library to use OCLC to locate local holding libraries and then to arrange the loan through a telephone call. Of course, this method could only be used if local holding codes were found and if the library involved accepted telephone requests. The evidence suggests that, although this procedure was popular in some libraries,

it accounted for very little of the total ILL traffic initiated by System libraries.

Aside from telephone loans, the least expensive method overall was online requests sent by the libraries. Unfortunately, this method shifted all costs to the library's budget. About half this cost was a clearly identifiable item on the library's OCLC bills -- the ILL per-request charge. As such it may have represented a stumbling block to libraries doing more of their own requests online.

The System recognized the importance of libraries continuing online ILL use and the resulting alleviation of System costs. After Project support ended in July 1982, IVLS offered libraries a subsidy to repay part of the per-request charge in order to encourage continued local online borrowing. In view of the results of this study, such a subsidy or other support for local online interlibrary loan operations would benefit both the local library and any centralized agency providing interlibrary loan services.

EFFECTS OF THE PROJECT ON RESOURCE SHARING PATTERNS

Interlibrary Loan Requests Sent

During the years of the Project, there were several changes in the resource sharing patterns of IVLS libraries. As was mentioned before, it is impossible to establish whether these changes are entirely due to the local library use of OCLC or to other factors such as the establishment of a state-wide delivery system, which decreased the turnaround time from out-of-System, in-state sources. Even the influence of the OCLC Project itself could be due to at least three factors of the experiment: the use by most libraries of the OCLC ILL subsystem in-house (beginning in 1981); the retrospective conversion

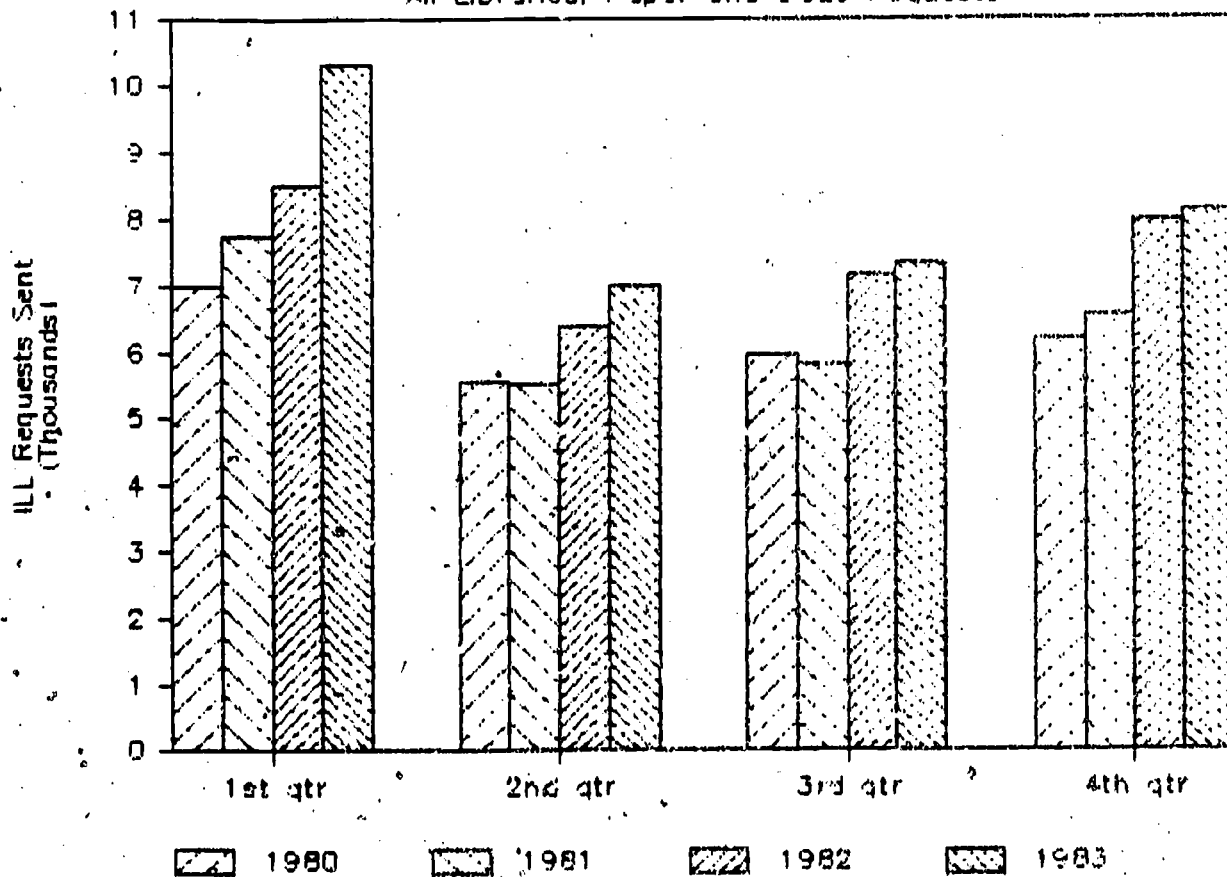
projects which put all holdings on the database for 1975 or later publications in the participating libraries and the installation of public access terminals in most Project libraries, highlighting resource availability for patrons (see Report No. 6). A fourth, intangible factor introduced by the Project was the effect OCLC use had on the library's image for patrons and staff. This visible, online connection with a larger world of libraries and technology may have encouraged people to use more freely services which had always been offered through the System.

In general, the use of interlibrary loan by IVLS libraries increased over the period of the Project. Figure VII-2 below shows that, from 1980 through 1983, except for two quarters, the total recorded interlibrary loans in the System increased every quarter in comparison to the same quarter the previous year. The figure shows all the ILL requests sent to IVLS headquarters on a paper form, and all online requests initiated by libraries. Requests from all seventy-two System libraries are included, not just the 33 Project libraries. Not included are any requests made by phone from library to library. Some of these did take place among Project libraries, but no accurate record of them is available.

FIGURE VII-2

IVLS INTERLIBRARY LOAN ACTIVITY

All Libraries, Paper and OCLC Requests



This graph shows the total ILL requests initiated each quarter in comparison with the same quarter in other years. All paper or online ILL requests from all IVLS libraries are included.

The interlibrary loan requests made by libraries can be broken out in two ways - paper requests versus OCLC requests, and requests from OCLC libraries (regardless of communications media) versus those from non-OCLC libraries. Table VII-Q below gives these breakouts for yearly totals.

TABLE VII-Q

INTERLIBRARY LOAN REQUESTS IN ILLINOIS VALLEY LIBRARY SYSTEM

	1980	1981	1982	1983
All ILL Requests Sent	24,717	25,630	30,037	32,819
<u>PAPER REQUESTS</u>				
From OCLC libraries	16,993	10,187	11,021	13,720
From non-OCLC libraries	2,363	3,252	4,372	4,406
All libraries	19,356	13,439	15,393	18,126
<u>OCLC REQUESTS</u>				
Pre-Project OCLC libraries	4,694	4,592	5,224	6,885
Project libraries	667	7,599	9,420	7,598
All OCLC libraries	5,361	12,191	14,644	14,483
<u>REQUESTS FROM OCLC LIBRARIES</u>				
Paper requests	16,993	10,187	11,021	13,720
OCLC requests	5,361	12,191	14,644	14,483
All requests from OCLC libraries	22,354	22,378	25,665	28,203

This group of tables gives annual totals of ILL requests initiated by the 72 IVLS libraries in several breakdowns. Paper requests are those sent on paper forms to IVLS headquarters and processed there. OCLC libraries include all Project participants (33) plus two other OCLC libraries that did not participate in the Project, but which sent some requests online. Pre-Project OCLC libraries are these two plus four Project partial participants - three academic libraries and one public. Project libraries are the full Project participants. Some of these used OCLC ILL before training in 1981 because staff members already knew the ILL subsystem from earlier jobs. OCLC requests sent from System headquarters itself are not counted since they are the result of paper requests from libraries.

From 1980 to 1981 the total number of interlibrary loan requests generated by System libraries grew by 913 requests, an increase of 3.7%. Most of this increase (889 requests) came from paper request sent to IVLS from non-OCLC libraries. 1981 was the year when most of the OCLC Project participants began using the ILL subsystem, yet that change in methods does not seem to have effected their total ILL use. They did not experience any significant growth, much less match the 38% increase of requests from non-OCLC libraries. 1981 was also the year during which most Project libraries accomplished the retrospective conversion of their recent holdings (1975+) to the OCLC database. This increase in availability of local resources may have cut down on delivery time and increased patron satisfaction and demand, but this factor would have affected interlibrary loan service in all libraries, whether they were on OCLC or not.

BEST COPY

There are two possible, but unverifiable, explanations for the apparent lack of growth in OCLC library interlibrary loan rates. The first is that OCLC libraries, having identified local holdings over OCLC, may have secured the material through a telephone call rather than an online or paper request. Telephone loans are not shown in these statistics. The second possible explanation is the practice of reciprocal borrowing. This policy, shared by all IVLS libraries, insured that library cards from any library would be honored in any other library. Patrons of OCLC libraries, when informed that a title was held by another nearby library, may have gone there themselves rather than use ILL services.

TABLE VII-R
RECIPROCAL BORROWING IN IVLS

<u>Quarter</u>	<u>Number of Reciprocal Loans</u>	<u>Percent Increase Over Previous Year</u>
1980 3rd	21,956	
4th	21,088	
1981 1st	25,167	
2nd	22,087	
3rd	32,245	46.9%
4th	31,983	51.7%
1982 1st	39,141	55.5%
2nd	31,510	42.7%
3rd	31,225	- 3.2%
4th	34,848	9.0%
1983 1st	39,811	1.7%
2nd	35,662	13.2%
3rd	31,226	0.0%
4th	37,098	6.5%

Beginning in July 1980, each IVLS public library reported to the System the number of items checked out directly to patrons of other libraries. These figures are a comparison of those statistics.

Table VII-R above indicates that there was a large increase in reciprocal borrowing during the latter half of 1981 and the beginning of 1982. Unfortunately, earlier statistics are not available to show whether this increase was a normal rise that eventually reached a plateau or whether it was an unusual rate of change. It is not wholly unreasonable, however, to attribute at least part of this increase to increased patron knowledge of holdings in libraries outside their own and awareness of their library's place in a network.

The introduction of online ILL requests in January, 1981, affected the OCLC libraries in another way. Although the number of recorded requests they generated remained virtually the same, the method shifted from paper requests to online requests. All of the growth in online requests in 1981 came from the new OCLC libraries rather than those which had been using OCLC (and online ILL) before the Project. Over the year, online requests accounted for 54% of requests sent by OCLC libraries.

During 1982, Project libraries finished the retrospective conversion projects. In July of 1982, Project support of OCLC use ended, and six small and one medium-sized public libraries dropped OCLC membership. In addition, the largest public library, although it continued to use OCLC, did not send ILL requests online after June, 1982.

The number of ILL requests in the System grew by 4,407 in 1982, an increase of 17.2%. Despite the cessation of Project support in mid-1982, 75% of this increase came from OCLC libraries, and 75% of these additional 3,287 requests (2,453) were sent online, a 20% increase over their online requests for the previous year. Paper requests also grew during 1982, 8% for OCLC libraries and 34% for non-OCLC libraries. In terms of growth rate, however, the non-OCLC libraries once again outstripped their automated neighbors by increasing ILL requests by 34% (1,120 requests) compared to the 15% (3,287 requests) increase by OCLC libraries. Once again, reciprocal borrowing and telephone borrowing may account for some of this apparent difference. Another factor that increased non-OCLC library interlibrary loan activity was the admission to the System at the end of 1980 and the beginning of 1981 of 10 new school libraries, only two of which joined the Project. Non-OCLC library request increases in 1981 owe a lot to these new school system members, but the 1982 increase came chiefly from public libraries, as shown below:

Non-OCLC Library ILL Requests

	<u>1980</u>	<u>1981</u>	<u>1980-1981</u> <u>Difference</u>	<u>1982</u>	<u>1981-1982</u> <u>Difference</u>	<u>1983</u>	<u>1982-1983</u> <u>Difference</u>
Schools	205	941	+ 736	1,358	+ 417	1,383	+ 25
Others	<u>2,158</u>	<u>2,311</u>	<u>+ 153</u>	<u>3,014</u>	<u>+ 703</u>	<u>3,023</u>	<u>+ 9</u>
Total	2,363	3,252	+ 889	4,372	+1,120	4,406	+ 34

In 1983, however, there was very little growth in ILL requests from non-OCLC libraries of any type. In total requests generated in the IVLS area, there was a 9.3% increase in 1983 over 1982 (2,782 requests). Virtually all of this came from OCLC libraries which had a 9.9% increase in interlibrary loans. The method used, however, had shifted back slightly to paper requests - the number of online requests initiated actually declined, and all the growth was in paper requests. This was the first full year of libraries paying all their own OCLC costs, so the need to save money by avoiding OCLC ILL charges would have its full effect. In fact, the OCLC pre-Project libraries, which had always paid their own OCLC bills, increased the number of online requests in 1983.

The month-to-month change in ILL figures is shown in the three graphs below. These numbers show the same general pattern of growth as the annual statistics.

FIGURE VII-3

PAPER ILL REQUESTS SENT TO IMLS
From OCLC and Non-OCLC Libraries

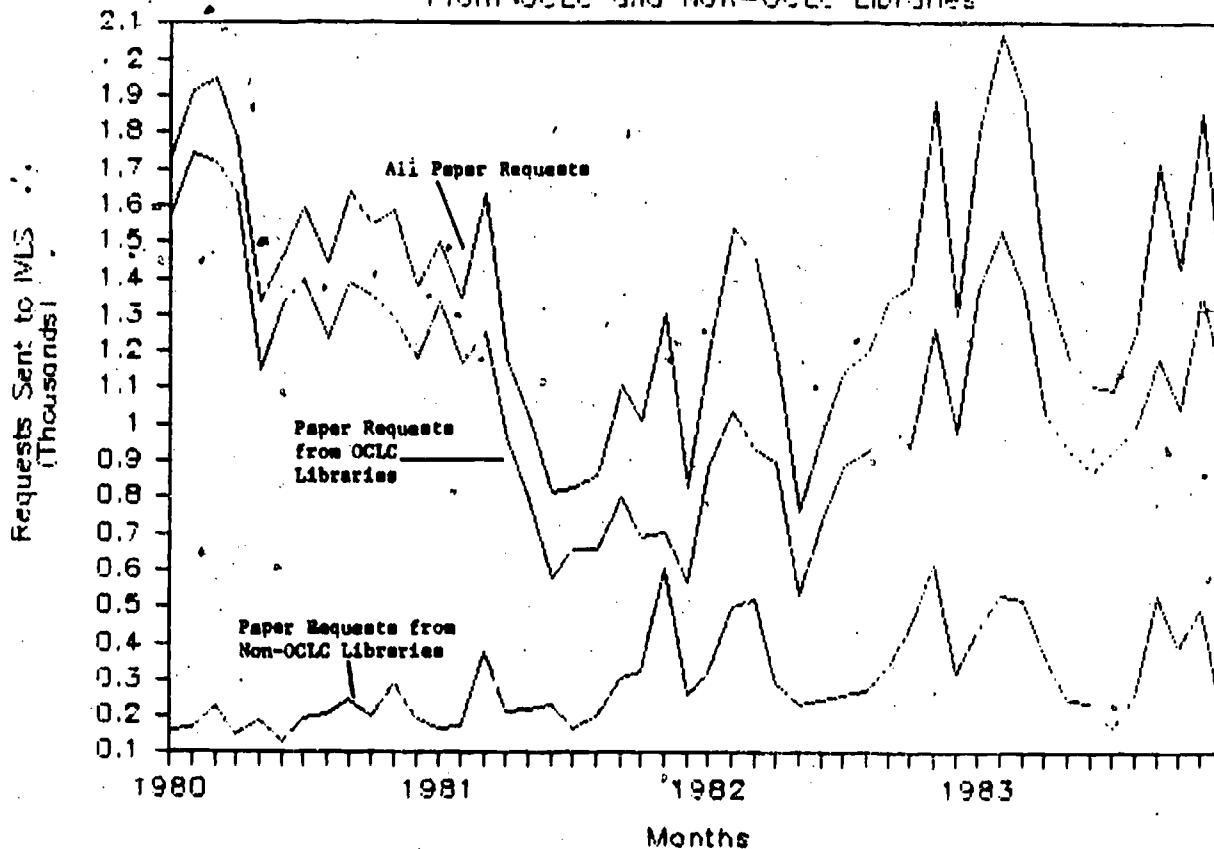


FIGURE VII-4

ILL REQUESTS SENT ONLINE
Project and Pre-Project OCLC Libraries

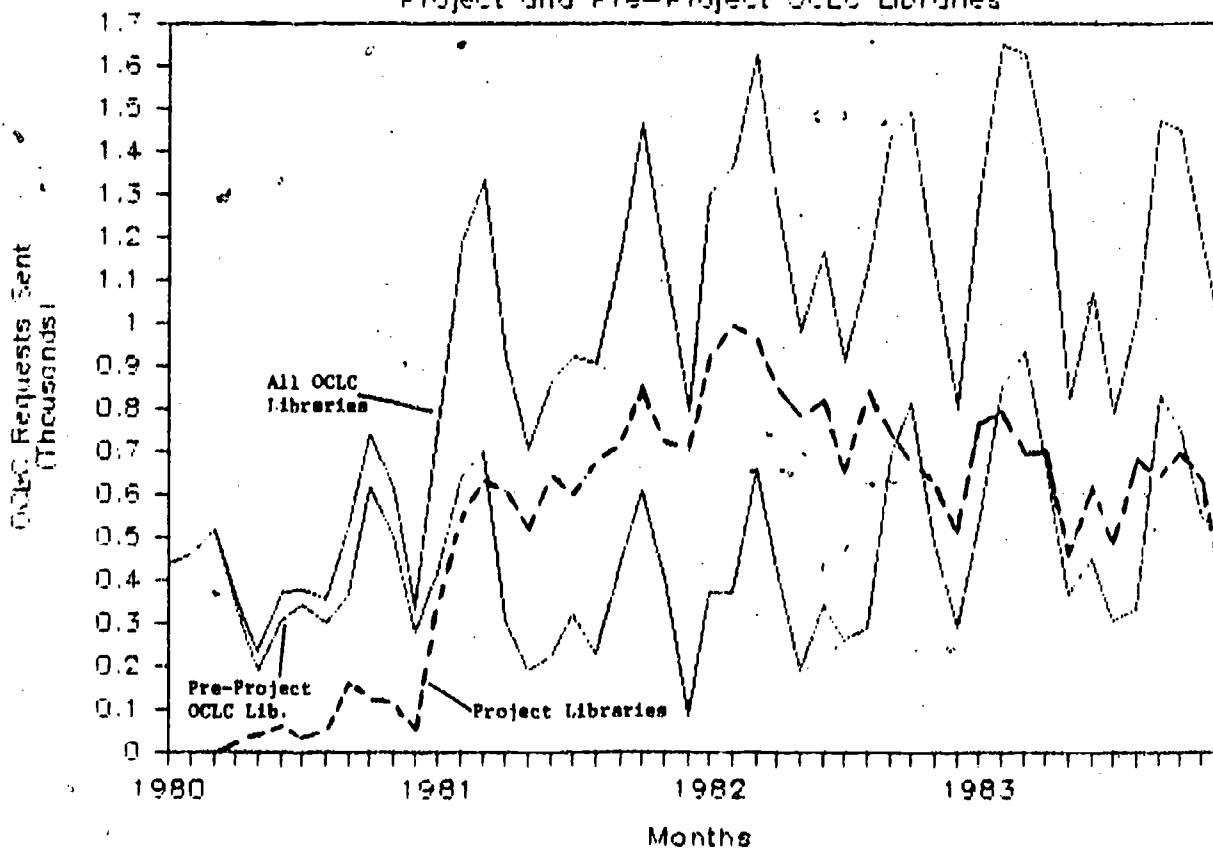
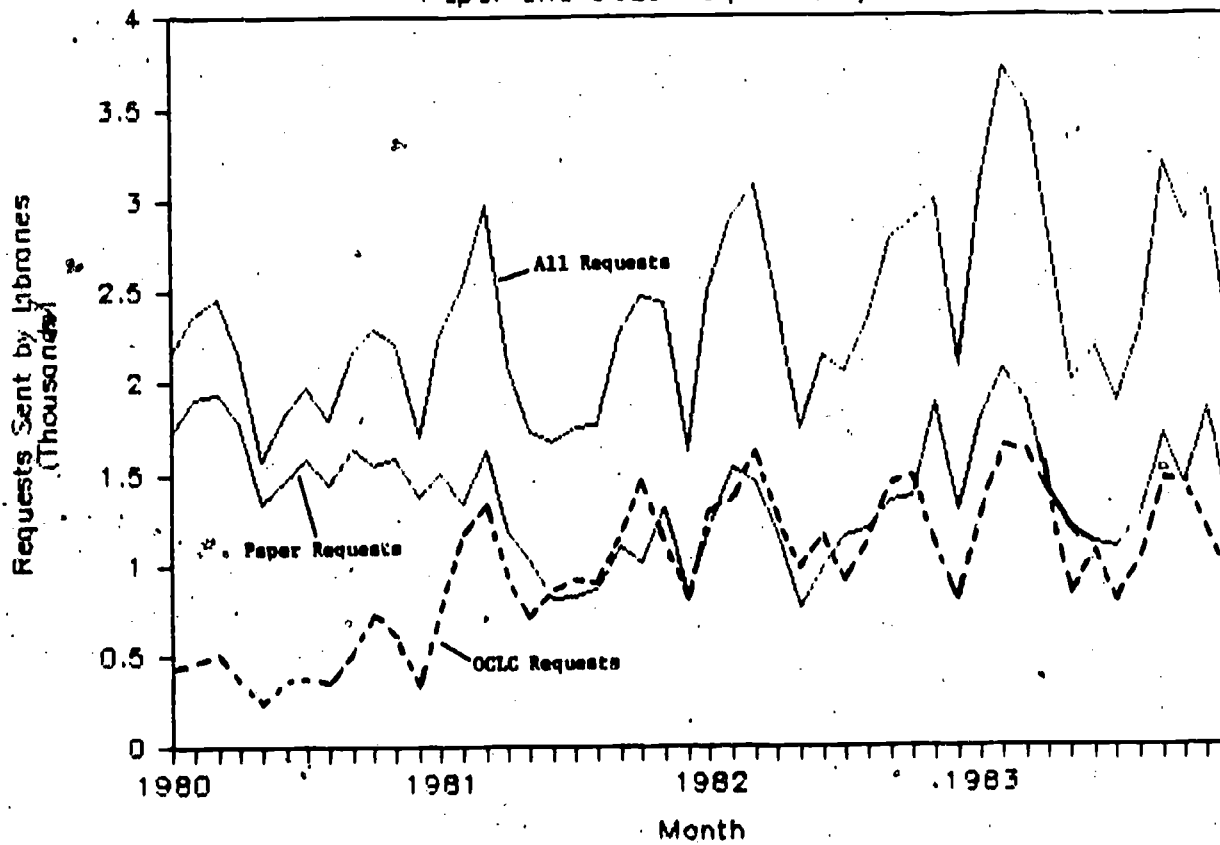


FIGURE VII-5

INTERLIBRARY LOAN ACTIVITY

Paper and OCLC Requests, by Month



The monthly total of paper and online requests from all System libraries from 1980 to 1983 was almost always higher than for the same month in the previous year. Only 7 months showed a decrease, five of them summer months. Paper requests on the whole were down every month in 1981 when compared with the same month in 1980. Paper requests from non-OCLC libraries, however, were up every month except July and August and were especially high in March through June, October and November. In November 1981 there were 603 requests from non-OCLC libraries as compared with 291 the previous year.

In 1982 monthly totals for paper requests were up each month (compared to 1981) except January and March-May. For non-OCLC libraries, every month showed an increase, with the greatest increases coming in February and March, continuing the trend from the end of 1981. Increases for non-OCLC libraries

continued through May of 1983 after which every month except September showed a slight decrease. During the same 1982-83 period the total of paper requests from all libraries increased in 17 of the 24 months.

The workload to the ILL department at System headquarters was temporarily lowered by the use of online interlibrary loan in the libraries, but only when all Project participants were subsidized for that use. Even before the subsidy tapered off in July 1982, paper requests began to increase again. In 1983, despite heavy use of the online system, total paper requests were only slightly less than they had been in 1980; in fact, for four months in 1984 the paper requests were higher than for the same months in 1980.

Month-by-month online ILL statistics for Project libraries show a steady increase in online ILL use after the initial jump when it was introduced in January 1981. Use does not fall off in comparison to the previous year until October 1982, although full funding stopped in July 1982. From then on online ILL, although it continued to be high, is less than the same month the previous year except for October and November of 1983 which show very slight increases.

Changing Patterns of ILL Activity

During the Project, we tried to examine other factors besides the number of ILL requests initiated and the methods used to send them. The transaction study of manual interlibrary loan showed some patterns of requests and fills. In addition, samples were taken of requests sent by the two major methods - paper requests sent to IVLS headquarters and printouts of online ILL requests initiated by Project libraries.

Results from the Transaction Study (Fall 1980)

This study, besides isolating costs, suggested some patterns of inter-library loan activity in the System libraries. The fill rate for the whole sample was 88.8% (366 items) by the time the study ended approximately 200 days after it began. This is the same as the fill rate on all requests processed at the System in 1980. Included in the 11.2% not filled are some that were cancelled by the libraries rather than unfillable at IVLS. The type of material requested broke down as:

Books/monographs	90.1% of requests (87.9% filled)
Periodical articles	7.2% of requests (100% filled)
Microfilm (generally genealogy)	2.7% of requests (93.1% filled)

Two time periods were examined in this study - the time for request forms to reach the System from the libraries and the time between System request receipt and library receipt of the item.

TABLE VII-5
TRANSACTION STUDY RESULTS
Days for ALL Request Forms to Reach System

<u>Days Elapsed</u>	<u>Cumulative % Received</u>
0	.7%
1	14.6%
2	52.7%
3	68.9%
4	85.3%
5	94.8%

(N=402)

The days elapsed is the difference between the date the request is filled out at the library and received at the System, including weekends and holidays. In a few cases, requests were phoned to the System.

BEST COPY

TABLE VII-T

TRANSACTION STUDY RESULTS
Days for ILL Requests to be Filled After Receipt at System

<u>Days Elapsed</u>	<u>Cumulative % Filled</u>
2	12.4%
4	31.5%
6	51.2%
8	63.1%
10	65.8%
12	67.4%
16	75.7%
20	81.7%
30	90.7%

(N=330)

The days elapsed is the difference between the date IVLS received the ILL request form and the date the library received the item, including weekends and holidays. Only filled requests with both dates available are considered here.

The chief factor in the first time period is the frequency of pick-up at each library by the System delivery van. This varied from daily delivery for larger libraries to twice a week for the smaller ones.

Factors in the time needed for items to arrive in libraries are the source of the fill and the methods used to obtain the item. If the first steps in the IVLS procedures are successful, not only is time saved at headquarters, but the request is filled locally so document delivery is speedier.

TABLE VII-U

TRANSACTION STUDY RESULTS
Sources of Material and Turnaround Time

	<u>Percent of Fills</u>	<u>Average Turnaround</u>
<u>Sources in IVLS</u>		
IVLS library (contacted by phone)	37.3%	6.6 days
IVLS headquarters collections	10.1%	15.2 days
Route list to IVLS libraries	8.7%	17.1 days
Bradley University Library	8.1%	4.2 days
Purchase by IVLS	3.4%	39.6 days
Peoria Public Library	1.7%	14.6 days
All IVLS Sources	69.3%	10.6 days
<u>Sources Outside IVLS</u>		
OCLC ILL request	15.4%	18.6 days
University of Illinois (LCS)	8.9%	9.8 days
ALA paper request	5.0%	47.6 days
Second OCLC ILL request	1.4%	31.2 days
All non-IVLS sources	30.7%	19.6 days

(N=357)

These figures are from filled requests only where the source of the material was clearly indicated on the transaction form.

Locating holdings and contacting IVLS libraries by phone is clearly the most frequent and one of the fastest methods. IVLS headquarter's collections are less accessible because many items are constantly on rotation to libraries and must be tracked down. Lists of needed titles routed to the libraries are slow because they are batched and responses from libraries are slowed by the delivery time. The long turnaround for purchase, however, may not be normal. One of the 13 items obtained in this way was subject to unusual delays, according to the staff. Use of the collection of the largest area library is small and slow chiefly because, in order to keep the burden on this collection to a minimum, this option is the last in-System search used by System staff.

Study of IVLS Paper Requests (1978-1982)

The Illinois Valley Library System retained files of all paper requests processed by the headquarters staff. The requests were kept by quarter according to the date they were filled or cancelled. For the first quarter of 1978, through the second quarter of 1982, we pulled a random sample of 100 requests from each quarter. The following information was recorded from each form:

- Whether the request was RUSH
- Type of material
- Publication date
- Date request was initiated by library
- Date request was received at IVLS
- Date filled or cancelled
- Borrowing library (non-participants in the Project were grouped together as "other")
- Borrowing library type
- Number of libraries/sources queried
- Request status (filled, cancelled, expired, etc.)
- Lending library (Project libraries and major state sources were noted specifically, others in general categories)
- Lending library type
- Lending library location
- Successful method for filled requests (e.g., OCLC request, Telex, ALA form)
- Unsuccessful methods tried

The coded sheets were keyed into a computer at Bradley University and analyzed using the Statistical Package for the Social Sciences. The general characteristics of the sample are given below. More detailed reports of the findings will be discussed later.

Sample size (N)	1799
Rush requests	12% of sample
Type of material	
Adult books	74.7%
Photocopies	12.9%
Juvenile books	5.3%
Microfilm	5.1%
Phono records	1.3%
Government documents	.4%
Publication date	
Unknown	12.5%
Pre-1900	4.3%
1900-1950	7.6%
1951-1960	4.6%
1961-1970	12.8%
1971-1975	18.6%
1976-1980	36.5%
1981-1982	3.0%
Borrowing library	
Project libraries	83.9%
Non-Project libraries	16.1%
Borrowing library type	
Public	85.2%
School	4.8%
Special	4.4%
Academic	3.8%
System Staff	1.7%
Status of request	
Filled	85.4%
Reserved (hold placed on item in an IVLS library)	3.7%
Unfilled (item could not be located/ obtained)	7.7%
Cancelled (request cancelled by li- brary or IVLS)	1.6%
Expired (item not obtained before "need before" date)	1.1%

Lending library	
IVLS/OCLC libraries	45.7%
Unspecified non-IVLS libraries	16.6%
Could not be determined	11.2%
University of Illinois	8.8%
Other state resource libraries	8.0%
IVLS headquarters collection	6.8%
IVLS non-OCLC libraries	2.9%
Lending library type	
Public library	39.7%
Academic library	29.9%
Illinois system	10.1%
Other	20.3%
Lending library location	
IVLS	54.7%
Illinois R & R Centers	16.8%
Other Illinois	10.2%
Out-of-state	6.4%
Successful method used	
Telephone request to IVLS library	45.0%
Telex	13.3%
OCLC	10.1%
Route list to IVLS libraries	7.6%
Other	24.0%

Later in the report these figures will be examined more closely, particularly in relation to the online ILL printouts and for evidence of change over time.

Study of OCLC Interlibrary Loan Requests (1981-1982)

After Project participants were trained on the ILL subsystem in January, 1981, they were requested to make a printout of each request either sent or filled and send these to the Project office. The printout was made at the point where the ILL transaction was most complete - that is, either the lent item was received back or the borrowed item was returned to the lending library. If the library did not have a printer, the staff was asked to fill out a paper form with the necessary information instead.

The printouts were arranged by the date a request was initiated and a random sample of 100 requests were pulled from each month from January, 1981 through May, 1982. The following information was obtained from each sampled request:

Borrowing library
 Request initiation date
 Need Before date
 Received date
 Lending library
 Due date
 Publication date
 Lending charges
 Returned date
 Borrowing library type
 Borrowing library location
 Whether the request was sent by a system on behalf of a library
 Lending library type
 Lending library location
 Whether the item was obtained directly from the lender or through a system
 Whether a renewal was requested or granted
 Type of material
 Request status (filled, cancelled, etc.)

As a first step for analysis, the requests were divided into two overlapping categories - requests with an IVLS borrowing library and requests with an IVLS lending library. Within these two categories, different variables were examined. The general characteristics of the sample that included all IVLS library borrowing are given below. The IVLS lending requests will be covered in a later section.

Sample of Requests Initiated by IVLS/OCLC Libraries

Sample size	1391
Borrowing library	
Medium-sized public (5,000-50,000 pop.)	55.9%
Small public (0-5,000 pop.)	22.0%
Special	9.5%
Large public (50,000+ pop.)	6.9%
Academic	3.9%
School	1.8%

Lending library	
Medium IVLS/OCLC public library	28.0%
Non-IVLS other libraries	23.8%
University of Illinois Library	9.7%
Bradley University Library	8.3%
Other IVLS/OCLC academic libraries	6.8%
Small IVLS/OCLC public libraries	6.5%
Other state R & R Centers	5.7%
IVLS headquarters collection	2.7%
Peoria Public Library	2.3%
Non-OCLC IVLS libraries	1.1%
Special libraries	.9%
School libraries	.4%
Publication date	
Unknown	7.5%
Pre-1900	.6%
1900-1949	4.1%
1950-1959	4.2%
1960-1969	11.8%
1970-1974	13.4%
1975-1980	46.9%
1981-1982	24.8%
Lending charge	
No charge	98.9%
Lending library type	
Academic	40.9%
Public	44.8%
School	.5%
Special	1.9%
System	6.6%
Other/unknown	5.3%
Lending library location	
IVLS	59.2%
Illinois R & R Centers	16.2%
Other Illinois	15.5%
Out-of-state	8.6%
Unknown	.5%
Position of lending library in string	
Average position = 1.8	
Type of material	
Book	94.1%
Photocopy	5.8%
Other	.1%
Status	
Filled	94.7%
Unfilled	4.0%
Cancelled	.6%
Other/unknown	.4%
Expired	.3%

Age of item requested (request year minus publication year)

0	8.5%
1	15.9%
2	10.0%
3	8.6%
4	8.1%
5	5.1%
6-10	17.5%
11+	26.3%

Fill Rates

Increased use of ILL services by library patrons could be the result of increased awareness of its availability and a new image of the library as part of an extended network of resources. Sustaining and building interlibrary loan use, however, must also depend on good service as shown by high fill rates and quick turnaround time.

Over the years preceding and during the Project, the fill rate for paper requests sent to IVLS did not show any definite improvement or deterioration. The figures below include all paper requests sent to the System during this period, not just the sampled requests.

BEST COPY

TABLE VII-V
 FILL RATES
 IVLS Paper Requests by Quarter

Quarter	Fill Rate	Sources for Fills		Illinois ²	Out-of-State
		IVLS	R & R ¹		
1979 Jan-March	N/A	59.2%	14.3%	N/A	N/A
1979 April-June	N/A	56.5%	21.9%	N/A	N/A
1979 July-Sept	88.6%	N/A	N/A	N/A	N/A
1979 Oct-Dec	88.9%	55.4%	22.2%	N/A	N/A
1980 Jan-March	90.0%	55.9%	22.0%	N/A	N/A
1980 April-June	87.0%	52.4%	19.5%	N/A	N/A
1980 July-Sept	86.7%	66.0%	19.9%	9.1%	5.0%
1980 Oct-Dec	87.1%	64.7%	19.9%	9.5%	5.9%
1981 Jan-March	90.7%	62.6%	18.6%	10.1%	3.6%
1981 April-June	82.6%	60.6%	16.5%	10.9%	12.0%
1981 July-Sept	87.7%	58.1%	22.0%	11.9%	7.9%
1981 Oct-Dec	89.5%	59.0%	22.7%	11.4%	6.9%
1982 Jan-March	89.4%	60.1%	21.6%	10.6%	7.7%
1982 April-June	86.8%	56.0%	23.1%	11.0%	9.9%
1982 July-Sept	88.2%	57.1%	22.0%	11.7%	9.2%
1982 Oct-Dec	90.6%	62.0%	18.7%	10.1%	9.1%
1983 Jan-March	89.5%	60.4%	20.6%	12.1%	6.8%
1983 April-June	86.7%	50.3%	18.7%	20.6%	10.4%
1983 July-Sept	90.8%	53.4%	20.0%	17.0%	9.7%
1983 Oct-Dec	88.9%	55.1%	21.2%	15.4%	8.3%

This table is based on the total IVLS headquarters interlibrary loan statistics as reported to the Board. Over the years the report form has varied, so relevant figures are not always available. Fill rates are calculated by the number of requests resolved in the time period (either filled or cancelled). Pending requests are not included.

Statistics for July 1980 through June 1981 did not specify the geographic source for genealogical/microfilm materials. These requests have, therefore, not been included in figuring either the fill rate or the fill source. After July 1981 such materials were included in the general count and have, therefore, been included in the figures.

¹ R & R refers to special Reference and Research Centers in the state of Illinois which are used as prime sources for filling ILL requests.

² This column refers to Illinois libraries excluding the IVLS area and the R & R Centers.

The only clear pattern in fill rates is that it always dips in the April-June quarter. In this same quarter, the percent of items obtained from IVLS libraries also goes down. This most likely reflects the term-paper-related requests that libraries get at this time which are more difficult to fill and require more specialized resources. Also, at the end of the school year in June, any pending requests for school libraries are cancelled and therefore count as unfilled.

One of the premises of the Project was that inputting a large number of local holdings symbols to a shared database would increase the number of requests filled locally. As far as requests processed by IVLS are concerned, this does not seem to hold true - the percent of fills from IVLS libraries did not clearly increase over the time of the Project. (The increase from July 1980 to June 1981 probably occurred because genealogy requests, which are generally filled out-of-System, could not be counted in.) If anything, fills from the other three sources showed a gradual increase.

The reason for this unexpected stability in interlibrary loan sources may be the decisions made in the OCLC libraries about which requests to do themselves and which to send to the System. One of the larger public libraries, for instance, had a policy that they would not lend or borrow out-of-state. Items with no Illinois locations were therefore sent to IVLS which would then request them from non-Illinois libraries. Another possible explanation is that patrons at OCLC libraries may have used their reciprocal borrowing privileges to go to other local holding libraries themselves to obtain material once it was located through a terminal. The reciprocal borrowing statistics in Table VII-R indicate that this was an important part of local resource sharing that may have been greatly increased by the Project.

The sampling of OCLC ILL printouts for IVLS libraries as borrowers shows a higher fill rate - 94.7% - than IVLS headquarters. Since IVLS used the same resource as the libraries (OCLC) along with additional sources, this higher rate of fills is almost certainly because any items that could not be located on the terminal were sent to IVLS and therefore would not show up in the printout study. In fact, the stable fill rate at the System was maintained despite the conditions created by the Project where many of the heaviest ILL users were doing easy requests themselves and sending more difficult requests and overload to headquarters.

The high fill rate with online ILL in the libraries, whatever its source, would have been an important factor in staff and patron satisfaction. Because of the high participation of public libraries in the Project and in retrospective conversion (the two largest did complete recon projects), one would expect the fill rate for publics to be highest. However, the highest fill rate was for special libraries (99.2%) which had expected to have the most trouble finding technical publications. Academic (98.1%) and school libraries (95.8%) also had higher fill rates than the public libraries (94%).

The high fills for special and academic are probably because of the high participation of academic libraries in OCLC nationwide. Also, the 80 photocopy requests in the sample had a higher fill rate than books and most of these requests were for special and academic libraries.

The lower fill rate for public libraries may be explained by an examination of fill rates by publication dates. These rates run from 80% to 100% for material published before 1975. From 1975 to 1980, the period covered by the Project retrospective conversion, they start at 92.5% for 1975, rise to 97.9% for 1977 then fall back to 93.4% for 1980. In the two most recent years, the effect of popularity is more strongly felt and fill rates fall to 85% (1981) and 75% (1982) despite the fact that all currently published materials held by the Project libraries were in the database. Thus the relatively lower fill rates for public libraries probably is attributable to the high number of requests they sent for new and popular materials already circulating to patrons of the owning libraries, rather than to a lack of holdings in the database.

Fill Method

The ILL department of IVLS experienced a series of changes in the methods used for obtaining materials - the introduction of OCLC and the Project themselves were only two of these. The table and graph below illustrate these changes over time, showing how various methods were adopted, used more or less heavily to fill requests and then tapered off as newer methods superseded them. The "phone" method itself involved at least two different technologies. At first libraries in IVLS were called because their holdings were in a union catalog or the IVLS staff member knew from experience that a particular library was likely to have an item. After the introduction of OCLC, some were called because their holdings were online, but until the Project most local holdings were still located through the union catalog. After the Project started and particularly after recon projects were well underway OCLC became a major source and telephone fills increased. Thus, although the Project did not increase the percent of requests filled locally, it decreased the time required to do so. It may also have decreased the cost and staff time since filling by phone calls was quicker and more efficient both at IVLS and in the libraries than using the route list.

TABLE VII-W
METHODS USED TO FILL ILL REQUESTS AT IVLS
Percent of Fills From Each Method

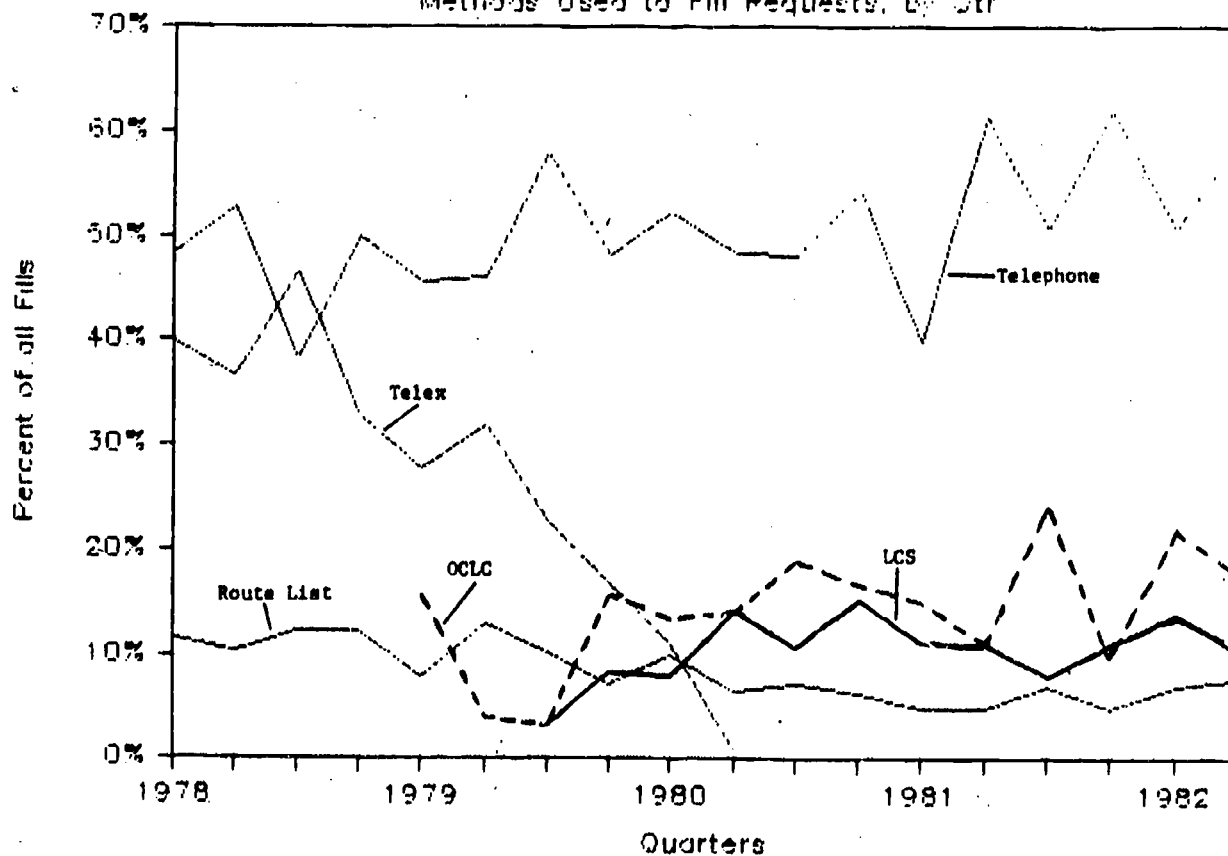
Quarter	Telex	Telephone	Route List	ALA Paper	Purchase	OCLC	LCS	Other	(N=)
1978 1st	40.0%	48.4%	11.6%	-	-	-	-	-	95
2nd	36.8%	52.6%	10.5%	-	-	-	-	-	76
3rd	46.6%	38.4%	12.3%	2.7%	-	-	-	-	73
4th	32.7%	50.0%	12.2%	5.1%	-	-	-	-	98
1979 1st	27.8%	45.6%	7.8%	1.1%	2.2%	15.6%	-	-	90
2nd	32.0%	46.0%	13.0%	1.0%	4.0%	4.0%	-	-	100
3rd	22.7%	58.0%	10.2%	-	2.3%	3.4%	3.4%	-	88
4th	16.9%	48.2%	7.2%	1.2%	2.4%	15.7%	8.4%	-	83
1980 1st	11.1%	52.2%	10.0%	-	5.6%	13.3%	7.8%	1.3%	90
2nd	1.1%	48.4%	6.5%	10.8%	5.4%	14.0%	10.0%	5.0%	93
3rd	-	48.2%	7.1%	12.9%	2.4%	18.8%	10.6%	-	85
4th	-	54.4%	6.3%	3.8%	2.5%	16.5%	15.2%	-	79
1981 1st	-	40.0%	5.0%	20.0%	4.0%	15.0%	11.0%	-	100
2nd	-	61.4%	4.8%	12.0%	-	10.3%	10.8%	-	83
3rd	-	50.6%	6.9%	6.9%	-	24.1%	8.0%	-	97
4th	-	62.2%	4.9%	8.5%	-	9.8%	11.0%	3.7%	82
1982 1st	-	50.6%	6.9%	5.7%	-	21.3%	13.8%	-	87
2nd	-	59.0%	7.7%	5.1%	-	17.3%	10.3%	-	78

This table and the graph below illustrate the different methods used to fill requests received at IVLS. "Telephone" fills were made by calling IVLS libraries whose holdings were in the union catalog or, later, on OCLC. The "Route List" was a list of needed books which was sent regularly to all IVLS libraries. ALA forms were used chiefly for genealogy and microfilm requests. LCS is an online circulation system used by the University of Illinois and several other Illinois academic libraries. A terminal at IVLS was hooked into this system.

FIGURE VII-6

IVLS PAPER REQUESTS — FILL METHODS

Methods Used to Fill Requests, by Qtr



These figures reflect only the IVLS headquarters' methods. The actual use of OCLC to fill requests in the area was, of course, a much higher percent after the introduction of online ILL in Project libraries in January, 1981.

Fill time

Besides the overall success rate, the time needed to fill requests may also be important to both patron and staff satisfaction. This is certainly true in academic, special and school libraries and sometimes true in public libraries. On the other hand, some public libraries staff members felt that cutting turnaround time by a few days did not make much difference in most cases. Often the patron would come to the library on a set day of the week so that, as long as the item arrived in time for one of the patron's weekly visits, it was felt to be quick enough.

The transaction study reported earlier showed that, for the group of transactions studied in late 1980, the average time needed at IVLS to fill a request was 13.36 days. The average turnaround as seen by the libraries was 16.2 days. The turnaround in library terms was affected by the delivery van schedule - the number of days per week the library got delivery and so could send in request slips and receive materials. In the comparisons of turnaround time below this delivery factor is included. All calculations of elapsed time include weekends and holidays.

The sample study of IVLS paper requests also gave turnaround times on filled requests as shown in Table VII-X below.

TABLE VII-X

TURNAROUND TIME FOR PAPER REQUESTS
By Quarter

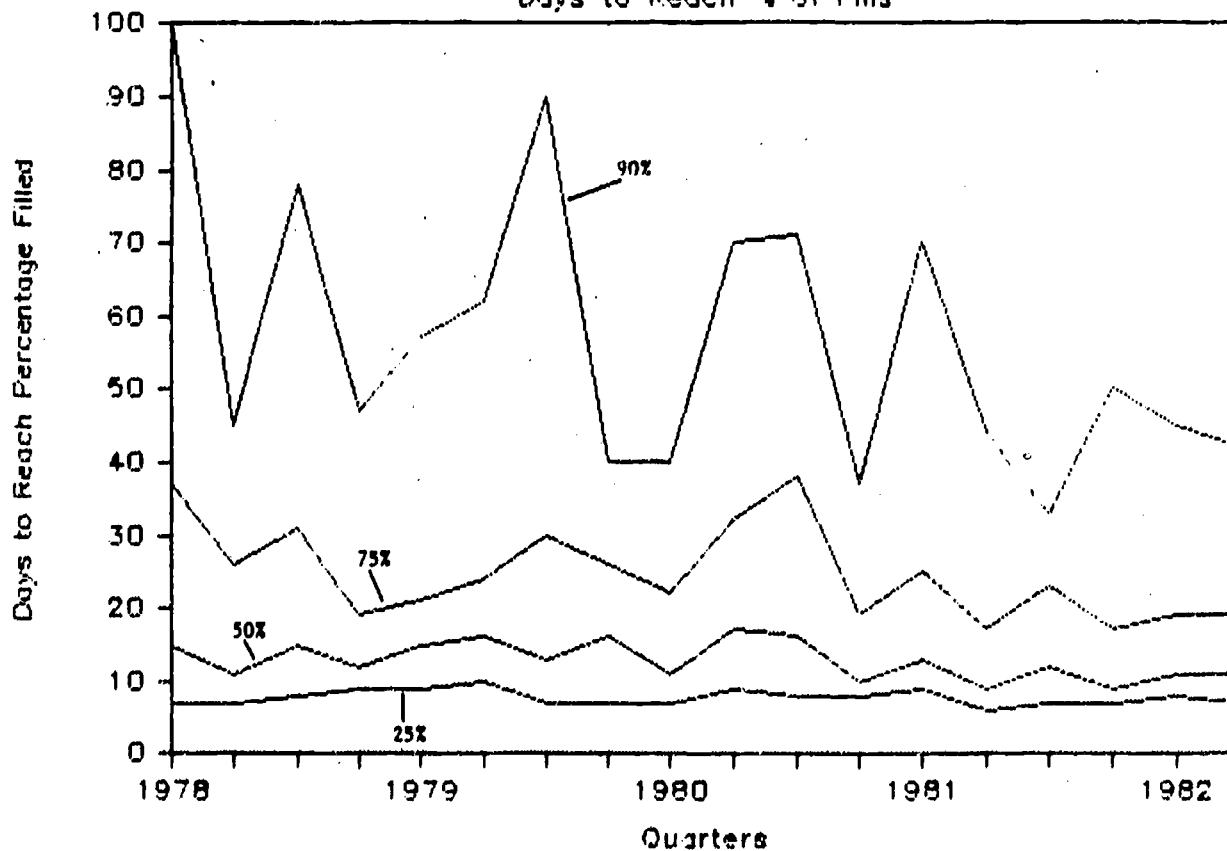
Quarter	Days to Receive				(N =)
	25% of Fills	50% of Fills	75% of Fills	90% of Fills	
1978 1st	7	15	37	100	91
2nd	7	11	26	45	73
3rd	8	15	31	78	70
4th	9	12	19	47	97
1979 1st	9	15	21	57	89
2nd	10	16	24	62	93
3rd	7	13	30	90	84
4th	7	16	26	40	30
1980 1st	7	11	22	40	87
2nd	9	17	32	70	88
3rd	8	16	38	71	33
4th	8	10	19	37	78
1981 1st	9	13	25	70	97
2nd	6	9	17	44	78
3rd	7	12	23	33	84
4th	7	9	17	50	90
1982 1st	8	11	19	45	88
2nd	7	11	19	42	77
Range	6-10	9-16	17-37	33-100	

This table shows the number of days that elapsed after the patron's request before the designated percentage of requested items reached the library. The dates of the patron's request and of the completion of work at IVLS were obtained from the paper ILL form. The date of item delivery at the library was obtained by adding to this the average van delivery time for the individual library. All days are counted, not just weekdays.

FIGURE VII-7

PAPER REQUEST TURNAROUND

Days to Reach % of Fills



Over the four and a half years studied, there is a general decrease in the turnaround time on ILL requests mediated by the System. Most of this decrease is in the middle 50% of requests filled. In the first quartile, the time needed for delivery limits the amount of improvement that can be made. An examination of the days needed at IVLS headquarters itself to fill the first 25% of requests shows a range of 1-3 days for the first 18 months and a range of 0-1 days for the last 18 months of the study.

Interlibrary loan requests sent online had a much faster turnaround time, as shown in Table VII-Y below.

TABLE VII-Y
TURNAROUND TIME FOR ONLINE REQUESTS
By Month

Quarter	Days to Receive				(N =)
	25% of Fills	50% of Fills	75% of Fills	90% of Fills	
1981 Jan	5	7	16	25	80
Feb	4	8	16	31	88
March	4	8	12	23	80
April	5	7	14	18	82
May	5	7	11	23	68
June	4	6	11	18	83
July	3	6	10	13	73
Aug	3	5	8	16	82
Sept	4	7	12	18	68
Oct	4	6	9	17	81
Nov	5	8	14	24	80
Dec	4	8	14	21	92
1982 Jan	4	6	9	21	69
Feb	3	5	10	14	76
March	4	6	8	14	58
April	5	7	13	22	77
May	4	7	12	21	73
<u>Overall</u>	4	7	12	21	1,316
<u>Range</u>	3-5	5-8	8-16	13-31	

This table shows the days elapsed between the date an item was requested on OCLC and the date it was recorded as received. Only transactions where an IVLS library was the borrower and where the request was filled are included. All days are counted, not just weekdays.

In every quartile, the longest turnaround time is faster than the fastest experienced for paper requests. For the first 25% of fills, the difference involves only a few days, but in the penultimate 15% to be filled, items

requested online are two to three weeks quicker to arrive at the library. Libraries requesting materials online can generally fill 75% of their requests within two weeks. For libraries concerned with satisfying patron needs quickly, OCLC was clearly the better alternative.

Delayed Requests

There were some requests in the printout sample which required more than 30 days to fill. In an effort to find out the causes for these long delays, 110 of these delayed requests were retrieved from the sample and the printouts examined for any evidence of the cause of the delay. In fact, 28 (25%) of these printouts showed that the return date and the received date were the same, indicating that the borrowing library simply had not updated the latter until the item was returned and then had not bothered to put in the correct received date.

This leaves 82 transactions that were truly slow in being filled. The reasons that could be identified are:

1. New/popular title. (25 items, 30%) The book requested was new or very popular. It is therefore likely that the lending library put it on reserve (hold) or gave a future date. In 10 instances, lending or borrowing notes on the request show that a reserve was placed for the requesting library.
2. Mediated Request. (20 items, 24%) System libraries used the IVLS library symbol in the lender string after exhausting other System library holdings symbols and before going to other Illinois libraries. If IVLS located the item through the University of Illinois circulation system or some other special sources, the System would answer the request "will supply" and would send an order to the source library it had identified. In some cases this created delays because the item was missing from the source library or other problems occurred. Because the System had answered "yes" to the request, it would continue to hold it in a "will supply" state and seek other sources for the item.

3. Shipping delays. (10 items, 12%) These items seem to have experienced inordinate, unexplained delays in shipping. Of these, 4 came from out-of-state libraries, 5 were sent between Illinois libraries and one went between libraries in IVLS.
4. Photocopy requests. (5 items, 6%) Of the delayed photocopies, two came from technical journals and one from a regional publication.

Fill Source

There are several factors that undoubtedly contributed to the faster response time for online requests. The time needed to transmit paper requests to System headquarters, the time to sort, search and make routing decisions on requests at headquarters, the delays inherent in batch processing and the time needed for paperwork on items coming from non-System sources were all eliminated. One other factor that can be examined more closely from the data is the source of supply. Where the source shifts toward greater use of local resources, transportation of the item is quicker.

The source for interlibrary loan materials borrowed by IVLS libraries can be examined from two different perspectives -- the location of the lending library and the type of library.

Location of Lending Library

Data on lending library locations for IVLS paper requests was given earlier in Table VII-V based on statistics reported to the IVLS board at its regular meetings. Because these statistics were not kept in a consistent manner, the results of the sample study were also examined, as shown in Table VII-Z below.

TABLE VII-2
LENDING LIBRARY LOCATION
Paper Requests
by Quarter from Sample

Quarter	Lender Location					(N=)
	IVLS	R & R	Illinois	Out-of-State	Unknown	
1978 1st	60.2%	21.4%	14.3%	4.1%	-	98
2nd	63.3%	13.9%	16.5%	5.1%	1.3%	79
3rd	50.7%	26.0%	20.5%	2.7%	-	73
4th	63.4%	22.8%	10.9%	2.0%	1.0%	101
1979 1st	59.3%	13.2%	14.3%	13.2%	-	91
2nd	62.0%	13.0%	9.0%	6.0%	-	100
3rd	68.9%	15.6%	10.0%	3.3%	2.2%	30
4th	57.8%	27.7%	10.8%	3.6%	-	93
1980 1st	67.8%	18.9%	10.0%	2.2%	1.1%	90
2nd	62.1%	20.0%	11.6%	3.2%	3.2%	95
3rd	57.5%	20.7%	17.2%	4.6%	-	87
4th	61.7%	25.9%	8.6%	1.2%	2.5%	81
1981 1st	52.5%	10.9%	10.9%	21.8%	4.0%	101
2nd	65.9%	15.3%	5.9%	11.8%	1.2%	85
3rd	58.9%	16.7%	7.8%	12.2%	4.4%	90
4th	65.5%	15.5%	10.7%	8.3%	-	84
1982 1st	56.7%	18.9%	8.9%	13.3%	2.2%	90
2nd	65.8%	15.2%	8.9%	7.6%	2.5%	79
All Quarters	61.1%	18.9%	11.4%	7.1%	1.5%	1,597

These figures are from the study of a sample of paper requests filled by the System staff. Percentages are of the total number of requests filled in each quarter's sample.

The effect of the Project on the lender location for paper requests handled by IVLS was not what was expected. Although the number of local holdings symbols available online was more than doubled, the percent of requests filled from local IVLS libraries did not increase very much, if at all, according to either set of figures. The percents supplied from other locations are roughly the same in both tables, but according to the sample study, the fills from R & R Centers and other Illinois locations are decreasing while out-of-state fills increase.

Lender locations for online ILL initiated by the Project libraries have essentially the same distribution. Over the course of the study, the percent of requests filled by IVLS libraries increased by about 10%. During the same period (1981-May 1982) the lender location for paper requests did not show any steady change, but was in the same range. The use of out-of-state sources for

online requests declined over the year and a half studied, with the requests being filled instead in IVLS and the R & R Centers. Use of other Illinois sources remained about the same.

TABLE VII-AA
LENDING LIBRARY LOCATION
Online Requests

Month	Lender Location					(N=)
	IVLS	R & R	Illinois	Out-of-State	Other	
1981 Jan	51.3%	12.5%	22.5%	13.7%	-	80
Feb	55.7%	13.6%	21.6%	9.1%	-	88
March	63.8%	10.0%	13.7%	12.5%	-	90
April	47.6%	20.7%	22.0%	8.5%	-	92
May	55.9%	17.6%	16.2%	10.3%	1.2%	68
June	55.4%	16.9%	19.3%	8.4%	-	93
July	56.2%	27.4%	12.3%	4.1%	-	73
Aug	65.9%	19.5%	9.9%	9.8%	-	92
Sept	48.5%	14.7%	13.2%	23.5%	-	68
Oct	50.6%	21.0%	22.2%	6.2%	-	91
Nov	60.0%	10.0%	22.5%	7.5%	-	80
Dec	65.2%	13.0%	12.0%	9.8%	-	92
1982 Jan	66.7%	15.9%	10.1%	0.0%	7.2%	69
Feb	68.4%	14.5%	14.5%	2.6%	-	76
March	65.5%	24.1%	5.2%	5.2%	-	58
April	61.0%	15.6%	13.0%	10.4%	-	77
May	63.0%	15.1%	16.4%	5.5%	-	73
Overall	59.0%	16.3%	15.6%	8.7%	.5%	1,316

The effect of the use of local sources on response time is shown below in Table VII-AB. IVLS and R & R Centers are roughly equal since the state delivery route stops at the R & R Centers as well as System headquarters. Also, the two most heavily used R & R Centers - the University of Illinois in Champaign-Urbana and the Illinois State Library - are on the same state route at IVLS, so same day or next day delivery to the System headquarters was common.

TABLE VII-AB

FILL-TIME FOR ONLINE REQUESTS
By Location of Lending Library

Percent of Requests Filled	Turnaround Time in Days by the Lending Library Location			
	IVLS	R & R Centers	Other Illinois	Out-of-State
25%	3 days	5 days	8 days	11 days
50%	5 days	6 days	12 days	15 days
75%	8 days	9 days	17 days	22 days
90%	14 days	14 days	22 days	31 days
(N=)	776	215	205	114

This table shows the number of days needed to fill the designated percent of requests depending on the location of the lending library. The turnaround time is from the date the request is initiated on OCLC to the date it is received at the library. The results are based on a sample of ILL printouts from Project libraries.

Lending Library Type

During the Project studies, we were especially interested in the effect that adding large numbers of public library holdings symbols to the database would have on borrowing patterns among types of libraries. Could public libraries fill the borrowing needs of other public libraries once their holdings information was accessible, or did public libraries fill their own needs for public library materials internally and tend to use interlibrary loan primarily for materials more often found in academic libraries? Would the use of the OCLC interlibrary loan subsystem by large numbers of public libraries and the increase in ILL requests put a heavier burden on the academic and larger public libraries, or would the addition of public library holdings spread out the load more evenly among sizes and types of libraries? Because most of the libraries in the Project were public and the overwhelming majority of the ILL requests sampled came from these libraries, we could only address questions of cross-type borrowing in terms of public libraries, not academic, special or school library borrowing.

BEST COPY AVAILABLE

The tables below show the sources of fills for IVLS public library requests by type of lender within geographic areas.

TABLE VII-AC
SOURCES FOR PUBLIC LIBRARY INTERLIBRARY LOAN FILLS
Paper Requests

Location of Lending Library	Type of Library Filling Public Library Requests						(N=)
	Academic	Public	School	Special	System	Other ¹	
IVLS	14.6%	71.6%	.5%	.5%	12.8%	-	849
R & R Centers	68.9%	3.7%	-	.8%	-	26.6%	244
Other Illinois	22.9%	1.2%	0.0%	33.5%	35.9%	6.5%	170
Out-of-state	43.3%	24.4%	-	20.0%	-	12.2%	90

This table shows the sources for fills for IVLS public library requests processed at IVLS headquarters. The percent is given for each type of library within a certain location.

¹ Other is used when the type of library could not be determined or did not fit the categories. In "R & R Centers" other is the Illinois State Library.

TABLE VII-AD
SOURCE FOR PUBLIC LIBRARY INTERLIBRARY LOAN FILLS
Online Requests

Location of Lending Library	Type of Library Filling the Request						(N=)
	Academic	Public	School	Special	System	Other ¹	
IVLS	34.3%	70.0%	.7%	.7%	4.0%	.1%	667
R & R Centers	75.3%	3.8%	-	-	-	20.9%	186
Other Illinois	53.5%	13.5%	-	1.2%	31.2%	.6%	170
Out-of-state	40.7%	46.5%	-	1.2%	-	11.5%	86

This table shows the sources for fills for IVLS public library requests sent by the libraries over OCLC. The percent is given for each type of library within a certain location.

¹ Other is used when the type of library could not be determined or did not fit the categories. In "R & R Centers" other is the Illinois State Library.

The first table represents a sample taken from 1978 through 1982. During the first two years, access to public library holdings was through the Peoria Public Library catalog and a union catalog for the eleven next largest public libraries. After that, holdings symbols on OCLC were also available. The online requests represent 17 months in 1981 and 1982.

Within IVLS, where public library holdings were relatively accessible to those filling the requests, the percent of public requests filled by public libraries was very high and did not vary much over time. This indicates that the ILL requests received from public library patrons are chiefly for the type of materials acquired by public libraries but for specific items not available at the home library either because of its size or its acquisitions decisions. For paper requests, the System collection played a more important role than it did for online requests, but the study of paper requests covered a period when the System was purchasing items to fill common requests. This practice had been virtually dropped by the time of the online study. Academic holdings in IVLS may have a higher percentage of use for online requests, as opposed to paper requests, partly because of increased patron awareness of the options open to them through their public library, an understanding that materials other than typical public library materials could be obtained. Public access terminals could have been a catalyst for this change. Because most academic library holdings in the IVLS area were already entered on OCLC by 1980, it is unlikely that increased holding information would account for the heavier online use of these sources when compared to their use for paper requests.

Requests sent to R & R Centers in Illinois went chiefly to the two academic centers (University of Illinois at Champaign-Urbana and Southern Illinois University). These sources have large collections with online access through OCLC or, for System headquarters, through LCS. The University of Illinois was preferred by IVLS staff because the LCS terminal could give circulation status as well as holdings information. The second largest R & R source was the State Library ("other"), with Chicago Public Library, the only public library R & R Center, playing a surprisingly small role in filling public library requests. The contrast between the lender patterns for IVLS

libraries and R & R Centers is striking. Although it would seem to indicate that public library needs that can be filled by public libraries were met within IVLS, the data from other Illinois libraries and out-of-state libraries shows that this is not the case. There are still some public library needs to be met. It is more likely that large public libraries are not good sources for borrowing public library materials. This idea will be examined in more detail later.

Lending by other Illinois libraries to IVLS public libraries depends almost entirely on their participation in OCLC. In this area, "system" sources should be counted essentially as "public." These sources represent requests filled by system headquarters in one of two ways. First, some system headquarters have a large collection of public library materials used to service their public libraries. Second, some systems serve as materials ordering and cataloging centers. In the later case, the cataloging for all or most system public libraries is done at system headquarters on a common OCLC profile. Incoming OCLC interlibrary loan requests, therefore, are addressed to the system but actually tap public library holdings.

Given the distribution of fills by public libraries within IVLS in comparison with the distribution outside IVLS two explanations seem possible. First, most needs for public library materials were filled within the system boundaries and most of the requests that needed to go beyond those boundaries were for academic-type materials that could not be filled by the four IVLS academic libraries. This explanation implies that a local group of public libraries with access to each others holdings can fill a substantial percent of each others requests and almost all the requests for public library types of materials. Of all the paper requests reported in the table, 45% were filled by IVLS public libraries. In the online study the amount was 42%.

Thus, a large percentage of the needs of public library patrons in a region would be met by the collections in the area which are thus seen as fairly comprehensive in terms of regional patron needs, varying chiefly in size and specific titles.

A second interpretation of this data may be that, where public library holdings information is available, it will be used successfully to fill a large percentage of public library requests. Where it is not as accessible, public libraries must tap other sources. Within IVLS, by the end of the Project, almost half the local holdings symbols on the data base were from public libraries. Of 35 OCLC libraries available as lenders, 22 were public. This distribution was not duplicated in Illinois libraries outside IVLS or in the nation, where the majority of OCLC users are academic libraries. The implication of this interpretation is that, where public library holdings are known, they will be used and that increased use of OCLC by public libraries would tend to shift the interlibrary loan burden away from academic libraries and toward public libraries.

Because of the large number of public libraries of varying sizes involved in the Project, it was also possible to study the lending patterns among them on the basis of size. Table VII-AE below shows the results.

TABLE VII-AE
SOURCES FOR PUBLIC LIBRARY INTERLIBRARY LOANS
By Size of Library

IVLS Borrowing Library	Lending Library						(N=)
	IVLS Large Public	IVLS Medium Public	IVLS Small Public	Chicago Public	Other Public	Other	
Large public	-	16.1%	1.1%	1.1%	14.0%	67.7%	93
Medium public	2.8%	29.6%	7.7%	.7%	14.0%	45.2%	750
Small public	1.5%	42.3%	7.2%	.4%	14.7%	33.9%	265

This table shows the lending patterns for those materials lent by IVLS public libraries and Chicago Public Library to IVLS public libraries using the OCLC subsystem. The "other public" category includes Illinois system headquarters collections and all public libraries outside IVLS except Chicago. "Other" is all academic, special and school libraries in any region.

In this table "small public" means a library serving a population of 1-5,000. "Medium public" serves 5,001-50,000. There was only one large public library in the group, which serves a population of 126,000.

The single large public library in the study was obtaining very few materials from a still larger public source, in fact, it obtained as much from its neighboring small libraries as from the major state public library. Of all the public library sources used by this large library, the local medium-sized public libraries supplied the most. The needs of Peoria Public that cannot be filled by its own collection, however, are chiefly met by other types of libraries, mostly academic.

Medium-sized public libraries filled the majority of their requests from other public libraries and chiefly from medium-sized ones. However, almost three times as many requests were filled for them by small public libraries as by Peoria Public and almost none were filled by Chicago. The same pattern appears, only stronger, for small public libraries.

This pattern is not the result of relative numbers of holdings symbols on the OCLC database. By the end of the Project, the large public library had contributed 29.8% of IVLS public library holdings symbols on OCLC, yet it filled only 4% of public library requests that were satisfied by IVLS public libraries. Medium-sized public libraries contributed 55.5% of the holdings symbols and filled 81.3% of the requests. Small publics contributed 14.7% of the holdings and filled 14.7% of the requests.

To some extent, lower use of the large public library holdings may be due to libraries querying them only after trying other local libraries in order to avoid placing a heavy load on the library they would assume to be the heaviest lender. However, if Peoria Public Library did hold a title, it had, according to the protocols, to be queried before the libraries used out-of-System lenders. This evidence should not be taken as dismissing the contribution of the largest IVLS public library. In the online requests sampled for the study, this library lent to other IVLS libraries exactly twice as many items as it

borrowed from them. However, it did not lend as many items to them as did the average medium-sized library.

The results in the table above indicate that:

1. The large public library used their own collection or on-demand purchasing to fill most of their patrons needs for materials typically held by public libraries. They used ILL mostly for obtaining materials from academic libraries.
2. Large public libraries are not a good source for public library ILL requests. It is likely, although they have large and varied collections, that they also have large local demand and cannot make popular materials available to other libraries. Also, a library with many branches may spend a lot on duplicate materials so that, although their volume count is high the number of unique titles acquired each year is actually equal to or less than that of a smaller, single-building library.
3. Medium-sized public libraries serve as the major resource for public library materials to public libraries of all sizes. The smaller the borrowing library, the more likely it is that their needs will be met by a medium-sized library.
4. Small public libraries have more to offer to themselves and to medium-sized publics than do large public libraries in terms of the numbers of ILL requests that can be filled from their collections. One reason for this may be that popular books that are acquired in smaller libraries may not have as many local readers, so they are soon free to fill other libraries' needs.

System-mediated Loans

The IVLS interlibrary loan protocols required that the OCLC code for the System appear in the lender string after codes for other IVLS locations and before codes for non-IVLS locations. Thus, any request which was not filled by local OCLC libraries was reviewed by IVLS staff before it left the System area. The staff checked the union card catalog to find older local holdings and holdings of non-OCLC libraries. They also checked the LCS terminal for University of Illinois holdings. If the request was filled in this way, the sample study of OCLC printouts showed the ultimate source library as the lender, but indicated that IVLS had mediated the transaction.

Of all online borrowing in the study, 19.6% was accomplished through this method. Of these 258 transactions, 41.5% were filled by IVLS libraries. The majority of IVLS-mediated loans were filled by the University of Illinois.

Materials acquired through IVLS mediation generally arrived at the library sooner than average as can be seen in Table VII-AF below. The process allows for maximum possible use of local resources and also for the use of circulation data for University of Illinois holdings. Since the university staff gives LCS requests a higher priority than OCLC requests, it was to the libraries' advantage to have such requests transmitted by the System.

TABLE VII-AF
TURNAROUND TIME FOR ILL REQUESTS
Direct and IVLS-Mediated Loans

<u>Percent of Requests Filled</u>	<u>Days Needed to Receive Item</u>	
	<u>Direct Loan</u>	<u>IVLS Mediated Loan</u>
25%	4	5
50%	7	6
75%	13	8
90%	21	14

This table compares the time needed to reach the given percent of fills, depending on whether a request was received directly from a library answering an ILL request or mediated by the System staff. Results are based on the sample of online requests.

IVLS Libraries as Lenders

Before OCLC, most libraries in IVLS had two ways to contribute their holdings to meet the ILL needs of other libraries. Eleven medium-sized libraries sent a catalog card for each title acquired to a union catalog maintained by the IVLS staff. This catalog was used to fill many requests from other IVLS libraries. In addition, materials that could not be located by other means were compiled into a list sent regularly to all IVLS libraries. Those with the materials available would notify the System staff.

Both these methods limited the library's sharing to filling IVLS area requests. The use of OCLC made the holdings of the Project libraries available more quickly and more widely. This increased access gave libraries both the pleasure and the burden of receiving more requests for their materials.

Of the online ILL printouts studied, 1063 had an IVLS library as the lender. These cases were analyzed as a group to examine the lending patterns of the Project libraries. These patterns reflect only the requests which were received over OCLC. What is not shown are the requests received from IVLS headquarters to fill paper requests from other IVLS libraries. Also, paper requests received directly on ALA forms and requests received by phone from other IVLS libraries are not reflected in these results. The general characteristics of the sample are given below.

Sample of Requests Filled by IVLS/OCLC Libraries

Sample Size	1063 requests
Type of Lender (IVLS/OCLC libraries)	
Medium-sized public	53.5%
Small public	13.3%
Academic	19.8%
Large public	5.2%
Other	8.2%

Borrowing library type

Public	78.3%
Academic	9.7%
Special	5.4%
School	2.3%
System	.8%
Other/unknown	3.7%

Borrowing library location

IVLS	73.9%
Illinois R & R Center	1.7%
Other Illinois	17.4%
Out-of-state	7.0%

14.5% of the loans were initiated by System headquarters on behalf of other libraries.

Position of the lending library in the string was an average 1.58.

Type of material

Book	96.9%
Photocopy	2.9%
Other	.2%

Most of the material borrowed online from IVLS libraries was borrowed by IVLS libraries. The percentage, however, got generally lower over the seventeen months of the study as a higher percentage of requests were filled for other libraries in Illinois and, to some extent, out-of-state libraries.

PROJECT FILE

TABLE VII-AG
LENDING BY IVLS LIBRARIES
Borrowing Library Location

Month	Location of Borrowing Library				(N=)
	IVLS	R & R	Illinois ¹	Out-of-State	
1981 Jan	85.4%	-	8.3%	6.3%	48
Feb	83.1%	-	11.9%	5.1%	59
March	89.5%	-	5.3%	5.3%	57
April	78.0%	6.0%	12.0%	4.0%	50
May	77.6%	2.0%	10.2%	10.2%	49
June	79.3%	-	12.1%	8.6%	58
July	68.3%	3.3%	25.0%	3.3%	50
Aug	81.8%	1.5%	10.6%	6.1%	56
Sept	53.2%	3.2%	30.6%	12.9%	62
Oct	74.5%	3.6%	18.2%	3.6%	55
Nov	75.0%	3.1%	15.6%	6.3%	64
Dec	75.9%	1.3%	22.8%	-	79
1982 Jan	63.0%	1.4%	20.5%	15.1%	73
Feb	83.9%	1.6%	11.3%	3.2%	62
March	60.3%	1.6%	27.0%	11.1%	63
April	75.8%	1.7%	16.1%	6.5%	62
May	66.7%	-	24.6%	8.7%	69
<u>Overall</u>	74.1%	1.7%	17.2%	7.0%	1,047

This table is based on a sampling of ILL loans made by IVLS libraries in response to requests received on the OCLC subsystem.

¹ Illinois libraries other than IVLS libraries or the Reference and Resource Centers

The different types of libraries in the Project showed different patterns of lending. Most (67.2%) of public library lending was to other IVLS libraries, with 22.6% going to other Illinois libraries and 8.2% to out-of-state libraries. School libraries lend 54.5% in IVLS, 27.3% in Illinois and 18.2% out-of-state. Special libraries had the most diverse lending - 53.3% in IVLS, 10% in Illinois and 26.7% out-of-state. In addition, 10% of their loans went to the R & R Centers in Illinois, as did 2% of public library loans.

One class of borrowers outside IVLS accounted for a large percentage of the loans. This was the system headquarters of the other sixteen Illinois library systems who mediated loans to their member libraries. Of the 180 items in the study lent to Illinois libraries outside IVLS, 147, or 81.7% were sent through systems. Virtually all these items came from IVLS public librar-

ies. During some months, these loans to systems amounted to a quarter or more of all the items lent, and they account for 13.8% of all the lending transactions in the sample.

In a few cases, the systems which borrowed from IVLS libraries use OCLC to catalog materials for their own public libraries, thus adding the holdings to the database for resource sharing. However, most public libraries in the systems do not contribute information about their holdings to the database. The lack of online information about these libraries' holdings, while their borrowing needs are met by OCLC use at various system headquarters, has set up a situation of one way access which may create problems. It has already been demonstrated that these public libraries which are borrowing through systems do have resources that are valuable to other public libraries, no matter how small they are. Libraries need to explore ways to promote access to these holdings for mutual resource sharing.

The types of libraries borrowing from IVLS libraries are given in Table VII-AH below.

TABLE VII-AH
TYPES OF LIBRARIES BORROWING FROM IVLS LIBRARIES
By Location

Location	Type						(N)
	Academic	Public	School	Special	System	Other	
IVLS	5.5%	86.0%	2.2%	6.3%	-	-	776
R & R Centers	77.8%	22.2%	-	-	-	-	19
Other Illinois	13.9%	50.0%	3.3%	2.2%	3.3%	17.2%	180
Out-of-state	28.8%	57.5%	-	4.1%	1.4%	8.2%	73

This table shows the types of libraries borrowing materials online from IVLS libraries within different geographic areas. The type given is the ultimate borrower - the library that used the material, not the library that might have officially made the request. In the case of Illinois libraries, 147 of the 180 requests were mediated by system headquarters but only 6 were actually for use in the System.

In IVLS, the distribution reflects the type of libraries participating in the Project. The R & R center borrowing was mostly from the two academic centers, with some from Chicago Public but no requests in the sample from the State Library.

Other Illinois libraries reflect a greater spread, but are still mostly public libraries. These figures reflect the ultimate user of the material, not the system initiation of a request. In some cases, however, it was clear from the printouts that a system was ordering for a member library, but not clear what type of library it was. This is the 17.2% "other." Loans to out-of-state libraries have the highest percentage of academic borrowers of any of the geographic categories, probably reflecting the high proportion of academic libraries in OCLC.

ILL USE AND STAFF ATTITUDES

The transfer of responsibility and control of interlibrary loan transactions from the System headquarters to libraries and the wider role these libraries played as borrowers and lenders was a major part of their reactions to OCLC use. In interviews with library directors at the end of the Project, they cited increased patron access to resources as the chief benefit of OCLC use in their libraries. Resource sharing was the main reason most libraries kept on using OCLC after the Project, according to both directors and governing authorities.

The most valued aspect of interlibrary loan was simply access to the resources - being able to verify and locate items the patron needed. Although the speed of ILL services increased with online transactions, only nine of the twenty-nine directors felt this was of great importance. Seven directors said specifically that confirmation of availability - regardless of the time needed to obtain an item - was important for their patrons' satisfaction. Four directors of smaller libraries felt that their participation as lenders - getting requests from other libraries - was an important benefit. They and their staffs needed to feel they were contributors as well as users in the resource sharing network.

When, at the end of the Project, directors were asked specifically about interlibrary loan, most (86.4%) felt it was faster to use OCLC than paper requests while the others felt it took about the same amount of time. Thus, the increased speed that has shown up in the quantitative studies was generally perceived by the staff in the libraries.

A plurality of directors (42.9%) perceived the new online process as taking more staff time than the previous paper request system. The remainder were equally divided between feeling that less staff time or about the same amount of time was needed. Some directors felt that the staff time per request was the same, but more time was needed because the number of requests increased. This feeling is born out by the results of the worklog studies which show slightly more time needed in the library to send an online request and a lot of additional interlibrary loan requests from patrons.

Nearly all directors (72%) felt that the online service produced a change that patrons noticed. The facets patrons commented on, according to directors, were the increased speed, access to information or resources, a perceived higher likelihood that the material would "be what they wanted," and appreciation for the geographical area materials came from. All these patron reactions resulted in higher use of ILL, good will for the library and an enhanced image of library service and the people who provided it.

Overall, most directors felt that the patrons were better served, but some commented that, although service might be better, the cost was not worth it. Most directors and governing authorities, however, felt that the resource sharing capabilities that OCLC gave them were valuable enough to their patrons and staff that OCLC was retained after Project support ended.

Conclusions

Results from the various cost studies of interlibrary loan activities need to be considered in three categories. The first is the total cost to all participants (System and borrowing library) to process an interlibrary loan request. In this category, the least expensive method of those studied is for the local library to use OCLC to identify other local libraries that hold the needed materials and then to contact them by telephone. Unfortunately, there are not always local holding libraries. Even if there are, there may be a limit to how many telephone calls a library is willing to receive since incoming phone calls interrupt staff and do not allow libraries to batch their lending activities in an efficient manner.

Aside from the telephone method, the least expensive method overall is for libraries to send their own requests online and avoid the use of System staff except to check special sources. The most expensive method is one which combines a local library check of OCLC with sending a paper request to the System.

The second way to evaluate the cost of borrowing is from the library's point of view. In this context, sending paper requests to the System is the least expensive method. Furthermore, without any OCLC terminal in-house, all the costs to the library are staff costs, not discrete, noticeable items in an expense report. The most expensive method for the library is sending the ILL request online from their own terminal. In view of this difference between what is most efficient overall and what is least expensive for the library, subsidies by the System to encourage local online borrowing may be an effective strategy for efficient ILL operations and increased patron satisfaction.

The third cost factor in using the OCLC interlibrary loan subsystem is the processing of incoming ILL requests. In this case, the worklog studies

suggest that an average incoming online request would cost about \$1.53 to process, and that telephone requests and ALA requests would both be less expensive. However, these figures are dependent on a variety of factors such as the percent that are answered "yes."

The use of OCLC in local libraries to build a database of local holdings symbols and for interlibrary loan had an effect on the amount and patterns of resource sharing in the System. The study results cannot be attributed entirely to the Project since there were other factors affecting System interlibrary loan at this time, but the following conclusions seem to be indicated.

The use of online interlibrary loan by the libraries, along with increased access to local holdings information and public exposure to OCLC terminals, has greatly increased the number of ILL requests generated by System libraries. This increase did not show up in Project libraries ILL statistics, however, until the second half of the Project. Reciprocal borrowing by patrons also reached new peaks during the latter part of the Project and continued at that high level afterwards. In general this, along with comments by library directors and governing authorities, indicates an increased awareness of the library as a part of a cooperating network and of the availability of additional resources to fill patron needs. The delayed response may show that the use of the service grew as its speed and reliability improved and were noticed.

Contrary to expectations, the increased online access to local holdings information did not dramatically change the fill rate for System interlibrary loan work. However, this rate did not decrease either, even though it is likely that Project libraries took over most of the easier interlibrary loan requests themselves and sent more difficult ones to the System. The fill rates for online requests from the libraries was very high (94%) so overall

the number of patron requests that were satisfied probably increased for Project participants.

The Project did not have much, if any effect on the percent of inter-library loan materials that came from local libraries, despite the doubling of local holdings symbols on the database. It is possible that this is because loans arranged by telephone were not recorded or because patrons chose to use their reciprocal borrowing privileges at other libraries rather than request locally held materials as interlibrary loans.

The general distribution of lending sources among IVLS libraries, Illinois R & R Centers, other Illinois libraries and out-of-state libraries was about the same for online requests as for paper requests sent to the System. It also did not show any drastic changes over time. This indicates that the protocols adopted by IVLS when more libraries became automated did not seriously change the way requests were distributed among potential lenders.

Turnaround from the time an item was requested to when it was received by a library was greatly improved by the use of online interlibrary loan requests in the libraries. Online requests generally took half the time of paper requests to be filled. In each percentile examined, the slowest time for an online request was fewer days than the fastest time for a paper request.

The large number of public libraries participating in the Project allowed us to examine the sources of items they borrowed. The results show that, aside from the largest public library in the study, almost half of public library ILL needs can be met by other local public libraries. This indicates that most public library needs are for materials in other public libraries and that increased public library participation in OCLC will not necessarily increase the lending burden of academic libraries but may decrease it. Thus,

the usefulness of OCLC as a resource sharing tool for public libraries will be greatly increased as more public libraries become members.

The study also shows that medium-sized public libraries are much better suppliers of public library needs than large public libraries. Even very small public libraries lent more to others than might be expected from the relative number of holdings symbols they contributed to the database.

Finally, the practice of system headquarters or regional interlibrary loan clearinghouses accessing the OCLC holdings information on behalf of non-OCLC libraries may become a serious problem. There are relatively few medium-sized public libraries with holdings on the database. These are exactly the materials needed by the small and medium-sized public libraries represented by the regional ILL centers. This arrangement of system-mediated borrowing seriously threatens the mutual access which must be the base of equitable resource sharing. Libraries of all types, but particularly public libraries, need to explore ways to enhance access for lending information where ever there is access for borrowing.

APPENDIX A

Statistical Information on Project Libraries

and

Map of Illinois Valley Library System

TABLE I-A

Partial Participants in the OCLC Project

<u>Library</u>	<u>Type</u>	<u>Population Served</u>	<u>Staff¹ (MLS)</u>	<u>Volumes</u>	<u>Annual Acq</u>	<u>Annual² ILL</u>
Bradley University Library	Acad	300fac/5,600st	35 (9)	290,000 ³	11,000	3,000
Illinois Central College LRC	Acad	200fac/6,400st	20 (6)	70,500	2,400	250
Peoria Heights Public Library	Public	8,200 pop	6 (1)	35,100	1,900	465
Spoon River College LRC	Acad.	40fac/1,200st	6 (3)	33,900	2,700	470

¹Staff size is given in FTE, with the number of staff members having MLS degrees given in parentheses.

²Annual ILL includes all requests sent, whether over OCLC or by other means.

³Does not include microforms, AV or government documents.

TABLE I-B

Academic Library Full Participants in the OCLC Project

<u>Library</u>	<u>Students¹</u>	<u>Faculty¹</u>	<u>Staff¹ (MLS)</u>	<u>Volumes</u>	<u>Annual² Acq</u>	<u>Annual³ ILL</u>
Black Hawk College LRC	900	28	5 (2)	15,000	400	50
Eureka College Library	435	37	8.5 (3)	65,000	1,100	500

¹Student, faculty and library staff size is given in FTE. The number of staff members having MLS degrees is given in parentheses.

²Annual acquisitions are given for the current year.

³Annual ILL is given for 1980, before extensive library use of the OCLC subsystem. Such requests were usually processed by IVLS.

TABLE I-C

OCLC Use in Project Academic Libraries

<u>Library</u>	<u>Annual OCLC Use 7/81-6/82</u>		<u>Total Uses Through June 1982</u>		<u>Online Holdings²</u>
	<u>Cataloging</u>	<u>ILL Requests¹</u>	<u>Recon</u>	<u>Orig. Input</u>	
Black Hawk	206	146	2,509	2	2,740
Eureka	761	273	4,033	11	7,960
TOTALS	967	422	6,542	13	10,700

¹Requests sent through OCLC; other requests may have been sent through IVLS or by other means.

²All holdings symbols added to the data base through any means -- cataloging, retrospective conversion ("recon"), reclassification, and updates.

TABLE I-D

Public Library Full Participants in the OCLC Project

Library	Population	Income	Staff (MLS) ¹	Volumes	Annual ²	
					Acq	ILL ³
Alpha Park	21,800	\$ 297,557	11.9 (4)	34,900	5,000	1,200
Ayer	2,400	28,000	1.2 (-)	12,100	380	150
Bradford	924	6,000	.4 (-)	5,000	171	139
Dunlap	4,700	72,600	2.5 (1)	14,800	2,600	1,000
Elmwood	2,700	60,000	1.2 (-)	9,500	500	280
Fondulac	13,500	254,600	9.5 (3)	34,019	4,000	750
Galva	3,700	53,343	3.4 (-)	17,700	1,500	780
Henry	2,700	30,600	1.2 (-)	16,700	800	610
Illinois Prairie	18,000	181,800	4.7 (1)	79,000	3,600	1,000
Kewanee	16,400	148,200	8.9 (3)	58,000	3,400	750
Lillie M. Evans	1,700	33,600	2.1 (-)	16,200	800	290
Mackinaw	2,800	36,800	2.1 (1)	12,500	900	520
Mason Memorial	700	250,000	.4 (-)	7,000	800	60
Morton	14,200	218,500	6.1 (1)	30,000	2,000	1,500
Neponset	1,000	15,900	1.4 (-)	13,900	600	50
Pekin	34,000	383,000	16.0 (5)	73,000	5,200	1,200
Peoria	124,160	1,400,000	112.0 (6)	451,000	18,000	1,700
Toulon	1,400	9,700	.5 (-)	7,000	40	124
Washington	20,000	184,000	8.7 (3)	33,500	1,700	1,100
Wyoming	1,600	6,000	.4 (-)	5,100	140	300

¹ Staff size is given in FTE, with the number of staff members having MLS degrees given in parentheses.

² Annual acquisitions are given for the current year.

³ Annual ILL is given for 1980, before extensive library use of the OCLC subsystem. Such requests were usually processed through IVLS.

TABLE I-E

OCLC Use in Project Public Libraries

Library	Annual OCLC Use 7/81-6/82 ¹		Total Uses Through June 1982			Online Holdings ²
	Cataloging	ILL Requests	Recon	Reclass	Input	
Alpha Park	2,724	838	17,384	---	29	22,873
Ayer	284	123	1,088	---	---	1,489
Bradford	96	12	381	---	1	534
Dunlap	1,943	794	6,552	---	230	10,655
Elmwood	37	14	---	8,375	167	8,579
Fondulac	3,541	764	19,741	---	58	28,052
Galva	967	135	2,197	---	22	4,299
Henry	814	2	2,736	---	---	4,396
Illinois Prairie	2,311	2	3,125	---	4	7,405
Kewanee	3,257	518	10,982	---	76	16,232
Lillie M. Evans	480	230	1,335	---	3	2,276
Mackinaw	730	557	2,200	---	11	3,702
Mason Memorial	205	36	---	1,083	13	1,491
Morton	2,076	685	7,736	---	71	11,277
Neponset	266	6	237	---	---	822
Pekin	5,167	1,053	43,803	---	3	52,588
Peoria	4,359	1,003	74,808	---	---	79,220
Toulon	39	56	382	---	---	473
Washington	1,525	384	5,894	---	---	9,124
Wyoming	102	58	232	---	2	375
TOTALS	30,923	7,270	200,813	9,458	690	265,862

¹ Requests sent through OCLC; other requests may have been sent through IVLS or by other means.

² All holdings symbols added to the data base through any means -- cataloging, retrospective conversion ("recon"), reclassification, and updates.

TABLE I-F

School Library Full Participants in the OCLC Project

<u>School</u>	<u>Level</u>	<u>Bldgs</u>	<u>Students</u>	<u>Faculty</u>	<u>Staff</u> ¹ (MLS)	<u>Collection</u>		<u>Annual</u> ² <u>Acq</u>	<u>Annual</u> ³ <u>ILL</u>
						<u>Titles</u>	<u>Volumes</u>		
East Peoria	K-JHS	8	2,500	140	4 (2)	--	51,200	600	20
Farmington	P-HS	5	1,600	90	4 (1)	18,600	26,000	1,000	150
Limestone	HS	1	1,350	88	4 (1)	13,500	15,500	650	10
Pekin	HS	2	2,800	150	10 (-) ⁴	--	36,700	2,000	30

¹ Staff size is given in FTE, with the number of staff members having MLS degrees given in parentheses.

² Annual acquisitions are given in titles, for the current year.

³ Annual ILL is given for 1980, before extensive library use of the OCLC subsystem. Such requests were usually processed through IVLS.

⁴ Two Pekin High School staff members are qualified media specialists.

TABLE I-G

OCLC Use in Project School Libraries

<u>Library</u>	<u>Annual OCLC Use 7/81-6/82</u>		<u>Total Uses Through June 1982</u>		<u>Online Holdings</u> ²
	<u>Cataloging</u>	<u>ILL Requests</u> ¹	<u>Recon</u>	<u>Orig. Input</u>	
East Peoria	523	43	2,599	24	3,597
Farmington	760	343	1,808	---	2,682
Limestone	491	43	2,340	---	2,939
Pekin	<u>1,138</u>	<u>76</u>	<u>5,834</u>	<u>20</u>	<u>7,333</u>
TOTALS	2,912	505	12,581	44	16,551

¹ Requests sent through OCLC; other requests may have been sent through IVLS or by other means.

² All holdings symbols added to the data base through any means -- cataloging, retrospective conversion ("recon"), reclassification, and updates.

TABLE I-H

Special Library Full Participants in the OCLC Project

<u>Library</u>	<u>Co. Type</u>	<u>Staff</u> ¹ (MLS)	<u>Collection</u>		<u>Annual</u> ² <u>Acq</u>	<u>Annual</u> ³ <u>ILL</u>
			<u>Monog.</u>	<u>Serials</u>		
Caterpillar Business	Manuf.	8 (1)	12,000	700	550	320
Caterpillar Technical Information Center	Manuf.	9 (2)	14,200	650	1,200	800
Methodist Medical Center	Hospital	4 (2)	2,000	250	400	1,200

¹Staff size is given in FTE, with the number of staff members having MLS degrees given in parentheses.

²Annual acquisitions are given for the current year.

³Annual ILL is given for 1980.

TABLE I-I

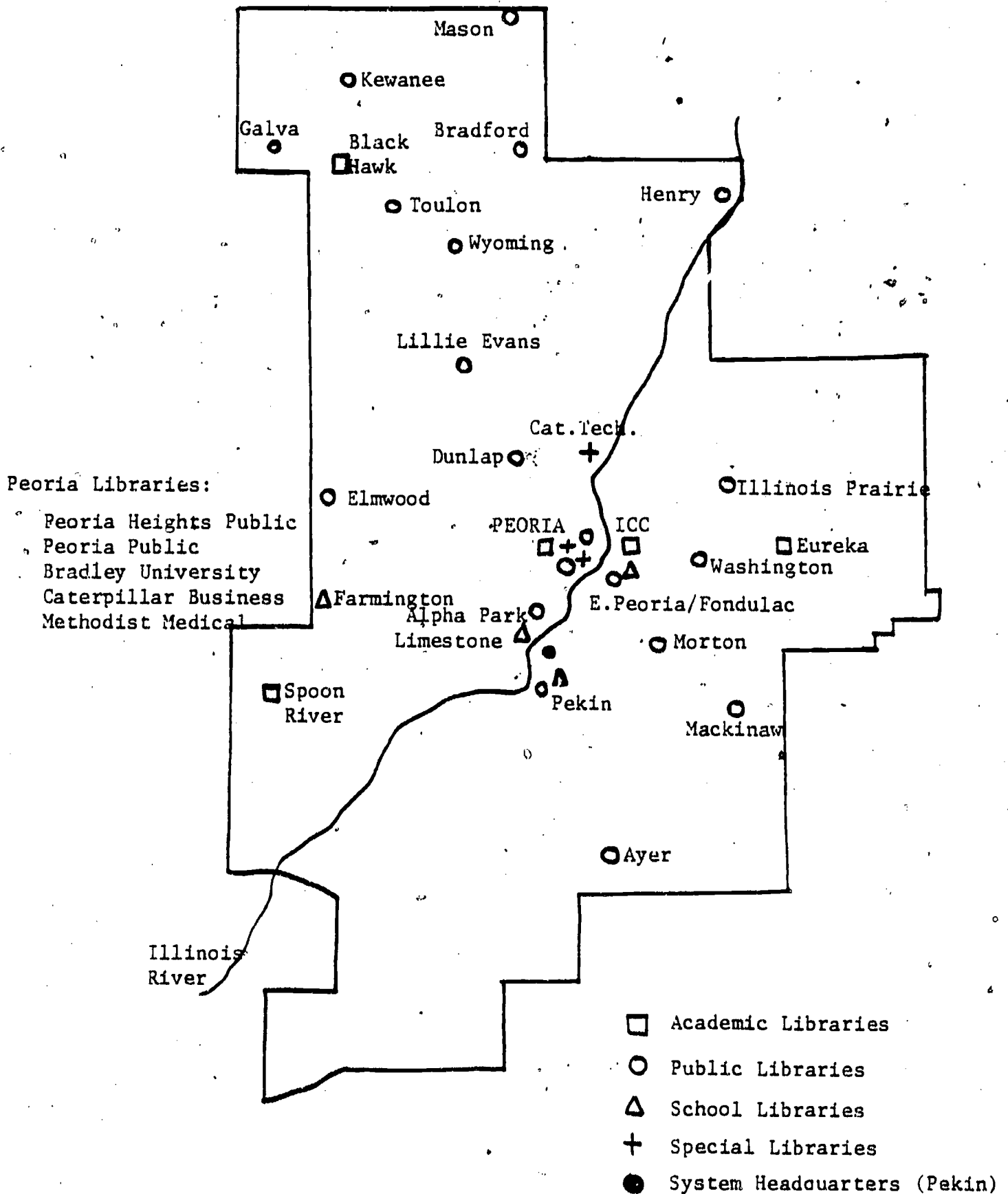
OCLC Use in Project Special Libraries

<u>Library</u>	<u>Annual OCLC Use 7/81-6/82</u>		<u>Total Uses Through June 1982</u>			<u>Online Holdings</u> ²
	<u>Cataloging</u>	<u>ILL Requests</u> ¹	<u>Recon</u>	<u>Reclass</u>	<u>Input</u>	
Caterpillar Business	396	482	2,460	172	32	3,435
Caterpillar Tech. Center	154	870	727	---	91	1,101
Methodist Medical	644	288	1,730	---	60	2,722
TOTALS	1,194	1,640	4,917	172	183	7,258

¹Requests sent through OCLC; other requests may have been sent through IVLS or by other means.

²All holdings symbols added to the data base through any means -- cataloging, retrospective conversion ("recon"), reclassification, and updates.

Illinois Valley Library System OCLC Experimental Project Participating Libraries



APPENDIX B

Illinois Valley Library System
Interlibrary Loan Protocols
and
Summary Card for Terminal Operators

IVLS INTERLIBRARY LOAN PROTOCOLS

September 2, 1980

Statement of Purpose

The purpose of the following the policy is to maximize the speed of delivery of resources to the user and to make the most use of local resources. However, we consider that speed of retrieval should take precedence over the use of local resources when there is a serious conflict between these two goals.

The Illinois Valley Library System has an increasing number of participating libraries using OCLC. As these libraries complete retrospective conversion projects, they will have more access to each others holding information. Through the use of terminals either in one's own library or in a nearby library, they will have almost as much information immediately available to them as is available at the System headquarters.

The direct use of the OCLC terminal located ^V in or near a library should be encouraged. It will eliminate time consuming typing, filing and delivery of requests as well as sorting and re-shipping of loaned and borrowed material. Direct use of the OCLC interlibrary loan subsystem by libraries will speed the delivery of the material to the patron and will increase the awareness in the local community of the availability of resources.

In some cases, however, the System will continue to be the intermediary for requests. These specific exceptions are explained in the policy.

Protocols for IVLS/OCLC Libraries

System libraries with access to an OCLC terminal will be expected to query other libraries with the following order of priority.

1. Other IVLS/OCLC libraries known to be using the interlibrary loan subsystem.
2. IVLS headquarters (IDM). The System headquarters will be queried even though it may not be listed as a holding library in the OCLC data base. For each request received, IVLS will first check the System union catalog (for post-1968 imprints only) and then check LCS.
3. Chicago Public Library, Southern Illinois University and/or the Illinois State Library if listed on the data base as a holding library. The University of Illinois will not be queried through OCLC.

4. Other Illinois OCLC libraries listed on the data base.
5. Out-of-state OCLC libraries listed on the data base.
6. IVLS headquarters. With this second query, the System will check all other resources available to it.

Rush requests should generally be made by phone either to other IVLS holding libraries or to the System headquarters so that the union catalog and LCS may be checked. If the patron is willing to travel to another nearby library, immediate telephone inquiry should be preferred over the use of the OCLC ILL subsystem.

If the request is not urgent, the OCLC interlibrary loan subsystem should be preferred since several locations can be queried for the same price.

Non-public libraries may eliminate step 2 if they are qualified to go directly to R & R Centers other than the University of Illinois. They may eliminate steps 2 and 3 if the technical nature of the request, on the protocol of another network in which they participate, indicates skipping the System union catalog and R & R Centers.

Members of the West Central Illinois Library Cooperative should query fellow cooperative members before step 3.

Libraries should specify the maximum cost as "free", especially when using out-of-state locations, unless the library is willing to pay.

Popular items that are fairly recent (3 to 4 months old) should not be requested beyond step 2. At this point if the material is not available from a System library, the System will consider purchase as an on-demand item. Similarly, paperbacks or low cost material should not be requested beyond step 3, since acquiring the material may be cheaper than paying delivery charges.

Non-OCLC Library Protocols

Libraries without access to an OCLC terminal will continue to send requests to the System headquarters. The System will follow the following priorities in processing these requests.

1. Verify the title on OCLC and request the material from any IVLS/OCLC holding library.
2. Check the IVLS union catalog.
3. Check LCS.
4. Through the OCLC interlibrary subsystem, query R & R locations that have been verified through OCLC or the microfilm, query other Illinois OCLC holding library, and query out-of-state OCLC holding library.

5. Search other traditional resources.
6. Put the title on a want list.

The same restrictions on popular materials and paperbacks will apply as outlined above.

Journal Articles and Other Photocopy Requests

At present photocopy requests make up approximately 1/10 of all IVLS requests. Currently there is no resources available to most System libraries to determine the journal holdings of other libraries. Therefore, photocopy requests will continue to be sent to the System headquarters for processing. The System will follow the protocols outlined below for these requests.

1. IVLS union card file for journal holdings.
2. R & R Centers.
3. Other Illinois union lists and/or Illinois holding libraries identified through OCLC.
4. Out-of-state libraries identified through union lists or OCLC.
5. Libraries identified through the Union List of Serials or New Serial Titles.

When the IVLS serials union list is published and local libraries have access to it, the first step in this process will be assumed by the libraries.

Geneology and Local History Materials

Borrowing geneology and local history materials often requires a special knowledge of their location and of sources willing to lend. For this reason, libraries should continue to send such requests directly to the System headquarters.

Incomplete Citations

Requests which are vague or uncertain should be sent directly to the System headquarters to be verified. The System will verify the title and process the interlibrary loan requests. This procedure will avoid incurring OCLC ILL charges on incorrect requests.

Audio-Visual Materials

Several IVLS libraries are currently working on guidelines for interlibrary loan of audio-visual materials within the System. Currently, however, AV materials are not generally available to libraries through interlibrary loan.

OCLC Experimental Project

One purpose of the OCLC Project is to test the cost effectiveness and user benefit of various systems for interlibrary loan. For this reason, libraries in different OCLC clusters may be establishing different protocols or communication arrangements for the duration of the Project. The results of this experiment should make it possible to adjust the IVLS protocols to achieve more efficient, cost-effective interlibrary loan service for all System libraries.

ILL LENDER STRING

1st IVLS libraries that have tagged the title

AGN	IDS	IDY	ILN	IQZ	ISP	ISW
IBA	IDT	IEQ	IPM	ISF	ISQ	ISX
IBU	IDV	IER	IQV	ISG	ISR	ISY
IDB	IDW	IEV	IQX	ISH	IST	IUK
IDM	IDX	IEW	IQY	ISK	ISV	IVB

2nd IDM — *even if the title isn't tagged*

3rd SOI, SPI, CGP — if they have tagged the title

4th Any other ILLINOIS libraries that supply,
except UIU

5th Any OUT-OF-STATE libraries that supply,
using the nearest ones first

6th IDM again

- You *must* use all possible codes in one category before going on to the next.
- Please vary the order of symbols *within* a category; do not always use alphabetical order.

APPENDIX C

Illinois Valley Library System
Interlibrary Loan Request Form

(4 Part NCR)

and

Flow Chart of

IVLS Interlibrary Loan Department Procedures

ILLINOIS VALLEY LIBRARY SYSTEM – TITLE REQUEST

ADULT BOOK JUVENILE BOOK RECORDING MICROFILM MAGAZINE OR PHOTO COPY GOVERNMENT DOCUMENT

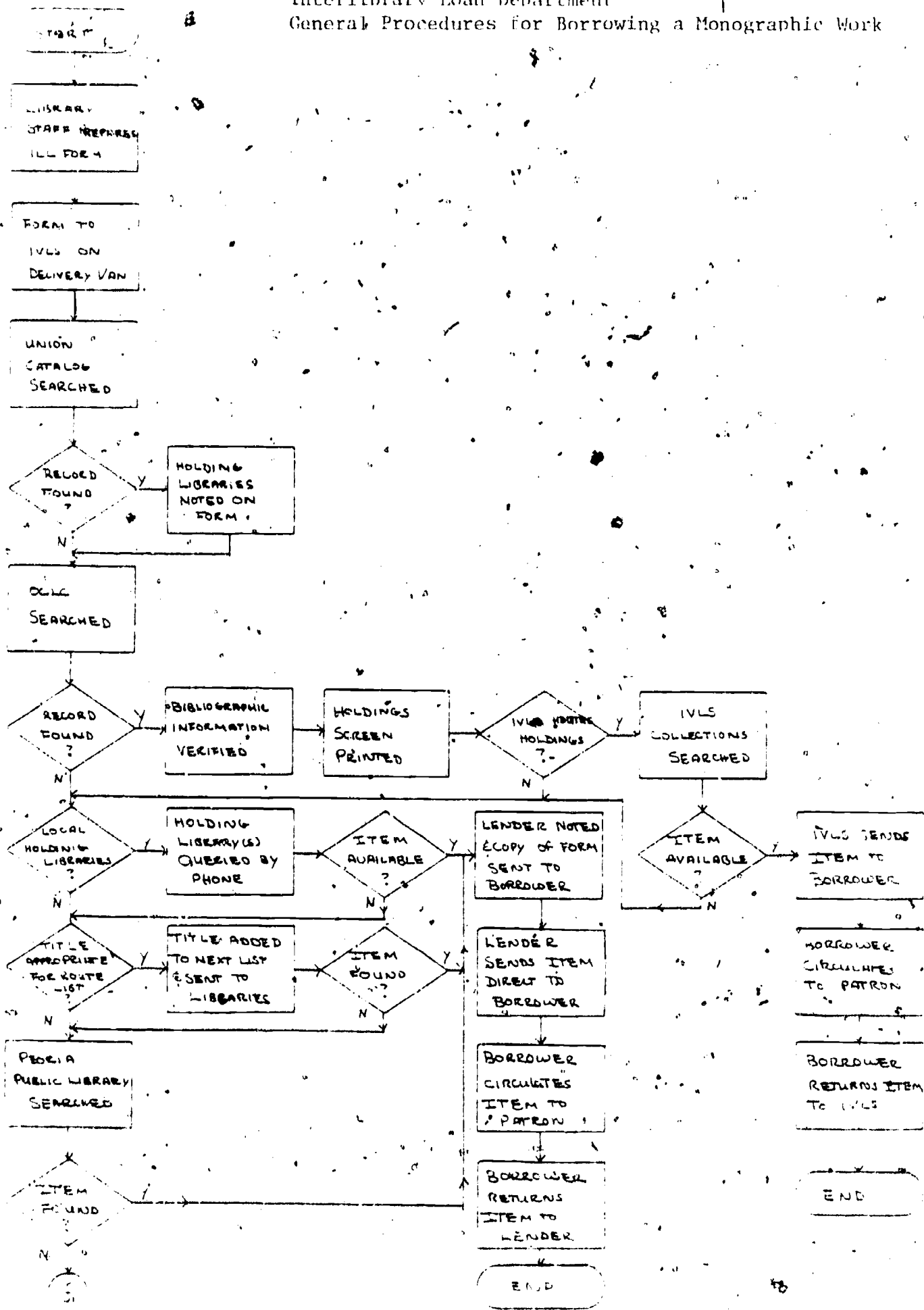
RETAIN LAST COPY FOR YOUR RECORDS

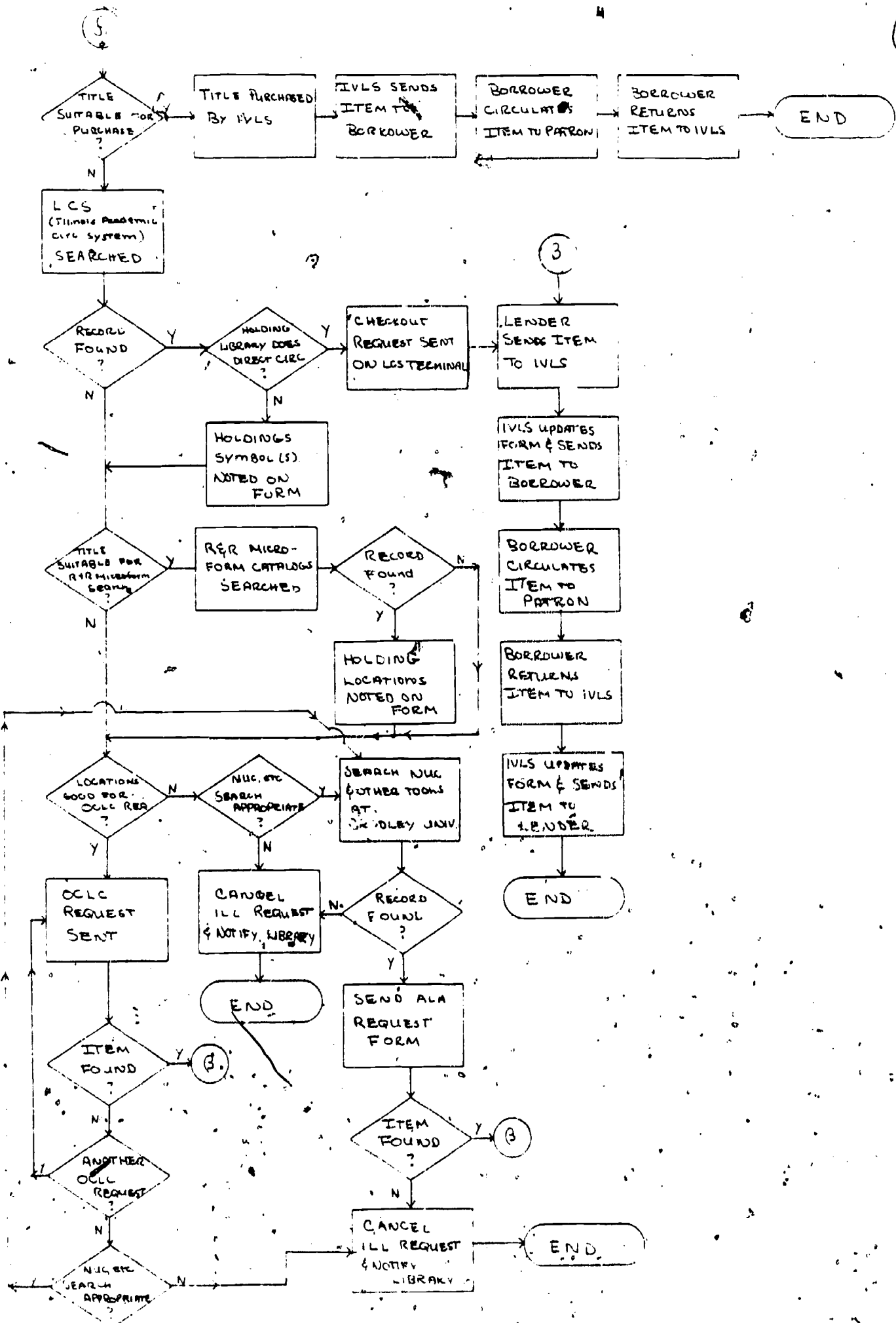
DATE	LIBRARY	STAFF MEMBER
		(INITIALS)
AUTHOR		
(LAST NAME FIRST)		
TITLE		
(ALSO PERIODICAL ARTICLE TITLE)		
PERIODICAL TITLE		
	(EDITION)	(PUBLISHER) (DATE)
	VOLUME	PAGES DATE
RECORDING	COMPOSER	
(INDICATE STEREO OR MONO)		
VERIFIED IN B I P	OR	
(VOL)	(PAGE)	(YEAR)
UNABLE TO VERIFY IN		
NOT WANTED AFTER	WILL WAIT INDEFINITELY <input type="checkbox"/> THIS EDITION ONLY <input type="checkbox"/>	
IF UNAVAILABLE IN ILLINOIS SHOULD WE REQUEST OUT OF STATE? YES <input type="checkbox"/> NO <input type="checkbox"/>		
SOURCE, ADDITIONAL INFORMATION – AND/OR COMMENTS:		
REQUEST COMPLIES WITH <input type="checkbox"/> 108 (B) (2) GUIDELINES (CCG) <input type="checkbox"/> OTHER PROVISIONS OF COPYRIGHT LAW (CCL)		
BORROWER	FACULTY <input type="checkbox"/> STUDENT <input type="checkbox"/> ADULT <input type="checkbox"/>	
ADDRESS	PHONE	CARD #

COMPLETED BY IVLS STAFF		
	CALL #	STATUS
PPL	_____	_____
IVLS	_____	_____
_____	_____	_____
_____	_____	_____
REQUESTED		
	DATE	STATUS
ISL	_____	_____
UI	_____	_____
CPL	_____	_____
SIU	_____	_____
_____	_____	_____
_____	_____	_____
FILLED		
	LIBRARY	DATE
RESERVED AT	_____	_____
ORDERED BY	_____	_____
SENT FROM	_____	_____
DUE	_____	_____
CALL #	_____	_____
RETURNED	_____	_____
INSURED	_____	_____
RECEIPT #	_____	_____
CANCELLED		

105

Illinois Valley Library System
 Interlibrary Loan Department
 General Procedures for Borrowing a Monographic Work





APPENDIX D

Transaction Study Form

This form was xeroxed front and back on a half-sheet
which was attached to an IVLS interlibrary loan
request form to be used in the libraries

BEST COPY

ILL Test Form
THIS SIDE TO BE FILLED OUT BY LIBRARY

Record for this ILL transaction only the approximate time spent on each activity, your initials and the date the activity was completed. Please add "am" or "pm" to the date.

<u>Activity</u>	<u>Time Spent</u>	<u>Date</u>	<u>Initials</u>
1. Assisting patron & writing form			
2. Filing yellow copy			
3. Dispatching form to IVLS			

THIS FORM MUST BE SENT TO IVLS ATTACHED TO THE ILL REQUEST. WHEN THE REQUEST FORM IS RETURNED TO YOU - FILL OUT THE APPROPRIATE CATEGORIES BELOW.

	<u>Time Spent</u>	<u>Date</u>	<u>Initials</u>
4. Receiving material/updating library records			
5. Notifying Patron			
6. Checking out to Patron			
7. Renewing material			
8. Checking in material returned by Patron			
9. Returning material to IVLS or lending library			

Was this what the Patron wanted? yes no

RETURN THIS FORM TO IVLS/ILL DEPT:

PHOTOCOPIES - Return form directly to IVLS after giving photocopy to patron.

BOOK FROM IVLS LIBRARY - Return form directly to IVLS after returning book
to lending library.

OTHER BOOKS - Return form with book.

THIS SIDE TO BE FILLED OUT BY IVLS
Place a check by the step at which material was ordered.

Activity	Time Spent	Date	Initials
Receipt of Request			
Check Union Cat./Union List			
Contact IVLS Holding Library			
Photocopying at IVLS			
OCLC Verification			
LCS Check			
PPL Check			
Bradley Verification			
R & R Microfilm/UL Check			
ULS/NST, Other Union Lists			
OCLC PRODUCE			
OCLC PRODUCE (2nd, etc.)			
Non-automated Request Sent			
Route List Inclusion			
Purchase			
Cancellation			
Receipt			
Updating Records			
Charge out			
Sort in Bins			
Returned Item check in			
Updating Records			
Return to Lender			
Filing/Sorting/Decisions			

FILLED UNFILLED

Please note if this request involved problem materials such as genealogy, census microfilm, etc.

APPENDIX E

Illinois Valley Library System
Interlibrary Loan Department
Worklog Study Form and Instructions

IVLS INTERLIBRARY LOAN WORKLOG

Name: _____

Date: _____

ACTIVITY	UNITS		TIME
1. Receipt of Requests- Stamp, sort, count (OCLC/paper)	Requests		
2. Verification (BIP, etc.)	Requests		
3. Search OCLC, printouts, Staple to request	Requests	Hits	
4. Locate IVLS book Ref, HC, Rotating, ILL-	Searched	Found	
5. Search Union Cat.	Searched	Found	
6. Search LCS & Order (if found)	Searched	Ordered	
7. Count Requests to/from PPL	Requests		
8. Search PPL, pull book	Searched	Pulled	
9. Reserve PPL material	Reserves		
10. Search R&R Mfilm	Searched	Found	
11. Verification at Bradley	Searched	Verified	
12. Pull Bradley Material	Pulled		
13. Arrange Route List Requests	Requests		
14. Type route list	Requests		
15. Route list - labeling			
16. Route list - tearing down returns	Lists		
17. PRODUCE OCLC request	Requests		

IVLS INTERLIBRARY LOAN WORKLOG

Name: _____

Date: _____

ACTIVITY	UNITS		TIME
18. Printout OCLC PENDING file			Requests
19. Update OCLC PENDING requests			Updated
20. Type ALA request and send			Requests
21. Type, varify and locate request and send			Requests
22. Cancel requests			Requests
23. Search HILC union list	Searched	Found	
24. Search IVLS union list file	Searched	Found	
25. Check UofI union list	Searched	Found	
26. Check print union lists			Found
27. Search ULS/NST	Searched	Found	
28. Search OCLC union list	Searched	Found	
29. Xerox (at IVLS or Bradley)			Articles
30. Unpack ILDS bag and sort			Items
31. Opening packages, mail, sorting			Items
32. Skimming IVLS route box -- check out, sort to bins (p.m.)			Items
33. Unpack IVLS route box and sort (a.m.)			
34. Check in receipts - pull ILL form, update			Items
35. OCLC file maintenance, (general)			Transactions

IVLS INTERLIBRARY LOAN WORKLOG

Name: _____

Date: _____

<u>ACTIVITY</u>	<u>UNITS</u>	<u>TIME</u>
36. Count, log, and pack ILDS		Books/phot
37. Sort route items into bins		Items
38. Pack US mail/UPS, stamp		Items
39. Counting and statistics general		
40. Count cancellations		
41. Monthly Statistical reports		
42. Miscellaneous filing of forms		
43. Union catalog - filing new titles, discards		Titles
44. Union catalog - refiling project		
45. Shelve books - including pulling circ cards		Books
46. Travel to Bradley		Trips
47. Decision-making process		Requests
48. Overdues, pulling & Xeroxing		Requests
49. Meetings		
50. Other		

Interlibrary Loan Test Form
Definition of Activities

General Instructions

Time

To record the time spent on any activity, please count the time that activity actually takes including any built-in waiting time, such as response time on the OCLC terminal. Do not count time between activities or between two applications of the same activity. That is, do not count the time that you may wait between making one phone call and making another. In general, the rule is that if the waiting time between operations is spent doing some other work, it is not counted as part of the time spent on this interlibrary loan request. If waiting time is a necessary and unavoidable part of the activity itself, and is not spent doing other work, then include it in the time spent on the activity.

Date

The date given should be the date at which any particular activity is completed. You do not have to wait until the results of that activity are seen before dating the activity as completed. That is, if a non-automated request is sent, count as the date at which you finished preparing that request. Do not wait until you receive a reply from that request.

Batching

For several activities here, the easiest and most accurate way to count time spent on a single request is to count the time spent on a group of requests and divide by the total number of requests involved. This kind of counting is referred to as "batching". If you batch requests to determine the time spent on a single one, you should enter on the form the total time, a slash and the total number of requests handled. If this information is on the testing form, we can later determine time for one request when we analyze the forms.

Please place a checkmark beside the step at which the material was effectively ordered. That is, if you have every reason to believe that a particular step will result in the receipt of the material, place a check by that step. If we later discover that the step was not an effective one in receiving the material, you can cross out that checkmark and place another one at the effective step.

Please use the last item at the bottom (filing/sorting/decisions) for any other miscellaneous activity which cannot be identified with the activities listed.

Activities

Receipt of Request: Count the time spent processing incoming requests, stamping and sorting them. Batch if desired.

Check Union Catalog/Union List: Count here the time spent checking a request in the union catalog for the System or in the card file for serials in the System. Batch if desired. However, if the request that is being tested takes an unusually long time to check, please count that time separately as accurately as possible.

Contact IVLS Holding Library: Count here the time spent attempting to contact the holding libraries that were located in the union list or catalog. Count actual dialing and phone time, but not waiting time between phone calls. Count all of the time spent trying to contact a library that can lend the book, even if no library is successfully contracted.

Photocopying at IVLS: Include the time spent finding the journal at IVLS and photocopying it. If the journal is received from another library in IVLS, count the time spent photocopying it and returning it to the library.

OCLC Verifications: Count the time spent at the OCLC terminal, including the time when you are waiting for a response. Batch if desired. However, if the request being tested takes an unusual amount of time, please give the time spent on that particular request as accurately as possible.

LCS Check: Count the time spent organizing material to check LCS and checking the LCS terminal. Batch if desired.

PPL Check: Count the time actually spent at the catalog at PPL or searching the stacks for the item being tested. The date stamp should be the date on which the search was completed at PPL, successfully or unsuccessfully.

Bradley Verification: Count the time spent using various tools at Bradley to verify the item being tested. The date should be the date at which these checks were completed.

R and R Microfilm/Union List Check: Count the time spent checking the R and R Microfilm to locate or verify a request. For serials, count the time spent checking R and R union lists. Batch if desired.

ULS/NST, Other Union Lists: Count here the time spent checking various other union lists for journal entries.

OCLC PRODUCE: Count here the time spent to create the OCLC interlibrary loan form and to send it.

OCLC PRODUCE (second, etc.): Count here the time spent preparing and sending second, third, etc., OCLC interlibrary loan requests. Please specify how many times OCLC was retried.

Non-automated Requests Sent: Count here time spent to prepare and dispatch interlibrary loan request forms that are not automated.

Route List Inclusion: Count here the time spent preparing the route list, both typing and labeling for routing. This count should be batched.

Purchase: Count here the time spent deciding on a purchase, preparing the order, receiving the material, and preparing it to be dispatched to the library. Time spent by the Business Office to process the invoice will be added later.

Cancellation: Count here the time spent sorting and writing explanations for unfilled requests. Batch if desired. However, if the request being tested takes an unusually long time to prepare, count the time separately.

Receipt: Count here the time for actual receipt of the piece, if the piece is ordered from a library outside the System. Batch if desired.

Updating Records: Count here the time required to update OCLC interlibrary loan records for received pieces. Batch if desired.

Charge Out: Count here the time required to pull interlibrary loan paper records and record the receipt and dispatch of the piece. This count may be batched if you wish.

Sort in Bins: Give an approximate time per piece to sort the pieces to the various receiving libraries.

Returned Item Check In: Count here the time needed to unpack and sort items returned from the libraries. This count may be batched if you wish.

Updating Records: Count here the time needed to update OCLC interlibrary loan record. This count may be batched if you wish.

Return to Lender: Count here the time spent clearing paper records in the interlibrary loan department and preparing a piece to be returned to the lender.

Filing/Sorting/Decisions: Count here miscellaneous time spent in processing and sorting interlibrary loan requests, including time discussing problems with particular interlibrary loan requests which do not fall into any other activity above. If a problem is discussed, count the total time for all of the people involved in the discussion with all of their initials.

APPENDIX F

Library Interlibrary Loan Worklog Study
Forms and Instructions
for Terminal Activities
and OCLC-Related Work

TERMINAL USE LOG
Library _____

INTERLIBRARY LOAN

Date _____

Item no.	NEW REQUESTS			UPDATES/INFORMATION							TIME min:sec	INIT.	PROBLEMS							
	Found?		Req Sent	Print	Search			Print	Pending					Other						
	Y	N			mf	il#	oth		Y	N	C	F	Lib.	B	L					
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				

Library type: A=academic; P=public; Sc=school; Sp=special; Sy=system
and Location: IV=IVLS; R=SIU, UI, CPL or ISL; IL=Other Illinois; OS=Out of State

Please Return to OCLC Project



Notes:

For Pending requests sent to your library, please record your answer:

- y = yes
- n = no
- c = conditional
- f = future date

Record also the type and location of the requesting library if it is easy to tell from the "ship to" address. Use the codes at the bottom of the page.

Other updates

Record only your role in the loan:

- B = Borrowing library
- L = Lending library

TIME

Please record minutes and seconds with a colon between:

2:32 = 2 minutes, 32 seconds

If only one applies (minutes or seconds), use the colon to show which:

- 1: = one minute
- :27 = 27 seconds

TERMINAL USE LOG
INSTRUCTIONS

Please read these instructions carefully before beginning the study.

1. Fill in the name of the library for whom the work is being done and the date.
2. Keep a supply of the forms at the terminal, with the stopwatch.
3. Use one line on the sheet to keep track of each separate operation. One "operation" includes all of the things done at one time to one title. Include as part of the "operation" any note-taking or other work you do (measuring a book, etc.) at the terminal as part of completing your work. Do not count time spent filling in the terminal use log.
4. START the stopwatch just before you start the operation.
5. STOP the stopwatch when the operation is completed.
6. Note the time elapsed in minutes and seconds. Read the seconds from the outer dial of the watch and the minutes from the inner dial (See stopwatch use instructions). Round off times to the nearest second. Please make sure the colon is in the right position:

2:35	2 minutes, 35 sec.
2:	2 minutes even
:35	35 seconds, no minutes

7. RESET the watch.
8. Place a check in each box that applies to the completed operation (See explanation below and attached examples).
9. Place your initials in the "int." box.
10. If you use time to correct terminal problems (for calling OCLC, IVLS, using the check procedure, etc.), record the time used in the "Problem" area.
11. If you use a dial access terminal, note log-on time in the "Problem" area.

CAT/RECON/SEARCHING

Use this sheet to record any operations done on the cataloging subsystem.

Found?

For each search done, whether for cataloging, recon or general information, check one box: Y = yes, N = no. Check a box even if you searched by an OCLC control number.

Count each total search as one item, regardless of how many search keys were tried. If you tried three search keys (e.g., ISBN, author, title) and found the record with the third try, record it -

like this:

Item No.	FOUND?	
	Y	N
1	✓	
2		
3		

Not like this:

Item No.	FOUND?	
	Y	N
1		✓
2		✓
3	✓	
4		

If you do not find the title by any search, check the "N" column, complete any work at the terminal for that title and record the time used.

USE

For each item found, check one box to show the use you made of the record:

- Cat = cataloging or reclassification - ordering cards.
- Rc = retrospective conversion.
- Acq = verifying ordering information and/or printing order slips.
- Oth. = other uses, including name authority file searches, name-address directory searches.

ACTION

Check as many boxes as apply to this terminal use.

- As is = for cataloging, reclass or recon, using the record and changing NO MORE THAN the 049 and the call no.
- Modify = for cataloging, reclass or recon, adding, editing or deleting additional fields.
- Refer = any action taken to refer a record to another person or hold it for your own later use. Such action may include making notes, making a printout or putting the record in save.
- New = putting an entirely new record on the database, either from a "wf" command or a "new" command.
- Labels = formatting and printing labels. Check this box if it applies even though you may have also checked another "action" box.
- Print = making any other form of printout - full record, partial record and/or printing acquisition slips. Check this box if it applies even though you may have also checked another "action" box.

INTERLIBRARY LOAN

Use this sheet to record any operations in the interlibrary loan subsystem.

NEW REQUESTS

Record actions taken on new ILL requests in this area, including requests starting from scratch, or from "expired" or "unfilled" requests.

- Found? Y N: Whether you found the title on the data base. For instructions see description of the cataloging sheet above.
- Req. Sent: Check here if you sent the request Via OCLC, regardless of whether you found the title on the data base. Do not use this box if you decide to use OCLC information, but send the request another way.
- Print: Check here if you made a printout(s), regardless of whether you sent the request via OCLC.

UPDATES/INFORMATION

Record all ILL operations here.

- Search: For each operation, record the way you searched. This includes searching the message file when there are no messages.
- Print: Check here if you made a printout(s) as part of the operation.
- Pending: For PENDING requests that are answered in a particular operation, give your answer and the code for the type and location of the requesting library (if this can be easily determined from the "ship to" address).

Y = Yes answer
N = No answer
C = Conditional answer
F = Future Date given

Codes for library type and location are at the bottom of the page.

- Other: For all the other UPDATE operations, check a box to show whether you are the borrowing (B) or lending (L) library. For quick reference, check to see if your code is in the "Borrower" field at the top of the screen.

EXAMPLE

TERMINAL USE LOG

INTERLIBRARY LOAN

Library Widget Corp

Date 9-8-81

Item no.	NEW REQUESTS			UPDATES/INFORMATION				TIME min:sec	INIT.	PROBLEMS							
	Found?		Req Sent	Print	Search		Print				Pending			Other			
	Y	N			mf	ll#					oth	Y	N		C	F	IL
1	✓		✓	✓											2:46	43	DIAL ACCESS LOG ON 2:15
2		✓													1:50		
3	✓														:42		
4	✓		✓	✓											3:10		
5	✓			✓											1:25		
6					✓										:10		
7						✓		✓				✓			:56		
8						✓							✓		1:15		
9						✓							✓		2:50		
10					✓			✓							:50		
11						✓				✓	A				2:15		
12						✓				✓	US				:25		
13						✓				✓	OS				:32		
14						✓				✓	Sy				:20		
15						✓				✓	P				1:15		
16						✓				✓	IV				:56		
17						✓		✓		✓	SP				2:15		
18											IL				:		
19															:		
20															:		
21															:		
22															:	✓	
23															:		
24															:		

Library type: A=academic; P=public; Sc=school; Sp=special; Sy=system
 and Location: IV=IVLS; R=SIU, UI, CPL or ISL; IL=Other Illinois; OS=Out of State

BEST COPY

127

124



STAFF WORKLOG
INSTRUCTIONS

Please read these instructions carefully before beginning the study.

1. Fill in the name of the library for whom you are doing the work.
2. When you begin doing one of the listed activities, START the stopwatch, or note the time begun on scrap paper.
3. When you finish the activity, STOP the stopwatch or note the time ended on the scrap paper.
4. Read the stopwatch dial - minutes from the inside dial and seconds from the outside dial. Note that the inside dial only records up to 15 or 30 minutes. Be sure to add an additional 15 or 30 minutes if the activity took longer than that. If you wrote times on scrap paper, calculate the total minutes used.
5. Note the time spent on the activity (not the time of day) in the appropriate box.

Use the punctuation given or words to show the units of time:

2/15 = 2 hours, 15 minutes
2:15 = 2 minutes, 15 seconds
1/4:56 = 1 hour, 4 minutes, 56 seconds

6. Note the number of items finished.
7. Place your initials in the third box.

Use as many sheets as you need to record the information without crowding. If you do one operation frequently in a day, you may record it on the back of the sheet, using the item number to identify the activity.

Please explain "other" activities.

Please begin a new sheet each day.

Worklogs may be distributed in two different ways:

1. Give sheets to each staff member who is responsible for one or more of the listed activities. The person would keep the sheet handy to record his/her work.
2. Place sheets at work areas for the activities. Anyone doing the work would be reminded to record relevant activities by seeing the sheet prominently displayed.

Please return to OCLC Project

STAFF WORKLOG

OCLC-RELATED ACTIVITIES

Library: _____

Date: _____

Activity	Time Spent hrs/min:sec	Units done	Initials
Cataloging			
1. Preparing information for terminal work		titles	
2. Checking returned OCLC cards - Processing, not including filing		cards	
3. Processing books - Pockets, labels, bookcards		titles	
4. Calls to host/guest for information, terminal status, etc.		calls	
5. Travel time		1 way	
6. Dealing with OCLC & Project paperwork (approx.)		 	
7. Training, decision sessions, etc. directly related to OCLC		 	
RECON/RECLASS			
8. Preparing cards, materials, etc. getting books		titles	
ILL			
9. Phone calls to or from libraries or IVLS, noting requests, answers		calls	
10. Checking library catalog & shelves for requested material		titles	
11. Checking circ. file for requested material		titles	
12. Updating files on ILL activity - check-out, etc.		titles	
13. Packing and shipping, placing on IVLS route, etc.		titles	
14. Completing/answering paper requests		titles	
15. Misc. investigation for ILL - overdues, etc.		titles	
16. Other: _____			

Please return to OCLC Project

131

126

APPENDIX G

Library Log Form for
Non-OCLC Interlibrary Loan Activity

Non-OCLE Interlibrary Loan Log

LENDING

Library: _____

Identification (auth, title, etc.) Optional	Date Request Rec'd	METHOD			From IVLS ?	Item Sent ?	Borrowing Library					Date Rec'd Back		
		Phone	Paper	Other			TYPE						LOCATION	
						Acad	Pub	Sch	Spc	Oth	IVL	R&R	IL	O-S
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														

Library type codes: Acad=Academic; Pub=Public; Sch=School; Spc=Special; Sys=System; Oth=Other
 Library location codes: IVL=IVLS area; R&R=UofI, SIU, CPL, ISL; IL=Other Illinois; O-S=Out of State

Return to IVLS/OCLE Project when completed

Non-OCLC Interlibrary Loan Log

INSTRUCTIONS

Lending

Begin using the log on May 1st.

Record all Non-OCLC requests received from other libraries between May 1st and May 31 st. This includes requests received from IVLS over the telephone. It DOES NOT include OCLC requests relayed to guest libraries from host libraries.

Continue filling in the log until all materials you sent through May 31st are received back at your library; that is, until all lines of information are completed.

Identification: Use whatever information is needed to identify the material so the final "rec'd back" date can be added later.

Date Request Rec'd: Fill in the date the request was received in your library.

Method: Check the appropriate method of communication used. "Paper" includes mailed requests and the IVLS route list. For "other", please indicate what the method was.

From IVLS: Check this box if the request came from IVLS.

Item Sent: Check this box if you sent the item.

Borrowing Library: If the information is available, please fill these two sections whether or not you send the item. Check one box each for library type and library location. The "R&R" locations are:

Chicago Public	(Type = Pub)
Illinois State Library	(Type = Oth)
Southern Illinois University	(Type = Acd)
University of Illinois	(Type = Acd)

Date Rec'd Back: Fill in the date that material lent was received back in your library.

Non-OCLC Interlibrary Loan Log

BORROWING

Library: _____

Identification (patron, auth, title, etc) Optional	Date of Patron Request	METHOD			To IVLS ?	Date Item Rec'd	Lending Library									
		Phone	Paper	Other			TYPE									
							Acad	Pub	Sch	Spc	Sys	Oth	LOCATION			
							IVL	R&R	IL	O-S						
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																

Library type codes: Acad=Academic; Pub=Public; Sch=School; Spc=Special; Sys=System; Oth= Other
 Library location codes: IVL=IVLS area; R&R=U of I, SIU, CPL, ISL; IL=other Illinois; O-S=Out of State

Return to IVLS/OCLC Project when completed

Non-OCLC Interlibrary Loan Log

INSTRUCTIONS

Borrowing

Begin using the log on May 1st.

Record all Non-OCLC requests sent between May 1st and May 31st.

Continue filling in the log sheets until all the requests initiated through May 31st are received or unfilled; that is, until all lines of information are completed.

Please record all requests your library sends by any means EXCEPT REQUESTS SENT OVER OCLC.

Identification: Use whatever information is needed to identify the material when it is received so the last items (date rec'd, lending library) can be filled in.

Date of patron request: Use the date the patron actually asked for the item.

Method: Check the box for the way the request was sent. "Paper" may be either an IVLS request form or a mailed request. In "Other" please specify what method was used.

To IVLS: Check this box if the request was sent directly to IVLS.

Date item rec'd: Fill in date item was received in the library, regardless of when (or if) the patron picked it up.
UNFILLED REQUESTS - place an X in this box.

Lending Library: Check one box each for library type and library location of the lending library. The "R&R" locations are:

Chicago Public	(Type = Pub)
Illinois State Library	(Type = Oth)
Southern Illinois University	(Type = Acd)
University of Illinois	(Type = Acd)