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MINITEX and ILLINET: Two Library Networks

by

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Contents

Introduction .................................................. 3
MINITEX: Minnesota Interlibrary Telecommunications
  Exchange ................................................... 3
  History ...................................................... 3
  Program Administration .................................... 5
  MINITEX Programs ........................................... 6
  Sources of Funding and Program Costs ..................... 14
  Some Observations ......................................... 15
ILLINET: Illinois Library and Information Network .......... 15
  Introduction ............................................. 15
  History ...................................................... 16
  Governance .................................................. 19
  ILLINET Programs .......................................... 20
  Sources of Funding ......................................... 24
  Some Observations ......................................... 24
MINITEX and ILLINET: Comments and Comparisons .......... 25
Appendix A ...................................................... 30
Appendix B ...................................................... 31
Appendix C ...................................................... 32
Appendix D ...................................................... 33
Appendix E ...................................................... 34
References ...................................................... 35
Additional References ......................................... 36
Vita ................................................................. 38
INTRODUCTION

The following paper discusses the current operations and future activities of the Minnesota Interlibrary Telecommunications Exchange (MINITEX) and the Illinois Library and Information Network (ILLINET), two state networks established in the 1960s to meet the information needs of their citizens. Although these networks have a common goal of cooperation to provide library resources, they pursued independent approaches relative to the environment in which each developed. MINITEX, centrally administered from a department of the University of Minnesota Libraries and funded by the Higher Education Board of Minnesota and contracts with other states, depends primarily on the University of Minnesota and local state government libraries to meet its information needs. ILLINET, based at the Illinois State Library and supported through a variety of programs funded by the Illinois legislature, works closely with public, academic, special, and school libraries in the 18 library systems in a hierarchical arrangement for the fulfillment of its objectives. Throughout this Occasional Paper, 1985/86 fiscal and statistical data have been used whenever possible.

MINITEX: MINNESOTA INTERLIBRARY TELECOMMUNICATIONS EXCHANGE

The Minnesota Interlibrary Telecommunications Exchange is a network of academic, public, governmental, and special libraries working together to share existing resources to provide needed materials and information to scholars and residents in Minnesota and its contiguous states. The program began in 1969 as a two-year project in resource sharing among 11 Minnesota libraries. It now involves 162 libraries in Minnesota, North Dakota, and South Dakota and has five programs: (1) document delivery, (2) a common union list of serials (MULS), (3) an online union catalog and cataloging via OCLC, (4) a telephone reference and information service, and (5) a serials exchange. The discussion that follows will describe some of the history of MINITEX, its governance, its programs, its funding patterns, and its relationship to other state, regional, and national bibliographic networks.¹

History

As the only major academic research library in Minnesota, the University of Minnesota Library had long permitted the patrons of other libraries—college and public—to use the materials "in house," which was really only
an advantage to those who lived close by. Interlibrary loan was used to make materials available to out-of-state areas, but policies in effect when the MINITEX program began generally limited interlibrary loans to graduate students and research faculty.\textsuperscript{2}

In response to the need for more convenient resource sharing, Edward B. Stanford, director of University Libraries, initiated a series of meetings in 1968 to explore ways of satisfying this need. As a result of these discussions and later proposals, the Minnesota Interlibrary Teletype Experiment was established in 1969. Funds were provided by the Louis W. and Maud Hill Family Foundation and Library Services and Construction Act Title III through the State Department of Education Office of Public Libraries and Interlibrary Cooperation (OPLIC).\textsuperscript{3} Alice Wilcox of the University Library staff was chosen to administer the $103,200 project, which used the Trans World Exchange (TWX) communications network, United Parcel Service, and first class U.S. mail to test sharing University of Minnesota Library resources with 11 representative private college, state college, junior college, and public libraries. Each library was supplied with a teletype machine and offered expedited service, including book loans and photocopies of journal articles, with all direct costs of the service borne by the MINITEX grant.\textsuperscript{4}

In the early years, the program experienced a rapid growth in the number of requests for materials as the number of member libraries increased and as libraries and library users became aware of the MINITEX services. While the types and levels of service have grown, the cost of providing these services per library and per request has remained low and relatively constant in terms of real, uninflated dollars. In 1969, the first year of operation, the University of Minnesota Twin Cities campus provided 100\% of the delivered items. More recently, the number of document requests has leveled off, and over 32\% of the delivered items are provided from outside the University Twin Cities campus. However, the university still shares more materials with more libraries than any other university library in the country.

The project sought answers to three questions: (1) Could needed materials be provided to out-of-state users in a useful format and in the time space needed? (2) What would be the comparative costs between sharing and duplicating resources? and (3) What would be the degree of conflict of interest with primary users at the host library?\textsuperscript{6} On the basis of the overwhelmingly favorable answers to the above questions at the end of the 18-month study that involved almost 33,000 transactions, the project
became a program of the Minnesota Higher Education Coordinating Board (HECB) and funded by the legislature. It was charged with the following mission: "To facilitate resource sharing among academic and other libraries in Minnesota—as well as those in other states—in order to strengthen the library services provided to students, faculty, researchers, and residents of Minnesota and to contribute to cost effectiveness of library service to individual libraries."  

Program Administration

In Minnesota, the Higher Education Coordinating Board is composed of 11 members, 8 of whom are appointed by the governor, 1 for each of the 5 U.S. congressional districts and 3 at-large. The terms are four years, staggered. The staff of this board determines the general policy direction of the MINITEX programs, defines MINITEX services, and represents MINITEX to the legislature and the public. The Higher Education Coordinating Board contracts with the University of Minnesota Libraries to provide the MINITEX services. The director of MINITEX, who is hired by the University of Minnesota, is a department head within the library, much like the person in charge of special collections or reference, and reports to the director of the university libraries. The university manages the day-to-day operation of the program and services with a staff of 20 plus the equivalent of 20 students working full-time in the MINITEX office in the Wilson Library.

In addressing its responsibilities, the coordinating board works closely with the 15-member MINITEX Advisory Committee, consisting of 12 members with two-year staggered terms plus ex officio members. Even though appointed by the HECB executive director, each member is nominated by the appropriate library constituency. (Appendix A is a list of the members for 1984-1985 and their institutions.) The MINITEX Advisory Committee has considerable influence in assisting the HECB in managing MINITEX.

Throughout the last 15 years, several principles have guided the administration of MINITEX:

1. The local library is the most appropriate user service level. MINITEX is an interlibrary network and therefore does not service patrons directly. It is an agency to enhance local library service through cooperation among libraries.

2. The local library is responsible for its own collections, bibliographic records, and personnel. It is the responsibility of an academic library to
provide the collection to support its institution’s educational and research programs and the responsibility of other libraries to provide the collection to support the needs of their clientele. There is no substitute for having needed items available locally; in fact 95% of library needs should be met at the local level and only exceptional needs (5%) should be referred to MINITEX.

3. Local libraries are responsible for determining their clientele and selecting appropriate services. Screening of requests is done locally by the librarian, not by MINITEX.

4. Participation in MINITEX should improve or provide additional service to the user. In no case should participation lead to deterioration of service to the user.

5. MINITEX participation should aid in cost effectiveness in individual libraries and allow for improved use of available funding.

6. National standards and protocols (bibliographic, telecommunication, formats, etc.) should be uniformly adopted in the development of any programs or systems. Programs should be developed with flexibility so they can be expanded to integrate with regional or national programs, or support local cooperative activity.

7. To the degree that it is economically feasible, it is appropriate for the network to support access to the communication, delivery, and bibliographic systems, but local use of the system and the accompanying costs are the responsibility of the individual library.

8. All functions should support sharing resources.

9. All procedures and functions should be service producing.  

MINITEX Programs

MINITEX services are delivered directly to 162 participating libraries through five programs. These services complement one another and provide one state’s example of effective library cooperation. Through the public library nodes, hundreds more public, academic, school, and special libraries have access to the MINITEX system. The following sections give a description of each program’s status.

Document Delivery
MINITEX participants transmit book and photocopy requests to the MINITEX central office located at the University of Minnesota, Wilson Library, by electronic means, using TWX, 300/1200 baud terminals, MECC and OCLC. The central staff locates and retrieves the needed materials from one of the 20 University of Minnesota—Twin Cities Campus libraries, the Minnesota State Board of Health Library, the Minneapolis Public Library and Information Center, and/or the Minnesota
Historical Society. Requests not filled at these libraries are referred to other participants known to hold the needed item. Table 1 and figure 1 illustrate the document delivery activity through MINITEX.

**TABLE 1**
**DOCUMENT DELIVERY ACTIVITIES, THE NUMBER OF ITEMS REQUESTED AND REFERRED, 1985-86**

<table>
<thead>
<tr>
<th>MINITEX Region</th>
<th>Requests Received by MINITEX</th>
<th>Percentage of Total</th>
<th>Requests Referred by MINITEX</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic and State</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency Libraries</td>
<td>111,773</td>
<td>64</td>
<td>129,346</td>
<td>83</td>
</tr>
<tr>
<td>UM-Twin Cities Campus</td>
<td>7,676</td>
<td>100</td>
<td>100,610</td>
<td>83</td>
</tr>
<tr>
<td>UM Coordinate Campuses</td>
<td>15,341</td>
<td>2,363</td>
<td>15,873</td>
<td>2,363</td>
</tr>
<tr>
<td>State Universities</td>
<td>29,676</td>
<td>5,566</td>
<td>35,243</td>
<td>5,566</td>
</tr>
<tr>
<td>Community Colleges</td>
<td>12,119</td>
<td>686</td>
<td>18,859</td>
<td>686</td>
</tr>
<tr>
<td>Private Colleges</td>
<td>36,578</td>
<td>13,343</td>
<td>49,921</td>
<td>13,343</td>
</tr>
<tr>
<td>MN State Agencies</td>
<td>7,854</td>
<td>581</td>
<td>8,435</td>
<td>581</td>
</tr>
<tr>
<td>All Others</td>
<td>8,629</td>
<td>6,197</td>
<td>14,826</td>
<td>6,197</td>
</tr>
<tr>
<td>Public Libraries</td>
<td>29,507</td>
<td>17</td>
<td>11,801</td>
<td>7</td>
</tr>
<tr>
<td>Minneapolis Public Library</td>
<td>2,359</td>
<td>9,040</td>
<td>11,399</td>
<td>9,040</td>
</tr>
<tr>
<td>All Others</td>
<td>27,148</td>
<td>2,761</td>
<td>30,009</td>
<td>2,761</td>
</tr>
<tr>
<td>North Dakota</td>
<td>17,955</td>
<td>10</td>
<td>3,376</td>
<td>2</td>
</tr>
<tr>
<td>South Dakota</td>
<td>10,983</td>
<td>6</td>
<td>1,842</td>
<td>1</td>
</tr>
<tr>
<td>Non-MINITEX Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wisconsin</td>
<td>5,512</td>
<td>3</td>
<td>8,984</td>
<td>6</td>
</tr>
<tr>
<td>Illinois</td>
<td>27</td>
<td>1,312</td>
<td>1,339</td>
<td>1</td>
</tr>
<tr>
<td>Canada</td>
<td>157</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Others</td>
<td>—</td>
<td>48</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>176,014</td>
<td>100</td>
<td>156,709</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: MINITEX, 1986

Traditionally, requests which could not be filled in Minnesota, Wisconsin, North Dakota, or South Dakota were referred to the Midwest Health Sciences Library Network, the Library of Congress, the National Library of Medicine, the National Agricultural Library, and/or the British Lending Library. With the dramatic growth in holding symbols and bibliographic records on OCLC, MINITEX is checking this source more frequently to find the items requested by member libraries and experiencing a growing fulfillment rate. For libraries wanting to pursue requests not available through the network or OCLC, MINITEX serves as the Minnesota state agency for obtaining locations of needed materials in other states from the National Union Catalog at the Library of Congress.
Figure 1. Document Delivery Requests

A variety of delivery services provide the needed materials to the requesting library. United Parcel Service, first class mail, commercial buses, and local couriers provide delivery. Couriers, partially supported by MINITEX as part of delivery service to areas with concentrations of libraries, also make
it easier for libraries to share resources through local arrangements. MINITEX has been able to coordinate some of its delivery activities with some of the multicounty, multitype regional library networks delivery services while simultaneously reducing costs and expediting deliveries.  

**MULS**  
*MULS: A Union List of Serials* was originally developed in the 1970s as the *Minnesota Union List of Serials* when it became clear that a database identifying where serials were held was necessary for an efficient resource sharing program. A preliminary edition, issued in 1972, listed 38,000 titles, all held by the University of Minnesota Libraries. Today, MULS has grown to be a machine-readable database which contains over 128,000 titles representing periodical, newspaper, and serial holdings of over 390 academic, public, governmental, medical, seminary, and special libraries in Minnesota, North Dakota, South Dakota, Wisconsin, and Iowa. Holdings from Minnesota, North Dakota, and South Dakota continue to be updated. Figure 2 shows the number of titles and participating institutions for each published edition of MULS.  

MULS supports cataloging, resource sharing, and collection development. Originally used as the basis for CONSER (CONversion of SERials) and loaded into the OCLC online catalog, MULS continues to contribute updated records for MINITEX libraries. Since requests for journal articles constituted 60% of the MINITEX document delivery business in 1985, it is crucial to have detailed holdings statements and accurate, standardized descriptions of items owned.  

By 1983, the number of titles in MULS exceeded the capacity of the system used to produce MULS; the computer language was badly outmoded and no longer used in data processing, and the university no longer employed anyone familiar with the language. When it became apparent that MULS could no longer be produced as it had in the past, it was agreed that a new system for MULS should allow for online access. After months of negotiating, MULS signed an agreement with OCLC in 1986 to maintain MULS on the OCLC Union Listing Subsystem for a period of three years. After that period, MINITEX may, if it desires, receive a copy of MULS on tape and count it on another system within its region. The only stipulation is that MULS continue to update member holdings for a period of three more years.  

**OCLC**  
The Higher Education Coordinating Board has a contract with OCLC (Online Computer Library Center, Inc.), the nation's largest system for
Figure 2. MULS Publications

Thousands of Titles Entered in MULS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>*</td>
<td>122</td>
<td>194</td>
<td>200</td>
<td>318</td>
<td>368</td>
<td>386</td>
</tr>
</tbody>
</table>

*University of Minnesota only

There were no new MULS publications for the years not shown.

Source: MINITEX office,
computer assisted cataloging, to provide its services in Minnesota and the states contiguous to its western border. In 1975, the Minnesota Council of Academic Library Directors (MCALD) identified two concerns which needed to be addressed to ensure effective and efficient delivery of library resources to their institutions and the network: (1) the development of a machine-readable bibliographic database for library materials, and (2) the implementation of a systematic cataloging process to reduce costs and improve processing time. The council formally requested that the Higher Education Coordinating Board and MINITEX negotiate an agreement with OCLC, Inc., for services to MINITEX libraries and that they seek foundation funding to assist in the implementation. The coordinating board submitted a grant proposal and negotiated a contract with OCLC. The funds provided by the Bush Foundation—$216,066 in July 1976 and $134,980 in October 1977—together with $88,000 in institutional grants from the Kellogg Foundation assisted in making OCLC available to many MINITEX participants for the purpose of building a MINITEX Minnesota/North Dakota/South Dakota database of library holdings. As of January 1985, 160 libraries were using 191 terminals to participate in the OCLC system for current cataloging as well as for adding retrospective holdings. This facilitates increased resource sharing among libraries in MINITEX and provides local libraries with additional alternatives to the card catalog. During fiscal 1985, MINITEX participating libraries added 32,248 new titles to OCLC and created over 1.1 million holdings records. There are now more than 8.5 million MINITEX holdings records online; this information is instantly available at any OCLC terminal.

Computer-assisted cataloging by MINITEX libraries improves access to local library resources while it simultaneously builds a MINITEX union catalog. This union catalog, like MULS: A Union List of Serials, allows efficient identification and location of materials needed by MINITEX library patrons.

Three of the 40 FTE MINITEX employees work in direct support of OCLC products and services. Temporary staff, consultants, and member librarians are used to assist and to perform various network functions on an as-needed-basis. Member libraries are used especially to help with OCLC training.

Communications from OCLC are shared with members via monthly mailings from the MINITEX/OCLC coordinator and irregular mailings through the document delivery system when the need is urgent. When members want to voice their opinions about programs they would like to see implemented or express positive or negative criticisms of existing

11
programs, they can go: (1) directly to MINITEX staff members, (2) through the MINITEX/OCLC Users Group, or (3) through the MINITEX Advisory Committee. If the suggestion involves a policy change, the MINITEX Advisory Committee and HECB must accept the policy change before it can be implemented.

MINITEX provides training sessions on OCLC subsystems with the frequency of each session dependent upon demand. These are held at network headquarters or on-site and are generally open to others in the region. MINITEX strives to provide the support that members need to make OCLC work in their respective environments, from training, to workshops, to hand-holding via the telephone.

The MINITEX/OCLC Users Group is made up of representatives of organizations who have contracted for OCLC services through HECB/MINITEX. Included in its major rights and responsibilities are the election of representatives to the OCLC Users Council and the making of recommendations and requests concerning OCLC services to HECB/MINITEX. The MINITEX/OCLC Users Group also participates in the dissemination of information about OCLC, its subsystems, and related plans.

Reference and Information Services
The back-up reference service helps librarians in smaller libraries provide needed information to patrons—i.e., a name, an address, a statistic, a formula, etc. If this information is not found in collections of the libraries of the University of Minnesota—Twin Cities campus, the Minnesota Historical Society, the Minneapolis Public Library and Information Center, or the Minnesota State Board of Health, it may be found in a search of computer databases or through individuals knowledgeable in the subject area. MINITEX uses every available resource to find the answers to a variety of reference questions. MINITEX provides toll-free WATS telephone lines for librarians in Minnesota, North Dakota, and South Dakota to enable librarians to discuss each request directly with the MINITEX reference staff. Figure 3 shows the number of reference requests from July 1974 to June 1986.

Serials Exchange
In this cooperative program with the University of Minnesota—Twin Cities Libraries Gifts and Exchange Division, librarians send duplicate and withdrawn issues of periodicals to MINITEX so that other libraries needing back issues or replacement copies may place requests and receive copies from the inventory as they are available. Since 1974, librarians have sent approximately 2.2 million items, and over 210,000 of these have been
Figure 3. Reference Requests redistributed by MINITEX to other libraries. MINITEX estimates that it costs less than $1.50 per item to handle replacements this way.\textsuperscript{25}
Sources of Funding and Program Costs

The MINITEX program is currently supported through direct appropriations to the Minnesota Higher Education Coordinating Board for service to educational and state agency libraries. In addition, the HECB contracts with the Minnesota Department of Education Office of Library Development and Services (LDS), North Dakota, and South Dakota to provide services to Minnesota’s public libraries and designated libraries in North and South Dakota. Table 2 shows the revenue sources for fiscal 1985.

<table>
<thead>
<tr>
<th>Sources of Revenue, Fiscal Year 1985</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct appropriation to HECB</td>
<td>$686,896</td>
</tr>
<tr>
<td>LDS Contract</td>
<td>174,986</td>
</tr>
<tr>
<td>North Dakota Contract</td>
<td>105,234</td>
</tr>
<tr>
<td>South Dakota Contract</td>
<td>71,529</td>
</tr>
<tr>
<td>Carry forward from FY 1984</td>
<td>33,256</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>$1,071,901</td>
</tr>
</tbody>
</table>

Expenditures for the MINITEX program are allocated to the five MINITEX services. In addition, under the contracts with North and South Dakota there is a payment to the University of Minnesota for collection development to compensate for the borrowing by these states. Expenditures for fiscal year 1985 are shown in table 3. In fiscal year 1985, member libraries spent $1,353,992 on OCLC services, but these were direct pass-through costs.

<table>
<thead>
<tr>
<th>Expenditures by Program, Fiscal Year 1985</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Delivery</td>
<td>$708,390</td>
</tr>
<tr>
<td>MULS</td>
<td>74,063</td>
</tr>
<tr>
<td>Reference and Information</td>
<td>146,974</td>
</tr>
<tr>
<td>Online Cataloging</td>
<td>93,744</td>
</tr>
<tr>
<td>Serials Exchange</td>
<td>20,449</td>
</tr>
<tr>
<td>Collection Development</td>
<td>$27,551</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>$1,071,171</td>
</tr>
</tbody>
</table>

MINITEX is a low-cost service largely because of its unusual nature and organization. Many other library networks in the country are organized as nonprofit corporations with their own independent boards. These networks must be concerned with operational details such as capital invest-
ment, overhead, and internal management systems necessary for tracking costs to be translated into user fees. Because MINITEX is a state program funded through a state appropriation to the HECB and housed at the University of Minnesota's Wilson Library, there are no overhead charges to support these costs; thus the costs are modest compared to those of other networks. Further, the involved accounting systems necessary to determine and create billing procedures are unnecessary due to the method of MINITEX funding. Program efficiency and cost effectiveness are thus increased.  

**Some Observations**

MINITEX is first and foremost a document delivery/resource sharing system. The other services offered, including union listing of serials, OCLC, reference backup, and serials exchange, are designed to strengthen and enhance resource sharing.

MINITEX has a widely-based group that utilizes its services in Minnesota and the Dakotas. Its reciprocal agreement with the Wisconsin Interlibrary Loan Service gives it special access to the extensive resources available in that state.

**ILLINET: ILLINOIS LIBRARY AND INFORMATION NETWORK**

**Introduction**

The Illinois Library and Information Network (ILLINET) is a statewide intertype library network composed of local public, academic, special, and school libraries, 18 library systems, 4 research and reference centers, and 3 special resource centers of last resort. The network began in 1965 in response to legislation promoted by the director of the state library and passed by the Illinois legislature. ILLINET currently involves 2261 libraries—612 public libraries, 164 academic libraries, 946 school libraries, and 539 special libraries—through the 18 library systems. It has five major program emphases: (1) document delivery, (2) bibliographic access via OCLC and computerized circulation systems, (3) reference/information services, (4) cooperative collection development, and (5) continuing education. The discussion that follows will describe some of the history of ILLINET, its governance, its program, its funding patterns, and its relationship to other state, regional, and national bibliographic networks.
ILLINET, which until 1974 was known as Illinois Library Network, was established with the creation of public library systems under the Illinois Library Systems Act of 1965. This legislation (initiated by Alphonse Trezza, former director of the Illinois State Library, and passed by the Illinois legislature) provided for the creation of a network of public library systems and for the administration of this network by the state librarian (who is also the Illinois Secretary of State) and his staff. The Illinois Library Systems Act, reflecting the social consciousness of the time, advocated the right of equal access for every Illinois citizen to library services to meet the users' information needs. Subsequently, the state was divided into 18 library systems which cover the entire state geographically. According to Preston Levi, senior consultant with the Illinois State Library, system membership is voluntary with all but 3 of 611 eligible public libraries now members of a system.

The Library Systems Act also specified four libraries as Research and Reference Centers (R&R Centers) for users of the library system network. These four centers include the University of Illinois at Urbana-Champaign, Southern Illinois University at Carbondale, Chicago Public Library, and the Illinois State Library. They are commissioned to provide backup interlibrary loan and reference service to the systems and for which they are reimbursed with state funds.

The Systems Act also authorized the state librarian to designate libraries with special collections as Research and Reference Centers. However, they are called Special Resource Centers to distinguish them from the four Research and Reference Centers. There are currently three: the John Crerar Library, the Northwestern University Library, and the Regenstein Library of the University of Chicago (see fig. 4). The act provided that a committee composed of the directors of the four Research and Reference Centers shall determine the rules and regulations under which the R&R Centers' resources will be made available to the residents of Illinois.

This precomputer hierarchy of back-up interlibrary lending and reference services represents the structural framework of the developing network. Local public libraries benefited enormously from membership in their regional systems (see fig. 5). Centrally provided services, programs, and resources enriched local libraries in ways that were impossible for libraries to achieve individually.

Although the Systems Act was initially only for public libraries, some librarians began to take the next step and to plan for cooperation with
other types of libraries. After two conferences funded by the Illinois State Library from federal grants, the first formal multitype cooperative was
founded in 1971 by academic, public, school, and special libraries in and around Chicago. Based on the positive results of this system, the State Library encouraged library systems to invite the participation of academic (1973), special (1974), and school (1975) libraries in their programs. In
1975, funds were made available to each system to add a cooperation consultant to its staff to work with nonpublic libraries in order to improve access to all library resources for all users. Although multitype library cooperation had become a routine way of life, the issues of governance and funding were still obstacles. According to the Library Systems Act of 1965, the library systems in Illinois were public library systems with boards consisting of trustees from public libraries and funding only to provide services to public library members. Enabling legislation was passed by the Illinois legislature in 1983, permitting systems, which wish to do so, to convert to multitype library systems with appropriate changes in their governance and provisions for additional funding.

Governance

ILLINET is a service of the Illinois State Library. The official authority for the existence of the network is found in the Illinois Library Law in chapter 128, section 107 which states that the function of the State Library is to "promote and develop a cooperative library network operating regionally or statewide for providing effective coordination of the library resources of public, academic, school, and special libraries, and to promote and develop information centers for improved supplemental library services for special library clientele served by each type of library or center." ILLINET is a not-for-profit organization both in the state of Illinois and at the federal level.

The Illinois State Library has an advisory committee designated by the Illinois Library Law in chapter 128, section 105 which states "there is hereby created an Advisory Library Committee whose duty it shall be to make recommendations concerning the policies and management of the State Library." The committee, which is appointed by the state librarian, is comprised of 19 people including the following: one educator in the library field, one institutional librarian, one special librarian, two school librarians, two academic librarians, six library directors of library systems or local public libraries, three citizen-trustees, and three citizen-representatives. Even though this committee officially has an advisory function, its influence is felt throughout ILLINET and the Illinois Library community. As Levi points out, the relationships between ILLINET and the State Library are so closely intertwined that it is often unclear whether there is any distinction. They are both committed to making the library resources of the state available to all citizens. The State Library promotes and develops ILLINET, administers grants which fund
library service development, offers a supplementary source for materials which are unavailable in local libraries, and helps local groups to develop services in areas unserved by libraries.38

Because of the variety of equipment available and to assure users a standard means of access to the broad spectrum of bibliographic and information data, the Illinois State Library has created the Advisory Automation Committee to study interfaces between the different computer systems. This committee, made up of representatives of the public and private sectors, has been assigned three charges: (1) assisting in the solution of specific library automation problems such as interfacing existing systems, (2) devising a means to encourage standardization of protocol and database construction whenever possible, and (3) recommending strategies for future ILLINET automation projects and programs. The work of this committee and of others aware of the impact of technology in libraries will enhance resource sharing and multitype aspects of library and information services in Illinois.39

ILLINET Programs

ILLINET services are delivered to 2290 participating libraries through five programs. These services complement one another and provide one state's commitment to library cooperation and resource sharing. Being a true multilayered, multipurpose, multitype library network, users throughout the state have access to resources throughout the state. The following sections give a description of each of the programs.

Document Delivery

ILLINET participants transmit their loan and photocopy requests to each other, the systems headquarters, and the Research and Reference Centers through a variety of means including telephone, OCLC, TWX, LCS, and direct automated circulation control systems interface. The Special Resource Centers can only be accessed through one of the R&R Centers. Although most libraries work upward through a hierarchy of local library, system headquarters, R&R Centers, and Special Resource Centers to find the desired materials and/or information, this is not an absolute requirement of the network. If one library knows that a certain library will have the item wanted, the potential lender may be contacted directly. Especially with the growth of online circulation systems, libraries are able to find out immediately if an item is owned and if it is available for circulation.40

Given the tremendous library resources available within Illinois, few requests for ILLINET need to be referred out-of-state. Those that are sent
elsewhere are generally identified through OCLC, the Library of Congress, or the British Lending Library. As more retrospective conversion projects are completed through OCLC and more automated circulation control systems are able to communicate with each other, it is expected that fewer requests will need to be routed out-of-state.\textsuperscript{41}

Most of the public library systems established delivery routes serving their member libraries immediately after they came into being in 1965. In the early 1970s, several systems established connecting points between their individual routes. Since the fall of 1980, all systems headquarters and high volume libraries (over 700) are connected by daily routes of the Intersystems Library Delivery Service. Every public library, no matter how remote, is served by a system delivery van at least weekly. System libraries also use UPS, commercial buses, and the U.S. Postal Service to expedite delivery to libraries and patrons with less frequent library delivery van service.\textsuperscript{42}

Not every library has deliveries to the door. Many academic, school, and special libraries use their local public library as their delivery connection, and several academic libraries serve as delivery contact points. During 1984, over 1.4 million items were transported between libraries at a cost of about $0.60 per item, totally funded by the State Library through a combination of state appropriations and federal funds. In addition to speeding the delivery of materials, the reductions in expense to libraries through minimal packaging (books are simply put in large canvas bags similar to mail bags without any wrapping) and no postage expense have increased their willingness to lend to others throughout the state. In addition to the traditional methods of providing information, ILLINET is expanding its use of telefacsimile. Levi stated that in the three years since telefacsimile was first used, almost 60 outlets have added machines. This is further reducing the time library users have to wait for their information needs to be filled.\textsuperscript{43}

**OCLC and Bibliographic Access**

The Illinois State Library, the contracting agent for OCLC in Illinois, established ILLINET/OCLC Bibliographic Data Base Service in the mid-1970s and today serves over 285 outlets with 410 terminals. The total administration and organization of the program has been incorporated into the State Library annual budget ($225,000 in fiscal 1985) to provide a designated staff, training programs, contract administration, and accounting for OCLC service fees. Each library contracts with the State Library for training, liaison, payment, and other network services. The State Library only passes direct OCLC costs to the users ($4.1 million in fiscal 1985/86).\textsuperscript{44}
To assist the Illinois State Library in policy and price structure recommendations, a 10-member Illinois OCLC Steering Committee has been established. This advisory committee is made up of five members who are elected by library directors in institutions using OCLC and who serve for three-year terms, a chairman appointed by the director of the Illinois State Library, the three officers of the Illinois OCLC Users' Group, and a technical representative appointed for a one-year term by the Illinois OCLC Users' Group.

As a state agency funded totally by the State of Illinois, ILLINET is prohibited from actively marketing any product. However, as new enhancements and subsystems become available from OCLC, the network office does hold overview sessions to make users aware of them. In addition, exhibits and presentations are done for the statewide and regional meetings, such as the Illinois Library Association and the Illinois Association of Media Educators. Brochures are distributed by mail to announce new subsystems and other services. ILLINET will make site visits and do individual demonstrations for interested libraries, either OCLC in general or specific subsystems.

ILLINET is interested in keeping its OCLC members informed and does this through a variety of publications and meetings. Illinois Libraries, Illinois Nodes, and the Information Bulletin carry information in various levels of detail about OCLC, its subsystems, and hints for more effective and efficient usage. The Illinois State Library holds an annual meeting for administrators to discuss pricing and other informational matters. The Illinois OCLC Users' Group conducts an annual meeting of OCLC users which is held in conjunction with a regularly scheduled workshop program, "Topics of Current Interest to Illinois OCLC Users." Technical bulletins received from OCLC are distributed promptly as well as other items of interest.

One of ILLINET/OCLC's great strengths is its comprehensive and regular schedule of training which is published one year in advance. In addition to beginning sessions on cataloging, interlibrary loan, serials control, and acquisitions subsystems, a full schedule of intermediate sessions are planned. These are all offered at least two times each year (one upstate—Chicago and one downstate—Springfield) with extra sessions scheduled as needed. New member training is provided at least eight times each year in two-day training sessions.

Since 1981, the State Library has encouraged the sharing of automated circulation systems to serve all types of libraries and to provide online catalogs for regional library sharing. Over 50% of the systems and the State
Library use CLSI (Computer Library Systems Incorporated) and at least 25% more are going to be using the ALIS III (Automated Library Information System) system. The electronic systems allow ILLINET members to use each other's resources by identifying where the material is located and indicating if the item is in the library and available for loan. As might be imagined, using circulation systems for resource sharing has been most successful with regional systems using the same equipment and searching each other's files.

ILLINET also cooperates closely with the Library Computer System (LCS), an online circulation and access system serving 27 public and private academic libraries throughout the state including the University of Illinois. This provides access to over 20 million volumes. LCS terminals have been installed in the 18 regional library systems and the Illinois State Library. These institutions search and borrow directly from the collections of the LCS libraries thus providing Illinois citizens with decreased turnaround time for receipt of materials and an increased number of available titles with few bureaucratic or procedural problems.

Reference/Information Services
In a manner similar to interlibrary lending services, ILLINET routes reference and information services up the same lines, from the local library, through the system headquarters, the R&R Centers, and the Special Resource Centers. Whenever reference/information requests can be satisfied by providing one or more books, photocopied articles, or other pieces of printed information, they are automatically converted to interlibrary lending transactions. As ILLINET is presently organized, only the State Library and the University of Illinois at Urbana Library can route questions to the Special Resource Centers. As the level of sophistication increases at lower levels in the hierarchy, direct access to Special Resource Centers is being discussed as a future possibility for the staff in system headquarter libraries. In the Chicago area, some libraries are utilizing InfoPass, a permit for a user looking for information that can be found only in a collection normally closed to the public. This permit is issued by the user's "home" library after contacting and receiving permission from the restricted library.

Cooperative Collection Development
ILLINET has been promoting statewide coordination of collection development at all levels with varying degrees of success for several years both before and after the report, Toward Cooperative Collection Development in the Illinois Library and Information Network, was published in 1977. A renewed emphasis is being placed on developing user-oriented collection development policies at the local level and determining subject collection
responsibilities at the system level. Higher in the hierarchy, the process is helping identify responsibilities at the research and reference centers and special resource centers. Anticipated results include written collection development policies at all levels and increased interlibrary loan fill rates at the local and system level.

Continuing Education
Until recently, the main emphasis of continuing education in ILLINET has focused on OCLC. As mentioned earlier, ILLINET/OCLC has an extensive, well-planned program of continuing education classes on all aspects of OCLC. In addition, many systems support a variety of continuing education programs aimed at all levels of library staff. Although not very successful in the past, the State Library and ILLINET are working to disseminate all of these continuing education offerings, no matter what the level, throughout the state. These are being put into an electronic mail file supported by the State Library as well as newsletters and mailings from the State Library, ILLINET, and the systems.

These local and regional continuing education opportunities are planned and attended by staff members of all varieties of libraries. Traditional workshops at the system level, open to librarians in all types of libraries, have focused on current issues of library service.

Sources of Funding
A precise financial picture is difficult to obtain because funding for ILLINET is buried within so many departments of the State Library and bound together with funding for the systems. The majority of the funding comes from the State of Illinois with lesser amounts from the federal government and grants. Rod Allen was able to provide figures for the 1986 fiscal year in terms of dollars for the State Library and services it administers (see table 4).

Some Observations
Among the great challenges ahead will be telecommunications as it will affect libraries and resource sharing in Illinois. ILLINET and the State Library need to continue examining means to provide access and linkage for the various systems presently operating throughout Illinois. They also need to be determining the most economical means of providing these data communication links.

Even though progress on cooperative collection development is being made, this will still be a major challenge. Financial incentives from the
State Library will have a profound effect on the speed and cooperation that is ultimately achieved.

The library community, its trustees, and supporters have done a tremendous job of convincing the legislature of the importance of supporting the services libraries provide. Even with the economic hard times experienced by so many Midwestern states, Illinois has increased per capita grants to local libraries over 250% between 1982 and 1985. As Tyer has pointed out, the lobbyist hired by the Illinois Library Association continues to be very effective in the state legislature in developing support for libraries which translates into support for ILLINET, the State Library, and their associated programs. The passage of 28 library-related bills in the 1985 legislative session shows the support libraries have in Illinois.\(^{54}\)

**MINITEX AND ILLINET: COMMENTS AND COMPARISONS**

In spite of their focus on document delivery/information access, MINITEX and ILLINET also have striking differences in the way they conduct business, the ways they are funded, and their administrative arrangements. After an 18 month grant-funded trial, MINITEX was permanently established as a way for the University of Minnesota—Twin Cities campus libraries to serve as resource libraries for all the other libraries in the state. It was designed to be a top down arrangement from one major research library. Document delivery was and continues to be seen as the most important aspect of what MINITEX does. Given the fact that MINITEX is the idea of former University of Minnesota Libraries Director Edward Stanford, it is not surprising that major funding for MINITEX comes through the Minnesota Higher Education Coordinating Board reflecting a higher education focus of MINITEX.
In Minnesota, there is no State Library with a large collection as there is in Illinois. The State Library is officially the Office of Library Development and Services (LDS), and is administratively under the Department of Education. It has only a small working collection of materials aimed at professional librarians. The Office of Library Development and Services is much more of a facilitator/consulting organization which distributes funds from the state and federal government and provides some of the contract support for MINITEX services to public libraries.

ILLINET began with the Library Systems Act of 1965, funded by the State of Illinois and administered by the State Library director and his staff. The 18 public library systems established at that time each have the option of reorganizing itself into a multitype system with representation from all types of libraries on the governing board. The systems are encouraged to handle as much as possible among system members before going up the referral hierarchy. In addition to distributing regularly appropriated state funds, the Illinois State Library handles federal funds and other grants that become available.

Since such a large percentage of materials lent by MINITEX is journals (60%), the need for a union list of serials (MULS) was seen as essential for libraries to offer the highest possible level of service to users. MULS, initially the holdings of the University of Minnesota Libraries, now includes over 400 libraries. William DeJohn, executive director of MINITEX, indicated that MULS contributes significantly to the quality of service that MINITEX is able to offer. The current MULS is out-of-date, but negotiations with OCLC were completed in 1986 for the production of a new edition that will permit users online access through dial-up access as well as the traditional microfiche. Eventually MULS would like to be able to allow users to update their own holdings online, thus increasing the currency of the information. Before allowing extended access to files for such manipulation, strict quality control standards would need to be formulated, and the participants carefully trained.

ILLINET lacks a centralized union list of serials to serve Illinois, although the Serials in Illinois Libraries Online (SILO) list, including public, special, and academic libraries, is being built on OCLC. Tyer said that each library system has a union list of some sort and provides access through printouts, microfiche, or online, and some systems have multisystem union lists. He also indicated that the number of journal requests varies widely from system to system, depending on the population served, thus influencing the need for a statewide union list. For example, in the Great River Library System, with no major research collections and only
three small private colleges, only 9% of the interlibrary loan requests are for journals compared with other systems which have as high as 25% to 30% journal requests.\textsuperscript{56}

Since 1974, MINITEX has served as the supplier of OCLC services for the states of Minnesota, North Dakota, and South Dakota. Among its major functions have been to train new users and to offer programs that update skill and introduce new subsystems. Because of legal restrictions, MINITEX is not able to market OCLC services and products such as LS/2000. It is, however, able to make users aware of their existence through such media as the \textit{MINITEX Messenger}. Because of the other telecommunication systems available, MINITEX has never been a heavy user of OCLC's ILL Subsystem. As the University of Minnesota Libraries and the state universities install their own online circulation and catalog systems along with more sophisticated telecommunications equipment, MINITEX may find itself using the OCLC ILL subsystem even less within its three state service area. Even though not all the TWX machines are gone, most have been replaced by microcomputers that, in addition to serving as devices to send and receive ILL requests, allow libraries to look at online public catalogs and circulation status files of cooperating institutions. These microcomputers also will provide the opportunity for MINITEX to begin sending messages and reports electronically more efficiently and quickly than through usual mail routes.\textsuperscript{57}

MINITEX, which until 1984 had been a centralized system with everything going through MINITEX headquarters, has been experimenting with direct borrowing among the state university libraries and their PALS (Project for Automated Library Systems) integrated online system. These materials are then moved through the MINITEX Statewide Delivery System. This has the potential for reducing the work load of the headquarters staff and shifting some of the load to users in the field. As other libraries become involved, MINITEX will become a much more distributed system.

Minnesota has recently introduced a group of seven multitype library systems through the Office of Library Development and Services as a new organization to promote the decentralization of resource sharing. The literature emphasizes that this is to be a network in cooperation with MINITEX and other cooperative groups already in existence, not an organization seeking to diminish or undermine existing efforts. It appears that these systems will be similar to the existing Illinois library systems, with an emphasis on meeting needs on a regional basis before going to MINITEX. MINITEX and the seven systems are cooperating to expand the delivery of materials to more distribution points through the statewide courier service.\textsuperscript{58}
Illinois, with its much larger research library base, has a different system and offers users a great deal more flexibility about where to go to find the desired information. Illinois has a very sophisticated delivery system, with over 750 libraries receiving daily state library supported courier service and each library in each one of the 18 systems receiving courier deliveries at least weekly. As mentioned earlier, the Illinois Library Services Act of 1965 established the public libraries in the 18 library systems as voting members and the academic, special, and school libraries as affiliate members. Under 1985 legislation, the systems have the option of becoming true multitype networks with the promotion of nonpublic libraries of all types to full participants. Travis Tyer, executive director of the Great River Library System, explained that this has enhanced an already strong cooperative arrangement and will make it even easier to move ahead with coordinated collection management plans.\textsuperscript{59}

ILLINET and MINITEX have both been network participants in OCLC since 1974. Through this participation they both developed online union catalogs of library materials. The OCLC Online Catalog has contributed to the level of service each network has been able to provide. But it also needs to be kept in mind that OCLC services constitute only a small portion of the total activities of MINITEX and ILLINET and consume only small portions of their respective budgets. As more and more libraries install online circulation systems that can be checked through dial-access ports, the level of interlibrary loan activity on OCLC will probably decrease, meaning less revenue for the OCLC Online Catalog Library Center, Inc. Although exact figures could not be obtained, the introduction of LCS in Illinois and its use by 25 academic libraries as well as access granted the 18 system headquarters has probably assumed a substantial amount of ILL traffic that would have gone through OCLC. MINITEX will probably experience the same thing when the circulation systems of the state university libraries are interconnected and direct access is granted to the multitype system or larger public libraries.

Since ILLINET contains several outstanding research library collections within its borders, it is able to fulfill a higher percentage of user inquiries from within the state than MINITEX. This may be why it does not have any reciprocal agreements with other states. MINITEX, because of its different environment, has found it beneficial to cooperate with other states, particularly the Wisconsin Interlibrary Loan Service (WILS), to offer faster service. More efficient handling of requests is also possible because of MINITEX’s 1986 agreement with the University of Illinois at Urbana-Champaign to submit serial requests via a facsimile machine and to borrow books through LCS. MINITEX also contracts with North
Dakota and South Dakota for the provision of services to these two less-densely populated states. This is an excellent example of true regional cooperation across state boundaries.\textsuperscript{60}

The research would indicate that ILLINET, with over 85 installations to date, is far ahead of MINITEX in the use of telefacsimile to speed the document delivery process, although DeJohn indicated that MINITEX is beginning telefacsimile use. MINITEX may, with its great distances and low user density, find telefacsimile a cost-effective alternative to some distribution means currently being used.\textsuperscript{61}

Even though MINITEX and ILLINET are funded by their respective states, the administrative channels for the distribution of those funds are very different. The money for MINITEX comes from the Minnesota Higher Education Coordinating Board who contracts with the University of Minnesota for the provision of MINITEX services. The money for ILLINET comes through the state librarian to the State Library, which is responsible for distributing the money among the ILLINET areas as well as to the State Library for its collection and services. Illinois made an earlier and more substantial commitment to library services as a right of Illinois citizens rather than just a privilege. This is reflected in the fact that the State Library has a budget of over $37 million and over $16.5 million of that goes directly to the 18 systems for collection development, information access, and services to the citizens.\textsuperscript{62}

Two major challenges facing MINITEX and ILLINET are changes generated by the new technologies: (1) online circulation control systems that allow for distributed access among local libraries and up the hierarchy; and (2) coordinated, cooperative collection development. MINITEX and ILLINET members are rapidly installing online library systems. Even though different brands have been selected, it is only a matter of time before they will all be able to communicate with one another. Although ILLINET has some experience with structured collection development policies, these need to be revised so each system or regional group can meet even more of its needs close to home.

MINITEX and ILLINET are two library networks that are flexible, adapting to the new technologies to serve the document delivery/information access needs of the citizens in their respective networks. It will be interesting to examine them five years from now to see how much they have changed.
APPENDIX A
MINITEX Advisory Committee

Cheryl Anderson-Laid  
St. Paul Public Library  
90 West 4th Street  
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- state universities

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Rosemount, MN 55068  
612-423-8406

Harold Opgrand  
Kiehle Library  
Crookston Technical College  
University of Minnesota  
Crookston, MN 56716  
218-281-6510 ext. 396  
- um/coordinate campuses

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-regional systems libraries

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Minneapolis, MN 55455

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Library  
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-community colleges

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Bush Memorial Library  
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St. Paul, MN 55101

William DeJohn, Director  
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S-33 Wilson Library  
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Minnesota, MN 55455  
612-624-2839

Margaret Stefanak  
State Librarian  
North Dakota State Library  
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Bismarck, ND 58505  
701-224-2492

APPENDIX B
Roles and Responsibilities

The Higher Education Coordinating Board:
- the final authority for MINITEX policies
- negotiates and authorizes contracts
- responsible for MINITEX to the Legislature

MINITEX Advisory Committee:
- advises the executive director of HECB on MINITEX
- policies
- planning issues
- program goals
- a forum for discussion of mutual concerns relating to MINITEX services and programs

OCLC Participants Group:
- advises the executive director and the MINITEX advisory committee on OCLC policies and contractual issues
- selects and advises representatives to the OCLC Users Council
- provides a forum for discussion of mutual concerns relating to OCLC

OCLC:
- a contracted agent providing technical services to MINITEX/OCLC participants

APPENDIX D

Illinois State Library Advisory Committee

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<thead>
<tr>
<th>Name</th>
<th>Area Specialization</th>
<th>Term Expires</th>
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<tr>
<td>Mary Deane Huntley</td>
<td>Public Libraries</td>
<td>1988</td>
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<td>Hayner Public Library District, Alton, IL</td>
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<td>Marilyn Boria</td>
<td>Public Libraries</td>
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<td>Elmhurst Public Library</td>
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<td>Evanston Public Library</td>
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<td>Alice McKinley, Director</td>
<td>DuPage Library System</td>
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<td>Jan Beck Isen</td>
<td>Library Systems</td>
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<td>Travis Tyer, Director</td>
<td>Great River Library System</td>
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<td>Bernardette Winter</td>
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<td>Robert Jones, Director</td>
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<td>Glenn Scharfenorth, Associate Vice-President for Academic Affairs</td>
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<td>DePaul University Library</td>
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<tr>
<td>Leigh Estabrook, Dean</td>
<td>Graduate School of Library Science</td>
<td>University of Illinois at Urbana-Champaign</td>
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<td>Joanne Crispen, Director</td>
<td>Lutheran General Hospital</td>
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<td>David E. King</td>
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<td>Standard Education Corp.</td>
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<td>Jeff Baker</td>
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<td>Charleston, IL</td>
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<td>Myrna Lynn Hammerman</td>
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<td>Mark Weber</td>
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<td>Robinson, IL</td>
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<td>Virginia Maulding</td>
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<td>Centralia, IL</td>
<td>Citizen-Trustee</td>
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<tr>
<td>Marilyn Nash</td>
<td>Citizen-Trustee</td>
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<tr>
<td>Geneseo, IL</td>
<td>Citizen-Trustee</td>
<td>1986</td>
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Ex-Officio Members

Robert Plotzke, President
Illinois Library Association
John B. Duff, Commissioner
Chicago Public Library, Chicago IL.
Robert Walhaus, Board of Higher Education
Springfield, IL

APPENDIX E
Library Systems in Illinois

January 1986

Shaded areas denote MULTITYPE library systems

From: Illinois Libraries, January 1986

34
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35
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**ADDITIONAL REFERENCES**

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