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AUTHOR Casey, Genevieve M.  
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## ABSTRACT

A study of the Oklahoma Teletypewriter Interlibrary System (OTIS), made at the request of the Oklahoma Department of Libraries, covers the period April 1968 through June 1969. It is based upon an analysis of records maintained at the Oklahoma Department of Libraries including: (1) what material was requested by what library, how the requests were verified and located, which library supplied the material and when; (2) time span for filling requests, arranged by transmission site and resource library; (3) monthly reports of volume of use from all transmission and resource libraries; (4) detailed expenditure records and (5) miscellaneous correspondence. A questionnaire sent to the 4 resource libraries and 10 transmission libraries was used to collect the original data. Field visits were made to nine transmission sites, all four resource libraries and selected satellite libraries. The report is composed of seven chapters: (1) History and Purpose of OTIS; (2) Volume, Users, Materials and Impact of OTIS; (3) Records and Procedures; (4) Closing the Time Gap; (5) Cost of OTIS; (6) Problems and (7) Summary and Recommendations. (NH)

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OTIS: AN EVALUATION OF THE  
OKLAHOMA TELETYPEWRITER INTERLIBRARY SYSTEM

by Genevieve M. Casey  
Associate Professor, Library Science  
Wayne State University  
Detroit, Michigan

September 1969

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ERRATA

Page 5, line 5	<u>services</u> not sources
Page 14, line 2	<u>any</u> not only
Page 25, line 21	<u>undue</u> not overdue
Page 46, line 2	<u>exchange</u> not enchange
Page 56a, line 2	<u>form</u> , not farm
Page 83, lines 7-8	Tulsa City-County Library fills 7% Oklahoma County Libraries, 5%

## INTRODUCTION

The following study of the Oklahoma Teletypewriter Interlibrary System (OTIS) was undertaken at the request of the Oklahoma Department of Libraries. Mr. Ralph Funk, Director of the Department and his staff felt that since OTIS had been operating for approximately eighteen months, the time had come to evaluate its benefits to the citizens of Oklahoma, examine its procedures and policies and to determine its unit cost.

The study, begun in May, 1969, covers the period from the beginning of OTIS in April, 1968 through June, 1969. It is based upon an analysis of records maintained at the Oklahoma Department of Libraries including, 1) the actual teletyped messages for the entire period with information on what material was being requested, what library requested it, for what patron, how the requests were verified and located, which library supplied the material and when, 2) log records indicating time span for filling requests arranged by transmission site and resource library, 3) monthly reports from all transmission

and resource libraries and their summaries, indicating volume of use, 4) detailed expenditure records and 5) miscellaneous correspondence. Reference was also made to records maintained at the Bibliographical Center for Research in Denver on use by the Oklahoma State Library, to a cost analysis of the impact of OTIS on the Tulsa City-County Library as one of its resource libraries, and to the study of Oklahoma's reference and research needs by Mason Tolman of the New York State Library which led to the establishment of OTIS.

Original data was collected in a questionnaire sent to the four resource libraries and ten transmission libraries included in the system to ascertain how OTIS was working, how it could be improved, what it was costing and how it had benefitted the local libraries of the state. Field visits were made to nine of the transmission sites, to the four resource libraries, and to selected satellite libraries where records were examined and administrators and operational personnel working with OTIS were interviewed.

Conferences were also held with Mrs. Elizabeth Geis, Library Resources Co-ordinator, Oklahoma State Department of Education, with Mrs. Helen Lloyd, formerly

School Library Supervisor in Oklahoma City, with one high school librarian, Miss Gwen Britton, Librarian of West High School, Muskogee, and one librarian of a private university, Miss Frances Kennedy of Oklahoma City University. Conferences were also held with the administrative staff and interlibrary loan librarian at the Oklahoma Department of Libraries.

The report will detail information on who the major users of the network are, what has been the nature, level and type of material requested, the percentage of requests being filled by the Department of Libraries, the resource libraries and the transmission libraries and by libraries outside the state and what percentage of requests have been cancelled or declared unavailable.

The report will include an analysis of the time required to fill requests, how the teletypewriter has effected interlibrary loan time, as well as the volume of interlibrary loan. It will contain an evaluation of the effect of OTIS on local library use, book selection and potential support, of its effect on the flow of materials throughout the state, of its contribution to the closer relationships between libraries of all types. Figures have also been gathered to document the cost of the service

which includes an estimate of the cost to transmission and resource libraries (but not to local, satellite libraries).

Records and reporting maintained at transmission and resource libraries and at the Department of Libraries have been studied, and recommendations will be made regarding the standardization and streamlining of records.

A special word of appreciation is due to Ralph Funk, Director of the Oklahoma Department of Libraries, and to his staff, especially Esther Mae Henke, Associate Director, Public Library Services and Mrs. Mary Hardin, Interlibrary Loan Librarian, who gave generously of their time and candor in aiding the study. The researcher also wishes to thank the administrators and interlibrary loan librarians in the transmission and resource libraries who cheerfully contributed their ideas in personal conference and via questionnaire, and to acknowledge the help of Mrs. Mildred Ludecke, former Director of the Yuma Arizona City-County Library for her work in analyzing data.

One of the compensations of this study has been the privilege of getting to know Oklahoma librarians and their beautiful state.

## I

### HISTORY AND PURPOSE OF OTIS

The Oklahoma Teletypewriter Interlibrary System is a part of Oklahoma's overall plan for the improvement of public library service, and the state's major activity under Title III of the Library Services and Construction Act of 1966, federal legislation designed to encourage the coordination of resources in all types of libraries within each state. The other two activities under the Library Services and Construction Act, Title III, are a project for developing a financial reporting system for the Oklahoma Department of Libraries and other libraries in the state, and a project to coordinate data processing applications among the libraries of the state, chiefly through the use of MARC tapes.

Oklahoma, a new state, somewhat sparsely populated, is not rich in library resources, although it boasts one university (University of Oklahoma) able to qualify for membership in the Association of Research Libraries. The University of Oklahoma Medical Library

(located not in Norman but in Oklahoma City) has relationships with five university medical libraries in Texas, Louisiana, New Mexico and Arkansas with whom they are planning a decentralized regional medical library, associated with the National Library of Medicine. In May, 1969, the University of Oklahoma Medical Library began a three-year federally supported program to provide medical information services directly to the physicians, and other health personnel and hospitals in Oklahoma.

The Oklahoma State University Library is growing rapidly and is strengthening its collection of about one million volumes, especially in veterinary medicine, chemical engineering, and other scientific and technical fields. Oklahoma State University also has a fully classified and cataloged collection of Oklahoma documents and aspires to be declared a regional depository for federal documents.

In addition to the two state universities, Oklahoma has a system of thirteen state colleges with enrollments, according to the latest published statistics, of between 700 and 8,400 , and library collections ranging from 55,000 to 119,000, none of them self-sufficient.

Elementary and secondary school library development in Oklahoma has been slow, with only thirty-five high schools in the entire state reporting full time librarians in the year ending June 30, 1967. At that time there were only two high schools in the state with libraries of over 10,000 volumes. Ninety-nine of the state's high schools reported no library service whatever. The two years of Title II, Elementary and Secondary Education Act, which provides federal funds to the state for the purchase of instructional materials have had the effect of accelerating school library development although it seems likely that another generation of young people will grow up in Oklahoma handicapped by sub-standard high school library services unless some presently unforeseeable crash program is funded. Elementary school libraries are almost non-existent.

There are 119 public libraries in Oklahoma. Although some of these are fine small or medium sized libraries, with the exception of Tulsa and Oklahoma City-counties there are no municipalities large enough to meet the ALA's recommended minimum standard of a support base of 150,000 population. Consequently, Oklahoma's plan for public library development envisions multi-county

library systems, with a one to two mills tax voted in each county, and the voluntary amalgamation of all municipal libraries in the region. Only the city-county library systems of Tulsa and Oklahoma City may form a system on a single county base. Expenditures in Oklahoma for public library purposes from all sources (local, state and federal) totalled in 1968 only \$4,465,651 or \$1.488 per capita.

In order to foster the development of multi-county library systems the Oklahoma Department of Libraries has used funds available under the Library Services and Construction Act, Title I, to conduct a series of two or three-year demonstrations to show the citizens the advantage of good library service made possible by cooperation. Out of these demonstrations has come the establishment of three systems, the Chickasaw Library System, with headquarters in Ardmore, the Western Plains Library System with headquarters in Clinton, the Pioneer Multi-County Library based in Norman, Oklahoma. A demonstration is currently in progress with headquarters in McAlester to form the Choctaw Nations Library System. The electorate will vote on this system in September, 1969.

The largest public library collections in Oklahoma are in Tulsa City-County Library (501,808 volumes in the year ending June 30, 1967), and in Oklahoma County Libraries (419,857 volumes on June 30, 1967). Both these libraries are considered state-wide resource libraries.

Oklahoma has thirty-five special libraries including such outstanding research libraries in oil technology as the Phillips Petroleum Company Library in Bartlesville and the Sinclair Research Center Library in Tulsa, and an excellent collection of documents and of serials as well as monographs on geology in the U. S. Bureau of Mines Library in Bartlesville which acts as one of the transmission sites under the OTIS system. Good military libraries are located at Fort Sill, Tinker Air Force Base at Oklahoma City and at Vance Air Force Bases in Enid. Lawton's Museum of the Great Plains has a collection of over 11,000 volumes on western history, and the State Historical Collection has over 30,000 volumes in Oklahoma history and geneology consulted by at least 4,000 scholars each year. Although they represent individually and together an important reference and research source for the people of Oklahoma, these special libraries do not even aspire to be self-sufficient and depend heavily upon

each other, upon the two state universities, upon the public libraries of Tulsa and Oklahoma City, and often upon their parent company libraries in other states.

The Oklahoma Department of Libraries is a comprehensive state library with broad statutory powers. It now has a collection of 193,778 volumes, not including a library development collection used to launch local system demonstration and a special collection for state institutions. The collection is geared largely to supplement the public library collections of the state, but also has some strength in law and state government, especially legislative reference. The department maintains an official file of Oklahoma state documents, although since no checklist is published, this resource is less than totally available. The department is at present the only regional depository for federal documents in the state and needs to strengthen its management of this material also. The department has current subscriptions to 750 serials and makes its collection of 1,139 16mm educational films available to the public library systems of the state. Major use of the films seems to be by local school teachers.

The Oklahoma Teletypewriter Library Information System was established April 1, 1968 for three basic purposes--1) to facilitate maximum access to all library

and information resources in the state for the benefit of all the people who might need them, and 2) to open the resources in research libraries all over the world to Oklahoma citizens who may have need of them, and 3) to encourage the improvement of local library service by fostering closer coordination between libraries of all types in an area, and the formation of public library systems. The purpose of OTIS is not to substitute for adequate school, public, academic, or special libraries, but rather to strengthen them by linkage with other strong collections in the state and nation.

The plans for OTIS grew out of the deliberations of the Oklahoma Council for Library Development, a group appointed by the Oklahoma Department of Libraries Board to advise the department on planning for interlibrary cooperation under Library Services and Construction Act, Title III. At the recommendation of the Advisory Council, Mason Tolman, of the New York State Library was retained to recommend a plan of action.

Mr. Tolman recommended that Oklahoma's state-wide cooperative service plan must contain the following factors:

- 1) It must involve different types of libraries, i.e., research, academic, school, public and special.

- 2) These different types must be "organized in an array whereby patron requests will be screened at a first level at the general collections of the district libraries of the multi-county systems; at a second level at the State Library --and at a third level in the research collections of the state, and eventually, to research libraries outside the state.
- 3) The response to a patron's request may take a number of forms:--photocopy, the loan of an original, a library-prepared written response and, in the future, telefacsimile.

Mr. Tolman observed that a framework of interlibrary loan and cooperation between the state's various types of libraries already existed and needed to be formalized. His proposal was that a state-wide network be established with access points for the patron through the type of library he is accustomed to use. The components of the network should be, according to Tolman's recommendations:

- 1) Local telephone service from the point of patron access to a communications system transmission site.
- 2) Teletypewriter access to the Oklahoma Department

of Libraries interlibrary loan center.

- 3) Teletypewriter access from the Department of Libraries to resource centers for referral of requests when the department cannot supply.
- 4) Mail or rapid commercial delivery of requested items directly from the supplying library to the access point.
- 5) Use of teletype facilities to report to transmission site on the disposition of each request.

The critical factors in Oklahoma's network, according to Mason Tolman, were location of transmission sites so that the state is adequately covered and the development of a highly efficient interlibrary loan center at the Department of Libraries. Although Tolman recommended that the department be considered the major supplier of material requested; he nevertheless recognized the importance of including the two state universities in the network, not only because they had resources important to the state, but also because they too needed access to collections beyond their own, to meet the special needs of their own faculty and students. Tolman also suggested that Oklahoma County and Tulsa City-County Libraries be designated as additional resource centers.

Communication equipment for the network might be, according to Mason Tolman, only one of the several types available including the Bell System teletypewriter which was in fact selected by the Department of Libraries.

In a \$43,000 proposed budget for the first year of the network, Tolman included an amount of \$25,000 for the installation and operation of the equipment, \$10,000 for salaries for the interlibrary loan center and grants to resource libraries for additional personnel, \$1,000 for grants to transmission sites to accept collect phone calls, \$2,000 for workshops and instructional meetings to insure success of the network and \$5,000 for additional studies to expand the cooperative library system. Mr. Tolman estimated that there should be approximately fourteen to eighteen teletype installations, supplemented by long distance telephone calls from satellite libraries. He felt that the door should be left open for telefacsimile when this becomes technically and economically feasible. School libraries, he declared were most important to the network as heavy potential users with need for access to a wider range of resources than can be hoped to exist in school and/or local public libraries.

An ad-hoc subcommittee of the Council for

Library Development made up of Ralph Funk, Oklahoma State Department of Libraries, Mr. William Stewart, Director, Muskogee Public Library, Miss Frances Kennedy, Librarian, Oklahoma City University, Miss Virginia LaGrave, Dr. Roscoe Rouse, Librarian, Oklahoma State University and Mr. Roderick Schwartz, Associate Director, Tulsa City-County Library, Chairman, studied the Tolman report and suggested that the Department of Libraries work out details of the plan and draft an in-state interlibrary loan code for the consideration of the libraries of the state.

On September 12, 1967, the full State Plan Committee, Chaired by Dr. Arthur McAnally, met to hear Mason Tolman's report, and the modifications of the sub-committee. It was unanimously voted that the report as modified be endorsed, and that the Oklahoma Department of Libraries be advised to establish an Oklahoma Teletypewriter Interlibrary System as proposed by Mason Tolman and the Committee. Thus OTIS received its mandate from the librarians and library trustees of Oklahoma.

In April, 1968, the State Department of Libraries placed teletype equipment in four resource libraries, the Oklahoma State University and University of Oklahoma libraries, Tulsa City-County Public Library and the Oklahoma

County Public Library. In addition equipment was leased for ten transmission sites located in the various geographic regions of the state. Four of these were the headquarters of library systems. One was in a state college, Northwestern State College in Alva and one in a special federal library, the U. S. Bureau of Mines in Bartlesville. The remainder were in unaffiliated public libraries of some strength, willing to administer the system for the benefit of smaller, satellite libraries in their area. (See Appendix for map of OTIS stations and directory of resource and transmitting libraries.) Because it was used very little, the TWX station at Northwestern State College was later discontinued on February 11, 1969. All equipment was linked only to the control station at the Oklahoma Department of Libraries which would poll each TWX machine on a pre-arranged schedule, twice a day. In emergency, libraries could also initiate calls to the Department of Libraries, but could not use the equipment to communicate with each other. A teletype machine was also available at the University of Oklahoma Medical Center in Oklahoma City under the federal Medical Library Program.

The libraries chosen to be transmission sites were asked to commit themselves to the following agreement for the first year of operation.

Transmission Sites agree to:

Accept requests from all libraries in their area eligible to participate under the criteria adopted by the Oklahoma Department of Libraries on the same terms as requests from their own patrons. (See map of transmission site areas and list of counties included in each area.)

Fill requests from their own circulating collection if the materials are not in circulation elsewhere.

Forward requests which cannot be filled at the transmission site to the Oklahoma Department of Libraries, providing the full bibliographic information required in the OTIS Manual and accompanying documents.

Verify all requests when possible in presently owned bibliographic tools and those supplied by the Oklahoma Department of Libraries.

Provide loaned materials free of charge to the user.

Return materials promptly to the lending library, wrapped in the same manner as received and following any special instructions for handling.

Observe any special restrictions on loan of materials imposed by the lending library.

Screen requests before forwarding to the Oklahoma Department of Libraries following standards in the OTIS manual.

Absorb the cost of general office and library supplies needed to make OTIS effective.

Make all financial and statistical reports required by the Oklahoma Department of Libraries and the U. S. Office of Education in connection with the plan.

Maintain total library expenditures and expenditures for library materials at the same level as in the preceding fiscal year, and provide verification to the Oklahoma Department of Libraries in the form of certified

reports of library operations and expenditures as required.

Develop a long-range plan with a timetable for bringing the library's materials collection up to national standards, and provide the Oklahoma Department of Libraries and transmission sites with copies of the plan.

Provide one month's notice of intent to terminate participation in OTIS.

In return, the Oklahoma Department of Libraries agreed to:

Fill requests received from Transmission Sites from its own collection, if possible, before referral.

Provide supplies directly connected with the teletypewriter units.

Transmit messages and requests received from OTIS member libraries to Referral Centers and Libraries on TWX when warranted.

Report to Transmission Sites on the status and disposition of each request received from each Site.

Agreements with the four resource libraries (or Referral Centers) provided that they would:

- 1) Promptly initiate a search for the material requested and report to the Oklahoma Department of Libraries via OTIS the disposition of the request.
- 2) Forward materials directly to requesting libraries, postage prepaid.
- 3) Furnish reports deemed necessary by the Department of Libraries, both financial and statistical.
- 4) Furnish staff and general office supplies and forms.

- 5) Follow message and request formats as set forth in the OTIS manual.
- 6) Provide one month's formal notice of intent to terminate participation in OTIS.
- 7) Inform the Oklahoma Department of Libraries of any difficulties arising in the operation of the System which might jeopardize its success.

On its part, the Oklahoma Department of Libraries promised to:

- 1) Fill requests received from transmission sites from its own collection, if possible, before referral.
- 2) Screen requests as set forth in the OTIS Manual.
- 3) Fully verify requests before referral.
- 4) Refer, in proper form, screened requests to the proper Referral Center.
- 5) Provide supplies directly connected with the teletypewriter units.
- 6) Make grants to cover cost of postage, handling, and will accept collect telephone charges when necessary to fill the request.
- 7) Transmit messages and requests from Referral Centers to OTIS member libraries and libraries on TWX when warranted.

The remaining libraries of the state were asked to send their requests by mail or telephone to the nearest transmission center. With the aid of the Bibliographical Center for Research in Denver, of which the Department of Libraries became a member in 1968, requests which could not

be located within Oklahoma were sent to any library in the nation, or indeed the world. For the users of libraries in Oklahoma, OTIS opened up enormous resources which for practical purposes had been previously closed to them. Every public library, no matter how small, became as large as the world.

Prior to the OTIS Project, academic libraries in the state had not made significant use of collections at the State Library, or in the larger public libraries of the state, nor had they made their own resources significantly available to the general public. Close association had been maintained between the two state universities, for at least six years with an exchange of cards for their public catalogs, a mutual agreement for free photocopying service and courier service between the two campuses (approximately 60 miles apart). The universities had also given preferential treatment to the libraries of the state colleges of Oklahoma. The University of Oklahoma was linked by direct telephone line and courier to its Medical School in Oklahoma City. OTIS made its major contribution to the academic libraries by facilitating borrowing between the academic institutions, and especially by simplifying and speeding up loans between the two state

universities for the benefit of their faculty and graduate students.

The preliminary "criteria for participation in OTIS by local libraries" distributed by the Department of Libraries for the fiscal year, 1968, emphasized that the network was intended to provide, in the language of the LSCA Title III regulations, "improved services of a supplementary nature to the special clientele served by each type of library"--that the network was not meant "to relieve libraries of the responsibility for building their own collections, for providing adequate basic library services to their own patrons or to discourage the adequate financing of libraries at the local level.

In general, libraries wishing to participate in OTIS were asked to agree to

- 1) Provide OTIS services equally and without discrimination to all patrons and file with the Department of Libraries a statement of compliance with Health, Education and Welfare Regulations under Title VI of the Civil Rights Act of 1964.
- 2) Provide network services without charge to the borrower.
- 3) Provide such statistical and financial information

to the Oklahoma Department of Libraries as may be needed to meet the requirements of the U. S. Office of Education in Accounting for federal funds expended, and to use in evaluating the program.

- 4) Make "consistent progress" in developing improved services, materials collections and financial support from local sources.
- 5) Attend and assist in conducting area OTIS workshops for staff training purposes.
- 5) Encourage the proper use of OTIS by their patrons and to publicize the service to their own clientele.

Specific criteria provided that the following types of libraries were eligible to participate in the network:

- 1) Libraries in educational institutions (school, college, university) accredited by a regional or national accrediting agency.
- 2) Public libraries and library systems which have by January 1, 1969, applied for accreditation to the Oklahoma Department of Libraries, or which have filed an approvable plan and timetable for bringing their institutions up to current ALA standards.
- 3) Special libraries which legally meet the other requirements of OTIS participation.

Libraries considered to be ineligible to share in OTIS were:

- 1) Church-supported libraries or libraries in church-supported institutions. (An attorney-general's opinion relating to the administration of Title II of the Elementary-Secondary Education Act seems to imply the necessity in the Oklahoma constitution for this prohibition. See Appendix for text of ruling.)
- 2) Libraries which are not supported in whole or in part by public funds. The regulations indicated that it might be possible to bring these in later under separate agreements.
- 3) Libraries which do not keep the general criteria set forth above, such as libraries which charge for services; libraries which do not serve all patrons of the community equally and without discrimination; etc.

The Department of Libraries outlined the lending policy of OTIS in ten propositions, indicating that all regulations were tentative, and subject to revision after some experience with the network.

1. The Oklahoma Department of Libraries will accept requests from a transmission site originating either

from the transmission site itself or libraries in its area which qualify for participation as set forth in the criteria.

2. Requests may be in the form of requests for specific titles or for material on a given subject. The Oklahoma Department of Libraries will strive to translate subject requests into title requests or L. C. subject headings before sending to referral centers.
3. Requests for reference information will be accepted by the Oklahoma Department of Libraries when the requesting library and the transmission site library have exhausted their resources. Only serious reference requests that cannot be answered at the Oklahoma Department of Libraries will be sent to referral centers.
4. Only request for printed material will be available through OTIS; requests for audio-visual material (excepting special need Talking Book requests) will not be accepted.
5. The lending library will set policy for length of loan, availability of materials, special restrictions on use, and substitution of photocopy in lieu of loan.
6. The borrowing library, the transmission site library and the Oklahoma Department of Libraries all have responsibility for determining seriousness of the request.
7. No more than 25 pages will be photocopied per request without special arrangements between the lending library and other libraries and individuals involved in the transaction.
8. Materials lent will be sent directly to the borrowing library by the lending library and will be returned by the borrowing library to the lending library as set forth in the agreement for transmission sites.
9. School or public libraries should not request material for routine school assignments such as state-wide or national debate topics.

10. Requests which will not be referred beyond the Oklahoma Department of Libraries:

- (a) Genealogical materials not in Oklahoma Department of Libraries.
- (b) Books which are new and in popular demand and which are not in Oklahoma Department of Libraries collection.
- (c) Children's books unless special need (SN) indicated and explained.
- (d) Textbooks, unless the only or best book available in a particular subject area.
- (e) Standard reference books.
- (f) Arco type books.
- (g) Non-serious fiction unless special need (SN) indicated and explained.

Academic libraries chose also to exclude from the network all undergraduates on the theory that interloaning to under graduates

- a) Violated the ALA International Interlibrary loan code,
- b) service to undergraduates would impose an overdue burden on the university library and,
- c) collections in the local academic library were (or should be) adequate to the needs.

The initial announcement of OTIS stated that the cost of the network for fiscal year 1968 would be met from Oklahoma's share in Title III of the Library Services and Construction Act. However, librarians were warned that the federal act requires local or state matching on a 50/50 formula, and that if state funds were not appropriated in

future years to pay part of network costs, participating local libraries might be required to assume part of the cost of OTIS, either in kind or in cash.

Library codes, message format and abbreviations were promulgated, along with a method of operation outlined as follows:

1. A potential user of OTIS will request material at his local library. That library will search its collection and if it cannot supply his need will suggest interlibrary loan if the need justifies it.
2. The local library, if other than a Transmission Site, will then contact the Transmission Site. At that library a search will be made. If the need cannot be filled, the Transmission Site will place the request on tape. Both at this level and at the originating library all pertinent bibliographic tools available will be checked to verify the entry.
3. At regular intervals each day, the Oklahoma Department of Libraries will poll the Transmission Sites and automatically pick up the information stored at each site.
4. The Oklahoma Department of Libraries will search its collection in an effort to fill the request. If it

cannot, it will screen the request as set forth in the lending policy and then further verify the bibliographic entry in the National Union Catalog, or Cumulative Book Index if necessary. Following this, the Oklahoma Department of Libraries will forward the request to a Referral Center library (Oklahoma University, Oklahoma State University, Oklahoma County Libraries, or Tulsa City-County).

5. If the material cannot be located in the State, the Oklahoma Department of Libraries will, if desirable, send the request to a library on the TWX network outside the state.
6. Special instructions:
  - A. All requests should be completely and accurately described.
  - B. Bibliographic description should follow form described under "Message Format."
  - C. Subject requests should be as specific as possible and should give age group of borrower, purpose of request, etc., to enable careful choice of material to be supplied.
  - D. Reference requests should be specific and set forth in such a way that the answer can be concise, if possible.
  - E. Any time a book or serial request cannot be verified, give the patron's source, such as: Memory, TV review, verbal recommendation, O. C. Times review.

Forms were devised which structured TWX messages according to the convention devised at Duke University Medical Center Library (See Appendix). However, the Department of Libraries wisely did as little standardization as possible at the beginning of the project, leaving opportunity for optimum methods to evolve.

Workshops were held in April and May 1968, throughout the state to which all librarians in the area were invited.

To acquaint the public with the new service, an extensive newspaper, radio and television campaign was carried out which won for the Oklahoma Department of Libraries the John Cotton Dana Award in 1969, for the most effective library public information program in the nation.

Now, eighteen months after OTIS was initiated the data is available to evaluate the project, to determine to what extent its policies and procedures are in fact facilitating access to the human record for all the citizens of Oklahoma and whether in fact the network is encouraging coordination of library services and resources.

## II

### VOLUME, USERS, MATERIALS AND IMPACT OF OTIS

A total of 17,467 requests were transmitted through OTIS between April, 1968 and June 30, 1969. The use has been steadily increasing, with a gain of 19% between the first and second half of fiscal year 1969.

Among the public library transmission sites, the heaviest users were the Western Plains Library System headquartered in Clinton which originated 19% of the total OTIS traffic and the Chickasaw Library System in Ardmore and the Choctaw Nation Multi-County Library System in McAlester, each of which placed 10% of the total requests. If one includes use of OTIS by the Oklahoma City and Tulsa City-County Libraries, the public library systems account for approximately one-third of the total use of OTIS, a statistic which may imply that quality library service is best achieved by library systems.

The University of Oklahoma and Oklahoma State University together accounted for over 19% of the total use of OTIS. In fact, the universities' use of the system

in materials requested (largely from each other) more than balanced their contribution to it as resource libraries.

The five resource libraries together, Oklahoma Department of Libraries, Oklahoma County Libraries, Tulsa City-County and the two universities, as users of the system account for 36% of OTIS requests during the last year. The concept that a network tends to operate primarily for the benefit of the weak library would thus seem to be in question, since the strongest libraries of the state are also the heaviest borrowers. In attempting to draw conclusions from the 36% statistic however, one must reflect that almost half of the population of the state live in the support area of Oklahoma City and Tulsa, and that the universities have the concentration of students in the state who are traditionally the heaviest users of libraries.

The increase in interlibrary loan throughout Oklahoma since OTIS is striking, ranging as reported from a gain of 29% to a gain of 2900%. Other factors unrelated to OTIS no doubt influenced this accelerated flow of materials. At Oklahoma State University, for example, the graduate program has grown in the same period,

and accounts in large part for the 71% gain in the library loan requests. The unaffiliated public library transmission sites prior to OTIS were not receiving or forwarding requests for their neighbor libraries. Several of the public library systems are new and growing, and the volume of interloan requests reflects the expansion and improvement of small existing libraries within the system area and the reaching of new readers by means of bookmobile stops and other new outlets.

Even giving full weight to these factors however, it seems evident that OTIS has improved significantly the utilization of materials within Oklahoma for the benefit of all of its citizens wherever they live. A comparison of the number of requests for interlibrary loan received at the Oklahoma Department of Libraries in 1966/67 (4,157) and the number of requests filled in the year ending June 30, 1969 (5,769) documents an increase since OTIS of 1,612 items or 38%.

Records are not complete on what percentage of the requests placed upon OTIS originated in the transmission site libraries themselves and what proportion originated in satellite libraries. Those libraries willing to make estimates were unanimous in guessing that the great majority

of their requests came from direct patrons of the transmission library. Library systems of course, did not differentiate between requests received at headquarters library, and those originating on bookmobiles or in member libraries of the system. The number of satellite library requests filled by the unaffiliated transmission site libraries was negligible.

Public libraries were the access point for most users of OTIS as reported by the transmission and resource libraries. However, three transmission libraries report use by school libraries of 13% to 20%. Community College Libraries constituted about 20% of OTIS use from the Oklahoma County Library site. State universities of course made heavy use of the system, and state and private college libraries a lesser use. Only two transmission sites, one itself a special library, the U. S. Bureau of Mines Library in Bartlesville, and the Tulsa City-County Library reported significant use of OTIS by special libraries.

What libraries supplied the material requested through OTIS? The Oklahoma Department of Libraries filled 62%, Oklahoma County Libraries 5+%, Tulsa City-County Library 7+%, (this includes material supplied

by the University of Tulsa Library). Oklahoma State University filled 64% of the requests, and the University of Oklahoma, 6%. The remainder of the requests were filled by the Oklahoma University Medical Library, by miscellaneous academic libraries in Oklahoma such as the Oklahoma City University and Oklahoma Baptist University, by the transmission site public libraries, and by libraries outside the state. The Bibliographical Center for Research in Denver supplied the Oklahoma Department of Libraries with locations for 830 titles between April, 1968 and June 30, 1969.

Major dependence is thus being placed on the collections of Oklahoma State Department of Libraries for the needs of the general public of the state.

In addition to the flow of materials through OTIS transmission sites however, OTIS is also making a major contribution to facilitating the sharing of materials between the two state universities. As indicated in the previous chapter, cooperative arrangements between the two university libraries ante-dated OTIS by many years. For approximately six years, the two universities have been filing each others' cards in their catalogs and have produced a union list of serials. Courier service

between the two campuses delivers materials twice a week. WATS telephone lines connect the two campuses and the University of Oklahoma with its Medical School in Oklahoma City. OTIS has contributed to these on-going cooperative arrangements by speeding up and simplifying the process.

Between July 1, 1968 and June 30, 1969, in addition to the 591 items loaned by Oklahoma State University to the libraries of the state, Oklahoma State University received 934 requests from the University of Oklahoma. The University of Oklahoma, in addition to the 549 items which it loaned to the libraries of the state, received 782 requests from Oklahoma State University. In addition the University of Oklahoma Medical Library received 236 requests from Oklahoma State University and 155 requests from its parent campus in Norman.

Thus the major flow of materials through OTIS from the two university resource libraries is to each other, not to the other libraries of the state. A detailed analysis of the TWX records for September-October, 1968 (see Chart in Appendix) further emphasizes this point.

Of the 132 items loaned by Oklahoma University in this period, thirty-one went to the University Medical

Library, sixty-five to Oklahoma State University and only thirty-five to other libraries in the state.

Of the seventy-six items loaned by Oklahoma State University thirty-eight went to the University of Oklahoma.

The primary supplier of materials to the public libraries of the state continues to be the Oklahoma Department of Libraries. Of the 561 items supplied within the state during this period, the Oklahoma Department of Libraries supplied 262.

However, although the two universities supplement each other's collections, they are not self sufficient either alone or together, since their combined collections total only about two million volumes.

On another analysis made of all requests received through OTIS for the University of Oklahoma in June, 1969, the following picture emerges:

119 requests were received and forwarded to Oklahoma State University

Sixty-nine were filled and ten are still pending. Thus 57% were filled within the month and 66% will be filled eventually by Oklahoma State University

Four were filled by Oklahoma University Medical School

Seven were filled by the Oklahoma Department

of Libraries and Tulsa City-County Library

Two requests were cancelled at the request of users and

Twenty-seven requests (22%) were returned to the University as not available in Oklahoma

These twenty-seven requests could have been forwarded by TWX for location to the Bibliographical Center for Research in Denver had the University wished it. This Center to which the Oklahoma Department of Libraries has access as a member maintains a union catalog of the Mountain Plains area to which it is presently adding cards for over 65,000 titles per year from eighty-three libraries. Its total data bank is over five and one-half million cards, in addition to an extensive collection of bibliographical tools to locate material whether it be in the region or indeed in the world.

The Oklahoma Department of Libraries has TWX access to the Bibliographic Center and in the past has used it for the benefit of the university libraries as well as the other libraries of the state. A study of the Bibliographic Center now on-going will document the average length of time required by the Center to respond to location requests.

At the beginning of the OTIS project, in March 1968, the Oklahoma Department of Libraries wrote to all libraries listed in the most recent TWX directory asking whether it would be within their inter-library loan policy to lend materials to Oklahoma libraries if requested by teletype. Affirmative answers were received from thirty-eight libraries (see Appendix), thirty-six of whom were willing to lend freely upon receipt of a TWX request; two of whom offered to respond only to requests for photocopied material. Among the responding libraries were:

Five State libraries (Arizona, California, Indiana, Nebraska and Wisconsin),

Twenty public libraries and public library systems, including two of the New York State Library Systems, and such outstanding libraries as Omaha, Nebraska, Kansas City, Missouri and Pittsburgh, and,

Ten academic libraries including the great collections of Yale, Indiana University, John's Hopkins,

Several special libraries such as New York Academy of Medicine and Union Theological Seminary also agreed to open their resources.

Who are the individuals using OTIS? Records kept by the transmission site libraries are sketchy in this regard, and requests frequently did not categorize the

user, except as student or adult.

In our effort to gain some insight into the question of users, detailed analysis was made of all teletype messages received at the Oklahoma Department of Libraries during September-October of 1968. These months were chosen as a period of relatively heavy use, providing enough volume to allow significant comparison and analysis. 798 requests were received during the period analyzed (See Appendix).

The educational enterprise is clearly one of the major beneficiaries of OTIS. The total of college and university faculty (108), plus elementary and secondary teachers (72), plus graduate students (86), plus undergraduates (55), plus high school students (34) adds up to 352 users, or 44% of the total use. Almost without doubt there are additional young people and adults among the 313 essentially unidentified users who requested materials to aid them in some form of formal education.

Although OTIS is used almost entirely for the benefit of faculty and graduate students at the two university sites, and at the Oklahoma University Medical

Library, it also serves the educational community from the public library sites. Service to college undergraduates accounted for 48% of the use of one site. At another, the total use by teachers, college undergraduates and college faculty amounted to more than one third of the total use.

Professional people, including doctors, hospital personnel, a geologist, engineers, writers, research workers, state and federal government employees, teachers, faculty, librarians were identified as users in 268 transactions, or 33 percent of the total. Again, one assumes that there are many professional persons included in the uncategorized adults.

Business men as users, specifically, were identified by only four libraries. However, two transmission centers also indicated requests from special libraries, one in a single request, another in nineteen requests, or 39% of the month's transactions.

In the standardization of record keeping which will be discussed in a subsequent chapter recommendations will be made to insure more facts on who uses OTIS since this is important information in planning future services.

What are the materials being requested by the users of OTIS? Guide lines promulgated by the Department of Libraries at the beginning of the OTIS project had discouraged requests for children's books, best sellers, geneology or material for routine high school assignments (the latter because it was felt that the network did not lend itself to the short time span of most high school assignments). In general however, the initial guide lines had been broad, placing responsibility for judgement on the local librarian about what should be placed upon the network.

An analysis of the 798 requests transmitted during September-October 1968 revealed the following information about material being requested.

Books are overwhelmingly the major type of material being requested over OTIS wires. During the period of analysis, 472 books were requested, by title, which is 61% of the total volume of requests. The various sites ranged from 20% to 90% of requests for books in relation to total material sought. In the public library sites, the median percentage of book requests was higher--74%. The demand for books may reflect the fact that there are in Oklahoma only about three and one-half

million books.

Serials accounted for 20% of the total requested, a median of 13% from all of the transmission sites. Three sites requested no serials during the period analyzed. The median average for serial requests in the larger resource libraries is significantly higher than in the public library transmission sites--31.5%, in contrast to a median of 7.5%. This lack of demand for access to serials where most of the new ideas are may reflect a lack of indices to periodicals available to the users of public libraries in Oklahoma. It may be that the Department of Libraries and the State Department of Education should consider a coordinated program to place periodical indices in the schools and public libraries of the state. The lack of demand for periodical literature may suggest an emphasis in future public information campaigns about OTIS. The fact that photocopying is not free may also discourage requests for serial literature.

Although the network did carry some requests for trivia, some requests for material available in paperback, the purchase of which may well have cost less than the expense of the TWX message, never the less, most of

the material requested was of a surprisingly serious nature. The decision of the system's planners to be as unrestrictive as possible and to rely upon the judgement of the librarian at the access point to decide what to request appears to have been wise. A significant number of the 1544 requests received in the last year which were cancelled represent substandard material which should never have been requested although also included in this group are dissertations not available, geneology, obscure titles which could not be verified and requests which were cancelled because the patron could no longer wait for the material.

That OTIS has in fact encouraged the flow of materials among the libraries of Oklahoma, and that it has opened resources both within and outside the state to the citizens who need them seems evident from the facts as outlined above.

Of the ten public libraries transmission and resource sites, six indicated that OTIS had definitely brought new patrons to the library, although exact documentation is impossible. These new patrons were usually professional people who had not previously expected the local library to meet their needs.

Oklahoma County libraries, for example, estimated that OTIS may have brought them as many as 500 new borrowers, "special students and business men, attorneys, geologists, Indian lore specialists, artists, musicians, actors, theatre and television producers, college and secondary teachers, doctors and nurses." In answer to the question, "has OTIS changed the kind of request you receive from your patrons;" Oklahoma County Library responded, "There have been more specialized requests which we were unable to fill before, such as a student from Oklahoma University who had sixty-five requests for materials on impressionist artists and poets for a paper to qualify for the President's Honor Program. We filled all of his requests, some from as far away as the British Museum--we could not have done this before OTIS."

The majority of libraries felt that OTIS had raised the level of expectation of their patrons who were now requesting a much wider range of materials and that they could satisfy requests more rapidly than before. The U. S. Bureau of Mines Library reports that its patrons are now asking for some un-technical material, such as books on retirement and art, in addition to the usual scientific material and that the location service available

through OTIS has speeded up interlibrary loan from libraries outside the state by eliminating the previous "trial and error" approach.

The effect of OTIS upon book selection was one of the most significant findings of the study. With the exception of the two universities and the Bureau of Mines Library, all but two of the transmission and resource libraries indicated that OTIS had given them a better insight into their own patron's needs and interests, and that it had resulted in an effort to strengthen the range and depth of their local collections. The fear, often expressed, that networks tend to encourage weakness in local libraries, by promising to provide for all or most needs from another source, is not born out in the Oklahoma experience. On the contrary, OTIS is leading to more use of local libraries, more articulation of need by local citizens and better local collections.

There is however, no evidence that OTIS as yet has led to the coordination of book selection either among the public libraries of the area, or among the public, school, academic or special libraries of the region.

The majority of public libraries responding to the

questionnaire did feel that OTIS had led to closer relationships between public libraries, and between libraries of all types in their areas. Examples sited were the experience of attending workshop meetings called by the Oklahoma Department of Libraries to introduce OTIS and informal contacts incidental to forwarding requests.

### III

#### RECORDS AND PROCEDURES

At the beginning of the OTIS project, transmission sites and resource libraries, as well as the other user libraries were given very little direction on what records to keep. A "Traffic Training Manual" was provided by Southwestern Bell Telephone Company with information on how to operate the equipment, abbreviations and message format. Message format was to follow the conventions recommended in Warren Bird's "Standards for Medical Library TWX Communications."

Now that the libraries of Oklahoma have gained some experience with OTIS, the time seems ripe to standardize procedures and record keeping in order to insure that essential information is gathered, that errors are minimized and that the mechanics of administration are as simple as possible.

The Bird message formats are not always being observed. Abbreviations are not always used consistently--for example, the codes ODL and OK are used interchangeably for

the Oklahoma Department of Libraries. It is recommended that the Department of Libraries provide all transmission sites and resource libraries with copies of the Teletypewriter Exchange System for Interlibrary Communication, published by Warren Bird (copyright, 1968), and follow these nationally accepted formats exactly.

Transmission libraries are almost unanimous in their desire for help in standardizing and simplifying records. Some of them are presently keeping records which overlap and repeat each other. All libraries find the teletype message copy difficult to organize. Information about the patron necessary in order intelligently to fill his request or to substitute for it is frequently not being gathered. Transmission libraries need records which will enable them to identify requests both by author or title, since this is how the user thinks about his request, and by OTIS transaction number since this is how the interlibrary loan office of the Oklahoma Department of Libraries must refer to a request. Every transmission library must therefore keep a dual set of records, one of which must become the basic, complete record, but it should not be necessary to keep more than two records, nor to retain any records for more than a

year since monthly reports from each resource and transmission site library and the basic TWX records are kept at the Department of Libraries.

The basic document now in use is a 3 X 5 card, "OTIS Interlibrary Loan Request," which is distributed by the Department of Libraries to all public libraries. Although the size and card stock of this form make it easy for libraries to file and forward to the transmission sites, it does not provide space for enough information, and when multiple copies of a request are needed (i.e., when the satellite library wishes to retain a copy for its own records) the stock does not lend itself to carbon copying.

It is recommended therefore that the "OTIS Interlibrary Loan Request" form be superseded by four 5 X 7" color coded forms, for requesting books, serials, films and subjects. It is further recommended that these forms be printed with two carbon interleaves, and that the original or first copy be printed on stock firm enough so that it can be filed, and refiled as a basic record by the transmission site library. Samples of the four recommended forms follow. The 5 X 7" size was chosen because this is the standard TWX message. It appears inevitable

Author \_\_\_\_\_ A

Title \_\_\_\_\_ T

Publisher \_\_\_\_\_ Copyright  
Date \_\_\_\_\_ F

Verified In \_\_\_\_\_ V

Subject \_\_\_\_\_ S

Will accept Will wait Not wanted  
substitute \_\_\_\_\_ indefinitely \_\_\_\_\_ after \_\_\_\_\_ SAdult  Basic  Advanced   
Student  Elem  JHS  HS  College   
School: \_\_\_\_\_ S

Other \_\_\_\_\_ Date \_\_\_\_\_

Patron's Name \_\_\_\_\_

Patron's Address \_\_\_\_\_

Requested by \_\_\_\_\_

OTIS Interlibrary Loan Request



that the convenience of the 3 X 5 card must be sacrificed since it cannot be made to contain enough information.

The new OTIS Interlibrary Loan Book Request form would be used as follows:

- 1) When the patron enters the network the requesting library fills out the request form, sends copies 1 and 2 to the transmission site library and files number 3 copy in a "Request Pending" file, by author until the request has been filled. When the book is received, the satellite library enters the due date and supplying library, and then files by author under the due date. When book is returned, the satellite library enters the date of return and files copy 3 in a "returned" file for one year. When the transmission site library receives the request (copy 1 and 2) they
- 2) Check in the Transmission Site Catalog. If the book is found, the call number is added in the upper right-hand corner, the due date and date sent is recorded. Copy 2 of the form is inserted in the book and mailed or delivered to the requesting library. Copy #1 is counted at the end of the day--(a daily record, is compiled monthly and should be kept of the number of