The Western Interstate Commission for Higher Education (WICHE) received a year's grant from the Council on Library Resources to design and develop a library network for the 17 western states. Major activities of the first quarter included: (1) hiring a systems analyst, cost study investigator, research assistant, and secretary, and selecting a project director; (2) setting up the project's administrative organization; (3) reviewing recent automation and networking developments likely to affect the project; and (4) initiating review of potential components for a western network. The concept for a western network was based on "interhetting" two developing bibliographic utilities--BALLOTS (Bibliographic Automation of Large Library Operations using a Time-sharing System) and the Washington Library Network--and three major bibliographic centers offering location information for holdings of western libraries--the Bibliographic Center for Research, the Pacific Northwest Bibliographic Center, and the California State Library Union Catalog--to provide technical processing and interlibrary loan products and services to libraries in the West.
INITIATING THE DESIGN AND DEVELOPMENT OF A WESTERN INTERSTATE BIBLIOGRAPHIC NETWORK

FIRST QUARTERLY REPORT
JULY - SEPTEMBER 1975

CLR Grant 614

Prepared by the WICHE Network Design Core Staff:
Maryann Duggan
Karl M. Pearson, Jr.
Louise T. Martin
Western Interstate Commission for Higher Education
P. O. Drawer P
Boulder, Colorado 80302
(303) 492-8150

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ABSTRACT

This report describes activities of the WICHE staff and Network Design Task Force members during the first quarter of a year's grant from the Council on Library Resources for a project to design and develop a library network for the 17 western states. Major activities included: (1) hiring a systems analyst, cost study investigator, research assistant, and secretary, and selecting a project director; (2) setting up the project's administrative organization; (3) reviewing recent automation and networking developments likely to affect the project; and (4) initiating review of potential components for a western network.

The Western Interstate Bibliographic Network project was proposed by the Western Council on Continuing Education and Library Resources, consisting of the state librarians of 11 western states. In September 1974, the Council sponsored a Network Study and Planning Conference in which 49 leading librarians in the West participated. As a result of the Conference, a Network Planning Task Force was established and Maryann Duggan, WICHE Director of the Continuing Education and Library Resources Program, was asked to undertake staff support for the Task Force.

During the next six months, Ms. Duggan and Task Force members, joined later by representatives of directors of western ARL libraries, developed a network concept and drafted proposals to CLR and USOE for funding to support network design and development. The concept for a western network is based on "internetting" two developing bibliographic utilities - BALLOTS and the Washington-Library Network - and three major bibliographic centers offering location information for holdings of western libraries - the Bibliographic Center for Research, the Pacific Northwest Bibliographic Center, and the California State Library Union Catalog - to provide technical processing and interlibrary loan products and services to libraries in the West.

The network will adhere to bibliographic standards to provide for smoothly interfacing western network products and operations with those of other regional library networks and with the emerging national network.
DEFINITION OF ACRONYMS

The acronyms used in this report have the following meanings:

ABAG - Association of Bay Area Governments, Claremont Hotel, Berkeley, California.

AIMS - Automated Instructional Materials Management System, a "total" library system for large school districts, developed by SDC.

ALPS - Automated Library Processing System; a projected commercial version of SDC's LISTS, a BALLOTS-like system.

ARL - Association of Research Libraries. Generally, when used in WICHE documents, ARL refers to the directors of 17 ARL member libraries in the West.

ASIS - American Society for Information Science

BALLOTS - Bibliographic Automation of Large Library Operations using a Time-sharing System. This system, initially developed at Stanford University, began daily on-line operation in November 1972.

3CR - Bibliographical Center for Research, Rocky Mountain Region, Inc., Denver, Colorado, formerly known as the Rocky Mountain Bibliographic Center.

BIBNET - A system for acquiring cataloging data from an on-line file, then editing the data for local use (or inputting new records) by means of a minicomputer terminal; developed by Information Dynamics Corp., Reading, Mass.

BNB - British National Bibliography

CCLN - Council of Computerized Library Networks, an association of managers of regional networks.

CIS - Center for Information Services, University of California. Responsible for computer-based information retrieval.

CLASS - California Library Authority for Systems and Services. A joint powers agreement with signatories from six groups: the State Library, University of California, California State University and Colleges, county libraries, city libraries, and community colleges.
### DEFINITION OF ACRONYMS, Cont’d.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
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<tr>
<td>CLR</td>
<td>Council on Library Resources, Inc. A foundation devoted to furthering the improvement of library service.</td>
</tr>
<tr>
<td>CLSI</td>
<td>Computer Library Services, Inc., Newtonville, Mass. This firm produces a turnkey minicomputer-based system for circulation control and acquisitions.</td>
</tr>
<tr>
<td>COLA</td>
<td>Committee on Library Automation</td>
</tr>
<tr>
<td>CONSER</td>
<td>Project A project partially funded by the Council on Library Resources to expedite the creation of machine-readable records for serial titles. It is a joint activity involving the University of Minnesota and the Ohio College Library Center.</td>
</tr>
<tr>
<td>CRL</td>
<td>Center for Research Libraries, Chicago, Illinois</td>
</tr>
<tr>
<td>CSLUC</td>
<td>California State Library Union Catalog, Sacramento, California.</td>
</tr>
<tr>
<td>CSUC</td>
<td>California State University and Colleges, a system that includes 19 state-supported universities and colleges.</td>
</tr>
<tr>
<td>CULP</td>
<td>California Union List of Periodicals, California State Library</td>
</tr>
<tr>
<td>FTE</td>
<td>Full time equivalence, normally interpreted to mean the dedication of 40 hours a week for 52 weeks of a staff person's time.</td>
</tr>
<tr>
<td>FTS</td>
<td>Federal Telephone System which is available at no direct charge to federal government agencies.</td>
</tr>
<tr>
<td>INCOLSA</td>
<td>Indiana Cooperative Library Services Authority, a state network.</td>
</tr>
<tr>
<td>LACL</td>
<td>Los Angeles County Library system</td>
</tr>
<tr>
<td>LC</td>
<td>Library of Congress</td>
</tr>
<tr>
<td>LISTS</td>
<td>Library Information System Time-Sharing, an SDC experimental version of a &quot;total&quot; library system, similar to BALLOTS, funded in part by CLR.</td>
</tr>
<tr>
<td>MARC</td>
<td>Machine-Readable Cataloging developed at the Library of Congress and following national and international standards for format, content designators and character sets.</td>
</tr>
</tbody>
</table>
DEFINITION OF ACRONYMS, Cont'd.

MARC-S - MARC format for serials records.

MCRS - Micrographic Catalog Retrieval System, a listing of cataloging data on microfiche, offered by Information Dynamics Corp., Reading, Mass.

MEDLARS - Medical Literature Analysis and Retrieval System, operated by the National Library of Medicine. MEDLARS II incorporates automated authority control and supports MEDLINE.

MIDNET - Midwest Library Network, a regional network covering several states.

NCLIS - The National Commission on Libraries and Information Sciences, appointed by the President of the United States for the study and planning of improved library and information services in the nation.

NELINET - The New England Library Information Network, a non-profit organization operated by the New England Board of Higher Education and designed to serve the libraries in six states.

NIH - National Institutes of Health

NLM - National Library of Medicine which provides the planning and financing for the National Bio-Medical Communications Network and the Regional Medical Libraries Network.

OCLC - Ohio College Library Center, a non-profit corporation chartered in the state of Ohio to provide computer cataloging support for member libraries through on-line tie-in with remote terminals tied into the central computer system in Columbus, Ohio.

PCD - Project Control Document, used by the WICHE Network Project to list tasks, products, and schedules.

PLAN - Public Library Automation Network. An experimental network, sponsored by the California State Library, of seven California public libraries using BALLOTS.

PMM - Peat, Marwick and Mitchell, a consulting firm that recently performed a major study of California public library systems and their funding.

PNBC - Pacific Northwest Bibliographic Center in Seattle, Washington
DEFINITION OF ACRONYMS, Cont'd.

SCAN - Southern California Answering Network, an inter-library reference service headquartered at Los Angeles Public Library.

SCILL - Southern California Inter-Library Loan network, headquartered at Los Angeles Public Library.

SDC - System Development Corporation, Santa Monica, California. SDC Search Service provides on-line access to large bibliographic and information files to users at terminals throughout the U. S. and elsewhere. The basic computer program system which supports this service is known as ORBIT(R).

SDI - Selective dissemination of information, usually performed by computer matching of descriptors from a user's "profile" against descriptors for new citations being added to a data base.

SLICE - Southwestern Library Interstate Cooperative Endeavor, a project of the Southwestern Library Association which involves the states of Arizona, New Mexico, Texas, Oklahoma, Arkansas and Louisiana and which is partially funded by the six state library agencies and the Council on Library Resources.

SOLINET - A non-profit organization which provides the legal and organizational and financial structure for 99 libraries in the southeastern area to tie-in to the Ohio College Library Center.

SPIRES - Stanford Public Information Retrieval System. This is a system which permits a user to access a variety of data bases in the Stanford University computer by on-line or dial-up terminals.

UC - University of California, a system of nine campuses: Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco Medical School, Santa Barbara, and Santa Cruz. Thus, UCB refers to the Berkeley campus, UCLA to the Los Angeles campus, and so on.

UCUCS - University of California Union Catalog Supplement. UCUCS -1 is a machine-readable file covering the pre-NARC period 1963-1967.

ULAP - Universitywide Library Automation Program of the University of California, headquartered at UCB.
DEFINITION OF ACRONYMS, Cont'd.

USOE - United States Office of Education.

Western Council - The Western Council for Continuing Education and Library Resources Program, a WICHE project composed of state librarians who contribute the funds to support this program. It serves as the "Board" for this WICHE program.

Western States - Refers to the 13 states in the WICHE compact plus the 4 states to the east (North Dakota, South Dakota, Nebraska and Kansas) and British Columbia.

WICHE - Western Interstate Commission for Higher Education, a non-profit organization created by an Interstate Compact of 13 states in 1953. It is dedicated to cooperative improvement of higher education throughout these 13 western states by the sharing of resources and expertise in that multi-state region. The basic program (student exchange across state lines) is funded by state legislatures. The other 40+ programs are individually funded through grants or contracts.

ILN - Washington Library Network
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INITIATING THE DESIGN AND DEVELOPMENT OF A WESTERN INTERSTATE BIBLIOGRAPHIC NETWORK

FIRST QUARTERLY REPORT
JULY - SEPTEMBER 1975

I. INTRODUCTION

This report provides the historic background for and briefly describes the activities performed during the period 1 July through 19 October 1975 in the management, technical, and training areas of the Western Interstate Commission for Higher Education (WICHE) project to design and develop a Western Interstate Bibliographic Network under terms of a grant from the Council on Library Resources (CLR). A separate report (see Appendix C) describes activities of the Cost and Funding Study, supported by a grant from the United States Office of Education (USOE), which is being performed as an integral part of the network design project.

Because this is the first formal report published by the Network Design Core Staff, it is appropriate here to comment upon the significance of a western bibliographic network and to review the events leading up to the activities described in this report.

Significance of the Western Interstate Bibliographic Network Design Project:

This Project will maximize return on capital invested in two computer-based systems (BALLOTS and WLN) by designing interconnections to provide incremental and collaborative development of services to the three major bibliographic centers and, ultimately, to the individual libraries in 17 Western states and British Columbia. Discussions with BALLOTS and WLN staffs were started by WICHE staff in April 1974 and have since continued in greater detail. As staffs of these two systems discussed their individual plans for development, it became increasingly obvious that, collectively, these systems had the potential for acting as a bibliographic data base service system or utility for the West. Staffs of both systems recognized the need to share with each other development plans and schedules in order to avoid unnecessary duplication in tasks as well as data base overlaps. Although varying in stages of development, sufficient similarities between the two systems emerged in the discussions that the possibility and benefit of interconnecting the two systems became obvious.

The configuration and services to be designed for a Western Interstate Bibliographic Network will provide users with a bibliographic utility from which states or individual libraries may extract records or products needed locally or at the state level. This philosophy of a bibliographic utility function on such a scale and involving such large data bases and so many service options has not been previously attempted. However, a survey of the 17 Western states indicates that a variety of products are needed. Interlibrary loan information is of highest priority. Many libraries want book catalogs or microfiche catalogs. Some want catalog cards. Nearly all want multiple access points for searching the data bases. The capability of retaining individual library call numbers on each bibliographic record in the data base is considered important. The capability of inputting full MARC and extracting full MARC must be given high priority. Authority files (main entry, subject, corporate name, personal name, and serials) are considered essential. The ability to use SPIRES and to search other types of data bases, such as community information files, is desirable. The array of services and products possible to obtain by interconnecting the two systems and...
the three bibliographic centers may be the prototype of the library network of the future - i.e., an integrated and coordinated bibliographic utility with distributed processing. As a minimum, the design of such a Western Interstate Bibliographic Network could provide the library community with an alternative to present network systems and would build on existing strengths and existing patterns of state level and multistate library cooperation.

Possible network organization and financial structure have evolved from the Network Planning Task Force working jointly with ARL library directors. Students* of network management and organizational theory have identified two general types of network, i.e., centralized and distributed. Funding patterns usually determine the organization decision structure. The prevailing attitudes in the West seem to reject the more autocratic structures and lean to a more collaborative structure with participatory funding and decision making. The WICHE organization has operated successfully in this mode for 21 years with the states as the basic building blocks.

The proposed exploration of equitable and legal ways and means of tapping commercial and private sector bibliographic records addresses a critical national issue faced by other networks and NCLIS. Some of the largest data bases in the West are privately owned. Networks in other parts of the country (such as OCLC) have machine-readable records of possible interest to the West -- and vice versa. An equitable means of tapping all data bases of use to a bibliographic network designed to serve all libraries in the West must be investigated.

The proposed interconnecting of various machine-readable data bases via telecommunication links with remote users will necessitate an evaluation of various telecommunications systems and policies. To date, telecommunication links have been provided in one of four modes, i.e., leased lines from a common carrier, dial-up system on a common carrier, wide area services, or use of the federal system (FTS). Preliminary studies** indicate the "optimal" mode is yet to be developed. Several of the Western states have installed state-operated telecommunication systems which provide high quality services at minimal costs. This project will explore the possible linkage of these state systems to obtain reduced line costs in the vast geographic western area. In like manner, the possibility of alternative telecommunications (such as packet-switched networks) will be investigated and the best design for the West developed. These findings could have significant implication on network planning in other regions and nationally.


** See "Telecommunication in Library Networks: A Five Year Projection" by Julius S. Aronofsky and Robert R. Kroffage, Nov. 26, 1974, Dallas Texas. This is a working paper prepared for the SLICE Project.
History of the Project:

The Denver Network Study and Planning Conference

In April 1974, the Western Council on Continuing Education and Library Resources,* representing the state librarians of 11 Western states, caused the reorganization of the WICHE Continuing Education Program for Library Personnel that had operated since 1967, and selected a new Program Director, Ms. Maryann Duggan. The reorganized Program was seen as an effort to assist in the improvement of library services in the West by (1) providing continuing education experiences for library staff, and by (2) developing ways and means for sharing library resources across state lines. It is one of more than 40 WICHE programs, all of which are related to improving the quality of education for all citizens in the West. The core budget for the Program (over $100,000 per year currently) is supported by membership fees from WICHE-area state library agencies electing to join the Program. Additional funds for specific activities come from special grants or contracts, such as the CLR grant for which this report has been produced.

On July 30, 1974, the Western Council decided to sponsor an invitational Network Study and Planning Conference to address the issues of networking in the West. The conference, attended by 49 leading librarians from 17 states (see Appendix B for list of participants), was held in Denver on September 19-20 and had the following objectives:

a) To initiate the planning for a western states bibliographic network;

b) To involve the key library leaders in the West in the planning process for a western network;

c) To identify bibliographic network needs in the western states;

d) To identify resources in the western states which could be significant in the development of a western bibliographic network;

e) To identify possible implementation strategies and steps towards developing a western bibliographic network; and

f) To identify tasks needed to be performed and possible roles for the key organizations in a western bibliographic network.

The Conference opened with a presentation of the current status of library resources and network evolution in the western states. Within these states there are more than 144 million volumes of materials in the public and academic library communities, with more than 208 million circulation transactions and acquisitions in excess of 6 million volumes annually.** The problems of making good use of these resources are graphically portrayed in Figures 1 and 2. In addition to a wealth of materials, there are three unique bibliographic resource

---

* The Chairperson for 1975-1976 is Mr. Joseph Anderson of Nevada; the Vice-Chairperson is Mrs. Ethel S. Crockett of California.

**FIGURE 1**

**SUMMARY OF LIBRARY RESOURCES IN THE WEST**
*(From *College and Research Libraries*, March, 1974)*

<table>
<thead>
<tr>
<th>STATE</th>
<th>SQUARE MILES</th>
<th>NUMBER OF VOLS.</th>
<th>VOLS./SQ. MILE</th>
<th>POPULATION</th>
<th>VOLS./PER CAPITA</th>
<th>NUMBER OF CENTERS</th>
<th>AREA OF STATE COVERED BY CENTER</th>
<th>% OF STATE COVERED BY CENTER</th>
</tr>
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<tr>
<td>Alaska</td>
<td>566,432</td>
<td>766,029</td>
<td>1.35</td>
<td>302,173</td>
<td>2.54</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Arizona</td>
<td>113,417</td>
<td>6,014,000</td>
<td>53.03</td>
<td>1,772,692</td>
<td>3.39</td>
<td>2</td>
<td>3,926</td>
<td>3.46</td>
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<tr>
<td>California</td>
<td>156,351</td>
<td>80,638,000</td>
<td>515.72</td>
<td>19,953,134</td>
<td>4.04</td>
<td>21</td>
<td>41,223</td>
<td>26.36</td>
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<tr>
<td>Colorado</td>
<td>133,766</td>
<td>9,016,000</td>
<td>86.69</td>
<td>2,207,259</td>
<td>3.93</td>
<td>4</td>
<td>7,652</td>
<td>7.57</td>
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<tr>
<td>Hawaii</td>
<td>64,233</td>
<td>3,050,000</td>
<td>474.71</td>
<td>769,913</td>
<td>3.39</td>
<td>1</td>
<td>1,963</td>
<td>30.55</td>
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<td>Idaho</td>
<td>82,677</td>
<td>2,428,000</td>
<td>29.37</td>
<td>713,008</td>
<td>3.41</td>
<td>3</td>
<td>5,889</td>
<td>7.12</td>
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<td>Montana</td>
<td>145,527</td>
<td>2,726,000</td>
<td>18.72</td>
<td>694,409</td>
<td>3.84</td>
<td>3</td>
<td>5,889</td>
<td>4.05</td>
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<td>Nevada</td>
<td>109,822</td>
<td>1,132,000</td>
<td>10.30</td>
<td>468,730</td>
<td>2.32</td>
<td>1</td>
<td>1,963</td>
<td>1.79</td>
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<td>New Mexico</td>
<td>121,412</td>
<td>2,343,000</td>
<td>19.30</td>
<td>1,016,000</td>
<td>2.31</td>
<td>2</td>
<td>3,926</td>
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<td>Oregon</td>
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<td>6,084,000</td>
<td>63.25</td>
<td>2,091,005</td>
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<td>5.34</td>
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<td>Washington</td>
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<td>Wyoming</td>
<td>147,226</td>
<td>1,221,000</td>
<td>12.56</td>
<td>332,416</td>
<td>3.67</td>
<td>1</td>
<td>1,963</td>
<td>2.02</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>133,689,029</strong></td>
<td><strong>34,009,349</strong></td>
<td><strong>76.48</strong></td>
<td><strong>3,84 avg.</strong></td>
<td><strong>52</strong></td>
<td><strong>102,076</strong></td>
<td><strong>5.84 avg.</strong></td>
<td></td>
</tr>
</tbody>
</table>

*These data are for "Research Libraries" per Dr. Downs. Note: The term "Center" in this table refers to Dr. Downs's definition, i.e., an area of not over fifty miles radius in which the total library holdings are 500,000 vols. or more. British Columbia data is not included.*
FIGURE 2

GEOGRAPHIC LOCATION OF "CEN'TERS"
CONTAINING MORE THAN 500,000 VOLUMES WITHIN
A RADIUS OF 50 MILES (PER DR. ROBERT DOWNS)

NOTES: (1) Alaska has no such Center.
(2) Data not given for British Columbia.
centers, the Pacific Northwest Bibliographic Center (PNBC), the Bibliographic Center for Research (BCR), and the California State Library Union Catalog (CSLUC), that among them contain approximately 13 million location records for materials in the West. Resource "centers" are concentrated along the western coast and the eastern edge of the Rocky Mountains, yet they must serve users scattered throughout the two million square mile region, part of which is separated from the rest of the region by 3,000 miles of ocean. There are several outstanding efforts in the West to move towards library automation; of particular interest are the Washington Library Network (WLN) and BALLOTS. These resources and systems have the potential of serving as the nuclei of a Western Interstate Bibliographic Network.

The review of resources and network evolution was followed by discussion of specific needs that should be considered in any plan for a western network. Of highest priority are those needs pertaining to interlibrary loan and the generation/use of bibliographic information in machine-readable form. A mechanism for providing equitable access to library resources by all potential users was identified as a high priority need. Another basic need is the technical and organizational ability to interchange and interconnect the evolving computer-based systems within the framework of an equitable access policy.

The Conference participants agreed that there was an urgent need for early action to initiate coordinated development of a western network -- not just further study. They agreed that WICHE, as an existing interstate organization, should be the agency to initiate the desired network development. The Western Council was charged with the responsibility of forming a Western Network Planning Task Force to prepare a plan for action. The Task Force was composed of the Western Council and representatives from WICHE, WLN, BALLOTS, Mountain Plains Library Association, Pacific Northwest Library Association, BCR, PNBC and the Federation of Rocky Mountain States. (Task Force members are listed in Appendix B). The initial meeting of the Task Force was held on September 20, 1974; Three working groups were established and charged with specific tasks to be accomplished by November 1, 1974. Data Base and Technical Group, chaired by Mary Jane Reed, WLN; Statistics and User Needs Group, chaired by Wayne Johnson, Wyoming State Librarian; and a Management Group, chaired by Ethel Crockett, California State Librarian.

Network Planning Task Force Meeting

The Network Planning Task Force held a second meeting in Reno on November 7-8. The Technical and Data Base Working Group reported on their investigation and conclusions regarding basic network system design requirements which would "carry the traffic" and meet the needs identified by the other groups. The basic design philosophy selected was to build on the existing capabilities of computer utilities emerging in the West, namely BALLOTS and WLN, and to incorporate location/holdings information from the three major bibliographic centers. The Statistics and User Needs Working Group reported on the results of a brief survey of 492 libraries in 17 western states and British Columbia. From analysis of the data, the Working Group concluded that a western states bibliographic network should provide the following services and exhibit the following capacities:
a) A variety of products and services must be offered, specifically:

1) location information for use in interlibrary loan and resource sharing;
2) author, title and subject searching;
3) information to assist in cataloging materials;
4) catalog cards, spine labels and bookform or microfilm catalogs;
5) as a low priority, computer support of acquisitions.

b) Network attention should be paid to materials in order of priority:

1) monographs, 2) serials, 3) reports and documents,
4) AV.

The findings of the Management Working Group dealt with desirable legal, financial and organizational arrangements for operation of a western network. As this is the most difficult area of concern in network design, it is not surprising that the Group's recommendations were not acceptable to university librarians. At a meeting of the directors of the western ARL libraries in February 1975, William Axford, Richard Dougherty, Roger Hanson, and Basil Stuart-Stubbs were appointed to an ARL ad-hoc committee to work with the Network Planning Task Force in developing management concepts that would be satisfactory to all interests concerned.

Proposal Development and Other Activities

On December 15, 1974, the WICHE Commission's Executive Committee approved the step of proceeding with developing a proposal for a Western Intersate Bibliographic Network, and five days later a first draft proposal was in the mail to 54 reviewers. A number of cycles for revision and review took place in the months thereafter, with the ARL Committee providing a significant amount of assistance after February 1975. The final proposal was submitted officially to CLR on March 24, 1975. A second proposal to perform cost and funding studies related to the design of a western network was prepared concurrently and submitted to USOE. 

During the proposal-writing period, WICHE staff met with librarians in Washington, Idaho, Oregon, Colorado and Utah to describe the network idea and the WICHE program in continuing education and library resource sharing. Along-with preparing the proposal, the WICHE staff also engaged in preparing and supporting USOE-sponsored institutes and workshops for continuing education of librarians in networking. As a result of these activities, teams of librarians from 11 states developed statewide plans for fostering continuing education of library staffs with particular emphasis on cooperative activities that can be supported through automation.

On May 7, 1975, WICHE was advised by CLR of their interest in funding the proposal, subject to negotiation of tasks and budget. Such negotiation was accomplished and resulted in additional explanatory materials being prepared during May and submitted to CLR in June. The Western Council in a May meeting voted unanimously for WICHE to proceed as rapidly as possible with early network implementation steps outlined in the CLR and USOE proposals, and stressed the
importance of obtaining the best qualified people for the three key staff positions that would be established when grants were received.

Proposed Tasks and Schedule

There are four major areas of activity envisioned for the project. One area is to develop specifications for the management, legal, and financial structure for the network. This area will require review of governance structures and funding bases used in other library networks, as well as in other forms of multi-state organization, the development of alternatives for consideration by potential network members, and the drafting of a charter and membership contracts. The ultimate objective for the project is to obtain signed commitments and funds from members to support continued development and implementation of network products and services.

A second area is to develop specifications for network products and services and for the technical, telecommunications, and database structuring required to provide the products and services. This area will begin with a review of systems, data bases, and other components potentially of use to a western network with the aim in mind of getting maximum value from previous investments in library automation. We hope to avoid the worst ravages of the "not invented here" disease! We will conduct studies as required to answer technical questions posed during the consideration of designs for a western library telecommunications network, protocols for interlibrary and internetwork communication, interconnection of major components (e.g., BALLOTS, WLN and the major bibliographic centers), and interfaces for record exchange with other networks and private database owners. Work in this area will result in technical specifications and implementation plans for providing the products and services desired by potential members under terms of the governance structure and contracts decided upon as a result of project activity in the first area.

The third area will consist of tasks performed in the Cost and Funding Study to determine representative costs for library services currently being performed without benefit of automation support, cost estimates for proposed network products and services, and funding formulas that provide for equitable participation by prospective network members. Research findings of the study will be published for the benefit of the total library community.

The fourth area will deal with communication of information about the network to prospective members and the preparation of training packages for librarians who will be using the network.

The schedule proposed for these tasks is displayed in Figure 3.

Organization and Objectives for the Project to Design the Western Interstate Bibliographic Network

To oversee and coordinate network activities during the design described in this report, a Steering Committee of 20 members will be selected by the WICHE Western Council on Continuing Education and Library Resources according to a
<table>
<thead>
<tr>
<th></th>
<th>1975</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCT. NOV. DEC.</td>
<td>JAN. FEB. MAR.</td>
<td>APR. MAY JUNE JULY</td>
</tr>
<tr>
<td>Review Potential Network Components, Services, and Governance Structures</td>
<td>Design Telecommunications Net and Protocols</td>
<td>Draft Charter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Charter, Technical Specs, Contracts</td>
</tr>
<tr>
<td></td>
<td>Study Interconnection of Network Components</td>
<td>Explore Record Exchange, Interconnection With Other Networks</td>
</tr>
<tr>
<td></td>
<td>Collect, Analyze Planning and Cost Data</td>
<td>Determine Network Costs, Benefits, Funding Base</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop Training Packages</td>
</tr>
</tbody>
</table>
formula designed to balance a variety of constituencies identifiable in the West and their respective resources. The Steering Committee will have responsibility to plan for the broad range of network design activities and to make broad policy decisions. The model to be used for the Steering Committee follows:

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Number of Representatives on Steering Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WICHE Western Council</td>
<td>3</td>
</tr>
<tr>
<td>2. Academic Libraries</td>
<td>3</td>
</tr>
<tr>
<td>3. Public and County Libraries and Cooperative Systems of Such</td>
<td>3</td>
</tr>
<tr>
<td>4. Other Categories of Libraries (including Schools, Community Colleges, Special, etc.)</td>
<td>5</td>
</tr>
<tr>
<td>5. Persons Elected at Large from each State or Province (i.e., Business or Political Leaders, Lay Board Members, etc.)</td>
<td>6</td>
</tr>
</tbody>
</table>

The selection of the Steering Committee will be done in such a way that all of the 17 participating western states and British Columbia will have at least one representative. The Steering Committee will meet two times during the design phase; it will choose from among its members an Executive Board of five persons (one from each constituency) to meet six times during the grant period. The Executive Board will represent the Steering Committee and will develop and deliver the mandate to the Design Core Staff (see description below). It will work closely with and review the progress of the Design Core Staff, monitor budget and expenditures, and report back to the Steering Committee for endorsement and evaluation of design developments.

A Design Core Staff (located at WICHE offices in Boulder) will carry on the network design activities specified in the CLR and USOE proposals. The Program Director will be Maryann Duggan (25% FTE) of the WICHE staff; the remainder of the Design Core Staff will consist of a:

- Project Director (100% FTE)
- Systems Analyst (100% FTE)
- Cost and Funding Investigator* (100% FTE)
- Research Assistant* (50% FTE)
- Secretary (100% FTE)
- Clerical Help as needed (0.10 FTE)

Each state will select at least five persons to serve on State Network Design Teams. These Teams will provide a focal point in each state for liaison with the Steering Committee and Design Core Staff to:

a) Ensure coordination of network design with existing and planned automation and networking within the state;
b) Collect grass roots input on services, priorities and user needs;

* These positions are funded under the USOE grant rather than under the CLR grant.
c) Assist in disseminating information about the network design project to the total library community within the state; and
d) Assist in preparing librarians, trustees, legislators and opinion leaders for state participation in a western network.

A Technical Advisory Group composed of persons with special expertise on telecommunications, machine-readable data bases, bibliographic center operations, network operations, etc., will be selected by the Executive Board of the Steering Committee to serve in an advisory capacity, as needed.

WICHE has ultimate responsibility for the fiscal and administrative aspects of this project. The organization chart in Figure 4 illustrates the relationships of the various groups involved in this project.

The major objectives of this project -- some of which are unique -- consist of specifically designing a bibliographic network for:

a) "Interconnecting" two developing computer-assisted bibliographic network systems (WLN and BALLOTS) to enhance rates of development for each.

b) Building on-line files of location information from the manual data bases of three operating bibliographic centers (BCR, PNBC, CSLUC) to enhance interlibrary loan services and collection development.

c) Providing an array of products based on the machine-readable bibliographic record plus location information.

d) Developing a legal, organization, and funding structure for a participatory multistate network agency based on state level memberships and designed to enhance on-going intra-state interlibrary cooperation.

e) Developing an equitable fee structure and access to library resources and machine-readable bibliographic records through mutually agreed upon interlibrary loan protocol and "net-contributing" concepts based on state level (rather than individual institutional) formula.

f) Exploring the optimal system for providing telecommunication links to obtain the maximum service at lowest cost consistent with the network activity levels and geographic distribution of terminals.

g) Exploring access (in an equitable manner) to publicly and privately owned machine-readable bibliographic data bases, and developing an equitable basis for exchange of records with other resources.
FIGURE 4
MANAGEMENT AND ORGANIZATIONAL STRUCTURE CHART

WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION
39 Commissioners, 3 appointed by Governor of each of 13 Compact member states

OFFICE OF THE EXECUTIVE DIRECTOR

OTHER WICHE DIVISIONS

DIRECTOR, DIVISION OF GENERAL REGIONAL PROGRAMS
ASSOCIATE DIRECTOR, WICHE

WICHE SUPPORT SERVICES
(Personnel, Accounting, Printing, etc.)

WESTERN COUNCIL OF STATE LIBRARIANS

DIRECTOR, WICHE CONTINUING EDUCATION AND LIBRARY RESOURCES PROGRAM

CORE PROGRAM
SECRETARY/ADMINISTRATIVE ASSISTANT

NETWORK STEERING COMMITTEE AND STATE DESIGN TEAMS

CONTINUING EDUCATION COORDINATOR

CONSULTANTS

NETWORK PROJECT DIRECTOR
SEC’Y/Clerical (1.5 FTE)

VARIOUS C.E. DEVELOPMENT AND TRAINING DELIVERY PROJECTS

SYSTEMS ANALYST

STAFF INVESTIGATOR
To our knowledge, no other organization has attempted to design a network in just this manner involving so many states, such large files, so many individual participating organizations, this kind of legal structure, and covering such a vast geographic area.

II. PROJECT MANAGEMENT AND STAFFING

Upon learning that grant awards were likely, WICHE mounted a national and intensive search for qualified applicants to fill the Design Core Staff positions. Detailed position descriptions were circulated widely through personal contact with leaders in the library profession and through the American Library Association annual conference in San Francisco the first week of July. WICHE sought for the project the best persons available by reason of expertise, training, talent and enthusiasm for fulfilling the exacting requirements imposed by an all-too-short schedule and a highly optimistic plan of work.

The selection process was performed in accordance with WICHE Affirmative Action policies and procedures. The most highly qualified and qualifiable applicants for technical positions were interviewed by the Program Director, the Director for General Regional Programs, and other appropriate WICHE staff. Members of the Western Council reviewed and approved applicants recommended by WICHE. Applications were received as shown in the table below:

<table>
<thead>
<tr>
<th>Position</th>
<th>Total</th>
<th>Female</th>
<th>Minority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Director</td>
<td>19</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Systems Analyst</td>
<td>16</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Cost Investigator*</td>
<td>12</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Cost Research Assistant*</td>
<td>50</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Secretary I</td>
<td>21</td>
<td>21</td>
<td>0</td>
</tr>
</tbody>
</table>

None of the applicants for the Project Director were as fully qualified as desired, despite reopening the position for additional applications. Perhaps the lack of applicants was due to the low salary range (relatively) established for the position, or to the very small pool available nationally of persons with the requisite background and skills. Nevertheless, we are satisfied that the staff that have been hired represent the cream of the profession and we are fortunate that such highly-qualified people have accepted the risks inherent in taking positions whose existence can be guaranteed only for one year.

The selection process was a lengthy one, and as a result it was not until near the end of the quarter that most of the staff was on board. The Project Director will officially join WICHE on December 6, 1975, but has participated in several meetings with the rest of the staff and was a member of the Network Planning Task Force.

Eleanor Montague has been selected as the Project Director. She has been the Assistant Manager of BALLOTS for several years and has been primarily re-

*These positions are funded under the USOE grant.
sponsible for conduct and direction of activities related to users and library
groups such as the Public Library Automation Network (PLAN) in California that
is being supported by BALLOTS. Eleanor has participated in a number of library
cooperative activities, and has the benefit of participation from the first in
planning for a western network. She also has been a member of the California task
force that has been developing the plans for a statewide network called CLASS that,
when brought into being next year, will be one of the most powerful components
of a western interstate network. Eleanor received the B.A. degree in Anthro-
pology and the M.A. degree in Library Science from the University of Chicago, as
well as the M.B.A. degree from the University of Santa Clara; she is currently
enrolled in the doctoral program in Library Science at the University of California
at Berkeley. (Resumes for Eleanor and other Design Core Staff members may be
found in Appendix D.)

Karl M. Pearson, Jr. was selected as the Systems Analyst and joined the
WICHE staff on September 15, 1975. He came from System Development Corporation
where he gained wide experience in library automation and networking by assisting
in the development, marketing, and management of the BALLOTS-like LISTS, ALPS, and
AIMS systems, MEOLARS II, and bookform cataloging services. In addition, he
participated in or directed several research studies in the information science
field. He received the M.S. degree in Information Science from the School of
Library Service at the University of California at Los Angeles.

Maryann Kevin Brown was selected as the Cost and Funding Study Investi-
gator and joined the WICHE staff on October 1, 1975. She came from WESTAT, Inc.,
where she participated in an evaluation of OCLC costs and benefits for the Texas
Inter-university Council. Previously, she was employed as a legal analyst by
Standard Oil of California where she performed economic studies and participated
in design of a legal information retrieval system. She holds the M.L.S. degree
from the University of California at Berkeley and has partially completed re-
quirements for a sixth year certificate in Library Management with a major
emphasis on operations research and statistics.

Anita McHugh will be the half-time Research Assistant for the Cost and
Funding Study. She has been employed previously as a mathematician, statistical
analyst, and computer programmer, has performed business surveys, and has worked
in school libraries. She received a B.A. degree in Mathematics from the
University of Omaha. She will begin work at WICHE on November 10, 1975.

Louise Martin was selected to be the Project Secretary. She is a
graduate of the University of California at Santa Cruz with a B.A. degree in
Psychobiology, and has had several years experience as a secretary, primarily
in the legal field. She began work at WICHE on October 20, 1975.
III: PROJECT ACTIVITIES

Recent Developments in Automation and Networking Affecting the Project

In recent months, there have been a number of advances in library automation, networking, and library cooperation that support development of regional networks such as that proposed for the West. The largest cataloging utility, OCLC, began providing service to several western libraries. The commercial utility, BIBNET, found its first customers and was in use at the New Mexico State Library. Two western utilities, BALLOTS and WLN, were in the process of developing on-line networking capabilities. BALLOTS is now in use within the state of California to support the PLAN group of seven public libraries for cataloging and provides the capability for searching its MARC and Meyer Library catalog data bases to libraries throughout the continent. WLN continues to support batch-mode catalog processing for libraries in that state while its on-line system nears operational status.

CLSI turnkey LIBS 100 circulation control systems have been installed at a number of western libraries, and the 19-campus California State University and Colleges (CSUC) has contracted with CLSI to provide a similar system that could eventually be used to support inter-campus loan activity. While local circulation control is probably not of vital concern to a network, the ability to interface with local systems would be highly desirable as a mechanism for interlibrary loan; in addition, network services might be of value in assisting individual libraries with building the bibliographic file needed for their circulation control system.

Within the western region, there has been growing enthusiasm for cooperation, networking, and resource-sharing to take advantage of tools provided by computer and telecommunications systems. The Bibliographic Center for Research (BCR) in Denver was revitalized and changed its mission from a passive locator service to an active broker and trainer to cataloging and bibliographic search services provided by OCLC, SDV, and Lockheed. In California, a centralized organization named CLASS is being set up to foster cooperation and to coordinate automation products and services within that state. A number of public and academic librarians have been exposed to on-line computer services, and they have become enthusiastic about the convenience and increased effectiveness afforded by almost instantaneous access to large bibliographic files.

The advance of networking activity in the West is mirrored in other regions of the country where organizations such as INCOLSA, MIDNET, SOLINET, and NELINET have been newly founded or have greatly increased the pace of their activity. On the national scene, despite the failure of the federal government to provide major assistance for library cooperation, several milestones were achieved with the publication of the final report by NCLIS and the establishment of CONSER. The NCLIS report recommended development of a national library network based on regional organizations such as the proposed Western Interstate Bibliographic Network. The CONSER project to establish an authoritative data base for serials, although encountering some delays, is moving close to fruition.

Throughout the year there has been a steady accretion of bibliographic data as existing data bases have grown to reflect new publications and as more libraries have converted their catalogs. In addition to the 1.7 million record
file at OCLC, there are major files in the West such as: the University of California Union Catalog Supplement (UCUSS-1) covering the pre-MARC period of 1963-1967; WLN, containing over 500,000 MARC records; Blackwell North America, containing both US and British National Bibliography (BNB) MARC records, plus thousands of local library catalog records and millions of location records; the Los Angeles County Public Library that supports the largest bookform catalog in the country; and several union lists of serials in California, Oregon and other states. While these files are of varying quality, they give automating libraries a good opportunity to convert their own catalogs by using existing records, and -- if holdings information can be captured -- of supporting more comprehensive union catalogs for western library holdings.

Meeting of the Technical Task Force, Boise, Idaho, August 12-13, 1975

These developments were reviewed at a mid-August meeting in Boise of representatives from key potential components of a western network: WICHE, WLN, BALLOTS, PNBC, "BCR - CSULUC, and the western ARL directors. The question was posed whether these developments obviated the need for a new regional network organization for the West. All parties to the meeting agreed that the proposed Western Interstate Bibliographic Network was still needed and that the WICHE staff should proceed as planned with the design of a governance structure and technical specifications.

Each representative reported on the current status and plans of their respective organizations. WLN, for which Boeing Computer Services is the software contractor, currently has over 500,000 records in its data base. A test file is being readied for on-line access by the end of 1975, and other on-line modules will be put up during the coming year. While first priority must be given to serving in-state libraries, there is no legislative prohibition on serving out-of-state users. BALLOTS is currently supporting cataloging for seven public library systems in addition to the Stanford University Libraries. The system is being modified to support full MARC records and to develop a file structure designed for network operation to include holdings and individually customized catalog records.

PNBC has experienced an increase of 32% in traffic in the past year. Possible reasons for this increase are the growth of on-line searching and the stabilization or decline of library budgets for materials. BCR has contracted with Lockheed and SDC to provide search services for member libraries in the Rocky Mountain and western plains states. It is negotiating contracts with the New York Times and OCLC. BCR also provides training to users and continues to maintain a location file for interlibrary loan. In California, CLASS is emerging and will probably take over the functions of the California State Library Union Catalog.

Washington ARL libraries are committed to use WLN. Arizona State University, the University of Arizona, the University of Utah, and Brigham Young University are using OCLC. The University of Oregon uses Blackwell North America to produce catalog cards, and is considering closing some of the card catalogs in favor of producing computer on microfiche (COM) catalog supplements.
The Task Force recommended that initial planning should envision the western network as a bibliographic utility linking the various modules already developing within and without the region into a coherent system to: provide access to bibliographic data; support interlibrary loan through providing location information; and improve document delivery. The private sector should be included in network planning as a possible source for products such as catalog cards and book catalogs, and for catalog conversion.

Meeting of the Western Council on Continuing Education and Library Resources Program, Sun Valley, Idaho, 15-16 August 1975

The Western Council for the WICHE Continuing Education and Library Resources Program consists of the state libraries which support the program in the form of annual membership fees. This Western Council of state librarians serves in an advisory capacity to the program. States participating in the August, 1975 meeting of the Western Council were: Alaska, Arizona, California, Idaho, Nevada, Oregon, South Dakota, Utah, Washington and Wyoming. Montana was not present although they are a member of the Western Council.

The objectives of the August meeting of the Western Council were:

1. To seek the advice of the Western Council regarding staffing of both the Network Project and the Cost and Funding Study.

2. To seek nominees from the Western Council for consideration for appointment to the Network Steering Committee.

3. To further acquaint the Western Council with their roles and responsibilities in both the Network Design Project and the Cost and Funding Study.

4. To discuss the need for each state librarian to appoint a state Network Design Team and to review the criteria and function of these teams.

5. To discuss and distribute the Preliminary Network Planning Data survey instrument essential for the collection of initial planning data from each state.

6. To review the tasks needed to be performed in the Network Design Project and the Cost and Funding Study and to discuss timing of these tasks and the impact of these tasks on state level activities.

Based on the advice received from the Western Council, Mr. Pearson was offered the position of Systems Analyst for the Network Design Project and Maryann Kevin Brown was offered the position of the Cost and Funding Study Investigator. The Western Council recommended further recruitment for the position of Network Design Project Director.

In summary of this meeting, all of the objectives listed above were achieved and nominees for the Steering Committee and preliminary network design data have been received from all but one state as of this date. State network design teams are being appointed according to the criteria established at this meeting. The mechanism for appointing the network Steering Committee was approved. In general, the Western Council continued to be most supportive of the Network Design Project and expressed strong interest in successful implementation.
Meeting with ARL and LC Representatives, Washington, D.C., 17 September 1975

Maryann Duggan and Karl Pearson met with John MacDonald and Duane Webster of ARL to discuss the network project and to solicit their cooperation. The ARL staff was supportive of our plans and is interested in keeping in touch with developments in the West. ARL activities at this time do not relate directly to library networking, but do represent a background resource that the project can use to advantage.

We next visited Heniette Avram at the MARC Development office of the Library of Congress. Mrs. Avram briefed us on plans to provide on-line access to LC cataloging and in-process files, and to increase automation of the Register of Additional Locations that could support national interlibrary loan. Mrs. Avram is also engaged in a study for NELIS of major sources of location information, and is interested in what the western network might provide in this regard.

Integration of CLR and USOE Cost & Funding Study Segments of the Budget

On 18 and 19 September, a planning session for the Cost and Funding Study was held in Washington (see meeting report in appendix E). Present were Vernon Palmour, Consultant; Ronald Miller, Evaluator; Paul Janaske, USOE Project Monitor; and WICHE staff members Maryann Duggan, Maryann Kevin Brown, and Karl Pearson. This meeting both provided an opportunity for integrating data collection and analysis needs for network technical design with Cost and Funding Study requirements and offered us an opportunity to confer with Ron Miller regarding aspects of NELINET that might serve as a model for a western library network.

A summary of the activities to be performed under the Cost and Funding Study during the quarter can be found in Appendix C.

Preparation for Collection of Information About Potential Network Components

The first major task for the Project is to review potential network components. Accordingly, we developed a framework of necessary information to use for our guidance in conducting the review. An outline of these points is shown in Appendix F. In addition, each state was requested to submit basic planning data and information (much of which would be contained in annual reports published by the state library agencies) covering areas such as number of libraries, collection sizes, interlibrary loan transactions, networks and cooperatives and their activities, union catalogs and lists, and machine-readable data bases. To date, we have received this information from Alaska, Arizona, California, Idaho, Montana, Nevada, New Mexico, Oregon, South Dakota, Utah and Washington.

We have used this information, and the data point framework, to help build a set of interview guides in preparation for making site visits to organizations in the West and elsewhere. Use of interview guides help
assure that needed information is collected in a standard form in a minimum amount of time so that these site visits are minimally disruptive to the activities of the organizations visited.

We identified organizations likely to be carrying on activities that represent key factors in designing a interstate bibliographic network. Most of these we have visited during the quarter, and the remainder we will visit in the next quarter. In addition, we are taking tactical advantage of opportunities arising in the course of these visits to talk with other persons knowledgeable about various aspects of networking. Organizations to be visited include: California State Library (Union Catalog), 3ALLOTS, University of California's University-wide Library Automation Program, Marin County Public Library System, California State University and Colleges Library Systems Project, Blackwell North America, Washington State Library (WLN), Pacific Northwest Bibliographic Center, Bibliographic Center for Research, University of British Columbia, Computer Library Services Inc., NELINET, and the Ohio College Library Center.

The Project will take advantage of the Cost and Funding Study survey of a representative sample of 100 libraries to gather data on interlibrary loan activity and present uses of automation in the region.

California Site Visits, 2-14 October 1975

An initial round of site visits was made in California to review automation and networking developments in that state, which is expected to be a keystone in a western regional network. Information obtained in the course of these visits is summarized in Appendix G. A major impact upon the design of a western network is likely to result from the establishment of the California Library Authority for Systems and Services (CLASS). This central authority for state automation and networking activity, expected to be set up early in 1976, will draw together the State Library, the University of California, the California State University and Colleges, other academic libraries, major public library systems, and special libraries.

Presentations and Publications During the Quarter

Maryann Duggan made a presentation of Project objectives at a meeting of the Committee for Library Automation (COLA) during the American Library Association annual meeting in San Francisco on Sunday, June 29, 1975. Position descriptions for the Network Project Director, the Systems Analyst, and the Cost and Funding Study Investigator were distributed to approximately 150 persons attending the COLA meeting. A brief explanation of the project components was presented along with a description of the outcomes anticipated. Materials explaining the relationship of the Cost and Funding Study and the CLR Network Design grant were distributed, along with an organizational chart illustrating WICHE's role in the project.
A WICHE press release was prepared and disseminated to library publications in mid-July (see Appendix A).

WICHE staff were invited to make a presentation describing project goals and status at the Networking Preconference of the Colorado Library Association-Bountain Plains Library Association meeting in Denver on 19 October, 1975. Approximately 350 librarians from seven states attended this preconference. Maryann Duggan and Karl Pearson described the background, goals, and activities for the Project, essentially as included in this Quarterly Report. Maryann Brown described the plan and activities for the Cost and Funding Study; her presentation is included in Appendix C.

IV. PLANS FOR THE NEXT QUARTER

Having spent this first quarter in getting organized, we will turn our attention in the coming quarter to steps that can be taken immediately to give visibility to potential benefits of a western bibliographic network. Since our basic objective under the CLR grant is to obtain commitment of potential network members, we see a necessity for demonstrating that the network can provide some assistance to western libraries in the very near future, as well as for building a foundation for more powerful and sophisticated support of resource sharing and cooperation over the longer range. Accordingly, we will select several pilot or demonstration projects that can be undertaken during the first half of 1976 to illustrate how the network will provide some immediate pay-offs.

By the end of the next quarter, we will re-evaluate the set of tasks and schedules for the project as shown in the Project Control Document (PCD), N-2, included in this report as Appendix H. The PCD is based on an initial examination of the tasks and products described in WICHE's proposals to CLR and USOE, and any suggestions for modification arising as a result of next quarter's re-evaluation will be discussed with CLR as soon as detailed analysis of each modification has been performed. The tasks in the proposals to CLR and USOE are numerous and highly interrelated, and thus we have developed a dependency chart as a part of the PCD to illustrate graphically the dependencies among the tasks. Many of the tasks are cyclic in nature, in that initial steps of a task provide support for another task which, in turn, may provide information needed to refine the work being performed in subsequent steps of the first task. Each task defined in the PCD results in a specific product. The list of products and their due dates is included in the PCD.

The first product, to be delivered by the end of the next quarter, will be a report reviewing potential network components. The following tasks will be initiated during the quarter: (1) define and prioritize potential network products and services; (2) collect planning data; (3) study organizational aspects; (4) identify methods for improved delivery of materials; (5) develop alternatives for equitable funding of
interlibrary loans; (6) collect cost data on manual processes likely to be affected by network services, and (7) design the telecommunications capabilities and protocols to support efficient network operation. The task to review potential network components will be officially completed during the quarter, although in actuality such a review is an ongoing responsibility for a network.

Karl Pearson will attend the American Society for Information Science annual meeting in Boston at the end of October to gather more information on the status and plans for library networking in other regions of the country and on the national scene. Following the conference, he will visit Computer Library Services, Inc. and NELINET. At NELINET, he will concentrate on the technical details of the mini-computer system being developed there as a support for interlibrary communication and as a data concentrator for economical transmission between New England Libraries and OCLC.

Site visits will be made to the Washington State Library and Washington Data Processing Authority to obtain current information on the status, schedules, and operational plans for WLN and to explore technical details respecting interconnection and cooperation of WLN with BALLOTS. Visits are planned also to PNBC to explore possible use of WLN to support location data for interlibrary loan, and to the University of British Columbia to investigate what network support might be provided to that institution and how the network might relate to similar activities being planned nationally and locally in Canada.

The 20-member Network Steering Committee will be appointed during the quarter. This Committee will be responsible for providing guidance to the Core Design Staff and other groups involved in network planning respecting choice of alternatives for a governance structure and priorities for implementation of products and services.

Selection of State Network Design Teams will be completed during the quarter. Teams have already been appointed by Washington, Oregon, Idaho, and Nevada. Members of these teams will provide advice and assistance to the Design Core Staff concerning state needs and priorities for network products and services, and will provide a channel for communication about the Project to and from the "grass roots" within the states.

A major Project concern during the coming quarter will be to begin identifying strategies for obtaining the commitment of potential network members to continue development of the network after the CLR and USOE grants terminate. He will begin exploratory discussions with the major potential network members and start to determine the components needed for a marketing strategy to gain the needed commitments.
V. FINANCIAL REPORT SUMMARY

The required CLR financial report with attachments is contained in Appendix I. In summary of these data, a total of $6,117.99 was expended during this first quarter. Of this total expenditure, $417.41 was matching funds from the Continuing Education and Library Resources Program Core budget. It is anticipated that the funds budgeted for staff travel will not be adequate -- based on the rate of expenditure for staff travel during this first quarter. Requests for adjustment in the CLR grant budget will be made the next quarter.
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APPENDIX A

PRESS RELEASE ANNOUNCING AWARD OF GRANTS
The Western Interstate Commission for Higher Education (WICHE) has been awarded three grants totalling $174,404 to improve library services in 17 western states.

Using these grant funds, WICHE will provide continuing education for library personnel and develop ways and means to share library resources across state lines.

The three granting agencies are the Council on Library Resources, ($79,325), the U.S. Office of Education ($65,135), and the Division of Library Programs, Department of Health, Education and Welfare ($29,994). These funds were awarded to WICHE's Continuing Education and Library Resources Program, which is directed by Maryann Duggan.

The grant from the Council on Library Resources will support the overall design and development of the Western Interstate Bibliographic Network. This will be a communications network available to all types of libraries and bibliographic centers in a 17-state area. It will consider the equitable exchange of information, documents, and publication, and expand the usefulness of limited resources to support education. Over 250 individuals have been involved in preliminary planning over the past 11 months. The Council on Library Resources is a private foundation with the principal objective of aiding in the solution of library problems.
The grant from the U.S. Office of Education will support the cost and funding studies, which are related to the design and development of the network. These studies, among other things, will first determine and then compare present costs of library services without network support to projected costs for these same services with the use of the network.

This network will be designed so that it can comfortably mesh its activities with other developing state and national bibliographic networks.

The grant awarded by DHEW's Division of Library Programs will support the planning, implementation, and evaluation of library staff development programs. A total of 44 participants from 14 States will be involved in this year-long training activity.

The core support for WICHE's Continuing Education and Library Resources Program is provided by contributions from library agencies in each of 11 member states.

The Continuing Education and Library Resources Program is one of 54 interstate programs coordinated by the Western Interstate Commission for Higher Education. WICHE programming covers such fields as higher education, health, mental health, corrections, and management information systems in higher education.

WICHE is a public agency which helps the 11 western states work together to increase educational opportunities for western youth, to improve programs of universities and colleges, to expand the supply of specialized manpower, and to inform the public of higher education needs.
APPENDIX B

PARTICIPANTS IN WESTERN NETWORK STUDY AND PLANNING CONFERENCE AND PLANNING TASK FORCE
LIST OF PARTICIPANTS

Anderson, Herschel V., Director, South Dakota State Library, 322 South Fort St., Pierre, South Dakota, 57501 (605-224-3131)

Anderson, Joseph J., State Librarian of Nevada, Nevada State Library, Carson City, Nevada, 89701 (702-385-1130)

Barber, Nancy, Staff Associate, Regional Services Unit, WICHE, P.O. Drawer P, Boulder, Colorado, 80302 (303-449-3333)

Beck, Richard A., Associate Director, University of Idaho Libraries, Moscow, Idaho, 83843

Bunnell, Carol, Director, General Regional Programs, WICHE, P.O. Drawer P, Boulder, Colorado, 80302 (303-449-3333)

Carmack, Bob, Director of Libraries, I.D. Weeks Library, University of South Dakota, Vermillion, South Dakota, 57069 (605-677-3371)

Cohen, Mrs. Nina, Associate Director for Public Services, University of Washington Library, Seattle, Washington, 98195

Cooley, Mrs. Margaret B., Assistant Director, Dept. of Administration, Library Archives and Public Records Division, 3rd Floor, State Capitol, Phoenix, Arizona, 85007 (602-271-5031)

Crockett, Mrs. Ethel S., California State Librarian, P.O. Box 2037, Sacramento, California, 95809 (916-445-4027)

Dahl-Iansen, Ms. Abigail, Chairman, University of California Library Council, University of California - Riverside, Riverside, California

DeGabrielle, Mr. Clinton, Executive Director, Data Processing Authority, Olympia, Washington, 98504 (206-753-5445)

Dowlin, C. Edwin, State Librarian, New Mexico State Library, P.O. Box 1629, Santa Fe, New Mexico, 87501 (505-827-2103)


Dugan, Maryann, Director, Continuing Education and Library Resources Program, WICHE, P.O. Drawer P, Boulder, Colorado, 80302 (303-449-3333)

Ellis, Doris, Consultant, Colorado State Library, 1362 Lincoln St., Denver, Colorado, 80203 (303-292-2174)

Eppen, Richard B., Director of State Libraries and Museums, Alaska State Library, P.O. Box 1151, Juneau, Alaska, 99801 (907-465-2912)

Fay, Charles, Assistant Director, Pacific Northwest Bibliographic Center, University of Washington Library, Seattle, Washington, 98195
Fye, Kay, Coordinating Librarian, General Processes/Services, Nebraska Library Commission, Lincoln, Nebraska, 68502 (402-471-2045)

* Geske, Jane, Director, Nebraska Library Commission, 1420 "P" St., Lincoln, Nebraska, 68508 (402-471-2045)

Greenup, Jadin, President, California Library Association.

Hamel, Dorothy M., Chairman, Nevada State Advisory Council on Libraries, Atomic Energy Commission, P.O. Box 14100, Las Vegas, Nevada, 89114 (702-734-3802).


Hayes, Phoebe, Supervisor, Colorado State Library, 1362 Lincoln St., Denver, Colorado, 80203 (303-892-2161)

Haywitt, Joe, University of Colorado, Norlin Library, Boulder, Colorado, 80302 (303-492-7724)

Jacobs, Mrs. Alma S., State Librarian, Montana State Library, 930 East Lyndale Ave., Helena, Montana, 59601 (406-449-3004)

Johnson, Jayne H., Administrator, Wyoming State Library, Supreme Court Bldg., Cheyenne, Wyoming, 82002 (307-777-7281)

Katz, Ruth, University of Denver, Graduate School of Librarianship, Denver, Colorado, 80210

Mason, Dr. Ellisworth, Director of Libraries, University of Colorado Libraries, Norlin Library, Boulder, Colorado, 80302 (303-492-7511)


McCaughey, Philip F., Board Member, Bibliographical Center for Research, Rocky Mountain Region, Inc., Devoreaux Library, South Dakota School of Mines and Technology, Rapid City, South Dakota, 57701 (605-394-2419)

* Miller, Helen M., State Librarian, Idaho State Library, 375 W. State Street, Boise, Idaho, 83702 (208-324-2150)

Montague, Eleanor, BALLOIS Project, Stanford University, Stanford, Calif., 94305

* Moss, Carol, Los Angeles County Public Librarian

Nelson, Donald K., Director of Libraries, 374 MUL, Brigham Young University, Provo, Utah, 84602 (801-378-1211, ext. 7906)

Norman, Ron, (Incoming President, Nebraska Library Association), Kearney Public Library, Kearney, Nebraska (402-234-9722)
Osgood, Vicki, Secretary, Continuing Education and Library Resources Program, WICHE, P.O. Drawer P, Boulder, Colorado, 80302 (303-449-3333)

*Owens, Warren, Director, University of Idaho Libraries, Moscow, Idaho, 83843

Pulsiifer, Josephine S., Senior Library Information Systems Specialist, 614 Breezewood Drive, Greenbelt, Maryland, 20770 (202-426-5929)

Reed, Mary Jane, Associate State Librarian for Planning and Research, Washington State Library, Olympia, Washington, 98503 (206-753-5592)

Rodgers, Frank, President, Oregon Library Association, Portland State University Library, P.O. Box 1151, Portland, Oregon, 97207 (503-229-4521)

Schertz, Morris, Director, University of Denver Library, University Park, Denver, Colorado, 80210 (303-753-2006)

*Scholz, William H., Systems Coordinator, New Mexico State Library, P.O. Box 1629, Santa Fe, New Mexico, 87501 (505-327-2103)

Shaw,nard, Associate Director, University of Denver Library, University Park, Denver, Colorado, 80210 (303-753-2006)

Silver, Cy, Chief, Library Consultant Services, California State Library, P.O. Box 2037, Sacramento, California, 95809 (916-445-4730)

Sims, Charles E., State Librarian, Kansas State Library, 3rd Floor, Capitol Bldg., Topeka, Kansas, 66612 (913-296-3259)

Thielen, Lee, Consultant, Colorado State Library, 1362 Lincoln St., Denver, Colorado, 80203 (303-892-2174)

Titus, Mrs. Alberta, Administrative Assistant, Montana State Library, 930 East Lyndale Avenue, Helena, Montana, 59601 (406-449-3004)

Thompson, Earle, Dean of Library Service, University of Montana, Missoula, Montana, 59801

Volgenau, Jerry, Public Information Officer, WICHE, P.O. Drawer P, Boulder, Colorado, 80302 (303-449-3333)

Weber, David, Director of University Libraries, Stanford University, Stanford, California, 94305

Williams, William H., State Librarian, Wyoming State Library, Supreme Court Building, Cheyenne, Wyoming, 82002 (307-777-7281)

Wood, Ransom, Associate for Library Development and Services, California State University and Colleges, 6709 Wilshire Blvd. - Suite 900, Los Angeles, California, 90036 (213-738-2981, Ext. 348)
Other participants include:

Davis, Russell L., Director, Utah State Library Commission, 2150 S. 2nd W., Suite 16, Salt Lake City, Utah, 84115 (801-328-5875)

Carter, John M., Chief of Information Services, State Library of Wyoming, Supreme Court & State Library Building, Cheyenne, Wyoming, 82002 (307-777-7281)

Cuadra, Carlos Abf lember, NCLIS, Systems Development Corp., Technical Information Center - Library, 2500 Colorado Avenue, Santa Monica, California, 90406 (310-393-9411)

Geiman, Robert, Region X, Library Services Program Officer, USOE/BLET, Arcade Plaza Building, 1321 Second Avenue, Seattle, Washington, 98101 (206-442-4962)

Polan, Morris, Incoming President, California Library Association, P.O. Box 2334, Alhambra, California, 91803 (213-224-2201)

Porter, Barry L., Board Member, Bibliographical Center for Research, Rocky Mountain Region, Inc., State Library Commission of Iowa, Historical Building, Des Moines, Iowa, 50319 (515-281-5344)

*Our Conference registration records indicate that these people did not attend the Conference.
COMPOSITION OF THE WESTERN STATES NETWORK PLANNING TASK FORCE
CREATED AT THE SEPTEMBER 19-20, 1974
WESTERN STATES NETWORK STUDY AND PLANNING CONFERENCE IN DENVER

The Conferees agreed that all agencies and organizations in the 17 western states which are concerned with bibliographic networking should be represented on the Task Force. The work to be performed by this Task Force was defined by the conferees as follows:

1. To develop a skeleton plan for a Western Network by November 1, 1974.

2. To collect the necessary data for fleshing out the skeleton plan and to draft a proposal by December 31, 1974, for the implementation (in phases) of a Western Bibliographic Network.

The conferees recommended that the WICHE Western Council Chairman and Vice Chairman assume those same roles for the Task Force. After considerable discussion the conferees recommended the following composition of the Task Force.

1. Members of the Western Council (the State Librarians from Alaska, Arizona, California, Montana, Nevada, Utah, Washington and Wyoming)

2. Pacific Northwest Bibliographic Center
   Nina Cohen
   (To be confirmed by the PNBC Board)

3. Bibliographical Center for Research
   Ken Dowlin
   He was nominated by the BCR Board in a caucus held on September 20, 1974

4. Mountain Plains Library Association
   Wayne Johnson
   He was nominated by a caucus of MPLA Board members on September 19, 1974

5. Pacific Northwest Library Association
   Frank Rodgers
   Later confirmed by PNLA Board

6. Federation of Rocky Mountain States
   William Rapp

7. Washington Library Network
   Mary Jane Reed

8. California/BALLOTS
   David Weber
The above Task Force members were delegated the authority to represent their respective organizations in the deliberations and work of the Task Force.

On the afternoon of September 20, the Western Council authorized a budget of $15,000 for the work of the Task Force. The second meeting of the Task Force was set for November 7-8 in Reno, Nevada.

COMPOSITION AND FUNCTIONS OF THE WESTERN NETWORK PLANNING TASK FORCE

WORKING GROUPS FORMED ON SEPTEMBER 20, 1974

At the initial meeting of the Western Network Planning Task Force in Denver on September 20, it was decided that the work before the Task Force could best be achieved by the creation of three Working Groups as follows:

1. Data Base and Technical Group - Mary Jane Reed, Chairman

   Responsibility of this Working Group would be to investigate the characteristics of large manual and machine-readable data bases in the western states, begin preliminary systems design for methods of interfacing these data bases, determine the telecommunications requirements for a western network, and develop a realistic implementation schedule. Mary Jane Reed was nominated to chair this Working Group. Mr. Clint DeGabrielle was chosen to assist in this task as a technical advisor. Other members of this Working Group appointed by Mary Jane Reed are:

   - David Weber - BALLOTS, Stanford University
   - Kenneth Dowlin - Bibliographical Center for Research
   - Nina Cohen - Pacific Northwest Bibliographic Center
   - Mary Jane Reed - Washington Library Network

   Consultants: Clinton DeGabrielle, Data Processing Authority of Washington
   Eleanor Montague, BALLOTS, Stanford University
   Harold Epstein, BALLOTS, Stanford University

2. Statistical Data Collecting Group - Wayne Johnson, Chairman

   The Task Force recognized the need for data in order to begin planning a western network. The number of titles cataloged in the 17 states, the total volumes of library resources, the number of interlibrary loan transactions, the number of requests served by the three bibliographic centers will need to be known in order to begin the planning of a western network. Wayne Johnson was nominated to head this Working Group. The following persons were appointed by Wayne Johnson to assist him in this work:

   - Alberta Titus - Montana State Library
   - Edith Matthews - Arizona State Library
   - Abbie Dahl-Iansen - Univ. of Calif. Library Council
   - Joseph Edelen - University of South Dakota Library
   - Frank Rodgers - Oregon Library Association
   - Wayne Johnson - Wyoming State Library
3. Management Group - Ethel Crockett, Chairman

The Task Force recognized that planning for the western network must consider management policies, organizational structure, legal base, and financial resources. Ethel Crockett was nominated to chair this Working Group. The following members were appointed by Ethel Crockett to serve on this Working Group:

- Ruth Hamilton - Washington State Library
- Russell Davis - Utah State Library
- William Rapp - Federation of Rocky Mountain States
- Joseph J. Anderson - Nevada State Library
- William H. Williams - Wyoming State Library
- Ethel Crockett - California State Library

The Working Groups agreed to begin the assignments immediately and to present their findings to the entire Western Network Planning Task Force at Reno, Nevada on November 7-8. A budget of $2000 was authorized to fund each of the Working Groups between now and November 7, 1974.

Since September 20th, each of these Working Groups have been engaged in collecting data, exploring potential services, and communicating with appropriate user groups or network participants.

The Statistics and User/Needs Group conducted a rapid TWX survey covering 492 libraries in 17 states and British Columbia. The following questions were asked:

1. When would you consider going on-line for the following: (Give a broad date, if possible)
   A. Monographs
   B. Serials
   C. Government Documents
   D. Audio-Visual Material
   E. Blind and Physically Handicapped Material
   F. Other (Please Specify)

2. Indicate your total holdings (include all cataloged items)

3. What are your library interlibrary loan statistics (please indicate whether your statistics are for year, month, etc.)
   A. Sent from your library within your state
   B. Sent from your library beyond your state
   C. Projected number of requests sent from your library through proposed network
APPENDIX C

USOE COST AND FUNDING STUDY SUMMARY

(Copies of the full First Quarterly Report on the USOE Cost and Funding Study are available at printing cost ($3.00/copy) from the WICHE Continuing Education and Library Resources Program, Attention: Sue Middleton, P. O. Drawer P, Boulder, Colorado 80302.)
Presently WICHE, under a grant from the U.S. Office of Education, is conducting cost and funding studies concerning development and implementation of a proposed Western Interstate Bibliographic Network. This study is contingent upon, and concurrent with, the network design and development study funded by the Council on Library Resources. The grant from the Office of Education was officially awarded July 1, 1975, and will be approximately one year in duration.

The primary goals of these studies are:

1. To determine representative costs of present library services without network support;
2. To estimate future costs of library services with proposed network support;
3. To evaluate and compare the impact of a network upon costs of library services; and
4. To examine equitable programs of financial support for a proposed Western Network.

Currently a rigorous planning and design stage is underway to fulfill these requirements. Attachment A presents a simplistic overview of the tasks and schedule as presently proposed. The attachment indicates four phases of the project which correspond to stated goals. A further refinement of project tasks, including their inter-relationships appear in Attachment B.

As presented, the first phase includes the collection of planning and cost data on present library services. For purposes of cost determination of present library services, particular attention will be given to those library services deemed most apt to change due to network support. Thus, within individual libraries the focus will be upon technical processing and inter-library loan. Initially, base data will be gathered from a sample of 100 libraries in the West. These data include:

- budget allocations
- volume throughput, and
- holdings
Preliminary data should provide an accurate estimate of general costs under study, as well as a better overview of resources in the West. To further refine these gross cost estimates, 12 libraries will be selected for in-depth cost analyses. During three-week intervals, each of the twelve libraries will collect detailed information on staff time and volume throughput by specific tasks and transactions within technical processing and interlibrary loan. In combination with base data, budget allocations can be linked to specific processes affected by a network.

Intrinsic to any discussion of present and future library services in the West are the three bibliographic centers -- the Bibliographic Center for Research, the California State Library Union Catalog and the Pacific Northwest Bibliographic Center. Costs of services which will be affected by network support or impact a proposed network will be targeted. Besides providing invaluable costing information, it is hoped that the centers will be a significant source of evaluative data on interlibrary loan transactions in the West.

Estimating and comparing future costs as they might be (given any number of network configurations) presents one of the most difficult phases of the cost studies. Examination of the many available automated services such as BALLOTS, WLN and OCLC, and possible combinations of such services is the major task during this phase. A primary objective will be to estimate costs to the proposed network as well as the network participants for services provided by these systems. Cost impact to the individual library is of particular importance. Consideration will necessarily be given to competitive pricing for specific services, telecommunication and hook-up costs, initial investment requirements and long-term maintenance costs. Also to be studied during this phase are projected administrative needs and costs for such a network. This is, of course, dependent upon services to be provided by the proposed network and its proposed configuration.

After ascertaining present and expected future costs with network intervention, cost impact and comparison can be deduced. Present cost data will be adapted assuming substitution or alteration of present services by proposed network services. Thus, a model to approximate the cost impact upon present library services can be developed.

The final phase, determining a funding base for a proposed network, will be built upon both the cost impact data and necessary network support estimates developed earlier. Additionally, existing funding strategies, public policy and legal bases are components of this final phase of examination. Inquiry into alternative funding bases will hopefully yield a set of optimal funding strategies upon which a viable funding decision may be made.

The scope and depth of these studies suggest potential contributions to methodology, modeling and evaluation of library costs. Indeed, beyond the specific purpose they serve in the development of a possible Western Interstate Bibliographic Network, we hope that these studies will be of substantial value to many facets of research in library services.

Maryann Kevin Brown
10/17/75
### Overview of Schedule

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**DESIGN & TEST DATA**
- Site Visits and Data Collection
- Data Collection

**COLLECTION INSTRUMENTS**
- Cost Analyses
- Design & Test Data

**COST ANALYSES**
- Library Services (Present and Proposed)
- Cost Analyses

**DETERMINE LIBRARY SERVICES AFFECTED**
- Determine Network Support
- Determine Impact
- Identify Funding Sources and Level of Funding

**Determine Equitable Cost Impact on Library Services and Alternatives**

**DETERMINE COST IMPACT**
- Determine Support Necessary for Proposed Network
- Determine Funding Strategies

**FUNDING STRATEGIES**
- Overview of Schedule
- Cost and Funding Studies Concerning the Development of a Possible Western Interstate Bibliographic Network

**Determine Funding Sources and Level of Funding**
- Overview of Schedule
- Cost and Funding Studies Concerning the Development of a Possible Western Interstate Bibliographic Network
APPENDIX D

RESUMES FOR THE DESIGN CORE STAFF
ELEANOR A. MONTAGUE

Biographical Sketch

Project Director, Library Network Project

Mrs. Montague is responsible for integrating the activities for the NICHE Design Core Staff with the policies established by the Steering Committee for the Western Interstate Bibliographic Network and the tasks carried on by the State Network Design Teams. Prior to joining NICHE, she was the Assistant Manager of BALLOTS where she was responsible for project budgeting, scheduling, long-range planning, proposal preparation and systems analysis. She managed the design, implementation, and on-going evaluation of a pilot multi-library network based on BALLOTS, and developed rate schedules and performed marketing and financial forecasting for the network. With BALLOTS since its inception in 1967, she held senior level responsibilities for functional analysis of library requirements, forms design, hardware evaluation, program specifications, system and user documentation, acceptance testing, library staff training, and cost and statistical analyses.

In 1974 and 1975 she was an active participant in planning for networks within California and the West. She was on the Planning Committee for CLASS and was a technical consultant and member of ad hoc committees on standards for spine labels, bibliographic records, and network evaluation. She also was a member of the Network Planning Task Force for the Western Council that prepared a proposal to CLR to fund the design of the Western Interstate Bibliographic Network. From 1972 to 1975 she was a lecturer at the School of Librarianship, San Jose State University, where she taught "An Introduction to Information Science."

Before her BALLOTS experience, she was head of the Chemistry Library at the University of Chicago and had also worked as a law cataloger. She received the B.A. degree in Anthropology and the M.A. degree in Librarianship from the University of Chicago. She holds the M.B.A degree from the University of Santa Clara. She is currently pursuing the doctorate degree in Library Science at the University of California at Berkeley.
KARL M. PEARSON, JR.  

Biographical Sketch

Systems Analyst, WICHE Western Library Network Project

Mr. Pearson is responsible for developing the technical specifications for network cooperative and resource-sharing functions. He comes to WICHE from System Development Corporation (SDC) where since 1968 he participated in a number of library and information system projects and studies. Most recently, he participated in a study of education information resources and user needs, performed under a contract with the National Institute of Education. Previously, he participated in the design of MEDLARS II and in the training for the National Library of Medicine staff, operators of that system. In other work, he helped design and program the LISTS/ALPS and SIMS experimental on-line systems for various library functions, participated in a survey of automation in federal libraries, and operated a bookform catalog service. Prior to his work in the library field, he was a computer programmer and software test designer at SDC for the SAGE and BUIC air defense systems. Mr. Pearson has authored several articles on library systems and has written a chapter in the Annual Review of Information Science and Technology on the use of minicomputers in libraries. He received the B.A. degree in English from Bowdoin College and the M.S. in Information Science from the School of Library Service, UCLA.

LOUISE T. MARTIN  

Biographical Sketch

Secretary, WICHE Western Library Network Project

Ms. Martin is responsible for performing program-related secretarial duties for the network project in the Library Programs. She has been at WICHE since October 20, 1975. She completed her B.A. in Psychobiology at the University of California, Santa Cruz in June of 1975, during which time she worked as a legal secretary for various lawfirms in the San Francisco Bay Area. Previously, she was employed as an executive secretary for Ralph C. Sutro Co. in San Francisco, California for 9 months, Associated Mortgage Companies in Washington, D.C. for one year, W. E. Hutton & Co. in Jenkintown, Pennsylvania for one year, and William H. Rorer, Inc. in Ft. Washington, Pennsylvania for two years.
MARY ANN KEVIN BROWN

Cost and Funding Investigator, WICHE Cost and Funding Studies of a Proposed Western Bibliographic Network

Ms. Brown is currently involved in the cost and funding studies of a proposed Western Interstate Bibliographic Network. She has been at WICHE since October 1, 1975. Previously she was at Westat, Inc. in Rockville, Maryland where she was involved in information and library studies, as well as consumer product and health studies. She has recently finished a study of OCLC in Texas and New Mexico. Additionally, she was involved in a study of data requirements in evaluation for the Consumer Product Safety Commission. Prior to joining Westat, Ms. Brown was employed as a legal analyst at Standard Oil of California. There she participated in economic studies. Also she was involved in the implementation of the legal information retrieval system used in an anti-trust litigation. In addition, she consulted on the design of a library information handling system for a subsidiary of Standard Oil. Ms. Brown received a B.A. in history from the University of California at Davis and an M.L.S. from the School of Librarianship, UCB. She has partially completed requirements of a sixth year certificate from Berkeley in Library Management with a major emphasis on operations research and statistics.

ANITA L. Mc HUGH

Research Assistant, WICHE Cost and Funding Studies of a Proposed Western Bibliographic Network

Ms. McHugh will officially join the WICHE staff on November 10, 1975. She will be acting as a data technician on a part-time basis. She holds a B.A. in Mathematics from the University of Nebraska at Omaha. Additionally, she has taken numerous graduate level courses in applied mathematics and programming at both the University of Colorado and the University of California. Her responsibilities will include processing and manipulating data, data collection control and overseeing computer operations.
APPENDIX E

INITIAL PLANNING MEETING, COST AND FUNDING STUDY

(N-1)
The purpose of the meeting was to review the strategy proposed for conducting the Cost and Funding Study and to plan the data collection effort. Palmour had suggested collecting cost data and general planning data from a stratified probability sample of 100 state, academic, and public libraries. From these libraries, 12 (together with three bibliographic centers) would be selected by subjectively applied criteria for intensive on-site case study. After our review, it was decided that this approach was satisfactory except that major special and technical libraries would have to be included in the sampling universe.

The question of confidentiality was discussed. While it might be possible to conceal the identity of the smaller libraries in the sample, it appeared to be unlikely that the identity of the larger libraries would not be readily apparent from the data. This means the data analysis and reporting must be presented in such a manner as to make it clear that the larger libraries may have some relatively unique aspects to their operations, possibly making them not directly comparable to other libraries of their class.

Ron Miller suggested that cost data be analyzed and presented on a "productivity" basis, rather than expressed simply in terms of dollars. This is desirable because of an expected wide variation in direct labor salaries from one part to another of the western region and because the calculation of overhead is known to differ markedly from library to library. Using the "productivity" approach, cost elements can be expressed in terms of the amount of direct and indirect labor required. Another suggestion was to obtain dollar values through division of the total library budget by relatively broad cost categories rather than to attempt detailed dollar costing of particular narrowly defined activities.
While the data to be gathered from the sample of 100 libraries will be generalizable, it must be understood and clearly stated that the data derived from the case studies of 12 libraries cannot be assumed to be representative of other libraries. The purpose of the case studies are to derive some baseline cost estimates to be used in analyzing expected cost-benefits for network services and in evaluating the effectiveness of network operations. The cost data (from both samples) will contribute to network design by providing a basis for evaluating alternative network configurations and indicating the amount of resources that can be reallocated to non-network supported activities. The data can be presented as comparing total cost of manual vs. network service for various library activities in the region as a whole, and state by state. It also may be desirable to build a matrix of possible funding sources ranged against library activity groupings to suggest proportionate contributions likely from each source.

It appears that the case studies and survey of the 100 libraries need not be performed in a particular sequence. Alternatives to be considered are:

(a) survey of 100 libraries first, followed by the 12 case studies;
(b) case studies, followed by the survey of 100 libraries; or
(c) half the case studies, followed by the survey of 100, then followed by the remainder of the case studies.

The advantage of the second and third alternatives is that the case studies may raise questions about the generalizability of some findings which could then be tested in the survey of 100 libraries. A final selection from these alternatives will be made after we have had the opportunity to look over the gross planning data requested from the state libraries in early August.

The gross planning data, together with data reported in other studies, performed both inside and outside the West, will be analyzed prior to building survey instruments so that we can take full advantage of work done previously. We also plan to use the task descriptions defined in the highly-detailed California State University and Colleges (CSUC) study of technical processing performed several years ago, although we will categorize the 99 tasks into a group of 25 (approximately) for the sake of convenience and study cost reduction. As a planning guidepost, our desires for detailed data gathering should be reconciled to the constraints imposed by the project budget - keeping in mind that the study has the practical objective of furnishing information needed by Western library decision-makers to enable them to determine whether or not they should contract for network services.

The schedule for the cost and funding study cannot be firmly established until a review of the gross planning data has been accomplished. However, the cost portion of the study is anticipated to require about six months. Tentatively, we plan to have survey instruments ready for pre-test (using Idaho as a test-bed thanks to the gracious invitation of Helen Miller, State Librarian) by the beginning of November and final drafts ready for review about the first of December. The survey and studies would be conducted after January 1, 1976, taking cognizance of delays that may be occasioned in academic libraries by quarter or semester breaks in that month.
Cost studies of the bibliographic centers will focus on aggregate costs allocated to existing services and alternate approaches to the conversion of card files to storage in network machine-readable data bases. It is envisioned that bibliographic center operations will be markedly affected by the appearance in the West of on-line data bases containing holdings information.

Basic network service support systems (expected to be some or all of BALLOTS, WLN, OCLC, and BIBNET) will be examined from both the standpoints of estimated costs and expected service charges. While the former may be difficult to obtain, it is felt that such information is desirable in assessing the impact of major operational volume increases (or decreases) and the basis upon which service charges are established.
APPENDIX F

OUTLINE FOR CATEGORIZING NETWORK DESIGN INFORMATION AND DATA
One of the first steps taken in the Project once staffing had been initiated was to consider what kinds of information and data would be needed for designing the network. The outline of information categories shown below was drafted and used as a framework for structuring questions to be asked in making visits to library sites during the quarter. The outline also served conveniently as a device for characterizing information about networking acquired during literature review and informal conversations.

**OUTLINE FOR CATEGORIZING NETWORK DESIGN INFORMATION AND DATA**

1. **LIBRARY NETWORK ORGANIZATION, GOVERNANCE, AND FUNDING**
   (e.g., CLASS, NELINET, SOLINET, State Library Systems)
   a. Legal basis
   b. Charter provisions
   c. Bylaws
   d. Organization Chart
   e. Membership contracts
   f. Services
   g. Funding bases

2. **AUTOMATED SERVICES/UTILITIES**
   (e.g., OCLC, BALLOTS, CLSI, SDC Search Service)
   a. Library functions supported
   b. Computer type or utility location
   c. Batch/on-line and responsiveness
   d. Operation schedule
   e. Service and maintenance support
   f. Teleprocessing
   g. Capacity, throughput efficiency and capability
   h. Ease of use, accuracy enhancements
   i. Amount of operator training
   j. Transferability
   k. Service charges, costs

3. **CATALOGING DATA BASES**
   (e.g., OCLC, BALLOTS, Blackwell, Autographics)
   a. Size and growth characteristics, by type of material represented
   b. "Goodness of Fit" to full MARC format
   c. Source(s) of data
   d. Quality of data (authoritiveness of cataloging)
   e. Access points
   f. Years covered
   g. Availability for transfer and exchange

4. **INVENTORY CONTROL (LOCAL LIBRARY) DATA BASES**
   (e.g., CLSI circulation control files, serials lists, bookform catalogs)
   a. Library name and location
   b. LCCD, ISSN, ISBN, etc. in database
   c. Other data elements
   d. Source(s) of data
   e. Quality of data
   f. Size and growth characteristics
   g. Software used
OUTLINE FOR CATEGORIZING NETWORK DESIGN INFORMATION AND DATA

5. UNION CATALOG LIST DATA BASES
   (e.g., CSUC Union List of Serials)
   a. Libraries represented and codes used (if not NUC)
   b. Size and growth characteristics
   c. Source(s) of bibliographic data and quality
   d. Quality of data in respect to holdings information
   e. LCCD, ISSN, etc. in data base?
   f. Software used.

6. RESOURCE COLLECTIONS
   (e.g., UC, SFPL, LAPL, Stanford)
   a. Library name and location
   b. Collection strength
   c. Collection size and growth rate
   d. ILL policies and major borrowers

7. TELECOMMUNICATIONS SERVICES USED
   a. Service source (e.g., state, TYMSHARE, etc.)
   b. Transmission rate and capacity
   c. Distribution of nodes
   d. Restrictions on interstate connection
APPENDIX G

SUMMARY OF SITE VISITS TO CALIFORNIA

1-14 OCTOBER 1975
SUMMARY OF SITE VISITS TO CALIFORNIA

1-14 OCTOBER 1975

The expected signatories to the joint powers agreement establishing a state network, the California Library Authority for Systems and Services (CLASS), represent the major library centers of influence in the state: the State Library, the University of California, the California State University and Colleges, and the public library systems. The outlook for centralization of library cooperation is bright, which will make WICHE's task easier in dealing with the multitude of libraries in the state and in developing means whereby other states in the region can obtain improved access to California's resources of collections, automated systems, and databases. CLASS provides a good model for WICHE to consider in developing an interstate network since it provides a governance structure that recognizes the major centers of influence and at the same time allows other libraries to make their needs known.

The pattern of coordination between public and private enterprise in California is an interesting one. Commercial firms such as Autographics, General Research, and Innovar provide reasonably efficient access to major cataloging data bases for conversion and maintenance of library catalogs in machine-readable form, while SDC and Lockheed provide on-line access to the major journal and technical report citation files. A number of consulting firms, such as Brett Butler and Associates and Boeing Computer Services, are active in providing special expertise to libraries when needed. Except in the special case of Stanford's BALLOTS, California libraries are choosing to purchase computer-based systems and services such as CLSI and OCLC rather than attempt to build their own.

The physical components for an effective state-wide library network are now being emplaced in the state. CLASS should provide the formal structure needed to coordinate activities of the existing systems, promote standardization for efficient interfacing of network components, and focus the general desire for improved resource-sharing on practical mechanisms for making location information available, expediting delivery of materials, and compensating between net lenders and net borrowers.
APPENDIX H

PROJECT CONTROL DOCUMENT

(N-Z)
PURPOSE

This document lists the major tasks to be performed in the Western Library Network Project for the 1976 fiscal year, including the work to be performed under grants from the Council of Library Resources for network design and U.S. Office of Education for Library Services Cost and Funding. Each task, defined as a major project activity that ends with the preparation of a specific product (usually one that is deliverable to a funding agency), is briefly described and its relationship to other tasks is indicated. Products are listed to show date on which they are due for delivery. Tasks, their relationship to each other, and their period of performance are shown graphically in a schedule chart.

This document is intended mainly for general project coordination, and must be supplemented with various memoranda and notes providing more detailed activity schedules for each task. Travel schedules and non-task-oriented milestones (such as appointment of design teams, scheduling of meetings, etc.) will be developed and documented as needed or convenient.
PROJECT TASKS

Each major task in the project is outlined in the following list. Tasks are assigned an alphabetic identity code and the resultant products are assigned a numeric identity code for convenience in referring to the schedule chart and task and product lists. Staff members listed for a task are those having major participation in the task; it is assumed that all staff members will participate in each task to some degree. The person first listed has the main responsibility for the task's performance.

A Collect cost data on present manual activities likely to be affected by automation and other network services
Product 51: Cost estimates for current services
Performance estimate: 26 weeks
Staff: Brown, Palmer, Pearson
Tasks related to: C, J, T
Tasks upon which dependent: H, J

B Estimate costs for proposed network services, and cost out alternatives being investigated
Product 52: Cost curves and service charges for network activities, as basis for membership/fee schedules
Performance estimate: 16 weeks
Staff: Brown, Pearson
Tasks related to: P, C
Tasks upon which dependent: J, H, K, M, Q, T

C Determine cost of designed network, re-evaluate calculated cost/benefit for sample of libraries, and establish equitable funding basis for network
Product 53: Document methodology, findings, and recommendations for network self-support
Performance estimate: 20 weeks
Staff: Network Director, Brown, Palmer, Pearson
Tasks related to: U, P
Tasks upon which dependent: B, A
Task D

Study organizational aspects of other similar networks (legal basis, structure, management, funding, membership contracts)

Product 101: Working papers summarizing each network studied, and a recommendation for basis for Western Network

Performance estimate: 24 weeks
Staff: Network Director, Pearson
Tasks related to: P, C
Tasks upon which dependent: H

Task E

Determine alternatives for improved delivery of materials through interlibrary loan

Product 102: Working paper describing alternatives, recommending best alternative

Performance estimate: 14 weeks
Staff: Network Director, Pearson
Tasks related to: T
Tasks upon which dependent: D, H

Task F

Review existing networks + studies of systems and data bases available to the West

Product 3: Document describing existing or potential system components for the Western Network

Performance estimate: 14 weeks
Staff: Pearson
Tasks related to: G, H, J
Tasks upon which dependent: J

Task G

Determine desired content and structure of the data base needed to support resource sharing among western libraries

Product 5: Document describing record content and data base structure

Performance estimate: 8 weeks
Staff: Network Director, Pearson
Tasks related to: L, Q, P
Tasks upon which dependent: H, F, J, K
Task H
Define and prioritize the specific network services desired by potential network members
Product 7: Document listing and technically describing potential services, and priority for each
Performance estimate: 6 weeks; Time Needed: 15 weeks
Staff: Network Director, Pearson
Tasks related to: G, J, K, M, T, A, B, Q, P
Tasks upon which dependent: F, J

Task J
Collect planning ('hard') data about libraries and their potentially interdependent activities in the West
Product 4: Document presenting analysis and interpretation of the planning data
Performance estimate: 10 weeks; Time Needed: 26 weeks
Staff: Network Director, Pearson, Brown
Tasks related to: K, L, M, R, T, A, B, G, F
Tasks upon which dependent: H, F, A

Task K
Study feasibility of interconnecting the three bib centers, and gather ILL traffic data for each, growth rate of holdings data, etc. (establish optimum "system" for ILL resource sharing)
Product 9: Document recommendations for interconnecting the bib centers, and for future input of holdings data to WLN and BALLOTS data bases
Performance estimate: 12 weeks; Time Needed: 16 weeks for data collection, more dickering, better interfacing with other tasks
Staff: Network Director, Pearson, Brown
Tasks related to: G, T, B, M, Q, P
Tasks upon which dependent: J, H, L

Task L
Study feasibility of interconnecting WLN and BALLOTS through dual access and exchange of records
Product 8: Document providing technical and legal details on the interconnection of WLN and BALLOTS
Performance estimate: 12 weeks
Staff: Network Director, Pearson
Tasks related to: N, R, T, Q, P, K
Tasks upon which dependent: H, G
<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
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<tbody>
<tr>
<td>M</td>
<td>Design best telecommunications links and protocol</td>
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<tr>
<td></td>
<td><strong>Product 10:</strong> Document reviewing existing and potential links and protocols, and recommend best for western network</td>
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<td></td>
<td>Performance estimate: 23 weeks</td>
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<td></td>
<td>Staff:</td>
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<td></td>
<td>Tasks related to: Q, P, R, S, T, B</td>
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<td>Tasks upon which dependent: H, K, L, J, R</td>
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<td>N</td>
<td>Investigate legal aspects of database ownership and record interchange or purchase</td>
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<td><strong>Product 11:</strong> Document a summary of investigation and recommend strategies for record interchange or purchase</td>
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<tr>
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<td></td>
<td>Tasks upon which dependent: L, R</td>
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<td>P</td>
<td>Draft network charter and membership contracts; establish membership fees/other funding basis</td>
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<td><strong>Product 12:</strong> Draft charter and membership contracts</td>
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<td></td>
<td>Performance estimate: 13 weeks</td>
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<td>Staff: Network Director</td>
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<tr>
<td></td>
<td>Tasks related to: S, T, U</td>
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<td></td>
<td>Tasks upon which dependent: M, K, L, H, G, N, B, C</td>
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<tr>
<td>Q</td>
<td>Test input of current bib center additions into databases, and study feasibility of selective retrospective file conversion</td>
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<td></td>
<td><strong>Product 13:</strong> Document recommended strategies for selected input of location records from the bib centers to the two databases (WLN and BALLOTS)</td>
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<td>Performance estimate: 21 weeks</td>
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<td>Staff: Pearson</td>
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<td></td>
<td>Tasks related to: P, T, B</td>
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<td>Tasks upon which dependent: N, L, M, K, H, G</td>
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</table>
Task R
Explore record interchange with other networks and private sector
Product 14: Report on efforts to exchange bibliographic records
Performance estimate: 26 weeks
Staff: Network Director, Pearson
Tasks related to: N, M, T, B
Tasks upon which dependent: N, M, L, J

Task S
Begin development of training manuals and instructional programs
Product 15: Produce specific training packages for users at various network levels, activities
Performance estimate: 21 weeks
Staff: CE Coordinator, Network Director, Pearson
Tasks related to: T
Tasks upon which dependent: P, M, T

Task T
Prepare final western network technical specifications and organizational charter
Product 16: Final network design document incorporating technical, legal, organizational, financial, and operational details
Performance estimate: 17 weeks
Staff: Network Director, Pearson, Brown
Tasks related to: S, B, U
Tasks upon which dependent: H, J, K, L, M, P, Q, R, S, A

Task U
Draft contracts for network services and obtain membership commitments from each state and participating institution
Product 17: Completed contracts/commitments from network members
Performance estimate: 20 weeks
Staff: Network Director
Tasks related to: None
Tasks upon which dependent: T, P, C

Task V
Propose equitable means for funding interlibrary loan to cover the differences between net lenders and borrowers
Product 103: Working paper describing alternatives, recommending best alternative
Performance estimate: 14 weeks
Staff: Network Director, Pearson, Brown
Tasks related to: P
Tasks upon which dependent: H, J, D
### PRODUCTS AND DUE DATES

#### Products Deliverable to CLR:

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<td>1</td>
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<td>10/20/75</td>
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<td>F</td>
<td>12/22/75</td>
<td>Systems and Components Potentially of Use for a Western Library Network</td>
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<td>1/19/76</td>
<td>Second Quarterly Report</td>
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<td>4</td>
<td>J</td>
<td>3/15/76</td>
<td>Planning Data for a Western Library Network</td>
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<td>5</td>
<td>G</td>
<td>3/29/76</td>
<td>Content and Structure of a Resource Sharing Data Base</td>
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<td>7</td>
<td>H</td>
<td>3/1/76</td>
<td>Potential Services to be Provided by a Western Library Network</td>
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<td>8</td>
<td>L</td>
<td>3/29/76</td>
<td>Interconnection of Western Library Computer-Based Systems</td>
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<td></td>
<td></td>
<td>4/19/76</td>
<td>Third Quarterly Report</td>
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<td>9</td>
<td>K</td>
<td>6/7/76</td>
<td>Interconnection of Western Bibliographic Centers</td>
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<td>6/14/76</td>
<td>Telecommunications for a Western Library Network</td>
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<td>11</td>
<td>N</td>
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<td>Legal Aspects of Bibliographic Record Interchange</td>
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<td>12</td>
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<td>6/28/76</td>
<td>Draft of a Charter and Membership Contracts for a Western Library Network</td>
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<td>Fourth Quarterly Report</td>
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<td>Strategies for Adding Bib Center Holdings Data to a Western Library Network Data Base</td>
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<td>Exchange of Bibliographic Records with Other Networks and the Private Sector</td>
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<td>15</td>
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<td>Training Packages for a Western Library Network</td>
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<td>16</td>
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<td>8/16/76</td>
<td>Governance and Technical Specifications for a Western Library Network</td>
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<td>Contracts and Commitments for Members of a Western Library Network</td>
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<td>Governance Structures for Library Networks</td>
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<td>102</td>
<td>E</td>
<td>3/15/76</td>
<td>Improving Delivery of Library Materials</td>
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<td>103</td>
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<td>Equitable Funding for Western Interlibrary Loan</td>
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<td>3/15/76</td>
<td>Cost Estimates for Current (Manual) Library Activities Likely to be Affected by Network Services</td>
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<tr>
<td>52</td>
<td>B</td>
<td>7/19/76</td>
<td>Estimated Costs for Network Services</td>
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<tr>
<td>53</td>
<td>C</td>
<td>8/16/76</td>
<td>Costs, Benefits, and Funding Sources for a Western Library Network</td>
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### Quarterly Reports:

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<tr>
<td>101</td>
<td>D</td>
<td>3/15/76</td>
<td>First Quarterly Report</td>
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<tr>
<td>102</td>
<td>E</td>
<td>3/15/76</td>
<td>Second Quarterly Report</td>
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<tr>
<td>103</td>
<td>V</td>
<td>3/15/76</td>
<td>Third Quarterly Report</td>
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<tr>
<td>104</td>
<td>W</td>
<td>4/19/76</td>
<td>Fourth Quarterly Report</td>
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### Final Report:

- Title: Cost Estimates for Current (Manual) Library Activities Likely to be Affected by Network Services
- Due Date: 3/15/76
- Title: Estimated Costs for Network Services
- Due Date: 7/19/76
- Title: Costs, Benefits, and Funding Sources for a Western Library Network
- Due Date: 8/16/76
COUNCIL ON LIBRARY RESOURCES, INC.
ONE DUPONT CIRCLE, N.W.
WASHINGTON, D.C. 20036

FINANCIAL REPORT

CLR No. 634

Submitted by: John C. Staley, Associate Director, Western Interstate Commission for Higher Education

Name of Project: Western Interstate Bibliographic Network

Nature of Report: Interim [x] Final [ ]

Period of Report (see instructions): From 1 July 1975 To 30 September 1975

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<th>EXPENSE ITEMS</th>
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<th>Expenditures This Period (2)</th>
<th>Total Expenditures to Date (3)</th>
<th>Balance Available (Col. 1 - Col. 3) (4)</th>
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Total Grant $79,325.00 less receipts to date 17,500.00 balance available 61,825.00

*Please note that although total project expenditures are reported in Column 2 and Column 3, Balance Available (Column 4) is calculated not to exceed any one line item of the total Approved Budget (Column 1). The expenditures shown for Line Items D and E are not claimed from the CLR grant, as they are funded by other sources.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>ALLOCATION</th>
<th>EXPENDITURES TO DATE</th>
<th>JULY EXPENDITURES</th>
<th>AUGUST EXPENDITURES</th>
<th>SEPT. EXPENDITURES</th>
<th>EXPENDITURES JULY-SEPT.</th>
<th>TOTAL EXPENDITURES</th>
<th>BALANCE</th>
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<td>27 Consultant Fee</td>
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<td>29 Data Processing</td>
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</tr>
<tr>
<td>30 Travel-Staff</td>
<td>3,300</td>
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<tr>
<td>31 Travel-Relocate</td>
<td>--</td>
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<tr>
<td>32 Travel-Consult</td>
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<td>87.28</td>
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<td>33 Travel-Other</td>
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<td>1,688.19</td>
<td>1,688.19</td>
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<tr>
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<tr>
<td>45 Publications *</td>
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<td>56 Postage *</td>
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<td>2.40</td>
<td>2.40</td>
<td>2.40</td>
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<td>56 Meeting Exp</td>
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<td>--</td>
<td>--</td>
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</tr>
<tr>
<td>61 Office Supplies *</td>
<td>1,200</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>81.32</td>
<td>98.54</td>
<td>179.86</td>
<td>1,020.04</td>
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<tr>
<td>64 Copying *</td>
<td>2,100</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>112.05</td>
<td>112.05</td>
<td>112.05</td>
<td>1,887.95</td>
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<td>55 Other Exp</td>
<td>750</td>
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<td>304.63</td>
<td>304.63</td>
<td>304.63</td>
<td>445.37</td>
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<tr>
<td>66 Train Matrls *</td>
<td>2,000</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>2,000.00</td>
</tr>
<tr>
<td>77 Equip Purchase</td>
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<td>--</td>
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<td>--</td>
<td>--</td>
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</tr>
<tr>
<td>TOTAL DIRECT COSTS</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>8,104.18</td>
<td>81,044.48</td>
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<tr>
<td>96 Indirect Costs *</td>
<td>20,483</td>
<td>--</td>
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<td>--</td>
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<td>19,760.00</td>
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<tr>
<td>GRANT TOTAL</td>
<td>107,808</td>
<td>--</td>
<td>784.48</td>
<td>977.85</td>
<td>5,241.52</td>
<td>7,103.35</td>
<td>7,103.35</td>
<td>104,041.15</td>
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*Funded by NICHE
**$162.86 was erroneously charged to this account.
ATTACHMENT TO FINANCIAL REPORT FOR CLR 614

JULY 1, 1975 TO SEPTEMBER 30, 1975

A. Salaries, Wages, and Employee Benefits

First Quarter

Miss Maryann Duggan, Program Director (25% of annual salary of $25,404. Work on project began 7/1/75)
$1,322.30

Karl Pearson, Systems Analyst (100% on project at annual salary of $24,500. Work on project began 9/15/75)
1,379.54

Vicki Osgood, Secretary (0.5 F.T.E., $4.25/hour. Work on project began 9/1/75)
345.50

Employee Benefits (total for all exempt and non-exempt)

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FICA</td>
<td>125.71</td>
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<tr>
<td>Health Insurance</td>
<td>7.26</td>
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<tr>
<td>TIAA-CREF</td>
<td>270.23</td>
</tr>
<tr>
<td>Life and Disability Insurance</td>
<td>12.41</td>
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<tr>
<td>TOTAL</td>
<td>415.71</td>
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</table>

Total Salaries, Wages & Employee Benefits $3,463.75

B. Consultant Fees

Karl M. Pearson, Jr. (Planning for tasks to be undertaken in design of Western Interstate Bibliographic Network presented to Library Network Task Force Meeting, Boise, Idaho August 12-13, 1975)
75.00*

*50% of cost for this trip charged to USOE Grant
C. **Travel**

<table>
<thead>
<tr>
<th>Inclusive Dates</th>
<th>Person, Destination, City &amp; Institution</th>
<th>Round Trip Mileage</th>
<th>Purpose</th>
<th>Transp.</th>
<th>Living</th>
<th>Total</th>
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<tbody>
<tr>
<td>7/23/75</td>
<td>Karl M. Pearson from Pacific Palisades to Sacramento</td>
<td>972</td>
<td>Discuss network with Maryann Duggan, Ethel Crockett, and Joe Anderson</td>
<td>$71.19</td>
<td>$2.25</td>
<td>$73.44</td>
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<tr>
<td>7/23/75</td>
<td>Joseph J. Anderson from Carson City to Sacramento</td>
<td>308</td>
<td>Review staffing with Maryann Duggan and Ethel Crockett</td>
<td>46.20</td>
<td>10.00</td>
<td>56.20</td>
</tr>
<tr>
<td>8/4-5/75</td>
<td>Karl M. Pearson from Pacific Palisades to Boulder</td>
<td>2206</td>
<td>Interview for System Analyst Position</td>
<td>192.87</td>
<td>27.86</td>
<td>220.73</td>
</tr>
<tr>
<td>8/4-7/75</td>
<td>Vernon Palmour, Applicant, from Cody, Wyoming to Boulder</td>
<td>990</td>
<td>Interview for Project Director Position</td>
<td>148.50</td>
<td>51.76</td>
<td>200.26</td>
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<tr>
<td>8/7/75</td>
<td>Karl Pearson from Pacific Palisades to Stanford</td>
<td>826</td>
<td>Discuss BALLOTS operation in relation to network</td>
<td>72.22</td>
<td>-0-</td>
<td>72.22</td>
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<tr>
<td>8/12-13/75</td>
<td>Karl M. Pearson from Pacific Palisades to Boise</td>
<td>1726</td>
<td>Consultant presentation at Library Network Task Force Meeting, Boise, Idaho</td>
<td>76.16</td>
<td>11.12</td>
<td>87.28*</td>
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<tr>
<td>8/26-30/75</td>
<td>Karl M. Pearson from Pacific Palisades to Boulder</td>
<td>2206</td>
<td>Consult with Maryann Duggan on network project tasks and schedule, review current status of BCR.</td>
<td>218.50</td>
<td>71.04</td>
<td>289.54</td>
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*50% of cost, remaining 50% charged to USOE Grant.*
C. Travel, Cont'd.

LIBRARY NETWORK TASK FORCE MEETING, BOISE, IDAHO 12-13, AUGUST, 1975

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<th>Round Trip Mileage</th>
<th>Transportation</th>
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<td><strong>Task Force Members:</strong></td>
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<td></td>
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<tr>
<td>Don Simpson</td>
<td>1622</td>
<td>$141.74</td>
<td>$22.09</td>
<td>$163.83</td>
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<tr>
<td>Bibliographic Center for Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Denver to Boise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russell Davis</td>
<td>1008</td>
<td>78.73</td>
<td>24.79</td>
<td>103.52</td>
</tr>
<tr>
<td>Director, Utah State Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salt Lake to Boise</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Richard Beck</td>
<td>620</td>
<td>72.00</td>
<td>23.99</td>
<td>95.09</td>
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<tr>
<td>Chairman, Pacific Northwest Bibliographic Center</td>
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<tr>
<td>Moscow, Idaho to Boise</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>William Axford</td>
<td>1094</td>
<td>24.61</td>
<td>129.23</td>
<td>153.84</td>
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<td>University of Oregon Librarian</td>
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<tr>
<td>Eugene, Oregon to Boise</td>
<td></td>
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<tr>
<td>Sheila Thornton</td>
<td>1502</td>
<td>128.54</td>
<td>22.59</td>
<td>151.13</td>
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<tr>
<td>California State Library</td>
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<tr>
<td>Sacramento, California to Boise</td>
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<td></td>
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<tr>
<td>Eleanor Montague</td>
<td>1356</td>
<td>130.73</td>
<td>26.77</td>
<td>157.50</td>
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<tr>
<td>BALLOTS</td>
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<tr>
<td>Campbell City, California to Boise</td>
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<tr>
<td>Mary Jane Reed</td>
<td>1002</td>
<td>107.74</td>
<td>43.35</td>
<td>151.09</td>
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<tr>
<td>Washington Library Network</td>
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<tr>
<td>Olympia, Wash. to Boise</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>$1,509.73</td>
<td>$465.94</td>
<td>$1,975.67</td>
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D. Supplies and Materials

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<td>Postage</td>
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<td>Library Books and Materials</td>
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<td>Total</td>
<td>$305.36</td>
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E. Printing and Duplication

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<tbody>
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<td>Copying charges</td>
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F. Equipment

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G. Other Costs

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<td>Office Rental</td>
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APPENDIX J

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Eloise Ebert
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Lura Currier, Director, Pacific Northwest Bibliographic Center
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Mary Jane Reed, Washington Library Network
Hank Epstein, BALLOTS