

**HOW THE U.S. NATIONAL COMMISSION
ON LIBRARIES AND INFORMATION SCIENCE
SUPPORTS RURAL AMERICA**

by

Peter R. Young

It is a pleasure to be with you today and to address such a distinguished group concerned about the role of library and information services in rural economic development. I want to thank Bernard Vavrek for inviting me to join you today at this Conference to talk about the National Commission and Rural America. Your topic is particularly timely and relevant to National concerns. The importance of rural economic development is underscored in a recent report issued by the Office of Technology Assessment, *Rural America at the Crossroads: Networking for the Future*.

This OTA report indicates that rural America is showing a loss of economic vitality, a relative decline in income, high unemployment, low work force participation, and a high level of out-migration. It is clear from the findings of the study described in this report that libraries, information services, network communications, and newer telecommunications technologies can be used to improve the prospects for rural economic development. These technologies present the promise for rural America by reducing the barriers of distance and space that have disadvantaged rural areas. Successful application of these information and communication technologies requires policies to foster and create favorable conditions for technology deployment. The conditions are required to overcome the barriers preventing rural community residents from achieving stable economic prospects for the future.

My talk this morning centers on programs of the U.S. National Commission on Libraries and Information Science (NCLIS) that relate to Rural America. It is my hope that you will find the experience of the National Commission in this area useful in your efforts to achieve successful policies and

programs for the future of libraries and information services available to Rural America.

Before I talk about NCLIS, I'm going to take a few moments to comment on recent changes in the general library and information services field. These changes are having a transforming affect on our institutional missions regardless of location. I spend a great deal of my work time talking with librarians and other information professionals involved with managing libraries, shaping information technology, making strategic plans, publishing, educating, and in formulating and proposing public policy. Aside from professional gossip, a dominant topic of conversation centers on the future of the library and the evolving role of the information-related professions in an increasingly complex and changing environment.

During the course of these conversations, whether I am talking with colleagues from rural geographical areas, from large urban centers, or from that strange Federal cyberspace known as "Washington", there is a sense of crisis and urgency. It is as if we sense some basic and fundamental change. Along with this feeling of change, comes a threatening uneasiness about the rapid pace of pervasive institutional change. Do libraries and librarians have a future? If so, what will this future be like? How will it differ from the present and how should we be preparing for it? Some in the information field identify these changes as shifts in the historic library paradigm. How are we to respond to these changes and shifts? And more particularly, what are the consequences of these forces on rural library information services and on the economies of rural areas?

Recently, I had a conversation with my friend Dave that reflected some of these concerns. Dave is not a librarian; he works for a network systems company that maintains a national online computer system network for handling airline reservations. I described some of the concerns that librarians have about the changes that computer and communications technology have brought to the traditional print/text based library. As a technical writer, Dave works closely with information network technology and with information systems. He was quiet for a few moments, then he gave a chuckle and told me that my comments triggered an image of today's librarian as Gutenberg, standing by his movable-

type printing press, lost in thought, speculating about the social implications of inventing movable type.

The image was startling. Dave's point was that if Gutenberg had been able to foresee the stunning political, social, educational, and religious transformation spawned by the new printing technology, he might have become catatonic, like a deer caught in a car's headlights, and would have never printed books with movable type. Dave does not worry about the future of his field. He is too busy keeping up with the changes in technology that continue to shape and reshape the systems and networks he works with daily.

If we as librarians and information professionals are to survive and evolve in the newly emerging library and information service network paradigm for services in rural, urban, suburban, and exurban communities in the changing demographic landscape, we must look for creative opportunities such as this meeting to foster collective interaction about the future nature of our information institutions and policies as these are transformed into networked information environments. From what I have seen, this new network communication infrastructure has important potential for influencing and shaping the nature of services and economies of rural communities of the future.

Perhaps, to be successful, we need to focus less on the possible effects of integrating new information and network communications technology on libraries. Perhaps we need to spend more time focusing on the application of all forms of communication on the changing information needs of our users. Future successful evolution of our libraries as viable community resources involves the formation of alliances between many different types of information and communications organizations; alliances which are broadly representative of all the different sectors and interests in our society and which allow us to focus on the needs of our user constituencies in the communities that our institutions serve.

Occasions such as this Conference afford opportunities to discuss and reflect on our collective futures and to explore visions of the new rural library and information services paradigm. Our explorations will, hopefully, result in the actions and policies required to build our future together as partners in

meeting the full spectrum and diversity of needs in our pluralistic society, regardless of where we live, what we do for a living, or of the choices we make in the conduct of our personal public and private lives.

My comments today address three things: the past, the present, and the future. In essence, I am going to describe the following:

1. the National Commission's past involvement with Rural issues, and, specifically, NCLIS's support and involvement with the Inter-mountain Community Learning and Information Services Project;
 2. NCLIS's current programs focusing on the status and condition of library and information services available to the Nation's Native American communities, and focusing on improving the quality and timeliness of library data collection at the national level;
- and finally,
3. I am going to talk about the role of the National Commission in pursuing implementation of those recommendations from the White House Conference on Library and Information Services that relate to rural communities.

This third and last topic, while concentrating on future concerns of NCLIS, actually relates well to the current interest of the U.S. library and information services community in the evolution and development of the National Research and Education Network or NREN which received National policy endorsement through enactment of P.L. 102-194 the High Performance Computing Act of 1991, which President Bush signed into law last December.

Before I begin to discuss these past, present, and future concerns of NCLIS relating to Rural America, I need to provide an overall idea of the purpose and mission of this small Federal agency. The U.S. National Commission on Libraries and Information Science (NCLIS) is a permanent, independent executive branch agency consisting of fifteen Commissioners appointed by the President for five-year terms. They have primary responsibility for developing and recommending overall plans and policies related to library and information services adequate to meet the needs of the people of the United

States. NCLIS advises the President and Congress on the implementation of national policy, the need for cooperation among Federal, state, and local governments, and public and private agencies, in assuring optimum utilization of the Nation's educational resources.

NCLIS conducts studies, surveys, and analyses of the information needs of the Nation; appraises the adequacies and deficiencies of current library and information resources and services; evaluates the effectiveness of current library and information service programs; develops overall plans for meeting national library and informational needs; advises Federal, state, local, and private agencies regarding library and information services; promotes research and development activities, and publishes reports. I direct a small staff of 6.5 supporting the work of the Commission.

The U.S. National Commission on Libraries and Information Science was established as an independent executive branch agency on July 20, 1970 by Public Law 91-345. This law gives the National Commission "...primary responsibility for developing or recommending overall plans for, and advising the appropriate governments and agencies on..." the policies required to assure optimum provision of library and information services adequate to meet the needs of the people of the United States.

PAST INVOLVEMENT

Now, to the topic at hand: the National Commission's past involvement with Rural issues, especially those issues which reflect on the role of libraries and information services in rural areas. In the past, NCLIS has provided support and direction to the Intermountain Community Learning and Information Services (ICLIS) Project.

P.L. 91-345 provides NCLIS with statutory responsibility and authority to conduct studies, surveys, and analyses of the information needs of the Nation. An important part of the NCLIS statute calls on the Commission to:

...conduct studies, surveys, and analyses of the library and informational needs of the Nation, *including the special library and information needs of rural areas*, of economically, socially, or culturally deprived persons, and of elderly per-

sons, and the means by which these needs may be met through information centers, through the libraries of elementary and secondary schools and institutions of higher education, and through public, research, special, and other types of libraries.

Based on this primary statutory responsibility, the Commission established a program focus by forming a National Rural Information Services Development Program (NRISD) in the early 1980s. This Program was based on a recognition that rural communities required assistance in planning and adapting to rapid social, economic, and demographic change. This assistance involved activities which served to increase the capacity to deliver essential services to rural areas. The NCLIS Program was developed in cooperation with the U.S. Department of Agriculture's National Agricultural Library and other components of USDA, along with the assistance and cooperation of state library agencies, and the Kellogg Foundation. The goal of the National Rural Information Services Development Program was actually taken from a National Program Document that the Commission formulated in 1975 which stated that there was a need to:

Ensure that basic minimums of library and information services adequate to meet the needs of all local communities are satisfied.

It was through the National Rural Information Services Development Program that contacts were made to the Kellogg Foundation in 1984 which resulted in grant funding for the ICLIS project. The Commission's interest and involvement in this effort came from cooperative work with the National Agricultural Library through an initiative that aimed to make the results of research directly available to local community users based on a clear understanding of user needs. The movement within USDA called upon the library community and the cooperative extension service to develop information delivery service programs that are responsive to the needs of information users.

The Commission worked closely in the early 1980s with the Department of Agriculture to extend the Intermountain Community Learning/Information Services Project to four Western states — Colorado, Montana, Utah, and Wyoming. This program was designed to demonstrate that the rural library can serve as a learning/information center responding to the personal, business,

professional, and governmental information needs of local citizens and organizations through the use of information network links.

The mission of the ICLIS Project was:

To improve the delivery of educational and informational services to rural communities through the efficient application of telecommunications and information technologies to link the rural library to national, regional, and state educational and informational resources.

The Intermountain Community Learning and Information Service (ICLIS) represents a four year (1982-1986) multistate \$2.7 million project funded by the W.K. Kellogg Foundation. Under this project, ICLIS equipped eight rural libraries with telecommunications and computer equipment to connect them with distant universities and nationwide databases, enabling the libraries to deliver adult education and information services to local residents. The state libraries and land grant universities of the four states involved links to two rural public libraries in each state.

ICLIS Project coordinators at the state libraries and universities, and local community information specialists were hired as part of the project to link the library's equipment, credit courses, and online reference databases with library clientele. Citizens were surveyed through a needs assessment process to determine the type of services which would be appropriate in meeting the disclosed information needs of the specific communities involved in the project. ICLIS formed a partnership with IBM to explore communications options and assist in delivery.

In 1984, the Commission joined with USDA and the Extension Service to consider establishment of a National Advisory Board on Rural Information Needs. Throughout this activity, the Commission served as a catalyst and coordinator among the various specialized government agencies, private information system concerns, and the various groups of educators, administrators, and librarians involved.

Important lessons resulted from this involvement. NCLIS members learned from this project involvement that the decision making process in rural and non-rural communities were not identical, and in certain cases, reflected

fundamental different structures. Working with a decentralized, consensus-based governing and policy making structure is radically different from working in the bureaucracy of the Federal government. Partnerships involving county executive officials and city managers working with expert support staffs are not common in the rural services sector. The absence of local expertise available to advise local officials on a variety of procedures, programs, and policies requires a radically different information support service approach to assure effective decisions. In short, the challenges facing rural residents require information and decision support structures and tools which are uniquely geared to the culture, environment, and climates of rural communities.

The Commission's involvement with Rural America projects has yielded important lessons for those working in the area of rural library and information services development. There are special problems associated with establishing systems and structures for providing relevant, timely, and selected information resources to rural governments, educators and students, public and private institutions, service professionals and others, as well as the general public. The factors affecting quality of life for residents of rural areas are not the same as for other citizens located in non-rural communities. These different factors include those relating to the environment, distance access barriers to tools and services, diversity of populations, unstable economies, a chronically low supply of professional services, as well as barriers to educational, social and health care services. These conditions are made more difficult by a recent shift from rural economies that concentrate primarily on agriculture to a situation in which fewer people are earning a living from farming.

Increasingly, younger generations are migrating away from rural areas in search of increased economic opportunities. Rural residents face problems which can only be addressed by community-wide actions to adapt to change and to exploit the creative opportunities for economic growth that arise during times of economic change.

CURRENT PROGRAMS

I am now going to address NCLIS's current programs which relate to library and information services for Rural America. I will focus on the

Commission's activities related to the status and condition of library and information services available to the Nation's Native American communities. In addition, I am going to discuss the Commission's program which focuses on improving the quality and timeliness of library data reporting and collection at the national level.

Before I talk about the Commission's current program focusing on library and information services for Native American peoples, I want to talk about another current NCLIS effort involving a cooperative program that has some important relationships with rural community concerns. Dr. Vavrek knows about this program, since he attended a Library Researcher Seminar last fall which was designed to engage the research community with topics related to public library statistics gathered by the National Center for Education Statistics. Since 1988, NCLIS has worked closely with the National Center for Education Statistics (NCES) at the U.S. Department of Education on developing and improving the collection and publication of reliable annual public library statistics from institutions around the country. The program now has components that concentrate on public, academic, school and special library statistics. The public library cooperative statistics program depends quite heavily on help and assistance from the State Library Agencies. The latest data (pre-publication) from the Federal State Cooperative System collected from states last summer indicates some interesting things about public library services to small communities.

In 1990, almost 62% of the 8,978 public libraries in the U.S. reported that they served populations of under 10,000. Forty-five percent of all U.S. public libraries reported that served populations of under 5,000. In 1990, 79.9% of public libraries served populations of less than 25,000. This represents an increase of 2% from data available in 1986. Small community libraries are not minority institutions in America. They constitute, as you all already know, the basis for public library services for the majority of the Nation's citizens. Those public libraries that serve small populations of under 25,000, however, face large problems, especially in meeting the growing demands for services and resources that increase in size and complexity in astronomical dimensions. How these small information institutions cope with the information needs of

rural populations in the future is, in part, dependent upon how well and how accurately we can measure their activities now to prepare for the future.

An important factor in the evolution and development of the Commission's involvement with this cooperative program for public library data is the creation of a public library universe file this past year. This new tool will facilitate sample surveys which can target a subset of the 9,000 public libraries in the Nation to obtain reliable and accurate information relevant to the performance, services, and effectiveness of these important institutions. To the degree that this information has not been possible previously, public library managers and planners have had little guidance in formulation of policies directed to improve the effectiveness of information services to specific segments of our population. For example, we can now target a statistically accurate sample of the public library universe which can be surveyed for per capita expenses on library resources and services for rural (population served totals under 10,000 or 25,000) areas which can be compared with other types of areas. Special needs and programs can be targeted with a degree of reliability and assurance that was previously impossible. How we use these new tools is in the hands of the analysts and researchers who are just now becoming aware of the availability of these new data.

Besides the Commission's library statistics program involvement over the last several years, NCLIS has been involved with Native American library and information services over the past decade. The activities which form the basis for material included in a report planned by the Commission on this topic for publication next fall result from NCLIS project activities covering more than three-and-a-half years. — from Spring 1989 to Fall 1992. The determination of the Commission to study and assess the status and condition of library and information services available to Native Americans and to develop recommendations for future improvements is based on P.L. 91-345 (July 20, 1970).

As a result of findings relevant to Native American library and information services, NCLIS has developed a blueprint for action that addresses the challenges to the Federal government, state and local agencies, the tribes themselves, and the Nation at large to develop and implement programs designed specifically to improve the information access and delivery services required for Native American communities to engage in the educational,

economic, social and cultural activities which maintain and extend the contributions of the First Americans to our Nation.

In the early 1970s NCLIS became increasingly aware of reported deficiencies in library and information services to Native Americans. Further investigations undertaken by the Commission led to a series of hearings which revealed serious problems in the ability of institutions and organizations to satisfy the informational needs of the Indian communities. Testimony presented at these NCLIS hearings indicated the inadequacy of the existing library and information services and pointed to the need for the establishment of new services and facilities specifically designed to provide for these tribal groups.

The Commission's interest in Native American library and information services resulted in convening the first Pre-White House Conference on Native American Library and Information Services, in Denver, Colorado, in 1978. This Pre-Conference was held in preparation for the first White House Conference on Library and Information Services (WHCLIS), conducted in Washington, D.C. in 1979. Among the 64 resolutions resulting from this National Conference, a National Indian Omnibus Library Bill was endorsed calling for the enactment of legislation to provide help in developing library and information services on all Indian reservations, as well as training for librarians and other forms of assistance.

In late 1988, the Commission developed plans for another series of regional public hearings on the condition and needs of library and information services to Native Americans. The purpose of these hearings was to assess and review the changes in the extent and quality of service to the Indian communities since the 1979 WHCLIS.

A total of five hearings were held between 1989 and late 1991, covering every region of the Nation: the Southwest (New Mexico), Northeast (Connecticut), Southeast (Florida), the Northwest (Seattle), and Alaska. In conjunction with the hearings, Commissioners and NCLIS staff also made site visits to local or nearby libraries and information service centers in order to gather information, make personal observations, and talk directly with Native Americans and tribal leaders. These hearings, visits, and discussions provided a wealth of information and impressions which serve as the basis for the report that is

planned for next Fall. I participated in the site visits to New York state and Montana.

The findings resulting from the NCLIS hearings and site visits to Native American library and information service centers revealed that both improvement and deterioration had occurred in the decade since the 1979 Conference. As a result of these discoveries, an Ad Hoc Committee on Indian Library Services was appointed by the Commission to identify strategies for improving library and information services for the Indian communities. Central to this effort was the announcement that NCLIS would engage in a renewed monitoring program in an attempt to assess directly the "...state of Indian libraries as well as the Tribal environment in which they operate."

In addition to the series of regional hearings and site visits, other major activities of the NCLIS Committee included the following:

1. The formation in mid-1989 of a special Commission Task Force on Library and Information Services to Native Americans comprised of representatives from key Federal agencies and from key Native American societies and associations which are charged with assisting NCLIS with planning and information gathering efforts related to Native American library and information services;
2. The commissioning of a special survey of Native American public library and information services in the continental United States. This survey was confined to Indians living on or near reservations located in the Continental U.S.;
3. The preparation of a Strategic Plan for the Development of Library and Information Services to Native Americans which was developed in cooperation with representatives from the Native American community, library leaders, and government officials;
4. The planning and implementation of the second Pre-White House Conference on Native American Library and Information Services in early 1991 in conjunction with the National Congress of American Indians;
5. The planning and implementation, in coordination with the National Indian Policy Center at George Washington University, of a

Forum on Native American Library, Information, and Archival Services, on 22–23 May 1991;

6. The preparation and presentation of testimony before the Select Committee on Indian Affairs of the U.S. Senate, 23 May 1991 Oversight Hearing to Gain a Better Understanding of the Condition of Native American Libraries, Archives, and Information Services, Senator Daniel Inouye, presiding; and
7. The preparation and presentation of testimony before the Joint House/Senate Oversight Hearing at the White House Conference on Library and Information Services, 11 July 1991, Senator Claiborne Pell, presiding.

The key objective underlying these and other activities of the National Commission was to secure Native American involvement and perspectives in gathering information and in understanding the issues involved with the provision of library and information services to Indian communities. In keeping with this strategy, the Commission sought the advice and opinion of experts, and used expert testimony as the basis for developing the Strategic Plan. A second key objective was to assist the Native American library and information services community in planning and preparing for the second Pre-White House Conference in order to assure full and meaningful participation at the National Conference in July 1991. Having accomplished these objectives, the National Commission made sure that the findings and challenges included in the report which will be issued next Fall are based on proposals by those Native Americans who were directly involved in the activities underlying the Commission's study. Although the NCLIS Native American study does not deal exclusively with the issues resulting from rural environments, many of the factors are similar and applicable to the challenges faced by those concerned about library and information services for rural residents.

THE NATIONAL COMMISSION'S PRESENT ROLE

My third topic concerns the present role of the National Commission in pursuing implementation of the recommendations from the White House Conference on Library and Information Services that relate to rural communities.

Delegates to WHCLIS passed several recommendations which have bearing on rural library and information services. Among these are the following:

1. A Recommendation encouraging new libraries and the abolition of access barriers reads: "That establishing new libraries be encouraged, where needed, and support provided for the abolition of barriers to library and information services whether educational, cultural, attitudinal, physical, architectural, legal, fiscal, technological, geographical, environmental, or in language or format." [ACC02-3]
2. A Recommendation establishing a study group for underserved minority groups reads: "That the President and the Congress establish a study commission to recommend policies and programs to improve access to library and information services for Native Americans, including American Indians, Alaska Natives, Native Hawaiians, and other under-served U.S. population groups." [ACC05-3]
3. A Recommendation for enhancing information delivery reads, in part: "That actions be undertaken to ensure equal and timely access to information materials [and that] special attention directed to the needs of geographically isolated areas including the territories and the noncontiguous states, to provide more current information and rapid delivery of library materials, regardless of format." [NIP01-1]
4. A Recommendation to develop networking equity for low-density areas reads: "That networks connecting small, rural, urban, and tribal libraries be developed and supported at the federal, state, and local levels to ensure basic library services to all end users...The federal government should provide additional funding, based on low-density populations, under the Library Services and Construction Act to address the networking needs of small and rural libraries. All rural and low-density population libraries should be provided with federal funds for a minimum of one access terminal on the National Research and Education Network. [NET12-1]

5. A Recommendation to target special-need populations reads: "That the Congress enable libraries in our increasingly multicultural and diverse society to target relevant services and programs to the special/unique segments of their community populations, including those with disabilities. Libraries should serve as gateways for actively disseminating information to everyone in the U.S., its states, tribes, and territories, including those in remote areas, through both traditional and nontraditional methods and outlets. Services to reach individuals and families of traditionally underserved populations should be comparable to those services offered to traditional users of service-oriented public libraries..."[SER07-1]
6. A Recommendation to adopt proactive policy for the underaware, underserved reads: "That federal priority and economic support be given to establishing libraries as primary information sources for the under-served of the Nation, including these major elements: Congressional adoption of a national policy to extend library services through outreach thus extending the boundaries of traditional library services and reaching people who either cannot avail themselves of library services or are unaware of available services..." [SER08-1]

Under the direction of our new Chair, J. Michael Farrell, who was designated as the NCLIS Chairman by the President in March, 1991, the Commission is concentrating attention on those White House Conference recommendations addressing access to government information in electronic formats and the role of libraries in the National Research and Education Network (NREN). An extremely important factor in shaping the Commission's activities over the next year involves the NCLIS statutory mission. Our law states that the Commission "...shall have primary responsibility for...advising the President and Congress on the **implementation** of national policy..."

Of all the topics addressed by the recommendations resulting from the Conference, perhaps the first area to receive national policy action since the Conference is the passage of the High Performance Computing Act of 1991 which the President signed into law in December. The purpose of P.L. 102-194 is to develop a "... program to demonstrate how advanced computers, high-

capacity and high speed networks and electronic data bases can improve the national information infrastructure for use by **all Americans.**"

The law calls for the President to establish an advisory committee on high-performance computing consisting of non-Federal members, including representatives of the research, education, and library communities, network providers, and industry "...to provide the Director [OSTP] with advice..." Finally, the law directs Federal agencies and departments to work with private network service providers, State and local agencies, libraries, educational institutions, and organizations, and others, as appropriate, in order to ensure that the researchers, educators, and students have access, as appropriate, to the Network."

NREN is a networked information initiative for a digital communication "superhighway" to share research and scholarly information resources among institutions and individuals. NREN is emerging from a loosely organized system of interconnected digital packet routed networks know as the Federal Research Internet. The overall goal of NREN is a high-capacity, high-quality computer network infrastructure that supports a broad set of applications and network services for the research and education communities.

Although NCLIS is not specifically mentioned in the NREN law, the Commission has a statutory basis for working with the Director of the Office of Science and Technology Policy, identified in the law as the lead NREN agency, in developing network management and access policies for NREN. NCLIS has authority to "...promote research and development activities which will extend and improve the Nation's library and information handling capability as essential links in the national and international communications and cooperative networks." [P.L. 102-95 Sec.4.] Finally, NCLIS has statutory authority for developing "...overall, plans for meeting national library and informational needs and for the coordination of activities at the Federal, State, and local levels, taking into consideration all of the library and informational resources of the Nation to meet those needs." NCLIS' responsibility is especially important in light of the partnership roles played by Federal agencies, regional network nodes, state agencies, and local network communication units in the implementation of NREN.

In addition, the Preamble to the WHCLIS statute includes the following statements:

- ♦ Whereas expanding technological developments offer unprecedented opportunities for application to teaching and learning and to new means to provide access to library and information services...
- ♦ Whereas rapidly developing technology offers a potential for enabling libraries and information services to serve the public more fully; and
- ♦ Whereas emerging satellite communication networks and other technologies offer unparalleled opportunity for access to education opportunities to all parts of the world, and to individuals who are homebound, handicapped, or incarcerated.

The Network(ing) word appears a total of 18 times in the 95 WHC Recommendations. The Topic Area (1 of 10) Information Networks through Technology included 16 specific recommendations addressing the range of issues reflected in networking. Of these recommendations, perhaps the most comprehensive is one concerning Share Via a National Superhighway (TEC06-1):

That the Congress enact legislation creating and funding the National Research and Education Network (NREN) to serve as an information "superhighway", allowing educational institutions, including libraries, to capitalize on the advantages of technology for resource sharing and the creation and exchange of information. The network should be available in all libraries and other information repositories at every level. The governance structure for NREN should include representation from all interested constituencies, including technical, user, and information provider components, as well as government, education at all levels, and libraries.

NCLIS is planning a number of program areas involving the emerging NREN. These include the following:

- A. NCLIS is planning to conduct an open forum 20-21 July, 1992 in Washington, D. C. to receive recommendations and proposals from the library and information services communities relevant to the Report to Congress required in December 1992 as specified in P.L. 102-194 Sec 102(g). In addition, this forum will address ways that users, libraries, electronic information resource suppliers, publishers, and other affiliated organizations will have access to the Network.
- B. NCLIS plans to provide recommendations and advice to OSTP and the National Science Foundation concerning access to and use of the Network as specified in P.L. 102-194 Sec. 201(3) & (4) based on the results of the open forum. This advice addresses the assistance required for colleges, universities and libraries to connect to the Network.

Further, NCLIS is planning to assist OSTP in the preparation of the Report to Congress called for by law. This Report addresses issues related to

1. effective mechanisms for providing operating funds for the maintenance and use of the Network, including user fees, industry support, and continued Federal investment;
2. the future operation and evolution of the Network;
3. how commercial information service providers could be charged for access to the Network, and how Network users could be charged for such commercial information services;
4. the technological feasibility of allowing commercial information service providers to use the Network and other federally funded research networks;
5. how to protect the copyrights of material distributed over the Network; and
6. appropriate policies to ensure the security of resources available on the Network and to protect the privacy of users of networks.

I know that some in the library community feel that NREN is not being built for the publics that libraries serve, but for the small group of scholars,

expert, and entrepreneurs who comprise a "...small percentage of citizens who belong to a scholarly, professional, or commercial information elite." — to quote from John Berry's editorial entitled "NREN and the Information Implosion" in the Feb. 1, 1992 *Library Journal*. (p. 6)

I share the fear that the rush to build a NREN and the new networked information world order might neglect the need to manage the growing proliferation of information that John refers to as the information explosion. But I also recognize that the electronic communications infrastructure reflected in the NREN Federal investment will revolutionize the nature of our work and our lives, much in the same way that the interstate highway system, the telephone, cable television, and the digital computer have had transforming impacts on human communities and organizations.

As Chuck McClure has said in his letter in *Library Journal* responding to John Berry's Editorial,

If NREN does eventually serve 'the one or two percent of the library constituency with special needs (as Berry claims), librarians will have no one to blame but themselves...The nation does, and the library community has an important role to play in organizing, accessing, and managing the information in cyberspace.

Similarly, NCLIS has an important role in fulfilling the promise of WHCLIS by providing the opportunity for the library and information services community to become involved in shaping the policies and structures of the evolving digital information infrastructure.

As I have described, the National Commission has, over the last two decades, initiated programs and projects in a number of topic areas which relate to the concerns addressed by this conference. Within the broad statutory authority, spelled out in the law, NCLIS programs encompass a wide range of national policy issues and topics. Our current program focus aims to provide the advice and planning required to assist the Nation in achieving the vision of a nationally integrated network of libraries exchanging information in digital and other formats through the national electronic networked infrastructure called for by NREN.

This Commission focus recognizes that the library and information fields are in transition. Symptomatic evidence of our current transitional environment are commonly accepted to be such items as the following:

- ♦ Increasing involvement of digital electronic systems in library and information organizations;
- ♦ Movement towards networked information systems and a shift away from resource ownership toward access to shared resources from diverse collection sources;
- ♦ Shift towards a more fluid format where information is available in a multiple array of formats, both graphic and digital;
- ♦ Shift towards greater user choice and control of the form and content of information and away from system constraints;
- ♦ Rapid changes towards a global perspective on information issues;
- ♦ Increasing proliferation of information production that necessitates an increase in the ability to process and manage information at an ever increasing level of efficiency;
- ♦ Concern about the social and economic impact of information illiteracy and electronic illiteracy;
- ♦ Growing concern over the economic consequences and property ownership implications of a transition from our graphic textual print-based information society to a culture dependent upon electronic communication as a means of information transfer and exchange;
- ♦ Increasing concern about individual privacy and confidentiality, especially in relation to personal information and to issues involving individual information selection and choice;
- ♦ Increasing involvement of different teams or groups of individuals engaged in collaborative work using information technology which bridges time and geographic distance allowing cooperative group intellectual research and shared problem solving;
- ♦ A growing awareness that the transition to a new library paradigm requires a careful examination of the inherent values underlying the information creation, exchange, and sharing process.

At the same time that our post-industrial society enters the age of networks linking intelligent human agents together into global communities, our social, economic, and technological policies will require attention and revision in order to assure that our values and principles are consistently carried forward in the transition to a network literate society.

Technology alone will not deliver the solutions to the economic, cultural, social, environmental, and human problems of Rural America resulting from the dispersion of rural communities and peoples. I can experience the confusion and frustration of information overload whether I am in Wolf Point, Montana, Clarion, PA, or in South Central, Los Angeles. Human scale, flexible, fluid, responsive, interactive, and engaging services, systems, and environments must address the individual and personal need to feel confirmed, empowered, and validated. To satisfy our needs for information we need to have our human expectations, cultural uniqueness, and emotional individuality addressed. Technology alone cannot provide services that satisfy all our needs for information and meaningful communication.

Our policies and our systems, our tools and our information spaces, require new approaches and attitudes that help orient us in attractive, satisfying, and comfortable environments which encourage curiosity and validate investigation in order to engender learning and new discovery. No one wants to use a service that makes them feel uncomfortable or ashamed or marginalized.

Networked information services are inherently different from hierarchical structures organized vertically which depend upon multiple levels of authority and static controls. A decentralized networked organizational model which interconnected independent relationships is emerging as the matrix structure of the future where shared power and autonomy allow for much greater freedom of information flow.

Networking means hooking people together who are geographically and hierarchically separated so that they may communicate with each other quickly and directly. Networks allow individuals to assume new identities. As a result, new relationships are created and new cultures emerge. This is especially true for disabled or handicapped persons who are disadvantaged by lack of physical mobility, sensory capability, or other handicapping condition. It is equally true

for those who are geographically distant, for those rural residents and communities where networked interaction through electronic access to libraries and information services can help mitigate the isolation and reduce the barriers to economic growth and development.

We are moving away from the notion of technology managing information toward the idea of technology as a medium of relationships. Rural libraries have the opportunity to better understand the complex ecologies of media that shape, deflect, and define one another. The structure of our networked society of the future can be compared to the architecture of the atom, built on energy and information, not on concrete and steel.

Marilyn Ferguson expresses this concept quite well in her 1980 book *The Aquarian Conspiracy: Personal and Social Transformation in the 1980's* when she writes:

The network is the institution of our time: an open system, a dissipative structure so richly coherent that it is in constant flux, poised for reordering, capable of endless transformation. This organic mode of social organization is more biologically adaptive, more efficient, and more 'conscious' than the hierarchical structures of modern civilization. The network is plastic, flexible. In effect, each member is the center of the Network. Networks are cooperative, not competitive. They are true grass-roots; self-governing, self-organizing, sometimes even self-destructing. They represent a process, a journey, not a frozen structure.

Networks represent the rural library's route to a future where communities are able to participate as active partners in our society's economic activities.