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AUTHOR Barkley, Daniel; Shane, Jackie
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ABSTRACT

This paper discusses the development of the Federal Depository Library Program (FDLP) and the increasing trend among federal agencies to reduce printed output and distribute information in electronic form--on floppy disks, CD ROMs, and, since the development of the National Information Infrastructure (NII), the Internet. Many libraries do not have the necessary combination of hardware, software, and requisite experience to enable users to access the electronic documents. In addition, many users do not possess the technical skills to utilize the information fully. If access is ownership, then information access must be ubiquitous. Depository libraries must continue to provide reliable, free, unrestricted access to all public documents regardless of the medium or location. They need to address the questions of who bears the responsibility of storage and archiving and whether the privatization of information access is feasible. Relevant developments in the state of New Mexico include four Internet access projects: New Mexico Technet, the Crown Point Project, La Plaza Telecommunity, and ZiaNet. (Contains 24 references.) (SWC/BEW)

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ACCESS IS OWNERSHIP: THE PEOPLE BECOME THE PUBLIC PRINTER

by: Daniel Barkley and Jackie Shane, University of New Mexico

Keywords: Electronic information; government information; Internet; National Information Infrastructure; Federal Depository Library Program; Government Printing Office; FDLP; NII; GPO.

The Evolution of the Federal Depository Library Program

The United States government has been and continues to be the largest publisher of information in the world. Since the inception of this country's founding in 1789, the Constitution as well as Congress have mandated the collection and dissemination of their records including the Executive and Judicial branches. The intent being that leaders would facilitate the concept of an informed citizenry as a knowledgeable and therefore participatory society.

From 1789 until 1846 provisions were made by Congressional mandate to facilitate the informed citizen process by establishing provisions to print, disseminate, and preserve all matters occurring in Congress. Initially all agencies reported to Congress, hence their publications were included within these guidelines. "While these responsibilities were met for many years through the use of contract printers, such arrangements proved to be subject to considerable political abuse. Consequently, in 1860, Congress established the Government Printing Office (GPO) to produce all of its literature....and to serve, as well, the printing needs of the Executive Branch." [1]

Further printing and publishing policies were centralized with the Printing Act of 1895 which established the Superintendent of Documents (SuDoc) whose duties included the management of selling government publications as well as preparing a *Monthly Catalog of United States Government Publications*. "This act, which was codified as Title 44 of the United States Code (USC), specifically abolished other government distribution programs." [2]

GPO from its inception has been faced with budget constraints. Only two days after monies were authorized for the construction of GPO buildings in 1860, Congress simultaneously reduced the "prices allowed for public printing" by "forty per centum."

Although initially the Superintendent of Documents (SuDoc) was weary of contracting with outside commercial publishers the Legislature eventually understood that GPO would not realistically be able to handle the massive amounts of agency publications. Hence, as provisions were made to publish and distribute agency publications via non-GPO production facilities these documents often evaded the SuDoc Distribution Program. These are commonly known as "fugitive" documents. The Depository Library Act of 1962 delegated GPO as an agent to acquire and distribute these non-GPO publications.[3]

The success of the Federal Depository Library Program (FDLP) has always relied upon the cooperation between GPO and participating libraries. Title 44 United States Code (USC) defines public information as "informational matter which is published as an individual document at government expense or as required by law." Within these guidelines all publications of relevance to the United States citizens are distributed free of charge to Congressionally designated federal depository libraries. These approximately 1,400 federally appointed libraries reciprocate many times over in providing full access to government documents and the supporting infrastructure necessary. [4]

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Since the 1980's Federal agencies have increasingly distributed their information in electronic format. During this time period, for example, the Bureau of the Census introduced the agricultural and economic statistics generated from 1982 surveys in Compact Disk, Read Only Memory (CD-ROM) format. These disks were a harbinger in 1987 for electronic dissemination of products and services.

With the advent of electronic information dissemination techniques, legislation has lagged in staying abreast of new technological issues. As more agencies engage in desktop publishing and distribute not print but electronic products, there is less need for them to rely on GPO as a distributing body. [5] Many of these agencies began by publishing their information on floppy diskettes and CD-ROMs, but since the development of the *National Information Infrastructure* (NII), the trend has recently been to mount files directly onto a server attached to the Internet. Due to broad interpretations of Title 44 of the United States Code "many of these products are never distributed through the GPO, and hence never reach depository libraries, often without the knowledge of the participants." [6]

One of the prime responsibilities of the GPO has always been to print the daily proceedings of the legislative, executive, and judicial branches of government. These include the *Congressional Record* (the official daily proceedings of Congress), the *Federal Register*, (a daily compilation of regulations, executive orders and proclamations), and its official codified counterpart, the *Code of Federal Regulations*. By 1985 the daily printing of the *Register* alone totaled nearly 33,000 copies. [7] Considering the voluminous nature of these materials, coupled with the fiscal constraints with which GPO is burdened, these materials are obvious candidates for electronic dissemination via a central gateway.

GPO's initial pilot project to disseminate *the Congressional Record* on CD-ROM was a complete flop. Although the CD format was more economical than a comparable quantity in paper, the total cost to the government for dissemination of the 1985 *Record* was greater than the estimated cost for disseminating the microfiche format. Additionally librarians reported considerable complaints about its usefulness.

In 1993 the *Government Printing Office Electronic Information Access Enhancement Act* (P.L. 103-40) was enacted. Under this new legislation the Superintendent of Documents was required to:

- maintain an electronic directory of Federal information
- provide a system of on-line access to the *Congressional Record*, the *Federal Register* and other appropriate publications and
- operate an electronic storage facility for Federal electronic information

In other words, SuDoc was required to maintain a locator service, an on-line interactive service, and a storage facility.

While federal agencies were in hot pursuit of developing electronic products and services in the 1980's, other legislative, administrative and private sources were hard at work attempting to develop, design, establish, and implement a technical infrastructure which will connect government agencies, the private sector, and

every individual or household to an electronic highway. This information superhighway, commonly referred to as the "Internet", the mother of all networks, is now viewed as the panacea to all the informational woes of America as well as the World. "...as of November 3, 1993 more than 2 million connected host, 20 thousand NSF registered networks, 127 entities (or nations) with international network connectivity, involving as many as 20 million people capable of sending and receiving data streams of 45 megabits per second," along with about 2,000 universities, colleges and high schools..." are estimated to be connected to and using this information superhighway. [8]

The Internet's evolution began in the 1960's as an electronic network for information transferred between federal agencies, principally the Department of Defense, and their private contractors and university researchers. By the 1980's, with an infusion of funding from the National Science Foundation (NSF), this system developed into a high-speed network of data transmission sites. This structure was enhanced "...by funding the establishment of regional networks to interconnect educational and research organizations and their individual computer networks." [9]

The Dynamics of Technology and Economics

Information Science developed rapidly between the invention of the personal computer (PC) and the development and deregulation of the NII. The PCs of the early 1980's ushered in a new era transforming the methods and means by which information, regardless of source of origination (ie--government, corporate, or private) has been disseminated and utilized. The computing and storage capacities of PC's coupled with telecommunication technology has carried our society into the information age.

Essentially, technology is value neutral. Technology neither prevents nor improves access to information. However, "threats to public access and improved access can both result from the use of technology" [10] as government policies are articulated, planned, enacted, deregulated, or changed due to the political/economical environment. Additionally, economic market forces also dictate who may gain access to electronic information as well as when and where they may access that information.

While the electronic age is a result of technological achievements of the past decade, the dissemination policies of federal and, to some extent, state government information have had both positive and negative impacts on the users and non-users of information which has been collected, collated and disseminated by those entities. This transition has resulted in "a move from a centralized printing authority (i.e.--the Government Printing Office [GPO]) to one of autonomy and decentralized printing and on-line dissemination" [11] of government information.

In fiscal year 1995 the Library Programs Services (LPS) of the GPO increased by 31% [12] the number of electronic titles distributed through the Federal Depository Library Program (FDLP). Yet, for dissemination of information in traditional formats (i.e.--paper and microfiche) "from 1981 through 1991 more that 514,000 separate publications entered the depository program...a decline of 26.4%." [13] This discrepancy and loss of information is not a direct result of new dissemination technologies and techniques. Rather, it

is a result of fiscally conservative political and economic practices and policies engaged in over the past decade. Conflicting opinions rendered by different GPO General Counsels [14], the enactment of the *Paperwork Reduction Act of 1980* (PL 93-511), and the issuance of the Office of Management and Budget's (OMB) Circular A-130, The Management of Federal Information Resources has confused GPO's ability to disseminate information in non-traditional formats. Additionally, GPO witnessed a drastic decrease in operating monies necessary to maintain and increase gathering and disseminating electronic information. [15]

Despite these political and economic constraints, the GPO, SuDoc, and LPS have made good-faith efforts and have re-examined the technical guidelines to ensure that government information continues to be equitably distributed to the American public. LPS, for example, has issued revised minimal technical guidelines for depository libraries vis-a-vis computer hardware and software requirements. GPO continues to seek legislative revisions to Title 44 USC as well as necessary operating funds.

This is not the first time librarians witnessed a transition in format. Years ago, librarians were reticent about using microfiche as a medium. The increase in electronic titles revealed a lack of experience and shortage of accompanying hardware and software. This frustrated even those librarians who were willing to embrace these new resources with open arms.

Many librarians, including those in the FDLP, are still ill prepared to handle information in solely electronic formats. At the most basic level internal library budgets prohibit purchasing the required electronic hardware.

Many libraries possess at least nominal equipment but lack the technical expertise. In a recently released survey which was conducted by the LPS in the Summer of 1994, the "survey revealed that while most depositories have some capacity to handle electronic Government Information, ('94% have a PC'), most libraries have a long way to go before they can serve the public effectively when the FDLP becomes predominately electronic." [16]

Even those libraries possessing the necessary hardware, software, and prerequisite expertise, experience a host of related problems [17]. Not all information being disseminated in an electronic format, especially those in CD-ROM's, are accessible to users of federal depositories for a variety of reasons. This information, which is "technically" available, may be stored under a selective housing agreement and located in a branch library where its staff may lack the equipment/or knowledge necessary to access and disseminate that product. As a result, "vast amounts of Federal information lie dormant on shelves, in cabinets or in desk drawers for lack of administrative support and/or technical capacities and skills to utilize it." [18]

Finally, not all users possess the technical hardware, software, and skills to utilize the information presented to them in the fullest, nor do they care as long as it is electronic in nature and is retrieved from a computer. "There is an apparent tendency for patrons to define information needs in terms of what is easily available from an electronic source....users seem more satisfied with the computer even if their actual search is not particularly successful." [19] On the Internet other issues come to light. A user for example, is rendered helpless if the server client is "down" or tied up by limited band-width.

The Internet as a platform

In conjunction with the reorganization of the FDLP, and the development of information science in general, the NII has evolved from its origins as *the National Education and Research Network*. No discussion of electronic dissemination is complete without examining the Internet. The Internet has been the buzzword of the nineties. It is virtually impossible to browse the popular press without crossing some reference to this most popular network.

The common interface language evolved most recently from *Gopher* to *World Wide Web* browsers such as *Netscape* or *Mosaic*. This coupled with the proliferation of *hypertext mark-up language (html)* editors has created exponential growth in the number of Internet nodes available for searching. A majority of government agencies now use the Internet as a method for distributing their information sources, at least at the experimental level. An agency makes its computer an Internet host, by allowing users at remote locations to log onto the agency computer usually via *Telnet*, and search its database for information. Users can also download files from the server via *FTP* with an anonymous password.

Agencies disseminate and maintain large databases of their information via the Internet because they believe it is more economical, timely and efficient, and fulfills their legal responsibility to provide access to that information to interested citizens. On the one hand the Internet is a relatively efficient platform for distribution; on the other, agencies, as previously addressed, may feel that their obligation for distribution has been met without ever making their equivalent paper publications available through the FDLP. Using the Internet solely as a platform makes this information not only difficult to locate, but there is no guarantee that an agency will not abruptly end Internet availability without notice, or without provisions for alternative distribution.

Unanswered questions

A host of other questions remain unanswered. For example, the archival provisions for CD-ROM's, floppy disks, Internet hosts, and government sponsored/or produced Bulletin Board Services (BBS) remain open to interpretation. Furthermore, who is responsible for the retention of government information? Will future technological developments supersede the usefulness and accessibility of electronic information being produced today? What will be the role of the FDLP should the prediction of some futuristic pundits become true: that budgetary restraints and political policies will finally eliminate the FDLP and the GPO and government information will only be available on the Information Superhighway?

Other problems address the expected performance level of information professionals. Since quite often what depository libraries receive are nothing more than raw data sets [20] or data with no accompanying software or adequate documentation, librarians often feel compelled to provide a "value added" service. Librarians may increasingly focus less on information *access* and more on information *synthesis*. Microdata for example gains tremendous value to the user when it is imported into a statistical manipulation program as opposed to being read simply in the "cross tab" program which is provided free with the

CDs. Information professionals need not only understand the content of information, but in order to access electronic files they will need to be information savvy as well. Who will be responsible for user education and training? Will this challenge eventually be offset by the trend in sophisticated, user-friendly interfaces and centralized gateways?

Privatization and the story of NTIS

Compound the previously mentioned problems facing the GPO and the FDLP today with legislative initiatives that are moving forward with the privatization of government information. These initiatives, prominently introduced during the Reagan Administration continue to hamper and impede information accessibility. For example, the efforts over the past several years at the movement to privatize *the National Technical Information Service* (NTIS) are well documented.

NTIS was established in (1965) to be the nation's primary disseminator of government sponsored scientific and technical information and research. NTIS, one of the first federal agencies established to function on a cost-recovery basis substantially achieved that directive until private market forces, spurred by the burgeoning information industry of the 1980's persuaded the Reagan Administration to sell or "privatize" NTIS.

This proposal was initiated to permit the private sector to obtain the scientific and technical information and repackage that information in order to generate a profit. Had the sale of NTIS become successful an outcome would have been a total disregard to archiving research documents, particularly that research which would be determined to be unsalable or unable to generate a sufficient profit.

As a result of efforts by the Reagan administration to sell NTIS to the private sector, "Congress enacted 'compromise' legislation, which requires much of the agency's activities to be funded through user fees." [21] Because of these private sector demands and Congressional legislative stop gap preventive measures, NTIS must now demand higher than normal prices for its information. Many NTIS products generate little interest or income. Therefore, other areas of research or product services offered by NTIS must compensate for these non-revenue producing studies.

Yet information, regardless of its profitability, is still available to any interested parties. Had the private sector forces had their way, only reports and other services which demonstrated any potential for profit would now be available or accessible. Furthermore, it is difficult to estimate whether or not prices charged today by NTIS would be less, more, or the same as what the private sector might be charging.

Still, the battle over privatization of NTIS continues today. Legislation which would disband the Commerce Department, which has oversight for the administration of NTIS, has been recently introduced. H.R. 1756 not only proposes privatizing NTIS, but also mandates that all NTIS assets be sold. These "assets" are the more than 2.5 million government sponsored research and development reports currently available from NTIS.

Although H.R. 1756 has been referred to numerous committees for hearings, as well as for further markup and compromise, this attempt at privatizing NTIS is .

just the tip of the iceberg with respect to the efforts of both a fiscally conservative Congress, coupled with an opportunistic and profit driven private sector. Other efforts of privatizing government operations have already occurred (for example, the Postal Service, Amtrak, etc.). Should these efforts by the private sector and Congress continue unabated, the next area designated could be the GPO or other agencies now producing information sponsored by tax payer dollars. What this essentially means is that information, generated by funds collected through the assessment of taxes, would be packaged and resold to the highest bidder or those most able to afford to purchase that information.

However, how can the FDLP fulfill its mandated legislative mission if more and more information becomes privatized while at the same time GPO's budget continues to decline? Privatization furthers the schism between these participants and impedes the government's ideal goal of bridging these economic gaps which now exist. Further, privatization contributes significantly to the lack of participation by the American public rather than enhancing and fostering the ideal of more participation because of a better informed and more knowledgeable public.

The haves versus the have nots

These privatization efforts lead us into another major problem area facing information professionals today: the haves vs. the have-nots. There has existed in this country since its founding an inequality in social status, wealth, and material ownership. At this juncture it is impossible to address these societal issues adequately. Libraries, even prior to the establishment of the FDLP, have historically served as gatekeepers of information for everyone, regardless of social or economic status.

The vast array of commercial on-line service providers expanded the number of *World Wide Web* users to somewhere between 2 to 13.5 million people according to an American Demographics magazine survey. [22] This is still however, a vast minority of the population.

As the Clinton/Gore team and Newt Gingrich furiously uploaded their home pages, there was a sense that the Internet was providing U.S. citizens a new world cyber-democracy. Environmentalists and gun advocates alike can recruit their constituents via email, bulletin boards or listserv announcements, and directly send feedback to Washington on pending bills. Democracy is at the fingertips of the populace. We would need however to disregard that latest published statistic which shows that 3.7 percent of all adult Americans own a computer and are connected to the Internet at all, and of that selection, the majority of these users are men who earn \$25,000 to 75,000 a year. [23]

Furthermore we would have to disregard the fact that anyone can send a message under an alias name and address, and that politicians would have no way of knowing whether these notes actually originated from legitimate constituents. A note could represent an individual, or a bulk mailing might bombard a legislator's email box. Certainly, sending an email to Congress is much more efficient than a long distance phone call or the post, and the beauty of going on-line is that it is fast and potentially interactive. There remain several bottlenecks to a "seamless" electronic environment.

This leads to a concern for the disparity between the information "haves" and the "have nots." If access is ownership, than information access must be ubiquitous. Depository libraries must continue to provide free, unrestricted access to all public documents regardless of the medium, so that format is negligible. The information rich will always exist. What is important is that depository libraries serve as a safety net for the "have nots."

Even if all depository libraries are connected to the Internet and are fully equipped with electronic hardware, and as long as agencies are in compliance with Title 44, there is an underlying assumption that access to this information is not diminished. Whereas residents of rural communities had to go farther than their urban counterparts to find a print copy in a library, similarly they will still have to travel the distance. They should technically be guaranteed a copy, even if now it is via an electronic node. As the book was on the shelf, the copy is on the monitor. If a depository library loses its status because it can not afford to meet the recommended minimum guidelines for hardware as stated by SuDoc, then a large geographic area will no longer be served.

Implications for the future

Electronic delivery currently has no central point of delivery nor catalog. Perhaps the biggest challenge is distinguishing and locating the various formats in which government information is distributed. Locating government information has traditionally been perplexing, but the variation in formats from CD-ROM, magnetic tapes of machine-readable files, dial-up services and bulletin boards, floppy disks, *Geographic Information Systems* (GIS), spreadsheet and relational database files, and (on the Internet) registered databases, public Gopher and Web sites, and FTP-able archives can certainly glaze the eyes of the average user. Often catalogs and search engines are either experimental or non-existent. A prototype locator system was developed with descriptive electronic records for government information products available from GPO sources. In addition the *Government Information Locator Service* (GILS) provides a central registry of information resources from other Federal agencies, and serves as a gateway to those resources. As part of the Federal role in the NII, GILS identifies and describes information resources throughout the Federal government, and provides assistance in physically obtaining the information. GILS employs a client-server architecture based on the ANSI Z39.50 protocol (the information retrieval service definitions and protocol specification for library applications). The logic is that the Z39.50 client/server search protocol is already supported by billions of dollars worth of bibliographic catalogs. It is also the protocol required for use by all U.S. Federal government agencies, under public law Title 44 USC 3511 which established GILS in the first place. GILS was developed with the intent of using World Wide Web client searching (support for searching via the WAIS protocol, to date, is still in the development stage). *The United States Geological Survey* announced the alpha release of the freeware software the day that this article went to press. For further information see url:<http://www.usgs.gov/gils>.

Indeed there is a role for the Government Printing Office to help maintain consistent and equitable service standards. GILS demonstrates great promise in maintaining a standard protocol for bibliographic control of on-line government information. If access is ownership, there needs to be one consistent gateway

from which one can reliably index and access publications, regardless of their format or location. Not only must this be a mandatory requirement assigned to government agencies, including agency desktop publishers, but information professionals should exploit these search strategies. Again the key is equipment and user education.

Depositories must prepare to offer users access to work stations with a choice of text based or graphical user interface, CD-ROM capability, Internet connections, and the ability to print or download electronically. By 1996 or 1997 electronic capability will be a requirement for depository status. [24] Those libraries who cannot provide adequate hardware will simply be out of the loop. The question remains as to whether some administrative authority will provide funding for those libraries who "have not." If a rural library, for example, cannot afford the necessary equipment, that "safety net" has then been erased for a large geographic region. Ironically as our national treasure of information becomes global, our own home towns run the risk of losing access.

Resolution

The most complex and costly era is in the present. Eventually all information professionals will speak the vocabulary needed to understand electronic delivery. In this age of transition however, user groups vary tremendously in computer literacy and hardware. As a result, there will inevitably need to be duplication which will impact LPS's budget, and will, of course, impact libraries as they need to provide access in multiple formats. There is a need to reliably maintain electronic information for continuing public access should the originating agency no longer make it available. We will see more collaborative efforts between GPO and individual libraries.

The literature tends to discuss large policy issues and not the more mundane realities. Information professionals need to give policy makers and GPO feedback. It is not enough to erect a Web page. Providers need to understand that on the receiving end there are simple everyday barriers to access. If distributed servers are the answer, someone needs to assign responsibility. Those enlisted individuals or institutions deserve to be compensated for their added expenses. It is unfair to assume that libraries will absorb the cost of what taxpayers are already paying for--namely the coordinated publishing of government information.

Finally, the Internet is a potential for open forums and cooperation. Government agencies and policy makers must find a common ground for communication between the information providers and the users of information. The Internet holds tremendous potential for shared information networks. Likewise it is a platform for public policy issues forums.

Implications for the state of New Mexico

As has been aptly illustrated above, the same problems facing the Nation extend into the state of New Mexico (and the other 49 states as well). These problems are further exacerbated by New Mexico's low ranking in population, medium income, educational attainment, and those living on or below the poverty line. [25] Additionally, New Mexico is still primarily a rural state with only two

large metropolitan areas which are closely located to one another, and which contain the majority of the state's population, libraries, economic and business centers and its State government. [26] The rural areas which are sparsely inhabited are disconnected from the state and world because of great distances, lack of telecommunication lines, and access to computers.

Despite these disparities in population, income and education, various local, state, and federal agencies have combined their talents and limited economic resources to facilitate the development and maintenance of networking capabilities to aid in the State's hurried approach to participating in the electronic age. Furthermore, the State has two Regional and eight selective depositories that not only contain rich collections in historical information, [27] but are also actively participating in the FDLP's and the NII's efforts to provide electronic information to the culturally rich and diverse populations in the State.

Currently, several projects are in various stages of implementation and development which has afforded the State's population the ability to participate in civil matters as well as in obtaining personal information and knowledge. These projects are enhancing those who don't have access capabilities the ability to link to the remainder of the World via the Internet and participate in the "global village" in which this society is quickly moving.

The first of these projects was developed through a consortium of State universities (the University of New Mexico, the New Mexico State University, and the New Mexico Institute of Mining and Technology) along with the assistance of the major State research organizations, (the National Laboratories, Sandia and Los Alamos labs, White Sands, etc.) and with the State of New Mexico government. New Mexico *Technet* (Technet) is a private, not-for-profit corporation that has been in existence for over 10 years.

Technet provides Internet access throughout the state of New Mexico as well as connecting the Navajo Nation which incorporates areas of New Mexico, Utah, Arizona, and Colorado. Technet provides Internet access through a 10Mb connection via the Advanced Network Services whose core node is located in Albuquerque. Technet also utilizes a T1 connection as a backup which is based at the New Mexico State University in Las Cruces.

Currently Technet has over forty nodes in various locations state wide and also provides over thirty nodes located in K-12 schools as well as to private companies. Many of the private concerns are government contractors whose primary business contracts are with local, state or federal agencies.

Those connected purchase a point-to-point bandwidth to Technet nodes which connects them to databases at those nodes, or, utilizing a modem, a connection to the Internet. Technet also provides Internet access to local Internet re-sellers (i.e.--Route 66 based in Albuquerque). Funding for Technet comes from the NSF and WESTNET which help offset costs involved for the T1 backup connection. All revenues generated are returned to Technet to offset operating and maintenance expenses and for the expansion of the network.

The Crown Point Project, only a year into its initial implementation, was developed through the efforts and hard work of State Senator Leonard Tsosie along with the cooperative efforts of Los Alamos National Laboratory, the

Navajo Community College, Crownpoint Institute of Technology, the Bureau of Indian Affairs, the Indian Health Services, the Department of Energy, and a host of other federal and state agencies, and state universities.

The project envisions linking the Navajo Nation through a series of Wide Area Networks (WAN) to the Internet, as well as other local, state, and federal networks and BBS's. Access will enhance and improve the Navajo Nation's ability to provide better and much needed health care and educational training as well as better economic opportunities to a significant and specialized population (about 200,000) whose area of habitation spans over 25,000 square miles. At the same time, this project is being designed to not interfere, but rather preserve Navajo traditions.

This project, upon successful implementation, will serve as a model for Native and non-Native American communities by demonstrating how to combine and utilize financial and technical resources provided by federal, state, and private entities. This project, initially located at the Crownpoint Institute of Technology will not only provide high speed data connections, but also will provide training in the installation, maintenance and operations of these technologies required for such a network. By providing this training, the plan is to help open doors for Native Americans in high technology computer and networking fields--doors which have been essentially closed until now.

A third project under way is the *La Plaza Telecommunity*, which is the first and only active community network in New Mexico. La Plaza Telecommunity's mission is to provide and utilize technologies that can unite individuals, organizations and communities and serve their informational needs in an increasingly complex world. La Plaza is located in Taos, New Mexico and currently serves approximately 15% of the local area population (i.e.-those who are within a local phone call to Taos).

La Plaza was designed as a community-only-based information resource that incorporates change and flexibility as it strives to meet its mission goals. At the same time, La Plaza has encouraged and requested input from the local community to incorporate the needs of the individual in the community, as well as individual business components.

La Plaza provides free access to local users to a variety of local, state, federal, and world-wide information resources through the Internet. La Plaza also provides 68 hours per week of individual and in-person help assistance, and offers free classes and tutorials for specialized training on utilizing the Internet, as well as a host of personal or organizational needs. La Plaza has made every attempt and effort to take a leadership role in community networking, while continuing to maintain a humanistic approach to utilizing computer and Internet technology.

La Plaza was a finalist for the 1995 National Information Infrastructure awards, and was recently awarded a three-year, \$900,000 grant from the W. K. Kellogg Foundation. This money will be used to further develop and broaden its community based network.

The final project to be mentioned is *ZiaNet*. ZiaNet was established to support education, business, social services, and personal development opportunities for

New Mexican residents. ZiaNet provides access to a variety of information resources residing among New Mexican libraries, both public and university, as well as to national information networks and resources at affordable prices.

ZiaNet will:

- support educational opportunities for all levels of education
- enhance distance learning programs
- assist New Mexican residents in computer usage and training and
- support health services and professionals staying informed of recent medical developments

ZiaNet will meet these objectives by:

- utilizing existing state and national telecommunication networks
- offer gateway options to the Internet
- Provide toll-free access via modem to those who do not possess direct network connectivity
- provide training
- provide document delivery and
- encourage local database development on state legislative, state contract purchasing, job opportunities, economic development, social services, health programs and travel and tourism

ZiaNet is still in its developmental states and is soliciting bids as of this writing to construct its Internet connection.

While all these projects are individually unique and will provide much needed access to interested parties, New Mexico is still far behind in its efforts to bring the population, particularly the outlying areas, into the fold. "For such systems to truly become instruments of democracy, they must be made accessible to and used by the greatest number of people possible." [28]

Conclusion

Whether at the state or national level, access will only be ownership when all federal depository libraries are regarded as the only safety net in providing government information regardless of format. Administrative efforts must address the need for an equitable infrastructure. Libraries should not be excluded from the FDLP based on financial disparities. Furthermore, the FDLP must evolve as a partner to the NII.

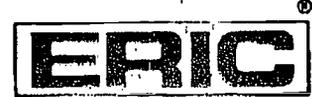
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25. According to the County and City Data Book (U.S. Department of Commerce, Bureau of the Census: Washington, DC, 1994) New Mexico's population was 1,581,830 which ranks 37th in size nationally and 13th in population density per square mile (pg. 2). 75.1% of New Mexicans have a high school degree yet only 20.4% possess a bachelor's degree or higher (pg. 6). New Mexico's median income is \$27,623 (pg.6) yet per capita income is \$11,246 (pg.7). Additionally, 16.5% of New Mexican families and 20.6% of all persons live at or below the national defined poverty level.
26. Ibid.
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