

U.S. Government Publications in Time of Change

by Ann E. Miller

Federal documents librarians quote to each other at conferences, "May you live in interesting times." Everyone in libraries is experiencing these times, but no area is nearer the "bleeding edge" than federal government publications. Government collections now include every format, from print and video to remotely accessible databases and Web sites. As bibliographic records for documents are loaded onto online catalogs, government publications convert into electronic formats, and agency sites appear on the World Wide Web, library users are exploring government information as never before. The combination of new awareness and changing formats has created challenges for libraries wishing to provide access to federal information.

Public Awareness

The initial change in public awareness of federal information began in 1976 when the Government Printing Office (GPO) switched to MARC format cataloging. The move provided standardized MARC records which could be integrated into online databases and used to create CD-ROM indexes for networking. This integrated method of searching for federal materials has increased demand for and awareness of "traditional" printed government publications.

The format in which government publications are and will be distributed has created the most drastic change in awareness and access. In the late 1980s and early 1990s federal depositories began receiving floppy discs and full-text CD-ROM products. Frequently these

were the first full-text CD-ROMs in the library collection. The change brought a certain caché to federal information that had not previously existed. Libraries began scrambling to find equipment to support access to these products. Almost every product came with different hardware requirements, different software (or none at all), and instructions which could be overwhelming or nonexistent. It became apparent that libraries weren't prepared to run or support many of the products distributed. The explosion of remotely accessible federal resources on the Internet has provided additional challenges to libraries collecting government publications. The Web sites' ease of use and their graphic and interactive qualities make this type of government information more accessible and appealing to much of the public.

In August 1995, Congress required the GPO to examine what measures would be necessary to move the Federal Depository Library Program (FDLP) from a primarily print-based program to a fully electronic distribution system.¹ In June 1996, GPO released its final report, *Study to Identify Measures Necessary for a Successful Transition to a More Electronic Federal Depository Library Program*. Although this report addresses the Federal Depository Library Program in particular, the issues it raises and attempts to address will affect all libraries interested in providing access to federal materials. The report examines legal requirements for agencies to provide access to information and where those requirements are lacking; retention of and permanent access to electronic in-

formation distributed through FDLP; the effect of distributed dissemination on locator services; the need for standardization in electronic products; and methods of no-fee access for depositories to fee-based services.² Most of the issues are not new, but the plan envisions a transition from print to electronic format by FY 2001. Documents librarians now ponder with new urgency the collection development, service, and cost implications of this type of access for libraries.

Collection Development

Libraries collecting federal materials face a four-fold challenge: collecting in a decentralized distribution system, deciding what type of materials to collect, collecting publicly accessible materials, and retaining and archiving.

Historically, the Government Printing Office has served as the central printer and distributor of federal information. Non-depository libraries wishing to purchase government publications could identify materials in the *Monthly Catalog of U.S. Government Publications* and purchase publications through the GPO Sales Program. Scientific and technical titles not offered by GPO generally were available through the National Technical Information Service. In addition, libraries frequently have relied on GPO to provide them with information regarding title changes, cessations, and now format changes.

While "fugitive documents" always have existed, centralization in GPO has given libraries some assurance of continuity and responsibility for distribu-

tion. The advent of efficient agency desktop publishing and electronic distribution has fostered decentralized federal publishing. A growing number of publications are escaping the depository net. Others, once depository items, are dropping out of the system. So how will a library know of a publication's existence? Fugitive materials are lost to libraries unless identified by a customer request or serendipitously by a selector. A good individual example is *Competition Policy in the New High-Tech, Global Marketplace*, a Federal Trade Commission staff report which, at the time of writing, existed on the FTC Web server but had not been distributed to depository libraries and wasn't located in searches of two versions of the *Monthly Catalog*. A *WorldCat* search did reveal a commercial reprint. I discovered the report when using the FTC Web server for unrelated research.

The GPO transition plan acknowledges that there currently exists no requirement for an agency to notify GPO of changes in publication or distribution. Appropriate legislation must be written and passed to ensure that agencies notify a central agency coordinating the depository program so that bibliographic control can be maintained, and libraries notified of changes in distribution.

The transition to electronic dissemination of some products has forced libraries to create policies on collecting various formats. Each library must determine which available format is most useful to its particular set of users. In some cases, such as materials available on the *National Trade Data Bank* CD-ROM, it results in duplication of materials in both print and electronic formats. In others, the choice is made for the library, such as when materials are discontinued in print and only available electronically. In addition, libraries must decide not only what customers may want and need now, but also what they might need in the future. A product may not be available for long, and an interested library may need to select or purchase it, regardless of whether it can currently be supported. The CD-ROM *OTA Legacy* from the Office of Technology Assessment is an excellent example. It is a five-CD set which provides full-text, Adobe Acrobat Portable Document Format (PDF) image files for all OTA publications from 1972 until the closure of the office in 1995. These image files require a specific level of software and hardware for display and printing, software and hardware a library may not have yet. The OTA re-

ports are heavily-used and -referenced items, and many libraries would be wise to have them. No longer in print, these publications are available only electronically. They are on the Web now, but will they remain accessible?

How is a library to collect accessible rather than acquirable electronic information? Most access to federal materials on the Web is not selective, unless the site charges a subscriber fee, such as for *STAT-USA*. How can a library be specific about what type of site it supports when users can find it on their own? If a user finds it, must we support it? No one really expects a law library to support access to large sets of weather data. Public and general academic libraries, however, will be faced with the challenge of supporting a wide variety of information on remote sites. Future collection development policies will need to define the collecting level for electronic resources. As with printed materials, the existence of a remotely accessible database doesn't mean that the library will purchase it. Libraries must consider usefulness, price, and technical requirements.

The retention and continued accessibility of electronic materials is of serious concern to all, though large research libraries perhaps feel it most. While the National Archives and Records Administration (NARA) has the ultimate responsibility of retaining federal records, the federal depository program through its regional libraries and large selective depositories has provided a working backup to NARA for published federal materials. Most electronic products distributed through the Federal Depository Program are retained just as paper publications are. Many electronic publications change from version to version. With changes in computer software and hardware, we are discovering that some new software is incompatible with the old. For instance, will a product which was issued to run in MS-DOS version 3.0 run on a PC which is running Windows 95? Good question. And how long will a CD last, anyway?

What happens to remotely accessible electronic information? Depositories and those using their resources have

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no control over what comes and goes on federal agency Web sites. How can libraries be sure that the Web information of today will be there for the researcher of tomorrow? So far, most agencies see the Web as a method of disseminating current information. They don't yet recognize the historical value of retaining that information, or they assume that paper or distributed electronic products will support historical research. The *Study to Identify Measures Necessary for a Successful Transition to a More Electronic Federal Depository Library Program* proposes that GPO and NARA provide long-term access to useful information.³ But who determines long term, or useful, and just what would be acceptable access?

As federal depositories have considered this issue, several aspects of the problem have become clear. Regional depositories cannot download and retain all this information; it is too much for one library, however large, to take on. A central government site for long-term access is a possibility, but it will need to be easily accessible. Many have experienced the frustration of being unable to access an electronic service due to heavy traffic. And what if the service is down, perhaps during a government closure? Just as one has the option of going to another library if a copy of a book is checked out, so mirror sites should be available for federal information. But who will create these sites and where the sites might be are issues still to be resolved.

Support and Service

Libraries have always supported federal collections administratively. We check-in and shelflist, catalog, bind, manage, and provide reference assistance for the materials we collect; however, we have been supporting traditional collections of print and microfiche. The promise of additional, if not total, electronic distribution poses new questions for libraries to answer.

Libraries will need to provide hardware and software to access and use these new products. GPO has provided depositories with a recommended minimum standard for the hardware for a stand-alone workstation (fig. 1).⁴ As of Oct 1, 1996, these recommendations are to become requirements for depository libraries.⁵ To be sure, the workstation configuration is daunting. Remember, this is a single workstation to support all federal products. As such, it is a highend workstation, capable of coping with almost every software

requirement which might present itself. Even as GPO supplies the standards, it also notes that:

LPS cannot anticipate or address every possible depository library computer scenario. Rather, these specifications are intended to assist depository staff in making informed purchases which will best achieve the goal of providing public access to Federal Government information in a variety of electronic formats.⁶

Librarians need to assess what type of electronic materials they will be collecting, types of remote materials their users will likely encounter, and configure workstations to meet those needs. The outline of minimum requirements is intended to provide depository librarians with evidence to convince administrators of the need to purchase workstations that meet future needs as well as current ones. For non-depository libraries, the GPO guidelines provide a list of hardware requirements that will be encountered when using federal materials they might purchase.

It is likely that these minimum specifications will be difficult to meet. Libraries will not be able to purchase four or five workstations which conform to these guidelines. Electronic products will need to be distributed among several workstations, networked, or carefully selected so that the need for special support is minimal. For instance, Duke University doesn't have a single workstation which meets the minimum requirements, though our specialized GIS terminals come close. Rather, we've identified what the products we support require and have distributed the tasks among different machines. This distribution is possible at larger institutions with multiple workstations. For smaller libraries where one or two workstations support all federal materials, it will be necessary to purchase workstations close to or exceeding these requirements.

Software adds another wrinkle. It seems as though every CD-ROM the federal government has issued comes with a different software package. Even those that run on the same software, such as GO from the Census Bureau, require that additional files be loaded to provide access to the unique data sets on each disc. In the worst case scenario, the CD arrives with no instructions on how to install the software or even what is required to run it. Beyond the logistical problem of managing

many software programs, there are serious staffing implications. Often one staff member will be responsible for installing and maintaining access to federal electronic materials. The "opportunity for growth" usually falls to someone with existing responsibilities.

Providing reference service for this new generation of federal materials will continually challenge librarians. Not only must the reference staff know content and location of materials, but also how to search, display, and download or print using a variety of software packages. In addition, new types of information are being released. Agencies are taking advantage of the new medium to issue data sets that were not available before.

Creating a tiered-service policy is one way many depository libraries are dealing with this issue. Librarians initially identify use patterns for electronic materials and those products which support the research needs of their customers. Those products with heavy use, or those that are networked, have a very high service expectation; those for which no software exists or little use is expected, have very low levels. Within the service levels, staff are given guidelines for what they are expected to know. At a high service level, for instance, the staff member is expected to know the content of the product, be able to access and search for information, retrieve and display it, and finally download or print the results. The lowest level of service may be to find the product in the *Monthly Catalog* and circulate the item to the user.

Duke has a four-tier service system which was instituted in Fall 1995. The highest level is expected for products loaded onto our CD tower (content knowledge, search, display, download/print), the second level for products loaded on individual machines in the department (locate, searching, display, download/print). The third level is for products that will need to be loaded. Users are required to allow two working days for the product to be installed and will receive only minimal support. Finally, we circulate some CD products for a week. I should note that circulating CDs is a controversial decision and may not be right for all libraries.

Training of staff and followup individual practice are essential. Unfortunately, with the exception of *GPO Access*, there

is little formal training available for federal electronic products. Training sessions do turn up at the Federal Depository Library Conference, ALA, and NCLA Documents Section meetings. Yet these may not reach all staff. Many depositories have turned to internal cross-training. Cross-training ensures that at least one individual is knowledgeable about a product. We have taken advantage of light Friday morning reference traffic for our training time. Professionals and support staff alike have presented products. Cross-training provides an impetus for creating handouts that can be adapted for customers, and gives staff a chance to ask "stupid" questions in a safe environment. It is important then to allow practice time for everyone to reinforce their skills.

Our customers face both the loss of favorite publications and new information in new formats. Library users may be somewhat familiar with the use of a computer and associated hardware, but they certainly cannot be expected to cope with all the software packages and product options available. Having clear selection and service policies and goals will help to focus user instruction. Now, more than ever, customers need to rely on the advice and assistance of reference librarians.

We cannot discuss support for electronic products without looking at the price tag for libraries. While Congress may view the distribution of electronic information as a cost cutting measure for the federal government, libraries will see a number of increases in their local costs.

Consider the hardware and software costs. It will not be cheap to purchase machines that meet the minimum requirements. Libraries also will need to purchase complementary software to meet the requirements. Some software will be an extension of what libraries already use for administrative support, but other types, such as database software, will need to be acquired to support specific electronic publications.

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There almost certainly will be subscription fees for some remote services. While the Federal Depository Library Program is willing to broker free access for depository libraries, other libraries will need to subscribe to government services just as they do for commercial database providers. Unfortunately, it isn't certain yet that even depositories will have free access to remote services, despite assurances to the contrary.

An immediate and obvious cost is printing. Some customers will accept downloaded materials, but most still prefer to have printouts they can take home. Electronic materials ripe for printing range from one-page pamphlets to monographs hundreds of pages long. Libraries must decide whether to pass the cost along and provide hardware that can process and print large documents quickly, or whether it is wiser for the library to print out a master copy of a document for retention and checkout. Policies need to be established that both fit the needs of the customers and allow libraries to continue to provide effective service.

Conclusion

By the time this article goes to press the issues facing libraries collecting federal materials will have changed. Congressional mandates for electronic dissemination and the public's increased awareness of and access to federal information in all formats are driving much of that change. The type and method of collecting, the need for a state-of-the-art computing infrastructure, and the necessity of providing service to a variety of products are daunting challenges to libraries; however, I believe that we have the tools to address those challenges. The knowledge we all share for collecting, administering, and serving our collections will provide us with the basis for creative policies and decisions that will ensure our public's access to the wealth of information that government publications provide.

Lagniappe

I have had great difficulty in selecting only ten significant federal publications. So much valuable federal information is available for so many different purposes. In the final analysis, I chose products that will lead researchers into the literature; products that present traditional information in a new and dynamic way; and those publications that provide exceptional quality as a reference source.

Bureau of the Census. *Statistical Abstract*

of the United States. Bureau of the Census. Department of Commerce. Washington, D.C., 1878 - . For sale by the Supt. of Docs., U.S. G.P.O.

Familiar to librarians, the *Statistical Abstract* continues to be one of the most important and heavily used federal documents. Not only does it provide comprehensive and detailed statistics, but it includes international data and information gleaned from private sources as well. Available for purchase in paper and CD-ROM, selected tables are available at the U.S. Census Bureau web site: http://www.census.gov/stat_abstract/.

Bureau of Labor Statistics. *Occupational Outlook Handbook* and the *Occupational Outlook Quarterly*. Bureau of Labor Statistics. Department of Labor. Washington, D.C., 1949 - . For sale by the Supt. of Docs., U.S. G.P.O.

The *Handbook* and its companion journal *Occupational Outlook Quarterly* provide information on jobs and job prospects. The *Handbook* provides information on what a job entails, prospects and salary, conditions and training needed. The *Quarterly* supplements the handbook, looking at trends in geographic movement of jobs, salary changes, and hot occupations.

Federal Research Division. *Area Handbook Series*. Library of Congress The Division. Washington, D.C. For sale by the Supt. of Docs., U.S. G.P.O.

Once produced by the Department of Defense, now by the Library of Congress, each book in this series analyzes the culture, politics, security, history, and society of the country in question. Some are available in full-text on the *National Trade Data Bank*, and text and illustrations for one (as of writing) may be found at the Library of Congress web site (<http://lcweb2.loc.gov/frd/country.html>). All are available for sale from GPO.

Government Printing Office. *U.S. Government Printing Office Home Page*. Government Printing Office. U.S. Congress. Washington, D.C., 1995 - . <http://www.access.gpo.gov/>

The GPO page enables searching of the *Monthly Catalog* for recent publications and locations of depositories selecting the item. It also provides access to *GPO Access*, and the *Pathfinder* service which

identifies government Web sites. In addition, the homepage provides links to other federal agency homepages.

Government Printing Office. *GPO Access*. Government Printing Office. U.S. Congress. Washington, D.C., 1994 - .

This WAIS-searchable database is available to the public from a variety of points on the Internet. Full-text material included on GPO Access include the *Federal Register*, *Congressional Record*, Bills, GAO Reports, House and Senate Calendars, the *Congressional Directory* and *Economic Indicators*. Citizens of North Carolina can access the service from several gateways, including UNC-Chapel Hill/Duke/NCSU online catalogs; NCSU's web site (<http://www.lib.ncsu.edu/stacks/gpo/>), GPO's web site (<http://www.access.gpo.gov/>), plus other gateways around the nation.

LaRoe, Edward T., ed. *Our Living Resources: A Report to the Nation on the Distribution, Abundance, and Health of United States Plants, Animals and Ecosystems*. U.S. Department of the Interior, National Biological Service, 1995.

The monograph *Our Living Resources* is a exceptional compilation of articles on the status of U.S. animal species, ecosystems, ecoregions and special environmental issues. Each article provides an overview of the topic, challenges for the future, and a short bibliography. The volume is beautifully laid out and very accessible.

Office of Technology Assessment. *OTA Legacy*. Office of Technology Assessment. U.S. Congress. Washington, D.C., 1996. For sale by the Supt. of Docs., U.S. G.P.O.

Between 1976 and 1995 the Office of Technology Assessment produced many valuable reports on science and technology issues. This five CD-ROM set contains OTA reports in PDF format. It is an excellent example of a product which poses one of the greatest challenges to libraries in access, reproduction, service, and retention. Viewing and printing of these image files requires hardware and software that can read and reproduce Adobe Acrobat PDF formatted files.

Platt, Suzy, ed. *Respectfully quoted: a dictionary of quotations requested from the Congressional Research Service*. Library of Congress. Washington, D.C., 1989.

One of the best reference books for quotations around. It is organized by topic with indexes for subject, author, and keyword.

STAT-USA. *National Trade Data Bank* and *STAT-USA*. STAT-USA. U.S. Dept. of Commerce. Washington, D.C., 1990 - .

The *National Trade Data Bank* was created in 1990 to provide one-stop-shopping for businesses interested in international trade opportunities. NTDB has expanded to two CDs a month which provide access to full-text and statistical files. *STAT-USA* (<http://www.stat-usa.gov/>) provides some of the same material, plus timely trade opportunities and detailed economic data; however, *STAT-USA* is a subscription service. Federal depositories may provide one free access point if they select the service.

U.S. Superintendent of Documents. *Monthly Catalog of United States Government Publications*. United States Government Printing Office. Washington, D.C., 1907 - .

Since 1907, the *Monthly Catalog* has provided access to federal materials printed and processed by the Government Printing Office. It now has expanded to include documents in electronic format at agency sites. Available for purchase in paper and CD-ROM, also available for searching on the World Wide Web at: http://www.access.gpo.gov/su_docs/dpos/adpos400.html.

United States. Congress. *Official Congressional Directory*. U.S. Government Printing Office. Washington, D.C., 1887 - . For sale by the Supt. of Docs., U.S. G.P.O.

Not only a biennial directory to members of Congress, this volume contains a guide to the executive branch, lobbyists, statistics on voter turnout, congressional district maps, and more. An electronic version of the directory is available via GPO Access.

References

¹ U.S. Senate Appropriations Committee, U.S. Senate, *Report to Accompany H.R. 1854 Legislative Branch Appropriations*, 1996, 104th Cong. 1st sess., 1995, S. Rept. 114, 48-49.

² U.S. Government Printing Office, *Study to identify measures necessary for a successful transition to a more electronic Federal Depository Library Program: as required by Legislative Branch Appropriations Act, 1996, Public Law 104-53: report to the Congress* (Washington

D.C.; GPO, 1996), ii-iv.

³ *Study to Identify*, 21-22.

⁴ "Recommended Minimum Specifications For Public Access Work Stations In Federal Depository Libraries," *Administrative Notes* 17, no. 7 (1995): [\[una.hh.lib.umich.edu:70/00/socsci/poliscilaw/godort/gpo/1996/170796/an1707p\]\(http://una.hh.lib.umich.edu:70/00/socsci/poliscilaw/godort/gpo/1996/170796/an1707p\)](http://gopher://</p>
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⁵ *Study to Identify*, 13.

⁶ "Recommended Minimum Specifications."

GPO Recommended Minimum Specifications May 15, 1996

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| Computer | IBM-compatible Pentium chip computer operating at 100mhz |
| Memory | 16 megabytes (Mb) of RAM |
| Hard Disk Drive | 1.2 gigabytes (Gb) capacity; 12 ms or less access time; IDE or SCSI interface |
| Floppy Disc | 3.5" high density drive. Consider a 5.25" drive if you have a collection of 5.25" diskettes that have not yet been converted to 3.5" |
| Expansion | Three free expansion bus board slots; 1 or more additional hard drive bay(s) desirable; 2 serial ports and 1 parallel port |
| Monitor | Super VGA (SVGA) compatible, with at least 70 Mhz vertical refresh rate at SVGA resolution (800x600) non-interlaced, 0.28 or smaller dot pitch; display card which supports 800x600 resolution at 7-Mhz or faster. 15" monitor minimum, but consider 17". Consider 21" to display full page images. |
| CD-ROM Drive | For stand-alone use, single or multiple platter drive (ISO 9660 standard). 300 K/byte per second transfer rate, quadruple (4x) speed support. CD-ROM XA support. |
| Printer | Ink jet or laser printer which supports PostScript. 2 MB memory. Consider color. |
| Pointing Device | Microsoft-compatible mouse or similar pointing device to support programs and Microsoft Windows. |
| Network Connection | Direct Internet or SLIP/PPP connection |
| Modem | 28.8 kbps data transfer rate, meeting V. 32, V. 42, V.42bis or MNP 5 standards and compatible with Hayes "AT" command set. |
| Operating System | Microsoft Windows 3.1 or later (requires MS-DOS 3.3 or higher). Device driver for CD-ROM drive and MS-DOS CD-ROM extensions. |
| Communications | Package which supports multiple file transfer protocols; several terminal emulations such as ANSI-BBS, TTY, VT-100. Data transfer rates up to 28.8 kbps. Supports Hayes "AT" compatible modems; manages telnet sessions. Consider ability to "script" log-on files. |
| Client Software | World Wide Web graphical browser with forms support. ANSI Z39.50 compatible, GILS-aware WAIS client. Consider EInet WinWais customized for GPO Access. |
| Viewers | PDF file viewer. GIF and JPEG graphics viewers. |
| Database | dBASE file format compatible or dBASE and ASCII comma delimited file importing database management software; useful to have fixed field format (SDF) import ability. |
| Spreadsheet | Lotus .WK1 file format compatible software; support for other formats such as Excel and Quattro Pro. |
| Word Processing | Software capable of importing major text file formats (Microsoft Word, WordPerfect, Multimate, etc.) and ASCII text files. |