

**BIENNIAL REPORT TO CONGRESS
ON THE STATUS OF *GPO ACCESS***



DECEMBER 31, 2001

BIENNIAL REPORT TO CONGRESS ON THE STATUS OF *GPO ACCESS*

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EXECUTIVE SUMMARY

In the past two years, *GPO Access* has remained one of the leading online sources of free, official Government information and the only such system mandated by law. Its publicly available resources, covering all three branches of Government, have grown to encompass more than 2,200 databases through over 80 applications, including the popular *Congressional Record*, *Federal Register*, and *Code of Federal Regulations*. As of December 2001, the Web site provided access to more than 130,000 titles on Government Printing Office (GPO) servers and over 94,000 additional titles through links to other Federal agency Web sites. Due to its efficiency, the cost of the entire *GPO Access* operation has been much lower than originally estimated.

To measure GPO's success in disseminating electronic Government information, the number of document retrievals by users is monitored. Recent statistics indicate that *GPO Access* fulfills approximately 31 million document retrievals per month, with a total of more than 355 million retrievals during fiscal year 2001 alone. Complementing these figures is the praise extended for the level of service and scope of information on *GPO Access*. *GPO Access* has been featured and applauded by LibrarySpot.com and GovSpot.com, and was also recognized with an E-Gov 2001 "Trail Blazer" award in June 2001. Ben's Guide to U.S. Government for Kids, the educational component of *GPO Access*, also received accolades from many notable organizations, such as the American Library Association, USA Today.com, *Skewl Sites* Newsletter, FirstGov, HomeworkSpot.com, the Philadelphia Inquirer, and many others.

To further the mandates of Public Law 103-40, GPO has taken a number of steps to improve the services it provides to the public. New applications and publications have been added, and improvements have been made to several existing applications. Numerous system enhancements have also been made, including the incorporation of "Akamized" files, the monitoring of referrals from other Web sites, and improvements to the U.S. Government Online Bookstore. Moreover, the initial steps have been taken to develop a *GPO Access* mirror site in a geographically removed location.

In order to support and constantly improve *GPO Access*, a number of studies were undertaken. Quarterly studies are being conducted with the goal of improving the visibility of *GPO Access* pages in Internet search engines and directories. In addition, in order to compare the Legislative resources available via *GPO Access* to resources on other sites, three iterations of the Legislative Resources Comparison Report were also completed in the past two years.

Furthermore, *GPO Access* was reviewed in the "Performance Measures for Federal Agency Websites" report that was conducted by Charles R. McClure et. al. The report stated that *GPO Access* "could serve as a guideline for other agencies in establishing or amending their Web site development strategies."

To achieve its mission and the broader goals of Government, GPO has established partnerships with other Federal agencies and educational institutions

EXECUTIVE SUMMARY (CONTINUED)

to save time, money, and resources. These partnerships provide effective, inexpensive methods of disseminating information while eliminating duplicative efforts. Internet-related services that GPO performs on a reimbursable basis include hosting 17 agency Web sites and over 30 agencies' databases of Government Information Locator Service (GILS) records.

Because several customers have requested that GPO upgrade its Internet services to include a LISTSERV capability to enable them associate such a service with their Web sites being hosted by GPO, a LISTSERV mailing list server has been made operational.

On January 1, 2002, the long-standing, successful alliance between GPO and the Department of Commerce to provide an online version of the *Commerce Business Daily* (CBDNet) will come to an end. GPO will, however, continue to maintain the archive of notices. This will ensure that the public continues to have historical reference access to the procurement activities of their government during the five-year life of CBDNet.

Maintaining *GPO Access* user satisfaction is a major concern of GPO. Therefore, GPO educates users about the products and services offered on *GPO Access* through three primary means: training classes, demonstrations at conferences and trade shows, and the *GPO Access* User Support Team. During FY 2000 and 2001, GPO staff conducted approximately 25 hands-on training classes and demonstrations for Federal depository librarians, members of Congress, professional organizations, various other groups, and the public, both locally and across the country. The *GPO Access* User Support Team responded to an average of 6,100 inquiries per month, including approximately 4,000 phone calls and 2,100 e-mail messages. Due to the unique nature of the recent Presidential election, the number of calls and e-mails received by the Team increased dramatically, with over 10,000 user inquiries in December 2000.

Many of the improvements that have been made to *GPO Access* are in response to feedback GPO has received through various channels. On a daily basis, GPO monitors user feedback about *GPO Access* from telephone calls, e-mail messages, faxes, and letters, which are directed primarily to the *GPO Access* User Support Team. GPO also uses more formal means of soliciting comments and evaluations. GPO has conducted Usability Studies, numerous User Surveys on both *GPO Access* and Ben's Guide to U.S. Government for Kids, and several focus groups and open forums throughout the country.

GPO continues to improve and add to the services available via *GPO Access*. The future includes plans for new applications, such as a *Statutes at Large* application, and the *Electronic Code of Federal Regulations* (e-CFR) application. The *GPO Access* Web Committee has taken steps to apply new *GPO Access* Web Design Guidelines. GPO has also procured equipment and secured a location to conduct hands-on *GPO Access* training classes and demonstrations at the main GPO facility.

OVERVIEW OF *GPO Access*

Public access to Government information has been transformed by an innovative information technology service called *GPO Access*. Established by Public Law 103-40, the *Government Printing Office Electronic Information Access Enhancement Act of 1993*, *GPO Access* offers free electronic access to official information from all three branches of the Federal Government.

GPO Access allows people worldwide to access Federal Government information products electronically and to use those products without restriction, unless otherwise noted. It provides access to more than 2,200 databases through over 80 applications, such as the *Federal Register* and the *Congressional Record*. More than 130,000 titles are housed on *GPO Access* servers, and links are provided to over 94,000 additional titles from other agency Web sites, totaling over 224,000 titles. Many electronic documents, which are the official published versions, appear on the day of publication exactly as they appear in print. The immediacy of electronic publishing allows for pre-print updates to existing databases and the provision of products that lack a print equivalent.

GPO Access has been carefully designed, developed, and implemented so that it is easy to access and use. Numerous search tools locate Government information products by topic, title, agency, or keyword within one database or across multiple databases. Links direct users to related databases in order to facilitate their searches and to highlight connections among information products. An electronic ordering mechanism allows for the secure online purchase of products from the GPO sales program.

GPO uses *GPO Access* to make online Government information products available to Federal depository libraries and the public with the goal of widespread and equitable information dissemination. Its efforts include providing *GPO Access* training and user support for Federal depository librarians, Federal agencies, and the general public to increase awareness of the service and promote its usage; identifying and providing links to official Government information on other Federal agency Internet sites; making the information on its servers available to other institutions and organizations; providing bibliographic information, locator tools, and making this information available on GPO servers; and providing electronic information dissemination services for other Federal agencies.

To service a large base of users with varying technological capabilities, *GPO Access* supports a wide range of information dissemination technologies, from the latest Internet applications to dial-up modem access. Methods compatible with technologies to assist users covered by the Americans With Disabilities Act are available. GPO is committed to setting an example for other Federal agencies by ensuring that *GPO Access* pages and hosted sites meet the accessibility requirements for electronic and information technology set forth in Section 508 of the Rehabilitation Act. All efforts are being made to ensure that everyone can access and utilize all that *GPO Access* offers. In order to accommodate people

OVERVIEW OF *GPO ACCESS* (CONTINUED)

without computers, more than 1,300 Federal depository libraries throughout the country have public-access workstations for *GPO Access* usage. This enables users to get assistance at the local level from librarians in using *GPO Access*.

The system's ability to expand to meet the public's needs and to store information indefinitely supports GPO's commitment to provide permanent public access to electronic Federal information products. Recent statistics indicate that *GPO Access* averages approximately 31 million document retrievals per month, while helping Congress, Federal agencies, and the courts disseminate official Government information quickly, efficiently, and inexpensively. The convenience, timeliness, versatility, and simplicity of *GPO Access* have rapidly made it an invaluable public resource.

GPO ACCESS LEGISLATION

Summarized below are the key provisions of Public Law 103-40, the U.S. Government Printing Office Electronic Information Access Enhancement Act of 1993, which charged the Superintendent of Documents with developing mechanisms to enhance public access to a wide range of Federal electronic information products.¹

Electronic Directory, Online Access, and Storage Facility

The Superintendent of Documents is required to (1) maintain an electronic directory of Federal electronic information; (2) provide a system of online access to the Congressional Record, the *Federal Register*, and other appropriate publications, as determined by the Superintendent of Documents; and (3) operate an electronic storage facility for Federal electronic information. Collectively, these elements constitute *GPO Access*.

Federal Bulletin Board (FBB)

Senate Report 103-27 incorporated the Federal Bulletin Board, which existed prior to Public Law 103-40, into *GPO Access*. The FBB enables Federal agencies to provide to the public self-service access to Federal information in electronic form.²

Departmental Requests

To the extent practicable, the Superintendent of Documents shall accommodate requests by department and agency heads to disseminate their information through *GPO Access*. In these cases, the publishing agencies will fund the initial publishing costs from their appropriations, as they do with current electronic information products.³

Consultation

The Superintendent of Documents shall consult with *GPO Access* users and other providers of similar information services to assess the quality and value of its system, in light of users' needs.

Fees

The Superintendent of Documents may charge reasonable fees for the use of *GPO Access*, except to Federal depository libraries, which shall have access at no charge.⁴ If fees are charged, they must be set so as to recover the incremental cost of dissemination.⁵

Status & Biennial Reports

By June 30, 1994, the Public Printer shall submit to Congress a report on the status of *GPO Access*. Beginning in 1995, the Public Printer must submit to Congress a biennial report on the status of *GPO Access* by December 31 of each odd-numbered year. This report shall include a description of the functions of the service, including a statement of cost savings in comparison with traditional forms of information distribution.

Operational Deadline

GPO Access shall be operational by June 8, 1994.

¹ The successful implementation of this law requires the combined resources of many components of GPO.

² The bulletin board was given a Web interface in October 1994.

³ This latter statement is cited from Senate Report 103-27.

⁴ The cost of depository library access is to be paid from the Federal Depository Library Program appropriation.

⁵ To meet strong public expectations for free access to taxpayer-supported information online and due to the costs associated with administering paid subscriptions, *GPO Access* has been available without charge to users since December 1995.

GPO ACCESS OBJECTIVES

To implement the legislative mandate, the following objectives have been established for the program. *GPO Access* allows users to locate official government electronic products available via the Internet and to order these products online. The product line includes, beyond legislative information, many important products from the executive and judicial branches such as the *Federal Register*, the *Code of Federal Regulations*, the *Commerce Business Daily*, and Supreme Court opinions, as well as Government Information Locator Service (GILS) records for a growing number of Federal agencies.

The primary objectives of *GPO Access* are as follows:

- Provide access to Federal Government information in electronic formats.
- Provide electronic document delivery and online interactive services that are well-designed, easy to use, and available to the public without charge through the Federal Depository Library Program (FDLP).
- Provide access to Federal Government information that is official and complete. GPO secures the integrity of its databases to ensure against unauthorized changes in text or graphics.
- Provide locator tools that assist users in finding Government information.
- Assure access for a broad spectrum of users with a wide variety of technical capabilities both directly and through an active partnership with Federal depository libraries.
- Establish and operate an online interactive service that is capable of rapid expansion to meet the needs of Federal agency publishers and public users.
- Make official Government information available to the public without the re-keying of data when possible, and whenever feasible obtain the original document from the publisher in electronic format to help ensure the official nature of the document.
- Utilize a variety of dissemination media and methods, including World Wide Web, bulletin board services and online interactive search and retrieval services in order to achieve cost-effective information delivery that is appropriate both to the type of information being disseminated and the needs of users of that information.
- Ensure permanent public access of Government information made available through *GPO Access* and the FDLP via direct provision, the electronic storage facility and development of a distributed networked system of partner institutions.
- Provide services to other Federal agencies on a reimbursable basis, to save time, money, and other resources.

MEASURES OF SUCCESS

GPO measures its online success in numbers and words—Web site usage statistics and verbal and written praise of *GPO Access* from award committees, Government officials, and general users.

Increasing Web Site Usage

Of the metrics available for gauging Web site usage, GPO uses document retrievals because they represent units of actual content delivered to users. Document retrievals indicate the number of downloads both of documents within databases and files outside of databases that have been identified as containing Government information content. The more than 26 million retrievals in October 2000 propelled total usage of *GPO Access* to over 1 billion documents retrieved since the service premiered in 1994. October 2001 produced the highest total month's retrievals to date with more than 36 million documents downloaded. Ben's Guide to U.S. Government for Kids, the educational component of *GPO Access*, has received nearly 10.3 million retrievals since its debut in December of 1999. Its peak was in October 2001 with over 875,000 retrievals.

GPO recorded more than 355 million document retrievals in FY 2001 at an average of 29 million retrievals per month, an increase from an average of 21 million retrievals per month in 1999. This figure reflects more than a 25% increase over the total number of retrievals for FY 2000.

The average number of monthly retrievals from *GPO Access* is currently about 31 million and the average size of these documents is currently about 49Kb. With 2Kb equaling roughly one typewritten page, the average size of a document retrieved from *GPO Access* equates to some 24.5 typewritten pages. In turn, the average number of monthly retrievals from *GPO Access* measures almost 1.5 terabytes in size and is equivalent to about 750 million typewritten pages.

GPO Access Awards and Commendations

The success of *GPO Access* is visible not only in usage statistics, but also in the numerous awards and commendations that *GPO Access* has received from organizations, publications, and other Web sites. In the comments that follow, the success of *GPO Access* in providing and promoting public access to official Federal Government Information is evident.

In June 2001, *GPO Access* was recognized with an E-Gov 2001 "Trail Blazer" award. This award was given to Government organizations that demonstrated "exceptional [electronic government] solutions that merit recognition within the E-Government community." E-Gov.com <<http://www.e-gov.com>> is a government and technology portal that delivers Government services by publishing digital newsletters and holding conferences related to technology and government, such as E-Gov 2001.

In May 2001, LibrarySpot.com <<http://www.libraryspot.com>>, an award-winning library and reference portal, selected the U.S. Supreme Court Web site, which is hosted by *GPO Access*, to be featured among the best and most useful library and reference sites online.

MEASURES OF SUCCESS (CONTINUED)

In March 2001, the Congressional Bills database on *GPO Access* was featured in the Legislative Branch section of GovSpot.com <<http://www.govspot.com>>. GovSpot.com is a non-partisan government information portal designed to simplify the search for the best and most relevant government information online.

Also, in March 2001, CBDNet was inserted in the e-government global portal <<http://www.egov.it>>. Egov.it was developed by a research team at the University of Naples Federico II, under the sponsorship of the Dipartimento della Funzione Pubblica and was launched in conjunction with the Third Global Conference on Reinventing Government, Naples, March 15-17, 2000.

In addition, in March 2001, the FDLP Desktop site was featured on the Internet Law Web site <<http://www.internetlawweb.com/egovement.htm>> under the heading E-Government Law Links. The Internet Law Web site is a portal that provides links to various categories of resources, including legal issues, Internet law, information technology, e-commerce, and e-government.

In January 2001, the Public Papers of the Presidents of the United States database was included in the Current Web Contents Section of the ISI: Fully Integrated e-Information Solutions Site <<http://www.isinet.com/isi/products/cc/cwc/webselect.html>>. ISI is a database that provides information in the fields of science, social science, technology, and the arts and humanities. Since its inception, this journal-based resource has reflected the strict guidelines for selection developed by the ISI Editorial Development Staff.

In December 2000, Lightspan's StudyWeb <<http://www.studyweb.com>>, one of the Internet's premier sites for educational resources for students and teachers, selected the *U.S. Constitution: Analysis and Interpretation* application, available via *GPO Access*, as one of the best educational resources on the Web. Since 1996, Lightspan has scoured the Internet to select only the finest sites to be included in StudyWeb's listing of educational links.

In April 2000, *GPO Access* was voted one of *Library Journal's* "Best Reference Web Sites" for 1999. In addition, in April 2000, Forbes.com <<http://www.forbes.com>> mentioned *GPO Access* in an article about the "Best of the Web."

MEASURES OF SUCCESS (CONTINUED)

Ben's Guide to U.S. Government for Kids Awards

Ben's Guide to U.S. Government for Kids, the educational component of *GPO Access*, has received numerous awards and recognitions for its outstanding commitment to government and education. In October 2000, *The Washington Lawyer*, a publication for lawyers in the D.C. Metro Area, wrote, "of all the educational resources on the World Wide Web, this is one of the best for teaching young people about such things as historical documents, branches of government, how laws are made, the election process, and much more." Ben's Guide has received recognition from the following notable organizations:

- *Skewl Sites* Newsletter
- ConnectingStudents.com
- SurfNetKids.com
- StudyWeb.com
- FirstGov
- HomeworkSpot.com
- Blue Web'n
- Internet Scout Project
- The Philadelphia Inquirer
- American Library Association
- USATODAY.com
- *Newsletter of the Documents Interest Group of Oregon (DIGOR)*

ACCOMPLISHMENTS

Public access to Government information has continued to be transformed as *GPO Access* provides the public with electronic access to official Federal information. A number of new applications and improvements to this service have been made in order to facilitate continued use of *GPO Access* by the public.

System Enhancements

Akamai Content Delivery Service

In March 2001, GPO began working with Akamai, a company specializing in Web site optimization. In order to deliver content faster and more reliably, selected files on *GPO Access* are retrieved using the Akamai global network of more than 8,500 servers. When a user requests an “Akamaized” file, the Akamai network checks for a cached version of the file on a server within the local region before retrieving content directly from GPO-centralized servers.

Users downloading “Akamaized” *GPO Access* files and Web pages should experience an increase in speed and performance. Employment of the Akamai technology began with graphics files, the Supreme Court Web site <http://www.supremecourtus.gov> and the *Federal Register* HTML Table of Contents from March 16, 2001 to April 16, 2001. Other areas of *GPO Access* will use the service in the future.

Referrals to *GPO Access* from Other Web Sites

GPO began monitoring the number of referrals to *GPO Access* from other Web sites in October 2000. The monthly referral reports are created by analyzing log files that record the URL from which a referred user was directed to a particular page on *GPO Access*.

While referral log analysis was initially intended to gather referral information related to the launch of FirstGov, GPO has continued to review referrals in order to learn more about the broad array of commercial, government, educational, and military Web sites directing users to *GPO Access*. The referral reports are also used to examine the web traffic directed to *GPO Access* by registered depository Web sites.

Bandwidth

GPO continues to make improvements to its network in order to provide the fastest possible response times for *GPO Access* users. Until July 2000, GPO’s bandwidth consisted of four T1 lines (each operating at approximately 1.5 megabits a second) totaling 6 megabits. In July 2000 GPO upgraded to a T3 connection, with a bandwidth of 12 megabits and the ability to expand to 45 megabits. On December 18, 2001, GPO expanded the bandwidth to 24 megabits, and now will begin preparing the infrastructure for a future increase to 45 megabits. The multiple T1 lines continue to be maintained in a backup capacity.

ACCOMPLISHMENTS (CONTINUED)

New Features and Applications

Since January 2000, a number of new applications have been added to *GPO Access*, several of which are listed below (for a list of most popular applications, see **Appendix C**):

- The *Davis-Bacon Wage Determinations* database makes available wage determinations issued by the U.S. Department of Labor under the *Davis-Bacon and Related Acts*. *GPO Access* contains the Davis-Bacon Wage Determinations from March 2, 2001 forward. The Davis-Bacon database offers full search and browse features and is updated every Friday morning by 9:00 am eastern U.S. time.
- *Deschler's Precedents* are the parliamentary precedents of the House of Representatives, compiled by Lewis Deschler, parliamentarian of the U.S. House of Representatives 1928 to 1974. These materials were prepared and published as House Document 94-661 in accordance with Public Law 94-551. *Deschler's Precedents* currently consists of 31 chapters arranged in the approximate sequential order in which they occurred in the House. Each chapter is subdivided into sections, which constitute the document level on *GPO Access*. All documents are available as ASCII text and Adobe Acrobat Portable Document Format (PDF) files.
- The FirstGov search interface has been added to the *GPO Access* suite of Finding Aids to provide greater accessibility to Federal Government information. Designed to replace the Pathway Indexer, the agency search engine feature, and the discontinued GovBot, users may now search the Federal Government using the FirstGov search index. Users have the choice to search either the entire Federal Government or just *GPO Access* pages.
- The *Hinds' Precedents of the House of Representatives* is the compilation of Asher C. Hinds', Clerk at the Speaker's Table of the U.S. House of Representatives from 1895 to 1910, early precedents of the House of Representatives, dating from the First Congress. These materials were prepared and published by authority of the Act of Congress, approved March 4, 1901. *GPO Access* provides the five volume series, currently consisting of 148 chapters, which is available as ASCII text and PDF files.
- *Public Papers of the Presidents of the United States* is an official series in which Presidential writings, addresses, and remarks of a public nature are compiled. Currently, this database contains both volumes of President Clinton's *Public Papers* from 1993-1999. Previous and subsequent volumes will be added on an incremental basis.

ACCOMPLISHMENTS (CONTINUED)

- The *United States Code* is the codification of the general and permanent laws of the United States. *GPO Access* contains the 2000 and 1994 editions of the *U.S. Code*. The 2000 edition codifies the laws that were in effect as of January 2, 2001. Currently, Titles 1-20 are available for the 2000 edition, with additional titles to be added when available. Previous supplements are available for research purposes.

Improvements to Existing Applications

GPO not only added to the total number of applications, databases, and publications on *GPO Access*, but also made improvements to the methods users can employ to find and retrieve documents.

- In addition to the free, online *Code of Federal Regulations (CFR)*, a comprehensive list of CFR Titles available containing order icons is provided to facilitate the ordering process for patrons who would like to purchase individual copies. This checklist is updated on a weekly basis.
- The *Federal Register* 2000 database now contains documents with active links to Web sites referenced in the document text. The active HTTP-link feature will be added to previous *Federal Register* databases in the future.
- A new browse feature has been installed to the *U.S. Code* which allows users to browse individual *U.S. Code* titles, down to the section level, for the latest available update. This feature consists of three levels, permitting a more precise and timely search.
- The *Weekly Compilation of Presidential Documents* now has a new browse feature, presenting publications from January 8, 2001 forward.
- In May 2001, certain enhancements were made to the U.S. Faxwatch service. These enhancements allow Faxwatch users to request documents from the Faxwatch database using any messaging application program interface (MAPI), simple mail transfer protocol (SMTP), or post office protocol 3 (POP3) compliant e-mail client. Users may request any document on the U.S. Faxwatch Service by sending an e-mail message to USFaxwatch@gpo.gov.
- In January 2001, the Federal Bulletin Board's World Group Server™ was upgraded to the 3.0 version. One of the main features of this new version is its use of the Dynamic HTML document format. Dynamic HTML allows for the presentation of file library contents in an HTML format that can be read by any Web browser. The file library listings are updated in real time and can be viewed immediately. Prior to this

ACCOMPLISHMENTS (CONTINUED)

enhancement, any changes to the library structure could only be viewed after the bulletin board server was restarted. In July 2001, a second Federal Bulletin Board server was brought online as a fully duplicated backup to ensure continued availability of the Federal Bulletin Board during the infrequent periods of downtime for routine maintenance.

U.S. Government Online Bookstore

The U.S. Government Online Bookstore serves as the official online bookstore for U.S. Government publications available for purchase from the U.S. Government Printing Office. Available on *GPO Access* at a new and simplified URL, <<http://bookstore.gpo.gov>>, the Online Bookstore links to the Sales Product Catalog (SPC), Superintendent of Documents New Sales Product Releases, Best Sellers, locations of U.S. Government bookstores, information about the U.S. Fax Watch service, and links to the Public Documents Distribution Centers in Laurel, MD and Pueblo, CO. Also, a group of Special Collections is available for customers to browse, including a list of CD-ROMs and other electronic products for sale, sales products by topic, the U.S. Government subscriptions catalog, a Regulatory Catalog, and a link to the Federal Consumer Information Center's Web site that sells GPO's products.

Customers purchasing items through the online Sales Product Catalog (SPC) are assigned a unique GPO Order Number. Customers can reference this number when contacting GPO's Order Division with questions about their order. A detailed transaction receipt is provided after each order submission and a copy of the transaction receipt is sent to the customer's e-mail address, if provided on the online order form. In addition, customers can now choose the American Express payment option when ordering through the SPC.

A number of additional enhancements are planned for the Online Bookstore. These include improved system integration to provide the most up-to-date information and to allow for the fastest possible processing of customer orders; the ability for customers to select special shipping options, such as Federal Express online; and the capability for people placing foreign orders to see all price differentials.

GPOLISTSERV

Through the GPOLISTSERV, GPO users have a quick and easy way to receive up-to-date information on various resources available via *GPO Access*. Customers can subscribe to e-mail listservs moderated by GPO or hosted on *GPO Access* for other Federal agencies. Current lists available include the Federal Register Table of Contents and Merit Systems Protection Board Decisions and Studies Lists. The GPOLISTSERV is available at <<http://listserv.access.gpo.gov>>.

ACCOMPLISHMENTS (CONTINUED)

New Titles by Topic E-Mail Alert Service

The New Titles by Topic E-mail Alert Service, one service of the GPOLISTSERV, allows customers to receive e-mail updates when new publications become available for sale from the Superintendent of Documents. Anyone can sign up for one or more of the following lists free of charge: Business Publications, Elementary and Secondary Education, Defense and Security, Health Care, Military History, and Travel and Tourism. This service can also be reached via the U.S. Government Online Bookstore at the following address:
<<http://bookstore.gpo.gov/alertservice.html>>.

Permanent Public Access and the FDLP Electronic Collection

For 140 years, GPO has produced, distributed, and disseminated Federal Government information products. One mission of GPO in the information age is to provide current and future permanent public access to electronic Federal Government information products of public interest or educational value through the Federal Depository Library Program (FDLP) and on *GPO Access*. As directed by Congress, the primary method of making publications available through the FDLP is online dissemination. In accordance with this initiative, GPO continues to take steps to provide permanent public access to these publications. Ensuring permanent access to the broad range of products in the FDLP Electronic Collection (FDLP/EC) includes *GPO Access* databases, and extends GPO's responsibilities to include other Government information products. The FDLP/EC includes over 224,000 electronic titles, including more than 130,000 titles on *GPO Access* itself and more than 94,000 additional titles on agency Web sites to which GPO links through electronic finding aids.

The FDLP/EC consists of the following elements, all of which are covered by the permanent public access initiative:

- Permanent public access to core legislative and regulatory information managed by GPO on GPO servers
- Permanent public access to agency information managed on behalf of agencies by GPO on GPO servers
- Current access, via GPO's bibliographic data and finding aids, to electronic Government publications that remain on publishing agency servers
- Access to electronic Government publications no longer available on publishing agency servers, utilizing archived copies stored at GPO or on partner servers
- Tangible electronic Government publications housed in Federal depository libraries

Persistent Uniform Resource Locators (PURLs) are assigned to all online resources that will permanently link to a document, wherever it may reside. PURLs are included in the bibliographic records for electronic items cataloged in the *Catalog of U.S. Government Publications* (CGP) available through *GPO Access*. Additionally, to assure permanent public access to electronic U.S. Government information, the FDLP is operating an archive of publications that

ACCOMPLISHMENTS (CONTINUED)

are identified, described, and pointed to as part of the FDLP/EC, when these publications are not part of the FDLP in any other form, nor are they guaranteed to be permanently available by their issuing agency or entity. Users will be directed from GPO's finding aids to the server of the originating agency or entity for as long as the publication is available. At the point that a publication is no longer available from the source, users will be directed automatically to the FDLP/EC Archive, unless it has been removed for reasons of national security, classification, official or administrative use only, or errors in content.

In addition to its archiving activities, GPO is actively working with agencies to ensure that publications on agency servers remain freely available over time through a variety of partnership agreements. For instance, GPO and the National Library of Medicine (NLM) reached an agreement that assures permanent public access to many of NLM's most popular and important titles; included in the agreement are PubMed and NLM Locator Plus, online resources that replaced at least eight titles formerly represented in the FDLP in paper or microfiche. For a complete list of partnerships, see the Other Partnerships section under Outreach.

GPO's efforts in the area of permanent public access included initiating meetings with other Federal agencies, national libraries, Congressional staff, public interest groups, and other organizations outside of the Government that are concerned with the preservation of and access to Government information produced electronically. The Permanent Public Access Working Group has held a series of meetings in an environment of cooperation among those engaged in related activities. GPO has set up a public Web site on *GPO Access* that includes information about the Permanent Public Access Working Group and its members, its goals, and links to resources relevant to the topic. It can be found at <http://www.gpo.gov/ppa>. The activities related to the permanent public access meetings and creation of the Web site helped increase GPO's visibility in this area.

Section 508

In 1998, President Clinton signed the Workforce Investment Act into law. This Act amended Section 508 of the Rehabilitation Act of 1973 to include accessibility requirements for electronic and information technology. Section 508 now requires that electronic and information technology used by the Federal Government, including their Web sites, be made as accessible for people with disabilities as it is for people without disabilities. The Federal Access Board outlined 16 specific accessibility standards implementing Section 508 as it applies to Web pages. The deadline for meeting these standards was June 21, 2001. Although Section 508 currently only applies to executive branch agencies, GPO is committed to ensuring that new and existing *GPO Access* Web pages along with pages on hosted sites meet the 16 accessibility standards outlined in Section 508. Therefore, GPO is currently working to ensure that existing pages on *GPO Access* and hosted sites are Section 508-compliant, and that future pages will be created specifically with these accessibility standards in mind.

ACCOMPLISHMENTS (CONTINUED)

Authentication/PKI

GPO is working towards using Public Key Infrastructure (PKI) to ensure that the files available on *GPO Access* were created by the appropriate authority and re-disseminated securely. Through PKI, documents submitted to GPO electronically will contain a digital signature verifying their authenticity and that they have not been altered. *GPO Access* users will be able to verify that the electronic file was created as part of the official process through the use of a free plug-in available on the Web site. Currently, GPO has a PKI infrastructure in place and preliminary testing has begun using digitally signed congressional bills.

Interactive Training CD-ROM and Revised Training Manual

A CD-ROM version of the *GPO Access* training booklet was released in August 2000. Copies were distributed to Federal depository libraries and made available for purchase through the U.S. Government Online Bookstore. The CD-ROM version provides an overview of the Web interface, instructions for locating and retrieving information, sample searches in popular applications, interactive elements (such as section quizzes and Web links), and videos that capture examples of document searches and retrievals.

Also, an updated print version of the *GPO Access* Training Manual was released in June 2001. This manual replaced the June 1998 edition and includes an overview of *GPO Access*, searching strategies, application information, instructions for tracking legislation and regulations, ordering publications through the U.S. Government Online Bookstore, as well as sample exercises.

Copies were distributed to Federal depository libraries and made available for purchase through the U.S. Government Online Bookstore. In order to provide the most current training manual possible, the manual and its updates are available from the *GPO Access* Help page to print and add/replace pages in the booklet. Updates are announced via various listservs, such as DocTech-L, GovDoc-L, Gateways, and DocWorld.

GPO staff is currently working on production of a new and updated *GPO Access* training CD-ROM to replace the August 2000 version. Future versions of the electronic training manual will be made available online.

STUDIES UNDERTAKEN

In order to support and improve *GPO Access*, a number of studies were undertaken. The following is a summary of the findings.

Search Engine Evaluations

One of the most popular ways in which users find the resources available via *GPO Access* is through major Internet search engines and directories. Therefore, GPO is involved in an ongoing effort to improve the visibility of *GPO Access* pages in major search engines and directories.

The project involves quarterly evaluations of the visibility of seven representative *GPO Access* pages in 23 search engines and directories. Searches were performed in each search engine using five keyword strings for each of the seven *GPO Access* pages. For each page, a title search was conducted, along with four other keyword strings based on the keyword metatags of each page, for a total of 35 searches performed in each search engine. To ensure consistency of results, identical searches were performed during each of the evaluations.

The seventh and most recent evaluation showed an overall increase in the positioning of *GPO Access* pages in the 23 search engines studied. Top 30 search returns increased from 29% in the sixth evaluation to 33% in the seventh; top 10 returns increased from 24% to 25%; and top 5 returns increased from 21% to 23%. Of the seven *GPO Access* pages studied, five increased in percentage of top 30 returns and only two decreased since the sixth evaluation. These increases are signs that the various measures undertaken to improve positioning seem to be working. A description of these measures follows.

Based on the feedback given at various Open Forums, the keyword metatags for the seven pages in the project were re-evaluated. The result was a complete revamp of the keyword metatags of these pages. A few specific strategies were followed during this evaluation. The first was the elimination of keyword metatags that seemed to be ineffective or repetitive. The second was to rank the keyword metatags in order of importance. Information gathered from various sources revealed that keywords at the beginning of a list of keyword metatags are considered more important and therefore be weighed more when that page is indexed by search engines.

In addition to the re-evaluation of the traditional metatags, GPO is monitoring the emergence of a standardized set of metadata to describe online resources, one of which is Dublin Core. This is an initiative that is attempting to adopt a common set of elements for resource description. Composed of 15 different elements (i.e. Name, Author, Contributor, Coverage, etc.), Dublin Core is intended to be imbedded within the HTML metadata of Web pages, and has the potential to become the standard form of metadata for Web pages. For these reasons, Dublin Core has been inserted into the metadata of a number of *GPO Access* pages.

It was also determined that manual URL submission to search engines was not effective enough to improve positioning. Therefore, GPO has procured a software

STUDIES UNDERTAKEN (CONTINUED)

package and has subscribed to a fee-based service to assist in the process of URL submission. The service submits ten *GPO Access* URLs to over 1,000 search engines on a monthly basis. The submission software is employed on a periodic basis.

After the previously mentioned measures were taken, it was still deemed necessary to learn more about the rapidly changing field of search engines and directories. Therefore, research is being done through a number of channels. First, GPO has subscribed to a fee-based Web site that is maintained by personnel who are considered the leading information experts in the industry. The site provides information on how search engines and directories work, as well as the latest developments in the industry. GPO personnel also obtained information at a recent Search Engine Strategies Conference, at which personnel from many search engines were attendees and speakers.

Based on the information gathered from these various channels of research, GPO has implemented a test of paid positioning on the popular search engine GoTo, which powers the paid listings that appear on many other popular search engines. These tests will initially focus on the U.S. Government Online Bookstore portion of *GPO Access*, the results will be studied, and a decision will be made regarding how to proceed in terms of the rest of the site.

GPO will continue to monitor the latest developments in Internet search engines and adjust its strategy accordingly. Quarterly reports will also continue to be generated.

Legislative Resources Comparison Report

In March 2001, the third in a series of evaluations of legislative resources was conducted to further GPO's efforts to improve coverage of congressional and other legislative information on *GPO Access*. This report compares the legislative resources available via *GPO Access* to resources on other sites. This iteration was a continuation of the baseline evaluation in October 1999. This evaluation reviewed the congressional and other legislative branch information available through *GPO Access* and compared the data to other relevant Government and non-government Web sites. Three factors were analyzed: (1) what resources are available; (2) the scope of the resources; and (3) the source of the resources.

To preserve continuity, the same sites were reviewed in all three evaluations to see if any changes had occurred, such as expanded years of coverage or newly added legislative resources. In-depth comparison and analyses were conducted on four Government Web sites: *GPO Access*, THOMAS (run by the Library of Congress), the House of Representatives Web site <<http://www.house.gov>>, and the Senate Web site <<http://www.senate.gov>>. The same comparison and analyses were conducted on three commercial, fee-based Internet services: Congressional Universe, CQ.com, and Lexis-Nexis. The March 2001 comparison yielded these key findings:

STUDIES UNDERTAKEN (CONTINUED)

- Often, even if THOMAS, the House Web site, or the Senate Web site has a particular legislative resource, there is often a link back to *GPO Access* for other available file formats of a document. There are also disclaimers stating that GPO produces the only “official” version of certain legislation.
- *GPO Access* is still the leader among the compared sites, housing 19 of the 22 legislative resources measured.
- *GPO Access* has not added any new categories of legislative resources since July 2000; however there is now a browse feature for the *United States Code*, which increases the usability of and access to current legislative resources.
- The *Statutes at Large* are represented as being housed on Lexis-Nexis; however, this is merely a table indexing the *Public Laws*.
- Whereas the commercial sites appeared to be playing “catch-up” in July 2000 by adding more of the resources on *GPO Access*, no resources have been added to the sites since then. Therefore, none of the sites have gained any ground on *GPO Access*.
- None of the sites houses all 22 legislative resources compared, but *GPO Access* makes available the greatest number (19) of resources.

The tables below present a summary comparison of the number of resources on each service:

GPO Access Compared to Government Web Sites:

<i>GPO Access</i>	19
THOMAS	6
House Web site	4
Senate Web site	3

GPO Access compared to non-Government Web sites:

<i>GPO Access</i>	19
Lexis-Nexis	16
Congressional Universe	12
CQ.com	8

In comparison to other governmental and commercial sites, *GPO Access* continues to be the innovative leader and custodian of legislative resources, providing a high level of comprehensive, free legislative information to the public. To get the full report with full analysis and accompanying graphs and tables, please see <fedbbs.access.gpo.gov/access.htm>. Click on Legislative Resources Comparison report.

Performance Measures for Federal Agency Websites

GPO Access Performance Measures were examined in the “Performance Measures for Federal Agency Websites” report, conducted by Charles R. McClure of Florida State University, J. Timothy Sprehe of SIMA Inc., and Kristen Eschenfelder of the University of Wisconsin, and released on October 1, 2000. The report was funded by the Energy Information Administration, Defense Technical Information Center, and U.S. Government Printing Office. The full text of the report is available on the Federal Bulletin Board at <<http://fedbbs.access.gpo.gov/measures.htm>>.

STUDIES UNDERTAKEN (CONTINUED)

The main objectives of the study were to identify the current best practices in Federal agency Web site performance monitoring, and to develop standard measures that should be used by Federal agencies to evaluate the services being provided by their Web sites. *GPO Access* fared well in the review of current practices, with the report suggesting that the strategy for assessing *GPO Access* “could serve as a guideline for other agencies in establishing or amending their Web site development strategies.”

PARTNERSHIPS

GPO's partnerships with other Federal agencies and depository libraries save time, money, and resources by providing effective, inexpensive methods of disseminating information while eliminating duplicative efforts. The benefits of this type of cooperation are far-reaching, extending to the public, agencies that are directly involved in the partnerships, and the Federal Government as a whole.

Client Agencies

Internet-related services that GPO performs for other Federal agencies include hosting and maintaining agency Web sites, Government Information Locator Service (GILS) records, databases, and other electronic files. *GPO Access* currently hosts 17 Federal agency Web sites and databases of GILS records for over 30 agencies.

Non-Government Partnerships

GPO has agreements with depository libraries to provide online Government information content and services. These include the following:

Partnership with the University of Central Oklahoma Chambers Library

The University of Central Oklahoma (UCO) Chambers Library, in partnership with the Government Printing Office, assumed responsibility for the "Browse Government Internet Sites by Topic" finding aid in 1999. The UCO Chambers Library maintains this locator tool, a browseable list of subject-oriented bibliographies of Government Web sites, and coordinates volunteers from the Federal depository library community to develop or contribute to a topic on a regular basis.

Partnership with the University of North Dakota, Chester Fritz Library

In August 2001, the Federal Depository Needs and Offers (N&O) online list service was transferred to the University of North Dakota, Chester Fritz Library, through a partnership agreement. The N&O is a tool used by depository librarians for collection development purposes, in which selective depositories seeking to dispose of publications withdrawn from their collections may list the availability of publications to other depositories. Depository libraries can offer their discards that are over 5 years old through the Needs and Offers site once they have followed their Regional's processes for weeding publications from the depository collection. This service was formerly provided by volunteers from the Federal depository library community.

Partnership with the National Library of Medicine

As a result of a partnership between GPO and the National Library of Medicine (NLM), the NLM has agreed to provide permanent public access to several of their publications. The permanent and free public access agreement allows these online publications to supersede several paper titles in Federal Depository Libraries:

MEDLINE is the National Library of Medicine's bibliographic database, containing information on the fields of medicine, nursing, dentistry, veterinary medicine, and the preclinical sciences. MEDLINE indexes articles from more

PARTNERSHIPS (CONTINUED)

than 4,300 international biomedical journals, and contains all citations published in *Index Medicus*. Bibliographic citations are available for publications from 1966 to the present.

Medical Subject Headings (MeSH) is the National Library of Medicine's controlled vocabulary thesaurus. The National Library of Medicine uses the MeSH thesaurus for indexing articles from biomedical journals; for cataloging books, documents and audiovisuals; for indexing the MEDLINE database; and for headings used as index terms in the *Index Medicus*.

NLM LocatorPlus is the catalog of books, journals, and audiovisuals available through the National Library of Medicine. LocatorPlus also includes access points to other medical research tools.

Other Partnerships

In addition to NLM, UCO, and North Dakota, GPO has standing partnerships with several Federal agencies and educational institutions to provide online Government information content and services.

- The DOE Information Bridge: A component of EnergyFiles that provides free access to full-text reports and bibliographic records of DOE research and development in areas such as physics, chemistry, materials, biology, environmental science, energy technologies, engineering, computer and information science, and renewable energy. This collection includes over 72,000 reports produced by DOE and the DOE contractor research and development community that have been received and processed by OSTI since January 1995. Users can search for and download information electronically.
- *PubSCIENCE*: Allows users to search across a large compendium of peer-reviewed journal literature with a focus on physical sciences and other disciplines of interest to DOE. Searches return abstracts and citations for relevant articles from more than 1,000 separate journal titles. These abstracts and citations contain links to the publishers' servers, where users may retrieve full-text articles through a journal subscription, on a pay-per-view basis, by special arrangement with a publisher, or through a library or commercial provider. Unrestricted access is granted for the full text of some articles.
- U.S. State Department Foreign Affairs Network (DOSFAN) Electronic Research Collection: Provides permanent public access to archived, electronic State Department documents made available through a partnership of the U.S. State Department, the University of Illinois at Chicago, and GPO.

PARTNERSHIPS (CONTINUED)

- University of North Texas Research Collections: Provides permanent public access to electronic publications from disbanded Federal agencies through a partnership between the University of North Texas and GPO. Currently includes publications from the Advisory Commission on Intergovernmental Relations, the Commission on Structural Alternatives for the Federal Courts of Appeals, the National Civil Aviation Review Commission, and the Department of Transportation's Office of Technology Applications' Highway TechNet, among others.
- Federal Agency Internet Sites: This tool allows users to search or browse a list of Federal agency Internet sites through a partnership between Louisiana State University and GPO. This list reflects the structure of the Government as identified in The United States Government Manual.
- Documents Data Miner: Provides an extensive suite of tools for finding information in the List of Classes of United States Government Publications and other administrative files through a partnership of Wichita State University, the National Institute for Aviation Research, and GPO.
- Enhanced Shipping List Service: Enables Federal depository libraries to generate check-in records and call-number labels for depository items through a partnership between the University of New York at Buffalo and GPO.
- GPO has also signed a new agency permanent public access agreement with the National Renewable Energy Lab in Golden, CO. for their electronic reports.
- GPO is in negotiations for an FDLP site for Census 2000 Summary files.

CBDNet

In August 1996, GPO entered into a strategic alliance with the Department of Commerce to develop and operate an online version of *Commerce Business Daily* (CBD) to be known as *CBDNet*. Through a collaborative effort involving virtually every area of GPO, *CBDNet* went live on December 6, 1996, receiving wide acclaim. Since then, *CBDNet* has operated in a consistently award-winning manner while achieving the original alliance goals of utilizing available information technology to create a system that worked better, cost less, and expanded the availability of procurement information. *CBDNet* stands as a lesson in cooperation not only between two agencies, but also within GPO itself.

A recent change in the Federal procurement process will bring about the end of this successful alliance on January 1, 2002. After the *CBDNet* system is used by the Federal contracting officials to submit notices for publication in the final edition of *Commerce Business Daily* (dated January 4, 2002) the submission

PARTNERSHIPS (CONTINUED)

portion of the system will be shut down. All of the notices validated for publication in the final issue will remain accessible in the active database for the required 15 days, until they pass into the archive database and the active database will be shut down.

The archive database will remain permanently accessible to the public through *GPO Access*. This will ensure that the public continues to have historical reference access to the procurement activities of their Government during the five-year life of *CBDNet*. While usage will not be as great as the millions of notices traditionally retrieved each month from the active database, usage patterns for the archive database prove that it is an important and necessary resource for *GPO Access* users.

TRAINING & USER SUPPORT

The three primary means by which GPO educates users about the products and services offered on *GPO Access* are training classes, demonstrations at conferences and trade shows, and the *GPO Access* User Support Team.

Training Classes & Demonstrations

The continued and rapid growth of *GPO Access* has translated into a number of requests for training classes and demonstrations to help educate users about electronic products and services. In addition, GPO has participated in many trade shows. During FY 00 and FY 01, staff from the Office of Electronic Information Dissemination Services (EIDS) conducted approximately 25 hands-on training classes and demonstrations on *GPO Access* for Federal depository librarians, members of Congress, and the general public, both locally and across the country. Recent sessions were conducted in Pasadena, Indianapolis, Minneapolis, San Francisco, and Atlanta. (Refer to **Appendix G** for a full list of training sites and conferences).

By combining multiple activities in the course of one trip, GPO was able to maximize coverage of the widest possible geographic area with minimal costs. Consequently, *GPO Access* training classes are scheduled generally only in conjunction with trips where exhibits are planned at trade shows.

User Support Team

Users needing assistance with *GPO Access* can contact the *GPO Access* User Support Team. These highly trained specialists are available Monday through Friday (except Federal holidays) from 7:00 a.m. to 5:30 p.m. On average, the Team receives 6,100 inquiries per month, including approximately 4,000 phone calls and 2,100 e-mail messages. Due to the unique nature of the recent Presidential election, the number of calls and e-mails received by the Team increased dramatically. During the month of December 2000, for example, the Team responded to over 10,000 user inquiries. Despite this large volume, the Team was able to respond to the additional load in a timely and expert fashion. The Team may be reached via:

E-mail: gpoaccess@gpo.gov
Phone: 1-888-293-6498 (toll-free)
202-512-1530 (DC Area)
Fax: 202-512-1262

USER FEEDBACK

On a daily basis, GPO monitors user feedback about *GPO Access* from telephone calls, e-mail messages, faxes, and letters. GPO also uses more formal means of soliciting comments about and evaluations of its online products and services, such as user surveys and focus groups. Many of the improvements that have been made to *GPO Access* are in response to feedback GPO staff has received through these channels.

Usability Testing

In the ongoing process of gathering user feedback, two sessions of usability tests of *GPO Access* were performed, one coinciding with the Computers in Libraries Conference on March 14-16, 2001 and the other with the 2001 Fall Depository Council Meeting. The usability tests involved watching participants who use the site perform a series of scripted tasks on *GPO Access*. The participants were asked to perform tasks of varying degrees of difficulty within a specified period of time. These tasks assessed various areas of *GPO Access* including the *U.S. Government Online Bookstore*, *Code of Federal Regulations*, the Help feature, as well as overall site layout and ease of use. The testing sessions were videotaped for future reference and analysis by GPO staff.

Usability testing continuously proves to be a very useful way to obtain direct, observable user feedback regarding *GPO Access* and its usability. One of the volunteers had no previous experience with *GPO Access*; the others had varying degrees of knowledge and familiarity with the site. The range of experience of the users gave a respectable cross-section of the average user. Many of the problems that users encountered have simple design solutions such as changing the icons at the bottom of the screens to be more apparent as to their function and use.

There are plans for future usability studies for *GPO Access*, including a test to determine which search engines and search terms users employ to find *GPO Access* and its applications. More usability testing will be completed through partnerships with the library community.

GPO Access User Survey

On July 25, 2001, a User Survey was posted on *GPO Access*. It was the fourth annual user survey distributed in an effort to learn about *GPO Access* users, their usage patterns, and their opinions of *GPO Access*. By the deadline of September 30, 2001, 478 responses were received. Below, are some of the survey's key findings.

- Personal Affiliation: Federal depository library (35%); general public (20%); government (14%); other (13%); academic/education (12%); non-depository library (7%).
- Times *GPO Access* used per month: 10+ (36%); 0-2 (27%); 3-5 (19%); 6-10 (18%).
- Gained knowledge of *GPO Access*: Federal Depository Library (24%); Internet search (20%); link from another site (16%); training class (11%); conference/trade show (5%); other (26%).

USER FEEDBACK (CONTINUED)

- The most frequently used Finding Aids were: *Catalog of U.S. Government Publications* (21%), Government Sites By Topic (16%), Federal Agency Internet Sites (16%), Government Information Products For Sale By Topic (11%), Sales Product Catalog (10%), Government Information on Selected Internet Sites (9%), New Electronic Titles (8%), Government Information Locator Service (8%), and other (1%).
- Percentage of the time users find the information they needed: 75%-100% (46%), 50%-75% (32%); 0%-25% (10%); 25%-50% (8%); never (3%).
- *GPO Access* Site Search page rating: Good (44%), Fair (28%), Excellent (15%), and Poor (14%).

Ben's Guide to U.S. Government for Kids Survey

In December 2000, GPO posted two user surveys geared toward assessing the effectiveness of Ben's Guide to U.S. Government for Kids and obtaining ideas for further development of the site. One survey was targeted to students from kindergarten through twelfth grade. The second focused on obtaining feedback from parents and educators. The survey was posted for two weeks, and during that time, over 1,000 responses were received. Key findings are summarized below:

Feedback from Students:

- 39% of the students found the site through a teacher and 43% through an Internet search.
- Most students were in either grades 3-5 or 6-8.
- According to the students, the most popular sections on Ben's Guide were branches of Government (52%), the election process (46%), and games and activities (46%).
- 94% of the students found the sections on Ben's Guide easy to understand.

Feedback from Adults:

- 57% of the adults surveyed were teachers.
- 56% of the adults found the site through the Internet.
- Survey participants felt that the most useful sections were branches of Government, the election process, games and activities, curriculum links, and U.S. Government Web sites for kids.
- The most requested features to be added according to survey participants were lesson plans, quizzes, as well as alternative versions of the site (i.e. print and online interactive version).
- 96% of adults felt the sections on Ben's Guide were written appropriately for the targeted grade ranges.

USER FEEDBACK (CONTINUED)

Focus Groups

To further improve *GPO Access*, GPO regularly conducts focus groups throughout the country. These sessions provide insight into how people use *GPO Access* and how the various services could be revised, improved, and enhanced. Participants include congressional staff, Federal depository librarians, members of trade and professional organizations, private-sector employees, and other public users. All participants were uncompensated volunteers.

In May 2001, the U.S. Government Printing Office had the opportunity to gather feedback from local students on Ben's Guide to U.S. Government for Kids. The focus group was conducted in conjunction with the Long Island Library Conference held in Long Island, New York. This was the first time a focus group was conducted about Ben's Guide.

Three focus group sessions were conducted that included seventh grade students from Northport Middle School, as well as fifth and first grade students from Ocean Avenue Elementary School. The goal of the focus group was to gather information on the usability and curriculum appropriateness of the site, as well as technical and reading comprehension skills of the students.

COSTS & SAVINGS

Expenditures and Operating Costs

The *GPO Access* system is much more efficient than originally expected and, consequently, has been less costly than originally estimated by the Congressional Budget Office (CBO). In 1993, the CBO estimated that creating and operating the online computer system would cost approximately \$6 million in appropriated funds over the next five years. In addition, it was expected that provisions allowing free online access for Federal depository libraries would cost between \$2 million and \$10 million per year, assuming appropriation of the necessary funds.⁶ It was also expected that, beginning in FY 1995, GPO would incur annual costs of \$750,000 to keep the directory of publications up-to-date and to maintain the electronic storage facility.

The following table presents total *GPO Access* operating costs and capital expenditures for equipment and software by fiscal year. Operating costs include the recurring costs of providing permanent public access to electronic Government information products housed on GPO servers.

Fiscal Year	Annual Operating Cost
1994	\$696,700
1995	\$1,294,200
1996	\$1,822,028
1997	\$2,749,320
1998	\$3,149,615
1999	\$3,068,083
2000	\$3,114,172
2001	\$3,126,793

Savings and Benefits

GPO Access provides a resource from which users can instantly access a plethora of Federal information free of charge, and it has resulted in cost savings for GPO by reducing distribution of paper copies. In order to meet public expectations for free access to taxpayer-supported information online, *GPO Access* has been available without charge to users since December 1995. *GPO Access* has been cost-effective by expanding public access for a much larger audience of users than was previously available through the distribution of paper documents. *GPO Access* has also resulted in savings for many other Federal agencies that have their web sites hosted on GPO servers. By placing their information on *GPO Access*, agencies reduce the need to expend additional resources and eliminate duplicative efforts. By providing this service, GPO is also saving other Federal agencies the time and resources it would take for them to house their own information.

⁶ *Government Printing Office Electronic Information Access Enhancement Act of 1993* (H.R. 103-108), p. 2

FUTURE OUTLOOK

Many new developments, some of which will require additional resources/funding, are in the works for *GPO Access*. Some plans for Web site improvements and enhanced training efforts are provided below.

Upcoming Applications

Statutes at Large

GPO Access is currently working on creating a new Statutes at Large application. The addition of this application will further enhance *GPO Access* users' ability to track a bill throughout the legislative process.

Browseable Congressional Hearings

In the near future *GPO Access* also hopes to add a browseable list of all Congressional Hearings. A browseable list will provide an alternative to the current Congressional Hearings database that utilizes a search function to retrieve documents.

E-CFR

GPO is working with the Office of the Federal Register, National Archives and Records Administration to provide an *Electronic Code of Federal Regulations* Application (e-CFR), that will be updated daily as opposed to the currently annually updated *Code of Federal Regulations* application. The e-CFR will consist of two linked databases: the "current *Code*" and "amendment files." The current *Code* database will be updated according to the effective dates of amendments published in the *Federal Register*. As amendments become effective, the changes will be integrated into the current *Code* database to display the full text of the currently updated CFR. For future-effective amendments, hypertext links will be inserted into the affected sections or parts of the current *Code* to take users to the pertinent amendment files. Currently, a beta test site of the e-CFR is available via *GPO Access*.

Standardization of Web Pages

The *GPO Access* Web Committee has drafted *GPO Access* Web Design Guidelines. These guidelines are intended to help standardize the publication of pages on *GPO Access*; specifically, the Superintendent of Documents home page and related pages. These guidelines will be modified as technologies and accessibility recommendations change.

Learning Center

GPO has procured equipment and secured a location to conduct hands-on *GPO Access* training classes and demonstrations at the main GPO facility. This new facility will help to minimize costs and leverage the use of available staff to conduct *GPO Access* training classes and demonstrations in the Washington, DC area. It is expected that this facility will be used to provide more training on *GPO Access* to the Federal depository library community, Congressional staff, and other Federal agency personnel who either work in or visit Washington, DC.

FUTURE OUTLOOK (CONTINUED)

XML Extensible Markup Language (XML) is an integral component of the transition to the next phase of *GPO Access*, an enhanced online service that will use standardized data structures to provide additional search and retrieval capabilities. Because the XML structure can be used from the authoring level throughout the publishing process from print and electronic products, regardless of hardware or software, GPO anticipates that it will provide more substantial savings in the Federal sector than the methods that are currently used.

In addition to providing new search and retrieval capabilities, the XML database structure will permit:

- Creation of databases at the authoring stage that are suitable for print, CD-ROM, and online publication, without data manipulation by GPO, allowing the same information to be extracted, reordered, and merged from structured databases.
- Incorporation of data from one publication to another publication that has a different printed format without manipulation (e.g., incorporation of congressional bills into the *Congressional Record* or of *Federal Register* documents into the *Code of Federal Regulations*)
- Submission of validated machine-readable data by publishing customers.
- Automated composition – or “printing on demand” – of data that is extracted from electronically disseminated databases in the same format as the “official” print publication or in another format chosen by the user.

Software Upgrade

GPO is currently seeking a new build/search/retrieval software system for *GPO Access*. New databases that use this technology, such as the e-CFR, will provide numerous enhancements:

- Daily updates to compliment existing WAIS databases
- More numerous and specific Boolean operators to aid in query construction
- The ability to search multiple specific sections in the body of a document
- Enhanced ability to link documents. (e.g., direct links to originating documents in the *Federal Register* from e-CFR search results)

Mirror Site

Plans are under development for a *GPO Access* mirror site, to be housed in a geographically separate location. Initially, the site will consist only of two servers configured to provide offsite storage of GPO data. Subsequent to identifying, procuring, and implementing a replacement for the existing wide area information server (WAIS) search engine, appropriate hardware and connections will be moved to, and/or procured, and then installed at the selected location to permit data to be passed securely to the mirror site. Extensive testing of the transferred data will be performed before the mirror site goes live in a limited capacity. Once the mirror site has been operating at peak levels for data transfer, security, and performance over a predetermined period of time, GPO will explore options for its broader deployment.