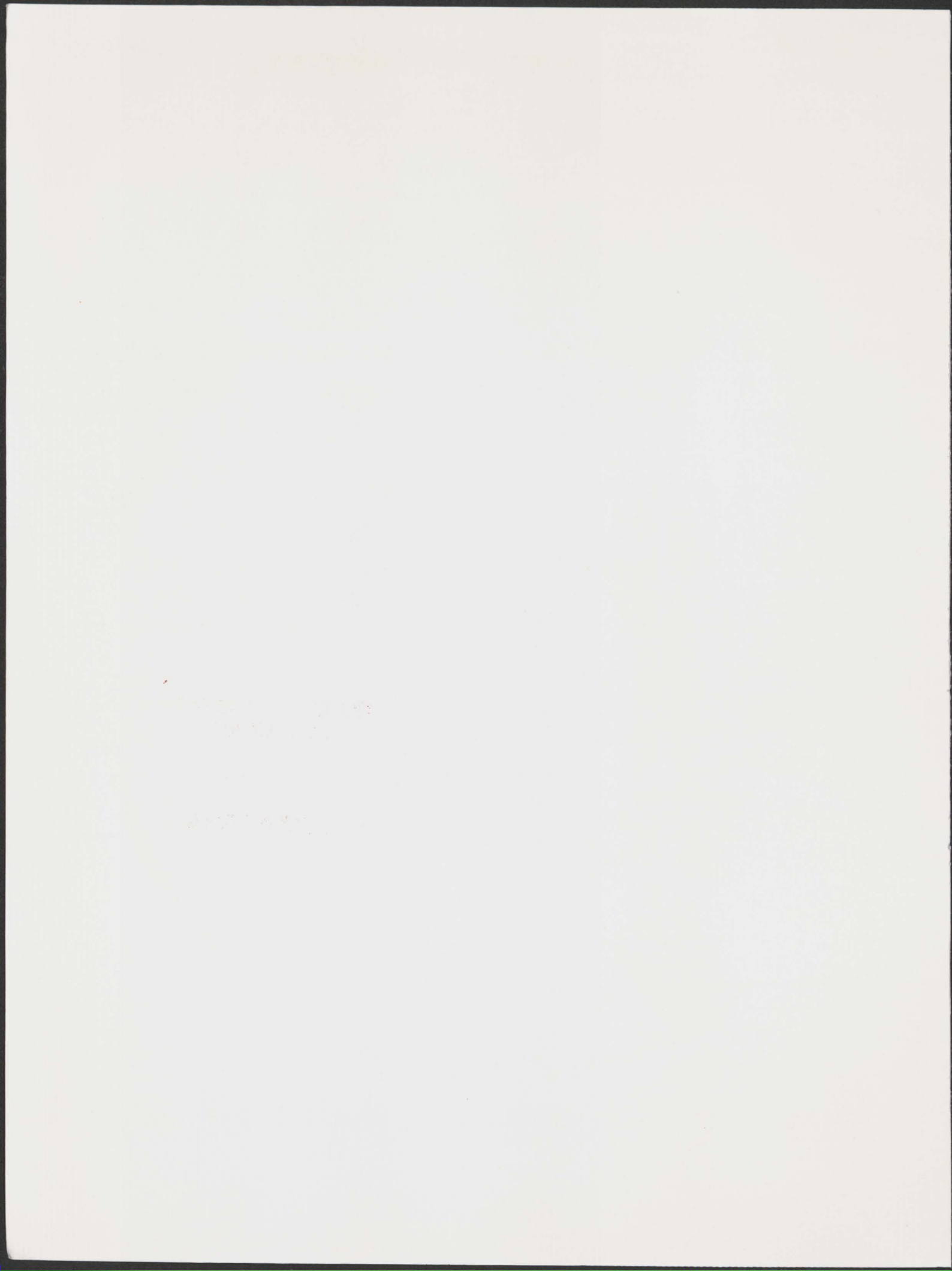# Accessing

....THE ECONOMIC BULLETIN BOARD.........

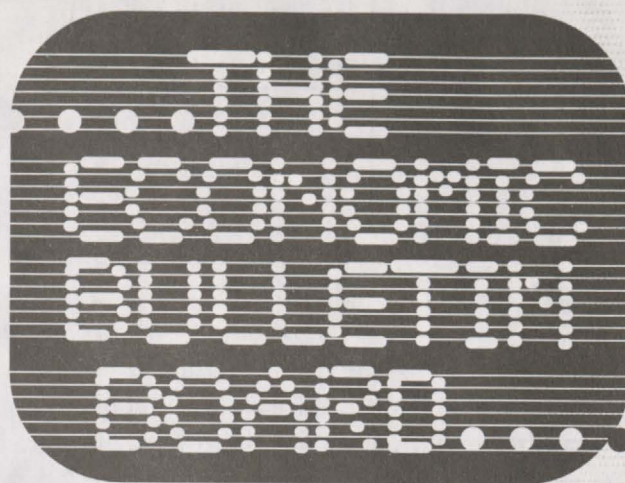Electronic Publications in the Federal Depository Library Program
Pilot Project Report

U.S. Government
Printing Office

Superintendent of
Documents

Accessing

GP 3.2:EC 7

THE ELECTRONIC BULLETIN BOARD

Electronic Publications in the Federal Depository Library Program
Pilot Project Report

U.S. Government
Printing Office

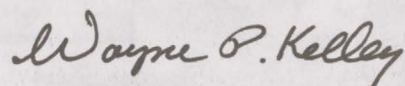March 1994

Superintendent of
Documents

PREFACE

In May 1983, the Joint Committee on Printing (JCP) formed an Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases. The ad hoc committee, chaired by Bernadine Abbott Hoduski of the JCP staff, was composed of individuals nominated and appointed from the public and private sectors who were involved in the production, dissemination, and use of electronic information. Their charge was " . . . to evaluate the feasibility and desirability of providing access to Federal Government information in electronic formats to depository libraries."[1]

The committee's final report affirmed " . . . the principle that the Federal Government should provide access to Federal information, as defined in sec. 1901, U.S.C., title 44, in electronic form through the depository library system" and suggested that the economic feasibility of such an action be investigated. It proposed a pilot project program, under the direction of JCP and the Superintendent of Documents, through which " . . . depository libraries will receive Federal information in electronic form and provide it to the general public free of charge."[2]

This report is the third in a series to be released following the conclusion of the implementation phase of the pilot project program. It describes and evaluates the findings of one of two projects that involved online dissemination of Government publications.

I believe that this report provides useful data on the costs of disseminating Government information online. No less useful are the insights offered by the report into the effects and benefits of providing electronic access in depository libraries for public users of Government information.

Wayne P. Kelley

WAYNE P. KELLEY
Superintendent of Documents

---

[1] Letter of December 9, 1982, from Senator Charles McC. Mathias, Jr. asking organizations and agencies to nominate candidates to serve on the ad hoc committee.

[2] U.S. Congress. Joint Committee on Printing. *Provision of Federal Government Publications in Electronic Format to Depository Libraries.* Report of the Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases. (Washington, D.C., U.S. Government Printing Office 1984), p. iii.

Executive Summary

In 1987, the Joint Committee on Printing (JCP) commissioned the Government Printing Office (GPO) to conduct tests for determining the feasibility and practicality of disseminating electronic Government information to the general public through the Federal Depository Library Program (FDLP). This report presents the findings of the *Economic Bulletin Board (EBB)* Pilot Project, one of five projects approved and undertaken to address the JCP request.

The EBB Pilot Project provided the opportunity for 100 test site libraries to have online access to more than 400 files on a bulletin board for current economic news and statistics. A Test Site Selection Survey was distributed to all 1,398 depositories in order to identify the libraries that were interested in taking part in the Pilot Project.

The 100 test site libraries were selected from the group of 376 libraries that expressed interest in participating. Among the 745 libraries that declined to be considered for the pilot project, the most frequently mentioned reason was insufficient user interest. Almost 24 percent of those that declined cited a lack of equipment for accessing the data base [Table 3-1].

During the pilot project period, 93 libraries conducted a total of 3,247 online EBB sessions [Table 4-5]. Usage was disproportionate across the libraries, as 17 percent of the test sites accounted for more than half of all sessions. Computer work stations were generally available to most users and, when the EBB was dialed by modem, the line was usually not busy.

Users reported accessing 120 of the more than 400 files on EBB during the pilot test period [Table 4-6]. More than half (56 percent) of the libraries reported using the EBB to provide reference services for patrons, while one-third reported using it to download updates of frequently requested statistics [Chart 4-5].

In terms of the EBB's acceptance and utility, 79% of respondents to one survey reported getting the information they were looking for from the EBB [Chart 4-8]. Sixty-nine percent were generally or very satisfied with EBB [Chart 4-9]. Seventy-seven percent of respondents to another survey reported that the EBB made their work easier rather than harder [Chart 4-10]. A substantial majority of users indicated that the EBB provided information that is more up-to-date than what was available in the library before. However, survey results were more divided over whether the EBB offered a more useful format or whether it provided new information [Table 4-7 and Chart 4-11].

A majority of EBB users believed there was some overlap with certain Government documents [Chart 4-12]. However, when respondents representing the libraries were asked if EBB access would be an acceptable substitute for specific titles, such as

Consumer Price Index, most did not consider the EBB an acceptable substitute [Table 4-10].

Almost three-quarters (74 percent) of the libraries encountered one or more major problems in using the EBB. The problem mentioned most frequently (by 26 libraries) was that the EBB was not user friendly or lacked a search capability [Table 4-11]. Of the 27 distinct improvements that libraries suggested for the EBB, the one most often cited was that more detailed information be provided as to EBB file content, location, and update times [Table 4-12].

The Government cost of the EBB Pilot Project was $15,000, the amount paid by GPO to the Department of Commerce as a transfer payment. Pilot project libraries reported an average of $289 per library in staff expenses for setting-up EBB and for training staff and others to use the system [Table 5-2]. The libraries also covered their own telecommunications costs, which averaged $89 per library for the Pilot Project period [Table 5-3]. The average total EBB cost to libraries was $463 [Table 5-4]. Asked whether library cost considerations may have served to restrict library use of the EBB, more than two-thirds (69%) of EBB users responding to one survey indicated that such considerations restricted use to "little or no extent".

The EBB Pilot Project demonstrated the technical *feasibility* of disseminating Government documents online to the general public through the FDLP. Although useful information was obtained about the *practicality* of online dissemination, the results are not conclusive due to limitations in the scope of the EBB Pilot Project and its evaluation.

TABLE OF CONTENTS

LIST OF CHARTS

Section 4, Survey Results

Section 5, Cost Analysis

LIST OF TABLES

LIST OF ABBREVIATIONS AND CONVENTIONS USED

Abbreviations

EBB	Economic Bulletin Board
FDLP	Federal Depository Library Program
FY	Fiscal Year (October 1 through September 30)
GAO	General Accounting Office
GPO	U.S. Government Printing Office
ITP	Information Technology Program
JCP	Joint Committee on Printing
LPS	Library Programs Service

Conventions

A. Terms

Libraries:
Academic, public and other libraries in the Federal Depository Library Program.

Librarian:
Library project coordinator who supplied responses to questions on the Library Survey on behalf of the library administration and staff.

EBB:
The Economic Bulletin Board, an online service offering current economic information, sponsored by the U.S. Department of Commerce.

User:
Individual that had actual experience with the EBB and completed a User Survey. The user might be a member of the library staff or a library patron.

B. Numbers

Percentages are rounded to the nearest whole number.

Unless stated otherwise, the survey percentages cited are based on the number that responded to a particular survey question, rather than the total number of possible respondents.

Numbers in parentheses ( ) denote response frequencies for specific survey questions; for example, (314), refers to the number of librarians who checked the Test Site Selection Survey, question 2, choice 1.

Numbers and letters in brackets [ ] are references to particular survey questions; for example, [C2], would refer to Library Survey, question 2.

C. Other

The online User Survey for librarians differed only slightly from the online User Survey for library patrons. In the interest of clarity and simplicity, responses to both the librarian and patron online User Surveys were combined for purposes of analysis and presentation in this report.

INTRODUCTION

Background of the Pilot Projects

Since the 19th century, the Federal Government has been making its publications available for free use by its citizens in local communities across the country. Congress established the Federal Depository Library Program (FDLP) to bring Government information[1] into every congressional district in the Nation.[2]

The FDLP is administered by the Superintendent of Documents, U.S. Government Printing Office (GPO), with oversight by the Joint Committee on Printing (JCP). It is a partnership of Government publishers, GPO, and approximately 1,400 academic, public, Federal, and other libraries. This partnership allows Federal publishers to use the dissemination mechanisms of GPO and the services of the designated depository libraries to make their publications available to the public.[3]

Dissemination of publications to depository libraries was done primarily in paper format until the late 1970s. Microfiche format was introduced in 1977 for the purpose of reducing administrative costs to the FDLP[4], and, by the end of fiscal year 1991, more than 62 percent of the publications distributed through the FDLP were in that format.[5]

Concern has been expressed in recent years about the lack of public access to electronically-stored Federal Government information. As early as 1979, the American Library Association, in its support of a proposed revision of title 44 of the *U.S. Code*, affirmed that distribution to depository libraries should include publications in electronic databases as well as those in the traditional paper and microfiche formats.[6]

The JCP's Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases

---

[1]In this document, the terms "Government information" and "Government publication" are used interchangeably. According to GPO's General Counsel, " . . . whenever an agency 'publishes' information, that is, intends to, and does, disseminate it to the general public—in whatever form—the information constitutes a 'Government publication' within the meaning of [Title 44 *U.S. Code*] Section 1901. This would include, therefore, a publication in electronic format." U.S. Government Printing Office, Office of General Counsel, "GPO Dissemination of Federal Agency Publications in Electronic Format", Memorandum, May 22, 1989, p. 5.

[2]Authorization for the FDLP is in Title 44 *U.S. Code* Chapter 19.

[3]During the fiscal year 1991, Library Programs Service (LPS), the operational arm of the FDLP within GPO, distributed nearly 27 million copies of publications from the legislative, executive, and judicial branches of Government to the designated depositories.

[4]Letter from Hon. Howard W. Cannon, Chairman, Joint Committee on Printing, to Thomas F. McCormick, Public Printer, authorizing the Superintendent of Documents to convert publications to microfiche " . . . when savings in costs are clearly demonstrable . . . ", March 25, 1977.

[5]U.S. Government Printing Office, Library Programs Service, "Depository Library Statistics for Fiscal Year 1991".

[6]American Library Association Council Resolution, "Revision of Title 44, Public Printing and Documents", Adopted in Dallas, Texas, June 28, 1979. Cited in U.S. Congress, Committee on Rules, Subcommittee on Rules of the House, *The National Publications Act of 1980, Hearings on H.R. 5424*, 96th Cong., 2d session, May 14 and 21, 1980, p. 125.

recommended that the economic feasibility of dissemination of electronic information to depositories be investigated through a pilot project program.[7] In 1987, JCP asked GPO to implement pilot projects to test the committee's belief that " . . . new and emerging electronic technologies could make it possible to distribute government information to Depository Libraries at substantial cost savings to the program."[8]

In response to the JCP request, the Superintendent of Documents established the Information Technology Program (ITP) to coordinate the planning of the recommended pilot projects.[9] A single full-time position was designated for the ITP while GPO sought funding to conduct the pilots according to the ad hoc committee guidelines.[10]

In 1988, a draft plan for the pilot projects was published for comment.[11] Entitled *Dissemination of Information in Electronic Format to Federal Depository Libraries*, it described five discrete dissemination activities with estimated costs. The pilot project plan was approved by JCP in May 1989, and, as the initial request for appropriated funds to conduct the pilots was rejected, GPO agreed to conduct the pilot projects with existing resources.[12] The General Accounting Office (GAO) was enlisted to provide technical assistance to GPO for the evaluation activities.

Goal and Objectives of the Pilot Projects

JCP provided the goal for the pilot projects when they asked GPO to begin work on a program to carry out the tests as recommended by the ad hoc committee. In a letter to the Public Printer, Hon. Frank Annunzio, then Chairman of the JCP, stated that the purpose of the pilot projects was to " . . . test the feasibility and practicality of disseminating electronic government publications to Depository Libraries in electronic formats."[13]

The ad hoc committee established objectives for the pilot projects in a 1987 report that

---

[7]U.S. Congress, Joint Committee on Printing, *Provision of Federal Government Publications in Electronic Format to Depository Libraries.* op. cit., p.10.

[8]Letter from Hon. Frank Annunzio, Chairman, Joint Committee on Printing, to Ralph Kennickell, Jr., Public Printer, May 7, 1987.

[9]Letter from the Public Printer, Ralph Kennickell, Jr. to Hon. Frank Annunzio, Chairman, Joint Committee on Printing, July 14, 1987.

[10]U.S. Congress, House of Representatives, Committee on Appropriations, *Legislative Branch Appropriations for 1988, Hearings*, 100th Cong., 1st sess., p.782.

[11]U.S. Government Printing Office., Library Programs Service, *Administrative Notes*, July 1988, pp. 15-18 [See Appendix A.].

[12]In the Appropriations Hearings for fiscal year (FY) 1988, the Public Printer requested $800,000 to initiate the first year of a proposed 5-year pilot project program. This request was "not allowed" pending release of a study by the Office of Technology Assessment—a study which came to be called *Informing the Nation*. [See: U.S. Congress, House of Representatives, Committee on Appropriations, *Report to Accompany H.R. 2714: Legislative Branch Appropriations Bill, 1988*, 100th Cong., 1st sess., Report 100-173, p. 30.] Appropriated funds were not requested in either FY 1989 or FY 1990. In the FY 1991 budget for the Office of Superintendent of Documents, Salaries and Expenses, $80,000 was appropriated for the pilot projects. [See: U.S. Congress, Senate. Committee on Appropriations, *Report to Accompany S. 3207: Legislative Branch Appropriations Bill, 1991*, 101st Cong., 2d sess., Report 101-533, p. 36.] The costs for conducting the pilot projects have, in essence, been funded out of existing appropriations.

[13]Letter from Hon. Frank Annunzio, op. cit., footnote 8, p. 2.

indicated that " . . . both the usefulness and cost of disseminating Federal information in electronic format . . . should be tested by projects that included both online and distributed dissemination".[14] To accomplish these objectives within the resources allocated, projects were selected and evaluations were designed that would be able to provide information on the following:

- Ability of the Government to disseminate information in electronic formats through the FDLP.

- Integration of Government electronic information into depository libraries.

- Use and usefulness of Government information in electronic formats.

- Costs of distributing Government information to depository libraries in electronic format.

Description of the Pilot Projects

The pilot project plan included project descriptions and estimated costs of different types of Federal agency databases that would be disseminated to depository libraries using electronic technologies.

Three of the five pilot projects involved agency databases distributed on compact disc, read-only-memory (CD-ROM).[15] The Bureau of the Census' *Test Disc #2* Pilot Project, the Environmental Protection Agency's *Toxic Release Inventory* Pilot Project, and the JCP's *Congressional Record* Pilot Project each featured this space-saving technology that evolved from audio compact discs in the mid-1980s.

The remaining two projects examined depository library access to online databases of the Department of Commerce and the Department of Energy.

Pilot Project Reports

Each of the pilot projects is to be fully described in individual project reports which will be consolidated into a report of all pilot project findings. The *Economic Bulletin Board* Pilot Project is the subject of this report.

Findings from the *EBB* study are conveyed in the body of the report, with detailed backup data in the appendixes. The Survey Results section supplies details about most of the data collected

---

[14]U.S. Congress. Joint Committee on Printing. Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases. "Report to the Joint Committee on Printing", January 14, 1987.

[15]CD-ROM is a molded plastic digital storage medium that is 4.72 inches in diameter and weighs approximately 1 ounce. It can hold large quantities of data (over 600 megabytes) that cannot be altered by the user. The data is read optically by a laser beam in a CD-ROM drive which is usually connected to a personal computer.

from the libraries. The Cost Analysis section describes the Government and library costs associated with the EBB Pilot Project.

The Economic Bulletin Board

The Economic Bulletin Board was established in 1985 by the Department of Commerce to provide timely access to statistics and other current economic news. It contains a variety of data published by Commerce Department offices and several other sources, including the International Trade Administration, Bureau of Economic Analysis, Census Bureau, The Bureau of Labor Statistics, Federal Reserve Board, and the Treasury Department. Examples of information available through the Economic Bulletin Board include the Consumer Price Index (CPI), Gross National Produce (GNP), employment statistics, and Daily Trade Opportunities for Exporters (TOPS). In 1990 there were about 2,300 paid subscribers to the Economic Bulletin Board service.

The Economic Bulletin Board is available to dial-up users 24 hours a day. It typically contains about 30 megabytes of data in over 400 files. Archival data is not retained on the bulletin board. Rather, data files are replaced as soon as new information becomes available. Many widely-used statistics, such as the CPI, are loaded onto the bulletin board within 15 minutes of their official release. Two-thirds of the files on the bulletin board are updated on a quarterly or monthly basis. Selected information, such as TOPS, may be updated daily. Many files on the Economic Bulletin Board are text files, and contain data exactly as it appeared in Commerce Department press releases. Other files are in Lotus 1-2-3 (or compatible) format to facilitate data manipulation by the end user. Appendix G contains a complete list of the files that were available on the Economic Bulletin Board in July 1989.

Online bulletins, which contain general economic news, calendars of release dates for upcoming news, and points of contact in economic statistical agencies, are designed to be read while signed onto the EBB. The core of the EBB--representing over 95% of the data on the bulletin board--is comprised of files that are intended for downloading to a PC for later viewing or manipulation. Such files include the major economic press releases and specific economic information. Users equipped with dumb terminals can view or print out the files locally. In addition, the EBB provides programs for accomplishing "housekeeping chores", such as changing passwords and leaving messages for the system operator.

The following examples illustrate the kinds of questions that can be answered using the EBB:

- What was the Consumer Price Index just released by the Commerce Department?

- What are the latest figures available on single family home sales for the U.S.?

- How can I find out the latest Producer Price Index issued by the Bureau of Labor Statistics?

- Can you give me the personal income levels by county for this state?

- I'd like to look at the "trade opportunities" issued today to see what kinds of products or services my company might be able to sell in overseas markets.

One does not need to be an advanced computer user to make effective use of the EBB. Easy-to-use menus guide users through most of the steps needed to access the information. Online help is available for assistance in using specific commands. Documentation that clearly explains how to use the bulletin board, along with telephone support, are available to EBB users.

STUDY APPROACH AND METHODOLOGY

The intent of the EBB pilot project study was to develop information for the JCP about the feasibility and practicality of electronic information dissemination through the Federal Depository Library Program. The approach and methodology for the evaluation of the EBB project was derived from the project plan developed by the JCP, GPO, and Department of Commerce and was designed with consideration of the limited time and resources available to support the study. The intent of the evaluation approach and methodology was to provide descriptive data about the use and usefulness of the EBB, the library environment in which it was accessed, and EBB dissemination costs under a library cost-sharing model. The study approach included a site selection process that provided all depository libraries with (1) an opportunity to indicate interest in participating in the project, and (2) a chance for each interested library to be randomly selected for participation.

Study Approach

Considerations and Limitations

The primary approach adopted for the EBB evaluation was to use multiple survey methodologies administered to participating depository libraries and EBB users. These surveys were designed to obtain descriptive information on various aspects of online dissemination of EBB information--its effects, benefits, and some associated costs. The information obtained from the surveys was supplemented by data recorded by the EBB host computer which tracked the number of online sessions and associated charges. The choice of this study approach was dictated by a number of design considerations in conjunction with project resource limitations.[1] It was not possible to draw a statistically representative sample of the entire depository library population for the study since the project plan limited participation to 100 test sites that voluntarily chose to participate. In order to be statistically representative, the sample would need to be larger, randomly selected, and not restricted to those who volunteered to participate. A significant drop-out rate or refusal to participate in the study would also have to be avoided.

The site selection process, however, was designed to assess the extent of library interest in participating in the project and ensure that the libraries randomly selected from interested libraries would approach the mix of libraries in the depository program on the dimensions of type of library, library size, and geographical location.

Other considerations influencing development of the study approach and methods included:

---

[1] Between 1989 and late 1991, the EBB pilot project, along with three other dissemination pilot projects, was staffed entirely by GPO's Manager of the Information Technology Program with technical assistance from GAO on a half-time basis.

- The need to collect a substantial and diverse amount of study data from participating libraries and knowledgeable individuals during and immediately after the project's seven-month period of operation. Survey methods standardized the data collection process and preparation of data for analysis.

- Balancing the detail with which specific dissemination issues or effects could be examined with the data collection burden placed on participating libraries and individuals. Data collection procedures and controls that could potentially improve the amount and quality of data but impose a significant burden on project participants were not attempted. Requests for information needed to be reasonable and realistic. Moreover, extensive and detailed data collection requirements were not likely to be successfully implemented at the sites.

- The inability of the EBB host computer to identify and track the files accessed by users required that libraries and individual users be queried about their use of EBB files.

- The need to ensure that the study approach assessed but did not determine library procedures for providing access to the EBB. Study methods that significantly interfered with or altered the way the library would choose to provide access to the EBB service would be less likely to yield data indicative of typical or normal library operations. Library and user participation in the pilot project study was strictly voluntary.

- Infeasibility of developing and implementing a conventional cost/benefit assessment given (1) the limited correspondence between the contents of EBB files and paper publications, and (2) the time and project resources needed to develop methods for comprehensively identifying and assessing costs and benefits (e.g., indirect costs to libraries).

Test Site Selection

Before the pilot project study could begin, a site selection method was established to determine which libraries would participate in the pilot project study. The site selection plan was designed to support two objectives--to select sites that reflected the diverse types of libraries that comprise the depository community and to select sites that would attempt electronic information dissemination under special or innovative circumstances. To achieve these two objectives, the site selection process was divided into two parts. Eighty-six of the 100 available test site slots were to be randomly selected from groups of candidate libraries cross-classified on the dimensions of library size, library type, and geographical location (e.g., large, academic, western library). The purpose of the selection process was to obtain a mix of test site libraries that approximated the proportionate representation of these groups in the depository population. The remaining 14 test site slots were set aside for discretionary assignment based on the library's proposal for using the EBB service. Depository type was also of interest, but maintaining proportional representation of regional libraries to selective libraries would severely limit the inclusion of regional libraries as test sites. Given the

regional library's role as a central resource for information dissemination in the depository program, an additional selection requirement was set that, overall, roughly 20% of the project participants be regional libraries.

In accordance with the site selection plan, test site libraries were chosen out of a pool of depository libraries that had indicated their desire to participate in the EBB pilot project study. In volunteering to be considered as an EBB test site, a library agreed to comply with specified conditions for participation. If selected as a test site, a library would have to submit a brief plan outlining 1) how access to the EBB would be provided by their institution, 2) how the library would inform its user community about the availability of the EBB, and 3) the steps that the library would take to train its staff and users on using the EBB.

The libraries selected as test sites were given online access to the EBB, asked to submit their project implementation plans within 30 days of going online, and designate a staff member to serve as Project Coordinator.

Study Methodology

Four survey data collection instruments (DCIs) were developed to collect pilot project data. Three of these surveys were administered in paper format and the fourth survey in electronic format. This electronic format survey was presented to users when they logged on to the EBB. User responses to the electronic survey DCI were recorded by the EBB host computer. The EBB system operator installed and maintained this online survey DCI as well as the data base for tracking the number of sessions and associated session charges for each participating library. All surveys contained a mix of closed-ended and open-ended questions. The open-ended survey questions gave libraries and EBB users an opportunity to express views in their own words. The DCIs were administered at different times during the course of the pilot project.

Data Collection Instruments

The four survey DCIs used for obtaining pilot project data were developed through a joint effort of the GPO, GAO, and Department of Commerce. The process of DCI content development was based on a review of pilot project background literature and other DCIs used to assess online information dissemination. The survey DCIs were pretested with small groups of depository librarians and revised on the basis of their comments and observations.

Test Site Selection Survey: This survey (See Appendix A) was a short, 14-item questionnaire that was designed for use in the initial site selection process. It was sent to all depository libraries before the project began. Responses to certain items on this survey were used to identify the pool of candidate libraries from which to select project test sites. Questions on this survey also assessed the extent of library interest in participating or the reasons why libraries declined consideration as candidate test sites.

Library Survey: The Library Survey (See Appendix C) was designed to capture a single, institutional response from the library test sites at the end of the project period. This survey featured 15 multipart questions that included requests for information on:

- staff time and other library resources expended on EBB activities

- telecommunications costs

- the use and value of the EBB in the library

- problems encountered in using the EBB

- suggestions for improving EBB services

For most of the survey items requesting data on EBB-related expenditure of library resources, there was an accompanying data source question. The data source question asked respondents to indicate whether the figures being provided were based on estimates or were actually monitored during the project. The responses to the data source questions were used analytically as quality control checks to assess if there were significant differences in reported figures as a function of the data collection methods used by the library.

Online User Survey: This questionnaire, using a special survey function available on the EBB, was presented to users when they logged onto the bulletin board. Although limitations in the EBB survey software restricted the length and structure of the questions that could be posed or the responses that could be given, the online survey provided greater control over the data collection process and reliably captured user responses concerning the files they were going to access at the time of EBB use.

The survey presented several subsections which respondents selected on the basis of whether they were library staff or library patrons and whether they had completed an Online Survey before. When EBB users encountered the Online Survey for the first time, they completed a questionnaire (25 item survey for library staff, 29 item survey for library patrons) that covered such topics as:

- their previous use of the EBB

- how they learned to use the EBB

- EBB support and accessibility

- usefulness of the EBB information

- level of satisfaction

Most of the questions asked of users who were library staff and users who were library patrons were the same. Library patrons were asked 4 additional questions concerning their use of EBB information and their profession. If an EBB user was presented with the Online Survey again after logging onto the system, they were asked to complete a short, follow-on survey that requested a listing of the files they intended to access for review or downloading during that session. Under this arrangement, EBB users completed the longer survey once--the first time it was presented to them--and then completed the shorter, file identification survey on all subsequent occasions when they encountered the Online Survey.

Offline User Survey: This survey, a short eight-item questionnaire, was designed to obtain direct feedback from library patrons who obtained information from the EBB, but did not directly access the bulletin board (i.e., a library staff member accessed the EBB in response to the patron's request). The survey inquired about the usefulness of the EBB information, patron's use of that information, and their profession. The survey was limited to a few items in order to facilitate the immediate completion and return of the survey at the time it was given to the patron.

Site Selection Process

All libraries were mailed information packets describing the EBB pilot project, the EBB files, requirements for participation in the project, and the site selection process. A copy of the Test Site Selection Survey was also included. Libraries were instructed to review the package and then complete and return the survey, thereby indicating whether or not they were interested in being considered as a candidate test site.

Libraries indicating they were interested in participating in the project constituted the pool of eligible test sites from which the participating sites were selected. For selection of 86 test site participants, the candidate libraries were grouped according to the cross-classified attributes of library size, library type, and geographical location (e.g., large, academic, eastern libraries). Libraries were randomly selected by computer from each group to fill the number of test site slots allotted to that group. Allotment of test site slots to the groups was based on each group's proportional representation in the depository library population. Groups whose representation in the population was so small that allotment of even a single test site slot was not possible were pooled into a single, larger set whose collective size obtained a proportional allocation of eight test site slots. These test site slots were filled by random selection from all libraries in the combined group. Selection of regional libraries preceded selection of selective libraries in order to meet the requirement that 20% of the test sites be regional libraries. A statistical test of the distribution of randomly chosen regional libraries indicated that it was not significantly different from the population distribution of all regional libraries in the cross-classified groups.

Responses of libraries also expressing interest in being selected for one of the remaining 14 discretionary test site slots were initially reviewed by GPO and the final selection of the 14 sites was done by Depository Library Council members. Further information on responses to the Test Site Selection Survey are presented in the *Study Participants and Response Rates* section.

Data Collection Process

The data collection process began with libraries completing and returning the Test Site Selection Survey. The notification letter sent to libraries chosen as test sites asked the libraries to submit an EBB implementation plan within 30 days of going online. This letter described the material that should be included in the implementation plan and also the data that libraries should collect for the project evaluation. Libraries were informed that they should use logs or other recordkeeping methods to track or otherwise monitor EBB accessibility, use of EBB information, and the expenditure of staff time or funds on EBB-related activities. Equipment, set-up, training, and telecommunication costs were specifically mentioned.

Although the Online Survey was to be implemented shortly after libraries began accessing the EBB, the demands of other pilot projects on limited staff resources delayed development and installation of the survey until the fourth month of the project. Libraries were randomly divided into three groups and presented with the Online Survey on a weekly rotating basis. This procedure was adopted in order to reduce the data collection burden that would be placed on users if the survey appeared on their EBB computer screens every time they logged on for the rest of the project period. Development of the Library Survey was also delayed for the same reasons and distribution of this DCI did not occur until approximately one month before the end of the test period. Resource limitations also precluded independent verification of library or user responses on the DCIs.

The Offline User Survey was developed late in the study period after review of the patron response count for the first month of the Online User Survey's operation. The delayed initiation of the Online Survey coupled with the limited number of test sites that permitted patrons to personally log on to the EBB significantly reduced the rate at which direct feedback from patrons was being obtained online. The Offline User Survey was implemented as a supplement to the Online Survey as a method of improving the collection of data from library patrons who obtained EBB information.

A final data collection packet containing the Library Survey and copies of the Offline User Survey was mailed to each of the test site libraries. Each library's Project Coordinator--whose role it was to administer the project activities, collect data, and return all appropriate forms by the deadline dates--was asked to complete the Library Survey after consulting with other library staff who had relevant knowledge or involvement in the library's EBB experience. Project Coordinators were given instructions to distribute the Offline Survey to patrons who obtained EBB information. Instructions stated that each patron obtaining EBB information was to complete the survey only once, not every time they made a request that required accessing the EBB. The Library Survey and all completed Offline User Surveys were to be returned at the end of the study period.

A brief chronology of project activities and data collection events follows:

January 6, 1990: All depository libraries are mailed EBB information packets and are solicited to become applicants for the pilot project test site slots.

April 19, 1990: Of the 361 library applicants, 100 are selected to serve as pilot project test sites.

June 1, 1990: Online access to EBB begins for test site libraries; libraries are asked to submit their project implementation plans within 30 days.

October 1, 1990: Online surveys of librarians and EBB users commence on a rotating basis an continue through December 31, 1990.

November 20, 1990: Final data collection packet is mailed to each of the 100 EBB test sites; return date for the completed DCI's is set for January 15, 1991.

December 31, 1990: EBB online access period ends for test site libraries.

March-April 1991: Follow-up efforts mounted by GPO to collect outstanding DCI's from library test sites.

Data Processing and Analysis

At the conclusion of follow-up efforts to obtain outstanding survey DCIs from the test site libraries, data processing and analysis activities were initiated jointly by GPO and GAO. Processing of the paper format DCI's prior to data entry involved checking for duplicate returns, verifying the accuracy of the depository library numbers that were reported, checking that instructions for answering items were followed, and applying a content code to respondents' written answers to open-ended questions. Content codes were developed and applied to the open-ended questions on the Library Survey. These codes made it possible to automate, analyze, and summarize respondents' open-ended comments.

Computer files were created and merged for test site library responses from the Test Site Selection Survey, the Library Survey, and the session and charge data were automatically tracked by the EBB. This library master file also included information from a limited content analysis of library EBB implementation plans. Responses to the Online Users Survey and the Offline Users Survey were maintained as separate files. All data keying was double-entry verified and data cleanup programs were run to check for out-of-range values, data outliers, conflicting responses, failure to follow question "skip" patterns, and duplicate open-ended codes to the same item. When indicated, and possible, library project coordinators were contacted to verify or modify suspect data.

The purpose of the data analysis was to provide a preliminary, quantitative description of library and user experience with the EBB. Responses to survey items were interpreted as indicators of project effects and benefits. For example, responses to items addressing improvement in access to information were interpreted as assessments of benefit. The primary analytic approach consisted of generating frequency of response distributions to survey items either in total or broken out by library type and library size. For certain data elements, mostly measures of cost and staff time, means and medians were computed. In general, when summary statistics that comprise more than one data element per library are reported, the contributing data elements are combined for each library first before the overall statistic is computed across the number of libraries providing data.

Other analyses were also done. One analysis involved combining and editing file access data from the Library Survey and the Online User Survey to produce a master list of all EBB files identified as being used during the pilot project. Another analysis computed telecommunication cost-per-session across geographical regions. All data were analyzed using SAS software. SAS output was then transferred to Microsoft spreadsheet software, Excel, for generating charts and tables.

In evaluating the survey results presented in subsequent sections, certain observations and qualifications about the data and the analysis process should be made. With the exception of the session data that was tracked automatically by the EBB computer, all survey responses are self-reported and of unknown reliability. A data quality analysis using the data source questions on the Library Survey indicated that the general tendency was for libraries to report figures that were based on estimates. In most cases, there were variations in results as a function of whether the data reported were based on an estimate versus actually monitored. However, the differences were generally not extreme or indicative of significant impact. Such differences are reported in the results section when they are considered significant.

Study Participants and Response Rates

The number of libraries participating in the FDLP varies as new institutions are designated and others leave the system. Information about the libraries is regularly collected through the Biennial Survey that is conducted by GPO's Library Programs Service. The libraries are typically described according to the following categories: depository status, library type, and library size. In 1990, when the EBB pilot project was initiated, there were 1,398 libraries in the program. It was from this depository library population that libraries were selected to be EBB test sites.

Test Site Selection Survey Response Rate

The Test Site Selection Survey, which was distributed to all 1,398 libraries in January 1990, was completed and returned by 1,121 (80%) libraries. One third of the returns (376) indicated that the library wished to be considered as a test site candidate. These libraries constituted the pool of libraries to be used in selecting 86 of the 100 test site slots. Of these libraries 255 also indicated that they wished to be considered for selection as one of the discretionary site slots. The 745 libraries that answered the EBB participation question in the negative were asked to identify their reason(s) for not wanting to participate. Their responses are shown in Table 3-1.

Table 3-1
Reasons Given by Libraries For Not Becoming EBB Test Site Candidates

Reason	Count	Percent of Libraries
Insufficient user interest	389	52
Lack of staff resources	382	51
Lack of funds for telecommunications	229	31
Did not wish to begin a service that would be discontinued	192	26
Lack of computer equipment	178	24
Other	132	18
Total Response	**1,502**	

Source: A12. Based on 745 libraries responding.

Selected Sites

Using the site selection process described in the *Study Approach and Methodology* section, 101 libraries were selected to participate as EBB test sites. (The original sample of 100 test sites changed to 101 libraries, when one additional library was named to replace a library that decided to drop out of the EBB pilot project.) This group of selected libraries constituted 27% of those libraries that expressed interest in participating in the pilot project and 7% of the general depository library population. Table 3-2 shows the profile of selected EBB sites along with those of all candidate sites and the depository library population.

Table 3-2
Depository Library Profiles

	General Population		EBB Candidates		EBB Test Sites	
	Count	Percent	Count	Percent	Count	Percent
Library Size:						
Small	387	28	46	12	16	16
Medium	654	47	154	41	37	37
Large	357	26	176	47	48	47
Library Type:						
Academic	769	55	251	67	65	64
Public	342	24	81	21	23	23
Other	287	21	44	12	13	13
Time Zone:						
Eastern	720	52	180	48	51	50
Central	384	27	114	30	30	30
Mountain	105	8	26	7	7	7
Pacific	172	12	52	14	12	12
Other	17	1	4	1	1	1

Relative to the distribution of libraries by size and type in the general depository population, large libraries were proportionately over-represented in the selected test site group while small size libraries and "other" libraries were under-represented. Geographical distribution of the test site libraries is generally in accord with the population distribution.

Several factors contributed to the greater presence of large libraries in the test site group. The candidate pool from which sites were to be selected contained more large and fewer small libraries than the general population. Likewise, there were fewer "other" libraries in the candidate pool than the general population. For three of the cross-classified "small-other" groups, there were no libraries responding to the Test Site Selection Survey indicating that they wanted to be considered as candidate sites. Consequently, more large libraries were available for selection while small and other libraries were scarce. Large libraries dominated the selection of discretionary sites and the random selection of eight libraries from the group created by combining cross-classified groups whose individual representation in the population was not large enough for allocation of a single test site slot.

Library Survey Response Rate

Library Surveys were returned by 92 of the test sites. The distribution of libraries returning surveys was essentially the same by size, library type, and geographical location as the distribution of EBB test sites presented in Table 3-2 (i.e., nonresponse was not associated with any particular group of libraries). Records kept by the EBB host computer indicated that all the libraries responding to the Library Survey used the EBB.

EBB Users

EBB users are those persons who completed either the multi-section Online User Survey or the Offline User Survey during the course of the pilot project. Assessments of the EBB were obtained from 197 users at 54 test sites. There were 121 library patrons who completed an Offline User Survey and 76 respondents who completed the Online Survey's initial 25 or 29 item section. Respondents to the Online survey consisted of both library staff (63) and library patrons (13) who had directly accessed the EBB and encountered the Online Survey. Table 3-3 shows the distribution of libraries by size and type providing user survey responses and the associated number of user returns associated with each group.

Table 3-3
EBB User Profile

	Libraries		Respondents	
	Count	Percent	Count	Percent
Library Size:				
Small	7	13	22	11
Medium	18	33	75	38
Large	29	54	100	51
Library Type:				
Academic	36	67	140	71
Public	10	18	41	21
Other	8	15	16	8

In general, users answering the Online User Survey are predominantly library staff with previous, direct experience obtaining information from the EBB. During the session when users encountered the Online Survey, only 23% of the respondents identified themselves as first-time users. Of these respondents 31% had accessed the EBB from two to six times before, and 47% had logged on more than seven times previously. In contrast, respondents to the Offline User survey are exclusively library patrons who did not have direct access to the EBB. The majority of these respondents (79%) indicated that they had not obtained information from the EBB before.

Library patrons who obtained information from the EBB were asked on both the Online Survey and Offline User Survey to identify their employment status. Table 3-4 presents their responses to this item for both surveys combined.

Table 3-4
Employment Status of Library Patrons

	Count	Percent
Student	48	36
School faculty/Administration	30	23
Professional	20	15
Researcher	13	10
Government	9	7
Self-Employed	6	4
Manager/Proprietor	1	1
Service/Production	1	1
Retired	1	1
Other	3	2
Total	**132**	**100**

Another section of the Online User Survey consisted of a short follow-on set of questions that respondents who had completed the initial, longer section of the survey were to answer if, in a subsequent EBB session, they were presented with the survey again. The short form was designed to identify those files that the user intended to access during the session, as the EBB computer could not track this information. There were 173 completed Online Survey short forms obtained from 38 libraries. Since a single user could respond more than once to the short form of the survey, the quantity of short form returns obtained during the study only reflect the number of times the form was completed by users when they logged on and were presented with the survey. It is neither a count of individual users nor a comprehensive indicator of file usage since (1) libraries were presented with the Online Survey on a rotating basis and (2) EBB system records show some users chose not to respond to this section of the survey when it was presented to them. Table 3-5 shows those libraries by size and type that are the sources of data on EBB file usage.

Table 3-5
Libraries Where EBB Users Completed Online Survey Short Forms

	Libraries		Returns	
	Count	Percent	Count	Percent
Library Size:				
Small	3	8	9	5
Medium	12	32	58	34
Large	23	60	106	61
Library Type:				
Academic	27	71	119	69
Public	5	13	32	18
Other	6	16	22	13

It should be noted that the user feedback reported in the *Survey Results* section came chiefly from large libraries and academic libraries. While this is due, in part, to the oversampling that occurred in the site selection process, a review of the users providing feedback shows that the representation is somewhat larger than the presence of large and academic libraries in the test site group.

SURVEY RESULTS

The overall pilot project objectives served as the framework for analyzing EBB survey data. Those survey responses and the data collected by the EBB host computer (Appendixes A through E) serve as the sources for the results presented in this section. Survey data were analyzed to describe the incorporation of the EBB into library operations and services, the patterns of EBB usage in libraries, and the acceptance and utility of the EBB in libraries.

Charts and tables presented in this section are based on the responses of those who answered the survey questions. For all results, the information provided describes the cumulative experience and views of the libraries and users who participated in the pilot project. However, the results cannot be considered statistically representative of all depository libraries or EBB users. Also, the libraries used both estimation and tracking techniques to derive the project activity and cost data provided on the Library Survey. In instances where analysis of the data source question associated with a particular survey question indicates a notable difference between data that were estimated rather than actually tracked during the project, the difference is reported. Cost data are not included in this section but reported in Section 5 of this report. This Cost Analysis section covers the costs to the Government and to libraries for making the EBB available to the test site libraries during the pilot project period.

Incorporation of EBB in Libraries

Using outside computer data bases is a common practice for depository libraries. Of the 1,121 libraries responding to the Test Site Selection Survey 88% indicated that they were accessing outside computer data bases in order to provide reference services to patrons [A5]. For the 101 EBB test site libraries, 87% indicated on the Test Site Selection Survey they were already accessing one or more online services [C6]. Ninety-three percent indicated that they either had the necessary equipment or would acquire it to participate in the project; the remaining 7% said that they had the necessary equipment, but would acquire additional equipment if they were selected as a pilot project test site. Fully 94% of the online User Survey respondents who gave an opinion on the availability of library work stations/equipment, indicated that the equipment was "always available" or "generally available" to them for accessing the EBB [B7].

Four-fifths (80) of the selected sites submitted plans describing how they would implement EBB service, and 56% of these libraries said they intended to permit only library staff to directly access the EBB. The other libraries indicated that they would also have some form of supervised or controlled patron access.

Chart 4-1
Number of Online Services Accessed by Libraries
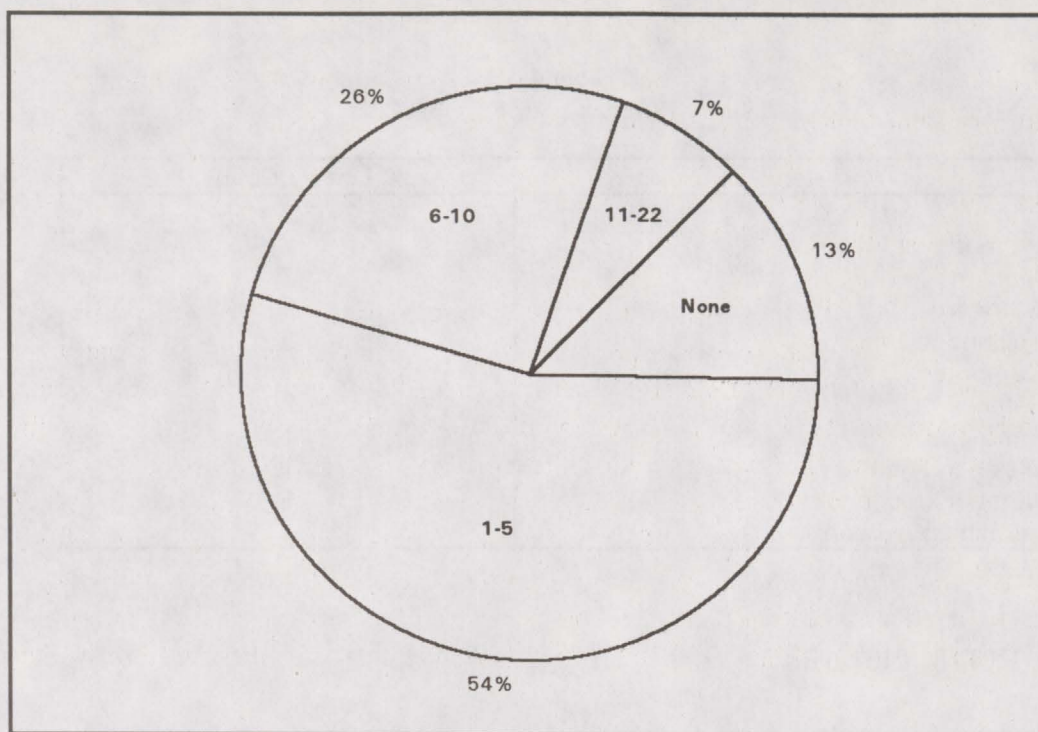
Source: C6. Based on 101 responding libraries.

EBB Installation and Set-up in Libraries

The mean time expended for installing or setting up the hardware and/or software to access the EBB was four hours for the 87 test site libraries that reported this data. The reported library staff time used in setting-up for EBB ranged from negligible (i.e., several libraries reported no expenditure of time on this activity) to a high of 32 hours. Some libraries explained that set-up time included such things as learning to use the communications software and/or having a telephone connection installed for the modem. Although smaller libraries spent more time setting-up than did either the medium or the large libraries, the most notable difference in set-up time was between Selective and Regional depositories. Selective libraries averaged four hours of staff time in setting up for EBB, which was double that of the 2-hour average for reporting Regionals. Table 4-3 shows the average staff hours spent per library in setting-up the EBB.

Twenty-five test site libraries reported budgeting or making expenditures for one or more products and/or services specifically to support library use of the EBB [C5].

Table 4-1
Library Purchases to Support EBB

Item	Library Count
Printing	8
Promotional Materials	7
Modem	7
Software	3
Telephone Line	3
Computer	3
Paper	2
Printer	1
Disk Storage Box	1
Notebook/Logbook	1
Terminal/Keyboard	1

Source: C5.

Promoting Use of EBB in Libraries

EBB Test Site Libraries were asked to undertake special efforts for ensuring that prospective users were made aware of the EBB's availability during the pilot project period. Promotion of the EBB by librarians was especially important because of the relatively brief duration of the pilot project. The selection of appropriate activities for promoting the EBB was left to the discretion of the individual libraries. In their EBB Implementation Plans, 78 test site libraries described the methods they intended to employ for promoting use of the EBB.

Table 4-2
Methods for Promoting EBB

Method	Library Count
Newspapers	54
Notifying Staff/Faculty	41
Notifying Other Libraries	32
Notifying Target Audiences	30
Talks to Groups	28
In-house Ads	17
Personal Contacts	13
Broadcast Media	7
Notifying Library Departments	7
Bulletin Board	1

Source: EBB Implementation Plans submitted by the test site libraries.

Training and Assistance to Library Staff and Users

Test site libraries were asked to report the number of library staff that received training in how to use the EBB, how many staff hours were spent in EBB training, and how many staff hours were spent in training non-staff on using the EBB. For the 90 libraries that provided information on these items, the average number of EBB-trained staff was 4.6. The average number of staff hours spent in training was 8.2 hours. However, a check of the associated data source question for this item indicated a notable difference in the average depending on whether the library reported the figure as being an actual or an estimated value. For the 24 libraries that reported an actual number of training hours, the average number of staff hours spent in training was 4.8. For the libraries that gave an estimated figure, the average number of training hours was 9.1 [C3].

Staff hours spent by test site libraries training non-staff to use the EBB averaged 5.3 hours. However, this average is somewhat moderated by the number of libraries that reported no non-staff training activity. Thirty-eight percent of the libraries reported no expenditure of staff hours training non-staff. When the analysis is restricted to the 56 libraries that did report some expenditure of staff time, the average increases to 8.5 hours [C4]. Within their respective categories, large libraries and public libraries on average reported training the most staff and spending the most hours on training of staff and non-staff. For example, large libraries trained almost twice as many staff (5.9) as small libraries (3) [C2]. Overall, libraries spent an average of 17.3 staff hours in set-up and training time for the EBB.

Table 4-3
Average Library Staff Hours Spent for
Setting-up EBB and for EBB Training

	Setting up EBB	Training Staff	Training Others	Total Hours
Library Size:				
Large	(41) 4.3	(44) 9.5	(44) 6.6	(44) 20.3
Medium	(32) 3.1	(33) 7.5	(33) 4.8	(33) 15.3
Small	(14) 5.0	(14) 5.6	(14) 2.4	(14) 13.0
Library Type:				
Academic	(57) 3.7	(59) 7.8	(59) 4.9	(59) 16.2
Public	(20) 4.3	(20) 11.5	(20) 8.5	(20) 24.2
Other	(10) 4.9	(11) 4.5	(11) 1.8	(11) 10.7
All Libraries	4.0	8.2	5.3	17.3

Source: C1,3,4. Numbers of libraries responding shown in parentheses.

EBB users responding to the Online survey were asked about the training methods they had employed in learning to use the EBB. The three training methods cited as choices were self-instruction, individual assistance from library staff, and formal instruction. The training method most frequently mentioned was self-instruction [B36-41].

Table 4-4
How Users Learned to Use the EBB

Method	User Count	Percent
Self-instruction (75)	69	92
Assistance from library staff (75)	42	57
Formal instruction (74)	12	16

Source: B36-41. Numbers of users responding shown in parentheses.

Library test sites were provided with EBB documentation and manuals, and also had telephone access to the Department of Commerce for seeking direct assistance. Most of the online User Survey respondents that had either received training, read the EBB documentation and manuals or made phone calls, reported finding each of these items at least moderately helpful [B12,14,15].

Chart 4-2
Helpfulness of EBB Training and User Aids
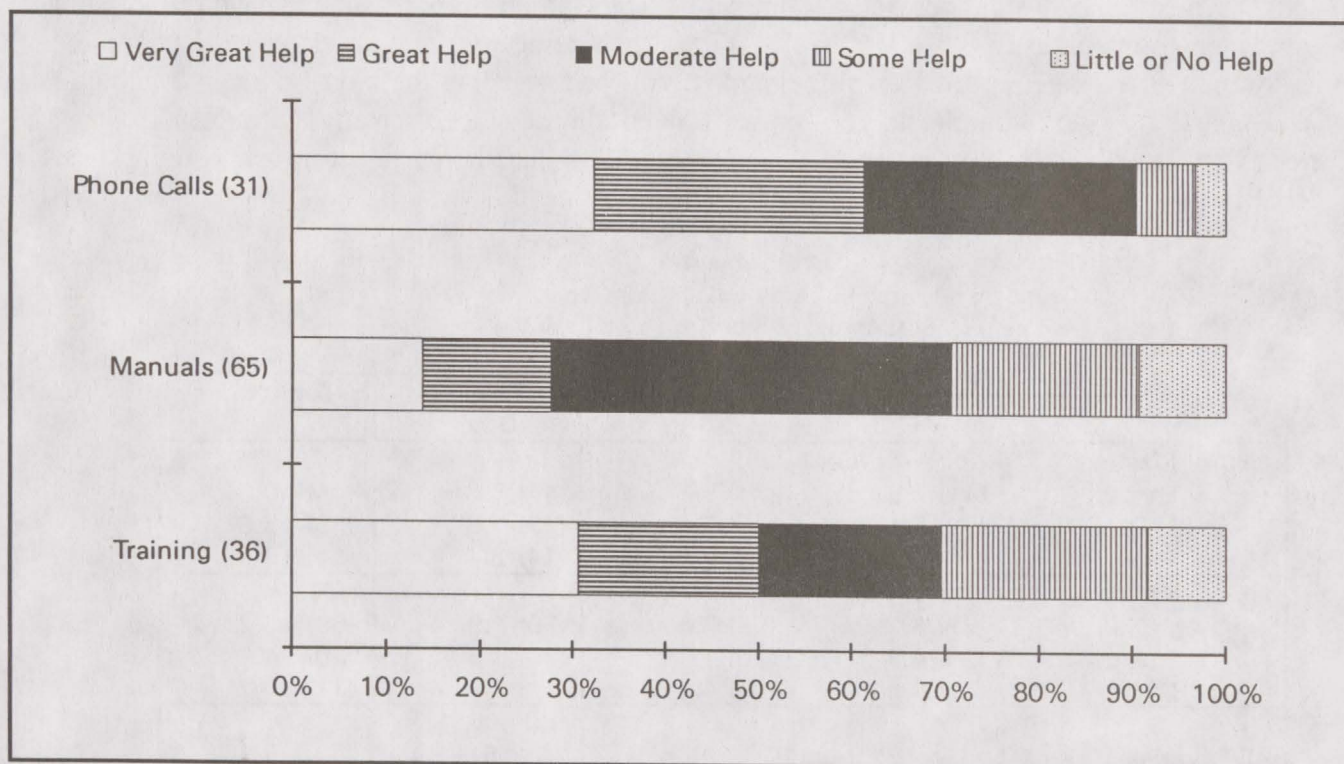
Source: B42-47, B53-64. Numbers of users responding shown in parentheses.

EBB Usage

During the seven-month trial period, the EBB was accessed by 93 of the 101 test site libraries for an overall total of 3,247 online sessions. For the test site libraries that explained their non-use of the EBB, their reasons had to do with equipment failure or unavailability, the library's inability to access the EBB system, a library staffing change or relocation, or the simple lack of user demand for EBB information. Because 17% of the libraries accounted for slightly over half of all the sessions, the average number of sessions per library tends to be pulled higher by a few libraries with heavy use of the EBB. Therefore, median levels of usage are reported in Table 4-5 to present a more representative picture of library use of the EBB.

Table 4-5
EBB Usage in Libraries

	Total Number of EBB Sessions for Libraries	Median Number of EBB Sessions Per Library
Library Size:		
Large (47)	2,072	27
Medium (33)	859	15
Small (13)	316	17
Library Type:		
Academic (61)	2128	21
Public (21)	777	15
Other (11)	342	27
All Libraries	3,247	21

Source: E. Numbers of libraries shown in parentheses.

The general pattern of EBB usage over the course of the pilot project period shows heavy activity (663 sessions) during July (after the "practice" month of June), before leveling-off to just under 500 sessions for each of the next three months, and then dropping to a low of 258 online sessions in December [E].

Chart 4-3
Monthly EBB Usage by Libraries
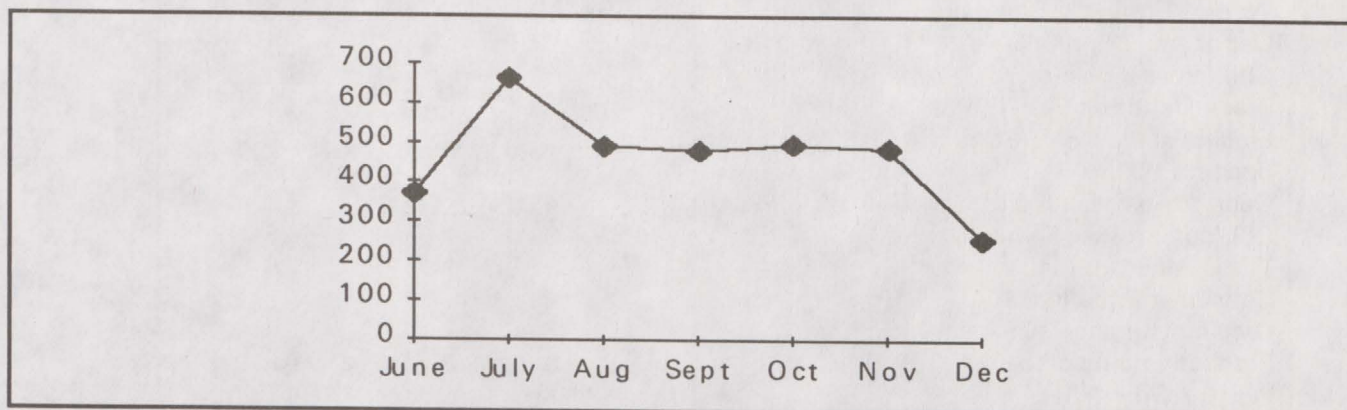
Source: E. Based on usage by 93 libraries.

Accessibility of the EBB

Users answering the online survey were asked how often they received no response or a busy signal when attempting to access the EBB. Two-thirds of the respondents who expressed an opinion indicated that they "never or almost never" had trouble getting through on the phone. Another 30% said they "sometimes" had trouble. Less than 2% of the respondents indicated having trouble getting through more than half the time they tried [B65-70]. When asked about the ease or difficulty of accessing the EBB on average, 90% of the users who expressed an opinion judged it to be either "very easy" or "somewhat easy" to do so [B31-35]. In general, the survey results indicate that neither an unavailability of equipment nor an inability to access the EBB system itself, posed any significant barrier to EBB access for most of the online User Survey respondents.

Files Accessed

Both the Online User Survey and the Library Survey asked respondents to identify EBB files accessed. The responses to these items on both surveys were merged to create a master list of all files mentioned as being accessed during the pilot project. This master list identified 120 of the more than 400 files available on the EBB. For just the Online Survey, 84 of these 120 files were identified one or more times by library staff and patrons as the files they planned to access during a session. Table 4-6 shows the frequency with which these files were mentioned. *The Summary of Consumer Price Index* was most frequently mentioned. The frequency with which a file was identified on the Online Survey provides a rough indication of the relative popularity of various EBB files. It does not, however, constitute an accurate count of file accessions since respondents were not required to answer the survey in order to access the EBB nor were all EBB users presented with the survey over the course of the pilot project. Hence, these data are not a complete count of file usage. As the master list compilation shows, 36 files were identified from Library Survey responses but not Online Survey responses.

Table 4-6
EBB Files Most Frequently Accessed

File	Frequency	Percent
Consumer Price Index: Summary	23	12.0
Employment Situation	12	6.3
Producer Price Index	8	4.2
Productivity and Cost	7	3.6
Selected Interest Rates	7	3.6
Weekly Economic Summary	7	3.6
List of All Files Available	6	3.1
CPI: Urban Consumers by Area	6	3.1
Trade Opportunities (TOPS)	6	3.1
Single Family Home Sales	5	2.6
Budget FY91	4	2.1
General Business Indicators	4	2.1
CPI (compressed form)	3	1.6
The Business Situation	3	1.6
Consumer Price Index	3	1.6
Leading/Lagging/Coincident Indicators	3	1.6
Productivity Indicators	3	1.6
Plus 67 Other Files*	82	43
Total	192	100

Source: C (short form). Based on 173 responses.

*None of these 67 other files was mentioned more than twice.

Purposes for Using the EBB

Slightly more than half of the online User Survey respondents who were library staff indicated they were searching the EBB in response to requests from end users. Another 25% indicated they were obtaining the information for library use while an additional 14% said they were accessing the EBB to do both [B5-8]. Library patrons directly accessing the EBB were asked to indicate if they were obtaining information for themselves, someone else, or both. Chart 4-4 presents the responses of both groups.

Chart 4-4
For Whom Are You Using the EBB?
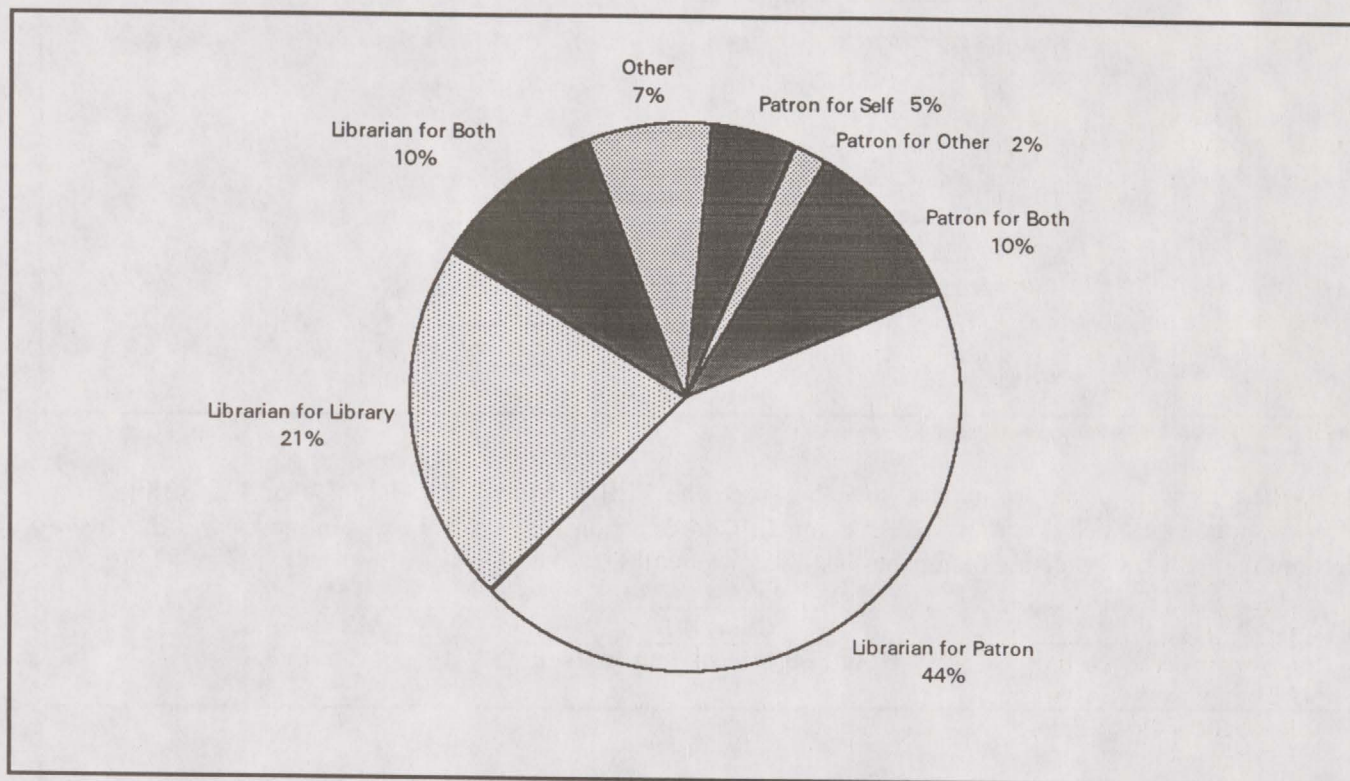
Source: B5-8. Based on 67 responses.

On the Library Survey, respondents were asked to describe how the EBB was used in the library during the pilot project period. Over half of the respondents (56%) mentioned using the EBB for providing reference services and one-third said they used EBB to download updates of frequently requested statistics [C10].

Chart 4-5
How the EBB Was Used in Libraries

Reference (52) — 36%
Update Statistics (31) — 21%
Demo/Training (22) — 15%
Other Responses (22) — 15%
Classwork (12) — 8%
News Releases (5) — 4%
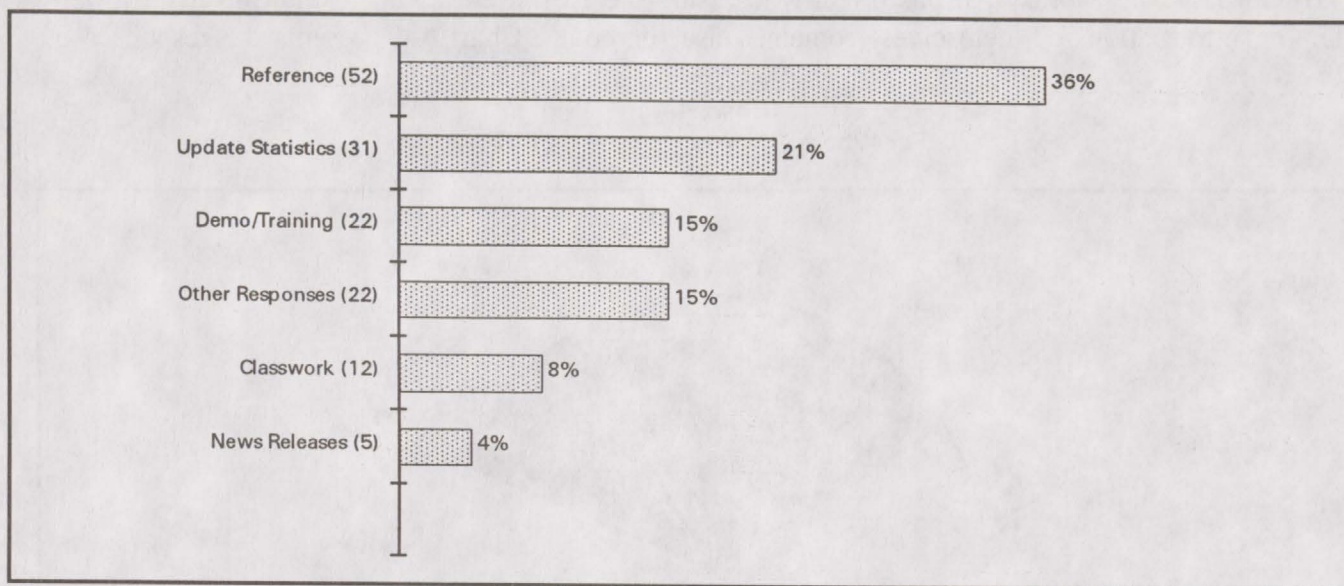
Source: C10. Based on 144 responses from 92 libraries.

Library patrons were asked to identify how they used the EBB information. Only 4% of 118 offline User Survey respondents stated that they were seeking EBB information for personal use. In most cases they were searching the EBB for academic or for job/business purposes [D2].

Chart 4-6
How EBB Information Is Used

Academic work 54%
Personal use 4%
Job/business 42%
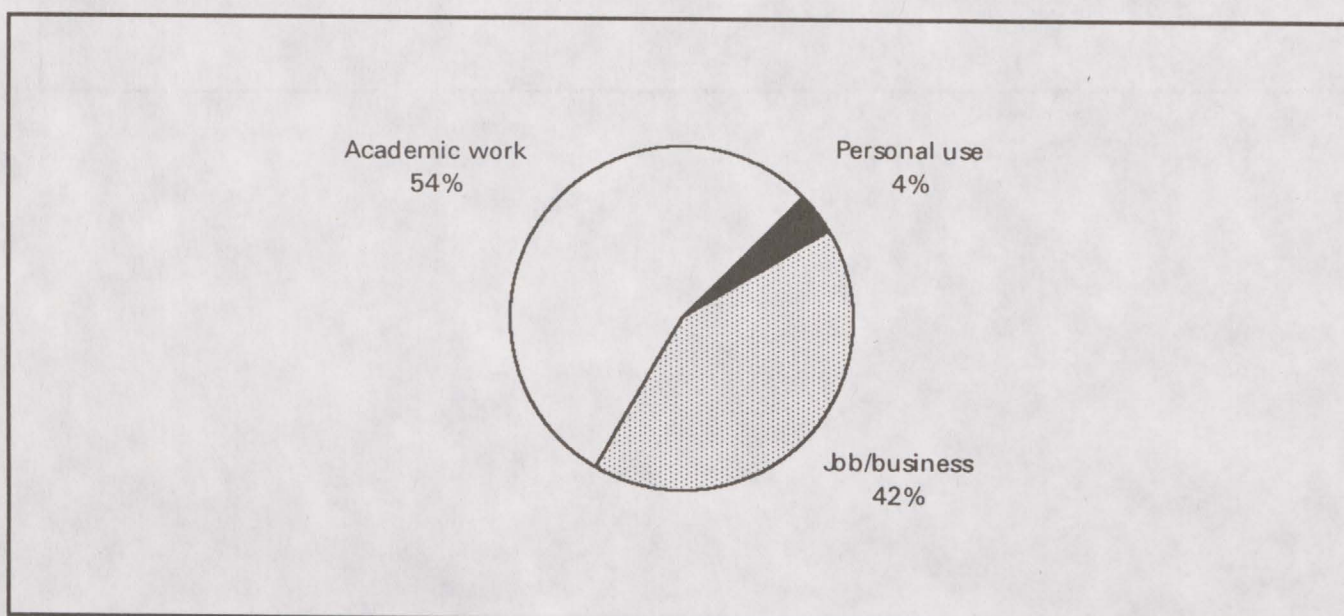
Source: D2. Based on 118 users responding.

In the online Users Survey, library patrons who directly accessed EBB were also asked how often they accessed EBB information for the same three specified purposes [B71-85]. Both surveys indicated a strong relationship between type of library and a patron's reason for using the EBB. A majority of respondents in academic libraries identified academic work as their purpose, while a majority of respondents in public libraries cited a job/business purpose.

Chart 4-7
Purposes for Using EBB
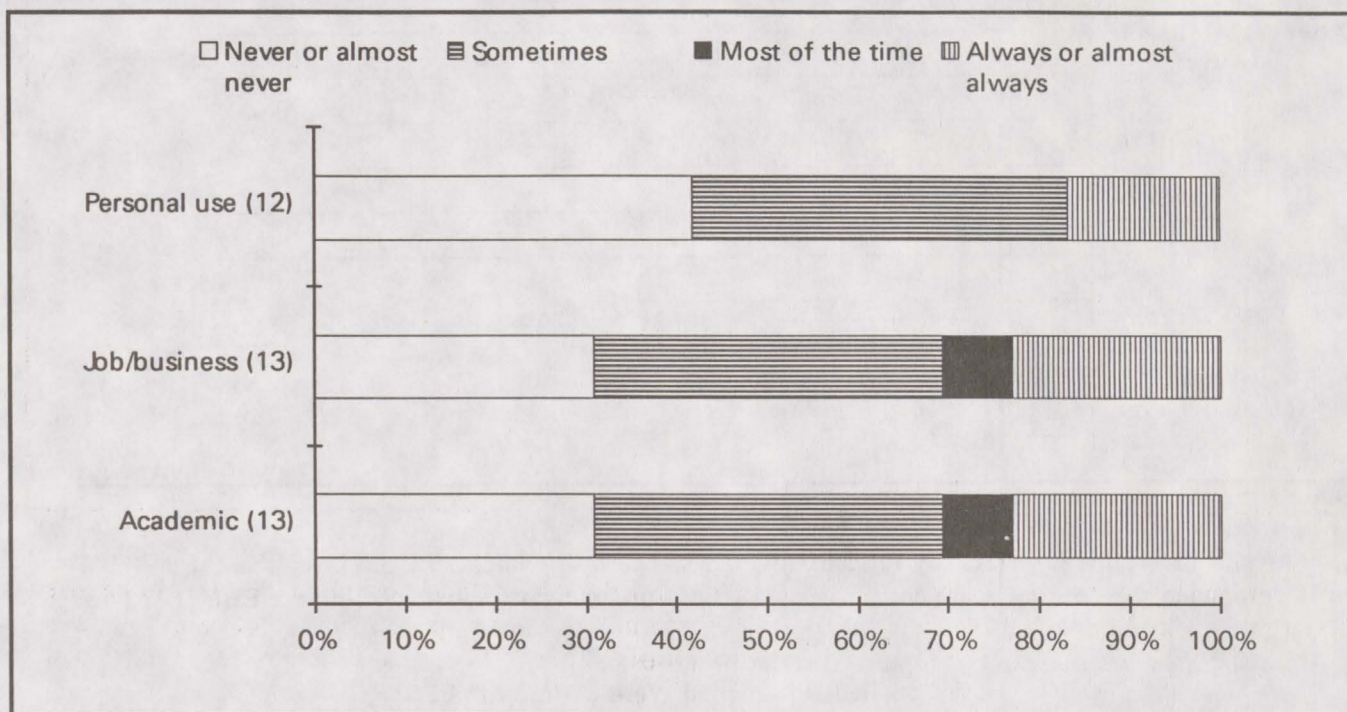
Source: B71-85. Numbers of users responding shown in parentheses.

EBB Acceptance and Utility

In the online User Survey the users were asked how often they got the information they were looking for when they accessed the EBB. Of the 61 users who expressed an opinion, 79% got the needed information from EBB at least "often" [B126-132].

Chart 4-8
How Often EBB Users Got the Information They Were Looking For

Category	Percentage
Always, or almost always	28%
Very often	23%
Often	28%
Sometimes	16%
Seldom, if ever	5%
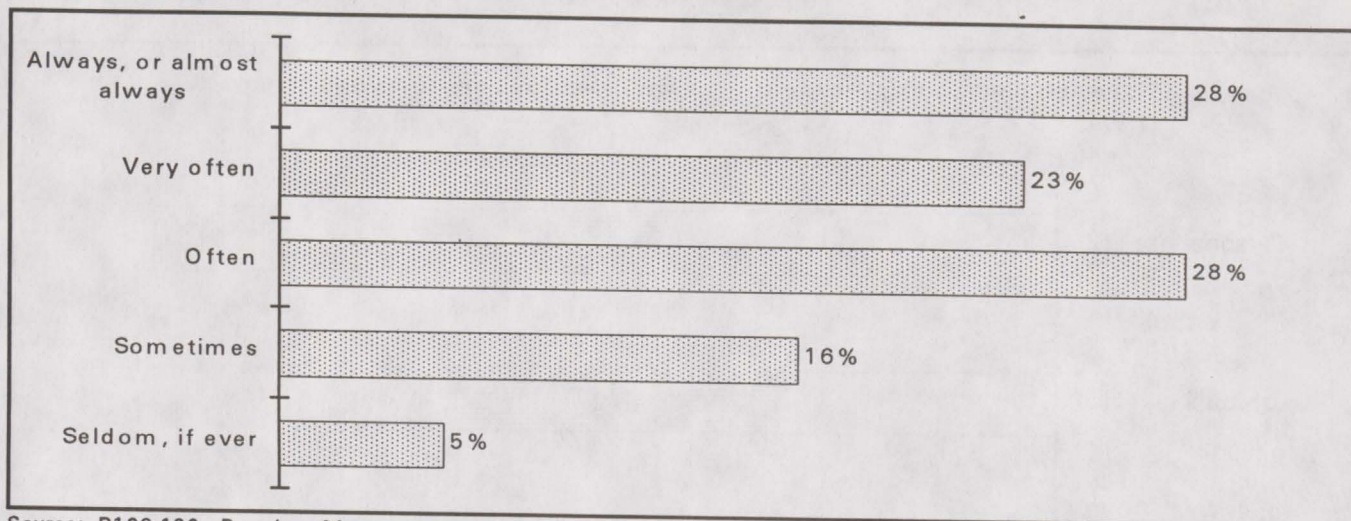
Source: B126-132. Based on 61 users responding.

Responses to the online User Survey reflected overall satisfaction with the EBB. Over two-thirds (69%) of the 70 respondents stated they were either "very satisfied" or "generally satisfied" with the EBB [B133-137].

Chart 4-9
How Satisfied/Dissatisfied Were Users With EBB?

Category	Percentage
Very satisfied	26%
Generally satisfied	43%
Uncertain	21%
Generally dissatisfied	9%
Very dissatisfied	1%
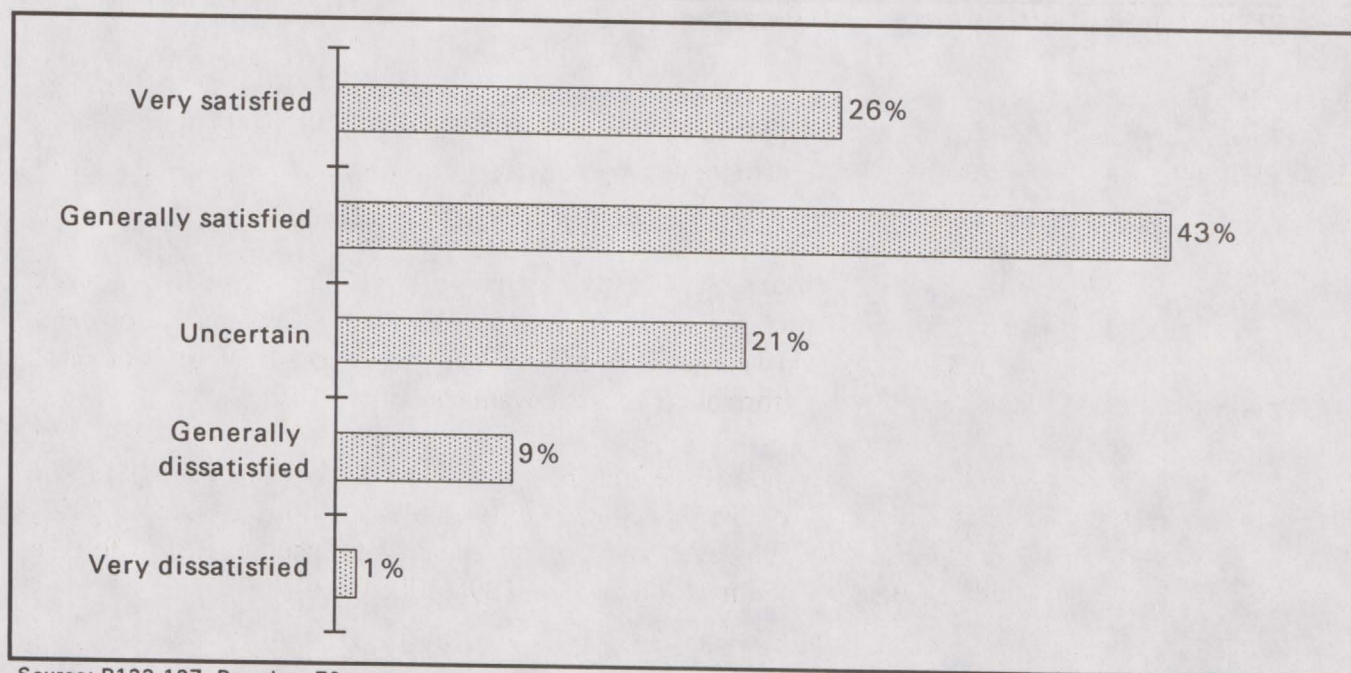
Source: B133-137. Based on 70 users responding.

Likewise, the majority of respondents to the offline User Survey provided a positive response when queried as to whether obtaining information through the EBB made their work harder or easier.

Chart 4-10
Did EBB Information Make Your Work Harder or Easier?
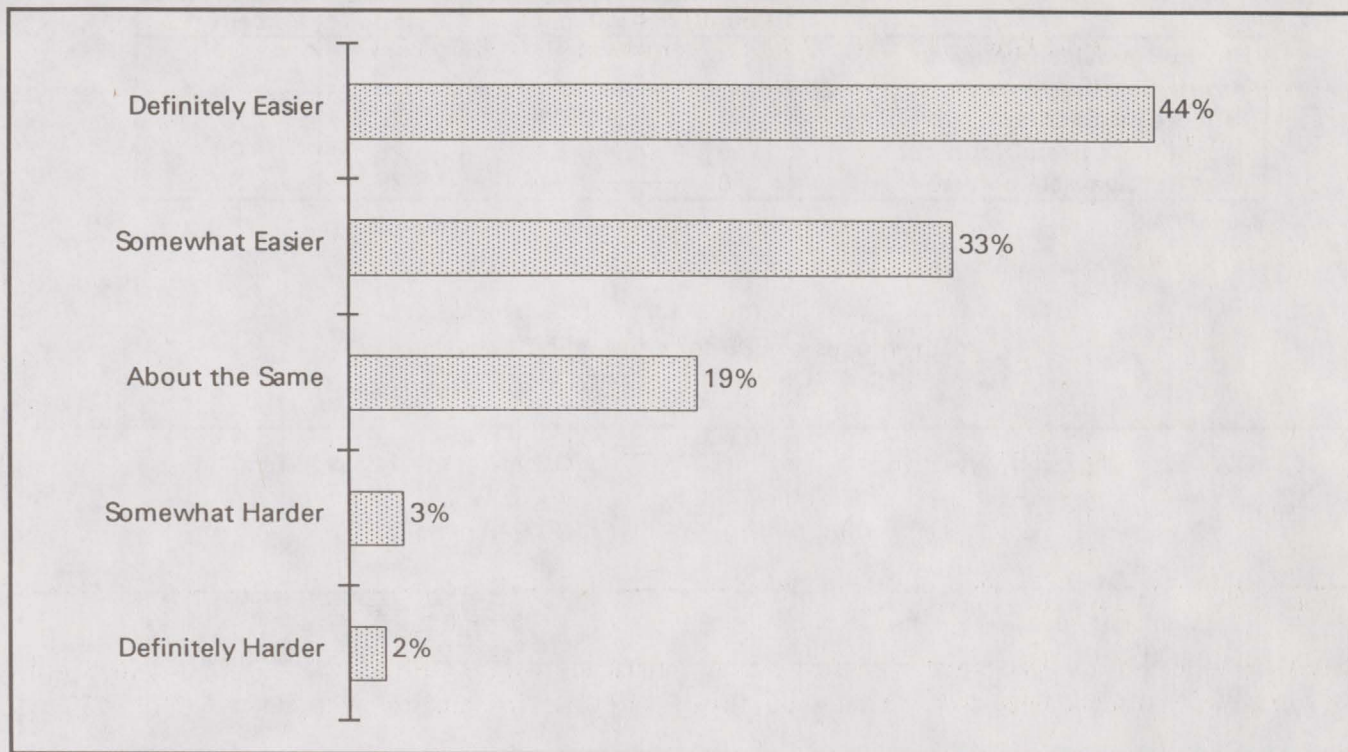
Source: D1.

Advantages of EBB for Information Access

Both the offline and the online User Surveys featured questions about the advantages offered by the EBB as compared with the information resources that were already available in the library. Three kinds of advantages were surveyed: access to new information, access to more up-to-date information, and access to information in a more useful (e.g., computer-readable) format.

This comparative assessment of the EBB's advantages presented in Table 4-7 and Chart 4-8 is based on the responses of those users who expressed an opinion on the matter. Excluded from this assessment are those survey respondents who answered "don't know/no basis to judge" or "not sure" to the survey questions that dealt with the information access advantages of the EBB.

A decided majority of respondents to both the offline and the online User Surveys indicated that the EBB provided information that is more up-to-date than what was available in the library before [B92-97,D4]. Survey results were more divided, however, over the questions as to whether EBB offered a more useful format and whether EBB provided new information [B98-108; D5,6].

Table 4-7
Advantages of EBB for Information Access
(Offline User Survey)

	Yes		No	
	Count	Percent	Count	Percent
Has EBB provided you with information that...				
-is more up-to-date?	85	91	8	9
-is in a more useful format?	57	69	26	29
-was not available before?	63	71	26	31

Source: D4,5,6.

Chart 4-11
Advantages of EBB for Information Access
(Online User Survey)
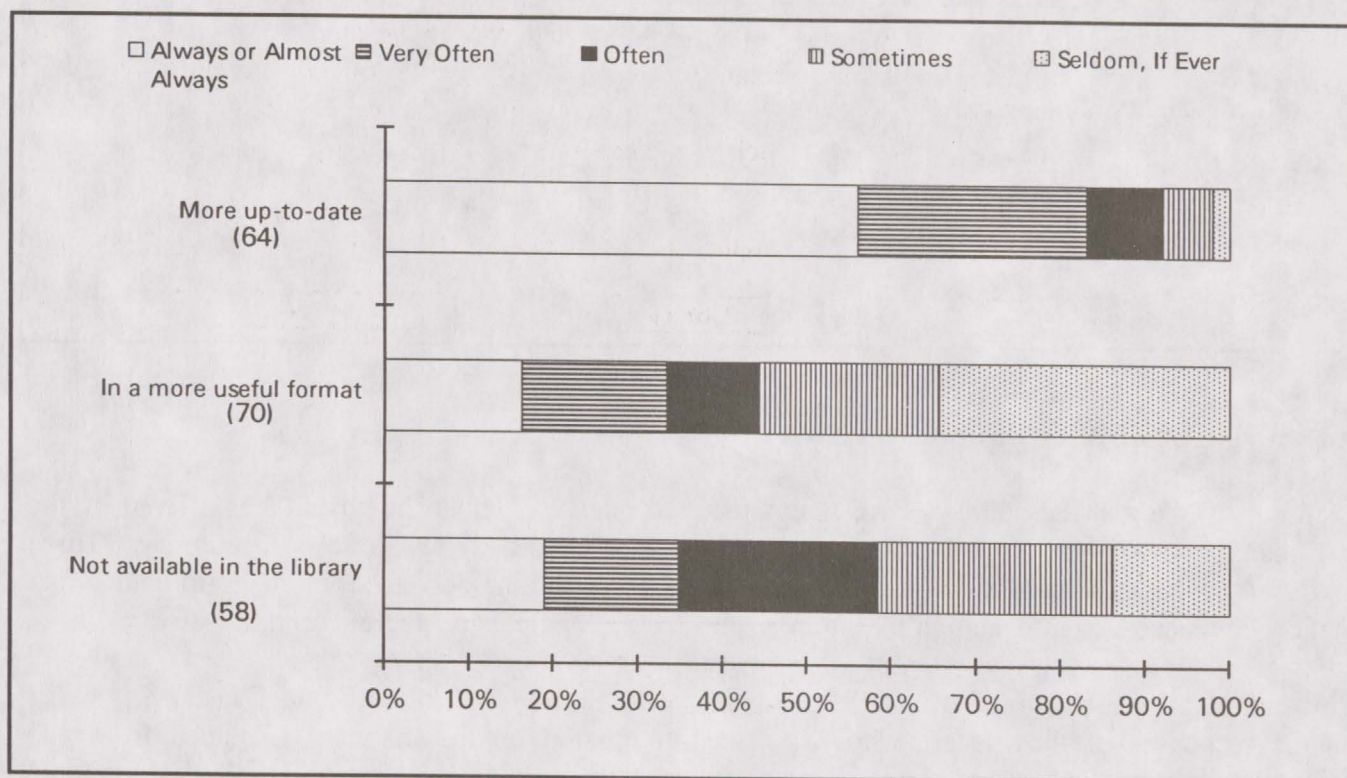
Sources: B92-108. Number of users responding shown in parentheses.

The Library Survey sought to elicit examples of EBB information that was either more up-to-date than library information or not in the library at all. When asked to identify specific EBB information that was more up-to-date than library information, 75 libraries provided 166 responses, which denoted 28 distinct files or publications. By far the most frequently mentioned example was the Consumer Price Index, which was cited by 56 libraries [C12].

Table 4-8
EBB Files More Up-To-Date Than Other Library Information

File	Library Count	Percent
Consumer Price Index	56	34
Producer Price Index	13	8
TOPS	12	7
Exchange Rates	10	6
Gross National Product	9	5
Federal Reserve Statistics	8	5
Economic Indicators	7	4
Housing Starts	5	3
Import/Export Price Indexes	5	3
Unemployment Statistics	5	3
Plus 19 Other Files*	37	22
Total	167	100

Source: C12. Based on 75 libraries responding.

*Note: None of these 19 other files was mentioned more than four times.

Libraries were then asked to cite examples of information that they were able to obtain from EBB, which was not in the library prior to the availability of the EBB. A total of 65 libraries provided 76 responses covering 24 individual EBB files. Most frequently mentioned was the Daily Trade Opportunities for Exporters (TOPS) file, which was cited by 21 libraries [C13].

Table 4-9
EBB Information Not Previously Available in the Libraries

File	Library Count	Percent
TOPS	21	28
Press Releases	7	9
Consumer Price Index	6	8
Interest Rates	5	7
Regional Economic Information	5	7
Federal Reserve Statistics	4	5
Import/Export Price Indexes	3	4
Import/Export Statistics	3	4
Plus 16 Other Files*	22	29
Total	76	100

Source: C13. Based on 65 libraries responding.

*Note: None of these 16 other files was mentioned more than twice.

EBB Access as a Substitute for Certain Depository Documents

Online User Survey respondents were asked how much of the information provided by the EBB overlaps with other Government documents they obtained through the library. On a scale ranging from "little, if any" to "all, or almost all", a majority of the 58 online User Survey respondents believed that "some" EBB information overlapped with other Government documents [B86-91].

Chart 4-12
How Much EBB Information Overlaps With Other Government Documents?
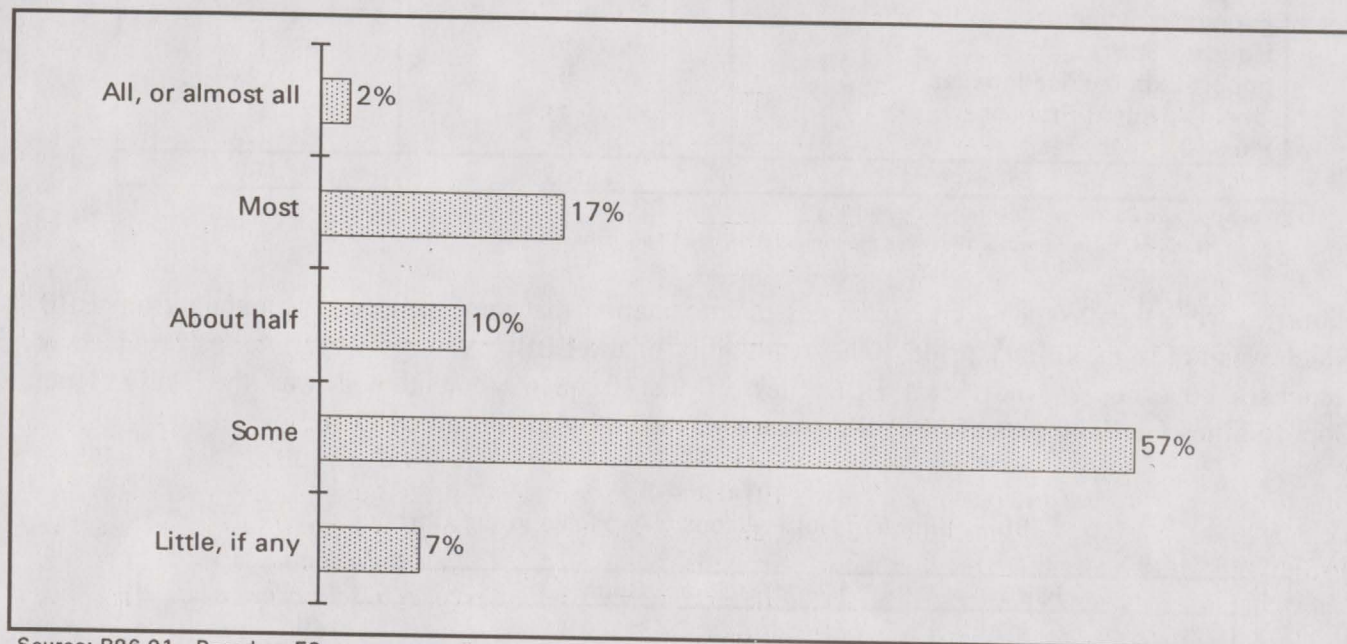
Source: B86-91. Based on 58 users responding.

Online User Survey respondents were also asked whether access to EBB, if it were instituted on a permanent basis, could be an acceptable substitute for some other Government documents obtained through the library. Of the respondents who expressed an opinion, almost two-thirds (64%) answered either "definitely yes" or "probably yes" [B121-125].

Chart 4-13
Could EBB Substitute for Some Government Documents?
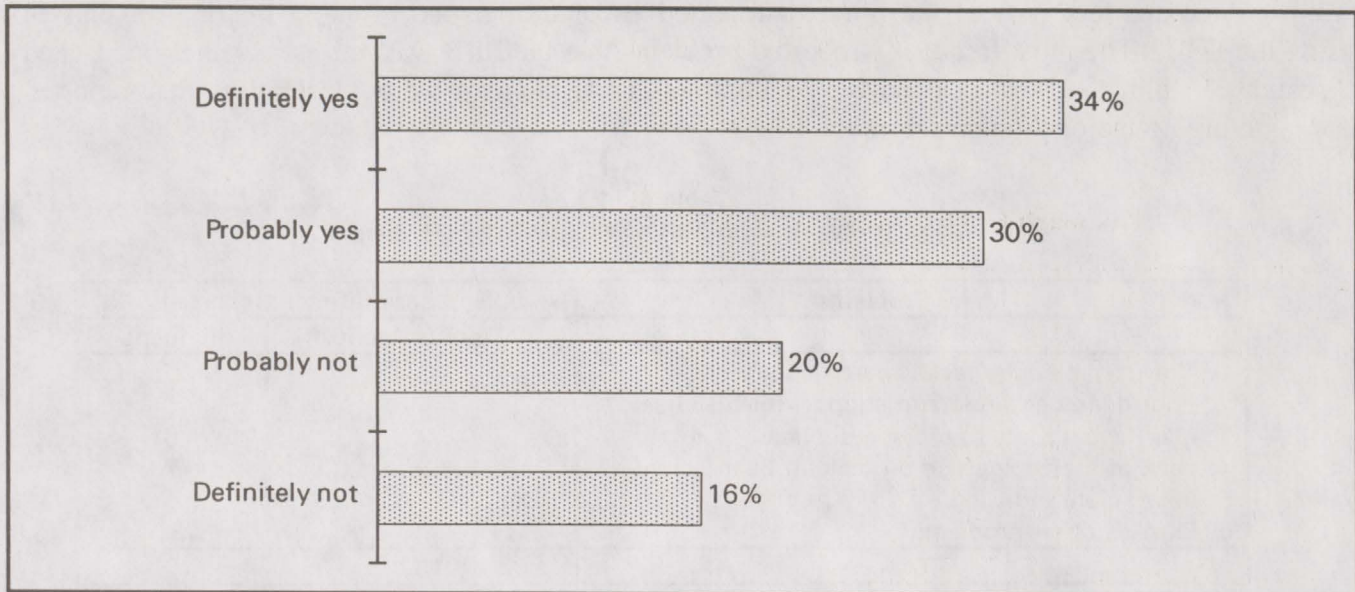
Source: B121-125. Based on 56 users responding.

On a more specific question in the Library Survey, respondents were asked to identify any Government depository documents that contain essentially the same information as that provided by the EBB. In addition, respondents were asked to indicate whether the EBB would be an acceptable substitute for the documents they identified. Of the 54 document titles that were identified, the most frequently mentioned were the Consumer Price Index, Producer Price Index, Survey of Current Business, and Economic Indicators. [C11]. As Table 4-10 shows, when this question focuses on specific documents, the majority of respondents mentioning each document did not consider the EBB an acceptable substitute.

Table 4-10
Documents containing the Same Information as EBB:
Would EBB be an Acceptable Substitute?

Document Title	Library Count	Would EBB be an acceptable substitute?	
		Yes	No
Consumer Price Index	48	8	38
Producer Price Index	31	5	22
Survey of Current Business	30	4	25
Economic Indicators	25	4	21
Employment and Earnings	20	2	14
Monthly Labor Review	17	2	15
Federal Reserve Bulletin	15	2	12
Plus 47 Other Titles*	110	n/a	n/a

Source: C11. Based on 92 libraries responding.

*Note: None of these 47 other titles was mentioned by more than nine libraries.

Problems Encountered with EBB and Suggested Improvements

Almost three-quarters (74) of the libraries reported encountering one or more major problems in using the EBB. The most frequently reported problem--that the EBB was not user friendly or lacked a search capability--was mentioned by 26 libraries [C14]. There were 11 libraries that reported encountering no major problems with the EBB.

Table 4-11
Major Problems with EBB as Reported by Libraries

Major Problems	Number of Times Reported	
	Library Count	Percent
1. Not user friendly/ lacks search capability	26	20
2. Poor documentation and support for EBB use	11	8
3. Insufficient staff to provide services	10	8
4. Lack of staff expertise on bulletin boards	9	7
5. Insufficient indexing	7	5
6. Plus 26 other problems*	69	52
Total	132	100

Source: C14. Based on 85 libraries responding.

*Note: None of these 26 other problems was mentioned more than six times by the responding libraries.

A majority of test site libraries suggested various improvements they would like to see in the operation of the EBB. Of the 27 discrete improvements that were suggested, the one most frequently mentioned was that more detailed information be provided as to EBB file content, location, and update times [C15].

Table 4-12
Library Suggestions for Improving EBB

Suggestions	Number of Times Reported	
	Count	Percent
1. Better describe EBB file contents, location, updates	20	10
2. Keyword searching	16	8
3. Better organization and indexing for faster access	16	8
4. Archival data retention	10	5
5. User-friendly manual	10	5
6. User-friendly screens	10	5
7. Ability to download sections of files	8	4
8. Toll-free phone number	7	4
9. Plus 19 other suggestions*	97	50
Total	194	100

Source: C15. Based on 73 libraries reporting.

*Note: None of these 19 other suggestions was mentioned by more than six responding libraries.

Cost Analysis

The figures presented in this section are the costs that were borne by the Government and by depository libraries in providing free public access to the EBB during the pilot project period. The library test site expenses are based on costs that were either monitored or estimated by the library.

Costs to the Government

Direct costs to the Government were limited to a single $15,000 transfer payment from GPO to the Department of Commerce to defray the costs incurred in providing libraries with online access and in performing the following pilot project support tasks:

- preparing a project implementation plan showing resource requirements and project milestones;

- performing the systems analysis and programming necessary to provide libraries with online access;

- providing EBB documentation and telephonic support to facilitate library access;

- recording and reporting statistical data on EBB usage by libraries; and

- participating in the project evaluation.

The actual dollar amount of EBB computer connect time used by the pilot project test site libraries was $8,813.

Costs to Depository Libraries

Depository libraries were asked to report EBB-related costs in three areas:

- Equipment\Service Expenses

- Staff Costs

- Telecommunications Charges

Equipment\Service Expenses

EBB equipment and service expenses were incurred in installing, promoting, and supporting the EBB. Table 4-1 in Section 4 identifies the EBB-related items and activities that were purchased with these expenditures. For most libraries these costs were negligible or non-existent. Of the 77 libraries that responded to the Library Survey's question about equipment/service expenditures, 67% reported no expenditures in this cost category. The remaining libraries reported expenditures ranging from a high of $2,200 for one particular computer purchase, to a low of $5 in several libraries [C5]. Table 5-1 shows the average equipment/service cost per library by library type and size. When the analysis is restricted to those libraries that incurred some expense, the average cost per library was $364.

Table 5-1
Average Cost per Library for EBB-Related Equipment/Services

	Equipment Costs
Library Size:	
Large (40)	$143
Medium (27)	113
Small (10)	34
Library Type:	
Academic (50)	$121
Public (18)	161
Other (9)	17
All Libraries	$118

Source: C1,C5. Numbers of libraries responding shown in parentheses.

Staff Costs

In addition to equipment/service costs, libraries incurred labor costs in providing the EBB service. Libraries were asked to report staff costs associated with the (1) staff hours spent setting up the EBB and (2) training staff members and others to use the EBB. Table 5-2 shows the average staff cost per library for these activities. For libraries responding to the items about staff costs in setting up the EBB and staff training, over 90% reported some costs. Staff costs reported for setting up the EBB ranged from $0 to a high of $500. The costs for training staff members ranged from $0 to $864.

With respect to staff costs for training non-staff, those costs ranged from $0 to $1,500. However, 38% of the reporting libraries indicated zero staff costs for training non-staff. If the analysis of this staff cost is restricted to only those libraries that reported some expenditure in this category, the average cost is $162 rather than the $101 reported in Table 5-2.

Table 5-2
Average EBB Staff Costs per Library

	Setting Up EBB	Training Staff	Training Others	Total Costs
Library Size:				
Large	(38) $72	(40) $156	(41) $115	(42) $326
Medium	(29) 61	(31) 120	(32) 109	(32) 281
Small	(14) 65	(14) 90	(14) 40	(14) 194
Library Type:				
Academic	(53) $73	(55) $133	(57) $ 89	(58) $280
Public	(19) 55	(19) 157	(19) 179	(19) 390
Other	(9) 57	(11) 84	(11) 28	(11) 159
All Libraries	**$67**	**$132**	**$101**	**$289**

Source: C1,C3,C4. Numbers of libraries responding shown in parentheses.

Telecommunications Charges

Under the cost-sharing provision of the EBB pilot project, participating libraries agreed to pay their own telecommunications charges for accessing the EBB. The libraries were asked to maintain a record of their monthly EBB telecommunications charges during the pilot project period and report these costs in the Library Survey. For the 69 libraries reporting EBB telecommunications charges, the average cost per library for the 7-month pilot project period was $89 [C8]. Telecommunications costs ranged from a high of $479 down to $0 for the two libraries within the EBB's local calling area. The average telecommunications cost per session per library was $2.90.

Table 5-3
Average Telecommunications Costs per Library

	For Project Period	Per Session
Library Size:		
Large (36)	$124	$2.87
Medium (24)	52	3.01
Small (9)	50	2.76
Library Type:		
Academic (44)	$88	$2.89
Public (19)	99	3.25
Other (6)	66	1.87
All Libraries (69)	**$89**	**$2.90**

Source: C8,E. Numbers of libraries responding shown in parentheses.

The geographical distribution of telecommunications costs was also examined using the time zone in which the library was located as an approximate indicator of distance from the EBB's location in Washington, D.C. With one exception, the pattern of average cost per session shows a gradual increase from the eastern time zone ($2.61) across the central zone ($3.50), to the Pacific zone ($3.61). However, the cost for the mountain time zone libraries was quite low ($1.67)[C8]. This anomaly could be due to the fact that the mountain time zone had the fewest number of libraries reporting telecommunication cost data--6 libraries--and 5 of those libraries calculated their costs by applying an average charge to estimated usage times.

In addition to reporting their EBB telecommunications costs, test site libraries were asked to report the costs of all other online services and, if possible, break out these costs between connect charges and telecommunications charges. For the 31 libraries that were able to provide this breakout of their online expenses, the libraries' average monthly telecommunications cost was calculated as a proportion of its average monthly telecommunication charges. The median EBB average monthly cost amounted to 7% of the average monthly telecommunication cost for these 31 sites.

Library Cost Summary

All equipment/service, staff, and telecommunications costs reported by each test site library were summed and used to compute an average total cost per library. Table 5-4 presents these figures. As indicated in Tables 5-1, 5-2, and 5-3, staff costs accounted for the largest portion of this total followed by equipment/service costs and then telecommunication costs.

Table 5-4
Average Total EBB Cost per Library:
Combined Staff, Equipment/Services, and Telecommunications Costs

	Total Cost
Library Size:	
Large (43)	$556
Medium (32)	416
Small (13)	270
Library Type:	
Academic (59)	$444
Public (19)	642
Other (10)	230
All Libraries (88)	$463

Source: C1,3,4,5,8;E. Numbers of responding libraries shown in parentheses.

Cost as a Factor in EBB Use

Because the test site libraries were responsible for their own telecommunications expenses, the Online User Survey included a question designed to assess whether cost considerations might have restricted library use of the EBB.   More than two-thirds (69%) of the respondents who offered an opinion, believed that budget/cost limitations restricted their use of the EBB to "little or no extent" [B109-114].

Chart 5-1
Extent to Which Costs Restricted EBB Use
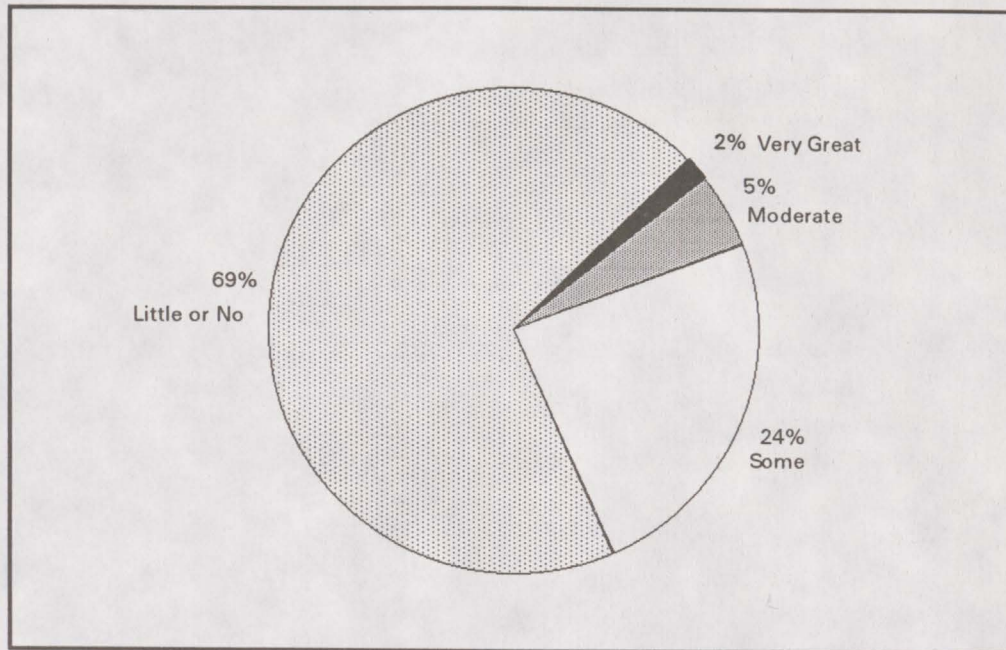
Source: B109-114. Based on 68 users responding.

Other survey data also suggest that project costs did not significantly influence EBB use during the study. The provision of a toll-free phone number was not among the top five suggestions provided on the Library Survey for improving the EBB (See Section 4, Chart 4-11). Additionally, in the Test Site Selection Survey, libraries were asked this hypothetical question: If the online access charges were not fully subsidized by GPO, what would be the maximum hourly access charge that your library would be willing to pay for the EBB? Of the 98 test site libraries that responded to this item 12% stated that they would not be willing to pay any online access charge for EBB. Almost two-thirds (65%) would agree to pay between $1.00 and $10.99 per hour, and the remaining 20% would pay more [A9].

Table 5-5
Maximum Hourly Access Charges Libraries Would Pay for EBB

Amount	Count	Percent
Not Willing to Pay	12	12
$1.00-$5.99	24	25
$6.00-$10.99	40	41
$11.00-$15.99	6	6
$16.00 or More	16	16
Total	98	100

Source: A9. Based on 98 libraries responding.

U.S. GOVERNMENT PRINTING OFFICE

SURVEY OF DEPOSITORY LIBRARIES
ECONOMIC BULLETIN BOARD PILOT PROJECT

INTRODUCTION

The Government Printing Office (GPO) is conducting a survey of depository libraries to ascertain your interest in participating as a pilot project test site for the Department of Commerce's Economic Bulletin Board. Libraries indicating a desire to participate will be considered as candidates from which 100 test sites will be chosen, as outlined in the accompanying materials.

Most of the questions can easily be answered by checking boxes, entering numbers, or providing brief narrative responses. Space has been provided for additional comments at the end of the questionnaire. If necessary, additional pages may be attached.

Even if your library is not interested in participating in the Economic Bulletin Board Pilot Project, please complete the appropriate items on the questionnaire. Information concerning your reasons for not choosing to participate is important in an overall assessment of the usefulness of on-line data bases for the dissemination of government information to the depository libraries.

The questionnaire should take only about 15 minutes to complete. If you have any questions, please call Ms. Jan Erickson at (202) 275-1003.

Please return the completed questionnaire in the enclosed pre-addressed envelope within 10 days of receipt in order to ensure that your library is included in the selection process. In the event the envelope is misplaced, the return address is:

    U.S. General Accounting Office
    General Government Division
    Mr. Thomas Beall
    441 G Street, N.W. Room 3826
    Washington, D.C. 20548

Thank you for your cooperation.

* * * * *

PLEASE PROVIDE THE FOLLOWING INFORMATION:

Depository library number: _____

Library name: _____

Library mailing address:

_____

_____

_____   _____   _____
(City)   (State)   (Zip Code)

Name and telephone number of person completing questionnaire or other contact person:

_____
(Name)

(_____)   _____
(Area code)   (Number)

1. Is your library a selective or regional depository library? (CHECK ONE.)

    1. [   ] Selective depository library [1068]

    2. [   ] Regional depository library   [53]

2. Which of the items below best describes the size of your library (depository and non-depository materials)? (CHECK ONE.)

    1. [   ] Over 600,000 volumes   [314]

    2. [   ] Between 150,000 - 600,000 volumes [527]

    3. [   ] 150,000 volumes or fewer   [273]

          Did not answer   [7]

3. Which of the items below best describes your
   library? (CHECK ONE.)

   1. [ ] Academic library   [630]

   2. [ ] Court library   [44]

   3. [ ] Federal agency library   [38]

   4. [ ] Law school library   [114]

   5. [ ] Public library   [229]

   6. [ ] State agency library   [33]

   7. [ ] Other (please specify) __[33]_____
      _____

4. In which of the following time zones is the
   library located? (CHECK ONE.)

   1. [ ] Eastern   [558]

   2. [ ] Central   [328]

   3. [ ] Mountain [78]

   4. [ ] Pacific   [145]

   5. [ ] Other (please specify) __[12]_____

5. Does your library currently participate in any
   "on-line" computer access to outside data bases
   which provide reference service to patrons?
   (CHECK ONE.)

   1. [ ] Yes   [985]

   2. [ ] No   [125]

   3. [ ] Don't know [2]
           Did not answer [9]

6. Does your library currently subscribe to the
   Department of Commerce's Economic Bulletin Board?
   (CHECK ONE.) (NOTE: THE SELECTION OF CANDIDATES
   FOR THE PILOT PROJECT WILL NOT BE BASED IN ANY WAY
   ON THE CURRENT USE OF THE ECONOMIC BULLETIN
   BOARD.)

   1. [ ] Yes   [41]

   2. [ ] No [1071]
           Did not answer [9]

STOP . . . . .

```
BEFORE COMPLETING THE REMAINDER OF THIS
QUESTIONNAIRE, PLEASE READ OR REVIEW THE ECONOMIC
BULLETIN BOARD INFORMATION PACKET CONCERNING THE
REQUIREMENTS FOR PARTICIPATING IN GPO'S ECONOMIC
BULLETIN BOARD PILOT PROJECT.  THE SIGNATURES OF
THE LIBRARIAN AND LIBRARY DIRECTOR ARE REQUESTED
IN QUESTION 14 FOR THOSE LIBRARIES APPLYING FOR
CONSIDERATION AS A PARTICIPANT FOR THE ECONOMIC
BULLETIN BOARD PILOT PROJECT.
```

7. Does your library wish to be considered as a
   candidate for the Economic Bulletin Board pilot
   project? (CHECK ONE.)

   1. [ ] Yes (CONTINUE TO QUESTION 8.) [376]

   2. [ ] No (SKIP TO QUESTION 12.)   [745]

8. Does your library have the equipment to use the
   Economic Bulletin Board or will the necessary
   equipment be acquired if your library is selected
   for the pilot test? (CHECK ONE.)

   1. [ ] The library has the necessary equipment
                                          [363]

   2. [ ] The library will acquire the necessary
           equipment   [9]

   3. [ ] The library has the necessary equipment
           but will also acquire additional
           equipment if selected for the pilot
           project   [23]

   4. [ ] Don't know   [2]

   5. [ ] Other (please specify) _____[7]___
      _____
      _____

           Did not answer   [717]

9. The on-line computer access charges for the pilot
   project will be paid by GPO; the libraries will
   pay the telecommunications charges. If the
   on-line access charges were not fully subsidized
   by GPO, which of the following charges, if any,
   would be the maximum hourly on-line access charge
   that your library would be willing to pay for the
   Economic Bulletin Board? (CHECK ONE.)

   1. [   ] Not willing to pay   [59]

   2. [   ] $1.00 - $5.99 per hour   [90]

   3. [   ] $6.00 - $10.99 per hour   [152]

   4. [   ] $11.00 - $15.99 per hour   [36]

   5. [   ] $16.00 or more per hour   [43]
            (SPECIFY) $ _____
                  Did not answer   [741]

10. How much interest, if any, do you think users of
    your library would have in accessing the Economic
    Bulletin Board? (CHECK ONE.) (NOTE: THE
    SELECTION OF CANDIDATES FOR THE PILOT PROJECT WILL
    NOT BE BASED ON YOUR RESPONSE TO THIS QUESTION.)

    1. [   ] Little interest (SKIP TO QUESTION 13.)
             [8]
    2. [   ] Some interest ──────────┐
             [50]   │
    3. [   ] Moderate interest   │
             [137]   │
    4. [   ] Great interest   │─→(CONTINUE TO
             [138]   │   QUESTION 11.)
    5. [   ] Very great interest   │
             [57]   │
    6. [   ] No basis to judge ───────┘
             [12]

             Did not answer   [719]

STOP . . . . .

┌───┐
│ BEFORE RESPONDING TO QUESTION 11, PLEASE READ OR │
│ REVIEW THE ECONOMIC BULLETIN BOARD INFORMATION   │
│ PACKET SECTION III, METHODOLOGY FOR SELECTION OF │
│ TEST SITES.   │
└───┘

11. Please describe below any special circumstances,
    conditions, or plans associated with your
    library's desire to participate in the Economic
    Bulletin Board pilot project. (INCLUDE ANY
    ATTACHMENTS.)

┌─────────────────────────┐
│ SKIP TO QUESTION 13.   │
└─────────────────────────┘

12. Which of the following reasons, if any, describes why your library does not wish to be considered as a candidate for the Economic Bulletin Board pilot project? (CHECK ALL THAT APPLY.)

    1. [   ] Do not have the equipment to access the data base. [178]

    2. [   ] Do not have funds to support telecommunications costs [229]

    3. [   ] Do not have adequate staff resources available to support this information service [382]

    4. [   ] Do not believe that there would be sufficient library user interest in this particular information service [389]

    5. [   ] Do not wish to institute a service that might be discontinued at the end of the pilot project period [192]

    6. [   ] Other (please specify) ___[132]_____

13. If you have any additional comments regarding any previous question or general comments concerning GPO's Economic Bulletin Board pilot project, please use the space provided below.

GGD/MS/12-89

- -

14. If you answered "Yes" to question 7, indicating that the library wishes to be considered as a participant in the Economic Bulletin Board pilot project, please have the following statement signed.

    I have read the information contained in the Economic Bulletin Board Information Packet and agree to fulfill the administrative responsibilities of a pilot project participant. Responsibilities include collecting and reporting data on EBB system usage patterns and telecommunications costs, providing user assistance, and ensuring that library staff are trained.

    _____   _____
                    (Librarian)   (Date)

    _____   _____
                 (Library Director)   (Date)

ECONOMIC BULLETIN BOARD PILOT PROJECT

USER SURVEY

FOR EACH QUESTION DISPLAYED, PLEASE ENTER
THE NUMBER THAT BEST DESCRIBES YOUR
ANSWER AND THEN PRESS RETURN TO CONTINUE.

Why are you currently using the EBB?

5.   Obtain information for yourself   [3]

6.   Obtain information for someone else [15]

7.   Both 5 and 6   [15]

8.   Other   [5]
      Did not answer   [9]
ENTER YOUR ANSWER (5-8) AND
PRESS RETURN TO CONTINUE.

During this session, do you plan to
access specific files you have already
identified?

9.   Yes [48]

10.   No   [24]
      Did not answer [4]
ENTER YOUR ANSWER (9-10) AND
PRESS RETURN TO CONTINUE.

During this session, do you plan to
search files to see if any contain the
information you want?

11.   Yes [49]

12.   No   [26]
      Did not answer [1]
ENTER YOUR ANSWER (11-12) AND
PRESS RETURN TO CONTINUE.

Where are you accessing the EBB for this
session?

13. Within the library building [70]

14. Somewhere else   [6]

ENTER YOUR ANSWER (13-14).

Before this session, how many times had
you accessed the EBB?

15. This is my first time accessing the
     EBB   [17]

16. 2 to 6 times   .[23]

17. 7 to 12 times   [10]

18. More than 12 times [25]
         Did not answer   [1]
ENTER YOUR ANSWER (15-18).

How often do you access the EBB, on
average?

19. At least daily   [13]

20. Less than daily, but
     at least once a week   [19]

21. Less than once a week, but
     at least once a month   [23]

22. Less than once a month [10]

23. Not applicable; first time accessing
     the EBB   [10]

24. Not sure   [1]

ENTER YOUR ANSWER (19-24).

How available are library work
stations/equipment for accessing the EBB?

25. Always, or almost always available   [46]

26. Generally available   [21]

27. Generally unavailable   [2]

28. Always, or almost always unavailable   [0]

29. Not sure   [2]

30. Does not apply   [4]
        Did not answer   [1]
ENTER YOUR ANSWER (25-30).

On average, how easy or difficult has it
been for you to access the EBB?

31. Very easy   [34]

32. Somewhat easy   [28]

33. Somewhat difficult   [5]

34. Very difficult   [2]

35. Not sure   [7]

ENTER YOUR ANSWER (31-35).

In learning to use the EBB, did your
training include teaching yourself, using
available information and materials?

36. Yes [69]

37. No   [6]
       Did not answer [1]
ENTER YOUR ANSWER (36-37).

In learning to use the EBB, did your
training include individual assistance
from library staff?

38. Yes [42]

39. No   [33]

ENTER YOUR ANSWER (38-39).

In learning to use the EBB, did your
training include attending a class or
some other type of formal instruction?

40. Yes [12]

41. No   [62]
        Did not answer [2]
ENTER YOUR ANSWER (40-41).

How helpful was the EBB training you
received?

42. Very great help   [11]

43. Great help   [7]

44. Moderate help   [7]

45. Some help   [8]

46. Little or no help   [3]

47. Does not apply/received no training [35]
        Did not answer   [5]
ENTER YOUR ANSWER (42-47).

Was the training you received adequate to
successfully use the EBB the first time
you tried?

48. Yes
                                            [26]
49. No
                                            [14]
                                            [1]
50. Do not recall

51. Don't know, this is my first time
     accessing the EBB.   [5]

52. Does not apply/received no training [28]
        Did not answer   [2]
ENTER YOUR ANSWER (48-52).

How helpful are the documentation/manuals
for the EBB?

53. Very great help   [9]

54. Great help   [9]

55. Moderate help   [28]

56. Some help   [13]

57. Little or no help   [6]

58. Does not apply/did not use [9]
        Did not answer   [2]
ENTER YOUR ANSWER (53-58).

How helpful were the results of any phone
calls you may have made for assistance
with the EBB?

59. Very great help   [10]

60. Great help   [9]

61. Moderate help   [9]

62. Some help   [2]

63. Little or not help   [1]

64. Does not apply/made no calls [44]
        Did not answer   [1]
ENTER YOUR ANSWER (59-64).

How often do you get no response or a
busy signal when accessing the EBB?

65. Never or almost never [38]

66. Sometimes   [17]

67. About half the time   [1]

68. Most of the time   [0]

69. Almost always   [1]

70. Not sure   [18]
        Did not answer   [1]
ENTER YOUR ANSWER (65-70).

How often do you access EBB information
for use in academic research, courses, or
other types of instruction?

71. Never or almost never   [4]

72. Sometimes   [5]

73. About half the time   [0]

74. Most of the time   [1]

75. Always or almost always   [3]
        Did not answer   [63]
ENTER YOUR ANSWER (71-75).

How often do you access EBB information
for your use in your job
or business?

76. Never or almost never   [4]

77. Sometimes   [5]

78. About half the time   [0]

79. Most of the time   [1]

80. Always or almost always   [3]
        Did not answer   [63]
ENTER YOUR ANSWER (76-80).

How often do you access EBB information
for your own personal use?

81. Never or almost never   [5]

82. Sometimes   [5]

83. About half the time   [0]

84. Most of the time   [0]

85. Always or almost always   [2]
        Did not answer   [64]
ENTER YOUR ANSWER (81-85).

How much of the information provided by
the EBB overlaps with other government
documents you obtained through the
library?

86.   Little, if any   [7]

87.   Some   [33]

88.   About half   [6]

89.   Most   [10]

90.   All, or almost all   [2]

91.   Not sure   [14]
      Did not answer   [4]
ENTER YOUR ANSWER (86-91).

When you use the EBB, how often is it
because the EBB provides access to
information that is more up-to-date than
what is available in the library?

92.   Always or almost always [36]

93.   Very often   [17]

94.   Often   [6]

95.   Sometimes   [4]

96.   Seldom, if ever   [1]

97.   Not sure   [7]
      Did not answer   [5]
ENTER YOUR ANSWER (92-97).

When you use the EBB, how often is it
because the EBB provides access to
information not available in the library?

98. Always or almost always [11]

99. Very often   [9]

100. Often   [14]

101. Sometimes   [16]

102. Seldom, if ever   [8]

103. Not sure   [13]
     Did not answer   [5]
ENTER YOUR ANSWER (98-103).

When you use the EBB, how often is it to
obtain information that is in a more
useful format (e.g., a computer-readable
file) than what is available in the
library?

104. Always or almost always [11]

105. Very often   [12]

106. Often   [8]

107. Sometimes   [15]

108. Seldom, if ever   [24]
     Did not answer   [6]
ENTER YOUR ANSWER (104-108).

To what extent, if at all, has your use
of the EBB been restricted because you
have budget/cost limitations?

109. Little or no extent [40]

110. Some extent   [14]

111. Moderate extent   [3]

112. Great extent   [0]

113. Very great extent   [1]

114. No opinion   [10]
     Did not answer   [8]
ENTER YOUR ANSWER (109-114).

To what extent, if at all, has your use
of the EBB been restricted because it is
unavailable (e.g., you get a busy
signal)?

115. Little or no extent [43]

116. Some extent   [12]

117. Moderate extent   [3]

118. Great extent   [1]

119. Very great extent   [1]

120. No opinion   [10]
     Did not answer   [6]
ENTER YOUR ANSWER (115-120).

Suppose the EBB was instituted on a
permanent basis. Could you use the EBB as
an acceptable substitute for some other
government documents obtained through the
library?

121. Definitely yes   [19]

122. Probably yes   [17]

123. Probably not   [11]

124. Definitely not   [9]

125. Not sure   [15]
     Did not answer   [5]
ENTER YOUR ANSWER (121-125).

When you access the EBB, how often do you
get the information you are looking for?

126. Always or almost always   [17]

127. Very often   [14]

128. Often   [17]

129. Sometimes   [10]

130. Seldom, if ever   [3]

131. Not sure   [2]
     Did not answer   [5]
132. Not applicable; first time accessing
     the EBB

ENTER YOUR ANSWER (126-132).

In general, how satisfied or dissatisfied
are you with the EBB?

133. Very satisfied   [18]

134. Generally satisfied   [30]

135. Uncertain   [15]

136. Generally dissatisfied   [6]

137. Very dissatisfied   [1]
     Did not answer   [6]
ENTER YOUR ANSWER (133-137).

What is your employment status?

138. School faculty/administration [3]
139. Researcher   [3]
140. Government   [0]
141. Student   [4]
142. News media   [0]
143. Self-employed   [0]
144. Manager/proprietor   [0]
145. Professional   [1]
146. Sales   [0]
147. Service/production   [0]
148. Retired   [0]
149. Librarian   [62]
150. Other   [1]
     Did not answer   [1]
ENTER YOUR ANSWER (138-150).

If you have any comments about this
survey or the EBB, please enter them and
press return to continue.

ENTER COMMENTS AND PRESS RETURN TO
CONTINUE. IF YOU HAVE NO COMMENTS, PRESS
RETURN TO CONTINUE.

Thank you for completing this survey. If
you use the EBB again, you may be asked
to complete a different, much shorter
version of this survey. Your answers to
each survey are important in the
assessment of the EBB pilot project.

PRESS RETURN AND "Q" TO ACCESS THE MAIN
EBB MENU.

BLANK PAGE

> # Economic Bulletin Board Pilot Project
> ## EBB Data Collection Form

Please provide the following information. For certain items, please indicate, when requested, if the figure provided is an estimate or was actually monitored during the project.

1. Number of staff hours spent in installing or setting up hardware/software to access the EBB. (Only time spent on activities that specifically pertain to the EBB should be counted.)

    Total personnel cost associated with these staff hours (i.e., hourly rate of person(s) performing these activities multiplied by number of hours worked)

    (Check One)

    Staff hours _____[4.0]_____   ( ) Actual   ( ) Estimate
                                                     [2.2]   [4.7]

    Total personnel costs [$67.01]   ( ) Actual   ( ) Estimate
                                                    [$78.36]   [$4.74]

2. Total number of library staff receiving training in how to use the EBB.

    (Check One)

    Number of staff _____[4.6]_____   ( ) Actual   ( ) Estimate
                                                     [4.1]   [10.0]

3. Total number of library staff hours spent in receiving training in how to use the EBB.

    Total personnel cost associated with these staff hours (i.e., hourly rate of person(s) receiving training multiplied by number of hours in training)

    (Check One)

    Staff hours _____[8.2]_____   ( ) Actual   ( ) Estimate
                                                     [4.9]   [9.1]

    Total personnel costs [$132.29]   ( ) Actual   ( ) Estimate
                                                    [$18.39]   [137.97]

4. Total number of library staff hours spent providing training to others in how to use the EBB.

Total personnel cost associated with these staff hours (i.e., hourly rate of person(s) providing training multiplied by number of hours they provided training).

(Check One)

Staff hours _____[5.3]_____   ( ) Actual   ( ) Estimate
                                    [1.9]   [8.8]

Total personnel costs __[$101.14]__   ( ) Actual   ( ) Estimate
                                        [$5.20]   [$159.64]

5. In the columns below, please identify/describe any services, equipment, materials, supplies, software, or other products that were purchased or budgeted **specifically** to support library use of the EBB. Beside each item identified, enter its cost. Include only purchases that are used predominately in support of the EBB and would not have been purchased otherwise. Do not include any purchases that are routinely made in general support of the on-line databases used by the library.

Item Purchased or Budgeted   Cost

__[See Appendix C-I]_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

6. How many on-line services (e.g., DIALOG, OCLC) does the library access?

(Check One)

On-line services _____[5.5]_____   ( ) Actual   ( ) Estimate
                                        [4.9]   [7.3]

7. What are the library's total costs for all on-line services combined?

On-line costs   [$2,359.08/month]   **Check One:** ( ) Actual   ( ) Estimate
                                                        [$3,718.55]   [$1,825.01]

Please indicate what period of time the figure covers (e.g., year, month) or provide specific dates. _____

If possible, please indicate how much of the total on-line costs were for the following:

[$1,834.53]   On-line access (i.e., connect charges)

                                        Check one: ( ) Actual ( ) Estimate
                                                     [$1,636.22]   [$1,887.03]
[$286.95]   Telecommunications charges

                                        Check One: ( ) Actual ( ) Estimate
                                                     [$459.78]   [$241.21]

8. What were the library's telecommunications charges for accessing the EBB? *(If possible, please provide the figures by month -- June through December, 1990.)

_____ June   _____ October

_____ July   _____ November

_____ August   _____ December

_____ September

*[The mean total cost per library was $89.27 for the entire pilot project period.]
                                    Check One: ( ) Actual   ( ) Estimate

Please explain below how the estimate was determined.

_____

_____

_____

_____

9. In providing information to library patrons from the EBB, please estimate the overall percent of time each of the following formats was used.

Percent

_____ Paper (e.g., printout)

_____ Disk or other electronic format

_____ Viewed on-screen only

_____ Other (Specify) _____

10. Please provide a brief description of how the EBB has been used in your library. Mention any routine or typical uses of the information and identify what files were most popular or frequently accessed.

_____[See Appendix C-II]_____

_____

_____

_____

_____

_____

_____

11. Are there any government documents that the library currently acquires through the Depository Library Program that contain essentially the same information as that provided by the EBB? If there are, please list these documents below. Please check whether the EBB would be an acceptable substitute for this publication if it were instituted on a permanent basis.

	Acceptable Substitute? (Check one)	
Document Title	**Yes**	**No**
[See Appendix C-III]	( )	( )
	( )	( )
	( )	( )
	( )	( )
	( )	( )
	( )	( )
	( )	( )
	( )	( )

12. Please provide any examples of information that the library was able to obtain from the EBB that was more up-to-date or current than what was available in the library prior to the EBB.

[See Appendix C-IV]

13. Please provide any examples of information that the library was able to obtain from the EBB that was not in the library prior to the availability of the EBB.

[See Appendix C-V]

_____

_____

_____

_____

14. What major problems, if any, did the library encounter in using the EBB?

[See Appendix C-VI]

_____

_____

_____

_____

15. What improvements, if any, would the library like to see in the operation of the EBB?

[See Appendix C-VII]

_____

_____

_____

_____

Please Provide The Following Information:

Depository Library number: _____

Library name: _____

Name and telephone number of project coordinator or other contact person:

_____
(Name)

_____   _____
(Area Code)   (Number)

Appendix C-I

Library Survey Question 5:
Please identify/describe any services, equipment, materials, supplies, software, or other products that were purchased or budgeted _specifically_ to support library use of the EBB.

Item Purchased or Budgeted	No. of Libraries	Average Cost
Printing	8	$57
Modem	7	$181
Promotional materials	7	$29
Phone line	3	$120
Software	3	$113
Computer	1	$2200
Computer and modem	1	$2100
Phone line, printer, paper, and modem	1	$2000
Dummy terminal	1	$129
Disk storage box	1	$30
Paper	1	$20
Notebook/logbook	1	$5

Note: Seventy-seven libraries provided one or more responses.

Appendix C-II

Library Survey Question 10:
Please provide a brief description of how the EBB has been used in your library.

How EBB Was Used	No. of Libraries
Reference	52
Update frequently requested statistics	31
Demonstrations/training	22
Classwork	12
Not used at all	9
Scan for news releases	5
Search for more current information	4
Create reports	4
No regular usage	3

Note: Ninety-two libraries provided one or more responses.

Appendix C-III

Library Survey Question 11:

Are there any Government documents that the library currently acquires through the Depository Library Program that contain essentially the same information as that provided by the EBB? If there are, please list these documents below. Please check whether the EBB would be an acceptable substitute for this publication if it were instituted on a permanent basis.

Document Title	Frequency	Acceptable Substitute?	
		Yes	No
Consumer Price Index	48	8	38
Producer Price Index	31	5	22
Survey of Current Business	30	4	25
Economic Indicators	25	4	21
Employment and Earnings	20	2	14
Monthly Labor Review	17	2	15
Federal Reserve Bulletin	15	2	12
Census Bureau Publications	9	1	1
Construction Review	6	0	6
Bureau of Labor Statistics Publications	6	4	2
Daily Treasury Statement	6	4	2
Current Housing Reports	5	1	3
Current Wage Developments	5	0	4
Annual Energy Outlook	5	2	3
Monthly Energy Review	4	1	2
Business Conditions Digest	4	0	4
Business Statistics	3	0	3
Trade and Employment	3	2	0
Industrial Outlook	3	0	3
Employment and Wages	3	1	2
GNP	3	1	2
Housing Starts	3	0	2
Treasury Bulletin	2	0	1
Foreign Exchange Rates	2	1	0
Monthly Wholesale Trade	2	0	2
National Income Statistics	2	0	2
Personal Income--Local Statistics	2	0	2
Energy Publications	2	1	0
Commerce Business Daily	2	1	1
Monthly Retail Trade	2	1	1

Appendix C-III (continued)

Document Title	Frequency	Acceptable Substitute?	
		Yes	No
Area Wage Surveys	2	1	1
Quarterly Financial Report for Manufacturing, Mining, and Trade Corps.	2	0	2
National Trade Database CD-ROM	1	0	0
Statistics of Income Bulletin	1	0	0
Daily Trade Opportunities	1	1	0
US Labor News Releases	1	1	0
Press releases	1	1	0
Dept. of Commerce News	1	1	0
Petroleum Supply Annual	1	0	0
Agricultural Statistics	1	0	1
County Business Patterns	1	1	0
Monthly Report of Foreign Direct Investment	1	0	1
Statistical Abstract	1	0	1
Collective Bargaining Settlements	1	1	0
World Fact Book	1	0	1
Monthly Treasury Statement	1	1	0
Latin American Trade Review	1	0	1
Quarterly Report on Program Cost and Schedule	1	0	1
World Food Needs and Availabilities	1	0	1
Factsheet	1	0	1
Foreign Trade Report	1	1	0
Manufacturers Shipments, Inventories, and Orders	1	1	0
Wage and Salary by Industry	1	1	0
Current Industrial Reports	1	0	0

Note: Ninety-two libraries provided one or more responses.

Appendix C-IV

Library Survey question 12:
Please provide any examples of information that the library was able to obtain from the EBB that was more up-to-date or current than what was available in the library prior to the EBB.

Document Title	Frequency
Consumer Price Index	56
Producer Price Indexes	13
TOPS	12
Exchange Rates	10
GNP	9
Federal Reserve Statistics	8
Economic Indicators	7
Housing Starts	5
Import/Export Price Indexes	5
Unemployment Statistics	5
Labor Statistics	4
Press releases	3
Foreign Trade Statistics	3
Interest Rates	3
Per Capita Income	3
Regional Economic Information	3
Balance of Payments/Foreign Trade	2
Census publications	2
Import/Export Statistics	2
Collective Bargaining Settlements	2
Energy Statistics	2
Cost of Living Statistics	1
Crude Oil Price Summary	1
Drilling Machinery Costs	1
FY1991 Budget Resolution	1
Local Unemployment/Employment Statistics	1
Building Permits	1
Wholesale Food Costs	1

Note: Seventy-five libraries provided one or more responses.

Appendix C-V

Library Survey question 13:
Please provide any examples of information that the library was able to obtain from the EBB that was not in the library prior to the availability of the EBB.

Document Title	Frequency
TOPS	21
Press Releases	7
CPI	6
Interest Rates	5
Regional Economic Information	5
Federal Reserve Statistics	4
Import/Export Statistics	3
Import /Export Price Indexes	3
Detailed Construction Industry Statistics	2
Foreign Trade Statistics	2
Economic Indicators	2
Exchange Rates	2
Census Publications	2
Interest Rates	2
Consumer Rates	1
Per Capita Income (Regional)	1
Producer Price Indexes	1
Gross State Product	1
Treasury Rates	1
Advance Retail Trade	1
FY1991 Budget Resolution	1
Statistics Used for GNP	1
Energy Statistics	1
Summaries of Reports	1

Note: Sixty-five libraries provided one or more responses.

Appendix C-VI

Library Survey question 14:
What major problems, if any, did the library encounter in using the EBB?

Major Problem	Frequency
Not user friendly/lacks search capability	26
Poor documentation and support for EBB use	11
Insufficient staff to provide services	10
Lack of staff expertise on bulletin boards	9
Insufficient indexing	7
Printing screen image (width)	5
Insufficient workstations	5
Lack of compatible equipment	5
Inaccessibility	5
Too much data given	5
Insufficient documentation	4
Viewing files on screen (width)	4
Initial logon	4
Lack of necessary equipment	3
Patron resistance to new format	3
Lack of experience with downloading	3
Slow downloading	3
Slow appearance on screen	2
Lack of Lotus software made understanding data difficult	2
Moving between files	2
Thrown off system	2
Telephone costs	2
Increased costs for printing/downloading	2
Accessing recent files	1
Files listed not available	1
Insufficient expertise to set up	1
More local data needed	1
Incorporating EBB into normal reference service	1
Line noise	1
Bad timing	1
Labor-intensive effort in reformatting for word processing	1

Note: Eighty-five libraries provided one or more responses.

Appendix C-VII

Library Survey question 15:
What improvements, if any, would the library like to see in the operation of the EBB?

Suggested Improvement	Frequency
Better describe EBB file contents, locations, and updates	20
Keyword searching	16
Better organization and indexing for faster access	16
Archival data retention	10
User-friendly manual	10
User-friendly screens	10
Ability to download sections of files	8
Toll-free phone number	7
Availability on networks	6
More file documentation (text)	6
Smaller data bases to enable easier location/reading of files	5
Standardized format for statistics	3
More local data	3
Adaptability to different screen widths	3
Easier way to access	3
Faster scrolling option	3
Subscription/connection fees waived	2
Ability to view previous text on screen	2
More efficient file transfer protocols	2
Training/workshop	2
Communication between users	1
Interactive files	1
More publicity from issuing agencies	1

Note: Eighty-five libraries provided one or more responses.

US Government Printing Office

User Survey - Economic Bulletin Board

Introduction

The Department of Commerce's Economic Bulletin Board (EBB) is one of five Government Printing Office (GPO) pilot projects which disseminate government information in electronic formats. This library is participating in the pilot project. Your participation in this survey will help in assessing the usefulness of this on-line database.

This questionnaire should only take a few minutes to fill out. Your responses will be treated confidentially, and results will be reported in summary form only.

Please return the questionnaire to the librarian. If you have any questions, ask the librarian in charge. Thank you for your assistance.

Although you may obtain information from the EBB more than once, you should complete this questionnaire only once.

----

1. Did obtaining information through the Economic Bulletin Board (EBB) make your work: (Check one)

    [ ] Definitely easier   [52]
    [ ] Somewhat easier   [39]
    [ ] About the same   [23]
    [ ] Somewhat harder   [3]
    [ ] Definitely harder   [2]
         Did not answer [2]

2. Select the category that best describes how you will use the information obtained from the EBB. (Check one)

    [ ] Academic research/course work   [63]
    [ ] Job or business   [50]
    [ ] Personal use   [5]
         Did not answer   [2]

3. Have you obtained information from the EBB before this session? (Check one)

    [ ] Yes   [21]
    [ ] No   [92]
    [ ] Don't know
         Did not answer   [5]

4. Has the EBB provided you with information that is more up-to-date than what was available in the library before? (Check one)

    [ ] Yes   [85]
    [ ] No   [8]
    [ ] Don't know/no basis to judge [22]
         Did not answer   [6]

5. Has the EBB provided you with information that is in a more useful format (e.g., computer-readable file) than what was available in the library before? (Check one)

    [ ] Yes   [63]
    [ ] No   [26]
    [ ] Don't know/no basis to judge [25]
         Did not answer   [7]

6. Has the EBB provided you with information that was not available in the library before? (Check one)

    [ ] Yes   [57]
    [ ] No   [26]
    [ ] Don't know/no basis to judge [29]
         Did not answer   [9]

7. What is your employment status? (Check one)

    [ ] School faculty/administration [27]
    [ ] Researcher   [10]
    [ ] Government   [9]
    [ ] Student   [44]
    [ ] News media   [0]
    [ ] Self-employed   [6]
    [ ] Manager/proprietor   [1]
    [ ] Professional   [19]
    [ ] Sales   [0]
    [ ] Service/production   [1]
    [ ] Retired   [1]
    [ ] Other   [2]
         Did not answer   [1]

8. If you have any additional comments regarding any previous question or general comments about the EBB, please use the space provided below.

Thank you for your assistance.

(Librarian: Please enter Depository Library Number _____)

03/27/91   08:47   @202 275 7716   GPO SOD PTSG   +++ L F

ID	June Sessions	June Charges	July Sessions	July Charges	August Sessions	August Charges	September Sessions	September Charges	October Sessions	October Charges	November Sessions	November Charges	December Sessions	December Charges	June-December Sessions	June-December Charges

ADMINISTRATIVE NOTES
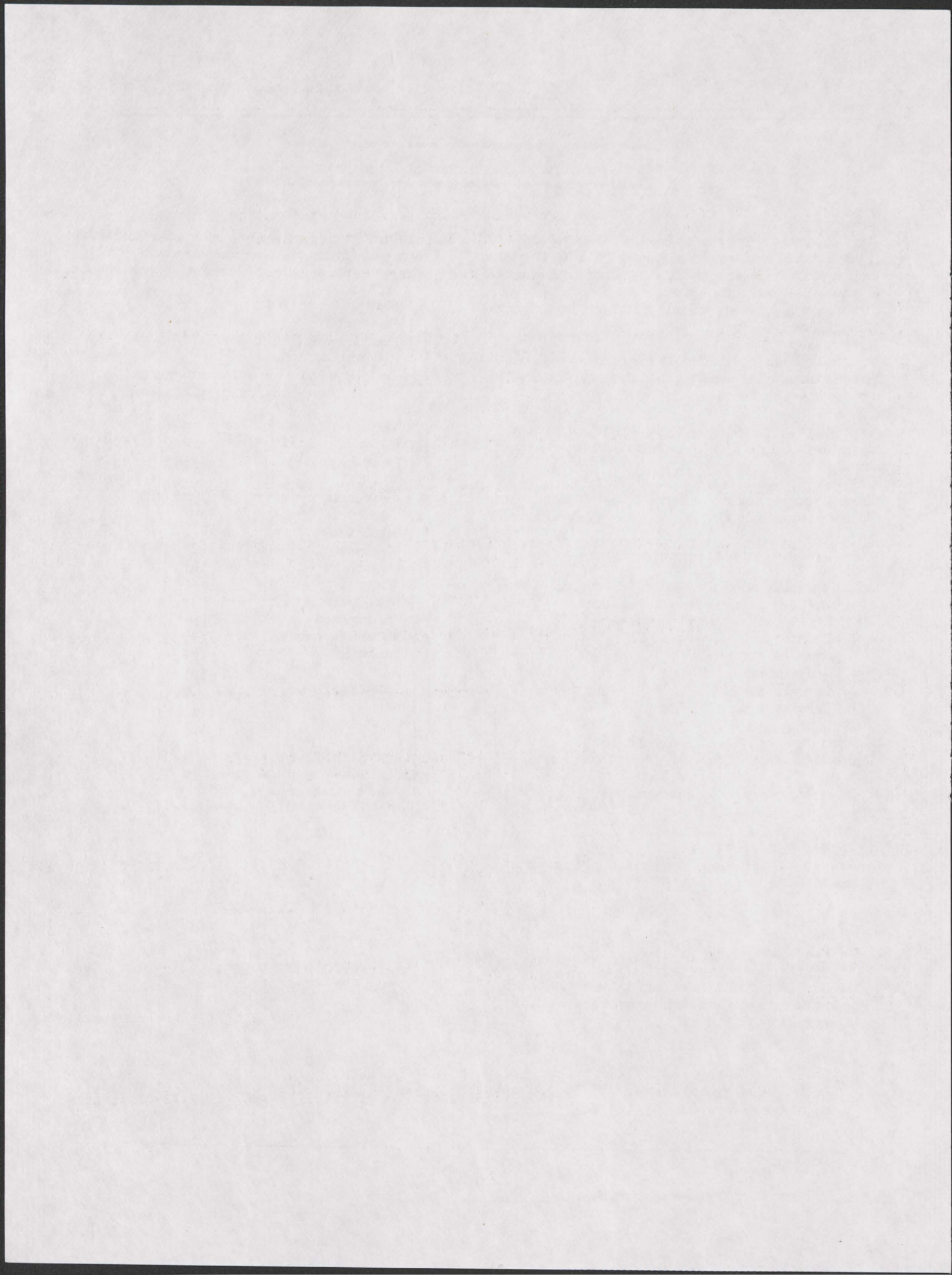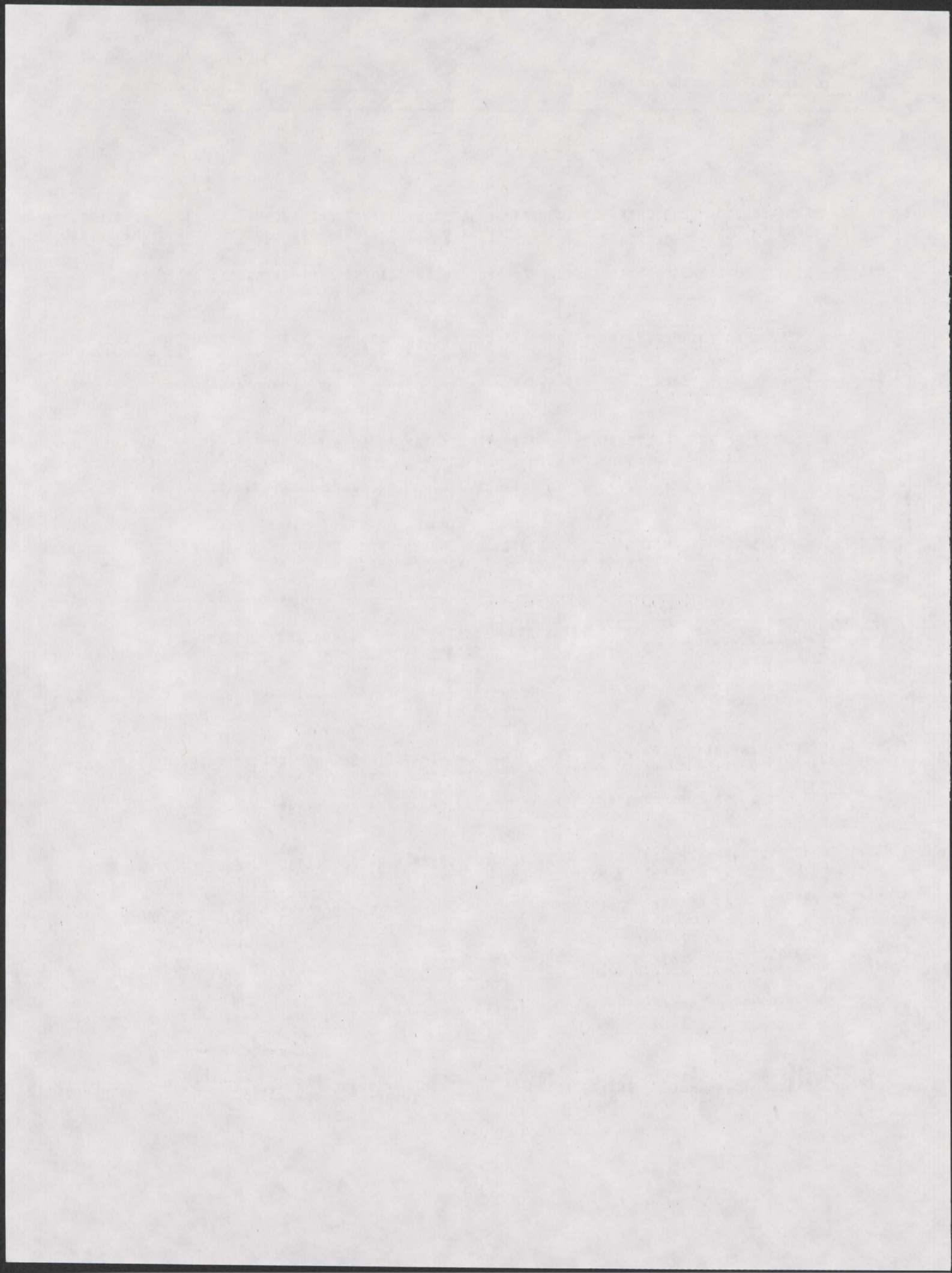
Superintendent of Documents
Stop SLLC

LIBRARY PROGRAMS SERVICE
Washington, DC 20401

| Vol. 9, no. 13 | GP 3.16/3-2: 9/13 | July 1988 |

Congress of the United States
Joint Committee on Printing

July 13, 1988

TO MEMBERS OF THE INFORMATION COMMUNITY

On April 9, 1987, the Joint Committee on Printing passed
a resolution urging the Government Printing Office to
initiate a series of pilot projects to test the feasibility
and practicality of disseminating government publications to
Depository Libraries in electronic formats. As a result of
that resolution the Government Printing Office, in
consultation with the Joint Committee on Printing, has
developed the enclosed plan.

At its meeting on June 29, 1988, the Joint Committee on
Printing, agreed that, prior to implementation, this plan
should be circulated for public comment. If you have
specific comments to make regarding these test projects,
please submit them to the Joint Committee on Printing by
August 22, 1988.

Sincerely,

Wendell H. Ford
Vice Chairman

Frank Annunzio
Chairman

AN-v 9-n13 - 7/88

FEDERAL DEPOSITORY LIBRARY PROGRAM

Access = Awareness

AN-v9-n13-7/88

DISSEMINATION OF INFORMATION

IN ELECTRONIC FORMAT

TO FEDERAL DEPOSITORY LIBRARIES

PROPOSED PROJECT DESCRIPTIONS

JUNE 1988

DISSEMINATION OF INFORMATION

IN ELECTRONIC FORMAT

TO FEDERAL DEPOSITORY LIBRARIES

AN-v9-n13-7/88

TABLE OF CONTENTS

I.   INTRODUCTION

In 1983, the Joint Committee on Printing established the Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases. The Ad Hoc Committee submitted reports in December 1984 and January 1987 strongly recommending implementation of demonstration projects within the depository library community as a means of accurately assessing both effectiveness and economic feasibility.1,2/ The Ad Hoc Committee also recommended that the Joint Committee on Printing submit a request for funding for the projects and that GPO be responsible for the "planning, administration and implementation of the projects...."3/ At the direction of the Joint Committee on Printing, GPO requested $800,000 for fiscal year 1988 for electronic dissemination pilot projects, however, these funds were not allowed by Congress.

On April 9, 1987, the Joint Committee accepted the Ad Hoc Committee's reports and passed a resolution calling for "a series of pilot projects [to] be implemented to test the feasibility and practicality of disseminating government publications to depository libraries in electronic formats."4/

II,   BACKGROUND

Responsibility of the Government Printing Office

As authorized under Title 44 of the U.S. Code, the Government Printing Office (GPO) serves as the Federal Government's printer and primary distributor of Government publications. For purposes of distribution to the Depository Library Program, Government publications are defined as "informational matter which is published as an individual document at Government expense, or as required by law.5/ The Depository Library Program guarantees public accessibility to Federal information at no cost to the user.

Government publications are provided to depository libraries in the most usable, cost effective format. Over the past ten years, Congress has authorized GPO to distribute an increasing number of suitable publications in microfiche format, in order to contain costs for the Depository Library Program. The House Appropriations Committee recently indicated its support for cost effective methods of electronic dissemination to depository libraries such as CD-ROM (Compact Disc - Read Only Memory)

format.6/

Depository Libraries

The Superintendent of Documents is required to make available to participating libraries "government publications, except those determined by their issuing components to be...for official use only or for strictly administrative or operational purposes which have no public interest or educational value and publications classified for reasons of national security."7/

There are nearly 1,400 depository libraries throughout the United States.   There is at least one depository library in every Congressional district.   Fifty-three libraries have agreed to serve as regionals to maintain complete collections, allowing the other libraries to select publications according to the needs of their users.   The selectives can borrow publications from the regionals.

The Patent and Trademark Office plans to provide each of its 63 libraries, many of which are also depository libraries, with a microcomputer, CD-ROM drive, and a printer.   This will not only increase the number of libraries with such devices, but also gives further indication of the growing acceptance of this technology.

Distribution of Government Information to Libraries

During FY 1987, 22.7 million copies of 58,143 titles were distributed to depository libraries.   Of the total number of copies, 9.6 million (42%) were in paper while 13.1 million (58%) were in microfiche.   The average number of libraries receiving any one item is 415.   Where a publication is produced in microfiche and paper formats, regionals receive copies of both versions.

III. DEPOSITORY LIBRARY PROGRAM DEMONSTRATION PROJECTS

Over the past eight years, the library community has strongly supported access to Government information in electronic format. All of the major library associations have testified to the Appropriations Committees in support of depository library access to Government publications in electronic format. The Depository Library Council to the Public Printer passed a supporting resolution in 1980, and in 1987, established a subcommittee on electronic dissemination to act as a resource during the planning and implementation of the plan.

AN-v9-n13-7/88

More recently, the Association of Research Libraries (ARL) issued a report compiled by the Task Force on Government Information in Electronic Format, which supported the earlier findings of the Ad Hoc Committee. ARL believes that the Depository Library Program has reached a critical juncture -- a crossroads, if you will, to the future. ARL vigorously urges GPO, in cooperation with other Federal agencies, to institute immediate action thereby enabling depository libraries to begin receiving Government documents in electronic format.8/

IV.   DESCRIPTION OF PROPOSED PROJECTS

Overview

This section of the plan describes possible projects to provide
Government publications to depository libraries in electronic
format.   These or similar projects would provide GPO and
depository libraries experience in dealing with these formats,
help clarify policy issues, and enable GPO to begin planning for
the future.

The criteria for selection of the projects include cost,
willingness of the publishing agency to participate in the
planning of the project, value of the information to the public,
size of publication, frequency of update, search requirements,
and the publishing schedule.

The five projects include a mix of formats, approaches, and types
of data.   Three of the projects involve CD-ROM (Compact Disc -
Read Only Memory).   Of the discs described herein, one will
contain statistical data (Census); one will contain descriptive
data in a record format (EPA); and one will contain full text
(Congressional Record).

Software development is an important consideration for the
increasing number of Federal agencies publishing CD-ROM products.
Agencies may develop retrieval software for CD-ROM in-house, as
Census has done, or contract for those services either on their
own or through GPO. GPO has expanded its procurement services to
include CD-ROM products and will be able to "ride" issuing
agencies requisitions to obtain copies for depository libraries
and for sales. If agencies contract for CD-ROM development, they
(or GPO, on behalf of the depository libraries) may have to pay
for software licenses for each of the CD-ROM copies that are
distributed.   Another possibility is for the government to
negotiate for unlimited use of software for a set fee.

Two of the projects would provide on-line access to Government
data bases.   There can be no doubt that online information
dissemination is technically possible; many libraries have
offered database searching as a service to their patrons for
years.   In many cases, online data base searching offers
significant advantages over using a printed counterpart (e.g., it
may be more up-to-date, easier to search, and may save staff time
previously spent cataloging and handling little-used materials).
However, online information distribution may be more costly than
paper distribution.   Some libraries pass the cost of the more
complicated and lengthy data base searches on to their patrons.
The Department of Energy (DOE) project is the most far-reaching
in its implications.   DOE proposes a phased effort to provide

online access to the DOE Technical Information Center computer in Oak Ridge to about 20 depository libraries. The libraries would be able to utilize a "gateway" to search DOE files and/or commercial systems, download data, and communicate via electronic mail. A subsequent phase might provide electronic access to the thousands of DOE reports currently sent to depository libraries on microfiche.

As microcomputers become more and more widely used, the number of data bases containing Government information is also growing. Usually, data entered into microcomputers is administrative in nature and would not qualify for depository distribution. However, instances have been reported where agencies have discontinued printing reports in favor of distributing flexible ("floppy") disks. Future efforts may include distribution of published reports on floppy disks.

The project descriptions presented in the following pages identify costs that can be attributed to individual projects. If these projects are implemented, some additional resources may be required to support the overall program. For example, some additional equipment will be needed, such as a CD-ROM drive ($845) and a modem ($350). It is also estimated that the Library Programs Service would initially require the equivalent of one additional staff year to support the successful implementation of these projects.

AN-v9-n13-7/88

PROJECT: Distribute a CD-ROM, software, and hard copy documentation published by the Census Bureau. The CD-ROM contains the 1982 Census of Retail Trade by Zip Code and the 1982 Census of Agriculture.

DESCRIPTION: As the nation's statistician, the Census Bureau collects and disseminates information about the population, economy, industry, and other aspects of American life. This information is used by all kinds of organizations, including Congress, Federal agencies, state and local governments, businesses, educators, associations, students and many others.

Despite the importance of Census data and the efforts of the Census Bureau to disseminate it as widely as possible, much of the information is not readily available to the public. Because of its sheer volume, much Census data is published in magnetic tape format only. Unfortunately, most libraries and certainly most individuals do not have the computing facilities and technical expertise to manipulate data in magnetic tape format. Therefore, this data is lost to large segments of the general public.

Last year, Census became the first Federal agency to publish data in CD-ROM format. Census' initial test, which involved over 30 libraries (most of which were depository libraries), as well as Census field offices and statisticians, was so successful that Census decided to expand the use of CD-ROM in future publishing efforts.

In March 1988, Census mastered a disc containing data from the 1982 Economic Census. Heretofore, this data was sold only on magnetic tape. This disc will be used to test whether parts of the 1990 Decennial Census should be published on CD-ROM. Census will provide basic search and retrieval software that they have developed. Data will be structured on the disc so that it can also be manipulated easily by dBase III and other commercially available software, which is widely used by the Federal government and other organizations. Census is in the process of developing software to facilitate downloading data to provide maximum flexibility to data users.

The Census Bureau is a good choice for a partner in a CD-ROM project because they already have expertise in this area, and Census is likely to be major publisher of CD-ROM products in the future. The Government could realize significant savings by distributing results of the 1990 Decennial Census to depository libraries in CD-ROM format instead of paper or microfiche.

Another advantage is that Census, as the originating agency, will pay for developing retrieval software and documentation and for

AN-v9-n13-7/88

the mastering of the disc; GPO will pay only for the copies for the depository libraries.

Finally, this project will not entail the issue of software licensing. (Service bureaus which develop CD-ROM products under contract sometimes charge substantial fees per disc copy for use of their retrieval software.) The Census Bureau software is in the public domain.

COST PROJECTION: The total cost for this project, including materials, postage, and labor, would be approximately $14,027 for 1,400 libraries. Contractor costs for duplicating copies of CD-ROMs and floppy disks are estimated at $2.75 and $5 respectively. The documentation (estimated at 100 pages) would cost about $51 per 100 copies. Postage and handling costs are based on distributing the materials via United Parcel Service (UPS).

AN-v9-n13-7/88

Publication Title: 1982 Census of Retail Trade by Zip Code and
                       1982 Census of Agriculture

Source Agency : Census Bureau

Project Description: Distribute a CD-ROM, software, and hard
copy documentation published by the Census Bureau.

Depository Distribution Comparisons:

1. Current costs for hard copy distribution

        (NOTE: Census of Retail Trade available in magnetic
        tape format only. Estimated printing costs shown
        below are based on actual printing costs for the
        Census of Agriculture. Handling and postage costs
        not shown.)

        1982 Census of Agriculture, Vol. I, $ 75,960
        Counties - 28,000 pp./set
        ($151.92 X 500 libs)

                                 TOTAL: $ 75,960

2. Costs for electronic dissemination in CD-ROM format

        CD-ROM Duplication - $ 3,850
        ($2.75 x 1400 libs.)

        Floppy Disk Duplication -   7,000
        ($5 x 1400 libs.)

        Print Documentation -   714
        ($51/100 copies x 14)

        Postage   2,086
        ($1.49 x 1400 lbs.

        Handling   41
        (3.5 hrs x $11.83/hr)

                                 TOTAL: $ 13,691

AN-v9-n13-7/88

PROJECT: Distribute the Toxic Release Inventory (TRI) to be published by the Environmental Protection Agency (EPA) in February 1989 to depository libraries in CD-ROM format.

DESCRIPTION: The EPA was established in 1970 to safeguard the environment through development of effective Government standards and regulations, research, monitoring, and education. As part of the Superfund Amendments and Reauthorization Act of 1986 (SARA), Congress charged the EPA with collecting and making available to the public information about over 300 toxic chemicals that are being released to the environment. Certain chemical manufacturers, processors, and users are required to submit annually a toxic chemical release form to the EPA. The release forms provide information to the Federal, state, and local governments and the public. EPA is required to make this data accessible by computer telecommunications and other means.

Between 160,000 and 300,000 release forms will be submitted to the EPA by July 1, 1988. Data collection will not be completed until about February 1989. EPA proposes to publish a CD-ROM containing the TRI data base for distribution to their field offices, as well as depository libraries.

CD-ROM format was selected for the TRI data base because of size, content, update frequency, and search requirements. EPA would contract for designing the layout of the CD-ROM and development of search software. Disc replication would be through a GPO contract.

EPA also plans to publish the TRI in printed format. It would probably be distributed to depository libraries in microfiche format, at a cost of approximately $70,257. Distribution of this data to depository libraries in CD-ROM format instead would offer significant cost savings.

COST PROJECTION: The total cost for this project, including materials, fees, postage, and labor is estimated at $22,319 for 400 libraries. Most of this amount, $20,000, is to purchase software licenses to entitle disc users to use contractor-developed software. (Some companies allow publishers to purchase rights to the software outright, but licensing seems to be more prevalent in the industry.) Costs for software licenses seem to vary a great deal depending on the company, product, and the number of disc copies produced. The figure used here ($50 per disc copy) seems to be a reasonable amount based on a recent survey of CD-ROM producers. The software license fee would include the cost of the floppy disk and documentation to support the software.

AN-v9-n13-7/88

Publication Title: <u>Toxic Release Inventory</u> (TRI)

Source Agency: Environmental Protection Agency

Project Description: Distribute the TRI to be published in
February 1989 to 400 depository libraries in CD-ROM format.

Depository Distribution Cost Comparison:

1. Current costs for microfiche distribution

    Final specifications for printing the TRI will not be
      available until sometime after July 1988. The estimates
    shown below are based on EPA receiving 230,000 response
      forms. Based on the preliminary specifications, the TRI
        would probably be distributed to depository libraries
    in   microfiche format.

        Printing- $ 57,088
          (100 sets of 3,408 fiche = $14,272
          $14,272 X 4 (400 libs.))

        Postage-   12,864
          ($32.16 per lib. X 400 libs.)

        Handling-   304
          (contract to package, label, meter,
          and mail)

                                  TOTAL: $ 70,257

2. Costs for electronic dissemination in CD-ROM format

        CD-ROM duplication - $ 1,700
          ($4.25 x 400 libs.)

        Software licenses -   20,000
          ($50 x 400 libs.)

        Postage-   596
          ($1.49 x 400 libs.)

        Handling-   23
          (2 hrs x $11.83/hr)

                                  TOTAL: $ 22,319

AN-v9-n13-7/88

PROJECT: Distribute the final (bound) edition of the
Congressional Record published by the U.S. Congress to depository
libraries in CD-ROM format.

DESCRIPTION: The Congressional Record is published in two
editions: 1) a daily edition is produced when Congress is in
session; and 2) a cumulated final edition is prepared after the
conclusion of each session of Congress.

Indexes to the daily Record are published on a biweekly basis.
Indexes to the final editions of the Record are created by
cumulating the biweekly indexes for each session of Congress.
The cumulated indexes are edited to reflect the page numbers that
appear in the final Record.

Currently, the Congressional Record is published   in three
formats: 1) paper (daily on newsprint, cumulated final on 40 lb
offset); 2) microfiche (daily and final on 24X diazo fiche); and
3) electronic (standard 1600 BPI, ASCII, IBM compatible, 9 track
magnetic tape).

While the magnetic tape format has never been offered through the
Depository Library Program, until 1986 the bound Record was made
available to libraries on dual format distribution (i.e.,
selective depositories could choose either paper or microfiche;
regional depositories received both paper and microfiche). In
early 1986, depository distribution of the bound Record was
changed from dual format to microfiche-only, as a cost-savings
response to budget cuts mandated by Gramm-Rudman-Hollings.

Recent advances in the use of CD-ROM technology seem to indicate
that this format may be an appropriate alternative to microfiche
distribution.   Not only does CD-ROM provide much greater
research capabilities to the user, it also appears that it will
be less costly than microfiche. The following analysis presents
the projected costs and considerations of employing CD-ROM as an
alternative to microfiche for depository distribution of the
Congressional Record.

Considerations in Publishing the final Record on CD-ROM

1. Size of data base

A year of the Congressional Record is made up of approximately
413 million keystrokes, which translates to about 500 megabytes
of information. In addition, the index and bill digest for a
year's Record will comprise approximately 22 additional
megabytes. A single, 4-3/4 inch CD will hold up to 660 megabytes
of data.

AN-v9-n13-7/88

The amount of data a disc can handle depends upon the type and size of the retrieval software. An initial decision must be made as to what type of software will be used, so the data can be properly structured. A year's <u>Record</u> on CD-ROM would be such a large data base that the response time in searching full-text on a personal computer could be quite long. Therefore, it may be more practical to include the index along with the text and have full-text searching of the index only, with the ability to directly locate in the <u>Record</u>, the specific index reference. It also might be possible to search on the headers in the full text.

2. Software

The users of data on compact discs will want to search, retrieve, and download the data onto another disk, or another computer. They also will want the capability to print a page or a smaller section of the data onto paper. The type of retrieval and on-demand printing software must be carefully chosen, in order to accommodate the variety of equipment that will be used to access the data.

3. Planning

A working group of technicians (GPO and JCP) and <u>Record</u> users (LC, House and Senate Library staff) should be established to plan the most effective way to publish the <u>Record</u> on CD.

4. Cost Projection

The basic publishing costs would include data preparation (converting the electronic data into a format suitable for CD-ROM), acquisition of retrieval software, creation of tapes containing text and index data, and procurement of the CD-ROM master disc. (GPO is in the process of leasing a CD-ROM publishing system for testing software and producing tapes for mastering discs.) The master disc and duplicate CD-ROMs would be procured from a private sector vendor.

The annual cost to the Depository Program if 1,295 depository libraries (plus 10 additional copies to replace those that may be lost or damaged) received the bound <u>Record</u> in CD-ROM format would be: 9/

Mastering	$1,700
Duplicate CD-ROM Discs (@ $2)	2,610
Duplicate Software (floppy) (@ $5)	6,525
Documentation (@ $.50)	653
Postage and Handling (@ $5)	6,525
Paper Index (@ $30.30)	<u>39,542</u>
TOTAL	$57,555

AN-v9-n13-7/88

(Postage and handling costs are based upon distributing materials via United Parcel Service.)   The estimated cost for 1,305 microfiche copies of the final Record for a single session of Congress is $158,203. For a detailed comparison, see the table below.

Estimated Cost Comparisons
For 1,305 Depository Libraries for One Year

	Microfiche	CD-ROM 10/
Printing Costs		
Record Text	$ 0	$ 0
Record Index	39,542	39,542
Production Costs		
Master Copy	5,048	1,700
Duplicate Copies		
Fiche	36,892	0
CD-ROM	0	2,610
Floppy Disk	0	6,525
Postage		
Record Text	1,109	1,945
Record Index	4,085	4,085
Handling		
Record Text	71,123	78
Record Index	404	404
Documentation	0	653
Total	$158,203	$ 57,542

House Report 100-621 (Legislative Branch Appropriation Bill, 1989) provides the following guidance for choosing an appropriate depository format for the bound Record: "The Committee agrees with providing cost-effective methods of electronic dissemination of information to depository libraries such as CD-ROMS."11/ Thus, the choice of CD-ROM format for depository distribution of the bound Record appears to be fully consistent with the Committee's direction.

AN-v9-n13-7/88

It should be noted that statistics compiled by the GAO for the
recent OTA study on information technology indicate that over 40%
of depository libraries already have CD-ROM readers. Given the
development of commercial products now being offered on CD-ROM,
it is safe to assume that in a relatively short period of time, a
substantially greater number of depositories will obtain such
devices. The OTA study indicates that such devices can be
obtained for approximately $845, which would appear to be well
within the reach of almost any library within a relatively short
period of time.

PROJECT: Provide online access to the Economic Bulletin Board
sponsored by the Department of Commerce.

DESCRIPTION: The Department of Commerce offers a wide variety of
programs aimed at monitoring the nation's economy and promoting
economic growth through international trade, free enterprise, and
technological advancement.   One facet of the Department's job is
to collect, analyze, and disseminate statistics representing the
state of the nation's economy. This information is provided to
business and Government planners to enable them to respond to
national economic conditions.

One of the primary ways utilized by the Commerce Department and
other Federal agencies to distribute economic news is through
press releases.   Such press releases sometimes contain important
Government information, for example, the Consumer Price Index and
national unemployment statistics. Even though press releases are
clearly within the scope of the Depository Library Program as
defined by Title 44 USC, it is often difficult to obtain copies
for depository distribution. Agencies frequently reproduce press
releases in limited quantities for immediate distribution.
Attempts to acquire copies later are costly and very often
futile. Even when copies can eventually be obtained, they are of
less value to depository libraries because the news is no longer
timely.

Another medium used to disseminate economic information is an
electronic bulletin board sponsored   by the Department of
Commerce. The Economic Bulletin Board contains economic news and
statistics published by several bureaus within the Department of
Commerce, including the Bureau of Economic Analysis, Census
Bureau, International Trade Administration, and NTIS, as well as
the Federal Reserve Board, Bureau of Labor Statistics (Labor
Department), and the Internal Revenue Service (Treasury
Department).   The information is contained in about 300 files
which are updated within a few minutes of their release time.
Updates are monthly or quarterly, depending on the release;
employment statistics, for example, are updated monthly. There
are currently about 900 subscribers, including about 100
libraries. The only equipment required is a "dumb" terminal,
however, most subscribers use personal computers to download data
to floppy disk for subsequent review and manipulation.   The
current equipment configuration at the Commerce Department will
accommodate up to 16 simultaneous users, using 2400, 1200, or 300
baud communication.

The Commerce Department has indicated their willingness to extend
access to selected depository libraries.   Officials there have
proposed that 100 libraries be given the opportunity to use the
Economic Bulletin Board for a period of six months.

AN-v9-n13-7/88

At the end of that period, the project could be evaluated and a decision made whether or not to continue the project and expand access to additional libraries.

COST PROJECTION: Commerce Department normally charges users $25 per year plus $6 per hour (daytime) to $3 per hour (evenings) for access to the Economic Bulletin Board. Rather than adhering to Commerce Department's regular fee structure, GPO would pay $5,000 for unlimited use by participating libraries for a period of six months. Commerce Department's costs for conducting this demonstration would be reduced somewhat since they would not have to register individual libraries or send bills for system use. (This arrangement would enable Commerce Department to upgrade their existing equipment to accommodate the additional users.) Telecommunication costs could be borne by the Federal Government or participating depository libraries. The estimated telecommunication costs ($16,800) are based on a total of 2,400 hours of connect time billed at $7/hour. The actual expense would depend on the amount of online use and the hourly rate for service, which varies significantly between carriers.

AN-v9-n13-7/88

Publication Title: <u>Economic Bulletin Board</u>

Source Agency: Department of Commerce

Project Description: Provide unlimited online access to the Economic Bulletin Board to 100 depository libraries for a period of six months.

Depository Distribution Cost Comparison:

1. Current Costs

(NOTE: Much of the information contained on the Economic Bulletin Board is not currently being distributed to depository libraries. Also, it contains data supplied by a wide range of Federal agencies, as described in the project description. For these reasons, reliable cost figures for hard copy distribution were not available.)

According to records of system usage compiled by the Department of Commerce, one Federal depository library used the Economic Bulletin Board (EBB) 45 times to download 261 files during the first three months of 1988. The cost for 100 libraries to use the EBB to this extent for six months (a total of 2,400 hours) at regular Commerce Department rates would be about $15,000.

2. Costs for online access

One-time fee for unlimited usage for six months	$ 5,000
*Telecommunications costs (2,400 hours X $7/hour)	16,800
TOTAL:	$ 21,800

*NOTE: Actual telecommunications costs would depend on the amount of online usage. This cost could be borne by the Federal Government or participating depository libraries.

AN-v9-n13-7/88

PROJECT: Phase I - (1) Develop a "gateway" to provide 18-22 depository libraries online access to bibliographic files residing on the Department of Energy (DOE) computer and/or commercial systems; and (2) perform a study to determine the optimum media (e.g., microfiche, CD-ROM, etc.) for delivery of DOE contractor reports to depository libraries. Phase II- Depending on the results of Phase I, select and test a system for electronic delivery of full-text DOE reports.

DESCRIPTION: In FY 1987, about 14,000 Department of Energy (DOE) technical reports were distributed in microfiche format through the Depository Library Program. Under an interagency agreement between GPO and DOE, the reports are mailed to depository libraries from the DOE facility located in Oak Ridge, Tennessee. DOE pays for producing the microfiche (an estimated $350,000/year); GPO reimburses DOE for postage and handling costs (about $175,000/year). An index to the technical report citations published by DOE, Energy Research Abstracts (ERA), is distributed to depository libraries.

DOE officials have proposed that selected depository libraries be provided online access to the DOE Integrated Technical Information System (ITIS). This would provide libraries more current access to the information received on fiche, greater search capabilities than possible through ERA, access to authority and other files internal to Office of Scientific and Technical Information (OSTI), and the ability to create electronic cataloging information (in LC/Machine Readable Cataloging format) for those documents the library receives.

Programming to provide online access to ITIS would be accomplished under the supervision of the DOE (OSTI). It would be carried out in two steps. The first task would require enhancing ITIS to allow depository libraries to search authority file information and bibliographic records created by DOE during the past year. Secondly, a "gateway" would be developed to enable users to automatically switch to a commercial system to search older Energy data base materials. Depository libraries could use existing programs to convert DOE bibliographic records into MARC format, which is the standard format used by the library community.

During the second part of Phase I, a study would be conducted to determine the optimum media (microfiche, CD-ROM, floppy disks) for distribution of the aforementioned DOE contractor reports to depository libraries. Alternatives would be evaluated on such factors as cost, usability, practicality, and timeliness.

This project would provide significant benefits for depository libraries. The libraries would have: (1) more current access to indexing (months before the paper ERA is distributed to

AN-v9-n13-7/88

depository libraries); (2) increased search capabilities (i.e., more access points); (3) retrieval capability for related information; (4) electronic cataloging information that is currently not available. (GPO is not cataloging these publications in the LC/GPO cataloging format and this material is not part of the <u>Monthly Catalog of U.S. Government Publications.</u>) The development and application of this system could allow realization of significant cost savings at each depository library.

<u>COST PROJECTION</u>: DOE officials have proposed that GPO reimburse DOE for development costs as well as use of the DOE computer by depository libraries for the duration of the project. One-time costs, in the amount of $100,000, would cover expenses for personnel and other resources needed to adapt the DOE computer system for use by depository libraries, develop the gateway for accessing commercial systems, and conduct the feasibility study for the format of DOE technical reports. The cost for searching files on the DOE computer would be $16 per hour. Based on 20 libraries searching the DOE computer for two hours a week, the annual recurring cost to GPO would be $33,280. This expense would be slightly offset by a savings of $2,155, if participating libraries no longer received printed copies of <u>Energy Research Abstracts</u>. Libraries that choose to utilize commercial systems to search for older DOE materials would pay for those services at the going commercial rate (currently $85-$120/hour).

AN-v9-n13-7/88

Publication Title: <u>Energy Research Abstracts</u>
Source Agency: Department of Energy

Project Description: Phase I - Develop a "gateway" to provide
18-22 depository libraries online access to bibliographic files
residing on the DOE computer and perform a study to determine the
optimum format (e.g., microfiche or CD-ROM) for delivery of DOE
reports to depository libraries. (Phase II costs would be based
on the outcome of Phase I, therefore, no costs are shown for
Phase II.)

Depository Distribution Cost Comparison:

1. Current costs for hard copy distribution

(Note: Cost estimates shown below are based on printing for
<u>Energy Research Abstracts</u>.   The DOE data base also contains
additional data not currently available in printed format.)

      Printing- $ 1,464
      ($3.05 X 24 issues/year X 20 libs.)

      Postage-   691
      ($1.44 X 24 issues/year X 20 libs.)
                                                              _____
                                          TOTAL: $ 2,155

2.   Costs for proposed study and online system

      One time costs to GPO- $ 100,000
        Project Management $ 14,682
        Technology Assessment $ 24,882
        ITIS Front End Devel. $ 24,900
        Travel $ 15,000
        Supplies and Materials $ 8,000
        Contingency $ 12,536

      Use of the DOE computer for one year   33,280
      ($16/hr X 104 hrs/year X 20 libs)
                                                        _____
                                          TOTAL: $ 133,280

AN-v9-n13-7/88

V. REFERENCES

1/U.S. Congress, Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases, Joint Committee on Printing, <u>Provision of Federal Government Publications in Electronic Format to Depository Libraries</u>, 98th Cong., 2d sess., 1984, pp. (III),10.

2/U.S. Congress, Ad Hoc Committee on Depository Library Access to Federal Automated Data Bases, Joint Committee on Printing, <u>Report to the Joint Committee on Printing</u>, 100th Cong., 1st sess., 14 January 1987, pp.2-3.

3/Ibid., pp.2-3.

4/U.S. Congress, Joint Committee on Printing, Committee resolution, 100th Cong., 1st sess., 1987.

5/Title 44-<u>Public Printing and Documents, U.S. Code</u>, sec. 1901 (1982 ed.).

6/U.S. Congress, Committee on Appropriations, <u>Legislative Branch Appropriation Bill, 1989</u>, House Report 100-621, 100th Cong., 2d sess., 1988, pp.30-31.

7/Title 44-<u>Public Printing and Documents, U.S. Code</u>, sec. 1901 (1982 ed.), p.543.

8/Task Force on Government Information in Electronic Format, Association of Research Libraries, "Technology and U.S. Government Information Policies: Catalysts for New Partnerships," Washington, D.C., October 1987, p.23.

9/Figures are based on the number of depository libraries currently receiving the final <u>Congressional Record</u> (1,295) plus ten copies for claims. Depository libraries that receive the final <u>Congressional Record</u> in microfiche or CD-ROM would be allowed to receive the Index in paper format.

10/Some additional costs would be incurred for developing or licensing retrieval software for the CD-ROM. Software licensing typically requires a one-time payment and/or royalties on a per disc basis.

11/U.S. Congress, Committee on Appropriations, <u>Legislative Branch Appropriation Bill, 1989,</u> House Report 100-621, 100th Cong., 2d sess., 1988, p.30.

TABLE OF CONTENTS

United States Government Printing Office
Washington, DC 20401

Dear Depository Librarian:

We are pleased to announce plans for implementation of a pilot
project to offer online access to the Economic Bulletin Board
(EBB) sponsored by the Department of Commerce. During the pilot
project, the EBB will be available to 100 depository libraries
for a period of six months.

The purpose of this letter and accompanying materials is to
provide you with detailed information about the Economic Bulletin
Board, and to ascertain your interest in participating as a pilot
project test site. This envelope contains a short, easy-to-
answer survey that we would like you to complete and return,
regardless of your desire to actively participate in this
project. Your response will help us fully consider the impact of
electronic information dissemination on the entire depository
library community. A copy of the enclosed information (except
for the survey) has also been mailed to the director of your
library.

The Economic Bulletin Board is one of five pilot projects being
conducted to test the feasibility of electronic dissemination of
information to depository libraries. It is one of two online
projects approved by the Joint Committee on Printing in May.

Each of the pilot projects is structured differently, and each
project will be evaluated carefully to understand more about
electronic information delivery to depository libraries. To
that end, we have asked the General Accounting Office (GAO) to
assist GPO in conducting the pilot projects. GAO brings to the
project their expertise in program development and evaluation.
GAO staff have played an active part in designing the Economic
Bulletin Board pilot project so that it can be evaluated fairly,
and so that it will yield important information for future
planning. GAO will also assist us in analyzing responses to the
enclosed survey to select a sample of depository libraries that
reflects the various types of libraries participating in the
Depository Library Program.
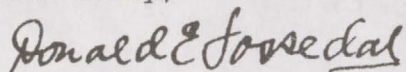
Participation in the Economic Bulletin Board pilot project is voluntary, and consideration as a test site is open to all depository libraries. Depository libraries that are chosen as test sites will be asked to fulfill important responsibilities, such as gathering information that will enable GAO to evaluate the pilot project. GPO will pay for access to the bulletin board itself; depository libraries must each pay their own telecommunications charges. Although costs will differ between libraries based on usage and other factors, a study of current subscribers to the EBB revealed that telephone charges are generally modest due to the nature of the system.

The survey of depository libraries, provided as a separate enclosure, is very important. The questions are designed to take only a few minutes of your time to answer. Please help us by completing the survey whether or not you wish to be considered as a test site. The survey should be returned to the U.S. General Accounting Office, General Government Division, Mr. Thomas Beall, 441 G Street, N.W. Room 3826, Washington, DC 20548 within 10 days of receipt. A postage-paid envelope has been provided for your convenience.

If you have any questions about the materials contained in this package, please call Jan Erickson at (202) 275-1003.

Thank you for your cooperation and support for this very important project.

Sincerely,

DONALD E. FOSSEDAL
Superintendent of Documents

Enclosure

INFORMATION PACKET
for the
ECONOMIC BULLETIN BOARD PILOT PROJECT

The Economic Bulletin Board (EBB) is one of five pilot projects
being conducted to test the feasibility of electronic
dissemination of information to depository libraries. The other
pilot projects, which include three CD-ROM applications and one
online system, are in varying stages of implementation. (For a
complete description of all of the pilot projects, see
Administrative Notes, v.9, #13.)

The purpose of this package is to provide more detailed
information about the Economic Bulletin Board pilot project,
including information that will help you decide whether or not
your library should be considered as a candidate for selection as
a test site. It is comprised of five parts:

   * Section I provides a description of the Economic Bulletin
     Board and how it is used;

   * Section II outlines requirements for participating as a
     test site;

   * Section III describes the methodology that will be used
     for selection of test sites;

   * Section IV provides names and telephone numbers of
     Government officials that you may contact for additional
     information or assistance in completing the enclosed
     survey;

   * Appendix I is a list showing the type of files typically
     available on the Economic Bulletin Board.

Although some of the information contained on the Economic
Bulletin Board also appears in publications that are distributed
to depository libraries, distribution of printed documents will
not be affected during the pilot project. Data is available on
the bulletin board much sooner than in printed documents; it is
also significantly easier to manipulate or combine with other
data, since it is already in machine-readable format.

Subscriber fees and hourly connect charges for utilizing the EBB
will be waived for participating depository libraries for the
six-month period during which the pilot project is conducted.
Libraries that already subscribe to the EBB may apply for
designation as test sites; however, annual subscription fees
already paid to the Department of Commerce will not be refunded.
Depository libraries chosen as test sites, rather than GPO, will
be responsible for paying telecommunications costs for accessing
the bulletin board. The amount of the line charges will vary
between libraries, based on the amount of usage; time of day;
distance from Washington, DC; and the telephone company or
network serving your institution.

Access to the EBB by depository library test sites may be
discontinued at the end of the six-month pilot period. However,
subscription costs to the EBB are low. The annual EBB
subscription fee is currently $25.00, with daytime hourly
connect charges of $6.00 per hour and evening and weekend hourly
connect charges of $3.00 per hour. Test sites may wish to
consider obtaining a subscription to the EBB at the end of the
test period if the pilot project is not continued. Libraries not
selected as test sites may also want to consider subscribing
directly to the EBB.

SECTION I. THE ECONOMIC BULLETIN BOARD

The Economic Bulletin Board was established in 1985 by the
Department of Commerce to provide timely access to statistics and
other current economic news. It contains a variety of data
published by Commerce Department offices and several other
sources, including the International Trade Administration, Bureau
of Economic Analysis, Census Bureau, the Bureau of Labor
Statistics, Federal Reserve Board, and the Treasury Department.
Examples of information available through the Economic Bulletin
Board include the Consumer Price Index (CPI), Gross National
Product (GNP), employment statistics, and Daily Trade
Opportunities for Exporters. There are currently about 2,300
paid subscribers to the Economic Bulletin Board.

The Economic Bulletin Board is available to dial-up users 24
hours a day. It typically contains about 30 megabytes of data in
over 400 files. Archival data is not retained on the bulletin
board. Rather, data files are replaced as soon as new
information becomes available. Many widely-used statistics, such
as the CPI, are loaded onto the bulletin board within 15 minutes
of their official release. Two-thirds of the files on the
bulletin board are updated on a quarterly or monthly basis.

Selected information, such as Trade Opportunities, may be updated daily. Many files on the Economic Bulletin Board are text files, and contain data exactly as it appeared in Commerce Department press releases. Other files are in Lotus 1-2-3 (or compatible) format to facilitate data manipulation by the end user. Appendix I contains a complete list of the files that were available on the Economic Bulletin Board in July 1989.

Online bulletins, which contain general economic news, calenders of release dates for upcoming news, and points of contact in economic statistical agencies, are designed to be read while signed onto the EBB. The core of the EBB - representing over 95% of the data on the bulletin board - is comprised of files that are intended for downloading to a PC for later viewing or manipulation. Such files include the major economic press releases and specific economic information. Users equipped with dumb terminals can view or print out the files locally. In addition, the EBB provides programs for accomplishing "housekeeping chores," such as changing passwords and leaving messages for the system operator.

The following examples illustrate the kinds of questions that can be answered using the Economic Bulletin Board:

* What was the Consumer Price Index just released by the Commerce Department?

* What are the latest figures available on single family home sales for the U.S.?

* How can I find out the latest Producer Price Index issued by the Bureau of Labor Statistics?

* Can you give me the personal income levels by county for this state?

* I'd like to look at the "trade opportunities" issued today to see what kinds of products or services my company might be able to sell to overseas markets.

You do not need to be an advanced computer user to make effective use of the Economic Bulletin Board. Easy-to-use menus guide users through most of the steps needed to access the information. Online help is available for assistance in using specific commands. Documentation that clearly explains how to use the bulletin board will be distributed to depository libraries selected as test sites. Telephone support will also be available for libraries needing additional assistance.

SECTION II. REQUIREMENTS FOR EBB TEST SITES

The purpose of this pilot project is to learn more about the benefits, costs, and other implications of depository library access to online government data bases. In order to accomplish this objective, full participation by depository libraries that are designated as test sites is of paramount importance.

Pilot project test sites will be issued an account number and password that will enable them to access the EBB. The depository library will be responsible for protecting this information, and ensuring that the bulletin board is being utilized properly under appropriate circumstances. While usage of the EBB is encouraged, abuse of the system will not be tolerated.

Depository libraries selected as test sites should make a special effort to ensure that potential users of the Economic Bulletin Board are aware of its availability. This is of particular importance because of the short duration of the pilot project. Activities for promoting the service, such as workshops, personal contacts, newsletters, etc., will be left to the discretion of librarians participating in the project.

Experience in transferring data utilizing a modem may be beneficial, but will not be necessary in order to participate in the EBB pilot project. Using tools such as the documentation and online help features, even novice users can expect to use the system successfully after a few practice sessions. Telephone assistance will also be available, if necessary. Librarians that will be using the system and/or assisting other users should plan to utilize the system sufficiently at the outset of the project to become familiar with its operation.

Depository libraries that are selected as test sites will be asked to submit a brief plan outlining 1) how access to the EBB would be provided by that institution, 2) how they plan to inform library users about the availability of the EBB, and 3) the steps they will take to train staff and/or library users about the EBB.

Test sites will also be expected to collect certain data in support of the evaluation of the pilot project. This will require that staff time be devoted to data collection activities. Test sites will be asked to collect information on such things as: frequency and nature of EBB use, staff resources expended on implementing the EBB and servicing EBB requests, telecommunications costs for accessing the bulletin board, and user satisfaction with the EBB.

In some instances, test sites may need to develop procedures or methods for obtaining the necessary information. For example, test site libraries that do not monitor their own long distance telephone call charges will need to get this information in order to track the cost of calls to the EBB. For the most part, test sites will be expected to provide evaluation information by responding to surveys such as the one enclosed in this package or completing a brief questionnaire when they sign on to the EBB. Other methods, such as telephone interviews, may also be used. Test sites may be asked to intermittently maintain logs or other data collection forms for monitoring the use of the EBB and its associated costs and benefits. Data collection requirements will be designed with the objective of minimizing the workload placed on test sites, and depository librarians will be consulted to ensure that the collection procedures are not burdensome. No travel will be required for librarians participating in the project.

Depository libraries designated as test sites will be expected to provide equipment for accessing the bulletin board. The following equipment and software are required:

Personal computer, word processor, or "dumb" terminal capable of asynchronous communications.

Asynchronous communications software if you are using a personal computer or word processor (dumb terminals have communications circuitry). Most popular programs sold in the personal computer market will work.

A modem which can communicate at 300, 1200, or 2400 baud. Most popular modems serving the personal computer market will work.

A cable connecting the modem to the computer (internal modems inside the PC do not need a cable).

Telephone line capable of transmitting and receiving data from EBB located in Washington, DC. (a telephone line that connects to outside lines through an institution's central switchboard may not work).

All depository libraries, regardless of their desire to apply for consideration as a pilot project test site, should complete the enclosed survey and return it to GAO within 10 days of receipt. (If the survey was inadvertently omitted or misplaced, call (202) 275-1003 immediately to request another copy.)

The final question on the enclosed survey requires the signature of the documents librarian (or other contact within the library) and the library director, if the library is applying for designation as a test site. By signing the survey, library personnel agree to comply with the requirements for test libraries outlined above.

SECTION III. METHODOLOGY FOR SELECTION OF TEST SITES

The site selection plan for the EBB pilot project has been designed to support two complementary objectives. One objective is to select sites that reflect the diverse types of libraries that comprise the depository library community. The other objective is to identify potential test sites that provide opportunities to assess electronic information dissemination under special or innovative circumstances that would be useful as case study evaluations. Test site allocation and selection of participating libraries is divided into two parts in order to realize these dual objectives.

For the EBB pilot project, at least 86 of the 100 test site slots will be apportioned on the basis of four dimensions to obtain an appropriate mix of depository libraries. These dimensions are: library size, library type, depository type (i.e., regional or selective), and geographic location. The selection of libraries to participate as test sites will based on the distribution of the slots across these four dimensions. Selection on the library type dimension, for example, has the following distribution: 50 percent of the test site slots will be allocated to academic libraries, 20 percent to public libraries, and 30 percent to the other types of libraries. It is anticipated that more libraries will apply for designation as test sites than there are slots available. If this occurs, libraries seeking designation as a test site will be randomly selected from the cross-classified groupings of the four dimensions. Using the previous example as a rudimentary illustration, if 200 academic libraries apply for consideration as test sites, 43 will be randomly selected from the 200 since 50 percent of the 86 test sites are allocated to academic libraries.

The remaining 14 available test site slots are set aside for possible discretionary assignment in support of the second site selection objective.

Libraries responding to item 11 of the enclosed survey will be considered for selection as one of the 14 possible discretionary test sites.

All libraries indicating their desire to participate as a test site have an opportunity to be selected as one of the 86 randomly selected sites whether or not they answer item 11. Libraries chosen as one of the 14 discretionary sites will be expected to engage in additional evaluation activities relevant to the particular circumstances or plans that constitute the basis for their selection.

IV. WHO TO CONTACT FOR ADDITIONAL INFORMATION

If you need additional information to complete the survey or to consider applying for designation as a test library, you may wish to call the Government officials listed below.

For information about the Economic Bulletin Board or the equipment required to use it:

    Mr. Ken Rogers
    U.S. Department of Commerce
    (202) 377-4450

For information concerning the enclosed survey or the methodology for selecting test libraries:

    Mr. Tom Beall
    U.S. General Accounting Office
    (202) 275-4427

For miscellaneous questions or information about the pilot projects in general:

    Ms. Jan Erickson
    U.S. Government Printing Office
    (202) 275-1003

BLANK PAGE

APPENDIX   THE ECONOMIC BULLETIN BOARD

NOTE: This listing is a sample of all the files available on the Economic Bulletin Board as of July, 1989. The listing is updated periodically.
File names usually stay the same unless otherwise noted; newer versions of recurring files such as press releases replace older versions
on the system. We suggest that periodically you download the file "FILES" to keep abreast of any new files that may have been added or
use the New command to find out what files have been added/updated since your last session.

File Name	Length (bytes)	Date	Contents

**STATEMENTS BY DEPARTMENTAL OFFICIALS
AND
SUMMARIES OF CURRENT ECONOMIC CONDITIONS
BY THE OFFICE OF THE CHIEF ECONOMIST
(Directory #1)**

File Name	Length (bytes)	Date	Contents
BULLET2	1987	06-12-89	Weekly economic summary - 06/08/89
CAP-UTIL	1456	07-17-88	Summary of capacity Utilization in June 1989
CBAR	835	04-26-89	Summary on major collective bargaining settlements in 1st Quarter of 1989
CONST	902	07-05-89	Summary of construction for May 1989
CPI	1177	06-21-89	Summary of Consumer price index for May 1989
CURRENT	1932	06-15-88	Summary of the Current Account international transactions, 1st qtr and Year 1989
DURGD	1088	05-25-89	Summary of durable goods orders for April 89
ECI	1141	04-26-89	Summary of employment cost index in 1st qtr of 1989
EMPLOY	1411	07-10-89	Summary of the employment situation in June 1989
EXIM	2085	05-01-89	Summary of Import and Export Price Indexes 1st Quarter 1989
GNP-SUM	2156	06-27-89	Summary of Revised GNP and Corporate Profits 1st Qtr. 89
HOME-SL	993	06-05-88	Summary of single family home sales, April 1989
HOUSE	891	06-21-89	Summary of housing starts, May 1989
INDEX	742	07-03-89	Summary of leading, lagging, coincident indicators, May 1989
INT-INV	2846	07-03-89	Summary of Net Investment Position
INV-SALE	1065	05-16-89	Summary of business sales and inventories for May 1989
NORWOODBLS	18816	07-07-89	Statement by BLS Commissioner Norwood to the Joint Economic Committee on the June 1989 employment situation.
PE	1432	06-12-89	Summary of plant and equipment spending plans, 1989
PERINC	939	05-01-89	Summary of personal income for March 1989
PPI	1980	07-17-89	Summary of producer prices in June 1989
PROD	977	06-05-89	Summary of productivity in the Ist qtr, 1989
PROD-IND	1161	04-18-89	Summary of industrial production and Capacity Utilization for March 1989
RETAIL	752	07-17-89	Summary of advance report of retail sales, June 1989
S-I-O	1135	07-03-89	Shipments, inventories, and orders, May '89
TRADE	2068	05-18-89	Summary of merchandise trade for Mar. 1989
TD-BAL	1956	03-02-89	Summary of merchandise trade, balance of payments basis, 4th quarter, 1988

**NATIONAL INCOME AND PRODUCT ACCOUNTS
(Directory #2)**

File Name	Length (bytes)	Date	Contents
GNP.BEA	59917	06-22-89	BEA PR - GNP 1st Quarter 89, 1st Revision
GNP-TXT.BEA	14891	06-22-89	BEA PR - GNP 1st Quarter 89, 1st Revision text only
GNP-TAB.BEA	45024	06-22-89	BEA PR - GNP 1st Quarter 89, 1st Revision tables only
GNP-PR.EXE	29292	06-22-89	GNP press release (GNP.BEA) in compressed form
GNP-REV.BEA	114256	08-09-88	Documentation on July 1988 NIPA revision
GNP-SRCE.WKS	39530	04-27-89	Source statistics used to calculate GNP - Lotus 123 format
GNP-SRCE.BEA	23514	04-27-89	Source statistics used to calculate GNP - Data format
NIPA.BEA	140992	06-22-89	BEA National Income Statistics - Data Only 87II to 89I
NIA.EXE	56203	06-22-89	Compressed form of NIPA.BEA
NIPA-A.WKS	152001	07-27-88	BEA National Income Statistics - annual from 1984 to 1987, Lotus 123 format
NIPA-A.BEA	99925	07-27-88	BEA National Income Statistics - annual from 1984 to 1987, ASCII format
NIPAS.WKS	228726	06-22-89	BEA National Income Statistics - Lotus 123 format
NIA-123.EXE	105861	06-22-89	Compressed form of NIPAS.WKS

APPENDIX   Cont.

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents

National Income and Products Accounts (Continued)

File Name	Length (bytes)	Date	Contents
NIPA-DOC.BEA	6656	06-24-86	Documentation for NIPA files above. GROSS NATIONAL PRODUCT FILES - TABULAR FORMAT
REAL.GNP	87977	06-28-89	Real GNP tables: 83II - 89I
CURRENT.GNP	81498	06-28-89	Current GNP tables: 83II - 89I
INCOME.GNP	87068	06-28-89	Income GNP tables: 83II - 89I
PRICES.GNP	73322	06-28-89	Prices GNP tables: 83II - 89I
GNP-TAB.EXE	121672	06-28-89	Real, current, income, & prices GNP tables, compressed format
GNP-123.EXE	330324	06-23-89	Real, current, income, & prices GNP, Lotus 123 worksheets 83II - 89I

ECONOMIC INDICATORS
(Directory #3)

File Name	Length (bytes)	Date	Contents
BCD40689.BEA	271638	06-29-89	BEA Business Conditions Digest data, 6/89
BCDR0689.BEA	19943	06-29-89	BCD data series with revisions over 4 years old
BCDN0689.BEA	1095	06-29-89	Explanation for changes in BCD series
BCDS0689.BEA	44510	06-29-89	BCD series titles and numbers
BCDFILES.DOC	8058	04-05-89	Documentation for BCD data file
CD-DAT.EXE	72958	06-29-89	Compressed form of BCD data file
BCDPGM.EXE	132504	07-07-88	Utility progrtam to convert BCD to Lotus 123
BCDPGM.DOC	6386	04-05-89	Documentation for BCDPGM utility program
BCD-PGM.EXE	59291	07-07-88	Compressed form of BCDPGM.EXE
BCDPROD.BEA	2939	04-05-89	Business Conditions Digets data products
BCD1.EXE	98185	03/13/89	Historical BCD data: series 1/55. Compressed format.
BCD2.EXE	101108	03/13/89	Historical BCD data: series 56/117. Compressed format.
BCD3.EXE	61240	03/13/89	Historical BCD data: series 118/310. Compressed format.
BCD4.EXE	79420	03/13/89	Historical BCD data: series 311/557. Compressed format.
BCD5.EXE	75558	03/13/89	Historical BCD data: series 559/920C. Compressed format.
BCD6.EXE	52785	03/13/89	Historical BCD data: series 920C/978. Compressed format.
BCD-REV.BEA	8514	03/13/89	Description of 1989 revisions to the BCD data
EI-DESC.TXT	28416	05-23-88	Description of statistics in Economic Indicators files.
EI.TXT	8002	07-17-89	Economic indicators, 07/14/89
EI-L.TXT	16640	07-14-89	Economic Indicators - long format
EI.PRN	24448	07-14-89	Economic indicators - data format
EI.WKS	33792	07-14-89	Economic indicators - Lotus 123 worksheet, (Note: must be downloaded using XMODEM)
EI.DAT	21760	07-03-89	Economic indicators data - 88-06 to 89-06
CONST.CEN	17119	07-03-89	Census PR - New construction, May 1989
DURGD.CEN	17420	06-23-89	Census PR - Durable goods shipments & orders May 1989
HOME-SL.CEN	9391	06-29-89	Census PR - New home sales, May 1989
HOUS-CMP.CEN	16523	07-13-89	Housing Units Completed in May '89
HOUS-VAC.CEN	17327	05-04-89	Census PR - Housing Vacancies, 1st qtr 89
HOUSE.CEN	20637	06-16-89	Housing starts in April 1989
INDEX.BEA	22275	06-28-89	BEA PR - Leading, lagging, & coincident indicators, May 1989
INDEX.REV	42157	02-13-89	Documentation on revision of composite indexes
INV-SALE.CEN	12198	07-17-89	Census PR - Manufacturing & trade inventories and sales, May 1989
PACE.BEA	22175	06-21-89	Pollution Abatement and Control Expenditures - 1987
PE.CEN	32204	06-08-89	Census PR - Plant and equipment expenditures - First qtr 1989 expenditures
PI.BEA	24192	06-23-89	BEA PR - Personal Income and Outlays, May 1989
REAL.BLS	20728	06-16-89	BLS Real earnings, May 1989 - Full release
REAL-TXT.BLS	5456	06-16-89	BLS Real earnings, May 1989 - text & table A only
REAL-1.BLS	11648	06-16-89	Earnings of production workers
REAL-2.BLS	3840	06-16-89	Earnings of production/nonagricultural workers
RETAIL.CEN	18056	07-14-89	Census PR - Advance retail sales, June 1989
S-I-O.CEN	117019	06-30-89	Census PR - Shipments, inventories, & orders May 89. (this is a very long file)
S-I-O.EXE	48737	06-30-89	Compressed form of S-I-O.CEN
S-I-O.TXT	4163	06-30-89	Shipments, inventories, & orders - text only
WH-REV.CEN	21343	04-05-89	Benchmark revisions to wholesale trade data, includes January 1989 data.
WHSALE.CEN	20768	07-11-89	Census PR - Monthly wholesale sales - May 1989

APPENDIX Cont.

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents

EMPLOYMENT STATISTICS (Directory #4)

File Name	Length (bytes)	Date	Contents
CBAR.BS	58005	04-25-89	Major collective bargaining settlement 1st Qtr 89 - Complete release
CBAR-TXT.BS	11478	04-25-89	Major collective bargaining settlement - text
CBAR-TAB.BLS	46528	04-25-89	Average wage and compensation - tables
ECI.BLS	64768	04-25-89	BLS Employment Cost Index, 1st Qtr 89 Complete release
ECI-TXT.BLS	12618	04-25-89	Employment Cost Index, 1st Qtr 89, Text only
ECI-TAB.BLS	52151	04-25-89	Employment Cost Index (tables only)
EMP.BLS	99419	07-07-89	The employment situation in June 1989 Complete release
EMP.EXE	48185	07-02-89	Compressed form of EMP.BLS
EMP-TXT.BLS	11392	07-07-89	The employment situation in June 1989 text only
EMP-A.BLS	66944	07-07-89	Household Employment Statistics - A tables
EMP-B.BLS	47616	07-07-89	Establishment Employment Statistics - B tables
LAUS.BLS	72507	06-13-89	BLS - Local Area unemployment statistics, April 1989
LAUS-TXT.BLS	3840	06-13-89	Local Area Employment & Unemployment, April 1989
LAUS-1.BLS	10368	06-13-89	Civilian labor force & unemployment by state
LAUS-2.BLS	27136	06-13-89	Employees on nonagriculture payrolls by state
LAUS-3.BLS	31488	06-13-89	Unemployment rates by state

PRICE AND PRODUCTIVITY STATISTICS (Directory #5)

File Name	Length (bytes)	Date	Contents
CPI.BLS	108123	06-16-89	Consumer Price Index, May 89. Full release
CPI.EXE	38502	06-16-89	Compressed form of CPI.BLS
CPI-TXT.BLS	28160	06-16-89	Consumer Price Index, May 1989, Text only
CPI-1.BLS	16384	06-16-89	CPI, urban consumers by commodity
CPI-2.BLS	16128	06-16-89	CPI, urban consumers by commodity-seasonally adjusted
CPI-3.BLS	7680	06-16-89	CPI, urban consumers by area
CPI-4.BLS	16384	06-16-89	CPI, urban wage earners by commodity
CPI-5.BLS	16128	06-16-89	CPI, urban wage earners by commodity-seasonally adjusted
CPI-6.BLS	7808	06-16-89	CPI, urban wage earners by area
EXIM-TXT.BLS	38656	04-27-89	Import and Export Price Indexes, 1st Qtr 89
EXIM-1.BLS	37248	04-27-89	Import Price Indexes and Percent Change
EXIM-2.BLS	29056	04-27-89	Export Price Indexes and Percent Change
EXIM-3.BLS	61184	04-27-89	Import Price Indexes and Percent Change
EXIM-4.BLS	52224	04-27-89	Export Price Indexes and Percent Change
EXIM-M.BLS	5504	06-22-89	Export/Import Price Indexes, April 1989
PPI.BLS	65222	07-14-89	Producer Price Index, June 1989 (text/tables)
PPI-TXT.BLS	15360	07-14-89	Producer Price Index - Text only, June 89
PPI-1.BLS	10880	07-14-89	PPI By Stage of Processing
PPI-2.BLS	26620	07-14-89	PPI By Commodity & Stage of Processing
PPI-3.BLS	12544	07-14-89	PPI By Commodity
PROD.BLS	37221	06-01-89	Productivity and Cost, 1st Qtr 89, Revised (complete release)
PROD-TXT.BLS	12800	06-01-89	Productivity and Cost (text only) - 1st Qtr 89
PROD-TAB.BLS	24576	06-01-89	Productivity and Cost (tables only)

FOREIGN TRADE (Directory #6)

File Name	Length (bytes)	Date	Contents
DIR.BEA	48443	06-29-89	U.S. Direct Foreign Investment Abroad (COMPLETE Release)
NTER.BEA	21248	06-13-89	BEA PR - U.S. International Transactions, 1st Qtr, 1989
TRADE.BEA	14080	05-26-89	BEA PR - Merchandise Trade, balance of payments bases, 1st Quarter 89
FOR-SPEN.BEA	32128	05-30-89	BEA PR - Foreign spending in the US to acquire or establish new businesses
EXIM.BLS	104376	04-27-89	Import/export Price indexes, See directory #5 for the current listing of this release.
FOR-TRD.CEN	82098	06-15-89	Merchandise Trade in April (Complete Release)
TRADE.EXE	40746	06-15-89	Compressed form of FOR-TRD.CEN
TRD-SA.CEN	8192	06-09-88	Exports and Imports of Merchandise Trade (Seasonally Adjusted)

OBA
July 1989

APPENDIX   Cont.

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents
Foreign Trade (Continued)			
FOR-TRD.TXT	3548	07-17-89	Merchandise trade in May 1989. Text only
INT-INV.BEA	11392	06-29-89	BEA PR - Net International Investment Position of the U.S., 1988
IMPORTS.OTX	33183	06-17-89	Textile & Apparel Imports, April 89
SUMAGREE.OTX	279083	05-26-89	Textile Summary of Agreements, 4/30/89
SUMAGREE.EXE	70365	05-26-89	Textile summary agreemenst (compressed file)
HONGKAGR.OTX	8838	01-06-89	Hong Kong textile agreement -- 1989
LIVENTRY.OTX	929	02-01-89	Hong Kong Live entry info
AP-EXP.BEA	13716	09-28-88	Capital expenditures by majority owned foreign affiliates of US firms
X3C-8687.BEA	24106	07-07-88	Merchandise exports, 1986-88I
X3C-8485.BEA	24078	07-07-88	Merchandise exports, 1984-85
X3C-8283.BEA	24078	07-07-88	Merchandise exports, 1982-83
X3C-8081.BEA	24078	07-07-88	Merchandise exports, 1980-81
X3C-7879.BEA	24078	07-07-88	Merchandise exports, 1978-79
TRD-DAT.BEA	84268	07-08-88	BEA merchandise trade data -- description and technical documentation
M3C-8687.BEA	20161	07-07-88	Merchandise imports, 1986-88I
M3C-8485.BEA	18817	07-07-88	Merchandise imports, 1984-85
M3C-8283.BEA	18817	07-07-88	Merchandise imports, 1982-83
M3C-8081.BEA	18817	07-07-88	Merchandise imports, 1980-81
M3C-7879.BEA	18817	07-07-88	Merchandise imports, 1978-79
TRD-DAT.EXE	87882	07-07-88	BEA merchandise trade data, compressed file
TRD-SERV.BEA	16388	09-29-88	Trade in services in 1986. New BEA survey
TEXQFILL.OTX	180464	05-25-89	Textile Quotas Filled - May 21, 1989
EMBARGOS.OTX	1025	06-21-89	Embargos for Textiles - June 20, 1989

INDUSTRY STATISTICS (Directory #7)			
QFRMFG.CEN	17936	06-12-89	Census PR - Quarterly Financial Report - manufacturing, mining, & trade, 1st qtr 89 This file also includes the QFR for Retail Sales.
QFRRET.CEN	5753	07-12-89	Census PR - Quarterly Financial Report - Retail - 1st qtr 89
CAPAC.FRB	20119	07-14-89	FRB-Capacity Utilization (G.3)
PROD-IND.FRB	188206	07-14-89	FRB-Industrial Production (G12.3)

MONETARY STATISTICS (Directory #8)			
EXCHANGE.FRB	4864	07-13-89	FRB foreign exchange rates, July 07, 1989
RESRV.FRB	16769	07-13-89	FRB Aggregate Reserves (H3)
MONEY.FRB	56001	07-13-89	Federal Reserve Money Stock Data (H.6)
BC.FRB	23361	07-17-89	Federal Reserve Bank Credit-H8
INTEREST.FRB	6895	07-17-89	FRB-Selected Interest Rates-H15
QUOTES.TXT	17153	07-17-89	FRB Quotations for U.S. government securities
10JUL89.SLG	3457	07-07-89	Treasury State & Local Govt. Bond Series Rates
11JUL89.SLG	3457	07-10-89	Treasury State & Local Govt. Bond Series Rates
12JUL89.SLG	3457	07-11-89	Treasury State & Local Govt. Bond Series Rates
13JUL89.SLG	3457	07-12-89	Treasury State & Local Govt. Bond Series Rates
14JUL89.SLG	3457	07-14-89	Treasury State & Local Govt. Bond Series Rates
17JUL89.SLG	3457	07-17-89	Treasury State & Local Govt. Bond Series Rates
18JUL89.SLG	3457	07-18-89	Treasury State & Local Govt. Bond Series Rates

SPECIAL STUDIES AND REPORTS (Directory #9)			
FRMC-TXT.OBA	19063	05-24-89	OBA Financial Ratios for Manufacturing Corporations (FRMC), 3rd qtr, 1988 includes aggregate industry tables
FRMC-A.OBA	28738	05-24-89	OBA FRMC data for nondurable goods industries
FRMC-B.OBA	35048	05-24-89	OBA FRMC data for durable goods industries

OBA
July 1989

APPENDIX   Cont.

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents
Special Studies And Reports (continued)			
FRMC.WKS	79257	05-08-89	OBA FRMC update file. 87-4 to 88-4, Lotus 123 format
BSIT.BEA	27344	06-29-89	BEA - The Business Situation, June 1989
NEWPRICE.BEA	1293	03-30-89	Announcement of changes in prices of BEA data
USR-GD.BEA	122922	04-14-88	A Users Guide to BEA Information
COMPRICE.OBA	50816	01-04-88	Changing US Competitive Price Position in World Markets - Article from 88 US INDUSTRIAL OUTLOOK
OUTLOOK.ITA	53228	12-29-88	Highlights from the 1989 US INDUSTRIAL OUTLOOK
OUTLOOK.PR	25000	12-29-88	Press release -- 89 US INDUSTRIAL OUTLOOK
GOVTR-SP.BEA	2173	02-08-89	BEA staff paper on government transactions available through GPO

SOURCES OF DATA (Directory #10)			
USR-GD.BEA	81079	04-21-89	Users guide to Bureau of Economic Analysis statistics; includes how to obtain BEA data
FRMC-DAT.OBA	2176	12-14-88	Order form for manufacturing financial ratios
BCDPROD.BEA	5370	07-07-88	Products available from Business Conditions Digest
CONSUMER.BLS	2485	08-12-88	Consumer expenditure survey data available on diskette from the Bureau of Labor Statistics

REGIONAL ECONOMIC STATISTICS AND PRESS RELEASES (Directory #11)			
GSP-TXT.BEA	34740	06-20-88	Gross state product, text only
GSP-TAB1.BEA	90790	06-20-88	Gross state product by component, 63-86
GSP-TAB2.BEA	169913	06-20-88	Gross state product by industry, 683-86
GSP-EXE	87764	06-20-88	Gross state product files in compressed format
STPI-TXT.BEA	5944	01-24-89	BEA Regional Personal Income, 87-III to 88-III, text
TPI-TAB.BEA	53795	01-24-89	BEA State personal income.82-III to 87-III, tables
PCPI-TXT.BEA	13131	04-20-89	State per capita personal income, 1988, text
PCPI-TAB.BEA	66846	04-20-89	State per capita personal income, 1988, tables
ST-TPI.PRN	8914	04-20-89	State total personal income, 1981-88
ST-PCI.PRN	8872	04-20-89	State per capita income, 1981-88
REGION.EXE	357592	04-20-89	BEA regional files (all states) compressed format (must use XMODEM to download) all revised data 1985-88
BEA-ST.FMT	1544	06-08-88	Format description for BEA .REG files
AK.REG	16150	04-20-89	BEA Personal Income & Wages - Alaska
AL.REG	16150	04-20-89	BEA Personal Income & Wages - Alabama
AR.REG	16150	04-20-89	BEA Personal Income & Wages - Arkansas
AZ.REG	16150	04-20-89	BEA Personal Income & Wages - Arizona
CA.REG	16150	04-20-89	BEA Personal Income & Wages - California
CO.REG	16150	04-20-89	BEA Personal Income & Wages - Colorado
CT.REG	16150	04-20-89	BEA Personal Income & Wages - Connecticut
DC.REG	16150	04-20-89	BEA Personal Income & Wages - District of Columbia
DE.REG	16150	04-20-89	BEA Personal Income & Wages - Delaware
FL.REG	16150	04-20-89	BEA Personal Income & Wages - Florida
FWEST.REG	16150	04-20-89	BEA Personal Income & Wages - Far West Region
GA.REG	16150	04-20-89	BEA Personal Income & Wages - Georgia
GLAKE.REG	16150	04-20-89	BEA Personal Income & Wages - Great Lakes Region
HI.REG	16150	04-20-89	BEA Personal Income & Wages - Hawaii
IA.REG	16150	04-20-89	BEA Personal Income & Wages - Iowa
ID.REG	16150	04-20-89	BEA Personal Income & Wages - Idaho
IL.REG	16150	04-20-89	BEA Personal Income & Wages - Illinois
IN.REG	16150	04-20-89	BEA Personal Income & Wages - Indiana
KS.REG	16150	04-20-89	BEA Personal Income & Wages - Kansas
KY.REG	16150	04-20-89	BEA Personal Income & Wages - Kentucky
LA.REG	16150	04-20-89	BEA Personal Income & Wages - Louisiana
MA.REG	16150	04-20-89	BEA Personal Income & Wages - Massachusetts

OBA
July 1989

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents
Regional Economic Statistics and Press Releases (Continued)			
MD.REG	16150	04-20-89	BEA Personal Income & Wages - Maryland
ME.REG	16150	04-20-89	BEA Personal Income & Wages - Maine
MEAST.REG	16150	04-20-89	BEA Personal Income & Wages - Middle East Region
MI.REG	16150	04-20-89	BEA Personal Income & Wages - Michigan
MN.REG	16150	04-20-89	BEA Personal Income & Wages - Minnesota
MO.REG	16150	04-20-89	BEA Personal Income & Wages - Missouri
MS.REG	16150	04-20-89	BEA Personal Income & Wages - Mississippi
MT.REG	16150	04-20-89	BEA Personal Income & Wages - Montana
NC.REG	16150	04-20-89	BEA Personal Income & Wages - North Carolina
ND.REG	16150	04-20-89	BEA Personal Income & Wages - North Dakota
NE.REG	16150	04-20-89	BEA Personal Income & Wages - Nebraska
NH.REG	16150	04-20-89	BEA Personal Income & Wages - New Hampshire
NJ.REG	16150	04-20-89	BEA Personal Income & Wages - New Jersey
NM.REG	16150	04-20-89	BEA Personal Income & Wages - New Mexico
NV.REG	16150	04-20-89	BEA Personal Income & Wages - Nevada
NWENG.REG	16150	04-20-89	BEA Personal Income & Wages - New England Region
NY.REG	16150	04-20-89	BEA Personal Income & Wages - New York
OH.REG	16150	04-20-89	BEA Personal Income & Wages - Ohio
OK.REG	16150	04-20-89	BEA Personal Income & Wages - Oklahoma
OR.REG	16150	04-20-89	BEA Personal Income & Wages - Oregon
PA.REG	16150	04-20-89	BEA Personal Income & Wages - Pennsylvania
PLAIN.REG	16150	04-20-89	BEA Personal Income & Wages - Plain States
RI.REG	16150	04-20-89	BEA Personal Income & Wages - Rhode Island
RMTN.REG	16150	04-20-89	BEA Personal Income & Wages - Rocky Mountain Region
SC.REG	8125	04-20-89	BEA Personal Income & Wages - South Carolina
SD.REG	16150	04-20-89	BEA Personal Income & Wages - South Dakota
SEAST.REG	16150	04-20-89	BEA Personal Income & Wages - South Eastern Region
SWEST.REG	16150	04-20-89	BEA Personal Income & Wages - South Western Region
TN.REG	16150	04-20-89	BEA Personal Income & Wages - Tennessee
TX.REG	16150	04-20-89	BEA Personal Income & Wages - Texas
USTOT.REG	16150	04-20-89	BEA Personal Income & Wages - United States
UT.REG	16150	04-20-89	BEA Personal Income & Wages - Utah
VA.REG	16150	04-20-89	BEA Personal Income & Wages - Virginia
VT.REG	16150	04-20-89	BEA Personal Income & Wages - Vermont
WA.REG	16150	04-20-89	BEA Personal Income & Wages - Washington
WI.REG	16150	04-20-89	BEA Personal Income & Wages - Wisconsin
WV.REG	16150	04-20-89	BEA Personal Income & Wages - West Virginia
WY.REG	16150	04-20-89	BEA Personal Income & Wages - Wyoming
COUNTY.EXE	140000	05-04-88	BEA personal income by state and county compressed file; all states
METRO-PI.BEA	14920	05-04-89	Metropolitan personal income
MSA-PI.BEA	29895	05-04-89	Metropolitan area personal income, 1985-87
BEA-CTY.FMT	1233	06-08-88	Format description for BEA .CTY files
AK.CTY	2228	05-04-89	Personal income by county -- Alaska
AL.CTY	5486	05-04-89	Personal income by county -- Alabama
AR.CTY	6069	05-04-89	Personal income by county -- Arkansas
AZ.CTY	1434	05-04-89	Personal income by county -- Arizona
CA.CTY	5024	05-04-89	Personal income by county -- California
CO.CTY	5206	05-04-89	Personal income by county -- Colorado
CT.CTY	928	05-04-89	Personal income by county -- Connecticut
DC.CTY	255	05-04-89	Personal income by county -- Dist. of Columbia
DE.CTY	501	05-04-89	Personal income by county -- Delaware
FL.CTY	5603	05-04-89	Personal income by county -- Florida
GA.CTY	12623	05-04-89	Personal income by county -- Georgia
HI.CTY	586	05-04-89	Personal income by county -- Hawaii
IA.CTY	8150	05-04-89	Personal income by county -- Iowa
ID.CTY	3642	05-04-89	Personal income by county -- Idaho
IL.CTY	8413	05-04-89	Personal income by county -- Illinois
IN.CTY	7618	05-04-89	Personal income by county -- Indiana
KS.CTY	8516	05-04-89	Personal income by county -- Kansas
KY.CTY	9516	05-04-89	Personal income by county -- Kentucky
LA.CTY	5258	05-04-89	Personal income by county -- Louisiana
MA.CTY	1421	05-04-89	Personal income by county -- Massachusetts
MD.CTY	2212	05-04-89	Personal income by county -- Maryland

APPENDIX   Cont.

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents
Regional Economic Statistics and Press Releases (Continued)			
ME.CTY	1537	05-04-89	Personal income by county -- Maine
MI.CTY	6859	05-04-89	Personal income by county -- Michigan
MN.CTY	7172	05-04-89	Personal income by county -- Minnesota
MO.CTY	9263	05-04-89	Personal income by county -- Missouri
MS.CTY	6543	05-04-89	Personal income by county -- Mississippi
MT.CTY	4549	05-04-89	Personal income by county -- Montana
NC.CTY	8130	05-04-89	Personal income by county -- N. Carolina
ND.CTY	4369	05-04-89	Personal income by county -- N. Dakota
NE.CTY	7498	05-04-89	Personal income by county -- Nebraska
NH.CTY	1068	05-04-89	Personal income by county -- New Hampshire
NJ.CTY	2010	05-04-89	Personal income by county -- New Jersey
NM.CTY	2820	05-04-89	Personal income by county -- New Mexico
NV.CTY	1596	05-04-89	Personal income by county -- Nevada
NY.CTY	5312	05-04-89	Personal income by county -- New York
OH.CTY	7340	05-04-89	Personal income by county -- Ohio
OK.CTY	6279	05-04-89	Personal income by county -- Oklahoma
OR.CTY	3129	05-04-89	Personal income by county -- Oregon
PA.CTY	5684	05-04-89	Personal income by county -- Pennsylvania
RI.CTY	667	05-04-89	Personal income by county -- Rhode Island
SC.CTY	3883	05-04-89	Personal income by county -- S. Carolina
SD.CTY	5314	05-04-89	Personal income by county -- S. Dakota
TN.CTY	7629	05-04-89	Personal income by county -- Tennessee
TX.CTY	20284	05-04-89	Personal income by county -- texas
US.CTY	259	05-04-89	Personal income by county -- US total
UT.CTY	2484	05-04-89	Personal income by county -- Utah
VA.CTY	8619	05-04-89	Personal income by county -- Virginia
VT.CTY	1362	05-04-89	Personal income by county -- Vermont
WA.CTY	3383	05-04-89	Personal income by county -- Washington
WI.CTY	5930	05-04-89	Personal income by county -- Wisconsin
WV.CTY	4509	05-04-89	Personal income by county -- West Virginia
WY.CTY	2066	05-04-89	Personal income by county -- Wyoming

```
ENERGY STATISTICS - TABLES
Data provided by The Department of Energy
Energy Information Administration
(Directory #12)
```

Abbreviations used in this directory:
   MER -- Monthly Energy Review
   STEO -- Short-term Energy Outlook
   AEO -- Annual Energy Outlook

File Name	Length (bytes)	Date	Contents
AEOA8.WKS	12033	05-03-88	ANNUAL ENERGY OUTLOOK, TABLEA8, BASE
AEOA3.WKS	19201	05-03-88	ANNUAL ENERGY OUTLOOK, TABLEA3, BASE
AEOA11.WKS	6401	05-03-88	ANNUAL ENERGY OUTLOOK, TABLEA11, BASE
AEOB1.WKS	9985	05-03-88	ANNUAL ENERGY OUTLOOK, TABLEB1, HIGH
AEOC1.WKS	9985	05-03-88	ANNUAL ENERGY OUTLOOK, TABLEC1, LOW
EOTEXT.EIA	5249	05-03-88	ANNUAL ENERGY OUTLOOK, SUMMARY TEXT
AEOA1.WKS	9984	05-03-88	ANNUAL ENERGY OUTLOOK, TABLEA1, BASE
STEO1.WKS	8705	02-02-89	JAN 89 STEO BASE CASE ASSMPNS LOTUS
STEO2.WKS	9473	02-02-89	JAN 89 STEO PETROLEUM BALANCE LOTUS
STEO5.WKS	13313	02-02-89	JAN 89 STEO QTRLY ENERGY PRICE LOTUS
STEO6.WKS	15617	02-02-89	JAN 89 STEO SUPPLY OF PETROLEUM LOTUX
MER1-2.EIA	5377	03-07-89	ENERGY OVERVIEW
MER1-3.EIA	9473	03-07-89	PRODUCTION OF ENERGY BY SOURCE
MER1-4.EIA	9345	03-07-89	CONSUMPTION OF ENERGY BY SOURCE
MER1-5.EIA	9473	03-07-89	NET IMPORTS OF ENERGY BY SOURCE
MER3-1A.EIA	9729	03-07-89	CRUDE OIL & PETROLEUM PRODUCTS OVERVIEW
MER3-1B.EIA	9217	03-07-89	CRUDE OIL & PETROLEUM PROD OVERVIEW cont
MER4-2.EIA	9601	03-07-89	NATURAL GAS SUPPLY & DISPOSITION
MER6-1.EIA	5121	03-07-89	COAL OVERVIEW

OBA
July 1989

APPENDIX - Cont.

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents

Energy Statistics - Tables (Continued)

File Name	Length (bytes)	Date	Contents
MER7-1.EIA	9345	03-07-89	NET GEN OF ELECTRICITY BY ELEC UTIL
MER9-1.EIA	7937	03-07-89	CRUDE OIL PRICE SUMMARY
MER1-2.EIA	4295	04-16-89	ENERGY OVERVIEW
MER1-3.EIA	7392	04-16-89	PRODUCTION OF ENERGY BY SOURCE
MER1-4.EIA	7345	04-16-89	CONSUMPTION OF ENERGY BY SOURCE
MER1-5.EIA	7517	04-16-89	NET IMPORTS OF ENERGY BY SOURCE
MER3-1A.EIA	8397	04-16-89	CRUDE OIL & PETROLEUM PRODUCTS OVERVIEW
MER3-1B.EIA	7943	04-16-89	CRUDE OIL & PETROLEUM PROD OVERVIEW cont
MER4-2.EIA	8380	04-16-89	NATURAL GAS SUPPLY & DISPOSITION
MER6-1.EIA	4521	04-16-89	COAL OVERVIEW
MER7-1.EIA	7347	04-16-89	NET GEN OF ELECTRICITY BY ELEC UTIL
MER9-1.EIA	6471	04-16-89	CRUDE OIL PRICE SUMMARY
MER3-1A.EIA	8541	05-10-89	CRUDE OIL & PETROLEUM PRODUCTS OVERVIEW
MER3-1B.EIA	8087	05-10-89	CRUDE OIL & PETROLEUM PROD OVERVIEW cont
MER4-2.EIA	8524	05-10-89	NATURAL GAS SUPPLY & DISPOSITION
MER6-1.EIA	4590	05-10-89	COAL OVERVIEW
MER7-1.EIA	7938	05-10-89	NET GEN OF ELECTRICITY BY ELEC UTIL
MER9-1.EIA	7030	05-10-89	CRUDE OIL PRICE SUMMARY
MER1-2.EIA	4591	06-01-89	ENERGY OVERVIEW

DAILY TRADE OPPORTUNITIES
U.S. AND FOREIGN COMMERCIAL SERVICE
U.S. DEPARTMENT OF COMMERCE
(Directory #13)

File Name	Length (bytes)	Date	Contents
TOP14.JUN	62305	06-14-89	Trade opportunities for June 14, 54 leads
TOP15.JUN	50526	06-15-89	Trade opportunities for June 15, 38 leads
TOP16.JUN	69257	06-16-89	Trade opportunities for June 16, 54 leads
TOP19.JUN	56482	06-19-89	Trade opportunities for June 19, 41 leads
TOP20.JUN	40959	06-20-89	Trade opportunities for June 20, 33 leads
TOP21.JUN	44434	06-21-89	Trade opportunities for June 21, 36 leads
TOP22.JUN	59124	06-22-89	Trade opportunities for June 22, 35 leads
TOP23.JUN	49258	06-23-89	Trade opportunities for June 23, 36 leads
TOP26.JUN	48562	06-26-89	Trade opportunities for June 26, 40 leads
TOP27.JUN	57917	06-27-89	Trade opportunities for June 27, 50 leads
TOP28.JUN	91661	06-28-89	Trade opportunities for June 28, 70 leads
TOP29.JUN	23136	06-29-89	Trade opportunities for June 29, 20 leads
TOP30.JUN	52726	06-30-89	Trade opportunities for June 30, 40 leads
TOP03.JUL	76138	07-03-89	Trade opportunities for July 03, 59 leads
TOP05.JUL	34213	07-05-89	Trade opportunities for July 05, 29 leads
TOP06.JUL	80636	07-06-89	Trade opportunities for July 06, 58 leads
TOP07.JUL	44357	07-07-89	Trade opportunities for July 07, 32 leads
TOP10.JUL	91009	07-10-89	Trade opportunities for July 10, 65 leads
TOP11.JUL	85931	07-11-89	Trade opportunities for July 11, 72 leads
TOP12.JUL	75919	07-12-89	Trade opportunities for July 12, 57 leads
TOP13.JUL	46721	07-13-89	Trade opportunities for July 13, 29 leads
TOP14.JUL	35457	07-14-89	Trade opportunities for July 14, 35 leads
TOP17.JUL	66979	07-17-89	Trade opportunities for July 17, 50 leads'

CURRENT BUSINESS STATISTICS FILES
(Directory #14)

File Name	Length (bytes)	Date	Contents
README.CBS	4994	12-06-88	Documentation for CBS files
CHANGES.CBS	351	06-29-89	Changes to CBS series
CHEM1.BEA	5771	06-29-89	Chemicals and Allied Products - Data - Part1
CHEM2.BEA	6689	06-29-89	Chemicals and Allied Products - Data - Part2
CHEMICAL.BEA	5405	06-29-89	Chemicals and Allied Products - Series titles
COALOIL1.BEA	8709	06-29-89	Petroleum, Coal, and Products - Data - Part1
COALOIL2.BEA	10095	06-29-89	Petroleum, Coal, and Products - Data - Part2

APPENDIX - Cont.

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents

Current Business Statistics Files

File Name	Length (bytes)	Date	Contents
COALOIL.BEA	7936	06-29-89	Petroleum, Coal, and Products - Series titles
CONSTRC1.BEA	7240	06-29-89	Construction and Real Estate - Data - Part1
CONSTRC2.BEA	8392	06-29-89	Construction and Real Estate - Data - Part2
CONSTRUC.BEA	7296	06-29-89	Construction and Real Estate - Series titles
DOMESTC1.BEA	11308	06-29-89	Domestic trade - Data - Part1
DOMESTC2.BEA	13108	06-29-89	Domestic trade - Data - Part2
DOMESTIC.BEA	10112	06-29-89	Domestic trade - Series titles
FINANCE1.BEA	24190	06-29-89	Finance - Data - Part1
FINANCE2.BEA	28042	06-29-89	Finance - Data - Part2
FINANCE.BEA	22528	06-29-89	Finance - Series titles
FOOD1.BEA	15602	06-29-89	Food and Kindred Prod.;Tobacco - Data - Part1
FOOD2.BEA	18086	06-29-89	Food and Kindred Prod.;Tobacco - Data - Part2
FOOD.BEA	15872	06-29-89	Food and Kindred Prod.;Tobacco - Series titles
FOREIGN1.BEA	10065	06-29-89	Foreign trade of the U.S. - Data - Part1
FOREIGN2.BEA	11667	06-29-89	Foreign trade of the U.S. - Data - Part2
FOREIGN.BEA	9088	06-29-89	Foreign trade of the U.S. - Series titles
GENERAL1.BEA	34586	06-29-89	General Business Indicators - Data - Part1
GENERAL2.BEA	40094	06-29-89	General Business Indicators - Data - Part2
GENERAL.BEA	29824	06-29-89	General Business Indicators - Series titles
GLASS1.BEA'	3737	06-29-89	Stone, Clay, and Glass Products - Data - Part1
GLASS2.BEA	4331	06-29-89	Stone, Clay, and Glass Products - Data - Part2
GLASSS.BEA	3840	06-29-89	Stone, Clay, and Glass Prod. - Series titles
LABOR1.BEA	30405	06-29-89	Labor Force, Employ. & Earn. - Data - Part1
LABOR2.BEA	35247	06-29-89	Labor Force, Employ. & Earn. - Data - Part2
LABOR.BEA	25088	06-29-89	Labor Force, Employ. & Earn. - Series titles
LEATHER1.BEA	1364	06-29-89	Leather and Products - Data - Part1
LEATHER2.BEA	1580	06-29-89	Leather and Products - Data - Part2
LEATHER.BEA	1408	06-29-89	Leather and Products - Series titles
LUMBER1.BEA	4190	06-29-89	Lumber and Products - Data - Part1
LUMBER2.BEA	4855	06-29-89	Lumber and Products - Data - Part2
LUMBER.BEA	4096	06-29-89	Lumber and Products - Series titles
METALS1.BEA	18540	06-29-89	Metals and Manufactures - Data - Part1
METALS2.BEA	21492	06-29-89	Metals and Manufactures - Data - Part2
METALS.BEA	18304	06-29-89	Metals and Manufactures - Series titles
PAPER1.BEA	5206	06-29-89	Pulp, Paper, & Paper Prod. - Data - Part1
PAPER2.BEA	6034	06-29-89	Pulp, Paper, & Paper Prod. - Data - Part2
PAPER.BEA	5376	06-29-89	Pulp, Paper, & Paper Prod. - Series titles
PRICES1.BEA	10630	06-29-89	Commodity prices - Data - Part1
PRICES2.BEA	12322	06-29-89	Commodity prices - Data - Part2
PRICES.BEA	9216	06-29-89	Commodity prices - Series titles
RUBBER1.BEA	1920	06-29-89	Rubber and Rubber Products - Data - Part1
RUBBER2.BEA	2235	06-29-89	Rubber and Rubber Products - Data - Part2
RUBBER.BEA	1920	06-29-89	Rubber and Rubber Products - Series titles
TEXTILE1.BEA	9387	06-29-89	Textile Products - Data - Part1
TEXTILE2.BEA	10881	06-29-89	Textile Products - Data - Part2
TEXTILES.BEA	9600	06-29-89	Textile Products - Series titles
TRANSCM1.BEA	6562	06-29-89	Transportation and Communication - Data - Part1
TRANSCM2.BEA	7606	06-29-89	Transportation and Communication - Data - Part2
TRANSCOM.BEA	6272	06-29-89	Transportation and Communication -Series titles
TRNSEQP1.BEA	6562	06-29-89	Transportation Equipment - Data - Part1
TRNSEQP2.BEA	7606	06-29-89	Transportation Equipment - Data - Part2
TRNSEQIP.BEA	6272	06-29-89	Transportation Equipment - Series titles
UTILITY1.BEA	3398	06-29-89	Electric Power and Gas - Data - Part1
UTILITY2.BEA	3938	06-29-89	Electric Power and Gas - Data - Part2
UTILTTY.BEA	3072	06-29-89	Electric Power and Gas - Series titles
CBS.EXE	229038	06-29-89	Current Business Statistics - All files in compressed format

OBA
July 1989

APPENDIX   Cont.

THE ECONOMIC BULLETIN BOARD

File Name	Length (bytes)	Date	Contents

PRESS RELEASES AND REPORTS FROM THE U.S. TRADE REPRESENTATIVE (Directory #15)

File Name	Length (bytes)	Date	Contents
KOREA.STR	4940	05-25-89	Press Release on elimination of Korean trade barriers.
SUPER301.STR	59137	05-26-89	Press Release on Super301.
OILSEEDS.STR	1141	06-01-89	Ambassador Hill's Statement on Oilseeds
MARCHBAL.STR	992	06-01-89	Ambassador Hill's Statement on March Trade Balance
DRAM.STR		06-22-89	Ambassador Hill's Statement on DRAM Consortium
CANNED.STR		06-31-89	Ambassador Hill's announces Tentative Resolution of canned fruit dispute with European community.
HORMONE.STR	2561	07-14-89	Ambassador Hills announces Small Reduction in U.S.-EC Meat Hormones Dispute

MISCELLANEOUS FILES (Directory #98)

File Name	Length (bytes)	Date	Contents
EA.TEL		06-29-89	Directory of Office of the Under Secretary for Economic Affairs
BSD.OBL	36992	09-24-86	Directory of Department of Commerce programs serving business from the Ofc. of Business Liason
BEA.TE	11447	05-05-89	Telephone contacts: Bureau of Economic Analysis
OBA.TEL	1664	03-22-86	Telephone contacts: Office of Business Analysis
BLS.TEL	12800	10-20-88	Telephone contacts: Bureau of Labor Statistics
BULLET1	7572	03-24-88	An overview of the Economic Bulletin Board
BULLET3	12672	07-06-89	Scheduled economic release dates, June-Dec 89
BULLET4	5000	11-09-88	User news
BULLET5	9088	11-09-88	Dept. of Commerce Bulletin Boards
BULLET8	8832	06-02-88	What's new on THE ECONOMIC BULLETIN BOARD
BULLET9	4992	11-09-88	Federal Government bulletin boards outside DOC
FILES	32293	07-06-89	List of all files available
REG-FORM	1792	08-25-86	Registration form for bulletin board access
PEEPER.EXE	81118	12-29-87	Utility program; creates window to view data in tables larger than 24 x 80
CENSUS.TEL	28545	05-23-88	Census telephone contact list