This SPEC (Systems and Procedures Exchange Center) Kit presents the results of a survey of Association of Research Libraries (ARL) member libraries. The survey addressed the following questions about numeric data (i.e., any information resource, print or non-print, with considerable numeric content) in academic libraries: (1) What relationships exist between libraries and other academic units that have responsibility for numeric data? (2) What are the principle sources for numeric data? (3) How much are libraries spending to acquire numeric data resources? (4) How much staff time are libraries devoting to numeric data? and (5) How do libraries evaluate their own performance regarding numeric data? The survey was divided into six topical areas: background; numeric data product collections; access to machine-readable numeric data products; staffing; budget; and evaluation of numeric data collections and services. A total of 66 of 121 ARL member libraries responded to the survey. A copy of the questionnaire with tabulated results is presented. Representative documents include collection policies, user guides, data service descriptions, job descriptions, and access policies from participating libraries. Selected resources, including books, journal articles, and World Wide Web sites are listed. (Contains 21 references.) (MES)
Numeric Data Products and Services

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SURVEY
Executive Summary

Introduction

As scholarship places increasing emphasis on quantitative analysis, the need for numeric data grows across academic disciplines. Students and faculty require better access to sources of numeric data ranging from simple descriptive statistics to large sets of raw data. A "numeric data product" may be defined as any information resource—print or nonprint—with considerable numeric content. This definition focuses on the content of numeric data products, irrespective of format. As is evident from the survey results, many perceive data as strictly limited to machine-readable files. Such a perception ignores the fact that data comes in a wide variety of formats.

Academic departments, campus computing centers, and libraries have all provided support to varying degrees for researchers using numeric data. While the demand grows, specialized data services are quickly becoming a major operation. On many campuses, the library has become a central access point for numeric data users by coordinating collections of data resources and services to researchers. As more academic libraries join the data game, they look to their peer institutions for models of service, collection development, access policies, budgets, and staffing patterns.

Academic libraries have historically collected and provided access to bibliographic sources that contain some amount of numeric data. Libraries that are also government document depositories have often served as gateways to numeric data, as many of the publications distributed through depository programs are statistical in nature. The emergence of major statistical indexes has helped libraries, both depository and nondepository, provide improved access to sources of numeric data. Such products as the American Statistics Index, published by the Congressional Information Service, allow users to identify and access publications that contain substantial numeric content.

As with bibliographic resources, the demand among numeric data users for immediate, full-text access is on the rise. Since the release of 1990 Census data on CD-ROM, academic institutions have faced an increasing demand for numeric data, especially in a machine-readable form. Data consortia, such as the Inter-university Consortium for Political and Social Research (ICPSR), have also provided more widespread access to numeric data by archiving and distributing data files.

The survey results indicate that most academic libraries collect and service numeric data, but a disparity exists in how they define numeric data, what specific services are provided, what levels of staffing and budget are needed, and how they evaluate data collections and services. It is hoped that the survey results will help identify some best practices, assuage some fears, and foster collaboration among institutions and individuals working to provide numeric data services.

Survey

While many academic libraries collect and provide services for numeric data resources, little has been written about how such resources are selected or which specific services are provided. The investigators have attempted to find answers to several specific questions about numeric data in academic libraries. What relationships exist between libraries and other academic units that have responsibility for numeric data? What are the principle sources for numeric data? How much are libraries spending to acquire numeric data resources? How much staff time are libraries devoting to numeric data? How do libraries evaluate their own performance regarding numeric data? The investigators designed their survey to
try to capture some of this information.

During the spring of 2001, an eighteen-question survey was distributed to ARL member institutions in the United States and Canada. The survey was divided into six topical areas: Background, Numeric Data Product Collections, Access to Machine-readable Numeric Data Products, Staffing, Budget, and Evaluation of Numeric Data Collections & Services. In addition to basic information gathering about data collections and services, respondents were presented with an opportunity to rank their service levels based on desired and perceived performance. The investigators draw from the LibQUAL+ methodology recently developed by ARL. Sixty-six of the 121 ARL member libraries (55%) responded to the survey.

Responsibility for Data

Sixty-four out of 66 libraries (97%) indicated they collect or provide access to numeric data. All of these respondents provide some assistance for users trying to locate numeric data. Apart from helping users locate data, the most frequently reported functions among libraries were: cataloging numeric data (98%), providing access to data (98%), collecting numeric data products (97%), storing numeric data (95%), answering reference questions about data (95%), and assisting users to retrieve data (92%).

The survey asked respondents to indicate which of the other campus units also perform various functions associated with data services. When it comes to assisting users with data analysis, about a third (31%) of libraries provide this service, while close to half of the respondents (45%) indicated that academic departments perform this function. This seems to correspond with the typical limitation many academic librarians place on reference service; namely, to help users get to information, but leave the interpretation of that information to the user. Other less frequently reported functions performed by libraries include: archiving data (53%), developing web-based tools to access numeric data (52%), and collecting codebooks (78%).

Among the other campus units, academic departments appear to provide a significant share of data services. Fifty-nine percent of respondents indicated that departments also collect data products, 47% said they store data, 36% said they provide access to data, and 31% said they provide user instruction. Overall, libraries appear to take the lead in handling numeric data. It should be noted, however, that this trend in responses is very likely a result of the fact that all the organizations surveyed were libraries. If a similar survey had been administered to the other campus units, a similar skew would probably have resulted. Nevertheless, the trend is telling, as libraries often are not aware of what other units on campus are doing with regard to data. Libraries considering providing more data-related services would do well to investigate what the other units are doing, and develop partnerships with them.

While 48% of responding libraries indicated they have no formal relationship with another academic unit responsible for numeric data, over a third (39%) hold both data and codebooks that are used by the data unit, and 34% include the data unit as an administrative part of the library. Among the explanatory responses, the majority of those commenting indicated they had an informal but strong relationship to other units, whether or not they are within the library.

Data Collection Development

Obtaining information about the number of data products libraries are collecting proved to be very difficult. On average, only about a third of the respondents were able to provide any numbers in response to this question. An overwhelming number of respondents indicated that approximating the number of products collected is difficult at best and perhaps impossible, as data products are distributed in various forms and from various sources.

Of those that could respond (22 out of 64), about half (48%) indicated they receive between 100–500 data products through a government depository program, 13% said they got 3,000 or more. Two-thirds (67%) said they receive 50 or fewer products via international governmental organizations (such as the UN, IMF, and OECD). About half (48%) indicated they received 20 or fewer products from commercial sources. Given the difficulty in answering this question, perhaps some other method of estimating the percentages of the library's total collection received from these various sources, rather than exact numbers, could shed better light.
The majority of respondents (89%) indicated their institutions were members of the ICPSR. Of those, 60% indicated that their official representative to the ICPSR was a member of the library staff. Over a quarter (27%) said their institutions participated with the Roper Center for Public Opinion Research. Other consortia included the European Consortium for Political Research, R-Cade, Statistics Canada's Data Liberation Initiative, Sociometrics’ Electronic Social Science Data Library and statewide consortia.

Over a quarter (27%) of respondents have a collection development policy covering numeric data. A preponderance (98%) of libraries collects numeric data in the social sciences. Over three-quarters (77%) collect in the sciences, while a little over half (56%) collect numeric data in the humanities. Business was mentioned frequently as another distinct subject area, while others included environment, public health, agriculture and law.

With regard to formats in which data is collected, online (98%) and CD-ROM (97%) are in the majority, followed by paper (81%), diskette (75%), microform (70%), and even magnetic tape (23%). The only other format mentioned was DVD, which reflects an emerging format of choice. Some respondents also commented that data only comes electronically, while differentiating that from statistics, which are acquired in print, microform etc. This is an interesting distinction to make as it reflects a prevailing notion that data is something relegated only to the world of computers.

Machine-readable Data

Since machine-readable numeric data poses particular issues for access and bibliographic control, two questions were asked specifically concerning this format. Nearly all responding libraries (97%) provide cataloging of these numeric data resources in their online public-access catalogs, and just under a quarter (23%) have some other specialized catalog specifically for data. Many respondents indicated they rely on lists presented on web pages, and several respondents said they had some sort of cataloging scheme in development.

Thirty-four percent of respondents indicated they have no formal policy with regard to patron access to machine-readable data. More than half (58%) said that access is freely available to the institution’s community, both on and off campus. Only a third (33%) restricted access to students, faculty, and staff. Over half of the respondents noted that walk-in users have access to their resources, both locally mounted and remotely accessed. Since there is a high degree of variability among license agreements (especially with regard to commercially produced data resources) nearly every data source, in effect, has a different access policy. Government document resources were often singled out as having no access restrictions.

Staffing and Budgeting

Just over a third of the responding libraries (38%) reported they employ someone specifically to acquire numeric data products. Of those, 79% hold the M.L.S. degree or its equivalent. Close to half (48%) said they employ someone specifically to handle service requests for numeric data, 65% of whom hold the M.L.S degree or its equivalent. Among other credentials held by these individuals are Bachelor’s and advanced degrees in political science, economics, and statistics.

The most commonly provided job title was Data Librarian. Judging from the responses that provided the same title for both acquisitions and reference service responsibility, 13 of the above individuals (54%) are responsible for both areas. Many respondents expressed concern over use of the term “specifically,” reporting that the tasks of acquiring and providing service for numeric data are often distributed among several librarians and staff, without having any one individual specifically charged with this responsibility. On average, libraries reported that they devoted 2 full time equivalent (FTE) librarians, 1 FTE support staff, and 1 FTE student staff to these responsibilities.

The same difficulty in determining the number of data products in the collection reappears when trying to estimate a budget for data products. Many respondents indicated that it is difficult to derive a budgeted amount since numeric data is scattered throughout their collections. Only 27 respondents out of 64 (42%) could provide some specific budget information. For those giving figures, the budgeted amounts range from zero to $200,000. The average amount is $31,825 with a median of $12,000. The majority (89%) budget less than $100,000 and 30% budget below $2,000.
Evaluation of Data Services

Respondents were asked to indicate what techniques or measures they used to evaluate the quality of their data collections and services. Nearly half (45%) admitted they do not perform any formal evaluation. Of those that did perform some evaluation, most (69%) preferred usage statistics to measure the quality of their data services.

Working with the LibQUAL+ methodology, respondents were asked to rank their numeric data collections and services on a nine-point Likert scale, with 1 being the lowest level of service and 9 the highest. Seven aspects of data collections and services were addressed: convenient access to data, providing reference services, acquiring data products, creating partnerships with other data units, collecting user feedback, adding products on request, and maintaining error-free catalog records. For each category, respondents were asked to indicate what they thought should be a minimum service level, a desired service level, and the perceived performance level at their own library.

For the most part, respondents tended to rank the minimum level of service at around 4-6, the desired level at 7-8, and the perceived level of performance generally landed somewhere in between. A look at the difference between average rankings for each of the three service levels reveals some interesting patterns and could indicate how well libraries are performing. In the area of providing convenient access to data products, the average ranking for a minimum level of service is 5.32, the desired level is 8.23, and the perceived level is 5.80. The relatively high desired level of service would indicate that libraries consider convenient access to be important. Since the perceived level of performance is fairly close to the minimum level, one could say that libraries are providing convenient access at about the minimal level of service. In other words, there is some room for improvement.

Similarly, looking at the difference between rankings across the various categories could offer some insight into how libraries value the different aspects of data collections and services. With regard to providing error-free catalog records, the average rank for minimal service is 6.17, the desired level is 8.55, and the perceived level is 6.60. Since the average minimal level and the average desired level are both higher for cataloging than they are for convenient access, one might infer that the libraries surveyed generally value accurate cataloging somewhat more highly than convenience. In fact, this seems consistent with the findings above that show most libraries indicate they catalog numeric data products and provide cataloging for machine-readable data as well.

With regard to collecting user feedback, the average minimum level is 4.56, the desired level is 7.54, and the perceived level is 4.00. These numbers would indicate that not only do the libraries seem to value collecting feedback less than they value cataloging, but also that they are not collecting feedback as well as they think they should. This seems entirely consistent with the earlier findings that show almost half of the libraries do not employ any specific measure to evaluate their collections and services. Likewise, in the area of creating partnerships, the minimum service level is 4.86, the desired is 7.80, and the perceived is 5.56. This would indicate that libraries may not value the creation of partnerships as highly as other aspects, and that they are a bit more satisfied with their performance in this area.

Again this appears to be consistent with the findings above that show about half have no formal relationships with the other data units on campus, but seem to rely somewhat on informal arrangements.

Issues Raised

The results of this survey raise several important issues for libraries to consider while planning to create or expand numeric data collections and services. Among these are: creating a working definition of numeric data, determination of services to be provided, relationships with other campus data units, staffing and budget, access policies, and evaluation mechanisms.

Perhaps the most fundamental place to begin thinking about data collections and services is a decision on how the library will define what it means by “numeric data.” Many respondents aired their views regarding this survey’s definition of data. Some found it confusing while others found it out of conformity with traditional definitions. Interestingly, whereas some indicated that numeric
data has never been thought of as a separate, distinct part of the collection, others pointed out that numeric collections are very different from traditional library collections. The result was that both groups found some questions difficult to answer. While the precise definition is certainly open to debate, the crucial matter is for libraries to have some understanding of what they will consider data to be, and to create or modify their collection development policies and service plans appropriately.

Libraries must decide for themselves what specific services they will provide with respect to data. Will they only provide reference assistance; limiting themselves to guiding users to sources of data and helping them copy or download? Will they take the next step and provide assistance in analyzing and presenting data in meaningful ways? Will they place data files on a server and create an interface for users to access the data? Will they only hold the data products and leave users to handle things on their own? Whatever services libraries decide to provide, they should have a firm sense of what these will be before proceeding.

Libraries should investigate what other units on campus are doing with regard to data. Has the academic computing department set up a data lab for students? Might someone there have expertise in data analysis to whom the library could refer users? Does the library have a subscription to a service that could help the data lab locate additional sources? Collaborative relationships between the library and other data units would go a long way towards providing more cohesive service to the university’s researchers. They could also help spread the costs so these departments might not feel the pinch as hard as if they operated alone.

Staffing and budgeting issues must also be settled. Once libraries know what services they plan to provide, they can determine what qualifications their staff would require to carry them out. Do they need to have a data librarian specifically charged to handle data, or could these functions be distributed among several librarians? Would they need to hire someone with a statistics background? The same is true for determining what kind of equipment the library would need and, consequently, how much they will need to spend. Will they need a new server, cabinets for CD-ROMs, extra terminals?

The library should decide what limitations they might place on access to data resources. Many licensing agreements require that access be limited only to university affiliates, while most government-issued resources are freely accessible. There are various, and sometimes conflicting, obligations imposed upon such resources that make creation of an access policy difficult. Will the library require a sign-in sheet for some resources and leave others open? Will they only provide web access to free resources while limiting use of commercial resources to on-site use only? At a time when the software industry is seeking stricter enforcement of their intellectual property rights, licensing restrictions on data products are becoming a very hot issue.

Finally, one issue that is often put on the back burner is evaluation. Many of the respondents do not have a mechanism for evaluating the quality of their collections or services, but having some method of evaluation is key for any future planning. Libraries might consider providing for an additional column on their reference statistics sheets to cover data-related questions. They could use server statistics to show how much usage their online data products are getting. A focus group could help show what other products or services users need. These techniques are also especially useful to aid libraries in deciding if they want to provide any specific data-related services at all.

Conclusion

Numeric data is quickly becoming an area for academic libraries to venture into, as more emphasis in scholarship is placed on quantitative analysis. As with other more traditional bibliographic resources, numeric data is available in a variety of formats, each of which bringing its peculiar limitations and requirements. Libraries planning to enter the data game would do well to consider the issues raised by this survey as they proceed. A review of the accompanying documents provided by respondents may help others to identify some examples of good practices, as well as become more aware of the collections and services other institutions offer and some of the challenges they have encountered.
Many libraries, particularly those with Government Document Depositories, have long provided access to numeric data. The use of numeric data is burgeoning across many academic disciplines. Research libraries have extensive experience in acquiring and assisting patrons with machine-readable bibliographic databases, but what, if anything, are they doing with machine-readable numeric data products? Are they acquiring them? Do they provide any service beyond pointing researchers to them? How successful are such services in connecting researchers with data?

The purpose of this survey is to identify which research libraries in the United States and Canada are working with numeric data products and to what extent. For the purpose of this survey numeric data product is defined as any information resource, print or non-print, with considerable numeric content. It is hoped that the survey results will offer some best practices, assuage some fears and foster collaboration among institutions and individuals working in this area.

This survey was designed by Michael Cook, Social Sciences Bibliographer, Cornell University; John Hernandez, Librarian for U.S. Documents, Politics, and Public Administration, New York University; and Shawn Nicholson, State Documents and Social Sciences Librarian, Michigan State University.

Please submit this survey and send the requested documentation by May 11, 2001. As always, individual responses to the survey will be treated confidentially.

Note: Sixty-six of the 121 ARL member libraries (55%) responded to the survey.

Background

1. Does your institution collect and/or provide access to numeric data products? (n=66)

<table>
<thead>
<tr>
<th>Yes</th>
<th>64</th>
<th>97%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2</td>
<td>3%</td>
</tr>
</tbody>
</table>
2. In the chart below, indicate which units in your institution are responsible for each numeric data activity. Check all that apply. (n=64)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Library</th>
<th>Computer Center</th>
<th>Data Archive</th>
<th>Academic Dept.</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collects numeric data products</td>
<td>62</td>
<td>8</td>
<td>14</td>
<td>38</td>
<td>11</td>
</tr>
<tr>
<td>Stores numeric data</td>
<td>61</td>
<td>17</td>
<td>14</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Archives numeric data</td>
<td>34</td>
<td>10</td>
<td>11</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Catalogs numeric data</td>
<td>63</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Provides access to numeric data</td>
<td>63</td>
<td>13</td>
<td>14</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>Collects codebooks</td>
<td>50</td>
<td>5</td>
<td>12</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Catalogs codebooks</td>
<td>49</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Provides access to codebooks</td>
<td>54</td>
<td>6</td>
<td>12</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Provides user instruction for numeric data</td>
<td>51</td>
<td>16</td>
<td>12</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Answers reference questions about numeric data</td>
<td>61</td>
<td>4</td>
<td>9</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Refers questions to other data units</td>
<td>51</td>
<td>16</td>
<td>13</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>Assists users to locate data</td>
<td>64</td>
<td>4</td>
<td>13</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Assists users to retrieve data</td>
<td>59</td>
<td>10</td>
<td>14</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Assists users with data analysis</td>
<td>20</td>
<td>18</td>
<td>9</td>
<td>29</td>
<td>10</td>
</tr>
<tr>
<td>Develops web-based tools for accessing numeric data</td>
<td>33</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Please explain: Many respondents indicated that various institutes and even individual faculty members hold data. Working within cooperatives/consortia provides access to more data and services.

If the library has responsibility for any of the above activities, please complete the survey.
If not, please submit the survey now.

3. Which of the following statements best describes the relationship between the library and other data service units? Check all that apply. (n=64)

31 48% The library and the data unit are separate—they have no formal relationship.
22 34% The data unit is an administrative unit within the library.
 3  5% The data unit is housed within the library, but is not formally a part of the library.
 1  2% The library refers all requests for numeric data products and services to the data unit.
25 39% The library holds both numeric data products and codebooks that are used by the data unit.
11 17% The library holds a collection of numeric data products that are used by the data unit.
1 2% The library holds a collection of codebooks, but not numeric data products, that are used by the data unit.
25 39% Other

Please explain: The majority of those commenting indicated an “informal” but strong relationship to other units, whether they are within or outside the library.

Numeric Data Product Collections

If the library collects numeric data products, please continue to question 4. If not, please skip to question 8.

4. Approximately, how many numeric data products are collected from the following suppliers? (n=22)

Government Document Depository Program: 48% receive 100–500 data products, 13% get 3,000 or more.
International government organizations (e.g. UN, OECD, IMF, etc.): 67% receive 50 or fewer products.
Data consortia (e.g. ICPSR, Roper, etc.): not coded
Commercial vendors: 48% receive 20 or fewer products.
Faculty: not coded
Other: not coded

Please explain: An overwhelming number of respondents suggested that approximating the number of products collected is difficult at best and perhaps impossible. The following is a typical response in this vein: “Difficult to quantify since our data products are distributed in various forms (e.g., online and CD-ROM databases, locally-loaded data files, CD-ROM, print, microfiche, web), and from various sources (e.g., federal, state, and international government).”

5. In what format(s) are numeric data products acquired? Check all that apply. (n=64)

<table>
<thead>
<tr>
<th>Format</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online from remote source</td>
<td>63 98%</td>
</tr>
<tr>
<td>CD-ROM</td>
<td>62 97%</td>
</tr>
<tr>
<td>Paper</td>
<td>52 81%</td>
</tr>
<tr>
<td>Diskette</td>
<td>48 75%</td>
</tr>
<tr>
<td>Microform</td>
<td>45 70%</td>
</tr>
<tr>
<td>Magnetic tape</td>
<td>15 23%</td>
</tr>
<tr>
<td>Other</td>
<td>6 9%</td>
</tr>
</tbody>
</table>

Please explain: The only other format mentioned was DVD. Some felt that “data” only comes electronically. “Statistics,” on the other hand, will be acquired in print, microform etc.
6. In what subject areas does the library collect numeric data? Check all that apply. (n=64)

Social Sciences 63 98%
Sciences 49 77%
Humanities 36 56%
Other 15 23%

Please explain: Business data was mentioned frequently. Other areas included environmental, public health, agricultural, and law.

7. Does the library have a collection development policy for numeric data? (n=64)

Yes 17 27%
No 47 73%

8. Does your institution participate in the Inter-university Consortium for Political and Social Research (ICPSR)? (n=64)

Yes 57 89%
No 7 11%

If yes, is the Official Representative (OR) to the ICPSR a member of the library staff? (n=57)

Yes 34 60%
No 23 40%

9. Please indicate any other data related consortia with which your institution is affiliated. (n=64)

Roper Center for Public Opinion Research 17 27%
Council of European Social Science Data Archives (CESSDA) 0 0%
Networked Social Science Tools and Resources (NESSTAR) 0 0%
Other 16 25%

Please explain: Other consortia listed included European Consortium for Political Research, R-Cade, Statistics Canada’s Data Liberation Initiative, Sociometrics’ Electronic Social Science Data Library and statewide consortia.
Access to Machine-readable Numeric Data Products

10. Which of the following statements best describe the library’s policy on access for machine-readable numeric data? Check all that apply. (n=64)

38  59%  Walk-in users may access web-based or remote data while in the library
37  58%  Access is freely available to the institution’s community, on and off campus, for local and remote data
37  58%  Walk-in users may access networked, locally mounted data while in the library
22  34%  There is no formal access policy
21  33%  Access is restricted to students, faculty & staff use only
  2  3%   Access is restricted to specific user groups only (e.g. graduate students, faculty, etc.)
16  25%  Other

Please explain: There is a high degree of variability in licensing; thus, nearly every data source has a different access policy. A preponderance of respondents noted that walk-in users have access to most all resources. Government Documents were often singled out as having virtually no access restrictions.

11. If machine-readable numeric data products are cataloged, how are catalog records made available to users? Check all that apply. (n=64)

OPAC  62  97%
Specialized catalog for data  15  23%
Card Catalog  0  0%
Other  12  19%

Please explain: Many respondents relied on lists presented on web pages. Several respondents had some sort of cataloging scheme in development.

Staffing

12. Does the library employ someone specifically to acquire numeric data products? (n=64)

Yes  24  38%
No  40  62%

If yes, please provide that person’s title. (n=21)

Most titles reported were variations of Data Librarian or Data Services Librarian.

Does this person hold the M.L.S. degree or its equivalent? (n=24)

Yes  19  79%
No  5  21%
What other relevant degree(s) does this person hold? (n=16)

These positions are filled primarily with individuals possessing advanced degrees, but a few libraries have Bachelors level employees. Among the degrees reported were:

MA Political Science
MA Eastern European Area Studies
MA Geography
MA Anthropology
MA English Literature
MS Statistics
MS Computer Science
BA Social Sciences (Economics)
BA Political Science
BA History

13. Does the library employ someone specifically to handle service requests for numeric data? (n=64)

   Yes 31 48%
   No  33 52%

Does this person hold the M.L.S. degree or its equivalent? (n=31)

   Yes  20 65%
   No   11 35%

What other relevant degree(s) does this person hold? (n=15)

As with Question 12, these positions are filled primarily with individuals possessing advanced degrees, but a few libraries have Bachelors level employees. Degrees held by a person different from the one in Question 12 include:

MA History
MA Political Science
MA Mathematics
Ph.D. Political Science
BA Economics
14. Please indicate the number of staff (FTE) in each category specifically charged with providing data services.

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Librarians (n=50)</td>
<td>0</td>
<td>25</td>
<td>2.01</td>
<td>1.0</td>
<td>4.40</td>
</tr>
<tr>
<td>Support Staff (n=32)</td>
<td>0</td>
<td>4</td>
<td>.94</td>
<td>.9</td>
<td>1.01</td>
</tr>
<tr>
<td>Students (n=24)</td>
<td>0</td>
<td>12</td>
<td>1.01</td>
<td>.25</td>
<td>2.44</td>
</tr>
<tr>
<td>Other (n=20)</td>
<td>0</td>
<td>2</td>
<td>.60</td>
<td>.75</td>
<td>.57</td>
</tr>
</tbody>
</table>

Please explain: Most respondents replied that a diverse group provided service and reference to their communities without being "specifically charged" to do so.

Budget

15. Approximately, what amount is budgeted for the acquisition of numeric data products within the library? (n=27)

<table>
<thead>
<tr>
<th>Range</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–1,999</td>
<td>8</td>
</tr>
<tr>
<td>2,000–9,999</td>
<td>4</td>
</tr>
<tr>
<td>10,000–99,000</td>
<td>12</td>
</tr>
<tr>
<td>100,000–200,000</td>
<td>3</td>
</tr>
</tbody>
</table>

Evaluation of Numeric Data Collections & Services

16. Please explain which techniques and/or measures (e.g. user surveys, usage statistics, comparison with peer institutions, etc.) your library uses to evaluate the quality of your numeric data collections and/or services. (n=35)

A preponderance of respondents report they do not perform any type of analysis. Those who do, use usage statistics and user surveys, informal feedback from faculty and students, and comparisons with peer institutions to measure the quality of data services.

17. We would like your impressions about the quality of your library's numeric data collections and services relative to your expectations. Please think about the two different levels of expectations as defined below:

- Minimum Service Level: the minimum level of service performance you consider adequate for a research library to provide.
- Desired Service Level: the level of service performance you desire from a research library.
For each of the following statements, please indicate: (a) the minimum service level a research library should offer by choosing one of the numbers in the first column; (b) the desired research library service level by choosing one of the numbers in the second column; and (c) your perception of your library's actual service level by choosing one of the numbers in the third column.

<table>
<thead>
<tr>
<th>When it comes to...</th>
<th>The Minimum Research Library Service Level Is:</th>
<th>The Desired Research Library Service Level Is:</th>
<th>My Perception of My Library's Performance Is:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std Dev</td>
<td>n</td>
</tr>
<tr>
<td>Convenient access to numeric data collections</td>
<td>5.32</td>
<td>1.82</td>
<td>60</td>
</tr>
<tr>
<td>Providing reference services for numeric data</td>
<td>5.77</td>
<td>1.93</td>
<td>60</td>
</tr>
<tr>
<td>Acquiring numeric data products</td>
<td>5.19</td>
<td>1.77</td>
<td>58</td>
</tr>
<tr>
<td>Creating partnerships with other data units</td>
<td>4.86</td>
<td>1.94</td>
<td>55</td>
</tr>
<tr>
<td>Collecting user feedback on numeric data products and services</td>
<td>4.56</td>
<td>1.99</td>
<td>59</td>
</tr>
<tr>
<td>Adding to numeric data collections on request</td>
<td>5.42</td>
<td>2.26</td>
<td>59</td>
</tr>
<tr>
<td>Maintaining error-free catalog records for numeric data</td>
<td>6.17</td>
<td>2.20</td>
<td>60</td>
</tr>
</tbody>
</table>
Additional Comments

18. Please submit any additional information regarding the collection, use, or dissemination of numeric data at your institution that may assist us in accurately analyzing the results of this survey.

Many respondents aired their views regarding this survey’s definition of numeric data. Some found it confusing while others found it out of conformity with traditional definition of a clear demarcation between raw data and statistics or already massaged raw data. Interestingly, whereas some indicated that numeric data has never been thought of as a separate, distinct part of the collection, others pointed out that numeric collections are very different from traditional library services. The result was that both groups found that the questions difficult to answer,

Some respondents rightly pointed out the difficulty in knowing what others are doing with numeric data, simply due to the diffusion of services across many units.

Lastly, several respondents suggest that their service to numeric data is in its infancy—0–2 years old—thereby making it difficult to answer many of the questions.
RESPONDING INSTITUTIONS

Auburn University
Boston College
University of British Columbia
University of California–Davis
University of California–Irvine
University of California–San Diego
Canada Institute for Scientific and Technical Information
Case Western Reserve University
Colorado State University
Cornell University
Duke University
Emory University
University of Florida
George Washington University
Georgetown University
University of Georgia
Georgia Institute of Technology
Harvard University
University of Hawaii
University of Iowa
Iowa State University
Johns Hopkins University
University of Kentucky
Laval University
McMaster University
University of Manitoba
University of Maryland
University of Massachusetts
Massachusetts Institute of Technology
University of Miami
University of Michigan
Michigan State University
University of Minnesota
National Library of Canada
New York University
University of North Carolina
North Carolina State University
Northwestern University
Ohio University
University of Pennsylvania
University of Pittsburgh
Princeton University
Rice University
University of Rochester
Rutgers University
Smithsonian Institution
Southern Illinois University
State University of New York at Albany
State University of New York at Buffalo
Syracuse University
Temple University
University of Tennessee
University of Texas
University of Toronto
Vanderbilt University
University of Virginia
Virginia Tech
University of Washington
Washington State University
Washington University
University of Waterloo
Wayne State University
University of Western Ontario
Yale University
York University
REPRESENTATIVE DOCUMENTS
Collection Policies
The University of British Columbia
COLLECTION DEVELOPMENT POLICY:
DATA SERVICES

October 1994

FACULTY: Data Services has a campus-wide mandate to serve data teaching and research requirements. In practice, and due to limited resources, we serve mainly the Faculties of Arts and Commerce. There are, however, regular as well as occasional users in many other faculties, particularly in Agricultural Sciences and Education, and in the Health Sciences.

DEPARTMENT/SCHOOL:

RELATED PROGRAMS/INSTITUTES/CENTRES:

RESEARCH AND PUBLISHING CHARACTERISTICS: For Data Services purposes, machine-readable data files (MRDFs, data files, or data sets) are defined to include numeric, full text, image and similar data in digital form. Numeric files may contain micro- or macrodata, and may be rectangular (flat), time-series, cross-sectional or longitudinal files. Bibliographic or catalogue-type files are not included, nor is computer software of any kind. Data Services acquires primarily numeric files.

Increasing numbers of MRDFs are being produced in many subject areas, in a variety of physical formats. At universities more and more quantitative analysis is being performed in business schools, in social science, science and medical faculties. Full text analysis is becoming increasingly popular in the humanities, and image data are used in many disciplines.

MRDFs are frequently difficult to identify and locate since they are not usually distributed through the conventional commercial channels. They are often created at academic institutions for local research purposes or by government departments as policy planning tools, and are subsequently made available for sale to other interested researchers.

Data files are distributed on media such as magnetic tape, personal computer disks, or CD-ROM disks. Distribution of files on the Internet is, however, growing rapidly and seems set to become the primary medium of dissemination.

Data may be distributed in 'raw' format (no value-added component) or in 'packaged' format (complete with retrieval software). Raw data are most commonly distributed on magnetic tape or via the Internet and tend to be produced by universities and government departments, whereas 'packaged' data come on floppy or CD-ROM disk and are often marketed by the private sector. Data Services acquires raw data files only. Packaged files are acquired by the appropriate subject division in the Library.

In general, Data Services acquires files which can be made available both via the campus network and to everyone at the University. CD-ROM and PC-based databases are thus generally excluded.

Increasing numbers of numeric files are available for direct searching on the Internet. Through its gopher server (accessible through ViewUBC), Data Services maintains direct connections to a number of computing sites housing such files.

Codebooks: Every data file requires a codebook for its interpretation. The codebook contains details about the structure and contents of the file and relevant background materials. It is impossible to use a raw data file without access to the codebook. For this reason two copies of all printed codebooks are acquired: one is anchored, the
other circulates. The anchored set of codebooks is housed in Data Services; circulating copies are soon to be moved into the Main stacks.

In the case of computer-readable codebook files, Data Services generally produces one printed copy (anchored). The codebook file is made available for users to access online or print their own copies.

**CURRICULUM AND RESEARCH SUPPORT LEVEL:** Canadian and U.S. socio-economic and financial time-series, international economic indicators, micro- and macrodata of relevance to Commerce, Economics, Political Science and Sociology.

**CURRICULUM SUPPORT LEVEL:** see previous paragraph.

**SPECIAL EMPHASIS:** All Canadian Census data, and all Canadian Institute of Public Opinion (CIPO) Gallup polls; other Canadian survey series such as the General Social Survey, the Labour Market Activity Surveys and Surveys of Family Expenditure.

**HIGHLY SELECTIVE:** Other U.S. and international numeric data files; full text files; digital map data; satellite images, etc. Increasingly, full text and digital map files are acquired by other appropriate Library branches/divisions.

**Printed collection:** Data Services has a small collection of books and serials in the area of survey design, data collection and analysis, and preservation of magnetic media. It also acquires the published catalogues of data archives and data publishers around the world although, increasingly, these are becoming available on the Internet. (See also 'Collections in other UBC libraries/affiliates' below).

**LANGUAGE COVERAGE:** Primarily English (applicable to codebooks only).

**GEOGRAPHIC ORIGIN:** All significant Canadian data files (especially microdata) for which there is demonstrated demand (Canadian being defined as 'having Canadian content'). U.S. and international data files acquired selectively, as funds permit.

**COLLECTIONS IN OTHER UBC LIBRARIES/AFFILIATES:** CD-ROM products (with retrieval software) in the David Lam Library (financial time-series) and Government Publications (Canadian census and other government data).

Large numbers of socio-economic time-series exist in printed as well as in machine-readable format, e.g. CANSIM (equivalent printed sources in Government Publications) and company balance sheet information (equivalent printed sources in the David Lam Library).

Books on survey design, on data collection and analysis, and on statistical analysis software are also found in the Main Library, the Sedgewick undergraduate library, and the Math Library. Official reports and other materials related to government-produced data files are generally available in Government Publications.

Most of Data Services' printed collection will be moved into the Main stacks, and collection development responsibilities have already been transferred to appropriate subject bibliographers.

**COLLECTIONS IN NON-UBC LIBRARIES:** The nearest data libraries are at Simon Fraser University and at the University of Alberta. There are a handful of other Canadian data libraries, and large numbers of U.S. data libraries. Most data files have to be bought under licence, and data libraries can make such files available only to members of their own campus communities. We are thus effectively barred from accessing files elsewhere, unless we hold a licence for the same files or, as in the case of CANSIM, one university holds a distributor's licence and other universities purchase client licences for the same database.
AREAS OF OVERLAP: Data available in different physical formats in David Lam and Government Publications. Identical data files available in other data libraries. Printed collections as specified under 'Collections in other UBC libraries' above.

INCONSISTENCIES THAT NEED TO BE RESOLVED: Data Services was founded as a separate branch library in 1972 to handle materials in a format different from traditional library materials, i.e. electronic, numeric data files on magnetic tape. The use of electronic data of all kinds has expanded rapidly as has network access to such data. More and more files are being made more easily accessible. The reasons for which a separate data library covering a wide range of subjects (but only for materials in a specific format, and with only two-and-a-half staff members) was founded are therefore no longer valid, and data library services are being mainstreamed. Services in this area will no longer be determined by format, but by subject, as indicated in various sections above.

Another question that needs to be addressed relates to the fact that the same data file is frequently produced in a number of different formats. The CANSIM database, for example, can be accessed remotely through commercial vendors. It is also available as raw data on magnetic tape, as a CD-ROM database packaged with retrieval software and, of course, in a wide variety of printed sources. It should be established, probably on a case-by-case basis, whether and under what circumstances the same database should be acquired in different formats.

There is considerable demand for biomedical data (such as genetic and protein sequences) on campus, but Data Services does not have the resources to accommodate it. The Woodward Biomedical Library has agreed to take responsibility for this area.

ADDITIONAL NOTES AND COMMENTS:

Data contracts: For most of the files acquired by Data Services a contract or licence agreement with the data file supplier has to be signed, which generally limits usage of the files to the UBC academic community. Data Services does not usually acquire data files that, under contractual agreements, can only be used by a single person. Any data file that we maintain must, at least, be accessible to all members of the UBC academic community.

Consortia purchases: Data Services is a member of the CARL (Canadian Association of Research Libraries) purchasing consortium for Canadian Population and Agricultural Census macro- and microdata files, and for the Canadian General Social Survey series of microdata files. It is also a member of ACCOLEDS (A COPPUL Consortium of Library Electronic Data Services). The latter purchases an annual federated membership in the ICPSR (Inter-university Consortium for Political and Social Research). Both arrangements result in considerable cost savings for Data Services. Consortia agreements should be pursued wherever possible.

Original data files created at UBC: Data Services has an archival function and will therefore collect original data files produced by local principal investigators in order to preserve them for posterity, provided that the principal investigator agrees to Data Services' standard conditions.

Data Services will also accept, if offered, original data files from any source for deposit, provided that the principal investigator agrees to the Data Services' standard conditions.

Resource sharing: Data Services is beginning to share networked databases with other universities, the first candidate being the CANSIM database from Statistics Canada. Resource sharing can result in the rationalization of costs and in increased access to data for our users. This is a major growth area with great potential for libraries.

Submitted by: Hilde Colenbrander

Date: October 13, 1994
ADDENDUM:

Social science data: As noted earlier, Data Services maintains an annual membership in the ICPSR at the University of Michigan (through the ACCOLEDS consortium). It is also a member of the Roper Center for Public Opinion Research at the University of Connecticut. As far as possible, social science data files are acquired from the ICPSR and the Roper Center.

The Roper Center membership secures all Canadian Institute of Public Opinion (CIPO) polls, and sometimes other public opinion poll data as well.

Cost sharing: The annual ACCOLEDS ICPSR membership fee is shared equally between Data Services and the Department of Political Science. Membership entitles us to access to some 40,000 data files in the ICPSR archive which can be acquired on demand and at little additional cost. The data librarian is UBC's 'Official Representative' to the ICPSR.

Financial and economic time-series data: Data Services maintains annual subscriptions to the following machine-readable time-series databases:

- CANSIM Main Base-distributor's licence (Statistics Canada)
- Citibase economic database (Citibank)
- COMPUSTAT (Standard & Poor's, Inc.) files:
  - Industrial annual
  - Industrial quarterly
  - Canadian annual
  - Bank annual
- CRSP (Centre for Research in Security Prices) files:
  - NYSE/AMEX daily returns
  - NYSE/AMEX monthly master/returns
  - NASDAQ daily returns
  - Government bonds
- IBES (Institutional Brokers Estimate System)
- IMF (International Monetary Fund) files:
  - Balance of payments statistics
  - Direction of trade statistics
  - Government finance statistics
  - International financial statistics

Cost sharing: The COMPUSTAT and CRSP databases are purchased jointly with the Faculty of Commerce. The Faculty paid for some of the initial database fees; annual update fees are shared equally between the Faculty (through the David Lam Library) and Data Services.
INTRODUCTION
This policy is intended to provide guidelines for the acquisition of machine readable data files. As the technology for the electronic storage of information changes, and as different kinds of information are made available in machine-readable formats, this policy will require revision. The current guidelines provide adequate physical and bibliographic access for a rather limited collection of specialized files. As the collection grows in scope and size, new guidelines may be required.

DEFINITION OF MACHINE READABLE DATA FILES
A machine readable data file (MRDF) is any information - numeric, textual, bibliographic, or some combination of these - stored in an electronic medium which is readable only by machine. A typical MRDF would consist of numeric data stored as electronically recorded signals on magnetic recording tape and readable by a computer, but other formats such as floppy disks, hard disks, video disks, and compact disks may become more common.

GOALS
The goals of this machine-readable data file policy are to a) affirm that the Library will acquire information in the format or formats which are most useful to the UCSD community, b) provide criteria for selection to MRDFs including those criteria which are specific only to MRDFs, and c) outline the role of the Library in providing access to MRDFs.

SCOPE
This policy covers data in any machine-readable format. It covers any type of library acquisition including purchase, lease, gift, or other means of acquisition which add material to the library collection.

POLICY
Machine readable data files acquired by the Library must meet the same criteria that other formats must meet to be added to the collection, i.e., the data or information must support an identifiable current or future research or curriculum need on campus. The extent of this need must justify the expenses of acquiring, processing, and maintaining the data file. In addition, acquisition of MRDFs by the Library should involve the following considerations:

1. Codebooks. There must be a complete and accurate codebook or user guide which details data structure and format, defines each data element, and explains all codes used.

2. Other Documentation. Other documentation, such as a description of how the data were collected, may be required for some data sets in order for the data user to evaluate and use the data.

3. Physical Format. The machine-readable format must be compatible with machines available to the UCSD community.

4. Software. Before acquiring a machine-readable data file, the Library must be assured that the UCSD community will have software access to the data file. While the Library does not, at this time, have the staff to create software, software access can be assured in any of several ways:
   a. The library can acquire, through purchase or other means, available software.
   b. The data file may be accessible by software already available to the UCSD community.
   c. Programming for accessing the data file may be made available (for example, by an academic department).
5. Duplication of Data. As with other formats, the content of the data should be evaluated in terms of how much it duplicates data already available in the collection. It may be appropriate, however, to make data available in more than one format (e.g., in printed format and in machine readable format). Each case should be evaluated individually.

6. Authority of Data. As with other formats, the authority and completeness of the data should be considered.

7. Online Availability. Many MRDFs are available online. Before purchasing a file which is available online through vendors or search services, the costs and uses of on-campus availability versus online availability should be considered.

8. Accessibility. Some data files may have restrictions on their use. Examples of restrictions include: data may be limited to "academic use" only; data may not be copied; data may contain proprietary or confidential information. Data files which have restrictions with which the Library cannot comply will not be acquired.

PROCEDURE
The Library will acquire only those data files which meet the policy criteria stated above and this will normally occur only after a member of the faculty requests a specific file. The Library will evaluate the acquisition using the criteria listed above. The evaluation process will include the appropriate subject bibliographers, the MRDF bibliographer, the AUL for collection development, and the faculty in appropriate departments.

The Library will acquire codebooks, user manuals, and other documentation along with any datafiles and will catalog and maintain these materials.

THE ROLE OF THE LIBRARY
The Library has several roles in assuring campus access to machine readable data files.

1. The Library will help identify the existence of data files not in the Library collection. The Library will continue to take an active role in keeping its users informed of the availability of information pertinent to their needs and will make a particular effort to identify machine readable data.

2. The Library will acquire the data files, and will insure that the files meet the standards set forth in the selection criteria listed above. When data files are available from more than one source, the Library will determine the best and most reliable source.

3. As a federal government depository library, the Library has a particular commitment to making government-produced information available. Because the federal government does not, at this time, include machine readable formats in the depository system, the Library will take an active role in attempting to assure access to such government-produced machine readable information.

4. The Library will maintain memberships in organizations such as the Inter-University Consortium for Political and Social Research and the International Survey Library Association in order to provide reliable and easy access to datafiles. The funding sources for such memberships have not been established at this time.

5. The Library will acquire, catalog, and maintain codebooks and other user guides, making them readily available to users of the Library collections.

6. The Library will provide reference service for the printed materials and referral service to the machine readable data files as part of the routine of providing information services.

7. The Library may produce catalogs, lists, or other materials to aid in identifying machine readable data files in the Library collection.
Collection Development Policy for Social Science Data Sets

GOALS OF THE POLICY

- Define roles of SSP Area Specialists and the Social Science Data Librarian with respect to the acquisition of machine-readable data files;
- Communicate to our users the general criteria we use in making purchasing decisions for data;
- Act as a planning document to define the roles of the SSP and the Harvard-MIT Data Center (HMDC) on data acquisitions issues; and
- Encourage collaboration and co-operation among SSP and other Harvard units to provide effective and cost-effective data collections at Harvard.

SCOPE

This policy covers machine-readable numeric data and accompanying documentation for use in social science research and coursework at Harvard University. It does not include data acquired through the Harvard Map Collection or the Environment Program of the SSP. Machine-readable data come in a variety of formats such as magnetic tape, diskette, CD-ROM and through online services. The time coverage includes both historic and current numeric data sets.

The acquisition of numeric data in print format follows the same guidelines as applied to other print materials acquired by the SSP.

USERS

The collection of machine-readable numeric data files supports research and teaching in the social sciences at Harvard. Data users come from a wide range of Departments and Schools at Harvard.

Historically, the primary data users were faculty members and graduate students, but increasingly there is demand for numeric data by undergraduate students. Changes in technology have simplified access to numeric data and created an even larger audience to serve. Many undergraduates now are expected to use "real-life" data in their upper-year coursework (ex. statistics or econometrics) and in their theses. Harvard undergraduate students are expected to demonstrate proficiency in data interpretation in their first-year by meeting the Quantitative Reasoning Requirement.

The general public has access to Harvard's government documents collection, including many sources of numeric data in print, diskette, CD and online subscription format.

EXISTING COLLECTIONS
Harvard is a member of the United States Federal Depository Library Program, as well as the Canadian and United Nations depository programs. Some numeric data files are received free as part of the depository programs; however, many government machine-readable numeric files are outside the scope of the depository collection and require separate purchases. Harvard is a European Union depository library through the Law School Library.

As of August 1998, the Government Documents unit and Littauer Library have a combined collection of approximately 550 CD titles (amounting to over 1900 individual CD's) and approximately 55 diskette titles (250 individual diskettes). The collection of numeric data sets also includes subscriptions to online services such as STAT-USA, and Statistical Universe on Hollis Plus.

COLLECTION GUIDELINES

As part of our mission, we strive to have a proactive collection development process where selection is guided by the academic programs at Harvard and the anticipated demand for data files from the Harvard community. The collection is developed in conjunction with area specialists in the SSP, the Harvard-MIT Data Center and other interested units at Harvard.

General guidelines for data acquisition include the following: [adapted from ICPSR Management of Machine-Readable Social Science Information Workshop, August 1996]

- relevance of the data to research and teaching at Harvard;
- current and potential user demand;
- format of the data; (do we have the necessary hardware and software to support the data file)
- one-time purchase or are updates required;
- restrictions on the use of the data;
- adequate documentation;
- quality of the data;
- quality of the search software;
- data producer reliability;
- required technical support;
- required reference service;
- data distribution (stand-alone or networked).

Access

Many machine-readable numeric data files in the SSP collection are distributed in CD-ROM or diskette format. Many of these files are considered reference materials and need to be available in the library at all times. All CD-ROMs and diskettes are catalogued and many are available for use on the workstations in Littauer Library and the Government Documents Reading Room.

The collection of CD-ROMs is divided into 3 categories:

Level "1" Service
- CD's will be networked for use in Littauer Library and/or the Government Documents Reading Room;
- Reference Staff will be trained on use of these CD's (content, searching, downloading);
- In-house guides will be provided for users.
Level "2" Service:
- Local access; software will be loaded on Littauer or Government Documents workstations and user will ask for CD's at the circulation/reference desk; no circulation of CD's allowed;
- All user documentation will be in the public area;
- At least one staff member will be familiar with CD's general use and will be available for user consultation.

Level "3" Service:
- No local access;
- CD's and documentation circulate;
- No user support; library staff not expected to provide reference.

Level 3 CD's will be barcoded and allowed to circulate to current Harvard ID holders for 48 hours. Users are responsible for returning CD's on time and in good condition. Users who do not comply with these rules will be billed for the replacement of the CD's.

All diskettes will be catalogued separately, barcoded, and kept at the Littauer Library Reserves Desk or the Government Documents Reference Desk, according to subject lines. The back-up copy of a diskette will circulate for a period of 48 hours. Users who do not comply with these rules will be billed for the replacement of the diskettes.

Documentation

Littauer Library houses the HMDC's collection of ICPSR codebooks. Many ICPSR codebooks are available online in pdf and HTML format. The SSP will catalog and maintain a collection of print ICPSR codebooks, non-ICPSR codebooks, and other supporting materials for data files in the collection.

User Requests for Data Purchases

Suggestions for data purchases will be considered on an individual basis. The guidelines listed above (under Collection Guidelines) will be used when making acquisition decisions.

Back-up Policy

The staff of the Social Sciences Data Service will compile an on-going list of machine-readable numeric data files which require back-up. Criteria for back-up include importance of the data to users and to the collection, availability of alternative sources, cost of original purchase, original delivery format, etc. Files will be backed up on CD-ROM and stored in the Harvard Depository.

The back-up policy is not intended to be an archival policy. At this time there are no plans to function as a data archive or to engage in long-term data preservation activities.

OTHER AVAILABLE RESOURCES AT HARVARD

The SSP will work with other Harvard units to discuss data acquisitions and service issues to maximize co-operative data collections and access for the Harvard community and minimize duplicate costs and efforts.
Collection Development Policy: Digital Information Resources

Introduction.

The Penn Library was an early adopter of information in electronic form, beginning in 1973 when librarians mediated batch processed searching of remote databases on behalf of patrons. Since that time the number of digitized resources has increased dramatically; full-text and numeric products have appeared, and time-share based services have been followed by CD-ROMs, floppy disks, magnetic tapes and other media for local loading, and access through remote servers via the world-wide web. Digital resources have proven to be essential to the support of scholarship, and the Library provides a selection of them to the University in accordance with programmatic needs, anticipated use and available resources. The purpose of this policy is to establish consistency within the Library in managing this increasingly important part of the collections.

Scope of this Policy.

This policy covers networked academic digital information resources purchased or leased by the Library on behalf of Penn faculty, students and staff in all schools and libraries except Law (although members of the Law School have access to our digitized information). These resources may be locally loaded or accessed remotely. All are available through the Penn Library web page to authorized users.

This policy does not govern the acquisition of non-networked products, resources networked within a building, instructional software, applications software or software intended for internal library and/or administrative use.

The Schoenberg Center for Electronic Text & Image (SCETI) creates digitized images of some of Penn’s rare and/or unique resources. See the SCETI homepage for details. For digitized visual resources in support of art and architecture, see the policy for Visual Resources currently under preparation by William Keller, the Fine Arts Librarian.

General Policies.

Selection of Networked Resources.

The Library purchases or leases high quality digital resources of major value to Penn programs and user groups in accordance with subject collection development policies, and makes available initially a sufficient quantity of data to be useful. The Director for Collection Management and Development facilitates the selection process and consults with other directors, departmental librarians, bibliographers and liaison librarians as appropriate. As with selection in other formats, the Library welcomes suggestions from faculty, students and library staff members.

This is a transition period in the provision of academic information, and the Library’s practice varies depending on the type of resource. Reference and indexing and abstracting tools have largely moved to digital formats, and the Library no longer receives the print equivalents. However, the Library does not expect to cancel print journals even when digitized versions are available until archiving and long-term access are assured. As a result some information is provided at present in both digital and print forms. This is not a practice the Library can maintain over time. As funds permit the Library buys access to some full-text resources deemed to have long-term value in support of Penn’s academic programs. When access to a particular resource is not permanent because of product changes, cost or technical reasons, the Library hopes to provide an alternative. The Library may also move a resource from one
platform to another when the new interface is superior to the old. In response to faculty and student requests the Library is now acquiring more full-text resources.

The Library acquires some digital resources through package deals with major suppliers such as the Research Libraries Group; others are selected individually.

Digital resources require continuing management to a far greater degree than print resources do. In general it is the responsibility of the sponsoring librarian to keep up with changes in an interface, selecting an alternate vendor and alerting staff and users to problems. Responsibility for writing documentation is shared by collection development and public service librarians.

Selection Criteria.

Selection of a digital resource requires the careful weighing of a number of content, presentation, functionality, technical, cost and management factors. Among these are the following:

Content:
- The importance of the resource for its discipline and the level of use expected at Penn.
- The comprehensiveness, durability and accuracy of the database.
- The currency of the information and update schedules.
- The distinctiveness of the database in the Penn environment, the extent of overlap (if any) with other Penn databases, and the relationship of the database to the Library's print and other holdings.
- The size of the database.

Presentation:
- Design of the interface.
- Willingness of the vendor to make changes for Penn's implementation.
- Platform(s) available.

Functionality:
- Functionality, including link to the online catalog, integrated ILL request capability, output formats.
- The potential of the database for secondary use, and the availability of data apart from that embedded in the interface.

Technical:
- The Library's digital resources must conform to current university-wide desktop computing standards. Obsolete formats and platforms are not generally supported.
- Ease of installation and maintenance, if required. In all cases the Library must have the technical capacity and staff needed to make available and maintain a database proposed for purchase. The Director for Information Systems makes this determination.
- The Library strongly prefers web versions of digital resources and will only acquire a Windows version in cases where there is no alternative.

Cost:
- The cost of the database.
- The availability and cost of computer storage space if needed.

Management:
- Availability and content of usage reports.
Funding.

The funding pattern for digital information resources has changed over the years. Initially most were paid for out of central library funds under the management of the Director for Administrative Services. Now most resources (with the exception of Citadel files) are paid for out of the Information Budget. The Information Processing Center is responsible for invoice payment.

Proposals to purchase or lease a database should be directed by the sponsoring librarian to the Director of Collection Management and accompanied by a realistic funding package which takes into consideration all the costs of a particular product, including internet access fees, server space and local staff time. The cost of a new database is initially borne by the appropriate subject fund or funds, and bibliographers are encouraged to collaborate and pool their resources. In subsequent years payment may come from the Digital Resources Fund at the discretion of the sponsoring librarian and if sufficient money is moved from the subject allocations to the Digital Resources Fund.

Databases which the Library purchases on a one-time basis are paid for out of the appropriate subject fund.

The Library participates in consortial purchases or leases of databases when it is financially advantageous to do so.

Licensing.

The Director of Collection Management and the appropriate bibliographer(s) review the license agreements for new databases; the Director signs the agreements.


In reviewing licensing agreements the Library seeks to protect its rights to information to the fullest extent allowable under law and includes the following statement in all new license agreements it negotiates:

"The Board of Trustees of the University of Pennsylvania reserves the right to use the licensed (or purchased) work to the fullest extent of applicable laws, including the right of fair use under U. S. copyright law, including but not limited to the right to reproduce (or have reproduced) copies for its nonprofit, educational purposes, such as for comment, criticism, news reporting, teaching (including multiple copies for classroom use), scholarship and research. This term is a material part of the contract between the parties and supersedes any contract terms contrary to or inconsistent with such rights under law."

In addition, the Library pays particular attention to its rights to continuing access to information paid for; the archiving of information; restrictions, if any, on the use of information for sponsored research; and confidentiality clauses.

At present the Director of Collection Management holds the license agreements for negotiated databases; the Acquisitions Department holds the license agreements for electronic journals. The goal is to consolidate all license agreements in a single location.
Electronic Media

Management of Electronic Access Databases Group (MEAD)
bb546@csc.albany.edu

I. General Purpose

The University Libraries select, house, and provide access to information published in many formats. In recent years traditional formats for information, such as books and microfilm, have increasingly been supplemented by information which is accessible only through the use of a computer. This policy addresses collection parameters for electronic media which the University Libraries expect to collect. Further, the University Libraries staff are aware that however flexible this policy, the speed with which technological changes are occurring with respect to information access will necessitate frequent revision of this document.

Selection of materials within the scope of this policy is the responsibility of various individuals and groups. Subject Bibliographers select all electronic media which fall within their regular subject assignments. Interactive media packages are selected by the Bibliographer in consultation with the Interactive Media Center (IMC) Coordinator. Bibliographers request technical assistance from the IMC Coordinator in determining the compatibility and advisability of electronic media purchases. They may submit to the IMC Coordinator purchase requests for interactive media. The Management of Electronic Access Databases Group (MEAD) approves purchase of all CD-ROM subscriptions and subscriptions to other electronic resources to support reference service upon the recommendation of University Libraries Reference librarians. The MEAD Group also addresses networking of CD-ROM products and purchases of products accessed via the Internet, as well as the library's approach to new electronic formats. The Government Publications librarian selects electronic media for the documents collection and librarians in other divisions of the libraries select electronic media needed by that division to support their work.

II. Subject and Language Modifiers

There are no exclusions based on language, chronological period or geographical area, but materials should reflect the present and expected future curricular and research needs of the University.

III. Description of Materials Collected

The University Libraries view acquisition of electronic media as a natural expansion of existing collection development activities. Materials are selected in all formats for which the University Libraries own or expect to own in the near future the equipment for their use; exceptions may be made when an academic department owns a specific piece of equipment and purchases are confined to materials requested by that department.

Electronic media can be categorized as follows:

1. Bibliographic files, e.g., MLA or ERIC;
2. Textual files, e.g., Nuremberg War Crimes Trials Online;
3. Numeric data files, e.g., Compustat;
4. Graphic and multimedia files, e.g., National Gallery of Art Laserguide;
5. Courseware/instructional files, e.g., Hypercell;

6. Internet files that fall under categories 1-5; and

7. Specific applications software needed to utilize the resources listed above, e.g., Excel.

8. Other types of electronic resources will be considered as they are developed, in light of their relevance, appropriateness, and contribution to the University Libraries' mission.

Electronic resources may be organized, collected, and distributed in a variety of formats. These include, but are not limited to, magnetic disks, magnetic tape, and optical disks. Delivery systems include PCS, LANs, and remote servers.

**General Selection Criteria**

Electronic media considered for acquisition by selectors should:

- follow all current collecting guidelines as represented by the subject collection development statements and other appropriate documents;

- represent materials useful and important to a significant segment of the Library's user community, and reflect current curricular and research needs;

- be available in formats for which the University or the University Libraries own appropriate hardware;

- be sufficiently "user-friendly" in that it provides or permits design of such amenities as introductory screens, on-screen tutorials, prompts and menus, function-specific help, novice and expert searching levels, helpful error messages, ease of exiting from one point in the database;

- be evaluated in light of other potential acquisitions, and weighed against acquisition priorities for other formats;

- provide improved access to or be an enhancement or enrichment of current library collections;

- reflect the excellence, comprehensiveness, and authoritativeness expected of materials in other formats;

- have adequate documentation available;

- not require an excessive amount of staff time to provide adequate use of the media -- individual cases may be negotiated with faculty;

- avoid duplication of print or microform holdings unless the electronic resource is not archived satisfactorily (does not provide for permanent retention) or provides better access to the information, or when different formats meet different needs for different user groups;

- be broadly accessible under current copyright laws and licensing agreements.
V. Other Factors

Electronic media is housed in various areas of the University Libraries. However, the primary location for interactive media, video and audio formats is the Interactive Media Center. The Reference and Government Publications areas of both the University Library and the Dewey Library house or provide access to electronic media used to assist patrons with reference queries. The Technical Services and Collection Development Divisions maintain electronic media needed by them for acquisitions and processing of library materials.

November 1997

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User Guides
Numeric Data Services at UBC: An Introductory Guide

Data Services has provided numeric data services to the UBC campus since 1972. In this Guide we describe our services and collections, using detailed examples. If you've never used data files before, we hope the Guide will give you a better understanding of what data files are and how you can use them.

Our primary user groups, and hence our data file holdings, are in the social sciences and in commerce and business administration but some of the more general files, such as CANSIM or the Census of Canada, are of interest to researchers from many other parts of campus as well.

We hope you find the Guide interesting and informative. Do contact us at Data Services if you have any comments or questions.
# Statistical Sources

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## ELECTRONIC SOURCES

- **Academic Universe** (CSU affiliates only)
  
  Follow path "Reference"/"Country Profiles" for handy statistics on individual countries.

- **Census Bureau**
  
  Includes 2000 census and much other data.

- **Centers for Disease Control**
  
  Includes data from the National Center for Health Statistics.

- **Central Intelligence Agency (CIA) World Fact Book**
  
  Brief up-to-date statistics on individual nations.

- **Colorado by the Numbers**
  
  Statistics pertaining to the state of Colorado. Begin with the "Table of Contents," which is arranged by subject.

- **Colorado Home Page**
  
  Has links to state agencies, which sometimes mount statistics on their sites.

- **Colorado State University Office of Budgets and Institutional Analysis**
  
  Includes the "Fact Book" and other institutional data in PDF format.

- **County Information Service**
  
  Many links to statistics pertinent to Colorado counties.

- **FactSearch** (CSU affiliates only)
  
  "Snapshot" statistics on policy issues, drawn from magazines, newspapers, and government publications.

- **FedStats**
  
  Links to 70 federal government agencies, including the Census Bureau, Office of Management and Budget, and agencies dealing with economic analysis, labor, justice, transportation, energy, the environment, agriculture, and education.

- **FisOnline** (CSU affiliates only)
  
  Click on "Country Profiles" for extensive statistics on individual countries. Very similar to the CIA World Factbook.

- **Food and Agriculture Organization of the United Nations**
  
  Includes FAO databases dealing with agriculture, nutrition, fisheries, forestry, and food quality control.

- **Larimer County Compass**
  
  Statistical data for Larimer County and Fort Collins.

- **NASIRE State Search**
  
  Provides links to agencies in all 50 states; arranged into 32 topical categories. Provision of statistics varies widely from state to state and agency to agency.

- **Oregon State University Government Information Sharing Project**
  
  Demographic, economic, and education data drawn from Census Bureau files. Especially useful for state, county, and school district data.

- **Regional Economic Information System**
  
- **STAT-USA (CSU affiliates only)**
  Provides access to the National Trade Data Bank, including statistics, market research, and country analysis.

- **Statistical Resources on the Web**
  This University of Michigan site provides numerous links to foreign government statistical agencies, foreign trade, and foreign economics.

- **Statistical Universe (CSU affiliates only)**
  Abstracts and some full text of statistics compiled by federal agencies, often reproduced from print sources. Links to other statistical sites.

- **United Nations Web Site Locator**
  Links to approximately 90 UN organizations appear in the "Alphabetic Index;" links to another 30 agencies can be found in "Other International Organizations." Provision of statistics varies by agency.

- **U.S. Census Bureau International Data Bank**
  Demographic statistics arranged by topic and country.

**PRINT SOURCES**

**Print Sources: Federal and State Agencies**


- **CIA World Factbook**  PREX3:15 Doc Ref Annual.


- **Crime in the U.S. [Uniform Crime Reports]**  J1.14/7 Doc Ref Annual.


- **Public Land Statistics**  IS3.1/2: [year] Doc Ref Annual.

- **Statistical Abstract of the U.S.**  C3:134: [year] Doc Ref Annual compilation covering many topics. A useful starting point.

- **Survey of Current Business**  C59.11: Doc Ref Published monthly.

- **Transportation Statistics**  TD12.1:[year] Doc Ref Annual.

- **U.S. Industry and Trade Outlook**  C61:48:[here] Doc Ref

**Print Sources: International Agencies**

- **Human Development Report**  HD4904.7 .H856 Ref Annual statistics on social indicators by country.

- **International Labor Organization**  *Yearbook of Labour Statistics*  HD4826 .I63 Ref Annual.

- **International Monetary Fund**  *Balance of Payments Statistics Yearbook*  HF1014 .I53 Ref Annual data by country and region.

- **International Monetary Fund**  *Direction of Trade Statistics Yearbook*  HF91 .U473 Ref
Annual data on exports and imports.

- International Monetary Fund. *International Financial Statistics*. HG61 .I57 Ref
  Four pages of annual data for each country.
- International Monetary Fund. *International Trade Statistics Yearbook*. HF91 .U473 Ref
  Detailed annual data on exports/imports by commodity.
- *UNESCO Statistical Yearbook*. HA12.5 .U63 Ref
  Annual data on education, science, and culture.
  Includes both population and vital statistics.
  Includes population, economy, and economic activities.
- World Bank. *World Development Indicators*. HC59.15 .W656 Ref
  Annual data on demographics, the environment, the economy, and markets.
  Annual data on developing countries.

**Print Sources: Commercial Publishers**

- *ACCRA Cost of Living Index*. HD6983 .A4 Ref
  Quarterly data for 300 U.S. urban areas.
  Annual comparative data in many categories.
  Updated periodically.
- *County and City Extra*. HA203 .C68 1998 Ref
  Statistics on counties and cities.
- *CQ's State Fact Finder*. HA203 .C85 Ref
  Useful annual comparative data.
  Annual.
- *Crime State Rankings*. HV6787 .C733 Ref
  Annual.
  Comparative data among nations.
  Annual. Formerly called *Accident Facts*.
- *NEA Almanac of Higher Education*. LA227.3 .N37 Ref
  Annual.
- *Source Book of ZIP Code Demographics*. HA203 .S66 Ref
  Best source for data by ZIP code.
- *Standard and Poor's Industry Surveys*. HC106.6 .S74 Ref
  Quarterly data on industries and leading companies.
- *Statistical Abstract of Latin America*. HA935 .S8 Ref
  Annual.
- *World Population Data Sheet*. HB848 .P65a Ref
  Annual.
Print Sources: Historical Statistics
  Some data on cities also.
  Historical prices in the United States.

Print Sources: Bibliographies and Guidebooks
  Indexes and describes publications of the federal government.
- *Encyclopedia of Business Information Sources.* HF5351 .E53 Ref
  Updated periodically; useful for sources for industry and trade associations data.
- *Index to International Statistics.* Z7551 .I63 Ref
  Indexes and describes publications of international organizations.
  Listings and definitions of federal statistical series.
- *Statistics Sources.* Z7551 .S84 19th 1996 Ref
  A listing by subject. Especially useful for sources for country data.
  Excellent explanation of the U.S. Census and its publications.

LIBRARY OF CONGRESS CALL NUMBER SEQUENCES:
- International statistical compilations: HA12.5--HA42
- General statistical compilations: HA155
- United States statistical compilations: HA175--HA730
- Statistical compilations for other continents and countries: HA740--HA4737
Data Services offers support in locating, extracting and formatting data from different sources in a variety of formats. Statistical software packages and data translation software are available on two separate workstations.

In December 1975, Congress passed Public Law 94-171 which specifies that within one year of Census Day, the Census Bureau must send each state the data that could be used by the state to redraw federal, state and local legislative districts. Raw Census 2000 redistricting data are now available in directories for individual states on the Census Bureau FTP site. To facilitate exporting into spreadsheet or database software, the files are segmented so that individual files will not have more than 255 fields. Each state directory thus has three data files, reflecting three data segments (Geographic Header file, File01 (Tables 1 and 2), File02 (Tables 3 and 4)). To get the complete data set for the redistricting files, users must FTP all three files in the state directory. Chapter 7 of the Technical Documentation provides information on how to link these files. The files are provided in compressed (ZIP) format and need to be uncompressed before they can be used. Once uncompressed, the data are in a flat ASCII format. The geographic file is in a fixed-field format; the two data files are in comma delimited format. Files to facilitate manipulation in SAS, xBase, Access 97 and Access 2000 are also provided. Consult the File Structure Read Me file for more information.

The Office of Management and Budget (OMB) has completed its Metropolitan Area Standards Review Project (MASRP). This review, which began early in the 1990s and continued through the fourth quarter of 2000, has culminated in the publication of new standards for the coming decade. The Metropolitan Area program has provided standard statistical area definitions for 50 years. In the 1940s, it became clear that the value of metropolitan data produced by Federal agencies would be greatly enhanced if agencies used a single set of geographic definitions for the Nation's largest centers of population and activity. Prior to that time, Federal agencies defined a variety of statistical geographic areas at the metropolitan level (including "metropolitan districts," "industrial areas," "labor market areas," and "metropolitan counties") using different criteria applied to different geographic units. Because of variations in methodologies and the resulting inconsistencies in area definitions, one agency's statistics were not directly comparable with another agency's statistics for any given area. OMB's predecessor, the Bureau of the Budget, led the effort to develop what were then called "Standard Metropolitan Areas" in time for their use in the 1950 census reports. Since then, comparable data products for Metropolitan Areas have been available.

The Statistical Consulting Center (SCC) in the Institute of Statistics and Decision Sciences is a statistical consulting service available at no cost to members of the School of the Environment and the School of Arts and Sciences. The SCC provides statistical advice and assistance with short-term statistical analysis to students, researchers and faculty. This includes assistance with designing experiments, studies and surveys, as well as analyzing data. The SCC seeks to develop longer term, collaborative research efforts and promote cross-disciplinary interaction between ISDS faculty and students and their counterparts in other disciplines.
Government CD-ROM user guides

The Government Documents Collection at the University of Massachusetts Amherst has a large collection of CD-ROMs, produced by federal government agencies, containing statistical reports, research reports, and compilations of laws and regulations.

CD-ROMs are included in the library's online catalog and are kept in the Documents Office on Floor 6.

Most, but not all, federal government CD-ROMs include software for easy access to the information on the CD.

In addition to the user guides listed here, technical documentation for CDs is either in paper or on the CD.

CDs can be checked out, with some exceptions. They can also be used in the Government Documents Office; call ahead for availability (413-545-2765).

Government CD-ROM User Guides

Agricultural Statistics 1998
Alabama Coastal Hazards Assessment
American Community Survey
Appropriations, Budget Estimates, Etc. [104th Congress, 1st session]
Basic Course in Occupational Medicine
Behavioral Risk Factor Surveillance System 1984-1995 Survey Data
Behavioral Risk Factor Surveillance System 1996 Survey Data
Budget of the United States Government
Catalog of Federal Domestic Assistance / Federal Assistance Award Data System
CDP File
Census Mapper
CensusCD + Maps
Coastal Change Analysis Program
County Business Patterns
Crime in the United States [Uniform Crime Reports]
Defense Science and Technology Strategy and Plans
Energy InfoDisc
The Ethics CD-ROM
Gamma Ray Observatory, NASA PPMI: "Lessons Learned"
Green Chemistry Expert System
HCFA's Laws Regulations Manuals
ICD-9-CM: International Classification of Diseases, Ninth Revision, Clinical Modification
LandView III
Library of Environmental Images
MMWR
National Trade Data Bank (NTDB) [November 1999+]
National Trade Data Bank (NTDB) [pre-November 1999]
Navy Advancement Center TRAMANs and NRTC
1994 National Home and Hospice Care Survey
1996 Natality Data Set
1999 Federal Tax Products
1998 Federal Tax Products
1998 Massachusetts Tax Forms and Publications
Occupational Outlook Handbook
O*NET: The Occupational Information Network
These user guides provide:

- a brief description of the CD-ROM
- information about system requirements
- installation instructions
- search tips
- references to equivalents in other formats or to related information

For other sources of information about using government CD-ROMs, check:

- the flyer in the jewel case of a particular CD-ROM
- the readme file on the CD-ROM (often found on the root directory)
- CD-ROM Technical Documentation Project
- GODORT Handout Exchange
Numeric Data Services
University Library

The University Library's new Numeric Data Service helps meet your data needs.

The Numeric Data Service helps you to:

⇒ access ICPSR data
⇒ identify & locate a data set
⇒ interpret documentation
⇒ transfer files
⇒ import data into statistical packages
⇒ support class instruction
⇒ access data from the Roper Center, DRI or other data providers

You can use the Numeric Data Service three ways:

In person at 203J Hatcher Library North, Monday - Friday, 1:00 - 3:00 p.m.

Via email at numeric.data@umich.edu

On the web at <www.lib.umich.edu/libhome/data>

Numeric Data Service means more time researching!

Start using it today and watch for further developments!
Introducing a New University Library Service

The University Library is launching a new Numeric Data Service to aid you in teaching and research. As an initial step, we have initiated an agreement with the Harvard/MIT Data Center to improve our campus access to data files from the Inter-university Consortium for Political and Social Research (ICPSR). Through the Harvard/MIT Data Center, U-M faculty, students, and staff can search, order and retrieve ICPSR data at any time. For selected datasets, the Harvard system can perform cross tabulations or subset data. The URL for access to ICPSR data is <www.lib.umich.edu/libhome/data/icpsraccess.html>

The Library’s Numeric Data Service makes it easier for the U-M community to:

⇒ identify & locate a dataset
⇒ interpret documentation
⇒ transfer files
⇒ import data into statistical packages
⇒ acquire & store datasets for class instruction
⇒ access data from the Roper Center, DRI or other data providers

Additional services will be added as we grow. Numeric Data Service is available

⇒ in person, Monday—Friday, 1:00—3:00 p.m., 203J Hatcher Library North
⇒ via email at numeric.data@umich.edu
⇒ on the web at <www.lib.umich.edu/libhome/data>

The University Library is also beginning development of local capability to manage and make data sets accessible via the web. Work is underway, using software acquired from UC-Berkeley, to develop local services for data extraction, statistical applications, and data subsetting. If you have datasets that you would like to suggest for campus deployment, please let us know. We are also actively engaged in efforts to develop campus partnerships to increase the availability, improve access, and ensure sustained management of data sets and welcome your interest in collaboration as well.

Please pass this information along to colleagues who would benefit from this new service. For more information, contact JoAnn Dionne at numeric.data@umich.edu or jdionne@umich.edu.
Reference Resources

User Guides

A % indicates a resource developed outside the University of Virginia Library

Address Matching in ArcView
A guide to using ArcView to match addresses. Offers tips on how to format address information, appropriate types of street data, and other information about geocoding addresses.

CensusCD+Maps
CensusCD+Maps is a product which combines demographic data and software to provide easy analysis of all census geographic breakdowns for the United States. GeoLytics, Inc. has created this product by using 1990 Census Data and adding software which lets you view and output reports and maps quickly and easily.

CensusCD+Maps
Guide developed at Electronic Data Services at Columbia University; largely reproduces on-line help on Census CD disc.

Community 2020 Tutorial
Community 2020 is a geographic and statistical data resource produced by the Department of Housing and Urban Development (HUD) to help community development personnel identify, catalogue and keep track of grants and programs administered by HUD. It contains a large amount of information regarding these programs. It also has a large amount of 1990 statistical information that is attached to geographic files for a large number of areas: block groups, census tracts, cites, MSAs etc. Community 2020 is available on every PC in the Geostat lab.

CPS Utilities
The Bureau of the Census states that, "The Current Population Survey is a monthly survey of about 50,000 households...[which] has been conducted for more than 50 years. The CPS is the primary source of information on the labor force characteristics of the U.S. population. The sample is scientifically selected to represent the noninstitutional population...[It] provides estimates for the nation as a whole and serves as part of model-based estimates for individual states and geographic areas." (See the Bureau of the Census, CPS) This document will outline the particulars of running CPS at EDS as well as giving a brief overview. It is not a complete guide to using the CPS Utilities Database.

International Financial Statistics
The International Financial Statistics is the principle publication of the International Monetary Fund. The IFS contains data from 1948 until 1997. The IMF reports that the CD-ROM "provides users with time series data covering approximately 26,000 economic concepts which show major economic aggregates used in the analysis of economic developments and includes data on the following topics: balance of payments, banking and financial systems, employment, exchange rates, Fund position, government finance, interest rates, international liquidity and banking, national accounts, population, prices, production and trade." (see IFS Coding Documentation)
National Longitudinal Surveys
This User's Guide illustrates how to begin using the Windows version of the data base
access software NLS Investigator. This retrieval system accompanies one or more of
the National Longitudinal Survey's (NLS) databases on CD-ROM. With it you can
extract data and prepare that data for statistical analysis. You can create, modify, and
save your own personalized, extracted files for further research. This package is easy
to use. If you already have some knowledge of the NLS and a search strategy in
mind, you will be able to complete that search and extract a file within minutes of
using the guide. Just follow this guide and substitute your own strategy for the
examples given.

Sources for Political Survey Data

Public Use Microdata Samples (MicroAnalyst Version)
The PUMS (Public Use Microdata Samples) data are 1% samples (5% samples are
available for 1980 and 1990) of households enumerated by the Decennial Census
between 1850 and 1990. In contrast to what is presented in the 'official' Census
reports, these data provide data on individual households and the individuals residing
in these households.

The PUMS data include information on a broad range of population characteristics,
including fertility, marriage, life-course transitions, immigration, internal migration,
labor-force participation, occupational structure, education, ethnicity, and household
composition.

SAS Support at the University of Virginia
SAS is a powerful program used by many banks and corporations worldwide. It is very
powerful, and is particularly useful for dealing with large data sets.

Getting Started with SPSS for Windows

Tutorial for SPSS for Windows

SPSS Support at the University of Virginia
SPSS is a widely used, user-friendly program that should accomplish most (if not all)
of your statistical computing needs.

Trans-Atlantic Slave Trade CD-ROM
This CD-ROM contains the records of over 27,000 slave trade voyages between the
years 1527 to 1866. This user guide provides a quick overview of the query software
and provides a detailed search.

Union Army Study
The Union Army Data Set consists of 35,747 white males from 303 randomly selected
Union Army companies during the Civil War, for whom military, socio-economic, and
medical information from the several sources throughout their lifetimes has been
collected. This data set was compiled by the Center for Population Economics.

3D Topoguads
3D Topoguads allows users to search for and view digital topographic maps of Virginia
by feature and place name, print portions of the map, or save it to the file. Despite
the name 3D Topoguads does NOT work in 3D in the Geostat Lab. Only Virginia maps
are included.
Using ASCII data files with SAS
Using ASCII data files with SPSS
Using SAS Transport files
Using SAS System files
Using SPSS Export files
Using SPSS System files
Using OSIRIS files: converting with Stat/Transfer
Using Dbank with Balance of Payments data
Using Dbank with Direction of Trade data

Introduction

The instructions and examples in the links above explain how to use data files from a computer directly connected to the Statlab NT Server.

Using ASCII Data Files (.dat or .raw files)

Column-delimited ASCII files (usually with the file extension .dat or .raw) can be read by the statistical packages on the Statlab NT Server. The sections listed above provide information for reading ASCII files in SAS and SPSS, both for Windows.

Using System Data files

The system data files available are ready for analysis using STATLAB software, with little additional data management. The links above provide instructions for accessing system data files in SAS and SPSS. If the analysis is designed to use other software, these data files are readily convertible to other data formats using the file conversion software DBMSCOPY available also at the STATLAB.

[ Statlab Home Page | SSDA Search | SSDA Home ]
Data Service Descriptions
Introduction

Electronic Data Center was established in 1996 to support quantitative research in the Social Sciences by members of the Emory Community. Located in the Technology Centers (Room 217) in the Robert W. Woodruff Library, the Data Center provides researchers at Emory with access to a broad collection of numeric data, workstations with statistical and mapping software and a knowledgeable staff with expertise in data development and quantitative research. The Electronic Data Center at Emory University is one of a handful of full-service Data Centers among universities in the United States.

Our Services

Emory's Electronic Data Center provides researchers and students with access to over 5000 data sets covering diverse subjects such as Criminal Justice, Urban Renewal, Health Policy, International Relations, Political Behavior and Economic Development. Interested Emory Researchers may access our online collection anytime or request that we acquire data from ICPSR, the US Government, and many other data providers. In some instances users can even analyze the data online using applications developed in partnership with Emory's Information Technology Division. We also provide faculty and students with a cluster of high-end workstations equipped with the latest software applications to facilitate their research.

The staff of the Electronic Data Center are active researchers with a strong interest in supporting the use of data and statistics analysis in research. We provide consulting and instruction to students and faculty at Emory regarding issues such as survey design, business forecasting and statistical programming. Our services have been utilized in support of research papers, theses, faculty publications, government reports and business analyses. We are active in professional organizations and on occasion we have provided support for local groups, emeritus faculty and alumni in need of our expertise.
The Harvard-MIT Data Center is the principal distributor of quantitative social science data at Harvard University and the Massachusetts Institute of Technology. It serves as the universities' official representative to the Inter-University Consortium for Political and Social Research (ICPSR); as a representative (and/or repository) to Roper Center for Public Opinion Research (searchable through Lexis-Nexis), and the National Center for Health Statistics (NCHS); provides access to Murray Center student datasets, Social Sciences Program Data; HMDC's Guide to Census Microdata and is a central contact point for many other archives and data suppliers. We maintain a large library of electronic data from all these sources, a growing collection of unique data sets, and an extensive codebook library. Few other university data centers approach the quantity of social science data that passes through here on a regular basis.

The HMDC web site has been awarded the title "Best Political Science Research Web Site, 1999" by the American Political Science Association (CMS). Many features of this site are unique, such as over five hundred online subsettable data sets, sophisticated browsing and searching options, automatic ordering of new data sets from other repositories, and interactive data exploration. We encourage our affiliates to take advantage of them all.

You may be interested in the history of the Data Center and our latest developments and innovations. Our largest project currently is the creation of a data center (VDC) -- a free, open, portable, self-installing data server, using the protocols for communication and searching from our ongoing Digital Libraries Project, and our recently completed Record of American Democracy project (the largest collection of combined census and electoral data set ever created). The VDC project will seamlessly integrate independent virtual data center sites around the world and make data sharing and distribution easy and transparent.

The Data Center is located in the Government Department in Littauer Center North Yard. We also have offices for our staff at CBRSS and WCFIA. We are always open (physically or virtually), but the Data Center staff are available to the public by appointment during the Summer, and during the fall and spring terms during office hours (except for official national, state, and Harvard holidays and recesses). Fellows may offer consultation at any time. We also operate several computer labs, with facilities for extracting, translating and statistically analyzing data. We look forward to your comments or suggestions.

We wish to thank our supporters.
Data Library Services

Data Library Services helps current students, staff and faculty at the University of Manitoba to identify, acquire and manipulate electronic data sources. We subscribe to the Data Liberation Initiative and to the ICPSR. If you need help finding or using electronic data, contact Gary Strike, the Data Librarian, at (204) 474-7086 or gary_strike@umanitoba.ca (Gary_Strike@umanitoba.ca).

Information on the ACCOLEDS Training FEST 2000.

Conditions of Use
Current faculty, students and staff may use Data Library Services for education and research purposes, i.e. NON-COMMERCIAL purposes only.

CIED Summer Data Training School
ICPSR Summer School
York University Summer Programme in Data Analysis
Research Data Centres
Statistics Canada Research Stipend

Help
How to ftp files, uncompress files, etc.

Citing Data Files
What's new
Newly acquired files, release dates, etc.

DLS Office Workstation
to work with data files.

Workshops
Hands on workshops on the use of data files.

Survey documentation

Networked data
Networked databases can generally be accessed, by authorized users, from offices, computer labs and from home computers.

Beyond 2020 software

Data on CD-ROM
A number of CD-ROM databases can be used on the Data Library Services workstation or borrowed

Data on Unix (ftp)
A large number of databases can be downloaded by ftp

1996 Census of Canada
Much of the data from the 1996 Census of Canada, population and agriculture, are now available.

Public Data on the Internet

Statistics Canada depository publications.

Statistics Canada downloadable publications (free).

Request a Data File, Appointment, etc.
Current Faculty, students and staff can request files and services.
Numeric Data Services provides:

- Help identifying and locating a data set, interpreting documentation, help transferring files, help importing data into statistical packages. Web sites on Identifying Numeric Data and Using Numeric Data are available.
- Access to ICPSR data: For more information on using ICPSR data see Access to ICPSR data for the University of Michigan.
- Access to other data sources such as: DRI/Webstract, the Roper Center and NCHS.
- Support for class instruction: Web-based exploration and extraction for selected data sets; acquisition and storage of data sets.

Staff
JoAnn L. Dionne, Social Science Data Librarian
Graciela Mentz, Data Consultant
Abigail Leah Plumb, Data Consultant
Hong Zieske, Numeric Data Programmer Analyst

Hours
Monday-Friday, 1-3 pm
Numeric Data Services will be closed
September 4th for Labor Day.

Location
203J Hatcher Library North

Contact
numeric.data@umich.edu
Quantitative and Geospatial Data Holdings

To support the research needs of Penn faculty, students and staff, the University of Pennsylvania Libraries acquire and subscribe to numerical and geospatial data resources in print and electronic formats. The library is a federal depository library, and receives large amounts of numerical data from agencies. Many of these resources are available on CD-ROM as well as on the web. Some of the agencies are:

- Census Bureau
- National Center for Education Statistics
- National Center for Health Statistics
- Bureau of Labor Statistics
- FBI–Uniform Crime Reports
- Environmental Protection Agency: Envirotrends

The library is also a repository of United States Geographic Survey maps that are housed at the High Density Storage Facility, Suite #10, 3001 Market Street. This collection is not cataloged in Franklin. Please consult Collection Development Policy: Maps regarding this collection.

The library's numerical and geospatial collections have a special emphasis on Philadelphia data and maps. Recently, the Penn Library has digitized historical Philadelphia census tract maps using ArcView. These maps and the electronic census data build a foundation for researchers to study demographic changes that have occurred in smaller areas of Philadelphia over the past sixty years.

The library is a subscriber to some major numeric data archives, such as ICPSR, Roper Center for Public Opinion Research and Sociometric Social Science Electronic Data Library. The Numeric Data Archives web page provides information on obtaining datasets from these archives.

The Library also holds uncataloged or incompletely cataloged U.S. census resources in print, microform, and CD-ROM. Much 1990 Census data is available online. Access to these materials will be discussed in this U.S. Census guide.

The Library provides access to several major statistical databases through the Library web site including:

- BankScope
- Country Finance
- EdgarScan
- EuroMonitor
- FISonline
- ISI Emerging Markets
- MultexnetUn Statistics Division Common Database
- Polls & Surveys via LEXIS-NEXIS Academic Universe, Click on Reference
- Polling the Nations
- Social Science Electronic Data Library (SSEDL)
- Statistical Universe
- SourceOECD
UNIVERSITY OF PENNSYLVANIA

- Standard & Poor's Industry Surveys
- STAT-USA
- TableBase
- UnStats Common Database

The Lippincott Library houses a collection of demographic and marketing statistics on CD-ROMs. In addition, Lippincott library also subscribes to international financial resources, such as DataStream.

Franklin, the online catalog, is used to locate the library's holdings of print and CD-ROM publications. These resources are housed in:

- Van Pelt Library
- Lippincott Library
- Fisher Fine Arts Library
- Biomedical Library
- Annenberg Library

To find these resources and their locations, please use the Franklin keyword search for terms such as:

```
franklin express! find anywhere in

statistics AND philadelphia DOQ OR (digital orthophoto
philadelphia census AND 1970 quadrangles)
census AND 1970 DOL OR (digital line graphics)
estimates AND building DRG OR (digital aster graphics)
health AND statistics AND USGS AND CD
CD
```

Or search by author for terms such as:

- Geological Survey
- National Center for Health Statistics
- (U.S.) World Bank
- United States. Organisation for Economic Co-operation
- Census and Development
- GeoLytics, Inc. United Nations. Dept. of Economic and
- CACI, Inc. Social Affairs

Please send mail concerning this page to: geodata@pobox.upenn.edu
Mission

Data Services facilitates access to machine-readable numeric data files for secondary data analysis. Data Services helps researchers identify appropriate numeric data files, locates files in-house or through outside sources, and acquires numeric data and documentation files for the Libraries' collections.

Data File Identification

Data Services offers consulting on the content and format of the Libraries' machine-readable data holdings, as well as data files not held by the Libraries. Reference assistance in identifying appropriate research studies and data files is extended to University of Tennessee faculty, staff, and students, and non-University persons at no charge. Service to researchers affiliated with the University of Tennessee, Knoxville has priority over service to all other patrons.

Data File Availability and Access Information

Data Services attempts to locate data and documentation files identified by the researcher. Information on how to access or order the files is provided to the user, regardless of his or her affiliation. Service to researchers affiliated with The University of Tennessee, Knoxville has priority over service to all other patrons.

Data File Acquisition

Data Services acquires requested data and documentation files available through consortia or organization memberships (e.g., ICPSR) and no-fee data providers (e.g., U.S. government statistical agencies) for University of Tennessee, Knoxville faculty, staff, and students at no charge. Data products from commercial or fee-based organizations may be purchased by the Libraries if funding is available and the cost is reasonable and justified. Data Services cannot guarantee the purchase of any data file(s) requested by the patron.

Data Services does not download, order, purchase, or otherwise acquire data files for patrons not affiliated with the University of Tennessee, Knoxville.
Preparing Data Files for Use

Data verification and manipulation of data files (as described below) is limited to University of Tennessee, Knoxville patrons. If time and resources permit, Data Services may be able to answer questions from non-University patrons about data files they acquired for themselves, but no action will be taken on the files.

Data Services generally performs basic data verification tests on data and documentation files obtained from ICPSR and other sources. This includes checking the readability of a file and that the correct number of records and variables are present.

Data Services can, on a limited basis, assist University patrons with the extraction of a subset of data for analysis. Patrons in need of complex subsetting or subsetting of very large data files are referred to the Statistical Consulting Center for assistance (200 Stokely Management Center; 974-9900; dii.utk.edu/scc/).

Statistical Analysis and Consulting

Data Services does not provide computing or statistical consulting on research projects. For assistance with manipulating, summarizing, analyzing, graphing, mapping, or interpreting data, patrons are referred to the Statistical Consulting Center (200 Stokely Management Center; 974-9900; dii.utk.edu/scc/).

Contacting Data Services

The primary contact for answering general service questions or identifying, locating, and/or acquiring data files is:

Eleanor Read
Social Science Data Services Librarian
ICPSR Official Representative
120A Hodges Library
(865) 974-0011
eread@utk.edu

This policy is subject to change as data products and/or computing and staff resources change over time.

4/01 EJR
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Introduction

The Data Library Service (DLS) at the University of Toronto was established by the University of Toronto Library and Computing Services (UTCS) in 1988. It is now wholly maintained by the Library, and is a part of the Data, Map, and Government Information Services (DMGIS). It supports empirical research and teaching activities of University of Toronto faculty, students and staff by collecting, managing, and making available research data in computer-readable form.

By archiving data files collected by University researchers, and acting as a registry for non-depositing data owners, the DLS also functions as a central data archive, as well as a source of expertise in the long-term preservation of computer-readable information.

The DLS does not provide access to bibliographic and other 'look-up' databases. Access to these resources is provided through the reference departments and branch libraries of the University of Toronto Library system.

Objectives

The objectives of the University of Toronto Data Library Service are to:

- acquire, manage and preserve machine-readable data files needed to support empirical or statistical research and teaching activities of the University of Toronto,
- provide access to machine-readable data files owned by the University of Toronto,
- provide support for users of these machine-readable data files.

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Collections

The collections of the DLS consist of numeric, spatial and textual research data files, primarily but not exclusively in the social sciences. These files contain quantitative research data, including microdata, aggregate data and time-series databases.

To search for specific titles or principal investigators, etc., please search UT/DLS inventory of holdings

Currently, major categories of holdings include:

- microdata from selected surveys conducted by Statistics Canada and other government departments,
- microdata from major social surveys conducted in Canada, the United States, Great Britain, etc.,
- public opinion polls from commercial pollsters, such as Canadian Gallup, CBC/Globe and Mail, Insight Canada Research, etc.,
- selected major socio-economic and financial databases from:
  - DRI McGraw-Hill databases such as COMPUSTAT and Basic Economics
  - Center for Research in Security Prices (CRSP)
  - Financial Post's Corporate database and Mutual funds database
  - CFMRC (formerly TSE/Western)
  - International Monetary Fund's IFS database
  - OECD national accounts database
- a small collection of textual files, and the University's membership in ARTFL (Project for American and French Research on the Treasury of the French Language, University of Chicago),
- digitized map files, such as World Data Bank II, a map of the world, and digitized political/census boundaries for Canada.

A few of our most popular time-series and aggregate databases have been provided with a WWW interface to searching and retrieving data, courtesy of CHASS, at: <http://datacentre.chass.utoronto.ca/>.

In addition, the DLS is constantly acquiring new data from major disseminators such as:

- Statistics Canada's Data Liberation Initiative [DLI],
- Inter-University Consortium for Political and Social Research (ICPSR), as a member of the OCUL/CREPUQ federation, and the
- Roper Center

as well as from other data archives and data libraries, and data disseminators around the world.
Services

The DLS offers a variety of services, including:

- **Codebooks**: The DLS has copies of documentation describing the content and format of all data files in the DLS collection. Where possible, machine-readable codebooks are made available by searching the UT/DLS inventory of holdings. Many codebooks, however, are available only in print, but circulating copies are available in the UT/DLS, as are circulating printed copies of some of our computer-readable codebooks.

- **Acquiring new data files**: Identification and acquisition of new data files and/or related documentation needed for research and/or teaching. The DLS maintains contacts with other data archives and libraries, and can assist with searching for and getting copies of data resources available elsewhere, either via the Internet or through purchase (the budget allowing). The DLS maintains memberships in the following:
  - Statistics Canada's Data Liberation Initiative (DLI)
  - Inter-University Consortium for Political and Social Research (ICPSR)
  - Roper Center for Public Opinion Research

- **Creating custom subsets**: Technical assistance in the identification and retrieval of data from large data files, including creating custom subsets of just the cases and variables needed for your research, in the software dependent format needed for your statistical package.

- **Transferring data**: Between hardware/software platforms;

- **Statistical packages**: Help with the use of statistical software in the definition of data files;

- **Custom instructional data sets**: Construction of custom data sets for instructional or research use;

- **Archiving**: Cleaning, documentation, archiving, and dissemination of original data files deposited by researchers;

- **Citing data files**: Help with the composition of bibliographic citations for computer files.

Access conditions and restrictions

The following restrictions are specified in the contracts that we have signed with individual data suppliers.

Who may use the data:

- Unless otherwise specified (in the UT/DLS inventory of holdings), data in the DLS collection are for use by University of Toronto faculty, students and staff only. This restriction applies to on-line databases (CANSIM, DRI basic economics, IMF, OECD, WB etc.), all CD-ROMS available in the DLS, databases on diskette, as well as other data files in the DLS collection.

- Some statistical products disseminated through the Data Liberation Initiative are also available to Ryerson Polytechnic University and York University IP addresses as well. Where materials are not accessible through a WWW server, faculty, students, and staff of these local universities should contact their local data service personnel (see Internet data resources: Individual data archives: Canada).

- Visiting faculty, visiting graduate students, affiliates, etc., must bring a letter signed by their respective Department Chair or equivalent. This letter should confirm the visitor's status vis-a-vis the University of Toronto, request that the visitor be treated as a faculty, student or staff member (as appropriate), and the length of time that such status should be accorded. A copy of the letter must be provided to the Data Service Librarian for our files.
• Alumni, holders of corporate library cards, and external readers have no access to restricted data files in the DLS collection. Only data specifically designated 'public use' and data files which the DLS is contractually allowed to disseminate, can be made available to these users.

Acceptable uses:

Acceptable uses include academic research and/or teaching (and by the University administration for administrative planning) only.

• University of Toronto faculty, students, and staff who access these data must not make copies of these data available, in whole or in part to colleagues who are not part of the University of Toronto academic community. Similarly, computing accounts at the University of Toronto should not be made available to non-University of Toronto persons for the purpose of accessing restricted data.

• These data may not be used for commercial consultancy work, commercially funded research, etc. Such users should contact the Distributor of the file and make their own arrangements for acquisition of the data.

• Use of microdata in any way to attempt to identify individual respondents is prohibited.

When in doubt always consult DLS staff. This is one instance where it is not easier to ask for forgiveness than permission. Unauthorized use could result in the University of Toronto being permanently prohibited from acquiring data from major sources.

The DLS is contractually allowed to disseminate a number of the data files in its collection. Copies of these data files can be made available to other users, on request, subject to the terms of individual deposit agreements. Contact DLS staff.

Miscellaneous:


• Note: To obtain a copy of the full thesis text, contact K. Nilsen at nilsen@fis.utoronto.ca.
What We Do

Geostat supports a wide range of academic and scholarly activities through access to extensive collections of numeric and geospatial data files; computing facilities and software for data manipulation, research, and instruction; and a suite of Internet-accessible data extraction tools.


The final editions of the 2000 National Election Study Pre- and Post-Election Survey data and 2000 General Social Survey data have been released for researchers through ICPSR. [UVA ACCESS ONLY]

NEW: Digital Sanborn Maps of Virginia

The Virginia Digital Sanborn Maps collection of Bell and Howell/UMI provides University of Virginia users with access to most maps of Virginia communities produced by the Sanborn Map Company, from the 1880s - 1950. Digital images were produced from black and white microfilm of atlases deposited at the Library of Congress, or transferred there by the Bureau of the Census. [UVA ACCESS ONLY]

UPDATE: County Business Patterns

The County Business Patterns data base provides county, state, and national level business data for 1977-1998.

UPDATE: Regional Economic Information System

The REIS database provides local area economic data for states, counties, and metropolitan areas for 1969-1999.
THE ESTABLISHMENT OF TRI-UNIVERSITY DATA RESOURCES

The establishment of Tri-University Data Resources is the result of a joint venture between the University of Guelph, the University of Waterloo, and Wilfrid Laurier University.

Members of the individual centres for data resources on each campus as well as representatives from the University of Guelph Computing and Communications Services and the University of Waterloo Information Systems and Technology have joined forces to create this centralized on-line data service.

The creation of this joint service arises from the need to dedicate resources to the centralization and distribution of data resources which have increasingly been produced in electronic format. Recent agreements on consortial use of data by Statistics Canada (through the DLI initiative) and ICPSR have allowed a rapid change in the way data is disseminated to educational institutions. The resources required to manage this acquisition and distribution of data is more than is possible for many institutions to handle given the current financial climate.

Users will benefit from the pooling of resources as data from the three institutions will be offered to members of the three participating universities. Sharing technology and human resources will result in an increase in the ability to process, mount, and maintain new data as it arrives. User support will also benefit as expertise is shared between the three institutions.

The main focus of the centralized service will be a joint web site where all data licensed to be shared is mounted and maintained on a single web site: http://tdr.uoguelph.ca

Individual institutions will continue to offer support and service to their respective communities of users. Each institution will also maintain data licensed to its own community due to specific localized research needs and licensing restrictions.

Overviews of each data centre including services offered and hours of operation can be found by following the links provided below.

- University of Guelph Data Resource Centre
- University of Waterloo Electronic Data Service
- Wilfrid Laurier University

Background documents related to the creation of this joint venture can be found by following the Publications link listed below.

PUBLICATIONS
The Social Science Data Archive at Yale

The Social Science Data Archive (SSDA) is the repository and reference center at Yale for machine-readable data sources in the social sciences. The SSDA owns and maintains a major collection of data from academic surveys, public opinion surveys, government agencies, international organizations, and related groups. SSDA codebooks and reference services are available through the Social Science Library and Information Services; the Social Science Statistical Laboratory provides technical assistance for dataset users. The SSDA holdings are restricted to use by the Yale community.

SSDA Holdings Information

- SSDA Catalog: **SEARCH** by keywords or **BROWSE** by subjects. The SSDA Catalog includes descriptions of datasets, detailed holdings information, and links to documents about how to access the data files.

- **Yale Roper Collection**: Note that many of these datasets are **not listed** in the SSDA Catalog.

- **Orbis**, the Yale University Library online catalog. Orbis includes records for datasets on CD-ROM and for codebooks which may not be included in the SSDA catalog.

Help using SSDA data

Extensive help using the data and statistical software on the Statlab network is available.

Data on the Internet

The SSDA maintains a list of **Internet sites** at which you can directly access numeric social science data. See also the list from UC San Diego.

Data at Other Archives

Inter-University Consortium for Political and Social Research, University of Michigan ICPSR, the world's largest repository of computer-readable social science data, acquires, processes, and distributes data collections on a broad range of topics. Data holdings of ICPSR may be searched on line. Yale faculty, students and staff on the Yale network may download data directly from ICPSR. Questions about ICPSR data may be directed to the Data Librarian (julie.linden@yale.edu).

**Search the Roper Center Survey Archive.** The Roper Center now offers a WWW based search facility for locating questions asked in polls in the Roper Survey Archive.
Searchable Catalogs of Data listed by the Social Sciences Data Collection at the University of California at San Diego

CESSDA Integrated Catalog: Council of European Social Science Data Archives. Search the data archives of: France, Denmark, the UK, Norway, Sweden, Israel, the Netherlands, Hungary, Germany, Australia, and ICPSR. See also the World Map of Social Science Data Archives, Council of European Social Science Data Archives

Glossary of social science data terminology

Terms often used in a data library environment are defined in this glossary from UC San Diego.
Job Descriptions
Job Description. 75% Data Services Librarian

RESPONSIBILITIES:

This position works on the maintenance, development and integration of Social Science Data collections and services within the Social Science and Humanities Library and the wider data user community to provide excellent access to these important resources.

Working closely with the other units in the Data Government and Geographic Information Services group, Jim will work to better integrate services through various projects that include but are not limited to the ideas described below. While service decisions are still made within Data Services, production programming and server maintenance activities have been transferred to the Software Engineering Department. In order to do accomplish Data Services priorities, a significant amount of time is currently focused towards collaborating with the Software Engineering Department.

Jim is in a unique position to provide national leadership on issues affecting dissemination and preservation of public data. Time to pursue these issues is an excellent outcome of the reorganization of this position. His postings to national listservs are sparking important debates and are being widely quoted and published.

PROJECTS AND ACTIVITIES:

The following projects and activities are at various conceptual stages, but all represent ways in which the goals of Data Services are carried out through this position.

1. Increase communications and education among docs/data/gis/maps staff to insure clear understandings of related holdings and their most appropriate uses in order to insure appropriate referrals. This will have added benefits for reference desk staff and the UCSD community as different outreach projects are developed within the group.

2. Keep apprised of and involved in changes in the mode of data delivery from ICPSR, i.e. web based delivery to provide improved services to the users of these data sets.

3. Increase and enhance our web based and PC-based tools for data and map/gis use.

4. Create a web-based search and browse system that will help users find the *best* resource to answer their questions - whether the resource is a large dataset, a CD-ROM, a paper map, a web site, a UCSD librarian, etc. While the project will eventually describe all of our resources, deeper content focus will be on local San Diego and perhaps regional trans-border data.

To this end, we have some major opportunities right now with gis/maps/docs/data.
- We have a considerable amount of already-machine-readable materials to which we can enhance access.
- We have a large and growing user base for these materials.

UCSD Libraries Data Services Librarian Job Description 2001
- There is an international infrastructure supporting activities like ours and working with standards-based tools allowing us to integrate our work with the work of others and collaborate internationally.
- We have experienced staff and infrastructure in place and existing collections and tools that we can expand and enhance. We are not starting from scratch.
- The tools and services we develop within the project I've outlined above can be expanded or adapted to other subject areas in the library. We could, in essence, be a pilot project or incubator for other projects.

The California Digital Library recently embarked on a project called "California Counts." On the surface, it looks quite a bit like our proposed Docs/Data/Maps/GIS project, but there are some major differences that make the two projects complementary rather than redundant.

California counts will provide access directly to a "data warehouse" of numeric data from (initially) about 6 studies. Users will be able to find, not only studies that exist (e.g., the census, the county and city databook), but the variables in those studies. People will use California Counts to find numbers in a few files and create tables, charts, maps, and downloadable data files directly. In short, California Counts is about DATA.

The UCSD Docs/Data/Maps/GIS project will encompass information about literally thousands of datasets, studies, and files. These will include paper maps and books, numeric data files, GIS spatial information files, and more. Formats included in the project will be books, maps, computer files, and more. Computer files will be included if they are available on CD-ROM, SSDC, ICPSR, or publicly available on the Web. The project will not include the numeric data or variable level information. People will use the project (which will be available through the Web) to locate any of thousands of information products that may help them answer their questions. In short, the project is about META-DATA.

California Counts and the UCSD projects do have one important thing in common. Both are using the same markup language and definitions (XML DTD) to store information. This will mean that in the future, CDL and UCSD will be able to build collaborative and interacting projects.
POSITION: Data Services Librarian

DEPARTMENT: Reference

PURPOSE AND SCOPE:

The Data Services Librarian provides assistance with numeric data files, electronic government publications, and general reference sources. The Librarian provides consulting and instruction in the use of statistical information, including files distributed by the federal government. The Librarian also maintains relationships with university, state, national and international data organizations such as the U.S. Bureau of the Census’ State Data Center and the ICPSR. Includes some evening and weekend hours on a rotating basis.

DUTIES AND RESPONSIBILITIES:

Provides public access to U.S. Census data by consulting and advising patrons about availability of data and by retrieving information from data sets, including files stored on mainframe accessible tape cartridges.

Instructs library users by teaching classes in the use of statistical data and prepares instructional guides.

Provides reference service by participating in staffing the Reference Department’s reference desk approximately 6-8 hours per week, and by developing and maintaining knowledge of electronic and print information resources and services within the Libraries, on campus, and beyond.

Selects and maintains the Data Services collections, including code books, by consulting appropriate sources, submitting order requests, downloading data sets, and reviewing the collections for possible transfers or supersessions.

Participates in discussions regarding the future of the Regional Depository by contributing information about series that are delivered electronically, series that have been sold to commercial publishers, and other changes in the distribution of information from the federal government.

Monitors developments and best practices elsewhere to ensure the excellence of Georgia’s data archive and electronic services by attending training, conferences and other professional meetings as appropriate.
Advises the Department Head about software, hardware, and other equipment which may be needed in either Data Services or the Reference Department.

Maintains the Data Services Department page in accordance with the guidelines established by the Web Advisory Group. Selectively relocates government documents pages to the Reference Department.

Keeps current on changes in the organization, serving on appropriate Libraries’ committees, and maintaining flexibility to assume similar duties and responsibilities as assigned.

QUALIFICATIONS:

REQUIRED: ALA-accredited MLS; Reference coursework in government documents or relevant experience; Familiarity with technology that supports research with government information and numeric data sets; Ability to prepare documentation which supports the use of statistical information, including the use of the Web for making the information available; Subject knowledge in the social sciences and quantitative analysis; Demonstrated ability to provide instructional presentations and training; Ability to manage a broad variety of tasks and shifting priorities; Excellent oral, analytical and written communication skills; Systematic attention to detail; and Ability to establish and maintain effective working relationships.

DESIRED: Experience with census materials in print and electronic formats; Working knowledge of statistical analysis software packages; Working knowledge of HTML.
MCMASTER UNIVERSITY
PAY EQUITY QUESTIONNAIRE

****** Response Booklet ******

JOB IDENTIFICATION

Job Title ___________________________ Digital Resources Specialist
Generic Job Class # (if applicable) ___________________________
Department ___________________________ Data Services (Library)
Location ___________________________ Mills 217
Telephone ___________________________

Employee Identification

Surname, Initial(s) ___________________________
I.D. Number ___________________________
Signature ___________________________
Date ___________________________

Approvals

Reports to (title) ___________________________ Assistant University Librarian
Department ___________________________ Readers Services
Location ___________________________ Mills 204
Telephone ___________________________ ext. 23883

INSTRUCTIONS:

Please use this booklet and the response sheet to answer the pay equity questionnaire. When completed and signed, forward both to the human resources area office.
**II - JOB SUMMARY**

What would you say is the primary purpose of the job? Please summarize the most important aspect of the job.

This position manages the University Library’s Data/Text Service; facilitates user access to digital data and text; and anticipates new technology in order to integrate that technology into services provided by the Library. The Digital Resources Specialist works collegially with staff from Reference Services, who help to provide the content and interface requirements for the Data/Text Service; and with staff from the Systems unit, who provide the technological contexts for the D/T Service.

What are the most important end results that are produced to accomplish this purpose? In the following space, please list the end results or specific accountabilities of the job. Please do not list individual duties.

For re-evaluations or revisions to an existing job, please clearly indicate changes using bold type, asterisks, etc.

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<th>SPECIFIC ACCOUNTABILITY</th>
<th>SKILLS / KNOWLEDGE / ABILITY</th>
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<td>1. Manages the University Library’s Data/Text Service by:</td>
<td>- comprehensive experience with UNIX, UNIX shell scripts and UNIX utilities</td>
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<td>- mounting digital material on the Service’s designate server.</td>
<td>- extensive knowledge of statistical and data management software (e.g. SAS, SPSS, Open Text).</td>
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<td>- assuming responsibility for the backup and ongoing care of Data/Text Service equipment.</td>
<td>- knowledge of the operations of information centres</td>
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<td>- ensuring compliance with software and data license restrictions by the Service and its users.</td>
<td>- familiarity and ability to work with network protocols</td>
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<td>- establishing appropriate security measures for the Service’s equipment and software within the parameters set by the Systems unit.</td>
<td>- a degree in computer science would be highly relevant</td>
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<td>- reviewing and monitoring the use of the Service and generating appropriate statistical reports.</td>
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<th>2. Facilitates User Access to digital data and text by:</th>
<th>All of the above plus:</th>
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<td>- working with Reference staff in all libraries to ensure that digital material accessed through the Data/Text Service is made available to users in a manner appropriate to their needs.</td>
<td>- extensive knowledge of text retrieval software (e.g. Open Text’s Livelink).</td>
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<td>- preparing self-service interfaces for digital data/text.</td>
<td>- excellent oral and written communication skills</td>
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<td>- working with faculty to create subsets of data for class/project use.</td>
<td>- ability to interact in an efficient and pleasant manner with users at all level of computer and research expertise</td>
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<td>- preparing user documentation related to the Service’s products and services.</td>
<td>- ability to be flexible and adjust to changing technologies and priorities</td>
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<td>- instructing Library staff and users in data/text retrieval and manipulation techniques.</td>
<td>- training and presentation skills</td>
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3. Takes an active role in ensuring that the University Library takes the best advantage of emerging digital services by:
   - participating, as a member of the Library’s Data Planning Group, in decisions concerning the selection of digital materials and the appropriate format of those materials.
   - anticipating new technology and working with reference staff to integrate such technology into the provision of reference service.
   - evaluating and recommending software and hardware requirements to ensure the ongoing development of the Data/Text Service.
   - participating in Library representation to ICPSR (Inter-University Consortium for Political & Social Research), DLI (Data Liberation Initiative) and other such consortium bodies.

   All of the above plus:
   - demonstrable interest in evolving technology
   - data management skills
   - time management skills
   - knowledge of the research and instructional needs (for digital data) of the academic community
   - ability to work effectively in a team environment, but with considerable independence.
   - problem solving and planning skills

4.

5.

6.

The first two pages are available on disk from the Library Human Resources Office
JOB DESCRIPTION: Director, Geospatial and Statistical Data Center

35%

Administration

Provides direction and leadership for geospatial and statistical data services within the Library and University. Coordinates Center activities with similar or related activities across the Library’s digital centers, digital library research program and other units as necessary. Evaluates Associate Director and Map Services Specialist (.5 FTE Library Assistant position within GIR); provides input to Associate Director for evaluation of Programmer/Analyst positions within Geostat. Assesses departmental training needs and assists others in assessing their own training needs. Prepares annual budget requests for student wages, collections, travel, training, and OTPS. Participates in the Information Technology Council and other Library-wide IT committees.

30%

Collections and Services

Develops data collections in accordance with established collection development criteria. Consults with users on research and teaching projects requiring statistical and/or geospatial data, and promotes the use of data resources across the University. Works with digital library research and development team members on creating web-based data identification and retrieval tools. Supervises management of print map collections, atlases and related cartographic products, including collection development, organization, maintenance, and preservation.

25%

Public and Reference Services

Provides reference and information service relating to government publications, social sciences data, and maps using print, microforms, and electronic information delivery systems. Serves as a resource for other Library faculty and staff with regard to the provision of geospatial and statistical data products and services.

10%

Professional Development

Keeps abreast of and contributes to the professional and research literature in data librarianship and related fields. Attends and participates in professional meetings and conferences. Serves as Geostat and Library representative at regional, state, national and international meetings as needed. Assesses personal training needs and participates in training programs to meet those needs.

80
Access Policies
General Licence Agreement Conditions

Most of UBC Numeric Data Services' data files are acquired under a non-exclusive, non-assignable and non-transferable licence to use the data product.

In consequence, access to these data files and dissemination of data retrieved from them is restricted to current faculty, staff or students employed by, or studying at UBC. UBC MAY provide limited World Wide Web (WWW) access to current students, staff, and faculty of other licensed Data Liberation Initiative (DLI) academic institutions for a limited selection of our data files.

UBC CANNOT provide individual support to non-UBC users. Non-UBC users requiring support with our files or WWW services must contact their own educational institution's Library for assistance.

The data files protected by these licence agreements are to be used only for teaching and for faculty or staff research, and in no circumstances for personal contract activities of faculty, staff or students. Use of these data files for any commercial purposes is prohibited.

See the Data Liberation Initiative page for licence conditions applying to all Statistics Canada data sets.

UBC users:

Access restrictions are noted in Library catalogue records describing data files. Look under NOTES in the full record display and you'll see something like:

- UBC access only, or
- All users, etc.
Access to Electronic Resources

The University of Pennsylvania is a private institution and its libraries are private libraries, maintained to support the teaching and research mission of the University. Use of the Library's electronic resources is generally restricted to currently enrolled students, faculty and staff in order to comply with license agreements for educational use and to ensure access to limited resources. Restricted resources are marked with a lock on the Library Web. Visitors to the library are invited to use Franklin, the Library's online catalog, and to use the Library's selection of unrestricted Internet Resources.

- **Franklin, the Library's Online Catalog**: unrestricted.

- **Databases and Selected Reference Sources** (e.g. MEDLINE, Britannica Online, ISI Citation Indexes): licensed for the use of faculty, staff, and currently enrolled students.

In order to sign on to a database Penn faculty, staff and students must have a current PennCard. If you are not able to sign on to a restricted database contact your library's circulation desk or call Van Pelt Circulation, (215) 898-7566.

- **CD-ROMs**: In order to provide adequate access and support for research and study, use of compact disc databases in Van Pelt, Biomedical, and a number of other libraries is restricted to Penn faculty, staff, students and alumni. Use of compact disc databases received as depository documents is not restricted.
The Holland Library Data Archive offers the Washington State University community access to a wide variety of numerical data resources. These have been acquired through the Library's United States and State of Washington depository programs, membership in the Inter-University Consortium for Political and Social Research (ICPSR) and other data gathering and distributing organizations.

The Data Archive, located at Media Materials Services on the ground floor in Holland Library, serves as a local repository for machine readable data files. Currently the collection consists primarily of US Government and ICPSR Data Products. ICPSR Data Products may be downloaded directly on the WSU campuses. Access from off campus will be made available only through the HLDA via FTP.

**ACCESS and CIRCULATION POLICY:**

Because of licensing restrictions certain categories of data held or made available by HLDA are accessible ONLY TO CURRENT WSU STUDENTS, FACULTY, OR STAFF. Patrons wishing to gain access to the data files and documentation available at WSU or needing assistance with downloading information from ICPSR, should contact the HLDA staff in person during normal hours of operation, or electronically via the **ICPSR Dataset Inquiry Form**, or through E-Mail. ICPSR data resources can be made available to non-WSU patrons for a fee.

- How to Find Datafiles
- How WSU-Affiliated Users Can Obtain Datafiles
- Special Facilities and Support for WSU Users
- Links to Data Oriented Web Sites
- Links to Interactive Data Analysis

**FOR MORE INFORMATION, CONTACT:**

- **Ryan Johnson**, Official ICPSR Representative for WSU (johnsonr@wsu.edu)

DATA ACCESS & USE RESTRICTIONS - TDR LICENCING AGREEMENTS

Many of the datasets that are housed within TriUniversity Data Resources are subject to licensing agreements.

As a rule, agreements stipulate that current students, faculty and staff of the University of Guelph, the University of Waterloo and Wilfrid Laurier University may use the data for academic and personal research only. Any use of these data for commercial applications or contract purposes will violate our licenses. Use by members of the community outside of these three institutions could also violate our licenses (please contact staff at any of the three Centres for more information).

Some of the data may also be restricted to use by an individual university within the TriUniversities. This would be a result of single ownership by that member institution of a specific data set which is governed by a limited licensing agreement.

In short, if you are currently a member of one of the three University communities (Student, Staff or Faculty), you may use the data available through the TriUniversity Data Resources for NON-COMMERCIAL applications such as teaching and academic research. If you are interested in our holdings, but are not a member of these University communities, we may be able to help you contact the appropriate organizations to arrange purchasing of the data for your own use.

For more information, please feel free to contact members of TriUniversity Data Resources for details by clicking on the following LINK.

Data Liberation Initiative (DLI) Agreement

This site is best viewed with Netscape 2.0 or higher or Microsoft Explorer 4.0 or higher.

Help us help you:
Please fill in our User Survey Form

Page Created and Maintained by
Michelle Edwards : edwardsm@uoguelph.ca and
Bo Wandschneider : bo@uoguelph.ca
Please Send Comments to : drc@uoguelph.ca
Access restrictions

Last updated April 26, 1999

Please note the following codes for access restrictions:

- DLI
  Available only to Data Liberation Initiative (DLI) member institutions (includes York); others may purchase access via the Statistics Canada IPS catalogue. Access from this page restricted to those within the University of Toronto, Ryerson, and York University IP domains. The use of this material is limited to the exclusive purposes of teaching, academic research and publishing; please read the DLI agreement for more details.

- DSP
  Available to members of the Depository Services Program. Remote access from this page is restricted to the York University IP domain.

If no code is present, access is unrestricted.

You must use your browser's BACK button to return to the page you were on.
Books and Journal Articles


Websites

Access Policies


Collection Policies


Data Service Descriptions and Home Pages


ICPSR


User Guides


User Surveys


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