Researchers are constantly in need of statistical data to measure behavior, test theories, and quantify information. Since the U.S. Government produces a variety of data on all aspects of our society, a self-guided exercise to teach the use of two major government statistical sources, the "Monthly Catalog of U.S. Government Publications" and the "American Statistics Index," was developed at the Colorado State University Libraries. Information relating to the use of the sources as well as tasks to be performed by the student as part of the learning process are included in the materials. The complete training exercise to be distributed following a general orientation and tour is appended. (Author/STS)
Access to U.S. Government Statistics through Course-Related Instruction

by

Joel S. Rutstein
The proliferation and utilization of statistics in social science research is of major importance for academic librarians. Researchers are constantly in need of statistical data to measure behavior, test theories, and quantify information. Librarians who are involved with such resources are witnessing the growth of data banks, attainment through information retrieval systems, and control of access through manual tools such as the American Statistics Index (ASI). Not only should librarians be familiar with such resources, but their patrons require notification of availability.

To a student, the term "statistics" conjures vagaries that defy how best to apply, let alone find the data. Instructors generally fail to prepare students for a statistics search, since they are primarily interested in the data per se, not the accessibility. At Colorado State University Libraries the authors have developed an orientation approach which appears to resolve part of this dilemma. The instructional mode or vehicle is a self-guided exercise designed to enable a student to become proficient in employing U.S. Government statistical sources. Why U.S. Government statistics, and not statistics in general? Principally because Federal statistical-gathering agencies produce such a wide variety and amount of data on all aspects of our society, that a researcher is heavily dependent on official sources. Students are usually surprised to discover when compiling data on, say, furniture sales within a local geographical region, that the information emanated from a Federal agency. Control and availability has also been facilitated with the advent of commercial publishers in the field of U.S. Government documents.
Organization and Availability of Statistical Data.

Accessibility to the vast quantity of governmental data is primarily through the Monthly Catalog of U.S. Government Publications, and through the American Statistics Index. The Monthly Catalog, which is issued by the U.S. Superintendent of Documents, is available to the public in most academic libraries. It is designed to be a comprehensive index to all unclassified (i.e., not classified for reasons of security) Federal publications. Completeness is not achieved because many Federal agencies fail to refer their publications to the Superintendent of Documents for indexing and inclusion in the Monthly Catalog.

The Monthly Catalog lists major statistical reports dispatched by Federal agencies, indicating if the publications are sent to depository libraries, and presenting complete bibliographical information for each item, including the Superintendent of Documents classification number. Each issue of the Monthly Catalog contains an author, title, and subject index, cumulated annually. (NOTE: The format of the Monthly Catalog was changed considerably, beginning with the July 1976 issue. For the purposes of the orientation program, the format used in prior issues was utilized).

The indispensable companion to the Monthly Catalog, and the one that must be utilized to extract Federal statistical data, is the American Statistics (ASI), published by Congressional Information Service, a private commercial firm. The ASI attempts to include nearly all unclassified publications of the U.S. Government containing statistical data of probable research significance. Scientific and experimental observations, technical studies, and memoranda stemming from specific scientific and technical R & D projects are not included, as this type of data may be culled from other sources.

The ASI is issued monthly in separate index and abstract sections. The index section lists materials by subject, name, category, title, and agency report numbers. Each
index reference is keyed to an abstract of the publication in the abstract section. This latter section comprises summaries of a publication's contents, discloses complete bibliographical information, and indicates appropriate tables of statistics to be located in the report.

Developing and Applying the Test Model.

In devising this exercise, past experience was drawn upon. Three years ago, the authors developed an exercise on the Census of Population for social work classes. Demographic data is obviously a vital element in social work study, and encouragement for this learning device was not lacking from social work faculty. The Monthly Catalog at that time remained the primary instrument for retrieving census data, and was deficient for the task. Those who have worked extensively with census reports would understand. The titles of census reports often give little indication of the contents; for example, "Detailed Characteristics of the Population." How does this differ from another major report "General Social and Economic Characteristics"? Albeit by subject, the Monthly Catalog simply referred the inquirer to the report, not the tables.

The test was incorporated into a general orientation on U.S. Government documents in general, federal statistical-gathering agencies, and how the census of population was issued. Included was a tour of the Documents Wing of the library, where the students would be working. After the presentation and tour, the tests were passed out, explained, and instructions given to complete the assignment within two weeks. At all times the authors stressed their readiness to assist students who were confused. After all, participation in whatever cognitive processes may occur was a fundamental objective. The results were favorable, but two major criticisms surfaced.

For one, as implied above, once the student found his report containing the relevant
data, he experienced difficulty finding the necessary tables to answer the
problem. The other criticism concerned physical obtainability. The authors
prepared only three variant tests, which meant there were always a number of
students occupied with the same test. Invariably, with so many users concentrating
on so few materials, the reports required to be searched ended up missing, mislaid,
or misshelved.

When the new test was designed, emphasizing the ASI, the authors tried to resolve
these problems. First, the Monthly Catalog was withdrawn from the statistical
element, and a new role involving a general documents search was created for it
(agency reports, hearings, etc.). The ASI focused on statistics. Since the ASI
actually listed specific tables, the students had no problem tracing the proper
information. As an added boon, because the ASI covered all statistics, not solely
census data, the scope of the exercise was broadened. Instead of purely demographic
information, the tests ran the gamut from salaries of black professionals to the
number of dishwashing machines in various Washington D.C. restaurants! The number
of individual exercises was expanded from three to sixteen, which significantly
reduced the physical access question.

Conclusion.

This exercise reflects the authors' philosophy that the only way to be certain a
patron thoroughly understands a sophisticated reference tool is to force him to
actually use it; and not merely point out its existence. "Show and tell" orientations
have their place in the pantheon of bibliographical instruction, but the librarian
must decide if further instruction is necessary. In cases where information resources
involve a complicated methodology, as with the ASI, this is an appropriate activity.
It is essential that librarians be actively involved in the learning process. When they compete for faculty status, the term "keeper of the books" and its implications of passivity is not enough. Classroom instructors are interested in librarians' services, and they have the capability and the opportunities, in these days of exploding information technology, to play their part. Exercises such as the one explained in this article are but one technique for expanding the intellectual framework.
USING U.S. GOVERNMENT STATISTICS: A LIBRARY EXERCISE

By Joel S. Rutstein, Social Sciences Librarian
and
Fred Schmidt, Documents Librarian

This exercise has three objectives: 1) to introduce you to the basic procedures for conducting a U.S. Government documents literature search, 2) to show you how Federal documents are arranged at C.S.U. Libraries, and 3), most important, to enable you to become proficient in the use of government statistics, through a mastery of the American Statistics Index.

The exercise is arranged in five parts. Part I (multiple choice) tests you briefly on the arrangement of U.S. documents in the C.S.U. Libraries. Part II (matching) is an exercise on using the Monthly Catalog of U.S. Government Publications. Part III involves an actual literature search utilizing the Monthly Catalog. Part IV is non-evaluative, explaining search techniques for the American Statistics Index. Part V is an actual statistics search with the ASI.

Before you begin the exercise, it is essential that you read the Guide to the Libraries, no. 4. It will also be useful if you take advantage of the A-V instructional machines explaining how to use Federal documents in the C.S.U. Libraries. These machines are located near the General Reference Desk, and next to the Documents Office on the second floor.

PART I. multiple choice. (Please circle the appropriate letter)

1. U.S. Government documents in the C.S.U. Libraries are:
   A. Cataloged with Library of Congress call numbers and shelved in the main collection like other books and periodicals.
   B. Cataloged with Library of Congress call numbers and shelved in a separate section by themselves.
   C. Assigned their own special call numbers and shelved in the main collection like other books and periodicals.
   D. Assigned their own special call numbers and shelved in a separate section by themselves.

2. When you begin your search for U.S. Government documents, the best source to consult is:
   A. The Card Catalog
   C. The Documents Shelflist
   D. The Loan Desk.

3. Which of the following types of call numbers is used for Federal Documents?
   A. C34
   B. BF3150
   C. 347.59
   D. None of these
   16
   L57
   E2
   M577
   DOC

8
PART I (continued)

4. U.S. Government documents in the C.S.U. Libraries are located:

A. On the Third Floor, Upper Level.
B. In the Basement, Far North Wing.
C. On the Second Floor, Far North Wing.
D. Interfiled in the main collection.

PART II. Matching

This is a reproduction of a page from one of the indexes to the Monthly Catalog of U.S. Government Publications. Match the appropriate numbers with the letters.

A. Poon, Calvin P.C., anaerobic-aerobic treatment of textile wastes with activated carbon, 29224
B. Pope, Robert B., photo plot bias, 28981
C. census, 10:
   - census tracts, 28121
   - characteristics of population, bound volume, 28112-119
   - detailed population characteristics, 28110-121
   - United States summary, 28120
   - evaluation and research program, 28132
   - Negro population, 28122
   - procedural history, 28112-124
   - subject reports, 28122-124
   - data access descriptions, 28191
   - supplementary reports, 28120-130
D. characteristics of population by ethnic origin, 28112

1. Entry number used to locate item in catalog section of Monthly Catalog
2. Main subject heading
3. Title of entry
Catalog section of the Monthly Catalog of U.S. Government Publications

Current population reports: Series P-20, Population characteristics
  * Paper, $30.50 (including Series P-20, P-23, P-25, P-26, P-27, P-28 summaries, P-60, and P-65 for one year). $7.75 additional for foreign mailing; single copy, prices vary. * Item 142-G C76.21S: P-20/(nos.)


Current population reports: Series P-26, Federal-State cooperative program for population estimates. * Paper, $30.50 (including Series P-20, P-23, P-25, P-27, P-28 summaries, P-60, and P-65 for one year). $7.75 additional for foreign mailing; single copy, prices vary. * Item 142-O C76.21S: P-26/(nos.)


*For Sale by National Technical Information Service, Springfield, VA 22151
*Sent to Depository Libraries

Page 13
You are interested in the response of the City of Denver to the Model Cities Program. Go to the index of the Monthly Catalog for 1973 and look up the subject, "Redevelopment (urban planning)." What report under this subject is most appropriate to your needs? (1) _____________________________. What is the entry number? (2) _____.

Now turn to the catalog section of the Monthly Catalog to find the full bibliographic citation. What is the title of the report? (3) _____________________________.

What is the name of the agency under which the report was issued? (4) _____________________________. What office and division of the agency prepared the report? (5) _____________________________. When was the report published? (6) __________. What is the call number? (7) __________.

Find the report in the Documents wing. What percentage of Denver's two model neighborhoods is composed of Spanish-surnamed residents? (8) _____________________________.

Did Denver conduct an evaluation of its program during the first action year? (See p.68). (9) __________.
Sample ASI Search

"How many children of unemployed parents are on welfare in California?"

Step 1

Check the ASI Index volume

Start with a "subject" approach, where extensive cross-references will lead to the proper index reference from almost any likely point of entry.

Index by Subjects and Names

Child welfare
Chartbook on children, 1970 compilation, 10718-1
"Children's Allowances: Their Size and Structure in Five Countries", 4742-1.110
Food assistance, USDA child nutrition and family food assistance programs, annual rpt, 1364-1
Food assistance, USDA child nutrition programs participation, monthly rpt, 1362-1
Juvenile court dependency and neglect cases, 1971 annual rpt, 4824-18
OASDHI benefits in current-payment status, by type of child beneficiary, 1940-69, 4744-3-9
1970, annual rpt, 4824-14
Public welfare personnel, statistical data, by State, FY70, annual rpt, 4824-11
Social security 1972 proposed amendments, effects on public assistance programs, 15368-3
Social services for families and children, by State, Dec 1969, 4828-2
State agency child welfare employees educational attainment, by State, June 1969, 4824-12-3
Widows with children, benefits and characteristics under OASDHI, 1962, 4746-4.16
see also Aid to Families with Dependent Children
see also Child day care

Index by Categories

BY STATE

Public Welfare and Social Security
Adoptions in 1970, by State, annual rpt, 4824-15
AFDC families and recipients, Feb 1970 and Feb 1971, annual rpt, 11784-2-1
AFDC families and recipients, by State, Feb 1972, annual rpt, 4824-5
Recipients and payments, total and unemployed parent segment, by State, monthly rpt, 4822-1.2
Recipients, characteristics and financial circumstances, 1971 survey, 4826-1
Recipients, consequences of State program

An alternate approach is through the "Index by Categories". Since you are looking for information about a particular State, you can find it under "By State".

xxxii AMERICAN STATISTICS INDEX
Step 2

Go from the index to the data description in the appropriate Abstracts volume.

The ASI accession number in the index will lead you to a publication entry that fully describes the document and pinpoints the tables containing the statistics you need.

Step 3

Retrieve the publication.

In you have access to an ASI MICROFICHE LIBRARY collection, the ASI accession number will lead you directly to the correct microfiche. Or, to refer to the document in hard copy form . . . the ASI description contains the bibliographic information you need to locate the publication in a library or to order it from the publishing agency.
**Sample Abstract — Individual Publication**

<table>
<thead>
<tr>
<th>ASI accession number for publication as a whole</th>
<th>publication type</th>
<th>title and sub-title of publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>6744-4</td>
<td>EMPLOYMENT AND</td>
<td>EARNINGS. U.S. 1909-71</td>
</tr>
<tr>
<td>6744-4</td>
<td>BUREAU OF LABOR</td>
<td>STATISTICS: MANPOWER AND</td>
</tr>
<tr>
<td>6744</td>
<td>MANPOWER AND</td>
<td>EMPLOYMENT</td>
</tr>
<tr>
<td>6744</td>
<td>Annuals and Biennials</td>
<td></td>
</tr>
</tbody>
</table>

**Description of Publication as a Whole**

Comprehensive collection of national statistics on employment, hours and earnings, and labor turnover for nonagricultural industries. Provides monthly and annual data from the beginning date of each series through Feb 1970, based upon payroll and other data reported by employers and collected under cooperative arrangements with State agencies.

Contents include: preface with summary tables and charts (p. iii-xlvi); detailed tables broken down by individual industries (p. 1-577); seasonally adjusted tabular series (p. 581-615); special tabular series (p. 619-637); and technical notes on the concepts, methods, scope and limitations of the publication (p. 667-688). Tables are listed below.

This volume replaces Employment and Earnings, Statistics for the U.S. 1909-70 (BLS Bull. 1312-7) issued in 1971. A companion publication, Employment and Earnings, States and Areas, 1947-70, provides similar information for all States and 214 areas (see 6744-5). Current statistics comparable with the May 1971 figures shown in this volume are provided each month in the monthly publication Employment and Earnings beginning with the Sept. 1971 issue (see 6742-2).

TABLES:

- Industry definitions are based on the 1967 Standard Industry Classification Manual. All industry title is identified by the appropriate SIC code. Data are adjusted to Mar. 1970 benchmarks as described in the 1971 issue of Employment and Earnings.

**Summary Tables**

- Tables are supplemented by 39 charts.
  1. Employees on nonagricultural payrolls by industry division, 1919-70. (p. xiv)
  2. Employees on manufacturing payrolls by major industry group, 1947-70. (p. xiv)
  3. Production or nonsupervisory workers on private nonagricultural payrolls, 1947-70. (p. xv)
  4. Average weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls, 1947-70. (p. xv)
Monthly journal providing information and statistics on current social security developments and programs, and historical data from 1940 or year of initiation of program.

Contents:

1. Feature articles which vary from month to month.
2. Notes and brief reports, including social security abroad.
3. Recent publications.
4. Current operating statistics, 32 tables, listed below.

More detailed breakdowns of benefits and beneficiaries and for statistics on additional information are presented in Social Security Bulletin, Annual Statistical Supplement, 1969 (see 4744-3).

TABLES:

2. Social Security Administration, outlays and collections, 1940 to 1972.
3. Social Security Administration, outlays and collections, 1940 to 1972.
4. Social Security Administration, outlays and collections, 1940 to 1972.
5. Social Security Administration, outlays and collections, 1940 to 1972.
6. Social Security Administration, outlays and collections, 1940 to 1972.
7. Social Security Administration, outlays and collections, 1940 to 1972.
8. Social Security Administration, outlays and collections, 1940 to 1972.
9. Social Security Administration, outlays and collections, 1940 to 1972.
10. Social Security Administration, outlays and collections, 1940 to 1972.
11. Social Security Administration, outlays and collections, 1940 to 1972.
12. Social Security Administration, outlays and collections, 1940 to 1972.
13. Social Security Administration, outlays and collections, 1940 to 1972.
14. Social Security Administration, outlays and collections, 1940 to 1972.
15. Social Security Administration, outlays and collections, 1940 to 1972.
16. Social Security Administration, outlays and collections, 1940 to 1972.
17. Social Security Administration, outlays and collections, 1940 to 1972.
18. Social Security Administration, outlays and collections, 1940 to 1972.
19. Social Security Administration, outlays and collections, 1940 to 1972.
20. Social Security Administration, outlays and collections, 1940 to 1972.
21. Social Security Administration, outlays and collections, 1940 to 1972.
22. Social Security Administration, outlays and collections, 1940 to 1972.
23. Social Security Administration, outlays and collections, 1940 to 1972.
24. Social Security Administration, outlays and collections, 1940 to 1972.
25. Social Security Administration, outlays and collections, 1940 to 1972.
26. Social Security Administration, outlays and collections, 1940 to 1972.
27. Social Security Administration, outlays and collections, 1940 to 1972.
28. Social Security Administration, outlays and collections, 1940 to 1972.
29. Social Security Administration, outlays and collections, 1940 to 1972.
30. Social Security Administration, outlays and collections, 1940 to 1972.
31. Social Security Administration, outlays and collections, 1940 to 1972.
32. Social Security Administration, outlays and collections, 1940 to 1972.

More detailed breakdowns of benefits and beneficiaries and for statistics on additional information are presented in Social Security Bulletin, Annual Statistical Supplement, 1969 (see 4744-3).
Sample Abstract — Publications in Series

ASI accession number
2535-1

1970 CENSUS OF POPULATION. SUPPLEMENTARY REPORTS, SERIES PC(S1) (item 154.
GPO or Commerce Dept Field Offices; for individual bibliographic data, see below.
C3.223/12/970/(nos.)

Open series of reports presenting miscellaneous types of population data from the 1970 population census, such as special compilations which cannot be accommodated in the regular final reports, and selected tables from large reports, reprinted separately to permit distribution of the particular figures in an inexpensive format. Most reports are reprinted or compiled from U.S. or State reports in the four chapters of Vol. 1, series PC(1) (see 2531-1).

Each report, unless otherwise indicated, contains a table or tables, plus introductory narrative summarizing the data, defining subject or geographic area terms, and noting source of and/or documents related to the printed data.

PUBLISHED IN 1971

2535-1.1: Distribution of the Negro Population, by County
(PC(S1)-1. June 1971. 8 p. $0.20.)

Contents:
1. 2 maps showing number and percent of Negroes in each U.S. county.
2. 2 tables. by region, division, and State showing for 1970: number of counties with 50,000 or 100,000 or more Negroes; and number of counties with 50% or more Negroes.

2535-1.2: Negro Population in Selected Places and Selected Counties
(PC(S1)-2. June 1971. 17 p. $0.20.)

Contents: 7 tables showing total and Negro population numbers and percent changes from 1950 or 1960 for:
1. Cities with 50,000 or more Negroes. 1950, 1960, and 1970, including 1960-70 net migration. (p. 5-6)
2. 50 places with highest percentage of
You are involved in a grant from the Air Force studying the readjustment of veterans to civilian life. For this project, it is necessary to have data showing how veterans utilize their military experience with non-military employment. Go to the ASI Retrospective index and look up the subject "Veterans employment." What item under this subject is appropriate for your needs?

What is the ASI accession number? (2) ____________.

Now turn to the ASI Retrospective edition to find your abstract. What is the name of the agency under which your publication is issued? (3) __________________________. What is the title of the series that includes your report? (4) __________________________. What is the title of your individual report? (5) __________________________. When was the report issued? (6) ______. What is the report's call number? (7) __________________________.

Find your report in the Documents wing and look up the table that shows Air Force experience and training as qualifying factors for civilian employment. What percentage of officers felt that their military experience was a hindrance as a qualification for the scientific-engineering fields? (8) ______. What percentage of enlisted men believe their military experience helped a great deal in obtaining work in the crafts-technical fields? (9) __________________________.